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REVIEW 2023

Hamburg's first Sustainability Report

Implementing the 2030 Agenda and the
Sustainable Development Goals at the local level





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Photo 1: Senator Jens Kerstan © F. Besser



Foreword

The Free and Hanseatic City of Hamburg is facing up to its responsibility to implement the Sustainable Development Goals (SDGs). It is being guided in this by the 2030 Agenda – which contains the 17 SDGs, and was adopted by the United Nations in September 2015. Cities have a central role to play in implementing the SDGs. In a “world of cities”, cities are at the same time both the cause of the problems and the solution to them. Here, a multitude of conflicts and a clash of legitimate interests manifest themselves in a relatively small space. Cities worldwide

therefore share a canon of challenges that occur in varying forms.

We in Hamburg wish to measure our governance against these 17 SDGs. This was decided by the Senate in 2017 – with the clear goal of taking on a pioneering role beyond the city limits. The best way to do this is together with the urban community, as the city ultimately performs a large number of public tasks with its administration, its state-owned enterprises and utilities.

With the Hamburg Roadmap for Implementing the United Nations Sustainable Development Goals, we are committing ourselves to such important issues as climate action, justice and global solidarity. We all bear the responsibility for shaping our world in such a way that coming generations can also lead a decent life. The authorities did not draw up this roadmap alone, but together with civil society. A core principle of the 2030 Agenda is thus also taken seriously: “Leave no one behind”.

This motto of the 2030 Agenda – “Leave no one behind” – is also a

guiding principle for Hamburg in all areas of life. Over the next few years, we must therefore focus on further developing the economic, social and cultural achievements of the City of Hamburg. At the same time we will need to reach out to all disadvantaged individuals and groups, tackle rising inequality and improve the urban environment so as to preserve the natural resource base on which life depends.

The COVID-19 pandemic has once again brought social inequality to our attention in an entirely new way. According to a study from 2022 commissioned by our Ministry for Social Affairs, there was also a statistically significant correlation between socio-economic status and high incidence rates in our city. This confirms what is perhaps in any case clear: in some cases, the SDGs interact extensively. We cannot focus on one of the goals without thinking about another. The multiple and interwoven crises of the world reflect a range of interactions between the various SDGs. The difficult times affect us not just personally. We

also feel them in our daily work for the city.

Seven years after the 2030 Agenda was adopted, the United Nations has presented an interim report. A great deal has already been achieved in the past years, yet major challenges also remain. Global crises such as the COVID-19 pandemic have not only caused development progress to stagnate, but have even led to setbacks. In September 2023, the next United Nations SDG Summit will perform a mid-term review of implementation to date. There, governments will not only discuss progress and deficits so far, but also define interventions to expedite SDG implementation.

This year sees another milestone for Hamburg. With this Voluntary Local Review, we are publishing the city's first sustainability report. Based on this, we will develop a sustainable development strategy with specific goals for the city in the coming years. Once again, this can only succeed if we work together. We are relying here on cooperation in partnership with the business community, civil so-

ciety and the municipality. We are on the right track as a city. But we cannot rest on our laurels – there are only seven years left until the SDGs are to be achieved. What is important is that we stay on the ball. There is still enough to do.



Jens Kerstan
Senator
Ministry for the Environment,
Climate, Energy and Agriculture

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1 Introduction

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Photo 2: Elbphilharmonie

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1.1 Voluntary local reviews and the 2030 Agenda

In 2015, the 193 UN member states adopted the 2030 Agenda for Sustainable Development in New York. In this Agenda, the global community agreed on the global framework for sustainability policy for 15 years. At the heart of the 2030 Agenda are the 17 Sustainable Development Goals (SDGs) and their 169 targets. The SDGs address all UN member states in the Global South as in the North, and cover environmental, social and economic aspects. The 17 SDGs point the way to a transformation of our world, and aim to bring about radical changes at political and societal levels.

The 2030 Agenda with its SDGs is not a simple programme of action to be adopted and implemented on a one-to-one basis. It is a long-term guiding framework that clearly extends beyond legislative periods. It identifies universally applicable requirements for change, the relevance of which must always be clarified in the particular local setting. It also provides a benchmark for political action with the goal of "leav-



Figure 3: The 17 Sustainable Development Goals, © United Nations

ing no one behind” – the explicit aspiration of the 2030 Agenda. The global community is embracing its responsibility and jointly tackling the major global challenges of sustainable development – including the fight against hunger and social inequality, education for all, environmental protection and climate action. Through SDG 11 -- “Make cities and human settlements inclusive, safe, resilient and sustainable” – cities are assigned a key role for sustainable development worldwide.

The obligations of governments that have committed to the SDGs extend to all levels and across all sectors. National and regional governments are key actors for achieving the SDGs. Local governments have a special responsibility: they are the level of governance that directly influences the specific conditions under which citizens live. It is in cities, districts and municipalities that the issue of whether sustainable development

succeeds will ultimately be decided. It is therefore crucially important how cities approach and develop the topic of sustainability and the implementation of the SDGs. Ultimately, it is in cities and municipalities that the battle for sustainable development will be won or lost.

To demonstrate progress towards achieving the SDGs, the United Nations Agenda 2030 calls for “regular and comprehensive reviews of progress at the national and subnational levels” (UN, Paragraph 79).¹ This includes the local level. Reporting at the national level is done through the UN’s Voluntary National Reviews. These national reports serve as the basis for regular reviews by the High Level Political Forum on Sustainable Development, a key UN body. The High Level Political Forum meets annually in New York. The Voluntary National Reviews are intended to facilitate the sharing of experiences, including successes, chal-

¹ United Nations (2023): Global Guiding Elements for Voluntary Local Reviews (VLRs) of SDG implementation, GlobalGuidingElementsforVLRs_FINAL.pdf (un.org), last accessed on 02/06/2023

lenges and lessons learned, in order to expedite implementation of the 2030 Agenda.

As awareness of the importance of the local level in implementing the 2030 Agenda grows, more and more municipalities are setting out to make their work for the SDGs visible and verifiable. To this end, Voluntary Local Reviews (VLRs) have become a proven and frequently used form of reporting at the local level. This

format was developed by the United Nations for the local level, based on the Voluntary National Reviews at country level. The United Nations sees VLRs as a progress monitoring tool that can accelerate the process of localising the Sustainable Development Goals. They provide guidance to local actors, without imposing strict and official requirements. This allows easy access and individual design.

1.2 Context, methodology and structure of this report

The sustainability report of the Free and Hanseatic City of Hamburg was written in the format of a Voluntary Local Review (VLR) as proposed by the United Nations. The city received support from Engagement Global's Service Agency Communities in One World. On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), the Service Agency works among other things to support the commitment of municipalities across Germany to produce Voluntary Local Reports on sustainable development, and to strengthen implementation of the 17 SDGs at the local level. In July 2022, the Service Agency published a Germany-wide call for expressions of interest in support and advice on preparing a Voluntary Local Report. Hamburg successfully applied, and was selected as one of six municipalities in Germany in August 2022.

Since November 2022, the Sustainability Department has been working on the First Sustainability Report of the City of Hamburg together with a specially founded interdisciplinary working group. All ministries and senate offices were involved, and were asked to provide quantitative contributions (indicators and cor-

responding key figures), as well as qualitative ones (measures, projects, legislative proposals, etc.).

To carry out a meaningful evaluation of SDG implementation in Hamburg, to make the effects of the path taken verifiable, and to enable a fact-based discourse on this, a monitoring system comprising targets and indicators to measure their achievement is to be developed. The monitoring system will form the basis for regular reporting on implementation of the SDGs in Hamburg.

At the beginning of the process, it was determined that the Bertelsmann Stiftung's SDG indicators for municipalities, which are established in municipal sustainability reporting in Germany, would be used as basic indicators.² The values reported by the Bertelsmann Stiftung come exclusively from official sources such as the statistical offices of the federation and the federal states, and are especially important for inter-municipal comparability.

The Hamburg Sustainability Forum³ established by the City of Hamburg – a civil society alliance of a good thirty Hamburg member organisations in the sustainability context – facilitates and supports the process of implementing the SDGs in Hamburg. The Sustainability Forum was involved in developing the sustainability monitoring system. It proposed a comprehensive compilation and evaluation of sustainability indicators for Hamburg, and provided a prioritised list. This prioritised list has been discussed across the ministries and has been incorporated into the present monitoring system of the Sustainability Report.

With the aim of developing a Hamburg-specific monitoring system for all 17 SDGs, the ministries were also asked to identify supplementary ministry-specific indicators. Other already existing and established SDG indicator sets, such as those from the German Sustainable Development Strategy or the indicators of the federal state initiative on core indicators, were

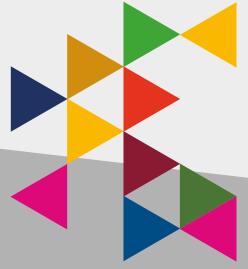
taken into account here. In this context, the ministries should also examine the extent to which there are points of overlap with the proposals of the Sustainability Forum. Besides technical suitability, the key criteria of the ministries for the selection of indicators were the availability of data, the possibility of updating and the possibility of future target formulation. Additionally, the ministries provided their own relevant qualitative contributions to the sector-specific SDGs for the Sustainability Report.

Furthermore, the structure of the report is divided into a qualitative and quantitative part. Each SDG chapter is introduced at the beginning with the links to the local level. This is followed by the contextualisation for Hamburg with relevant contributions in the form of qualitative reporting, and a quantitative part with the indicators that are relevant to the respective SDG. The indicators are based on the study "SDGs in Municipalities" commissioned by the Association of German Cities and on the selection of the ministries.

2 https://www.bertelsmann-stiftung.de/fileadmin/files/Projekte/Monitor_Nachhaltige_Kommune/SDG_Indicators_for_Municipalities_2020.pdf

3 Hamburg Sustainability Forum: <https://www.nachhaltigkeitsforum.org/>





02

2 Hamburg in the context of sustainable development

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2.1 Brief profile of the Free and Hanseatic City of Hamburg



Figure 5: Free and Hanseatic City of Hamburg – districts and neighbourhoods © Source: Statistical Office North 2021

The Free and Hanseatic City of Hamburg is located in northern Germany, bordering Schleswig-Holstein to the north and Lower Saxony to the South. With around 755 square kilometres of land area and a population of approximately 1.85 million, it is the second largest city in Germany. More than five million people now live in the Hamburg Metropolitan Region, which includes the Free and Hanseatic City of Hamburg and parts of the states of Schleswig-Holstein, Lower Saxony and Mecklenburg-Western Pomerania.

The city area is divided into seven municipal districts and 104 neighbourhoods, including the neighbourhood of Neuwerk, which is an island located in the North Sea.

The city consists of 92 per cent land and eight per cent water, and currently has 37 nature reserves covering almost ten per cent of the city's area – almost

as large as 10,000 football fields. The “green metropolis on the water” has long since made a name for itself, and was named the European Green Capital in 2011. The River Alster and the numerous rivers and canals traversed by over 2,000 bridges are the hallmark of the maritime ambience for which the city is known.

Hamburg is not only a port and industrial city, but also a transport hub, a tourist destination, a high-tech metropolis and a media centre. It is also a city with a steadily growing population, 37.4 per cent of whom have a migration background (as of 2021).⁴ As a research hub, Hamburg is internationally renowned in the fields of aerospace technology and the life sciences, among others. The Port of Hamburg is one of the largest transhipment ports in the world and, together with the international airport, makes the city an important logistics hub.

As a growing city, Hamburg faces environmental and social challenges. These involve the appropriate management of natural resources, and the implementation of innovative interventions for responsible growth. Furthermore, the city also needs to design its neighbourhoods in such a way that they meet the different needs of a heterogeneous and diverse urban society.

As in Germany as a whole, the multiple global crises have had significant consequences for the city. In 2019 Hamburg still recorded the highest economic growth in Germany, achieving figures that were well above average. Following that, however, the COVID-19 pandemic and the Russian war of aggression ushered in years of severe crisis and upheaval.

The social and economic impacts which this has entailed determine the status of implementation of the 2030 Agenda. In some cases this will have unforeseeable consequences for several of the indicators mentioned in the report. The Hamburg Senate is therefore focusing systematically on a wide range of interven-

tions in line with the UN Sustainable Development Goals in order to achieve a new start in the fields of business, education, culture, digitalisation, mobility, climate action and environmental protection.



4 Statistical Yearbook of Hamburg 2021, Statistical Office North

2.2

Sustainability in the Free and Hanseatic City of Hamburg – Introduction

For the Hamburg Senate, sustainable action has been highly relevant and a top priority for many years. City government policy is continuously aligned with the principle of sustainability. With the 2017 Senate resolution on implementation of the 2030 Agenda in Hamburg, the Senate has pursued this path consistently.

An initial review shows that many of Hamburg's interventions in the various policy areas already merit the attribute "sustainable". Beyond that, however, it also indicates that the SDGs are providing fresh impetus for thematic areas in which Hamburg can develop further.

Photo 6: View of the Georgswerder energy mountain
© Mediaserver Hamburg / Konstantin Beck



Milestones achieved by the Free and Hanseatic City of Hamburg

- | 2011 European Green Award
- | 2011 Hamburg receives the "Fairtrade Town" award for the first time
- | 2014 "now - northern German and sustainable: securing the future through education!" – certification system for extracurricular ESD
- | 2014 Anti-discrimination Strategy (update 2023)⁵
- | 2015 First Hamburg Climate Change Mitigation Plan (1st update 2019, 2nd update 2023)
- | 2016 Introduction of a Green Procurement Guide

⁵ A continuation or further elaboration of a bill or a resolution proposed for the Senate and the Hamburg Parliament is referred to in parliamentary parlance as an update.

(updated in 2019)

- | 2017 Paper⁶ 21/9700 “Implementation of the United Nations Sustainable Development Goals in Hamburg”
- | 2017 update of the Hamburg Integration Plan “We in Hamburg”
- | 2019 First Hamburg Climate Protection Act (updated in 2023)
- | 2019 Hamburg as a UNESCO partner – active member of the Global Network of Learning Cities (GNLC)
- | 2019 update of the Hamburg Engagement Strategy
- | 2019 update of the Victim Protection Plan
- | 2019 first place in the annual Smart City Index

(also in 2020, 2021 and 2022)

- | 2019 SDG Indicators Table published in the Annual Report of the Free and Hanseatic City of Hamburg
- | 2021 principle of sustainability enshrined in budget law
- | 2021 Hamburg Master Plan for Education for Sustainable Development 2030
- | 2022 Hamburg Urban Economic Strategy
- | 2022 Active City Strategy
- | 2022 publication of an action plan as a member of the international Open Government Partnership (OGP)
- | 2022 Pact for Public Health Service

⁶ In parliamentary parlance, documents such as draft bills or recommended resolutions are referred to as papers. Each paper is given its own number, which is made up of the current parliamentary term plus the sequential number: for example 20/11800. All papers of the Hamburg Parliament (known in German as the “Bürgerschaft”) can be found online in the parliamentary database. This is the Hamburg Parliament’s information system, which contains the publicly accessible work of the members and the parliament as well as all parliamentary materials (papers, plenary minutes) and parliamentary proceedings since the beginning of the 16th parliamentary term (08.10.1997); parliamentary database (buergerschaft-hh.de/parldok).

2.3 Strategic and organisational mainstreaming of sustainability

On 4 July 2017, the Senate approved the roadmap for the next few years by adopting the paper “Implementation of the United Nations Sustainable Development Goals in Hamburg”. As well as providing a baseline analysis (to determine where the Senate’s policy is already aligned with the goals of the 2030 Agenda), the paper also identifies the thematic areas in which concrete further work will be done in the coming years. Hamburg is facing up to its responsibility to implement the Sustainable Development Goals (SDGs). It is being guided in this by the 2030 Agenda – which contains the 17 SDGs, and was adopted by the United Nations in September 2015. The 2030 Agenda evokes an understanding of what the quality of life in a city like Hamburg can be in 2030, covering

an immense range of topics that vary in importance depending on local circumstances.

In its processes to date, the City of Hamburg has prioritised thematic areas that are of particular importance to it. Four areas of action have been identified, which represent important challenges and future tasks for the city. Each area addresses several SDGs.

The areas are cross-ministerial. This also reflects the integrated nature of sustainability.

The overview below shows that the areas of action each address several SDGs, and that individual SDGs are the subject of several areas of action:



Figure 9: © United Nations

Figure 10: Hamburg SDG priority and cross-cutting issues (printed matter 21/9700 of 2017). © Freie und Hansestadt Hamburg

The area of "Education and Science" is an exception. The topic is mentioned explicitly in SDG 4, and promotes and supports the process of implementing a large number of the SDGs and their targets through education. Furthermore, the SDGs include cross-cutting issues that are part of all areas of action. These include Hamburg's global responsibility, gender equality, anti-corruption and digitalisation.

Sustainability issues are dealt with across the ministries within Hamburg's city administration. Implementation of the 2030 Agenda and the 17 Sustainable Development Goals is strategically coordinated by the Sustainability Department, which is part of the Ministry for the Environment, Climate, Energy and Agriculture. The Department initiated the SDG working group, whose task is to shed light on the SDGs across all ministries. For the Sustainability Report process, a Voluntary Local Review working group was also set up, which likewise includes scope for networking with other cross-cutting areas (see the section on Strategic and organisational mainstreaming of sustainability). Cross-ministerial working groups have also been established for other thematic areas, such as the Bio-City working group, the working group on environmentally sound procurement and the steering group on Hamburg's Education for Sustainable Development (ESD) Master Plan 2030.

In order to make the budget sustainable, the City of Hamburg has also made many efforts in the past. For example, intergenerational budget management has been guaranteed since 2015. Since 2019, an SDG in-

dicator table has been published in the City of Hamburg's Annual Report, and since 2020, reports on the sustainability strategies of the state finance ministries have been prepared. In 2021, sustainability was finally enshrined in budget law. In the 2023 financial report, the individual SDGs were assigned to the guiding principles of the strategic priorities and areas of action.

Since implementation of the 2030 Agenda in Hamburg can only succeed through close dialogue with civil society and close civil society support of the SDG implementation process, a civil society body was established in order to strengthen this collaboration. The Sustainability Forum is an independent, voluntary and broad-based alliance from Hamburg's civil society for the city's policy-makers and administrators. The forum represents a large cross-section of Hamburg's civil society and looks at the SDG process from this overarching perspective.

In its sustainability management, it is very important for the City of Hamburg to work together with the advisory boards of the Senate (including the Council for Sustainable Development Policy, and the Integration Advisory Board), non-governmental organisations, in particular the Sustainability Forum, the Council for the Future, Green Events Hamburg, the chambers (business associations), the Hamburg Ratschlag annual conference and the trade unions, as well as the Regionale Netzstelle Nachhaltigkeitsstrategie (networking point for the north German sustainability strategy) (RENN.nord).

2.4

Public participation for sustainability



Photo 7: Hamburg Elbe beach
© Mediaserver Hamburg / Jörg Modrow

Continuous communication and sharing of information on the process are key to the success of sustainable development. The Senate intends to keep all the citizens of Hamburg up-to-date on the SDGs in the coming years. Platforms for participation will be adapted to topics, activities and target groups, in order to select the appropriate form of participation (e.g. e-participation) and the target groups to be involved (stakeholders, citizens). To deal with specific topics in greater depth, think tanks with experts will be held on an ad hoc basis. The principle of "leave no one behind" also means that the participation process must not be restricted to a limited circle of civil society organisations, but must reach all Hamburg citizens.

For example, civil society actors were involved in drawing up and implementing the Hamburg ESD Master Plan 2030 (this was operationalised in working forums of the education areas and the steering group). As part of the Second Update of the Hamburg Climate Action Plan, all citizens of Hamburg were invited to contribute their ideas and suggestions for new interventions in an online participation process. The Hamburg Climate Action Plan defines the climate goals for Hamburg, and shows which interventions the Senate intends to use to achieve these goals. Many Hamburg residents took part in the online participation process and voiced their ideas. During the three-week participation period, a total of 2,580 contributions and 1,649 comments were received on the digital participation platform.

With more transparency through data and data-based technologies, the City of Hamburg, together with its civil society cooperation partner the Körber Foundation, has published its action plan as a member of the international network Open Government Partnership (OGP). The City of Hamburg is part of Open Government Germany. The purpose of this project is

to develop software solutions – so-called “reference solutions for implementation” – that provide the best possible digital support for both the participatory process of drawing up spatial plans, and the provision of plans that are being drawn up or have been adopted. Existing solutions, some of which are already in use, will serve as models for the development.

Furthermore, a wide range of civil society actors are committed to the city. The Hamburg Sustainability Forum (NFH) supports the city’s sustainable development process as a constructive and critical sparring partner for Hamburg’s administrators and policy-makers. It organises digital climate round tables

and citizen participation. It was established in this role by Hamburg’s Ministry for the Environment, Climate, Energy and Agriculture (BUKEA) in 2018. The NFH has since developed into an alliance of 34 organisations from all sectors of society. Since 1 July 2020, the NFH has been run by the Michael Otto Foundation for Environmental Protection.

The Hamburg Council for the Future sees itself as an open forum and network for institutions, associations, companies and initiatives that wish to commit themselves to a sustainable, future-proof Hamburg. The Hamburg Council for Sustainable Development Policy advises the Senate on issues relating to devel-

Photo 8: Sailing regatta on the Alster © Mediaserver Hamburg/Ingo Boelter



opment policy – ranging from cooperation with foreign partners to development education work.

The Regionalen Netzstellen Nachhaltigkeitsstrategien (regional networking points for sustainability strategies – RENN) support actors from the realms of civil society, local government, business, policy-making and administration who wish to contribute to sustainable development in Germany. To this end, the networking points strengthen and connect the initiatives and competences of actors locally, in the federal states and in the respective RENN region. RENN.nord comprises the five federal states of Bremen, Hamburg, Mecklenburg-Western Pomerania,

Lower Saxony and Schleswig-Holstein. The consortium's lead organisation in Hamburg is the Schutzgemeinschaft Deutscher Wald (SDW) Landesverband Hamburg e.V. (Hamburg branch of the association to protect German forests). The Hamburger Ratschlag annual conference also organises various participation platforms for civil society, and generates calls on Hamburg's policy-makers to make the 2030 Agenda for Sustainable Development a reality both locally and globally.

2.5 Overview of indicators in the report

SDG	Indicators
	German Social Code (SGB II) quota Risk of poverty – children (%) Risk of poverty – youth (%) Risk of poverty in old age (%) Homelessness (%)
	Agricultural nitrogen surplus (kg/ha) Organic farming (%)
	HIV diagnosis rate Premature mortality rate – women (deaths per 1,000 inhabitants) Premature mortality rate – men (deaths per 1,000 inhabitants) Basic care close to home – family doctor (m) Basic care close to home – hospital (min.) Basic care close to home – pharmacy (m) Staff in nursing homes Staff in care services

SDG	Indicators
3 GOOD HEALTH AND WELL-BEING 	Nursing home places Air pollution: particulate matter (particle size 10 and particle size 2.5) / nitrogen dioxide (NO_2) / ozone (O_3)
4 QUALITY EDUCATION 	Education for Sustainable Development (ESD) Establishment of sustainability reporting at public state universities in Hamburg Child care in day care facilities Inclusive day care centres (%) Positions at state schools for educators Basic provision close to home – primary school (m) School drop-out rate Percentage distribution of final qualifications by gender Exclusion rate Education and participation scheme beneficiaries who take advantage of lunch in Hamburg schools First-year students Rate of supply of places in halls of residence at the Studierendenwerk Hamburg ("Hamburg Student Services")
5 GENDER EQUALITY 	Proportion of female civil servants and pay-scale employees in executive and top positions in the Free and Hanseatic City of Hamburg (B2-B6) Women's share of average gross hourly earnings (as an index) of full-time employees in Hamburg Women's share of seats in the Hamburg Parliament Percentage of women among single parents in Hamburg Proportion of women employed part-time in Hamburg Percentage of female Members of the Senate on supervisory boards of public companies Relationship between employment rates for women and men (%) Relationship between the median income of women and men (%)
6 CLEAN WATER AND SANITATION 	Connection rate to the public water supply system Connection rate to the public sanitation system Wastewater treatment (%) Phosphorus in flowing waters

SDG	Indicators
7 AFFORDABLE AND CLEAN ENERGY 	Share of renewables Wind energy (W) Photovoltaic systems (W) Energy consumption in municipal properties (heat) Charging point infrastructure
8 DECENT WORK AND ECONOMIC GROWTH 	Gross domestic product Ratio of gross fixed capital formation to GDP Family Seal companies – annual awards and current total number of certified companies Long-term unemployment rate (%) Employment rate – 15-64-year-olds (%) Employment rate – 55-64-year-olds (%) Gainfully employed individuals on supplementary benefits
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	Patent applications submitted to the German Patent and Trade Mark Office per capita of the population State expenditure on research and development per capita of the population (€) Third-party funding per professor (FTE) Number of large-scale collaborative research projects and coordinated programmes (regional and supraregional funding) Start-ups Highly-qualified professionals (%) Broadband internet access – private households (%)
10 REDUCED INEQUALITIES 	Rate of services for non-special forms of living linked to housing space Rate of Budget for Work benefit recipients plus outsourced workplaces of workshops for people with disabilities Employment rate – foreigners (%) School drop-out rate – foreigners (%) Naturalisations (%)
11 SUSTAINABLE CITIES AND COMMUNITIES 	Inward development – housing Living space Land take (%) Land-use intensity Recreational space Rental prices (€/m ²) Subsidised new rental housing with rent and occupancy obligation

SDG**Indicators**

11 SUSTAINABLE CITIES AND COMMUNITIES



- Homes for priority housing seekers through cooperation agreements, purchases of occupancy obligations as well as new rental housing subsidies
- Subsidised modernisation
- Completed residential buildings with renewable heating energy (%)
- Modal split for environmentally sound transport (choice of means of transport)
- Density of privately registered cars
- Privately registered passenger cars with electric drive
- Cycle route network
- Traffic accident victims

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



- Raw material productivity GDP/DMla including balance of intra-trade
- Amount of waste:
 - Generation of selected municipal waste (household and bulky waste)
 - Generation of selected municipal waste (household and bulky waste, separately collected recyclables from households, biowaste)
- Drinking water consumption - private households
- Certified hotels

13 CLIMATE ACTION



- CO₂ emissions per capita
- CO₂ emissions of Hamburg – total emissions and by sector
- Settlement area in the floodplain (%)

14 LIFE BELOW WATER



- Phosphorus in flowing waters

15 LIFE ON LAND



- Unfragmented open spaces
- Nature conservation areas (%)
- Landscape quality (hemeroby value)
- Soil sealing
- Sustainable forestry

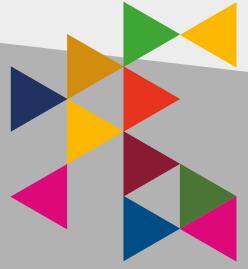
SDG**Indicators****16** PEACE, JUSTICE AND STRONG INSTITUTIONS

- Participation in elections to the German Bundestag
- Participation in elections to the Hamburg Parliament
- Participation in district assembly elections
- Anti-corruption
- Balance of income and expenditure in the core budget
- Total expenditure in the financial year (core administration)
- Tax revenues
- Criminal offences

17 PARTNERSHIPS FOR THE GOALS

- Fairtrade Town (number of previous awards / title renewals)
- Fairtrade Schools
- Partnerships in countries of the Global South
- Other Official Development Assistance (ODA) provided by Hamburg (excluding costs of university places)
- Costs of university places for students from countries of the Global South in Hamburg





03

3 Implementation of the Sustainable Development Goals (SDGs) in the Free and Hanseatic City of Hamburg

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3.1 SDG 1 – No poverty

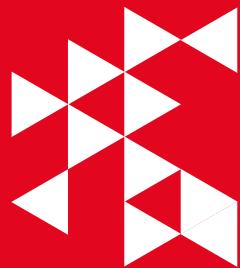
The **Sustainable Development Goal “No poverty”** requires all states to reduce poverty drastically. It aims to end poverty in all its forms everywhere. The 2030 Agenda defines poverty as a state in which basic needs cannot be met. Its manifestations include hunger and malnutrition, limited access to education and other basic services, social discrimination and exclusion, and lack of participation in decision-making processes. In this context, the core motto of the 2030 Agenda – “Leave no one behind” – is of key importance for guaranteeing sustainable livelihoods.

The targets for SDG 1 include interventions to reduce poverty and strategies to prevent child, youth and old-age poverty. Social protection systems appropriate to national circumstances should be implemented and a broad provision of basic services for all should be guaranteed.

The challenges in the Global South and Global North differ greatly with regard to SDG 1. While

the concept of the absolute definition of poverty is primarily applied in countries of the Global South, interventions in industrialised countries focus primarily on preventing, mitigating and promoting pathways out of relative poverty. Absolute poverty means that a person is unable to meet their basic needs for material reasons, whereas relative poverty refers to a person's social inequalities and socio-economic status. Among other things, it takes into account the socio-economic and cultural standards of a society, such as opportunities for participation.

SDG 1 on poverty reduction is key to the achievement of all the SDGs, and overlaps with all 17 of them. The main overlaps here are with SDG 4 (Quality education) and SDG 8 (Decent work and economic growth).



Overview – the City of Hamburg's links to SDG 1

Qualitative aspects:

- | Poverty prevention and reduction
- | Homeless assistance

Indicators:

- | Risk of poverty – children
- | Risk of poverty – youth
- | Risk of poverty in old age
- | German Social Code (SGB II) rate
- | Homelessness

Photo 11: Children stand in the mud with their rubber boots © Ben Wicks auf Unsplash



3.1.1 Introduction – implementation of SDG 1 in Hamburg

The best protection against poverty is employment that secures a livelihood. The Hamburg Labour Market Programme run jointly by the Federal Employment Agency, the Job Centre team.arbeit.hamburg and the Senate bundles relevant interventions to support various target groups. The lead agency is the Ministry for Social Affairs. One of the key aims of the three labour market partners is to reduce the risk of (old-age) poverty. Hamburg citizens should therefore be able to work in skilled occupations and professions without prolonged interruptions. To achieve this, Hamburg is pursuing educational policy approaches such as ensuring equal access to education and training for all population groups. At the same time, labour market policy interventions are being implemented that include combating precarious and atypical employment, and providing access to training for a wide range of stakeholder groups.

A further focus is on structural support for families, for example through the expansion of childcare facilities and the five-hour basic childcare that is free of charge. In accordance with the principle of "education right from the start", ensuring the right to early childhood education is one key to successful transition into the school system and the preservation of educational opportunities for all children in Hamburg – regardless of their social background. Young people transitioning from school to training and work have already been supported by the Youth Employment Agency since 2012 – with the aim: "No one should get lost - everyone is needed".

Another part of the Senate's policy is the sustainable prevention and eradication of homelessness. This takes place primarily within the scope of the overall plan for the care of homeless persons, and through numerous state-supported or state-implemented interventions.

The biggest milestones in the implementation of SDG 1 in the City of Hamburg in recent years include in particular:

- I Introduction first of a state minimum wage and from 2015 onward the statutory minimum wage
- I Increased participation in the labour force, espe-

cially by women

- I Decrease in the take-up of basic social security benefits among persons fit for work
- I Increase in the rate of uptake of child day-care facilities
- I Labour market integration of refugees
- I Further development of basic social security towards a basic income

3.1.2

Poverty prevention and reduction



Photo 12: Social Report of the Free and Hanseatic City of Hamburg
© Freie und Hansestadt Hamburg

Hamburg is a wealthy city, and its citizens have above-average incomes compared to the rest of Germany. However, there is an unequal distribution of income. Against this background, it is important to support people who are at risk of poverty. The at-risk-of-poverty rate indicates in percentage terms how many households are below the at-risk-of-poverty threshold (60 per cent of the average needs-adjusted net income). In Hamburg, the at-risk-of-poverty rate measured against the state median was 19.8 per cent in 2021 (see Annual Report of the Free and Hanseatic City of Hamburg 2021). Specific groups are particularly hard hit – especially young people in single-parent families with three or more children. People with a migration background also have a significantly above-average risk of poverty.

In 2014, the Senate published a ***Social Report***⁷, which presents the life situations of Hamburg's families and senior citizens in particular, and identifies the areas in which social policy supports and promotes Hamburg's citizens. The report serves as an empirical basis for discussing plans and options for labour and social policy action, and aligning this with socio-demographic and other social trends. It is divided into four studies, each with a different focus, based on

⁷ <https://www.hamburg.de/sozialbehoerde/publikationen/4255214/sozialbericht/>

different data sources and prepared by different institutes.

- I Families and seniors in Hamburg - cross-sectional study based on the microcensus; labour force participation and neediness of the next generation of seniors
- I Life situations of families and communities in need of SGB II benefits
- I Labour force participation and neediness of older workers
- I Senior citizens in Hamburg: basic social security in old age and assistance for long-term care as well as other transfer payments to older people.

In the years that followed, further life situation reports were compiled by the Senate, again with a focus on families, benefit recipients under SGB II, homelessness, and migration and displacement.

By passing the **Minimum Wage Act**⁸ in 2012, the Hamburg Senate fulfilled its responsibility to make clear or ensure that neither the employees of the City of Hamburg itself, nor the employees of the companies, institutions and agencies that provide services to the City of Hamburg, receive remuneration that can be considered precarious for their employment. With this voluntary commitment, the Senate took up the social debate on fair wages, which had also found expression in various requests in the Hamburg Parliament.

Since people with a migration background have a significantly above-average risk of poverty, they receive special support in Hamburg. With the publication of its **integration plan "We in Hamburg! Participation, interculturality and cohesion"**⁹ in 2017, Hamburg set out its integration policy. This pursues the goal of equal participation by all people, both with and without a migration background, in the core areas of so-

cietal life. The "we plan" is designed for everyone, as integration can only succeed as a task for society as a whole. Structural features of integration are made measurable through the integration plan; the indicators and target values are reviewed as part of an annual report to the Parliament, most recently published as paper22/9944¹⁰ in 2022. The City of Hamburg is also committed to **improving employment rights for asylum seekers and tolerated persons**. The legal frameworks for labour market integration have continued to improve significantly as a result of the various legislative processes since 2015. The Hamburg Senate has successfully campaigned at the federal level for easier access to work and training for refugees. We should highlight the successful efforts to suspend the priority check for the Hamburg agency district, the legal certainty achieved during training and subsequent employment for tolerated persons, and the reduction in waiting times for supportive employment promotion services. These opportunities must now be used. In the Senate's view, however, there is still a need for action, particularly with regard to the regulations for early access to systematic language support. This will continue to be the subject of initiatives at the federal level.

⁸ https://www.buergerschaft-hh.de/parldok/dokument/38612/gesetz_ueber_den_mindestlohn_in_der_freien_und_hansestadt_hamburg_und_zur_aenderung_des_hamburgischen_vergabegesetzes.pdf

⁹ <https://www.hamburg.de/zusammenhalt/10021064/integrationskonzept/>

¹⁰ https://www.buergerschaft-hh.de/parldok/dokument/81711/hamburger_integrationskonzept_2017_wir_in_hamburg_teilhabe_interkulturelle_oeffnung_und_zusammenhalt_drucksache_21_10281_bericht_ueber_den_umsetzungss.pdf

3.1.3 Homeless assistance

The City of Hamburg has had an elaborate and to some extent easy-to-access homeless assistance system in place for many years. To ensure the system's continuous further development in 2019 the Hamburg Senate published its paper entitled **further development of homeless assistance¹¹**, which refers to the **Master Plan for Homeless Assistance** in Hamburg adopted in 2012. The master plan provided for concrete interventions to improve the living situation of homeless people and to overcome homelessness. It was also further elaborated and concretised in sever-

¹¹ <https://www.hamburg.de/contentblob/12476216/9da0a7b80d-858ecdbea353d51a1fa43f/data/fortentwicklung-wohnungslosenhilfe.pdf>

Photo 13: © Nick Fewings auf Unsplash



al working groups in a three-year implementation process that lasted until the end of 2015. The implementation process was supported by an advisory board comprising experts from the voluntary welfare organisations as well as the competent ministries and district offices. The master plan has identified ways to improve the living situation of homeless people and to overcome homelessness. These principles and goals also guided the Ministry for Social Affairs in the further development of homeless assistance. The report on the master plan published in 2019 demonstrates that almost all of the objectives in the defined areas of action at that time had been successfully implemented. The further development of the support and assistance system will be continued in the future. Further specific projects and plans are already being prepared or implemented.

This includes significant quantitative increases. One example is the increase in personnel at agencies and authorities (including the strengthening of the specialist desks for housing emergencies and the expansion of street social work for the homeless). Another is the increase in places for emergency assistance and care services (e.g. the doubling of places for homeless people facing special, so-called grade 3 social problems from 150 to 300 places, as well as the increase

in places in overnight shelter and day room facilities for the homeless).

In terms of quality, the further development process is also progressing. One example is the improvement of standards in the winter emergency programme, with year-round single-room accommodation for particularly vulnerable homeless people. Others include the planning of emergency sleeping facilities for young adults, the Housing First model project for 30 long-term homeless people since 1 July, as well as special ongoing projects to improve outreach to and accommodation for homeless people, including the unsheltered mentally ill. The new plan for the qualitative and quantitative strengthening of street social work for homeless people has also been launched. Furthermore, there is already an increasing diversification in public housing and shelters to meet the special needs of clients, including women in need of protection who have experienced violence, people in need of care, young adults and the elderly. In connection with housing placement, the concept of interim leasing has been developed and implemented. Under this arrangement, the social enterprise for housing Fördern & Wohnen AöR (F&W) rents flats for a limited period of two years, and sublets them to households that qualify for public housing.

3.1.4 Indicators

1 NO POVERTY



Risk of poverty – children (%)

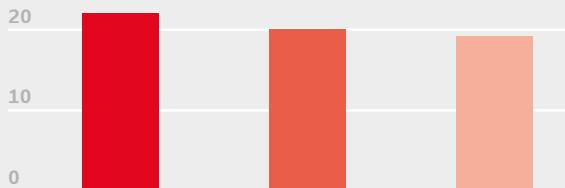
x per cent of the population under 15 years of age receives – indirectly through the claimants – benefits under SGB II. (Source: Federal Employment Agency, statistical offices of the federal states)

The risk of poverty for children is often caused by the unemployment and poverty of their parents. Possible consequences can be underprovision in important areas of life (such as housing or nutrition, and unequal educational and participation opportunities). In the City of Hamburg, data is available up to the year

2020; the proportion of under-15s affected by poverty has fallen over the period observed since 2011.

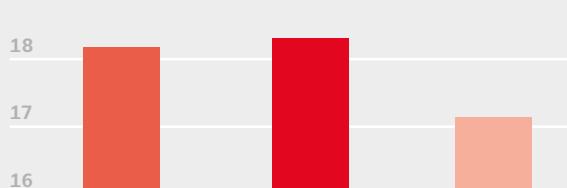
Risk of poverty – children (%)

22.01 %
2011 **20.07 %**
2015 **19.14 %**
2020



Risk of poverty – youth (%)

18.18 %
2011 **18.31 %**
2015 **17.15 %**
2020



Risk of poverty – youth (%)

x per cent of young people aged between 15 and 17 receives – indirectly through the claimants – benefits under SGB II.

(Source: Federal Employment Agency, statistical offices of the federal states)

1 NO POVERTY



The risk of poverty among young people can be a direct consequence of the risk of poverty among children. The fact that young people are in transition to independence adds to the difficulties of this target group, as they do not have sufficient resources for basic services. However, if they were already only

able to participate in educational opportunities to a below-average extent due to poverty, this limits their options for choosing a profession or a course of study, for instance. In the City of Hamburg, the proportion of 15 to 17-year-olds affected by poverty has fallen slightly over the period observed.



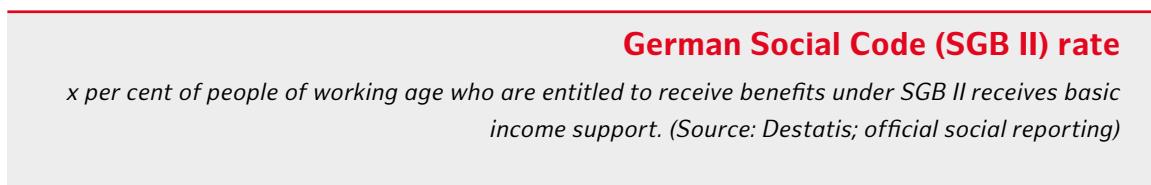
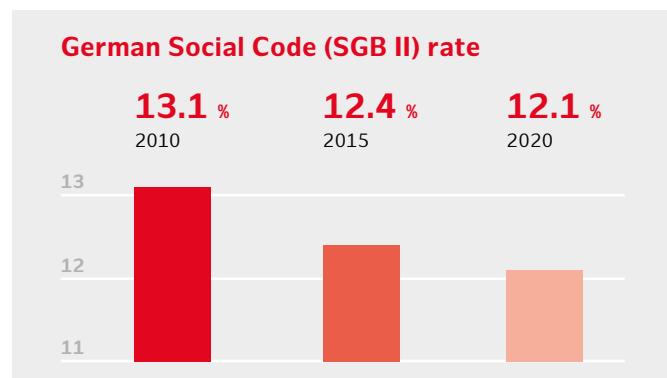
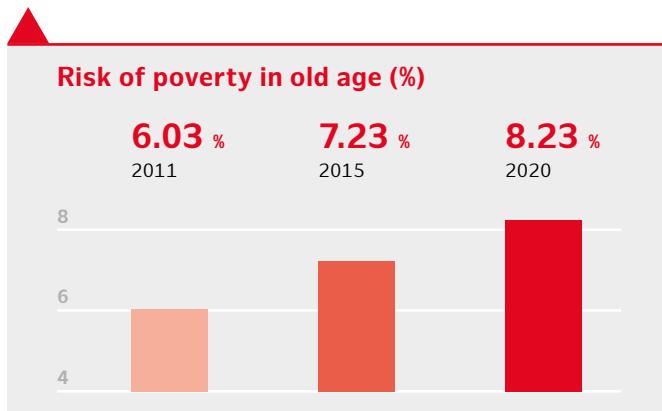
Risk of poverty in old age (%)

x per cent of people aged 65 or older receives basic income support under SGB XII.

(Source: Federal Employment Agency, statistical offices of the federal states)

The risk of poverty in old age describes the problem of having a pension entitlement that is below the subsistence level, irrespective of the length of employment, upon reaching retirement. In the City of Hamburg, the proportion of people over 65 affected by

poverty has risen slightly in recent years. The extent to which people are dependent on basic income support in old age is an indicator of inadequate sources of income in this phase of life.



The SGB II quota refers to the proportion of the working-age population that is dependent on basic income support benefits. The receipt of state benefits for basic income support is an important metric for assessing the social situation, and therefore the need for so-

cial policy action. The proportion of the working-age population in Hamburg dependent on basic income support benefits has been declining since 2010.



Homelessness (%)

2010	2015	2020
n/a	n/a	1.021 %

The reasons why people become homeless are many and varied, but very often involve a massive crisis in life history, and poverty. For many people it is also becoming increasingly difficult to find affordable and adequate housing. This indicator provides information on how many people are accommodated in residential shelters and other facilities for homeless

x % of the population is accommodated in public housing due to homelessness or displacement. (Source: Federal Employment Agency, statistical offices of the federal states)

people, or spend the night in emergency overnight shelters including the winter emergency programme. However, it cannot provide information on the actual number of homeless people. In Hamburg, the proportion of housed homeless registered persons in 2020 was 1.021 per cent.



3.2 SDG 2 – Zero Hunger

The **Sustainable Development Goal “Zero hunger”** aims to end hunger in the world, and ensure year-round access for all people to nutritious and safe food that is suitable for consumption by the end consumer.

The targets of SDG 2 do not focus exclusively on consumption by the end consumer. Besides financial access to food, it also aims to enable the quality that ensures a healthy diet. This goes hand in hand with the prevention of malnutrition through a varied and sustainable food supply based on needs.

While SDG 2 in the Global South relates to food and nutrition security, the focus in the Global North is on promoting and developing low-car-

bon and resilient agricultural practices. For municipalities and cities, this means ensuring sufficient food and nutrition in the local space. Producers should have guaranteed access to productive resources. In light of further population growth, productivity and yields need to be increased through agricultural methods that are more resilient to disturbances. Sustainable local development should also aim to source food for the local community from sustainable agriculture, which means sustainable food production.

SDG 2 also overlaps with other Sustainable Development Goals: No poverty (SDG 1), Good health and well-being (SDG 3), Economic growth (SDG 8) and Good governance (SDG 16).



Overview – the City of Hamburg's links to SDG 2

Qualitative aspects:

- I Sustainable food production and reduction of food waste

Indicators:

- I Organic farming
- I Agricultural nitrogen surplus

Photo 14: Weekly market Sternschanze © Mediaserver Hamburg



3.2.1

Introduction – implementation of SDG 2 in Hamburg

In Hamburg, SDG 2 is driven by various ministries within the scope of their competence. The Ministry for Social Affairs is the lead ministry for health-policy aspects of food and nutrition; the Ministry for Business and Innovation (BWI) is responsible for the food industry/skilled food trades; the Ministry for Justice and Consumer Protection (BJV) has lead responsibility for the topics of consumer protection, food safety and the reduction of food waste, while the Ministry for the Environment, Climate, Energy and Agriculture (BUKEA) works in the area of agriculture. One key aim of the Agricultural Master Plan 2025¹² is to secure the competitiveness of Hamburg's agricultural enterprises and to establish sustainable farming methods.

Hamburg does not have any reliable data on food waste. As things stand, no concrete figures on food waste are collected. The city cleaning service does perform an annual household waste analysis. It provides percentage figures on the specific waste fractions, including organic waste, disaggregated into compostable and non-compostable fractions. However, no exact figure for food waste in household waste can be derived from this. Moreover, there is no quantification of the green or food waste fractions for the separately collected organic waste.

One of the greatest success stories in the implementation of SDG 2 in the city in recent years is the Hamburg initiative aufgefangen ("collect it"). Launched in 2022, this has enabled the formation of a large network for food sustainability. The initiative is constantly growing through new partnerships, as well as

¹² https://www.buergerschaft-hh.de/parldok/dokument/68159/agrarpolitisches_konzept_2025_stellungnahme_des_senats_zu_den_ersuchen_der_buergerschaft_vom_28_maerz_2018_oekologische_qualitaet_staedtischer_landwir.pdf

numerous projects that are leading to less food waste in Hamburg.

Besides the qualitative interventions, the City of Hamburg also measures its contribution to SDG 2 by the proportion of organically farmed land and the agricultural nitrogen surplus. Hamburg thus follows

the recommendations of the study "SDG Indicators for Municipalities", which was initiated by the Association of German Cities and published by the Bertelsmann Stiftung. These indicators are also relevant to many other German municipalities, and thus enable comparability.

3.2.2

Sustainable food production and reduction of food waste

Photo 15: In the Hamburg metropolitan region there are many farms with organic vegetable production.
© Mediaserver Hamburg / Christian Brandes



In the area of food production, around 130 companies in the food industry have joined forces in the ***foodactive Hamburg network***¹³. This official food network of the Free and Hanseatic City of Hamburg is the network with the largest number of members in northern Germany. For this, Germany's Federal Ministry for Economic Affairs and Climate Action has awarded the network the Silver Label. The network develops solutions to typical challenges faced by the food industry and to questions concerning the production of food. These concern for instance the topics of healthier nutrition and sustainability in food production. For more than ten years, foodactive has regularly brought together the food industry on various issues. It does so at specific events where specialist information is passed on and where experts can dialogue with their colleagues in the industry. Examples of issues discussed include: options for quantitative measurement of sustainability indicators, material efficiency, climate action, regenerative agriculture, climate and environmental labels, sustainable packaging and "plastic-free" items.

To reduce food waste and help promote sustainability, the ***Hamburg initiative "aufgefangen"*** ("collect it")¹⁴ was launched. Through this initiative, Hamburg businesses, organisations, institutions and the Ministry for Justice and Consumer Protection join forces

13 <https://www.foodactive.de/?lang=en>

14 <https://www.hamburg.de/aufgefangen/>

in their engagement. The initiative aims to promote dialogue, implement joint projects and provide tips for the people of Hamburg. The partner organisations jointly develop solutions to reduce food losses and use food sustainably. The initiative also aims to help manage the delivery of food donations. To this end, it networks businesses and other initiatives and creates short routes. Since food waste can only be reduced together with citizens, the initiative informs people in Hamburg about food sustainability and provides them with tips. In autumn 2022, the "First Hamburg Dialogue against Food Waste" took place as a specialist congress. In Hamburg, numerous companies, associations and initiatives are already actively engaged in creating more sustainability and conserving resources. However, uncertainties often still remain. The initiative aims to focus engagement against food waste and make it more visible by improving stakeholder networking in Hamburg. Hamburg's Ministry for Justice and Consumer Protection is actively involved in a coordination and advisory role. Currently, 20 stakeholders are networked in the initiative. These include large retail chains such as EDEKA and Rewe, which conduct a variety of campaigns in the area of food sustainability and maintain partnerships with the Hamburg food banks. Companies such as Hela, TUI, Hamburg Cruises and the Hamburg Sports Club are also involved through individual partnerships and projects. Furthermore, smaller businesses (such as the Streubar packaging-free store) are helping to reduce food waste in Hamburg through their corporate approach, their collaboration with the foodsharing movement and the creation of food donation points that provide legal certainty. The manifold collaborations and numerous projects are presented in detail on the initiative's website. All in all, the "collect it" initiative is an ongoing undertaking whose focal areas continue to unfold. In the future, for example, there are plans to address the areas of out-of-home catering, as well as education and school catering, in conjunction with food sustainability.

Another contribution against food waste in Hamburg is made by the initiative **Kreuzfahrtschiffe spenden Lebensmittel** ("Cruise ships donate food"). Hamburg

has successfully lobbied at the federal level to allow cruise ships to donate the food they no longer need to the Hamburger Tafel (an association against food waste). Previously, customs and import law had meant that such food had to be thrown away. Cruise ships were considered "third countries", so food had to be destroyed when brought into the European Union. Hamburg, together with the federal government, the customs authorities and the veterinary and import office, has created a new framework. Suitable food of non-animal origin, such as noodles, rice, fruit juices or muesli bars, may now be donated. The City of Hamburg, the major shipping companies and the Tafel association are thus jointly sending a signal in the fight against food waste.

3.2.3 Indicators

2 ZERO HUNGER



Organic farming (%)

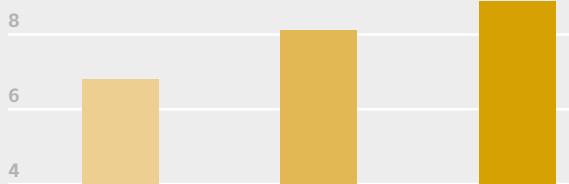
x per cent of Hamburg's agricultural land is organically farmed. (Source: Statistical Office for Hamburg and Schleswig-Holstein – Statistical Report C IV – LZ 2020 HH, Part 4¹⁵)

Organic farming is an environmentally and animal-friendly way of farming that conserves resources. This ensures positive ecological benefits for society as a whole. The share of organically farmed land

on Hamburg farms increased over the period 2010–2020, reaching 8.9 per cent in 2020.

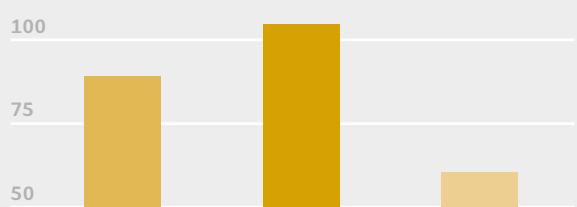
Organic farming (%)

6.8 %¹⁶ 2010 **8.1** %¹⁷ 2016 **8.9** %¹⁸ 2020



Agricultural nitrogen surplus (kg/ha)

102 kg/ha 2010 **110.7** kg/ha 2015 **85.1** kg/ha 2020



Agricultural nitrogen surplus (kg/ha)

The nitrogen surplus is x kilograms per hectare of agricultural land.
(Source: Federal state initiative on core indicators)

2 ZERO HUNGER



In particular, the excessive use of fertilisers and the associated agricultural nitrogen surplus cause a variety of environmental problems. In this respect, the global planetary pollution boundary has already been exceeded. Furthermore, nitrogen surpluses lead to the acidification of surface waters, seas and various

terrestrial ecosystems, as well as nitrate pollution in groundwater. In Hamburg, the agricultural nitrogen surplus has recently been declining; in 2020, the surplus was 85.1 kilograms per hectare.

15 https://www.statistik-nord.de/fileadmin/Dokumente/Statistische_Berichte/landwirtschaft/C_IV_Teil_4_H_%C3%96ko/C_IV_LZ2020_Teil_4_HH.pdf

16 978 ha land (organic) / 14,334 ha land (total)

17 1,192 ha land (organic) / 14,637 ha land (total)

18 1,295 ha land (organic) / 14,563 ha land



3.3 SDG 3 – Good health and well-being

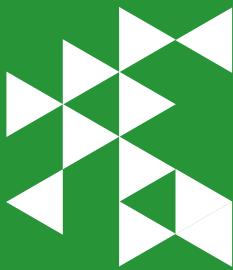
The **Sustainable Development Goal „Good health and well-being“** calls for ensuring healthy lives and promoting well-being at all ages. In addition to quality health care for all – regardless of social status and other factors – this SDG also focuses on prevention, in order to reduce the requirement for health care.

One target of SDG 3 is to significantly reduce deaths and illnesses from hazardous chemicals and from air, water and soil pollution. One of the global challenges, in addition to the increase in chronic and mental illnesses, is noise and air pollution from private motorised transport.

In the Global South, the focus is on reducing the global child and maternal mortality rate and

ending epidemics and tropical diseases. In the Global North, on the other hand, one focus is on the prevention and treatment of drug abuse and excessive alcohol consumption. In view of the ageing society in Germany, care and support are increasingly coming to the fore as locational factors. High-quality medical care and services close to home are therefore of particular importance for sustainable development.

The importance of SDG 3 is also illustrated by the direct links to other SDGs: healthy living includes healthy nutrition (SDG 2 - Zero hunger; SDG 6 – Clean water; and SDG 11 – Sustainable cities and communities).



Overview – the City of Hamburg's links to SDG 3

Qualitative aspects:

- | Health promotion and maintenance through sport and exercise
- | Air quality improvement
- | Reduction of noise pollution

Indicators:

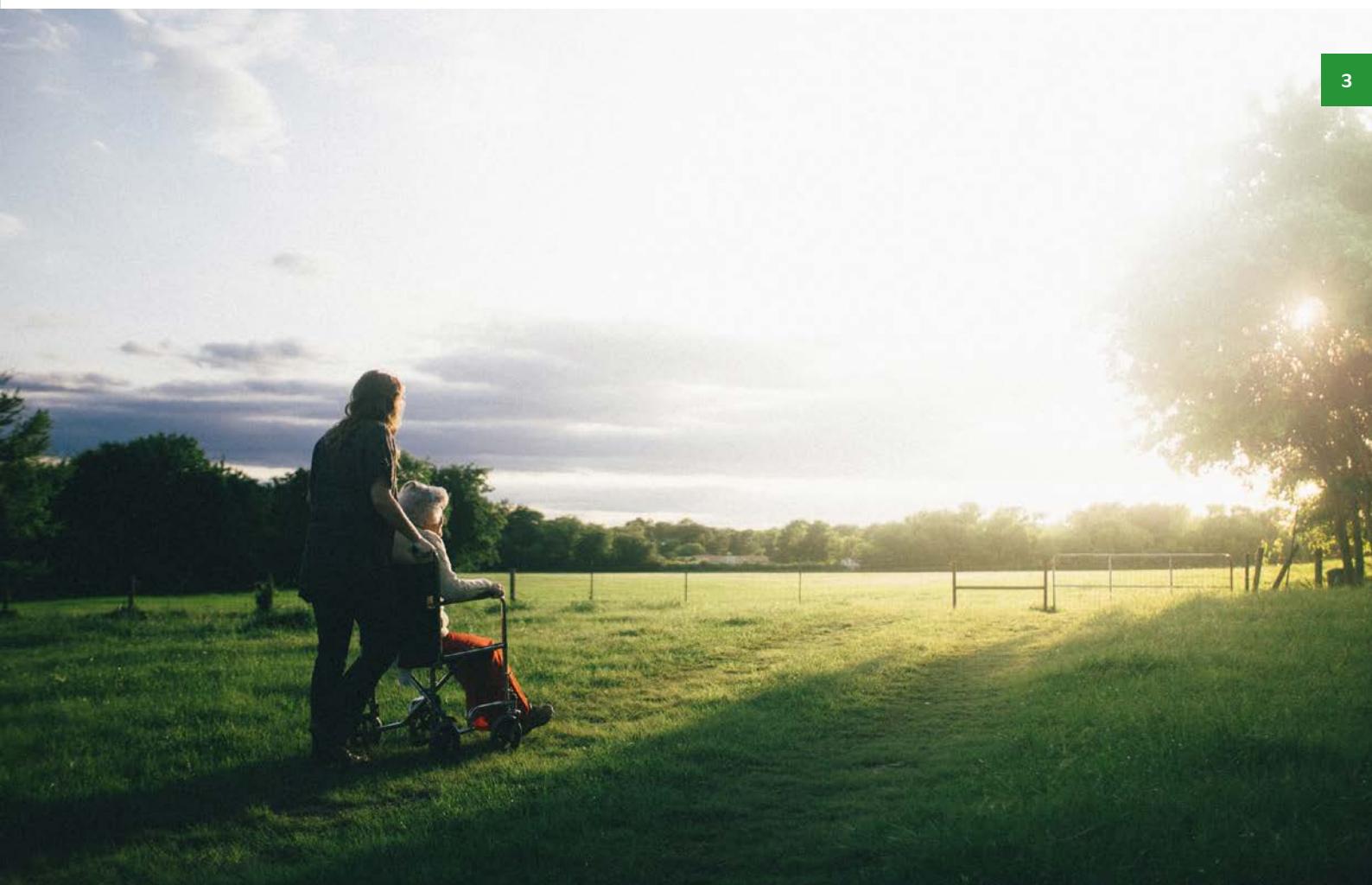
- | Number of local networking points for prevention
- | Basic care close to home – family doctor
- | Basic care close to home – hospital
- | Basic care close to home – pharmacy
- | Premature mortality rate - women and men
- | HIV diagnosis rate
- | Staff in nursing homes
- | Staff in care services
- | Nursing home places
- | Air pollution: particulate matter (particle size 10 and particle size 2.5) / nitrogen dioxide (NO_2) / ozone (O_3)

3.3.1 Introduction – implementation of SDG 3 in Hamburg

The global COVID-19 pandemic, its impact on Hamburg's citizens and the measures taken to contain the pandemic have underlined that the goal of ensuring healthy lives for all remains a key challenge for the city.

In the City of Hamburg, the topic of prevention and health promotion is managed by the Office for Health in the Ministry for Social Affairs, which collaborates with a wide range of actors. The Hamburg Working Group for Health Promotion (HAG) is the state-wide expert and coordination body for means-based health promotion and prevention. By establishing the Municipal Health Promotion Management System (KGFM) in the Hamburg districts and creating the local networking points for prevention, structures have been es-

Photo 16: © Dominik Lange auf Unsplash



tablished that can initiate needs-based, low-threshold health promotion services in neighbourhoods. In Hamburg, this work focuses in particular on socio-economically deprived areas. The activities of the office are geared towards behavioural and situational prevention. This includes the goal of improving the health literacy of citizens.

The goal of promoting and maintaining health is also at the centre of Hamburg's development as an „Active City“. The key interventions here are the comprehensive promotion of physical activity for all Hamburg's citizens, the expansion of the sports infrastructure and the strengthening of club sports. The promotion of physical activity specifically for children and young people, integration and inclusion through sports, and the promotion of women in sports are also being continuously expanded.

To protect the health of the population from air pollutants and noise, the Senate is implementing further interventions. The noise action plan aims to reduce the number of people affected by excessive noise (especially traffic noise). Noise pollution is calculated and mapped every five years in accordance with the Environmental Noise Directive. Based on this, noise reduction interventions are defined as part of the noise action plan. In addition, air quality is monitored in accordance with the 39th Ordinance for the Implementation of the Federal Immission Control Act (BImSchV).

Besides reducing air pollution and noise, the Ministry for Justice and Consumer Protection also works to ensure that living and environmental conditions are designed in a healthy manner with regard to other environmental factors (environmental health protection).

By translating scientific findings into local governance, health protection is considered early on, especially in urban planning, at the level of preventive public health management. This is designed to pre-

vent conditions that are detrimental to health from developing in the first place.

The biggest success stories in the implementation of SDG 3 in the City of Hamburg in recent years include in particular:

- | As part of COVID-19 prevention, the responsible ministry launched an information and prevention campaign that aimed to reach people especially in socio-economically deprived neighbourhoods. The successful cooperation with local actors and MiMi Hamburg („With Migrants for Migrants“) is now to be continued with a focus on increasing health literacy.
- | In the area of substance abuse, the widespread use of e-cigarettes among young people is particularly problematic. In Hamburg, the tobacco prevention programme „Be smart - don't start“ is therefore funded by the State Institute for Teacher Training.
- | The limit values specified in the 39th Ordinance for the Implementation of the BImSchV for the air pollutant „particulate matter“ (PM_{10} and $PM_{2,5}$) are complied with at all monitoring stations. In the reporting period from 2010 onwards, values for the most part fell significantly below the annual mean values.
- | The short-term limit values specified in the 39th Ordinance for the Implementation of the BImSchV for nitrogen dioxide (NO_2) were complied with at all monitoring stations during the reporting period. The specified long-term limit value, the annual mean, was complied with at all monitoring stations for the first time in 2021.

Besides the qualitative interventions, the City of Hamburg also measures its contribution to SDG 3 inter alia by the proportion of staff in nursing homes and care services, and the number of nursing home places. Hamburg thus follows the recommendations of the study „SDG Indicators for Municipalities“, which was initiated by the Association of German Cities and published by the Bertelsmann Stiftung. These indicators are also relevant to many other German municipalities, and thus enable comparability.

3.3.2

Health promotion and maintenance through sport and exercise

Photo 17: Beachvolleyball in Hamburg
© Mediaserver Hamburg/Ingo Boelter



In 2022, Hamburg adopted Active City – Die Großstadtstrategie auf der Basis von Sport und Bewegung („Active City The Metropolitan Strategy based on Sport and Physical Activity“ (**the Active City Strategy**¹⁹)). With this decision, the City of Hamburg has worked the approaches developed since 2016 through the Active City Master Plan into a comprehensive strategy to promote sport and exercise, and updated them for the future. The Active City Strategy defines the promotion of an active lifestyle as a cross-cutting task in the ministries and offices of the City of Hamburg.

Here Hamburg has set itself the goal of promoting sport and exercise in a comprehensive, long-term and sustainable way. The aim is to get more people in Hamburg moving, and motivate them to lead an active lifestyle. In recent years, numerous approaches have been developed or refined. Besides the expansion of sports infrastructure, these include sports and exercise-oriented urban development, the targeted activation of population groups that are not involved in sports and the strengthening of club sports. The idea is to make the best possible use of the potential of sport to strengthen social cohesion and individual quality of life and health in Hamburg.

The Active City Strategy, which includes 232 individual goals, serves as a guiding framework for Hamburg's sports policy for the coming years. Besides expanding the definition of sport to include the aspect of movement (especially movement in everyday life), the cross-ministerial approach and the use of cooperation arrangements receive greater emphasis. This also means that the social role of sport will be

¹⁹ <https://www.hamburg.de/active-city/16251852/active-city-strategie/>

changed and strengthened by gradually integrating in into areas of action and everyday life in the big city.

In order to obtain scientifically valid data on the physical activity and sporting activity of Hamburg citizens, the Active City Strategy is also receiving scientific support from the University of Hamburg (Department of Sports and Exercise Medicine). As part of the project „Scientific Support Active City“, the researchers review the existing data, evaluate it and derive targeted recommendations for action to further promote physical activity and health in Hamburg.

For the first time, the „First Hamburg Physical Activity Report“²⁰ provides meaningful and scientifically based data on the physical activity of Hamburg residents, and transparently presents the success stories and what still needs to be done in terms of physical activity promotion. To summarise, the data obtained indicates that Hamburg citizens are particularly physically active in their leisure time compared to the rest of Germany. The city also has a high density of gyms

and health studios, as well as the highest density of gyms and health facilities by national comparison.

The basis for the Hamburg Physical Activity Report was provided by the two large studies „NAKO Health Study“ and „Hamburg City Health Study“. These are extensive interdisciplinary research projects that are intended in the future to help prevent illnesses earlier and enable people to receive more individualised treatment. In addition, further data, for example on school entrance examinations, school swimming, and memberships of sports clubs, gyms and health studios, were reviewed and evaluated for the physical activity report.

In order to generate further representative data on the physical activity of all defined target groups in the future, to derive recommendations for action and to accompany the process as part of implementing the Active City Strategy, the scientific support will be continuously expanded and structurally institutionalised at the University of Hamburg. Hamburg will thus continue to rely on scientific expertise to review the effectiveness and scope of interventions to promote physical activity and, if necessary, develop them further based on evidence.

20 <https://www.hamburg.de/contentblob/16305878/ab0b106dd2bc45a51a389dcd01a0178d/data/active-city-strategie-dokument.pdf>

3.3.3 Air quality improvement

With the first Clean Air Plan of 2004, which was updated in December 2012, the City of Hamburg made great efforts and improved air quality. Through a large number of interventions, it was possible to comply with almost all legally prescribed target and limit values. With the second update of the Clean Air Plan, further interventions were introduced in order to put an end to the continuing exceedance of the annual mean limit value for nitrogen dioxide (NO₂) along a few sections of road, and thus to compensate for the lack of improvement in the reduction of emissions from diesel passenger cars. The third update of

the Clean Air Plan for Hamburg²¹ (part 1) serves to implement the ruling of the Hamburg Higher Administrative Court in 2019, as amended by the ruling of the Federal Administrative Court in 2021. According to the ruling, the City of Hamburg is obliged to update the Clean Air Plan in such a way that the period of exceedance of the immission limit value for nitrogen dioxide of 40 µg/m³ averaged over a calendar year is kept as short as possible. With the update, a traffic measure that had been introduced unscheduled in 2019 was then fixed. Thus in 2021, all limit values of the 39th BlmSchV (Ordinance for the Implementation of the Federal Immission Control Act) relating to hu-

man health were complied with at all monitoring stations in Hamburg.

In 2021, the World Health Organisation (WHO) published new air quality guidelines based on extensive systematic analyses of the current state of scientific knowledge, which confirm that air pollutants also have a negative impact on health below the previous guideline values. In the current revision of the Ambient Air Quality Directive, the EU Commission has submitted a proposal in which the proposed limit values are based on the WHO recommendations and are significantly lowered. Consequently, in the future even greater efforts will be made to reduce air pollution in order to ensure adequate health protection.

21 <https://www.hamburg.de/luftreinhaltung/16216328/luftreinhalteplan/>

3.3.4 Reduction of noise pollution

3

High levels of noise pollution can also pose a serious risk to human health. Against this background, the EU Environmental Noise Directive aims to reduce environmental noise. Environmental noise is defined as annoying or harmful outdoor noise caused by road traffic, rail traffic, air traffic, commercial or industrial installations. The European Directive was transposed into German law accordingly. This obliges municipalities to draw up noise maps and noise action plans based on them. In this way, noise impacts in areas found to be particularly polluted are to be combat-ed by implementing specific interventions, and quiet areas are to be protected from any increase in noise. The Free and Hanseatic City of Hamburg adopted a **Noise Action Plan**²² in 2013, which was updated in 2021. The focus of the Noise Action Plan is to reduce road traffic noise, as this is the dominant noise source and causes the highest impact. To this end, concrete

22 <https://www.hamburg.de/laermaktionsplan/>

strategic interventions for noise reduction are drawn up. The mapping required for this (in 5 dB level classes) was published in 2012 and 2017. For calculating and mapping the values in 2022, the standard Europe-wide calculation regulations were applied for the first time. Due to the necessary adaptation of the sound propagation calculation and assessment procedures, the methodology brings about a change in the numbers affected. Consequently, meaningful comparisons are only possible to a limited extent.

As the currently applicable noise limits or noise guideline values do not correspond to the current state of

scientific knowledge on the health effects of noise (see the WHO Environmental Noise Guidelines for the European Region 2018), Hamburg plans to implement further interventions leading to a reduction of environmental noise and the associated reduction of potentially health-threatening noise exposure.

Photo 18: Subway at the Landungsbrücken © Mediaserver Hamburg



3.3.5 Indicators

3 GOOD HEALTH AND WELL-BEING



Basic care close to home – family doctor (m)

2011	2015	2020
400 m	385 m	n/a

The population-adjusted linear distance to the nearest family doctor is x metres. (Source: Federal Institute for Research on Building, Urban Affairs and Spatial Development, statistical offices of the federal states)

In case of acute illness, the quick and immediate accessibility of the nearest family doctor is absolutely essential. In principle, working people, families with children and older people benefit particularly from

affordable basic health care close to home. In 2015, the population-adjusted linear distance to the nearest family doctor was 385.0 metres. No more recent data is available for Hamburg.

3 GOOD HEALTH AND WELL-BEING



Basic care close to home – hospital (min.)

2010	2015	2020
n/a	n/a	5.62 min

The population-adjusted car journey time to the nearest primary care hospital is x minutes. (Source: Federal Institute for Research on Building, Urban Affairs and Spatial Development, statistical offices of the federal states)

Comprehensive and quickly accessible hospital care is an essential element of services of general interest. Hospitals must act according to strict economic parameters and at the same time guarantee high quality

medical care. In Hamburg, the average population-adjusted car journey time to the nearest hospital is 5.62 minutes.

3

3 GOOD HEALTH AND WELL-BEING



Basic care close to home – pharmacy (m)

2010	2015	2017
n/a	n/a	505 m

The population-adjusted linear distance to the nearest pharmacy is x metres. (Source: Federal Institute for Research on Building, Urban Affairs and Spatial Development, statistical offices of the federal states)

Short distances to pharmacies are just as important as proximity to the family doctor or hospital. The number of pharmacies is also influenced, among other things, by the demographic structures of a region or

competition in the free market (including new digital retail platforms). In 2017, the population-adjusted linear distance to the nearest pharmacy in Hamburg was 505.0 metres.



Premature mortality rate - women and men

*Before the age of 65, there are x deaths per 100,000 of the under-65 population (age-standardised).
(Source: Statistical Office North; own calculations of the Ministry for Social Affairs (Division G21))*

Premature mortality (deaths before the age of 65) is a scientifically recognised indicator for a healthy lifestyle and the avoidance of behaviour that poses a risk to health. Premature mortality continues to be a particular problem for the male population. A portion of premature deaths is considered avoidable for certain diagnoses, be it through primary prevention interventions, health promotion based on circumstances,

early detection, medical treatment or health literacy promotion. In Hamburg, the trend in deaths per 100,000 women is fluctuating, but has been declining since 2015. The level for men is generally higher, but has been declining over time.

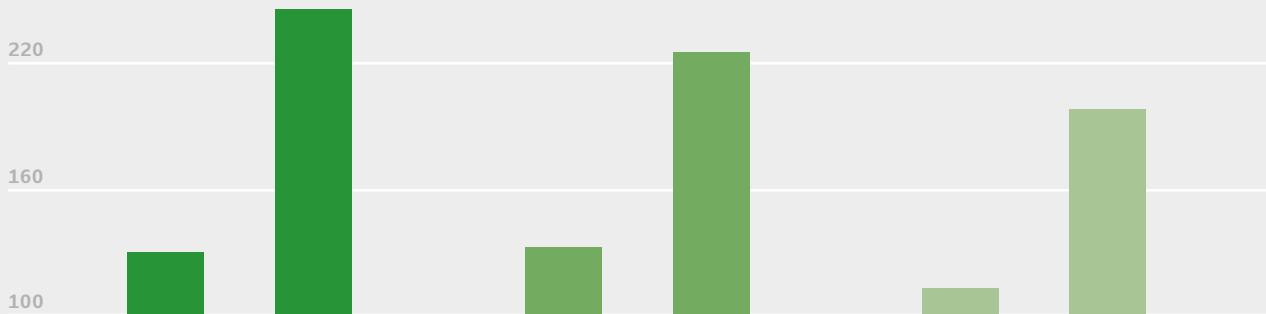
Premature mortality rate - women and men

Unit: deaths per 100,000 inhabitants (age-standardised according to "old" European Standard Population)

129.9 ♀ 246.1 ♂
2010

132.1 ♀ 225.7 ♂
2015

112.4 ♀ 198.2 ♂
2020





HIV diagnosis rate

2010	2015	2020
> 50 %*	87 %	91 %

* (rate of diagnosis was not yet recorded at this time)

By 2030, according to the Joint United Nations Programme on HIV/AIDS (UNAIDS) and its Fast-Track Targets, 95% of people living with HIV should know of their diagnosis, 95% of these people should be receiving antiretroviral therapy and 95% of people on antiretroviral therapy should have a viral load below the detection limit. Improving access to HIV testing services, and a high proportion of diagnosed HIV infections is a basic prerequisite for ensuring that as many people as possible have access to HIV therapy ("Leave no one behind"). From a medical point of

The proportion of people diagnosed as HIV-positive in Hamburg is x per cent. (Source: Robert Koch Institute, key data for Hamburg)

view, HIV therapy not only ensures a good quality of life for people with HIV. It also ensures that, given a correspondingly low viral load, the virus cannot be transmitted further. The number of people with HIV who know about their infection has improved continuously in Hamburg in recent years. This is most likely due not only to well-developed testing services, but also to effective outreach to people at increased risk of infection.



Staff in nursing homes

(full-time equivalent staff in nursing homes per 1,000 in need of care)

2011	2015	2021
580 Anz.	629 Anz.	636 Anz.

There are x persons working (full-time positions) in nursing homes per 1,000 inpatients and day care patients in need of care. (Source: Own calculations of the Ministry for Social Affairs based on nursing statistics for the year in question published by the Statistical Office for Hamburg and Schleswig-Holstein (Statistical Office North))

Given the demographic trend, the number of people in need of care is constantly increasing. This poses considerable challenges for the German care system in its current form as regards human and financial re-

sources. The number of full-time positions per 1,000 people in need of care has risen slightly in Hamburg since 2015 to 636 (2021).



Staff in care services (staffing ratio in full-time equivalents)

2011	2015	2021
0.48 quan.	0.45 quan.	0.36 quan.

In non-residential care services, x employees (full-time positions) are employed per person in need of care. (Source: Own calculations of the Ministry for Social Affairs based on nursing statistics for the year in question published by the Statistical Office for Hamburg and Schleswig-Holstein (Statistical Office North))

Due to demographic change, the demand for health services is continuously increasing. This is reflected above all in the demand for non-residential care services. To guarantee good non-residential care in Germany and to maintain the care system, better work-

ing conditions need to be brought about by lowering staff workloads. In Hamburg, however, the trend over time is declining in 2021, 0.36 employees (full-time positions) were employed per person in need of care, compared to 0.45 employees in 2015.



Nursing home places

(available residential places in nursing homes per 1,000 inhabitants aged 65 and over)

2011	2015	2021
53 quan.	53 quan.	51 quan.

x residential nursing home places are available per 1,000 inhabitants aged 65 and over. (Source: Care statistics (2011, 2015, 2021) Statistical Office North)

The number of available residential places in nursing homes plays a key role, given the major staffing and financial challenges in the German health care system. However, their importance is declining in the

face of an increasing number of day care places and of new forms of housing such as residential care communities.

3 GOOD HEALTH AND WELL-BEING



Air pollution

Particulate matter of particle size 10 (PM_{10}) / particulate matter of particle size 2.5 ($PM_{2.5}$) (Source: Hamburg air monitoring network (BUKEA) <https://luft.hamburg.de/>, Inner-city background monitoring station: Sternschanze For classification of the Sternschanze monitoring station, see Air Quality Annual Report 2020²³⁾

The indicator "air pollution" describes the impact of e.g. particulate matter on people or the natural environment. Particularly high levels occur in energy production, road traffic, shipping, air traffic, rail traffic, agriculture and industry. Particulate matter (PM) is considered particularly harmful to health and causes pollution primarily in densely populated areas. In the course of the last few years, a decrease in particulate matter immission concentrations (both PM_{10} and

$PM_{2.5}$) could be observed. Both the $PM_{2.5}$ limit value of the 39th BImSchV (for the annual mean value of 25 $\mu\text{g}/\text{m}^3$) and the PM_{10} limit value of the 39th BImSchV (for the annual mean value of 40 $\mu\text{g}/\text{m}^3$) were complied with at all monitoring stations in 2020 and in the years prior to that. Current data and annual reports of the Hamburg air monitoring network are available at <https://luft.hamburg.de/>.

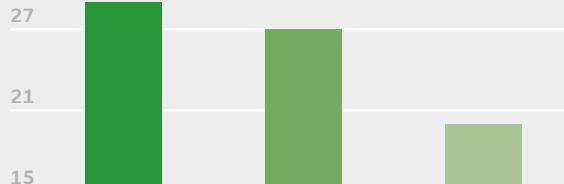
Air pollution

PM_{10}	24 $\mu\text{g}/\text{m}^3$	$22 \mu\text{g}/\text{m}^3$	$15 \mu\text{g}/\text{m}^3$
$PM_{2.5}$	16 $\mu\text{g}/\text{m}^3$	$13 \mu\text{g}/\text{m}^3$	$9 \mu\text{g}/\text{m}^3$



Air pollution

29 $\mu\text{g}/\text{m}^3$	27 $\mu\text{g}/\text{m}^3$	20 $\mu\text{g}/\text{m}^3$
2010	2015	2020



Air pollution

The concentration of nitrogen dioxide (NO_2) is x micrograms per cubic metre of air. (Source: Hamburg air monitoring network (BUKEA) <https://luft.hamburg.de/>, Inner-city background monitoring station: Sternschanze, For classification of the Sternschanze monitoring station, see Air Quality Annual Report 2020

Nitrogen dioxide (NO_2) is a corrosive irritant gas that directly damages the mucous membranes in the entire respiratory tract, which is why nitrogen dioxide is at the centre of efforts to achieve clean air. In Hamburg, a decreasing trend in ambient air pollution can be observed for NO_2 , in both long-term and short-term values. The NO_2 limit value of the 39th BImSchV of 40 $\mu\text{g}/\text{m}^3$ for the annual mean value, which has been in force since 2010, has since been complied with at all the urban background stations. At the urban traffic monitoring stations, the limit value was exceeded significantly in

some cases during the period described. The NO_2 concentration was also reduced at the urban traffic monitoring stations, which meant that in 2020 the immission limit value for the annual mean value was exceeded by 1 $\mu\text{g}/\text{m}^3$ at just one urban traffic monitoring station, at a measuring height of 1.5 m. In 2021, the limit value was complied with at all monitoring stations. This decrease in the NO_2 concentration is a result of the extensive air pollution control measures defined in the Clean Air Plan. The third update of the Clean Air Plan and the Annual Report 2021 are available online.

3 GOOD HEALTH AND WELL-BEING





Air pollution

2010	2015	2020
13 quan.	1 quan.	0 quan.

The 1-hour measured values (hourly mean values) greater than $180 \mu\text{g}/\text{m}^3$ per annum in the urban background for the ozone (O_3) values were exceeded x times. (Source: Hamburg air monitoring network (BUKEA) <https://luft.hamburg.de/>, Inner-city background monitoring station: Sternschanze, For classification of the Sternschanze monitoring station, see Air Quality Annual Report 2020

Although the concentration of NO_2 – one of the precursors for ground-level ozone – has tended to decrease in recent years, when considering the individual annual values no decreasing trend in the short-term values for ground-level ozone pollution can be observed over the period described. On the contrary, the measured concentrations of ozone vary widely

from year to year, according to the weather. The target value of the 39th BImSchV for the protection of human health (3-year average of the number of days with a maximum 8-hour average $> 120 \mu\text{g}/\text{m}^3$, with 25 permitted exceedances) was met at all stations in the period described.



3.4 SDG 4 – Quality education

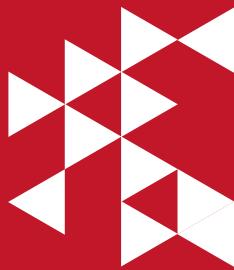
The **Sustainable Development Goal “Quality education”** aims to ensure inclusive and equitable quality education and to promote lifelong learning opportunities for all. Quality education is the basis for creating sustainable development in all areas of life. SDG 4 is based on the concept of lifelong learning and therefore includes all phases from early childhood upbringing up to adult education.

One important target involves Education for Sustainable Development. People should be enabled to think in a sustainable and participatory way, in a spirit of solidarity. Sustainable development should also be understood as a cultural task. The cultural sector reaches people through informal

education and motivates them to embrace new ways of seeing and thinking. Besides improving their quality of life, access to quality education can help equip people with the tools they need to develop innovative solutions to the pressing problems of the global community.

Education is considered a key prerequisite for eradicating poverty, for decent work and for a self-determined life. High-quality education and lifelong learning are thus also the basis for the future-oriented and sustainable development of a municipality.

SDG 4 has cross-cutting links particularly to SDG 1 (No poverty) and SDG 5 (Gender equality).



Overview – the City of Hamburg's links to SDG 4

Qualitative aspects:

- | The guiding principle of Hamburg's education policy
- | Education for Sustainable Development (ESD)
- | Extracurricular education
- | Higher education
- | Sustainability in the field of culture and media

Indicators:

- | Education for Sustainable Development (ESD)
- | Establishment of sustainability reporting at public state universities in Hamburg
- | Day care children who have participated in ESD projects funded by the City of Hamburg
- | Child care in day care facilities
- | Inclusive day care centres
- | Positions at state schools for educators
- | Basic provision close to home – primary school
- | School drop-out rate
- | Percentage distribution of final qualifications by gender
- | Exclusion rate
- | Education and participation scheme beneficiaries who take advantage of lunch in Hamburg schools
- | First-year students
- | Rate of supply of places in halls of residence at the Studierendenwerk Hamburg ("Hamburg Student Services")

3.4.1

Introduction – implementation of SDG 4 in Hamburg



Photo 19: ElbeCamp at the Falkenstein shore
© Mediaserver Hamburg / Lisa KnauerHamburg

SDG 4 covers public education policy in the field of formal education (especially early childhood education, schools, vocational training, universities) and non-formal education (e.g. general and political education). It also covers educational support processes in informal learning, as well as science and research. Education can make a general contribution to the realisation of all 17 Sustainable Development Goals (SDGs). By increasing knowledge on the individual SDGs and the aims of the 2030 Agenda, it promotes awareness of the need to achieve them. In this respect, education is also a prerequisite for transformation processes in politics and society.

The guiding principle of Hamburg's education policy: education right from the start

In the education sector, Hamburg is well positioned compared to the rest of Germany. The participation of all children in "education right from the start", and the safeguarding of equal opportunities, are key goals of the Hamburg Senate. All children, regardless of their parents' income and educational status, receive a good early childhood education and upbringing in day-care centres and in primary schools – starting with a free day-care place and a comprehensive range of all-day schools. This is followed by the guarantee of all-round and needs-based education at primary and secondary schools. The Senate gives special support to the strengthening of district schools and the qualitative development of all-day care.

Hamburg thus enables around 90,000 children of nursery school age and its 259,000 pupils to participate in quality education.



Photo 20: Meeting weeks 2022
© Büro für Kultur- und Medienprojekte gGmbH

In recent years, the demands on everyday school life have become more diverse and demanding. Growing numbers of pupils, all-day schooling, the improvement of key competences, digitalisation, inclusion, vocational training – these are just a few of the keywords to be mentioned here. Hamburg's Ministry for

Schools and Vocational Training, which has a workforce of 28,000 including teachers, is responsible for meeting these challenges.

Child day care

Child day care – as a child's first educational institution beyond the family – is of particular importance in enabling opportunities for all children to participate. As a place of learning and living that is used by almost all social groups, in the early years of life child day care can already help to compensate for any disadvantages caused by background, and thus provide the basis for a sustainable educational career of the child. The positive influence of early childhood education in day care centres on the child's cognitive development, and on their competence development in later years, has also been proven in numerous national and international studies.

Interventions to promote participation and equal opportunities in the early childhood education system start at different levels. The first thing to note is the structural level. This includes factors such as legal rights, funding, resource distribution, and the programmatic plans for education and upbringing plans. The structural level creates the framework for designing the level of educational content. This has the goal of providing tailored and high-quality support to children and families in need of special encouragement.

Within the framework of the flexible Hamburg day care voucher system, which is geared towards demand and does not provide for centralised planning of supply on the part of the public youth welfare agency, the day care providers adjust their care capacities to the changing demand structures by expanding existing day care centres or building new ones. Thanks to this enabling environment, the expansion of child day care in Hamburg has developed quite some momentum in recent years.

Child day care services have been continuously expanded in Hamburg, and the rates of uptake have increased. By now, almost one out of every two chil-

dren in the crèche sector (under 3 years) and the vast majority of children in the primary sector (3 years to school entry) are cared for in a day care facility.

The general legal entitlement in Hamburg comprises five hours plus lunch on five days of the week, and applies from age one until school entry. On 1 August 2014, this basic care was made free of charge. No parental contribution is required for care provided by a child minder for up to 30 hours per week. This removed a significant barrier to accessing public day care services.

In order to strengthen the child day care facilities in their demanding task of early childhood education, care and upbringing, the specialist staff ratio in the crèche sector has been improved step-by-step since 2015 to 1:4 by 1 January 2021. At the beginning of 2015, the staff ratio was still 1:6.3. In the primary sector, a specialist staff ratio of 1:10 will be reached by 1 January 2024. Currently, the ratio in the primary sector is 1:10.2.

Learning German as an key prerequisite for equal education and opportunities remains a central social and educational policy goal. Early support and education in a day care centre play a key role in this. Day care centres that care for an above-average number of children with a non-German family language or from socially disadvantaged families receive additional funding for improved staffing under the state programme "Day care centre plus". This state programme aims to enable individual support for children in their daily educational routine, promote language training, support cooperation within the team and with parents, and facilitate collaboration with external counselling centres. Ultimately, it also aims to develop the day care centre into an inclusive educational institution. Day care centres with an above-average proportion of children with a non-German family language who are not supported under the programme receive additional funding for to boost their language training.

In order to provide particularly families from socially disadvantaged neighbourhoods with low-threshold

access to child day care services, parent-child centres have been attached to numerous day care facilities in Hamburg. Parent-child centres in day care facilities are meeting places primarily for families with children under the age of three. In principle, they are open to all children who have not yet started school, and their parents. Parents and their children can take advantage of the support, education and counselling services without having to travel far, without having to register and without having to pay a day care centre voucher. They can also receive help with parenting issues. All services are uncomplicated and can be used without bureaucracy. There are parent-child centres in all districts of Hamburg, especially in districts with social challenges. Currently, 44 parent-child centres are being funded.

Right to all-day schooling

Compared to the rest of Germany, the City of Hamburg has been a leader in the development of all-day schools for many years. All Hamburg schools offer

their pupils free education and care in the afternoon – a milestone in ensuring educational equity. This service is free of charge from 8 a.m. to 4 p.m.; small fees are charged for additional early (before 8 a.m.) and late (after 4 p.m.) care, and for care during holidays. Hamburg has thus been offering a service for years that is not to be made compulsory nationwide until 2029.

Within this framework, the City of Hamburg also supports to the fullest extent the provision of a high-quality and tasty school lunch for all pupils at a reasonable price.

Ambitious school building programme to cope with growing pupil numbers

Hamburg's pupil numbers are growing strongly, and of late even more so than in previous years. Within just one school year, Hamburg's schools had taken in 7,490 additional pupils by the time the school year statistics were collected in October 2022. The addi-

Photo 21: CREATIV Education Program for Climate Justice: Dreamcatchers (India) © Dreamcatchers (Indien)



tional pupils are not only local pupils, but also many refugees from Ukraine.

To help implement the School Development Plan 2019 (SEPL), the Senate will invest more than 4 billion euros in the needs-based expansion and renovation of the school infrastructure by 2030. The plan provides for the construction of 44 new school sites and the expansion of 120 existing ones. Since the adoption of the current School Development Plan 2019, ten new schools have already been founded, including six primary schools, two campus district schools and two grammar schools. A further 16 schools are in the process of being founded.

Improving the basic skills of reading, writing and arithmetic

Reading, writing and arithmetic are key skills for personal, educational and professional development. Developing them is therefore a key concern of the Ministry for Schools and Vocational Training.

The Institute for Educational Quality Improvement (IQB) education trend shows that the performance of fourth graders in mathematics and German has deteriorated nationwide since 2011, and that an increasingly large proportion does not reach the minimum standards by the end of primary school. While the developments in some federal states are dramatic, Hamburg has been able to maintain the level of competence for the most part and performs remarkably well compared to the rest of the country. In 2011, the performance of Hamburg's pupils ranked 14th on average across all subjects in a comparison of all 16 federal states; today they rank 6th.

Hamburg has succeeded in counteracting these trends with a variety of interventions and support programmes. These include interventions for additional learning support, free tutoring, the expansion of all-day and pre-school programmes, as well as projects and targeted programmes to improve core competencies. Despite Hamburg's good performance in relation to the IQB education trend, Hamburg is still far from reaching its goal. Just under a fifth of

children are still unable to read, write or do arithmetic at an age-appropriate level.

Digitalisation

In order to prepare pupils for life in the digital world, Hamburg, with the support of the Federal Government, is investing heavily in digital infrastructure at state schools. Since 2018, the number of computers and digital terminals at general and vocational schools has been almost tripled from 55,000 to over 140,000 devices. Classrooms and teaching rooms have also been equipped with state-of-the-art presentation technology, and 99 per cent of state schools with WiFi.



Photo 22: ESD 2030 Master Plan © Freie und Hansestadt Hamburg

Inclusion

The development of inclusive education in Hamburg's schools over time is a success story. Initiated by the United Nations Convention on the Rights of Persons with Disabilities of 13 December 2006 (UN Disability Rights Convention), the right of children with disabilities to attend an ordinary school was enshrined in the Hamburg School Act in 2009. Today, parents or guardians can choose between the child attending an ordinary school or a special school. At ordinary schools pupils with disabilities are taught together with pupils without special educational needs, and receive special support. The special educational needs of these pupils are also catered for through the allocation of special needs teaching positions to ordinary schools and through school support.

Hamburg is on the right track. In no other federal state has the number of children and adolescents at



Photo 23: Hamburg Climate Protection Foundation for Education and Sustainability © Hamburger Klimaschutzstiftung für Bildung und Nachhaltigkeit

4

special needs schools and at the educational departments of the regional education and guidance centres decreased so much over time and. Conversely, in no other federal state has the number of children and adolescents with special educational needs at ordinary schools increased so much.

The improvements are also visible in the number of teachers assigned for inclusion. As of 1 August 2022, a total of 1,606 teaching positions for inclusion had been allocated to the ordinary schools. Eleven years ago (school year 2011/12), there were still only 564

teaching positions at the ordinary schools.

Youth Employment Agency

The establishment of the Youth Employment Agency, which advises and accompanies young people as they transition from school to training and work, is another milestone in the implementation of SDG 4. Since then, in Hamburg the whereabouts of young people after completing grade 10 have been known almost across the board. All young people are offered a pathway to training and further qualifications, thus opening up opportunities for participation. Thanks to the multi-stage educational and counselling services offered from grade 8 onwards, pupils from the district schools are managing the transition from school

to work much better than in the past. Whereas in the past only 25 per cent of school leavers made the transition directly into vocational training after grade 10, today the figure is around 40 per cent.

Orientation towards vocational training or higher education

The reform of vocational/academic orientation a few years ago highlights the potential of university study and vocational training as equivalent options that enable all adolescents or young adults to find the best possible next step after leaving secondary school. Clear frameworks and a binding number of hours create new prospects for a self-determined and appropriate career choice.

Vocational schools

Following attendance at secondary school, vocational education and training ensures that each school leaver can be offered an individually tailored solution. Whether this involves additional language support for immigrants, or the possibility of acquiring a higher school-leaving certificate as part of the training – the focus is on the best possible qualification and a successful transition to a fulfilling working life.

The 30 state vocational schools in Hamburg offer adolescents and young adults a diverse range of vocational education and training courses. These encompass foundation courses for vocational training, vocational training proper, opportunities to acquire higher educational qualifications, and continuing vocational education. The aim is for all young people and adults to be able to participate fully and without barriers in vocational education, work and society, regardless of their cultural, religious, social and individual backgrounds.

Thanks to the multi-stage education and counselling services provided in Hamburg and the “transition management” offered by the Youth Employment Agency (which was founded in 2012), the proportion of school leavers who went directly into training has increased significantly in recent years. While it was still around 25 per cent in 2012, it rose in the follow-

ing years and was in the range of around 40 per cent – with different-sized cohorts of school leavers. In 2022, 40.8 per cent of school leavers from Hamburg’s district schools made the transition to vocational training directly after completing grade 10. Vocational guidance at schools and the work of the Youth Employment Agency also proved to be crisis-proof in the second year of the COVID-19 pandemic, because here too the transition rate into vocational training was even slightly higher than the pre-COVID level of 2019 (2019: 40.4 per cent, 2021: 41 per cent).

Since 2021, in close cooperation with vocational schools and companies, learners at the Berufliche Hochschule Hamburg (BHH) have also been able to obtain two degrees in four years in an innovative educational model: the siA training programme that integrates a course of study. The programme leads to a training qualification plus a bachelor’s degree. The students at BHH are also trainees. They acquire sophisticated practical skills in the training company, broad knowledge on the respective vocational field in the vocational school and academic expertise at the university.

Adult education

People in Hamburg also have the opportunity to catch up on their school-leaving qualifications after their time at school. Obtaining a school-leaving certificate opens up new opportunities on the labour market and thus promotes social advancement and participation in society.

For this purpose, the previous three adult education schools – the “St. Georg’s evening school”, the “Holstentor evening school” and the “Hansa college” were merged, and existing course models were revised.

Among other things, there are also various opportunities to obtain a school-leaving certificate at a later stage, e.g. through the diverse offers of the Youth Em-

ployment Agency, the institutions of "second-chance education" and vocational training.

Lifelong learning

With a view to the goal of ensuring "lifelong education", the formal educational pathways for children, youths and young adults are complemented by a comprehensive range of non-formal educational opportunities. These include opportunities in civic education, or general and vocational adult education, in which state and commercial providers complement each other.

In a society that is changing at an increasing pace, it is now more true than ever that education is to be understood as a lifelong process. Accordingly, opportunities for further and continuing education must be firmly anchored in Hamburg's society, and in turn adapt to changes.

As the largest provider of continuing education in Hamburg, the Volkshochschule Hamburg ("Hamburg adult education centre" –VHS) has taken on this task and positioned itself for the future with its further development strategy "VHS 2025". It offers online and face-to-face educational programmes for adults that are designed for personality and competence development, and thus for the active and self-determined participation of people in cultural, political and social life – a key prerequisite for a democratic society.

The Ministry for Social Affairs also contributes to the implementation of SDG 4 by managing the benefits for the group of transfer recipients. For example, children and young people from low-income families should not be excluded from communal lunches in schools.

The biggest success stories in the implementation of SDG 4 in the City of Hamburg in recent years include in particular:

- I Senate resolution and start of implementation of the Hamburg ESD Master Plan 2030 as Hamburg's contribution to the implementation of the SDGs –

in this case: SDG 4, especially target 4.7.

- I Inclusion of ESD as a guiding principle in the revised Hamburg education plans for ordinary schools.
- I Implementation of the model project "ESD as a task for the whole school" and the project "CreAC-Tiv for Climate Justice".
- I Award for 81 Hamburg general and vocational schools in the Hamburg Climate Schools programme.
- I The state-funded educational centres Open School 21, Gut Karlshöhe / Klimastiftung Hamburg ("Hamburg Climate Foundation"), the Zentrum für Schulbildung und Umwelterziehung ("Centre for School Education and Environmental Education" – ZSU) as well as the BürgerStiftung Hamburg (Hamburg Citizens' Foundation") with their diverse offerings on global learning, sustainable development, service learning, and climate and environment.
- I The work of hamburg mal fair / Mobile Bildung e.V. ("Fair Hamburg /mobile education") – an educational institution that works to strengthen fair trade and sustainable consumption in Hamburg through its educational work in and out of school. It aims to raise the awareness of children, young people and adults for greater social justice in world trade. To this end, age-appropriate and creative hands-on activities and workshops are offered, especially for young target groups.
- I Establishment of exemplary cooperation between Hamburg vocational schools and partner schools from the Global South through the state initiative "Education for Sustainable Development and Global Learning at Hamburg Vocational Schools", run by the Hamburg Institute for Vocational Education and Training (2017-2022).
- I Establishment of low-threshold application and approval procedures for education and participation benefits / advertising and public information for education and participation benefits.
- I Implementation of a pilot project of Hamburg museums, exhibition halls and memorial sites on sustainability and operational ecology.
- I Establishment of minimum environmental standards for German cinema, TV and online/VoD pro-

ductions.

- I Development of the "Climate Action Guidelines" by the music industry.²⁴

In addition to the qualitative interventions, the City of Hamburg also measures its contribution to SDG 4 in terms of quantitative aspects such as the percentage of children under three years of age in day care

facilities, the school drop-out rate and the expansion of inclusive day care facilities. Hamburg thus follows the recommendations of the study "SDG Indicators for Municipalities", which was initiated by the Association of German Cities and published by the Bertelsmann Stiftung. These indicators are relevant to many municipalities, and thus allow comparison of the data mentioned below.

24 <https://www.musikindustrie.de/presse/presseinformationen/leitfaden-klimaschutz-musikwirtschaft>

3.4.2 **Education for Sustainable Development (ESD)**

Among the targets defined for SDG 4, Goal 4.7 "Education for Sustainable Development"²⁵ is of particular importance. Hamburg was the first major city and the first federal state in Germany to launch an action plan – the ***Education for Sustainable Development Master Plan 2030***²⁶. Through this Master Plan, Education for Sustainable Development (ESD) is to be systematically and structurally mainstreamed across all areas of education. This extends from early childhood to school, to vocational and extracurricular education, though to higher education and district/municipal education.

In cooperation with the Hamburg Ministry for the Environment, Climate, Energy and Agriculture (BUKEA) and other ministries, as well as the districts (munic-

25 SDG target 4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

26 <https://www.hamburg.de/nachhaltigkeitlernen/16049504/masterplan2/>

ipalities), the Ministry for Schools and Vocational Training (BSB) is implementing exemplary goals and interventions from key areas of the general education and vocational training section of the Hamburg ESD Master Plan 2030. The BSB's Office B, which is responsible for general (school) education, the Hamburg Institute for Vocational Education and Training (HIBB), which is responsible for vocational education and training, and the State Institute for Teacher Training and School Development (LI), are playing a key role in this.

Hamburg's responsible line ministries have ensured extensive participation by civil society actors in the working forums of the educational sectors and in the steering committee. By introducing the "northern German and sustainable certification" quality framework, Hamburg – together with other federal states – is also driving quality development in extracurricular education in northern Germany.

Education for sustainable development has a long tradition in Hamburg. Hamburg has received **many awards for its work as an "ESD municipality"**, including from the German Commission for UNESCO, the Federal Ministry of Education and Research (BMBF) and UNESCO (the United Nations Educational, Scientific and Cultural Organization). For many years, Hamburg has been involved in implementation of the "National Action Plan on ESD" (NAP) at the federal level through the partner network of "ESD municipalities", and in several educational forums of the BMBF. The overarching goal is to establish ESD as an important instrument for further developing and mainstreaming the idea of sustainability in municipalities.

In 2021, Hamburg adopted its ***Education for Sustainable Development (ESD) Master Plan 2030***, which is based on the NAP. The Hamburg Senate commissioned the initiative "Hamburg learns sustainability" (HLN) to implement the Master Plan, and is providing extensive annual funding for this purpose until 2030. In the implementation of the Hamburg ESD Master Plan 2030, civil society and the Sustainability Forum Hamburg (NFH) – the civil society represen-

tation commissioned by the Hamburg Senate – work together with representatives of public authorities, associations, federations and educational institutions. In this way, Hamburg is also making a comprehensive contribution to implementation of the SDGs by systematically addressing the cross-cutting issue of ESD. The first interventions for the six educational areas mentioned above were already implemented in the first year following the adoption of the Master Plan. Among other things, one intervention aims to mainstream ***ESD as a task for the whole school***. The intervention with 24 ESD pilot schools aims to test and introduce, over a three-year period, teaching and institutional elements that together will build a whole school approach (WSA). One example of this is the trial of the "free day" at two primary schools in Hamburg. On these days, pupils work and do research on the 17 SDGs in groups of several classes over an extended period of time.

Hamburg has been an active member of ***UNESCO's Global Network of Learning Cities (GNLC)*** since 2019, where it coordinates the ESD theme. In the summer of 2022, Hamburg was appointed by UNESCO as a member of the "ESD-Net 2030", in which not only states but also outstanding educational actors are involved. This was due to the high quality of its education work and the extraordinary political reach of the HLN initiative. The aim is to jointly advance knowledge about ESD at the global level, share good practice examples and work together on monitoring and evaluating ESD.

Furthermore, 2014 Hamburg introduced the ***certification system for extracurricular ESD***, which was developed jointly with the federal states of Mecklenburg-Western Pomerania and Schleswig-Holstein: *nun – norddeutsch und nachhaltig: Mit Bildung Zukunft sichern!* ("northern German and sustainable: Securing the future through education!") The system supports educational institutions and individual actors in developing the quality of their services, and provides a

single quality standard based on many years of experience in Schleswig-Holstein.

Schools in Hamburg have been awarded the **Hamburg Climate School** quality label²⁷ of the State Institute for Teacher Training and School Development (LI) since 2010. The prerequisite for the quality seal, which is awarded every two years, is that the schools create a climate action plan as part of a whole institution approach, and implement the teaching and technical interventions contained in it. There are currently 81 climate schools in Hamburg (as of 2023).

Another programme to promote Education for Sustainable Development through a whole institution approach is the "Eco-Schools in Europe – International Sustainability Schools" initiative. The eco-schools, which are integrated into the worldwide Eco-School Network of the Foundation for Environmental Education (FEE), focus on further developing the quality of environmental topics in the classroom and sustainable action in school life. Currently, 60 schools in Hamburg have received the award. They have proposed their projects in the fields of environmental and climate protection, and education for sustainable development, to the programme coordination desk for Hamburg. The latter is based in the division for environmental education and climate action of the LI.

Through the **Energiehoch4 ("Energy to the power of four") bonus programme**, Hamburg schools receive a financial incentive both for measurable savings in the four areas of heat, electricity, water and waste, and for teaching educational content on climate action and resource conservation. This makes environmental education an important element that leads to schools being rewarded for their commitment to climate action in lessons and school life. The programme is run by *Schulbau Hamburg* (a public agency for sustainable school buildings); the LI's division for environmental

education and climate action is responsible for the educational area.

School without Racism – School with Courage is a nationwide network that supports schools in their commitment to courage, human dignity, equality and opposition to all forms of discrimination and racism. It helps to change everyday school life and school culture. The goals are mutual respect and recognition of the individuality of others. In Hamburg, 61 schools already bear this seal of quality. In order to promote the integration of global learning at vocational schools in Hamburg, the *Länderinitiative Globale Lernpartnerschaften zur Verankerung von BNE / Globalem Lernen in der Beruflichen Bildung* ("State initiative for global learning partnerships on ESD / global learning in vocational training") was implemented from 2015 to 2018. The Hamburg Institute for Vocational Education and Training (HIBB) acted as the project executing agency. The aim of the project was to permanently integrate Global Learning (GL) into the school profile and school curricula, initially at two vocational schools in Hamburg. In August 2017, HIBB and Engagement Global gGmbH (EG) agreed to continue the state initiative until the end of 2022. This was in order to implement the guiding framework for global development education for Hamburg vocational schools, and make ESD and GL an integral part of the curriculum at five participating vocational schools. In the long term, this is designed to bring about a holistic transformation of the school learning and educational environment through a whole school approach (WSA). This will then be made transferable for other vocational schools in Hamburg.

27 <https://li.hamburg.de/fortbildung/themen-aufgabengebiete/umwelterziehung-klimaschutz/klimaschulen-ausgezeichnet-662956>

3.4.3 Extracurricular education

One example of extracurricular education in Hamburg is the ***Lernwelten (“Learning Worlds”) programme*** offered by the Hamburg Public Library for day care centres and schools. The Hamburg Public Library offers a variety of projects as part of the Learning Worlds. Examples include:

- | Library ‘driving licence’ (pupils get to know the components of a book, develop a desire to select books and acquire initial research skills, and understand the array of media on offer and the rules of use).
- | Research training (transfer of reading, media and information skills – the pupils learn about the array of media, are able to carry out research exercises using the library catalogue and can find the media on the shelves).
- | Robolab (the confident handling of robot technologies, abstract and logical thinking, and the generation of creative solutions to problems are promoted and questions relating to the topic of robotics and programming are explained)
- | DIALOGUE IN GERMAN: discussion groups for immigrants
- | SILVER & SMART: age-friendly training for tablet, PC and smartphone
- | The networking, information and participation tool of the REGIONAL EDUCATION CONFERENCES was used in the districts of Altona and Nord to boost the topic of ESD (especially sustainability, environmental awareness) among education actors.

The Hamburg Public Library is a member of the working group for extracurricular education in the Hamburg ESD Master Plan 2030.

3.4.4 Higher education

Hamburg is a research hub that is home to numerous universities. Access to high-quality academic education is an elementary building block for a free, democratic and diversity-sensitive society. Equal access to higher education for all women and men is also a high priority in Hamburg. For example, around 50% of all students at Hamburg's public universities are female. Where they do still exist, social barriers to access are continuously being reduced. Basic courses of study at Hamburg's public universities are in principle open to all women and men free of charge, even without a university entrance qualification obtained at school if other requirements are met. Furthermore, the **Hamburg Open Online University (HOOU)**²⁸ has set itself the goal of promoting digital innovations in university teaching and transporting these innovations beyond the borders of its universities. HOOU promotes the creation of innovative digital educational offerings and makes these freely accessible in order to tap into new target groups. With its educational platform, HOOU supports the opening up of universities and creates a digital space for collaboration and cooperation. Traditional in-person teaching is expanded using the possibilities offered by digital technologies and made available to a broad public. This also enables learning and working in cross-university teams. The cross-university network is supported by five state universities in Hamburg, the University Medical Centre Hamburg-Eppendorf and the Multimedia-Kontor Hamburg, and is funded by the Senate.

In addition to opening up the universities to the general public, **access to higher education for refugees** is also being promoted. For years, Hamburg's higher education institutions have been committed to integrating refugees by providing information to those willing to study and improving their ability to study through various preparatory activities and programmes. For example, the University of Hamburg (UHH) – Hamburg's largest university – also makes an important

²⁸ <https://www.houu.de/>

contribution through the programme "#UHHhilft". Since the programme was launched in 2015, several thousand participants have been given the opportunity to prepare for future studies in Germany. Numerous participants have subsequently been enrolled for regular degree courses at the UHH. The demand for support services at Hamburg's universities remains high, especially with the influx of refugees from Ukraine. For the second time since 2016, the responsible ministry is currently providing the universities with additional funding out of the amounts returned from the performance-based allocation of funds. These funds will be used at the UHH, the Hamburg University of Technology and the Hamburg University of Music and Theatre to provide additional language courses for refugees, especially those from Ukraine.

As a contribution to equal opportunities and educational justice, the City of Hamburg also promotes **affordable housing for students**. Since the demand in this regard is very high in Hamburg as a university city, the Senate, in cooperation with the Hamburg *Studierendenwerk* student services agency, launched a comprehensive package of measures in 2019. Around

2,000 new places in halls of residence are to be created by the end of 2030. Currently, the student services agency currently has a total of just under 4,400 places in 26 halls of residence in Hamburg. Most recently, almost 400 new places were created in 2017 and 2018 with the Allermöhe and HafenCity student residential complexes, and several halls of residence have been modernised in recent years. The expansion of the housing available to a total of around 6,400 places by the end of 2030 will be achieved through both measures in existing buildings, and the construction of new buildings.

Hamburg's public universities are making numerous efforts in all areas of performance – teaching, research, administration, governance and transfer – to advance the issue of sustainability and implementation of the SDGs. One example of this is the University of Hamburg, which has had a Chief Sustainability Officer (CSO) since December 2022. Professor Laura Marie Edinger-Schons is supported by the new Sustainability Office, which she heads. The aim is to develop and implement a sustainability strategy for the university, building on existing activities.

3.4.5

Sustainability in the field of culture and media

Implementing sustainable development is also becoming increasingly important in the field of culture and media. Under the motto "Eleven minutes to midnight – Hamburg museums act", the nationwide unique initiative of eleven Hamburg museums, exhibition halls and memorials was launched in 2022 to jointly address the issue of sustainability and operational ecology. The initiative began with two key processes. First of all, representatives of the museums came together with experts to draw up carbon footprints

for the museums. Here, the museums performed a baseline analysis with data from 2019 to make their emission sources transparent, and identify the major levers for change. Another step is the further training of 20 people as transformation managers, tasked to integrate the topic of sustainability into everyday museum life. Networking and exchange among the participants from the various museums plays a major role in this process. The overarching goal of the project is thus to systematically advance sustainability transformation in museums in the long term. The initiative is led by the Museum für Kunst und Gewerbe Hamburg (MK&G); the other participating museums are the Altonaer Museum, the Hamburg Archaeological Museum and Stadtmuseum Harburg, the Bucerius Kunst Forum, the Deichtorhallen Hamburg, the German Port Museum, the Hamburger Kunsthalle, the Neuengamme Concentration Camp Memorial, the Museum am Rothenbaum – Kulturen und Künste der Welt (MARKK), the Museum of Work and the Museum for Hamburg History. The initiative collaborates with the nationwide Network for Action on Sustainability in Culture and Media, and is funded by the City of Hamburg's Ministry for Culture and Media.

In the area of live music clubs, since May 2013 the "Future Fund" has also been pursuing the goal of making the city's nightlife more sustainable and climate-friendly. The project, implemented by the *Clubkombinat Hamburg e.V.* association and financed by the Ministry for Culture and Media, offers participating clubs and music venues the opportunity to receive grants for human resource funds to hire or train sustainability and transformation managers. A joint Code of Conduct for sustainability, borrowed from the Berlin Clubtopia initiative, forms the basis for this long-term professionalisation of the sector in this field, which is unique in Germany. In May 2023, the first six clubs – *HebeBühne, Uwe, Kent Club, moondoo, Uebel&Gefährlich* and *Fabrique im Gängeviertel* – will set out on the path to a more sustainable future.

A nationwide pioneer in the film sector is MOIN Filmförderung Hamburg Schleswig-Holstein, which created a seal of quality for sustainable productions back

in 2012 with the **green filming passport**. The filming passport came with recommendations on how to reduce energy and avoid waste. Film and TV producers were certified if they could prove that they were environmentally aware when filming on location. In 2020, the green filming passport was further developed into the green film passport, a mandatory sustainability check for the entire value chain of a film, from script to distribution. Thus, all funded productions that are predominantly German-financed and shot in Germany must meet environmental sustainability criteria. Each production thus helps to make production processes more environmentally sound and reduce the carbon footprint. Since 2022, the **Green Motion sustainability label**, which was developed with representatives of broadcasters, production companies, VoD services and film funds, and includes a binding commitment to comply with minimum environmental standards, has also been included in the list of criteria.

The question of what contribution the music industry can make to climate action was addressed in 2021 and 2022 as part of the Music Dialogue. Under the leadership of the Media Office of the Ministry for Culture and Media (BKM), stakeholders joined together in a working group to form a "Music 2030 Process" in order to generate concrete goals and interventions. The result is a joint **guideline on "Climate Action and the Music Industry"**. The relevant associations of the German music industry have agreed to provide information on the topic of environmental sustainability on their websites, and to publish the guideline (enriched with their own individual intro as well as sector-specific interventions). This can be considered a great success, as there were already many guidelines. However, their lack of clarity prevented many associations from integrating bundled interventions into their profiles in a uniform way nationwide. The participants in the "Music 2030 Process" working group have agreed to continue the working group beyond the Music Dialogue 2022, as all participants see the joint approach to climate action as an ongoing process.

3.4.6 Indicators

4 QUALITY EDUCATION



Education for Sustainable Development (ESD)

The funds made available for implementation of the Hamburg ESD Master Plan 2030 amount to x euros. (Source: BUKEA)

Education for Sustainable Development (ESD) is a cornerstone for achieving the 17 Global Sustainability Goals ,and enables people to think and act in a sustainable way. The Hamburg ESD Master Plan 2030 aims to mainstream ESD structurally across all areas of education and at district level, and contains around 100 interventions. It was adopted by the Hamburg Senate in June 2021. Funds for the implementation of the Master Plan were made available as follows from 2021 onward: 2021: € 386,000, 2022: € 691,000, 2023: €945.000.

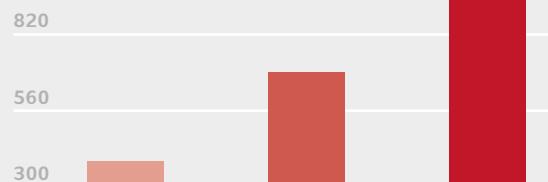
Education for Sustainable Development (ESD)

386 T€ **691** T€ **945** T€

2021

2022

2023



4 QUALITY EDUCATION



Establishment of sustainability reporting at public state universities in Hamburg

2010	2015	2020
0 quant.	0 quant.	0 quant.

x of Hamburg's public state universities develop and establish sustainability reporting. (Source: BWFGB)

The Hamburg ESD Master Plan 2030 includes the objective that in future all Hamburg higher education institutions develop and implement sustainability reporting processes tailored to their respective specifics features. As a result, the Ministry for Science,

Research, Equality and Districts has agreed on a corresponding procedure as part of the target and performance agreements with the six public state universities in Hamburg for the period 2023/24.



Child care in day care facilities

*Childcare (under 3-year-olds): x per cent of children under 3 are cared for in day care facilities; childcare (3- to 5-year-olds): x per cent of children aged 3 to 5 are cared for in day care facilities.
(Source: Data from the competent ministry)*

The expansion of childcare is designed to increase the educational opportunities of children – regardless of their origin and the educational status of their parents or guardians. In this way, children who are cared for in day care facilities are to be optimally prepared to attend primary school. In addition to language support integrated into everyday life, which is carried out in all day care centres in accordance with the Hamburg educational recommendations for the education and upbringing of children in day care centres, the state programme Kita-Plus also focuses on additional language training and support. Over time, the data points to a further increase in 2016 and 2022, starting from an already high childcare rate in 2009. With a childcare rate of around 95 per cent for 3 to 5 year olds, it can be assumed in principle that there is full provision, i.e. all parents or guardians who want a day care place for their child can also obtain one.

Child care in day care facilities

Under 3-year-olds	25.7 %	44.7 %	45.8 %
3 - 5 year olds	86.9 %	95.7 %	94.4 %

2009 2016 2022



Inclusive day care centres (%)

2011	2015	2019
20.71 %	22.33 %	29.39 %

Inclusive day care centres account for x per cent of day care centres in Hamburg. (Source: Statistical offices of the federal states)

Inclusive day care centres follow the principle of inclusion and enable all children, regardless of their physical, mental and spiritual state, to receive a comprehensive education and upbringing. Children with and without disabilities are cared for and supported to-

gether. The proportion of inclusive day-care facilities in Hamburg has risen significantly over the course of time, and was 29.39 per cent in 2019.

4 QUALITY EDUCATION**Positions at state schools for educators**

The indicator shows how many people with educational qualifications work at state schools (teachers as well as other pedagogical staff (e.g. social education specialists, educators)).

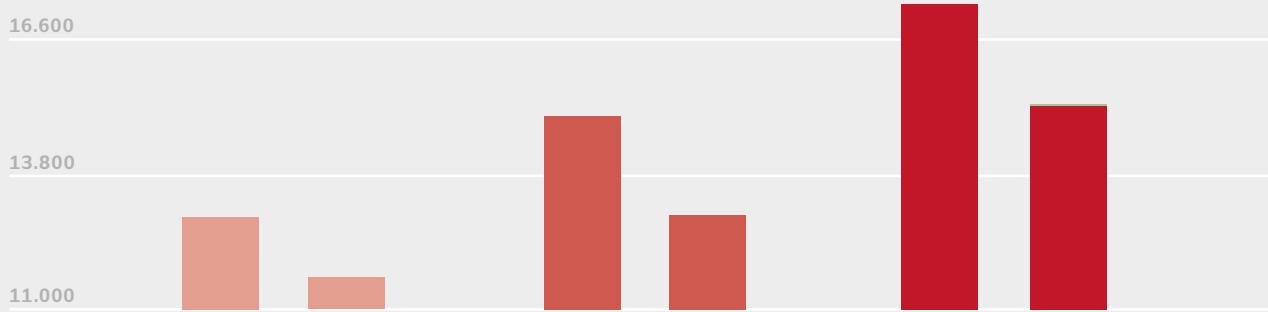
(Source: Data from the competent ministry)

The improvement of the staffing ratio, i.e. the increase in the number of staff with educational qualifications employed at schools, provides a pointer to the improvement of the care ratio, e.g. the possible employment of a second teacher or another person working alongside the teacher (e.g. a social educational specialist) in lessons. The larger the number of educational staff at a school, the better the scope for individual support for

each pupil. Moreover, educational specialists are also employed as part of educationally high-quality all-day care or afternoon care in schools within the framework of additional support lessons (e.g. tutoring, language support, homework support, etc.). The data given indicate a continuous and strong increase in the number of positions made available for educational specialists over time.

Positions at state schools for educators

	of which teachers		of which teachers		of which teachers
12,926.0	11,664.0	15,024.9	12,969.8	17,352.8	15,229.7
2010/11	2015/16	2022/23			



4 QUALITY EDUCATION


Basic provision close to home – primary school (m)

2010	2015	2020
n/a	n/a	557 m

The population-adjusted linear distance to the nearest primary school is x metres. (Source: Federal Institute for Research on Building, Urban Affairs and Spatial Development, statistical offices of the federal states)

The number of primary schools in a city has a significant impact on the daily lives of young families. The closure of primary schools can lead to a reduction in the use of public transport services, which in turn encourages private motorised transport. For families, this means more organisational effort and longer journeys on a daily basis. A lack of primary schools close to home can therefore encourage migration. In

2020, the population-adjusted linear distance to the nearest primary school in Hamburg was 557.0 metres. In Hamburg, parents or guardians are free to choose the primary school for their children. If the chosen primary school has school places available, these are allocated without taking into account the distance to school, in accordance with the legal stipulations of the Hamburg School Act.

4 QUALITY EDUCATION


School drop-out rate

2010/11	2015/16	2021/22
6.9 % (1020)	5.8 % (945)	6.3 % (1043)

x per cent of pupils drop out of school without a first general school-leaving certificate. (Source: Data from the competent ministry)

Early school leavers are pupils who complete their compulsory schooling without having obtained a first general school-leaving certificate during this compulsory schooling period. However, this indicator does not provide any information on the reasons why the pupil did not obtain a school-leaving certificate. For instance, it should be noted that in 2022, more than

50 per cent of school leavers in Hamburg without a first general school-leaving certificate in the regular system had special educational needs. Furthermore, many school leavers still go on to acquire a school-leaving certificate after leaving the general system, e.g. in the area of vocational training.

4 QUALITY EDUCATION


Percentage distribution of final qualifications by gender

This indicator shows the distribution of school-leaving qualifications between male and female school leavers according to the type of qualification. (Source: Data from the competent ministry)

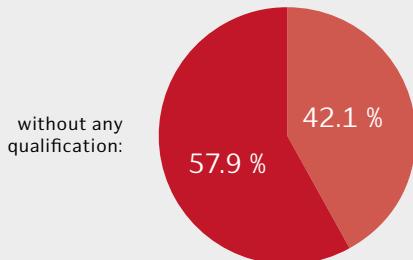
The distribution of final qualifications by gender provides answers to the question of equal opportunity in education, which ensures that neither gender is favoured or disadvantaged. The trend in the data over time shows a continuously high proportion of female school leavers, especially with the highest school-leaving qualification (university entrance qualification). Correspondingly, the proportion of female school leavers with no school-leaving qualifications or with

low school-leaving qualifications is in some cases significantly lower than their percentage share of the respective total cohort (e.g. in the school year 2021/22, 49.1 per cent of all school leavers were female). In this regard, concerning the respective qualifications achieved, male school leavers appear to have lesser opportunities. Note: All data refer to state and public schools including adult education schools.

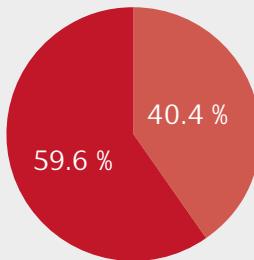
Percentage distribution of final qualifications by gender ● ♀ ● ♂

2010/11

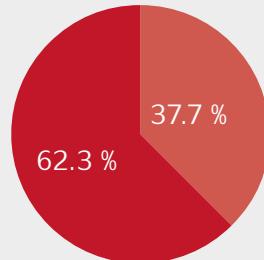
Of all school leavers

**2015/16**

Of all school leavers

**2021/22**

Of all school leavers



without any qualification:

with ESA (first-stage school-leaving certificate):

with MSA: (intermediate school-leaving certificate)

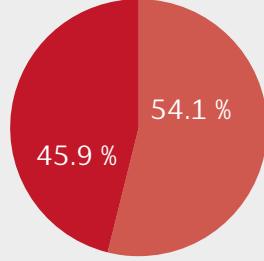
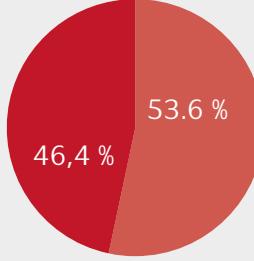
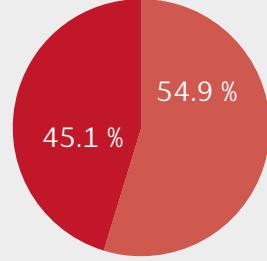
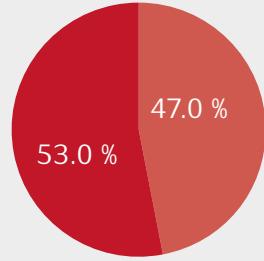
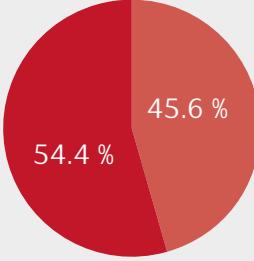
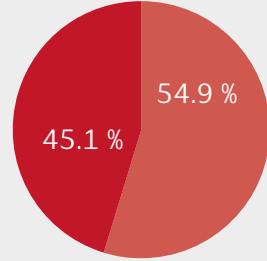
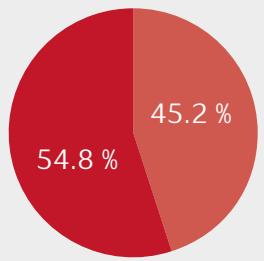
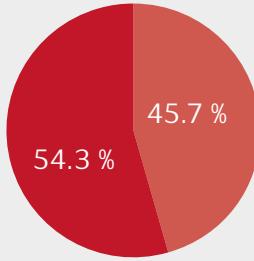
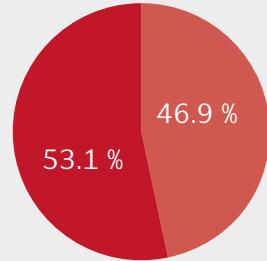
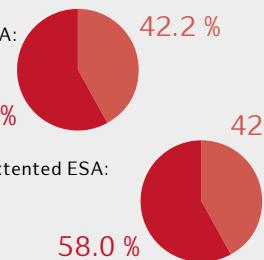
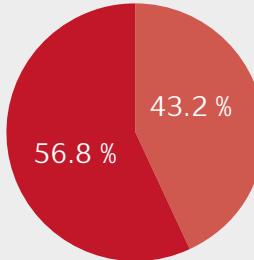
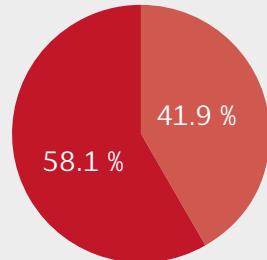
with school part of entrance qualification for university of applied sciences

with university entrance qualification

with ESA:

with extended ESA:

4





Exclusion rate

Pupils with special educational needs are divided into x per cent according to the total number and type of the respective school. (Source: Data from the competent ministry)

2010/2011	2015/2016	2022/2023
8,918	12,882	13,145
(of which at primary schools 14.4 %, at district schools 9.2 %, at grammar schools 0.4 %, at special schools 76.0 %)	(davon at primary schools 22.5 %, at district schools 38.2 %, at grammar schools 1.5 %, at special schools 18.2 %, at ReBBZ 19.7 %)	(davon at primary schools 26.0 %, at district schools 37.6 %, at grammar schools 2.4 %, at special schools 20.2 %, at ReBBZ 13.8 %)

Inclusive education is an approach whose key principle is the appreciation and recognition of diversity in education. It is based on the UN Convention on the Rights of Persons with Disabilities, adopted in 2009, in which the signatory states undertake to establish an inclusive education system in which joint teaching of pupils with and without disabilities is the norm. The data provided by the competent authority indicate the absolute number of pupils with identified special educational needs as well as their distribution across the respective types of school. It should be noted

that in Hamburg every pupil has a legal right to be educated at an ordinary school, but at the same time the parents or guardians can decide for themselves whether they want their child to be educated at an ordinary or a special school. Over time, there has been a clear reduction in the number of pupils attending special schools. (Note: "ReBBZ" = regional education and counselling centre, a form of special school for pupils with learning, language and emotional and social development needs).



Education and participation scheme beneficiaries who take advantage of lunch in Hamburg schools

2010	2015	2020
n/a*	16.31 %	16.88 %

*(education and participation) scheme only began in 2011

Percentage of those entitled to education and participation benefits who take lunch in Hamburg schools, measured against the total number of pupils in Hamburg. (Source: Ministry for Social Affairs, school statistics, school year survey, autumn statistics, school data, general schools – hamburg.de)

A constant proportion of Hamburg schoolchildren are ensured social participation and participation in education by taking part in communal lunchtime meals. The proportion has risen slightly in recent years, and was 16.88 per cent in 2020. The benefits of lunch, school transport allowance and learning support are made easily available to eligible children (or their par-

ents) by having them apply for these benefits at the point of delivery. In this way, the objective of providing services for all pupils (relevant German legislation: AsylbLG, SGB XII, SGB II, WoGG, Kinderzuschlag) for education and participation in social and cultural life in the community unbureaucratically from a single source has been optimally implemented.

4 QUALITY EDUCATION



First-year students

This indicator shows the absolute number of first-year students in the first semester (bachelor's, master's and other degree programmes, not including doctoral candidates). It shows the number of students enrolled in a degree programme and the admission capacity of the public state universities in Hamburg, excluding students on study leave, leave of absence and guest students. The academic year comprises the summer semester and the subsequent winter semester.

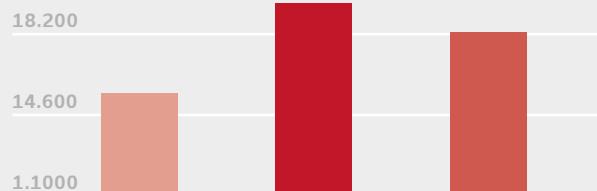
(Source: Federal Statistical Office, data published on university students)

In the period from 2010 to 2020, the number of new students per year increased by 17.5 per cent. To make this possible, basic funding was continuously increased.

First-year students

15,548	19,558	18,268
quantity	quantity	quantity

2010 2015 2020



4 QUALITY EDUCATION



Rate of places in student halls of residence provided by the Studierendenwerk Hamburg ("Hamburg Student Services")

2010	2015	2020
6.2 %	5.6 %	6 %

This indicator shows the ratio of places in halls to the number of students for whom the Hamburg Student Services are responsible pursuant to the German Student Service Act (StWG). The ratio has decreased and fluctuated overall during the period under consideration. This is despite the fact that the number of places has grown in absolute terms, because the number of students at Hamburg universities has increased disproportionately in relation to the number

of places that the Hamburg Student Services are able to provide. Between 2010 and 2020 the number of students increased by approximately 20 per cent, while the number of places in halls of residence only increased by 8.5 percent. The Senate and Hamburg Student Services plan to increase capacities in halls of residence by approximately 2,000, places and thus by around 45%, by 2030.



3.5 SDG 5 – Gender equality

The **Sustainable Development Goal “Gender equality”** aims to achieve gender equality and empower all women and girls. Gender equality calls for equal participation in political, economic and public life regardless of gender.

The targets of SDG 5 aim to end all forms of discrimination and violence against women and girls. Access to economic and natural resources should be guaranteed regardless of gender. This also calls for full and effective participation and equal opportunities for leadership by women at all levels of decision-making in all areas of society.

Worldwide, discrimination and violence against women and girls is still a serious problem due to social structures that are often patriarchal. Equal

access for women and girls to education, health care, decent work and representation in political and economic decision-making processes will promote the transformation towards a sustainable economy and benefit societies as a whole. Mainstreaming gender equality in services and employment in the community space will reduce gender-based disadvantage. The same applies to the creation of exchange platforms and dialogue formats on gender-based discrimination and violence.

Gender equality is a cross-cutting task for the 2030 Agenda and is reflected in many SDGs, such as SDG 3 (Good health and well-being), SDG 4 (Quality education) and SDG 11 (Sustainable cities and communities).



Overview – the City of Hamburg's links to SDG 5

Qualitative aspects:

- | Actual gender equality
- | Reducing gender-based discrimination and violence.

Indicators:

- | Proportion of female civil servants and pay-scale employees in executive and top positions in the Free and Hanseatic City of Hamburg (B2-B6)
- | Women's share of average gross hourly earnings (as an index) of full-time employees in Hamburg
- | Women's share of seats in the Hamburg Parliament
- | Proportion of women among single parents in Hamburg
- | Proportion of women employed part-time in Hamburg
- | Proportion of female Members of the Senate on supervisory boards of public companies
- | Ratio of employment rates for women and men
- | Ratio of median income of women and men

3.5.1

Introduction – implementation of SDG 5 in Hamburg

The Hamburg Senate's gender equality policy is geared towards creating equal opportunities and scope for women and men throughout their lives. Besides the implementation of gender budgeting for the overall budget of the City of Hamburg, the focus is on numerous equality policy interventions. These are summarised and updated in the Equality Policy Framework Programme. The continuous development of the Hamburg Gender Equality Monitor, which provides valid data on the realities of women's and men's lives, also forms an important basis for an evidence-based, modern gender equality policy. Gender equality is a cross-cutting issue that is addressed across the board in the Hamburg administration as part of gender mainstreaming. All ministries are called upon to consider it in their area of responsibility. The Division for Violence against Women and Victim Protection", which is part of the Ministry for Social Affairs, should be emphasised here. The Officer for Equality and Social Cohesion in the Ministry for Science, Research, Equality and Districts plays a coordinating role. It also develops overarching programmatic frameworks and gender equality instruments, and launches initiatives.

The resources made available through the budget are a key element for actual gender equality. Through its Budget Management for Gender Equality (GWHS) regime, the Senate pursues the goal of addressing gender differences and existing disadvantages and eliminating them in budgetary decisions. In Hamburg, gender equality interventions are linked to the performance side of the product budget and measured, using resources and management-related indicators. The budget is executed on a subsidiary basis by the ministries and offices (thus contributing to target SDG 5.c: "Adopt and strengthen sound policies and enforceable legislation for the promotion of gender

Photo 24: Expert Dialogue Violence against Women



equality and empowerment of all women and girls at all levels".)

Regarding SDG 5, the City of Hamburg can point to numerous successes and milestones in recent years on the path to gender equality, the protection of women against discrimination and gender-based violence, and gender justice in Hamburg.

- I One of these milestones is the introduction and continuous development of the Gender Equality Policy Framework, which sets out the principles and guidelines for Hamburg's gender equality policy.
- I The Action Plan for the Acceptance of Gender and Sexual Diversity is another comprehensive programmatic framework that addresses almost all areas and phases of life for LGBTIQ* persons in Hamburg through interventions. The Action Plan aims to promote the recognition of homosexual, bisexual, transgender and intersex people, and take action against discrimination.
- I With the introduction and continuation of the digital Gender Equality Monitor, different aspects of gender equality in Hamburg are mapped using currently 63 indicators in six areas of action.
- I One milestone on the way to gender equality is also the codification of gender-equitable budget management in the Hamburg State Budget Code combined with the introduction of gender indicators. This leads to a systematic gender-based inclusion and examination of all income and expenditure in the budget process during preparation, implementation and accounting, as well as in all budget-based activities.
- I Social transformation and innovation processes, such as the comprehensive digitalisation of public life, always have an impact on equality. This is why the "Innovation in Digital Equality Award - IDEA" was launched in Hamburg, and awarded for the third time in 2022. In addition, a gender mainstreaming guide for digital offerings was created. This contains advice for the city administration and the public on equality in digitalisation. In the "Digital Mentors" initiative, which aims to help

older people in Hamburg enter the digital world, women make up the largest group in this age cohort. Volunteers show seniors how to use "smartphones, tablets and co.", thereby contributing to equality in digitalisation.

- I Equality between women and men was also advanced in 2013 with the entry into force of the Hamburg Board Appointment Act. All boards for which agencies of the Free and Hanseatic City of Hamburg appoint members fall within the scope of the Act. A 40% gender quota applies to the members to be appointed, nominated, seconded or proposed by the City of Hamburg. For mathematical reasons, the composition of small bodies is based on the number of members. If other bodies nominate members, the city is obliged to work towards equal representation on the body and to promote this accordingly. Exceptions to these provisions on appointment are only possible if there is an important reason for doing so. For bodies that are currently not gender-equitable basis in their composition, the obligation to apply quotas when appointing new members applies. Every four years (and on the first occasion two years after the law came into force), the Senate must submit a report on gender balance on the boards. To enable women in Hamburg to be able to lead a self-determined and violence-free life, the "Strategy for Combating Violence against Women and Girls, Human Trafficking and Violence in Care" was put in place. This is being systematically implemented and gradually further developed, among other things through an extensive expert dialogue with representatives of those involved in victim protection.

3.5.2 Actual gender equality

To enable women and men to participate equitably in all areas of life, Hamburg was one of the first federal states to develop a ***Gender Equality Policy Framework***²⁹. Under the title "Together for more equality in Hamburg", the second update of the policy framework was published in 2023. This summarises the current equality policy challenges for Hamburg, defines the principles and guidelines for equality policy, and presents new interventions for more equality. The policy framework forms the basis for equality policy work in all Senate offices and ministries of the City of Hamburg, and is regularly evaluated and updated. It is drawn up in a cross-ministerial process. This is based on the Hamburg Senate's signing of the "European Charter for Equality of Women and Men in Local Life" in 2014. With this, the Senate publicly and formally committed itself to the principle of equality between women and men. The update of the policy framework in 2023 was developed together with citizens, interest groups and representatives from districts and city ministries. The result is a total of 110 new interventions that focus on different phases and areas of life: from childhood and youth to school and training, to the topics of gainful employment, family, old age, health, sports and culture.

Photo 25: © Clay Banks auf Unsplash



The systematic approach of the Gender Equality Policy Framework is complemented by the ***Hamburg Gender Equality Monitor***³⁰, a digital tool which, using currently 63 indicators in six areas of action, maps different aspects of women's and men's lives in Hamburg. The empirical mapping of the development of equality and the status quo also provides indications of the areas where intensive efforts are still needed in order to enable women and men to lead self-determined and equal lives. The Gender Equality Monitor is produced by the Ministry for Science, Research, Equality and Districts, in collaboration with the Statistical Office North and with the support of the Sen-

29 <https://www.hamburg.de/bwfgb/gpr/>

30 <https://www.hamburg.de/gleichstellungsmonitor/>

ate Press Office. As neutral, objective and scientifically independent institutions, the statistical offices provide information on societal, social, economic and environmental structures, contexts and developments, and highlight areas for policy action. The basic version of the Gender Equality Monitor published in 2019 initially mapped 48 indicators from the official statistics and the remaining database of the Statistical Office North. Since the first update in 2020, it has contained 13 new indicators (e.g. on BAföG [student grant] receipt and the gainful employment of mothers and fathers). The next steps in gender equality policy can be derived from the available data. The Gender Equality Monitor is currently being reviewed and further developed with a view to adding more indicators.

To promote the impactfulness of budget management, the City of Hamburg amended the State Budget Code (Landeshaushaltssordnung – LHO) with the Act on the Further Development of Digital Financial Management (Gesetz zur Weiterentwicklung des digitalen Finanzmanagements), to the effect that the principles of impact orientation (in particular taking into account the goal of actual gender equality as well as the principle of environmental, economic and social sustainability) must be complied with in budget preparation and execution (***Enshrining gender equality in budget law***, Section 1 LHO). The principle of sustainability complements the goal of intergenerational justice already pursued with the strategic realignment of the budget system. With the mandate now anchored in the LHO, the Senate and the Parliament are obliged to use suitable instruments and methods of impact orientation in the various phases of the budget cycle.

The implementation of gender budgeting through ***budget management for gender equality*** in the Ham- burger is an ongoing process. Hamburg is participating in the EU project Gender Mainstreaming in Public Policy and Budget Processes³¹, in order to gather inspiration and ideas in dialogue with experts and

colleagues from administrative units in nine European countries. This is a flagship project under the Technical Support Instrument of the European Commission's Directorate-General for Structural Reform Support.

The ***report on budget targets and indicators that affect equality 2022***³² published in 2023 sets out how the equality mandate is implemented in the budget. The report presents the targets and indicators for measuring their achievement at product group level by departmental budget, and explains them in relation to their impact on equality.

With the Annual Report of the City of Hamburg published in 2019, sustainability reporting was introduced in the form of an overview of indicators for all 17 Sustainable Development Goals. As part of this reporting, specific budget indicators that are relevant to gender equality under SDG 5 are also covered.

Currently, neither digital participation and use nor the technical implementation of digitalised services can be considered gender-neutral and non-discriminatory. Women are generally strongly underrepresented in areas of work and positions that are of particular importance for the digital transformation. Against this background, the ***Innovation in Digital Equality Award (IDEA)*** was launched in Hamburg, and allocated for the third time in 2022. With the award, the Senate honours and promotes innovation and dedication in the field of equality and gender justice in the digital space. The prize is awarded in two categories: The promotional prize rewards technical innovations or innovative concepts that have already been developed, which digitally transfer equality-oriented analogue solutions in or for Hamburg, or which digitally rethink equality (the promotional prize is endowed with a maximum of 25,000 euros). The honorary prize, on the other hand, is awarded to women who have made outstanding achievements in their commitment

31 <https://www.hamburg.de/bwfgb/gender-budgeting/>

32 <https://www.hamburg.de/fb/haushalt/16918604/gwhs/>

to equality in the digital world, or who have promoted and shaped the digital economy to a special degree.

Equal participation in digital services is also to be promoted by the ***Equality in Digital Strategies – Gender Mainstreaming Guideline for Digital Offerings***³³.

In order to close the digital gender gap, women are to be increasingly included in design teams. Diversity of perspectives is to be strengthened through staff training and the inclusion of test persons or (artificially created) personas. Furthermore, websites and apps should be designed in such a way that all gender identities are addressed equally and have the same options for access and usage. Non-discriminatory (visual) language is just as important here as the possibility of including all gender identities in interactive user interfaces. If automated decision-making systems are used, e.g. in application procedures, which evaluate persons or characteristics attributed to them, fair participation without gender bias must be ensured. This includes disclosure that such systems are being used, standards for regular and holistic reviews, and an appropriate legal framework.

³³ <https://www.hamburg.de/bwfgb/14661588/gleichstellung-in-digitalstrategien/>

3.5.3 Reducing gender-based discrimination and violence

In 2017, the Free and Hanseatic City of Hamburg adopted the first "Action Plan for the Acceptance of Gender and Sexual Diversity". Ninety interventions were named in eleven areas of action. By adopting and implementing the Action Plan, Hamburg took a major step towards equality and acceptance of LGBTIQ* persons by mainstreaming equality-oriented work more firmly across all ministries. This development continues: the newly developed ***Action Plan Hamburg I(i)ebt vielfältig (Hamburg I(o)ives Diversi-***

ty)³⁴ sets out numerous measures across all ministries to strengthen the recognition, fair participation and self-determination of LGBTIQ* persons, and to reduce discrimination and exclusion. Besides education and awareness-raising in all areas of society and government, protection against homophobic and transphobic attacks is also to be improved. With a total of 150 interventions, 91 of which are new and 59 already implemented or to be continued, the current update of the first Action Plan from 2017 creates a stable foundation for future LGBTIQ* policy in Hamburg. The interventions were developed in a broad participatory process involving the administration, policy-makers and interest groups.

Since 2014, the Strategy for Combating Violence against Women and Girls, Human Trafficking and Vio-

lence in Care has been the guiding framework for victim protection measures in Hamburg. After Germany ratified the Council of Europe Convention on Preventing and Combating Violence against Women and Domestic Violence ("Istanbul Convention"), the requirements formulated there are directly applicable law in Germany. Hamburg consistently implements the Istanbul Convention. From November 2020 to November 2022, a multi-year **expert dialogue on Violence against Women** was conducted under the auspices of the Ministry for Social Affairs. This established a common understanding of the implementation of the Istanbul Convention among those involved in victim protection in Hamburg. All recommendations from the expert dialogue series will be included in the **update of the victim protection strategy in 2023**.

³⁴ <https://www.hamburg.de/contentblob/17033866/a533f8faa8c73e350afc9eac71245b30/data/d-fortschreibung-aktionsplan-fuer-akzeptanz-geschlechtlicher-und-sexueller-vielfalt-2023.pdf>

Photo 26: © Foto von Teddy O auf Unsplash



3.5.4 Indicators

5 GENDER EQUALITY



Proportion of female civil servants and pay-scale employees in executive and top positions in the Free and Hanseatic City of Hamburg (B2-B6)

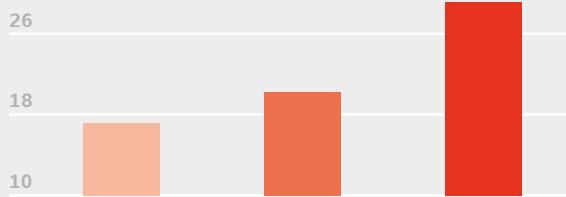
The proportion of women in grades B2-B6 and comparable pay scales in the total workforce is x per cent. (Source: Budget)

The indicator allows conclusions to be drawn on the equality of professional opportunity in executive positions in the City of Hamburg. Since the first survey of this indicator in 2013, the Senate succeeded

in successively increasing the proportion of women in top administrative positions from 17.2 per cent at that time to 29.1 per cent in 2020. The current figure is 32.6 per cent as of 31 December 2022.

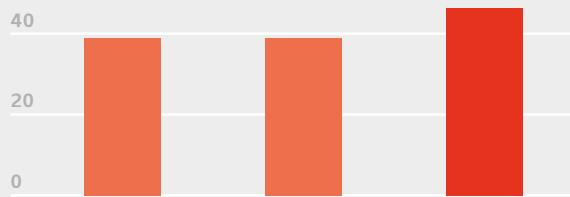
Proportion of female civil servants and pay-scale employees in executive and top positions in the Free and Hanseatic City of Hamburg (B2-B6)

17.2 %
2013 20.2 %
 2015 29.1 %
 2020



Women's share of seats in the Hamburg Parliament

38.8 %
2011 38.8 %
 2015 46.3 %
 2020



Women's share of seats in the Hamburg Parliament

Women's share of seats in the Hamburg Parliament This indicator reflects the representation of women and men in Hamburg's state parliament. It provides information on the proportion of women in the highest state body, women's share of nominations, the gender-based segregation of political issues as well as action needed to establish a balanced representation of women and men.

(Source: The data was obtained by BWFG – Equality and Gender Diversity Department – with the support of the Chancellery of the Hamburg Parliament. See also www.hamburg.de/gleichstellungsmonitor)

5 GENDER EQUALITY



The more women there are on the successful lists of candidates of the individual parties, the higher the probability of them being elected. In this regard, research suggests that with increased representation of certain segments of the population, the interests of the respective groups are also given greater con-

sideration in democratic negotiation processes. In Hamburg, a positive development is to be noted with regard to the appropriate representation of women in political bodies: since the last parliamentary elections in 2020, 46.3 per cent of the members of parliament have been female.

5 GENDER EQUALITY



Percentage of women among single parents in Hamburg

Percentage of single parents who are women. This indicator reflects the distribution of care work among couples who do not live together. It provides information on the unequal distribution of care work at women's expense, discontinuous employment histories, the need for flexible offers of even more highly qualified vocational training on a part-time basis, or insufficient old-age provision.
(Source: Statistical Office for Hamburg and Schleswig-Holstein; microcensus 2011 to 2020)

This indicator reflects the distribution of care work among couples who do not live together. It provides information on the unequal distribution of care work at women's expense, discontinuous employment histories, the need for flexible offers of even more highly qualified vocational training on a part-time basis, or insufficient old-age provision. The vast majority of paid and unpaid family and care work is still done by women. At almost ten times the rate in some cases (2010), women as single parents clearly outnumber men. A comparison over time shows that this has not changed significantly in the last ten years. For example, the columns show that in 2010 a total of 90 per cent of single parents were female, while in 2019 this

Percentage of women among single parents in Hamburg

90 %
2010 89 %
2015 86 %
2019

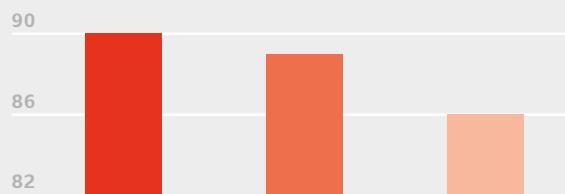


figure was 86 per cent, although in 2019 the absolute number of single parents increased sharply not only among men but also among women.

5 GENDER EQUALITY



Relationship between employment rates for women and men (%)

2010	2015	2020
93.52 %	95.13 %	92.41 %

The ratio of the female employment rate to the male employment rate is x per cent. (Source: Federal Employment Agency, statistical offices of the federal states)

Equal access to the labour market for men and women and equal opportunities for them to develop and achieve fulfilment in their careers is an important step towards gender equality. Breaking down traditional roles gives women better opportunities for full

participation in social and professional life. The ratio of the female employment rate to the male employment rate has remained stable at above 90 per cent in recent years, and is 92.41 per cent according to the latest figures (2020).

5 GENDER EQUALITY



Women's share of average gross hourly earnings (as an index) of full-time employees in Hamburg

2011	2015	2020
80.89 ind.	79.98 ind.	80.28 ind.

This indicator represents the average gross hourly earnings of women as an index. The index reflects the share of women's average gross hourly earnings when men's average gross hourly earnings are set to 100.

(Source: Statistical Office for Hamburg and Schleswig-Holstein; quarterly earnings survey for Hamburg for the years 2011 to 2020 in the manufacturing and services sectors (Sections B to S of the Classification of Economic Activities, 2008 edition 2008 (WZ 2008)))

From 2011 to 2020, average gross hourly earnings have risen continuously in each case, with women's earnings always below those of men (2020: women: 25.97 euros, men: 32.35 euros). The causes of the differences in earnings between women and men are manifold, and call for further policy measures in ad-

dition to the consistent application of the Equal Pay Act. Further improving the societal frameworks for reconciling work and family life remains a core challenge. The index has stagnated in its development, and stood at a comparable 80.28 per cent in 2020.

5 GENDER EQUALITY



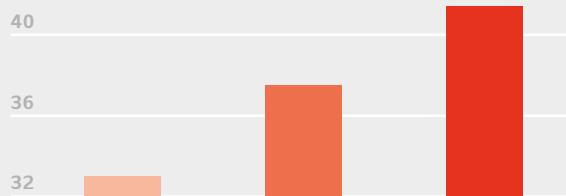
Percentage of women employed part-time in Hamburg

This indicator shows the percentage of women in the part-time working time model. This gives an indication of the difficulty of an economically independent lifestyle for women due to their high share of part-time employment, the insufficient pension provision which this entails, and the possibly lower likelihood of women reaching a managerial position. (Source: Statistical Office for Hamburg and Schleswig-Holstein; quarterly earnings survey for Hamburg for the years 2011 to 2020 in the manufacturing and services sectors (Sections B to S of the Classification of Economic Activities, 2008 edition 2008 (WZ 2008)))

Full-time work is the predominant working time model for both women and men, even though this form of gainful employment declined between 2011 and 2020 (women: 5 per cent). On the other hand, part-time employment among women increased by 8 per cent. In 2020, women were 30 per cent more likely to work part-time than men. It should be noted that more and more women are employed, but still perform a large part of unpaid family care work. Particularly with regard to the care of children and relatives, it can be assumed that changes in childcare and care provision will influence the desire for full-time or part-time work.

Percentage of women employed part-time in Hamburg

33 % 2011	37.5 % 2015	41.4 % 2020
---------------------	-----------------------	-----------------------



5 GENDER EQUALITY



Percentage of female Members of the Senate on supervisory boards of public companies

2011	2015	2020
24.0 %	41.5 %	43.9 %

The proportion of female Members of the Senate in interests of the City of Hamburg, in whose supervisory bodies at least one seat is held by a Member of the Senate), is x per cent of the number of members of the supervisory bodies. (Source: Hamburg Investment Report)

In order to increase the proportion of women on supervisory bodies, data on appointments was collected from 2011 onwards. In 2013, the Hamburg Board Appointment Act came into force. According to this law, there is an obligation to appoint a certain number of members (women and men) for certain board sizes. The Senate Commission for Public Enterprises, which is responsible for appointing Members of the Senate to supervisory bodies in interests of 50 per cent or

more, was kept updated every six months. The investment management team of the Free and Hanseatic City of Hamburg worked to ensure compliance with the Board Appointment Act in advance of the respective individual decisions in the Senate Commission for Public Enterprises. As a result, the proportion of female Members of the Senate increased significantly, reaching 43.9 per cent in 2020. In 2021, the figure was already 45 per cent.

5 GENDER EQUALITY



Relationship between the median income of women and men (%)

2010	2015	2019
n/a	82.07 %	84.41 %

Federal Employment Agency, Federal Institute for Research on Building, Urban Affairs and Spatial Development (Source: Federal Employment Agency, Federal Institute for Research on Building, Urban Affairs and Spatial Development)

Providing women with the same opportunities and rights as men to economic resources, and access to land, is part of the 2030 Agenda. To ensure this, equal pay for work of equal value is required, along with other factors. The relationship between the me-

dian income of men and women can shed light on this. For women this has barely changed in recent years. In 2019 it was 84.41 per cent of the median income of men.



3.6 SDG 6 – Clean Water and Sanitation

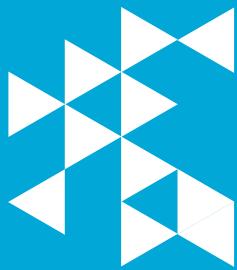
The **Sustainable Development Goal „Clean water and sanitation“** calls on the world to ensure the availability and sustainable management of water and sanitation for all. SDG 6 is the international goal to address both access to drinking water and sanitation, and water conservation. This includes long-term water availability, efficient water use and the promotion of water resource management.

The targets of SDG 6 call, among other things, for sustainable water management, which in the course of continuous dry periods is essential in order to avoid water scarcity and to increase the efficiency of water use. The sustainable supply of water requires the protection of water resources from pollution and overexploitation. This is

all the more important because seasonal and/or regional water shortages caused by the effects of climate change may play a role in the future – also in Germany.

While in the Global South the focus is on the provision of basic sanitation facilities, SDG 6 also targets the sustainable development of water supply for local communities, along with access to safe and affordable drinking water. This includes ensuring adequate water quality and unrestricted access to safe drinking water.

Water is also a cross-cutting theme for sustainable development. Access to clean water and sanitation is crucial for poverty reduction (SDG 1), inequality (SDG 10), and for peace, justice and sustainability (SDG 16).



Overview – the City of Hamburg's links to SDG 6

Qualitative aspects:

- | Sustainable water management in the Free and Hanseatic City of Hamburg

Indicators:

- | Connection rate to the public water supply system
- | Connection rate to the public sanitation system
- | Wastewater treatment
- | Phosphorus in flowing waters

Photo 27: Swimming fun at the Dove Elbe © Mediaserver Hamburg / Christian Brandes



3.6.1

Introduction – implementation of SDG 6 in Hamburg

Hamburg has an excellent water supply system, to which almost all households are connected. In order to secure the drinking water supply in the long term, the Ministry for the Environment, Climate, Energy and Agriculture and Hamburg's drinking water supply and wastewater disposal company HAMBURG WASSER are jointly implementing extensive measures to protect groundwater as a resource and to manage drinking water carefully. A new strategy paper, the so-called Drinking Water Agenda 2030/2050, is currently being prepared. The security of drinking water supply based on sustainable management of groundwater resources is and remains the Senate's declared goal, and can be considered a given for Hamburg.

Photo 28: By bike on the Binnenalster
© Mediaserver Hamburg

In view of the changing general conditions (e.g. population growth, climatic influences), new and continuous efforts are necessary in order to secure the goals that have been achieved. The management principles of the Water Resources Act (Section 6) and SDG 6 provide the framework for this Other targets of the 2030 Agenda, such as "increasing water-use efficiency" or "integrated water resources management", will continue to be intensively pursued both by the responsible ministries and by HAMBURG WASSER.

As a member of the Blue Community initiative, Hamburg has been committed to sustainable water management since 2022. Against the backdrop of increasing climate change, the Hamburg Water Atlas also presents the spatial connections between water, nature and climate action in Hamburg. As part of Hamburg's RainInfraStructureAdaptation (RISA) project, near-natural, decentralised rainwater management and rainwater treatment in Hamburg are also being promoted. Among other things, this can reduce material inputs into water bodies. Various inputs will also be reduced through the further development of near-natural riparian buffers and other accompanying measures.



3.6.2

Sustainable water management in the Free and Hanseatic City of Hamburg

Hamburg has been a member of the globally active Blue Community initiative since 2022. Around 100 cities and local authorities worldwide have now committed to key principles for the sustainable water resources management. Blue Communities commit themselves to the following four principles:

- | Recognition of access to safe drinking water and sanitation as a human right
- | Retention of public ownership of water services (water/wastewater)
- | Promoting the use of tap water instead of bottled water
- | Maintaining public partnerships with international partners

Photo 29: Illustration of an electrolyzer at H&R Ölwerke Schindler in the Port of Hamburg
© Mediaserver Hamburg / DOUBLEVISION



Hamburg has been aligning its actions in the water sector with the Blue Community principles for many years. More than 99 per cent of all Hamburg households are connected to the public water supply network, providing them with high-quality drinking water at socially equitable prices. Increasingly, drinking water is also being used in public spaces. To this end, the public drinking water supply is continuously being expanded in close cooperation with the two municipal companies *HAMBURG WASSER* and *Stadtreinigung Hamburg*, and public buildings such as schools are also equipped with drinking water dispensers. For several years, cooperation has also been underway with countries where the development status of water supply and sanitation can still be taken further. One example is the Restcent ("leftover cent") campaign by employees of the City of Hamburg, which finances projects to improve local drinking water supply and sanitation in León (Nicaragua). *HAMBURG WASSER* also actively supports international water partnerships in Tanzania, Jordan and South Africa – both in conjunction with training and in the context of knowledge sharing and know-how transfer. Drinking water is a vital, indispensable commodity. As a mem-

ber of the Blue Community, Hamburg would therefore like to make it even more of a focus of social and political awareness in the future, and draw appropriate attention to the resource.

Be it the river Elbe, the Alster or the Bille – life on and with Hamburg's waters shapes the city. Water protection and water management are important tasks that require special sensitivity and well-founded information in light of climate change. The **Hamburg Water Atlas**³⁵ provides a comprehensive database for this purpose. To better illustrate the spatial relationships between water, nature conservation and climate action in Hamburg, the Water Atlas, newly published in 2023, clearly brings together in one place geodata on Hamburg's water bodies and topics such as the Water Framework Directive, flood protection, rainwater and bathing water. This gives planners better access to important basic information on water protection and water-sensitive urban development. The Water Atlas offers interested citizens the opportunity to discover water management interrelationships and, for example, to follow the progress of measures to improve water ecology. The information is continuously supplemented and expanded by the Ministry for the Environment, Climate, Energy and Agriculture.

Climate change will also influence life in Hamburg in the future. The increasing risk of heat and dry periods on the one hand, and heavy rainfall on the other, requires a responsible approach to rainwater. To avoid damage and at the same time make optimal use of water as a resource, based on the sponge city principle Hamburg aims to temporarily store the rainwater that accumulates, and allow it to evaporate and infiltrate, as far as possible on site. As much water as possible is to be returned to the natural cycle. This relieves the pressure on rainwater pipes, reduces flooding and better protects infrastructure and water bodies. This is the context in which the Ministry for the Environment, Climate, Energy and Agriculture (BUKEA) and HAMBURG WASSEN jointly initiated the **RainInfra-**

StructureAdaptation (RISA) project,³⁶ to implement plans and solutions for a sustainable approach to rainwater. Implementation of the options for action created in the project and the model for sustainable and water-sensitive urban development is to continue. With the "RISA Structural Plan for Rainwater 2030", the joint project launched in 2009 was successfully completed in 2015. The RISA goals and action priorities can only be implemented as part of water-sensitive urban development through collaboration between various stakeholders from water management, urban development, landscape planning, transport planning and watercourse planning. HAMBURG WASSEN and BUKEA are working together to involve these and other actors that operate beyond water management. All stakeholders will work together in a modern network that pools resources across institutions and develops unconventional approaches to new challenges in rainwater management. The Adaptation to Climate Change/RISA Unit coordinates Hamburg's activities for adapting to the impacts of climate change, and acts as the lead agency for implementation of the RainInfraStructureAdaptation (RISA) Process.

35 <https://geoportal-hamburg.de/wasseratlas/>

36 <https://www.risa-hamburg.de/english.html>

3.6.3 Indicators

6 CLEAN WATER AND SANITATION



Connection rate to the public water supply system

x per cent of Hamburg's inhabitants are connected to the public drinking water supply system.

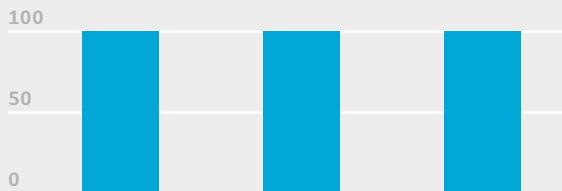
(Source: Statistical Office North (basic data supplied by BUKEA))

In Hamburg, almost 100 per cent of people have been connected to the public drinking water supply system for many years (since 2004). This reflects the high se-

curity of supply for drinking water. A declining trend is not to be expected.

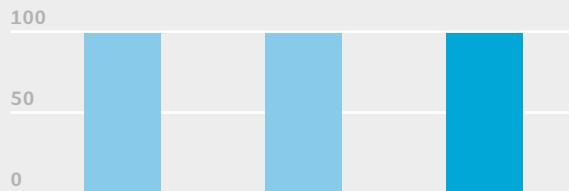
Connection rate to the public water supply system

100 %
2010 **100 %**
2015 **100 %**
2020



Connection rate to the public sanitation system

99.2 %
2010 **99.2 %**
2015 **99.3 %**
2020



Connection rate to the public sanitation system

x per cent of Hamburg's inhabitants are connected to the public sanitation system.

(Source: Statistical Office for Hamburg and Schleswig-Holstein)

6 CLEAN WATER AND SANITATION



Almost all households in Hamburg are connected to the public sewage system; the connection rate of the population has been above 99 per cent for many years. For about 0.7 per cent of the population, wastewater

is treated in small sewage treatment plants. Connecting non-populated areas remains an aim.



Wastewater treatment (%)

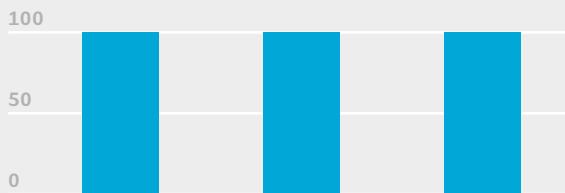
Ninety-nine per cent of wastewater is treated by means of denitrification and phosphorus elimination.
(Source: Statistical offices of the federal states)

"Wastewater" refers to water contaminated from domestic, commercial or industrial use, among other things, and can cause significant harm to humans, animals and nature if not properly treated. Nitrogen and phosphorus elimination can remove excess amounts

of those elements from wastewater, thus improving its quality of the. In Hamburg, over the entire time period (2010-2020) 100 per cent of wastewater was treated.

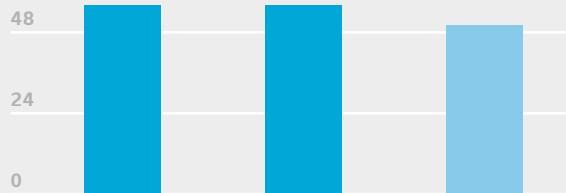
Wastewater treatment (%)

100 %
2011 **100 %**
2015 **100 %**
2020



Phosphorus in watercourses

56 %
2010 **56 %**
2015 **50 %**
2020



Phosphorus in watercourses (see also chapter on SDG 14)

x per cent of the monitoring sites show that concentrations of phosphorus in flowing waters comply with the guide values for good ecological status that are typical for those water bodies.

(Source: BUKEA, Institute for Hygiene and Environment (HU))



Implementation of the European Water Framework Directive (WFD) for the Elbe river basin will reduce the input of nutrients and pollutants (such as phosphorus) into coastal waters and thus into the North Sea. The final objective of the WFD is to achieve the elimination of priority hazardous substances, and help achieve concentrations in the marine environment that are close to background levels for naturally occurring substances. Therefore, the indicator phosphorus in flowing waters is listed for both SDG 6 and SDG 14. For this indicator, the monitoring data of annually measured monitoring sites near the estuary of 18 water bodies are used. Particularly due

to diffuse inputs, such as via rainwater, the guide values for good ecological status for phosphorus in water courses cannot be met at some of these monitoring sites in Hamburg. As part of the RainInfrastructureAdaptation (RISA) project, near-natural, decentralised rainwater management and rainwater treatment are being promoted throughout Hamburg. One result of this is that the material inputs into water bodies via rainwater can be reduced. The diffuse inputs will also be reduced through the further development of near-natural riparian buffers and other accompanying measures.



3.7 SDG 7 – Affordable and Clean Energy

The **Sustainable Development Goal “Affordable and clean energy”** aims to ensure access to affordable, reliable, sustainable and modern energy for all. Furthermore, the share of renewables in the global energy mix is to be significantly increased and the rate of increase in energy efficiency doubled.

The targets of SDG 7 also call for more access to clean fuels and technologies in order to achieve further progress in the integration of renewables in application systems for buildings, transport and industry. To this end, existing potentials for saving energy and increasing efficiency must be

leveraged. Secondly, there is a need for the massive, accelerated expansion of renewables as well as the creation of corresponding infrastructures; above all, modern electricity grids are required that meet demand.

SDG 7 represents one of the key challenges in sustainable development not only at the global level, but also locally. Accordingly, the transformation towards a sustainable energy supply must also be promoted at the municipal level. To achieve these aims, the current energy system must be transformed from fossil fuels to renewables.



Overview – the City of Hamburg's links to SDG 7

Qualitative aspects:

- | Renewable energy in heat supply (in new and existing buildings)
- | Wind energy and photovoltaic expansion
- | Advice and support services in the field of energy

Indicators:

- | Share of renewables
- | Wind energy
- | Photovoltaics
- | Energy use in municipal properties (heat)
- | Charging point infrastructure

3.7.1

Introduction – implementation of SDG 7 in Hamburg

The Senate of the Free and Hanseatic City of Hamburg has been working for over 20 years on the expansion of renewables, in both the heat and electricity sectors. This is achieved through policy initiatives, frameworks and regulatory law, as well as through expert advice and financial support. Furthermore, the Senate is working on the appropriate legal and factual frameworks for the expansion of renewables, which are generally much more complicated in a city state than in a large state. Here, the Senate is taking steps to increase locally generated green electricity, as well as to convert fossil heat generation to carbon-neutral heat generation solutions and to increase energy efficiency.

Photo 30: Wind turbines in Hamburg
© Mediaserver Hamburg



A key role is played by the switch to a grid-based heat supply. Heat grids offer the possibility of integrating renewable energy and efficient technologies into the heat supply at low cost. They also offer high potential for decarbonisation, because they can accommodate high shares of renewable and carbon-neutral energy sources. The Senate of the Free and Hanseatic City of Hamburg bought back the central district heating network, including generation plants, in 2019. It is now working on the implementation of ambitious, low-carbon generation concepts to replace the coal-fired power plants (Wedel CHP plant, Tiefstack CHP plant). Potential for decarbonisation of the central district heating systems in the city, as well as other existing and privately operated systems, is available in Hamburg. This involves industrial and commercial waste heat, near-surface as well as deep geothermal energy, and other environmental heat. Decarbonisation in the form of ground-mounted solar thermal energy and sustainably produced biomass can only come into play to a relatively small extent. This is due to competition between various interests to use the very limited open spaces of the densely populated metropolis. Furthermore, power-to-X technologies used for sector coupling offer promising opportu-

nities, and help build independence from imports in heat supply.

The biggest success stories in the implementation of SDG 7 in the City of Hamburg in recent years include in particular:

- I For a city state like Hamburg, the expansion of wind energy achieved in recent years to 67 wind turbines (2022) with a total capacity of 121.3 MW is a success in itself. Furthermore, the Senate is working to secure at least 0.5% of Hamburg's land area for wind energy, and thus to further promote the construction of new turbines and the repowering of existing ones. It is also worth noting that 14 of the wind turbines were erected in the port area. The port, with its port economy and as an industrial location, brings with it its own unique challenges for the approval of wind turbines. Nationwide, the City of Hamburg is a pioneer in this area. The Georgswerder energy mountain is also known nationally and internationally, and is a popular showcase for the reuse of landfill sites. The same role is played by the energy bunker in Wilhelmsburg in the field of solar thermal energy and photovoltaics. The quantitative indicators show a continuous increase in installed photovoltaic power per inhabitant. Due to the legal PV obligation, the further efforts of the Senate and the Ministry for the Environment, Climate, Energy and Agriculture, as well as the commitment of citizens, the expansion of photovoltaics will continue to increase in the future.
- I Another success story the remunicipalisation of Hamburg's central district heating system. The 2013 referendum on the remunicipalisation of Hamburg's energy networks has been fully implemented since 2020. After the gas grid and the electricity grid, the inner-city district heating grid was remunicipalised most recently, which gives the City of Hamburg further options for managing the decarbonisation of the gas and district heating grid.
- I The following decisions are also to be seen as milestones: By 2030, the City of Hamburg will com-

pletely stop generating heat from coal, and by 2045, heat generation for the city's district heating network will be carbon-neutral. In the process, the Wedel CHP plant is to be replaced by the Hafen energy park, which will use renewable heat, industrial waste heat, power-to-heat and waste heat from a waste recycling plant, among other things, to feed into the city's district heating network. In the second step, the Tiefstack CHP plant is to be replaced by waste heat from industry and waste incineration, power-to-heat and, above all, river water heat pumps in combination with seasonal aquifer storage.

- I The entry into force of the Hamburg Climate Protection Act in 2020, in particular the introduction of the obligation to use renewables in the supply of space heating and hot water in existing buildings, as well as the obligation to provide a system for generating electricity through the use of solar radiation energy, is also an important milestone.
- I In 2022, the concession for a central heating/cooling supply was awarded for the newly built district of Oberbillwerder. The supply plan now contractually secured for implementation is based on considerations from the specialist energy plan for the project area at the time. It provides for a heating and cooling supply based 100 per cent on renewable energy. The main heat sources are wastewater heat and ambient air.
- I Furthermore, 13 energy refurbishment plans have been developed and largely implemented in Hamburg for existing residential neighbourhoods. Due to the increasingly standardised implementation of the neighbourhood approach in modernisation planning, neighbourhood-based heating networks with high shares of renewable heat (over 50 per cent) are currently being realised in order to supply heat to existing buildings.
- I The Integrated Wilhelmsburg Heat Transition (IW3) project can also be considered a success. The aim of the project, which is funded by the federal government's Reallabor programme, is to supply an entire district of Hamburg (Wilhelmsburg) with almost carbon-free heat. The heat fed into the Wilhelmsburg heating network by the municipi-

- pal heating network operator comes predominantly from a plant for the use of medium-depth geo-thermal energy built as part of this project.
- I Since 2021, Hamburg's "Renewable Heat" funding programme has seen a significant increase in demand for heat pump funding. First of all, this increase is based on the over-fulfilment of the mandatory use of 15 per cent renewable energy in heating replacements since mid-2021. Secondly, the public discussion about independence from imports (natural gas and heating oil) from Russia that has arisen since the war in Ukraine also led to a further increase in motivation among citizens to use heat from renewable sources in 2022. The development in the use of heat pumps and in new connections to heating networks is not yet on the path to achieving Hamburg's climate action goals.

However, a significant increase in the use of renewables for the supply of heat to residential and non-residential buildings is still expected in the coming years due to the measures outlined above, the federal policy framework and the increased prices of fossil fuels.

In addition to the qualitative measures, the City of Hamburg also measures its contribution to SDG 7 on the basis of the charging station infrastructure, among other things. Hamburg thus follows the recommendations of the study "SDG Indicators for Municipalities", which was initiated by the Association of German Cities and published by the Bertelsmann Stiftung. These indicators are also relevant to many other German municipalities, and thus enable comparability.

3.7.2

Renewable energy in heat supply (in new and existing buildings)

7

When planning and realising new neighbourhoods, the City of Hamburg already has a powerful instrument to address aspects of a climate-friendly, affordable heat supply and high building efficiency at an early stage, and to incorporate these into the plans. Since the **Hamburg Climate Protection Act (HmbKliSchG) 2020**,³⁷ specialised energy plans can be required as expert opinions on energy in the context of development planning procedures. Specialised energy plans examine different types of climate-friendly heating and cooling supply for new buildings, while at the same time ensuring economic viability. As a result,

³⁷ <https://www.landesrecht-hamburg.de/bsha/document/jlr-KlimaSchGHA2020rahmen>

preferred variants are determined, which can then be fixed in the further course of development planning procedures, or stipulated in urban development agreements.

The focus on the building stock is equally ambitious. This seeks to achieve an ambitious transformation of those buildings that currently still largely have fossil-based heat generation technologies. The City of Hamburg is implementing this transformation process using the ***obligation to use renewable in existing buildings***, which has been in force since 2021. In the event of a heating system replacement, owners of the affected buildings must cover at least 15 per cent of the annual heating energy demand with renewables. Alternatively, they can meet this obligation by connecting to a heat network. The obligation to use renewable energy in existing buildings is supported by a ***funding programme for renewable heat***, which is delivered by the Hamburgische Investitions- und Förderbank on behalf of the City of Hamburg. The programme provides financial support for exceeding the obligation to cover at least 15 per cent of the annual heating energy demand with renewable energy. It does for instance by providing investment cost subsidies for efficient heat pumps.

The funding for the construction and expansion of heating networks with high shares of renewable

heat, which is also included in this programme, will be strengthened in the future by a new funding instrument. The Hamburg subsidy, which can be combined and cumulated with federal funding, provides quite attractive investment conditions for renewable-based heat generators and the corresponding heat networks. At the same time, the subsidy helps to make the renewable-based heat supply more affordable. Besides the increase in the renovation rate and depth, the significant rise in the use of heat pumps and the significant expansion of the heat network are key to achieving the climate action goals of Hamburg and the federal government.

Furthermore, by initiating and supporting neighbourhood energy plans, the Senate is ensuring an increase in energy efficiency in buildings that includes renewables, as well as concrete approaches for clearing "building refurbishment backlogs".

Responsibility for the heat transition is shared between the Ministry for the Environment, Energy, Climate and Agriculture and the Ministry for Urban Development and Housing, as the heat transition requires an increase in building efficiency and an increase in the share of renewables to go hand in hand.

3.7.3

Wind energy and photovoltaic expansion

Wind turbines and ground-mounted photovoltaic systems require space and suitable conditions (such as wind accessibility and solar radiation), and must be reconciled with numerous other competing uses, especially in outdoor areas.

The Hamburg Senate is therefore working on a cross-ministerial basis to expand renewables. The Ministry for the Environment, Energy, Climate and Agriculture is an important institution in this context, not only because of its responsibility for energy policy, but also because it is the licensing authority for energy production facilities. In Hamburg, the spatial control of wind energy in external areas subject to urban land use planning is carried out through the land use plan, which is the responsibility of the Ministry for Urban Development and Housing. The Ministry for Economic Affairs and Innovation and the district offices have a central role in the expansion of renewable electricity generation in port, industrial and commercial areas.

Photo 31: Wind turbine and solar energy © Mediaserver Hamburg



In a metropolis like Hamburg, port, industrial and commercial areas offer additional opportunities for the expansion of renewable electricity generation. However, they also place special demands on plant construction, e.g. due to the operation of port, industrial and commercial facilities, or hazardous goods operations, in the immediate vicinity of the plant. Municipal companies also play a central role. These include *Hamburger Energiewerke* for the planning, construction and operation of plants, the Hamburg Port Authority, *Hamburg Invest Entwicklungsgesellschaft* and the *Landesbetrieb Immobilienmanagement und Grundvermögen* for the provision of land in the port, on industrial and commercial sites and in the outskirts. These companies have a direct influence on the local likelihood of success for the construction of wind energy and photovoltaic plants.

Overall, the greatest successes in Hamburg in the

field of photovoltaics (PV) can be achieved through "rooftop installations". Besides these, however, approaches such as façade PV are also considered, agro-PV projects are examined and open spaces for PV systems are identified.

One cornerstone of the expansion of PV systems, especially on buildings in the city, is the Hamburg Climate Protection Act (HmbKLiSchG) of 2020. This stipulates a PV obligation for new buildings from January

2023 and for existing buildings from January 2025 if the roof cladding is completely renovated. As part of the amendment to the law, the obligation for existing buildings may be brought forward by one year to January 2024. Also as part of the amendment to the Hamburg Climate Protection Act, a car park PV obligation will probably be established in principle for newly constructed open car park facilities with 35 spaces or more.

3.7.4

Advice and support services in the field of energy

Photo 32: Energy bunker Wilhelmsburg
© Mediaserver Hamburg



All Hamburg building owners, homeowners, tenants and tradespeople can easily obtain free advice on energy-saving building and living from the *Hamburger Energy Guides*,³⁸ either online or in person. Since 2019, the Hamburg energy guides have also been advising private individuals and tradespeople during their visit to an exhibition. The exhibition on the ELBCAMPUS offers a good opportunity to gain an impression of what the building's condition might look like after modernisation. In addition, free information events on a wide range of topics are regularly offered for private building owners, as well as specialist events for building professionals for further training.

Given that the risk of electricity and gas disconnections increased significantly due to the sharp rise in electricity and gas prices in 2022, the City of Hamburg has set up a **hardship fund for energy users at risk of energy disconnections**.³⁹ The hardship fund is intended to help private individuals prevent energy disconnections (especially electricity disconnections). People in special hardship situations who cannot pay their energy costs and for whom social security systems are not effective, can receive support by having their debts to the energy supply companies (EVU)

³⁸ <https://www.hamburg.de/energielotsen/>

³⁹ <https://www.hamburg.de/haertefallfonds/>

taken over. The City of Hamburg provides up to 15 million euros for this purpose.

Photo 33: Georgswerder Energy Mountain © Mediaserver Hamburg



3.7.5 Indicators

7 AFFORDABLE AND CLEAN ENERGY



Share of renewables

x per cent of energy consumption comes from renewable energy sources.

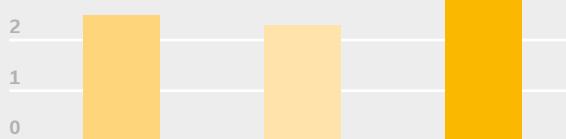
(Source: Energy balance sheet (Statistical Office North))

The trend in renewables as a percentage of energy consumption is an important benchmark for the progress of the energy transition. Renewables are those forms of energy that do not rely on finite resources. For Hamburg in particular, these include wind and solar, as well as geothermal energy. As a city state, gradually increasing the share of renewables in the

energy consumption mix poses a greater challenge for Hamburg than for Germany's larger states, as there is only a very limited amount of suitable land available. In 2020, the share was 3.2 per cent.

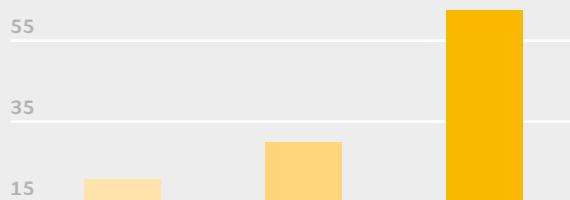
Share of renewables

2.5 %	2.3 %	3.2 %
2010	2015	2020



Wind energy (W per inhabitant)

20.6 w	29.9 w	62.3 w
2010	2015	2020



Master data register for gas and electricity markets, figures for wind turbines, and population of Hamburg (Statistical Office North) (Source: Marktstammdatenregister Windkraftanlagen und Beölkerungsstand Hamburg (Statistikamt Nord))

Wind turbines generate a considerable share of renewable energy. This indicator provides information on the installed capacity of all wind turbines per inhabitant. This means that Hamburg can be compared with other large cities in terms of its contribution to the energy transition through wind energy. However, it should be noted that Hamburg, as a city state, faces completely different challenges in the construction of wind turbines compared to the federal states with large areas of land. In a city state, the availability of

land for wind turbines is very limited due to the overall scarcity of land. Nonetheless, the City of Hamburg will meet the area contribution targets of the Wind Area Requirements Act (WindBG) of 0.5 per cent of the state's area by 2032 at the latest. The installed capacity of all wind turbines per head of population has increased significantly within the last few years, reaching 62.3 watts in 2020.

7 AFFORDABLE AND CLEAN ENERGY



7 AFFORDABLE AND CLEAN ENERGY



Photovoltaic systems (W)

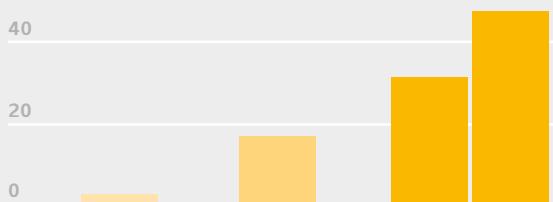
x watts of installed PV energy capacity per inhabitant (Source: Fraunhofer Institute for Solar Energy Systems (ISE), based on the master data register for gas and electricity markets, and statistical offices of the federation and the states)

Photovoltaic systems generate a large share of renewable energy, which is mainly used close to buildings. This indicator provides information on the installed capacity of all PV systems in relation to population size. This means that Hamburg can be compared with other large cities in terms of its efforts to contribute to the energy transition through photovoltaics. However, it should be noted that Hamburg, as a city state, in some cases faces completely different challenges in the erection of PV systems compared to the fed-

eral states with large areas of land. This is the case for instance with regard to the availability of land for ground-mounted systems, and the many listed buildings on which a photovoltaic system cannot readily be installed. The installed capacity of all PV systems per head of population has increased significantly within the last few years, reaching 42 watts in 2022.

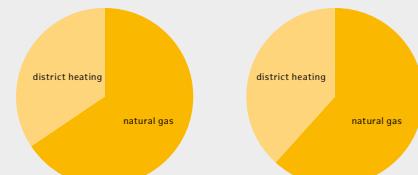
Photovoltaic systems (W per inhabitant)

5.9 w
2010 17.3 w
2015 29.1/42.0 w
2020/2022



Energy consumption in municipal properties (heat)

n/a
2010 902 million kWh
natural gas: 593
district heating: 309
2016 950 million kWh
natural gas: 587
district heating: 363
2020



Energy consumption in municipal properties (heat)

*Energy consumption in municipal properties (heat) is x million kilowatt hours.
(Source: BUKEA key municipal figures (weather-adjusted))*

Reducing energy consumption is an important goal for the municipal properties. It has not been possible to reduce heating energy consumption since 2016, and the trend for 2022 could not be taken into account in this presentation. As a consequence of the past years, the applicable standards for new construction

and renovation have nevertheless continued to be consistently implemented. Therefore, a continuous reduction in energy consumption in the municipal properties can be expected in the coming years.

7 AFFORDABLE AND CLEAN ENERGY



7 AFFORDABLE AND CLEAN ENERGY



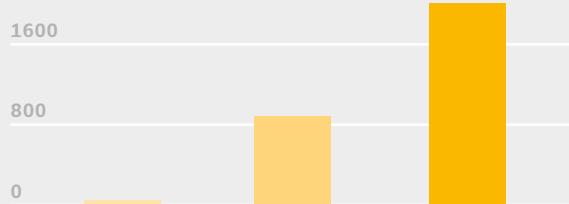
Charging point infrastructure

*There are x publicly accessible normal and fast charging points from 3.7 kilowatts upwards.
(Source: Federal Network Agency)*

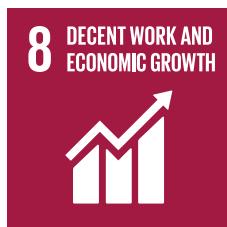
In 2009, Hamburg was selected as one of eight “model regions for electromobility”. One of the goals was to implement charging infrastructure in public spaces. A second project phase of the federal programme began in 2012. The “Master Plan to Further Develop the Publicly Accessible Charging Infrastructure for Electric Vehicles in Hamburg”, adopted in August 2014, laid the foundation for a needs-based charging infrastructure in Hamburg. This envisaged the installation of a city-wide and needs-based range of charging infrastructure designed to enable as many e-vehicle users as possible to charge their vehicle at any time. Until the end of 2021, the City of Hamburg had borne the costs for its own charging point infrastructure in public road space entirely by itself. As a result, the “chicken-and-egg problem” was overcome early on in Hamburg and the acceleration of electromobility in Hamburg got off to a very successful start. In the

Charging point infrastructure

2 Num. 31/12/2014	911 Num. 31/12/2018	2,076 Num. 31/12/2022
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past few years, this expansion included some 100 to 200 charging points per year, which means that 2,076 charging points are now available in Hamburg. For the next couple of years to 2025, an average of around 200 charging points per year are to be installed.



3.8 SDG 8 – Decent Work and Economic Growth

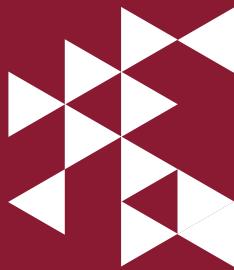
The **Sustainable Development Goal “Decent work and economic growth”** promotes sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. SDG 8 encompasses the economic dimension of sustainable development. It is about building a sustainable economy that will guarantee social prosperity in which all people participate.

The targets of SDG 8 call for, among other things, sustainable economic growth that enables people to obtain quality jobs, stimulates the economy and at the same time does not harm the environment. Furthermore, it is important to substantially reduce the proportion of youth who are not in employment, education or training. Equal pay should be paid for work of equal value.

SDG 8 also focuses on the implementation of sustainable production, and the creation and

safeguarding of good and fair working conditions. Labour rights must be protected and a safe working environment must be ensured, including for those in precarious employment. Effective measures must be taken against forced labour, slavery, human trafficking and the worst forms of child labour. The countries of the Global North are called upon to fulfil their international responsibilities. In this context, measures to promote sustainable tourism that enables local value creation, jobs and culture should also be implemented.

SDG 8 overlaps among others with SDG 1 (No poverty), SDG 4 (Quality education) and SDG 9 (Industry, innovation and infrastructure), among others.



Overview – the City of Hamburg's links to SDG 8

Qualitative aspects:

- | Sustainable business in Hamburg

Indicators:

- | Gross domestic product
- | Ratio of gross fixed capital formation to GDP
- | Family Seal companies – annual awards and current total number of certified companies
- | Long-term unemployment rate
- | Employment rate (15-64-year-olds)
- | Employment rate (55-64-year-olds)
- | Gainfully employed individuals on supplementary benefits

Photo 34: As a public enterprise, Hamburger Hochbahn provides important services for Hamburg residents and visitors. © Mediaserver Hamburg / Christian Hinkelmann



3.8.1**Introduction – implementation of SDG 8 in Hamburg**

The Senate sets the frameworks for a competitive, innovative, and environmentally and socially sound economy in Hamburg. The city is in constant dialogue with businesses, trade unions, science, chambers of commerce, environmental associations and other civil society actors on the “sustainable transformation of business”. All responsible ministries make important contributions to the sustainable and economically successful further development of Hamburg. With its public companies, the City of Hamburg as shareholder pursues the goal of efficiently fulfilling public tasks and specific policy goals. At the same time, through its (controlling) influence over these companies, it ensures that the public interest and services of general interest are safeguarded, and that services and infrastructure which are important for the community and the city remain under the control of the public sector. In this way, the City of Hamburg retains important leverage for control and management. At the same time, the public enterprises have the necessary freedom of action and decision-making to organise their affairs flexibly and according to business management criteria. Where necessary they can also adapt to competition. This ensures that the companies can fulfil or achieve their tasks and goals effectively, in accordance with the principles of economic efficiency and economy, and to a high standard of quality.

Every day, Hamburg’s “urban economy” serves the city’s more than 1.9 million Hamburg residents, as well as everyone who visits Hamburg for private or professional reasons: The water flows out of the tap at the desired temperature, the electricity comes out of the socket reliably, and waste is collected and recycled on time. Whether by underground, bus or ferry – public transport takes people to kindergarten, university or work in the morning, and to the swimming pool or theatre performance in the evening. The urban economy creates affordable housing, runs social accommodation and healthcare facilities, develops the port and transport infrastructure, shapes cultural

life in Hamburg, and much more. With the Hamburg City Economic Strategy "Together for the Common Good", the City of Hamburg has created a mission statement with the vision of shaping Hamburg as a sustainable metropolis where a good life is possible for all. Through its economic strategy, the City of Hamburg, as a shareholder of the public companies, sets goals that the companies are then required to concretise and back up with measures. In this context the promotion of collaboration and the formation of partnerships are designed to enable cross-company cooperation and drive development towards a sustainable city. This collaborative process also includes the city administration.

The Urban Economy Strategy is embedded in the governance structure of the City of Hamburg and, together with the Hamburg Corporate Governance Code (HCGK) and the Compliance Framework Directive (CRRL), forms the cornerstone of holistic corporate governance and control. This is based on the principles of the social market economy, and aligned with the "model of the honourable merchant".

The biggest success stories in the implementation of SDG 8 in the City of Hamburg in recent years include in particular:

- I For the first time, Hamburg's Urban Economy Strategy formulates a holistic set of goals for the public companies that goes beyond performance and economic efficiency, and must be prioritised, concretised and backed up with measures by the companies. The aim is to integrate the goals of the urban economic strategy into the corporate plans by 2026 at the latest, and from then on include them in business plans and medium-term financial plans. At the same time, the city is setting up a

monitoring system for key figures, comprising in particular individual company performance, financial and portfolio figures, as well as sustainability figures. This should enable the City of Hamburg as a group to also come closer step by step to achieving the goal of holistic corporate management.

- I To do justice to the idea of SDG 17 – "Partnerships to achieve the goals" –, flagship projects for implementation and monitoring of the urban economy strategy are planned. In these projects, joint group-wide interventions will be developed across organisations and ministries in the thematic areas of (i) work of the future, (ii) the mobility transition and (iii) the climate/energy transition. The Urban Economy Forum, which has also been set up, aims to advise public companies from the perspective of non-governmental organisations on implementation of the Urban Economy Strategy, and generate impetus for further development.

In addition to the qualitative measures, the City of Hamburg also measures its contribution to SDG 8 based on the long-term unemployment rate, the employment rates of 15-64 year-olds and 55-64 year-olds, and the number of people on supplementary benefits. Hamburg thus follows the recommendations of the study "SDG Indicators for Municipalities", which was initiated by the Association of German Cities and published by the Bertelsmann Stiftung. These indicators are also relevant to many other German municipalities, and thus enable comparability.

3.8.2

Sustainable economy in Hamburg

The Hamburg Senate has committed itself to implementing the Sustainable Development Goals (SDGs). Based on that commitment, the ***Hamburg Urban Economy Strategy***⁴⁰ of 2022 formulates clear goals for the future. It provides Hamburg's public enterprises with guiding principles for their actions and sets a framework for effective collaboration for the common good. The Senate supports the Hamburg Urban Economy in fulfilling its tasks, modernising the companies and promoting their performance. The Hamburg Urban Economy Strategy is divided into the four target clusters: "effectiveness and performance", "economics", "climate change and the environment" and "social responsibility". These are presented below.

Photo 35: Among other things, the port's municipal companies play a very important role for the "Economy" target cluster of Hamburg's urban economic strategy © Mediaserver Hamburg



The ***target cluster "effectiveness and performance"*** addresses the sustainable management of corporate services, as well as sustainable procurement. This is designed to promote sustainable practices, consumption and supply chain responsibility. By investing in infrastructure and using innovative technologies, companies should help make the city sustainable, safe and resilient, and achieve greater economic productivity and performance. Furthermore, by providing high-quality technical and vocational education and training for their employees, public enterprises should lay a solid foundation for sustainable economic growth and full and productive employment. The target cluster can then make a positive contribution to SDGs 4 (Quality education), 8 (Decent work and economic growth), 9 (Industry, innovation and infrastructure), 11 (Sustainable cities and communities) and 12 (Sustainable consumption and production).

The ***target cluster "economics"*** is to be seen in the context that public enterprises should help achieve the SDGs by providing their services efficiently

and collaboratively, and by further developing the (city's) assets. In doing so, they should contribute to sustainable and inclusive economic growth, and guarantee high-quality, reliable and sustainable urban infrastructure. The Hamburg Urban Economy Strategy takes into account the great diversity of different business models of public enterprises. Hamburg's Urban Economy should therefore plan and achieve appropriate profit and loss contributions. Insofar as each public enterprise is able, they make use of opportunities for its own and the group result. Furthermore, as a matter of principle enterprises only take on risks that are defined and controllable and are proportionate to opportunities and benefits. An appropriate and effective risk management (system) is therefore an essential component of corporate governance and control. The target cluster "economics" can thus make a positive contribution to SDGs 8 (Decent work and economic growth), 9 (Industry, innovation and infrastructure), 11 (Sustainable cities and communities) and 17 (Partnerships for the goals).

Preserving the vital natural resource base on which life depends is key to sustainable development. By implementing climate change and environmental protection measures, by driving the energy and mobility transition, by making infrastructure "climate change-proof" and by ensuring the careful use of natural resources – all under the **target cluster "climate change and the environment"** – the Hamburg Urban Economy is addressing those SDGs with links to climate action, energy and the environment, as well as sustainable consumption. It is also making a contributions towards building a resilient city. The focus here is on the goal of public enterprises achieving carbon neutrality by 2040. This target cluster can thus make a positive contribution to SDGs 6 (Clean water and sanitation), 7 (Affordable and clean energy), 8 (Decent work and economic growth), 11 (Sustainable cities and communities), 12 (Sustainable consumption and production), 13

(Climate action), 14 (Life under water) and 15 (Life on land).

The **target cluster "social responsibility"** focuses on occupational health and safety for employees, equal opportunities for women and men, and anti-discrimination. The Hamburg Urban Economy also aims to guarantee and create good and decent working conditions by paying fair wages, limiting temporary work and fixed-term contracts, and implementing inclusion measures. The target cluster can thus make a positive contribution to SDGs 3 (Good health and well-being), 5 (Gender equality), 8 (Decent work and economic growth) and 10 (Reduced inequalities). The Senate has already concretised SDG 5 "Gender equality" by publishing a paper on measures to promote equal opportunities for women and men in managerial positions in public companies. Sixteen measures give public companies and the city administration clear guidelines for action to achieve the goal and work towards a corporate culture based on gender equality.

Two important frameworks in the area of sustainable management are the Hamburg Corporate Governance Code⁴¹ and the Compliance Framework Directive. The **Hamburg Corporate Governance Code** (HCGK),⁴¹ a new version of which was published in 2020, enables a continuous process to improve corporate governance in Hamburg's public companies. This increases the transparency of the companies and, through greater publicity and traceability, trust in decisions made by administrators and policy-makers. The HCGK commits the management of public companies to the sustainability goals of the City of Hamburg, and includes a reporting obligation on contributions to sustainability, climate action, socially and environmentally responsible procurement, and environmental and resource protection. The HCGK creates a standard for collaboration between shareholders, supervisory body and management. It can thus make a positive contribution especially to SDGs 8 (Decent work and economic

⁴¹ <https://www.hamburg.de/contentblob/16053450/81e880c01eece8ed2ab1fdc2057a68a8/data/hamburger-corporate-governance-codex.pdf>

growth), 16 (Peace, justice and strong institutions) and 17 (Partnerships to achieve the goals). To complement the HCGK, public enterprises of the City of Hamburg are subject to the ***Compliance Framework Directive*** (CRRL).⁴² The framework directive creates a common identity that is shared across the public companies of the City of Hamburg, and promotes the continuous, verifiable process for improving corporate governance. Accordingly, the public companies are to further develop their existing compliance management system (CMS) or establish a comprehensive CMS for the first time. The framework directive defines the compliance goals, principles and minimum standards to be implemented by each individual company. At the same time, the CRRL is designed to encourage public companies to motivate their employees to act responsibly and to provide them with guidance in this regard. The CRRL can thus make a positive contribution to SDGs 8 (Decent work and economic growth), 16 (Peace, justice and strong institutions) and 17 (Partnerships to achieve the goals).

In addition, the following activities are also designed to help promote a sustainable economy in Hamburg:

- I In the course of 2023, a dialogue is being conducted with stakeholders on the "sustainable transformation of the economy". Selected representatives from companies, trade unions, academia, chambers, environmental associations and civil society are invited to the ***series of dialogues on the topic "Economy Shapes the Future"***. The three-part series of events is intended to provide space for free thinking and creative ideas that are independent of fixed and familiar positions. The first event took place in April 2023.
- I For more than 20 years, sustainability in the economy has been driven and practised through the voluntary programme of the ***Hamburg Environmental Partnership***⁴³ together with associations

and enterprises. The Hamburg Environmental Partnership was founded in 2003 with the aim of taking an integrated view of the major areas of business and the environment. The aim is to support businesses and companies in implementing voluntary environmental and climate protection measures in their operations. This is done for various thematic areas (e.g. energy procurement/energy efficiency, sustainable procurement, etc.) and through different activities such as information events and on-site advisory services. The responsible body – comprising the Chamber of Commerce and the Chamber of Handicrafts, plus the Port and Industry Association (UVHH e. V., IVH e. V.) and the Environmental Ministry – connects different actors, and emphasises the benefits of partnerships and networking for developing or rolling out content. The Hamburg Environmental Partnership was extended for another five years in April 2023.

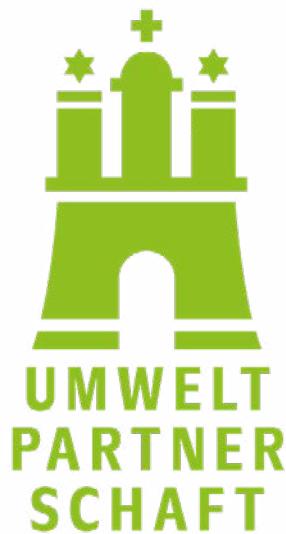


Photo 36: Environmental partnership logo © Freie und Hansestadt Hamburg

- I Since 2021, the ***project "clean:tech inside"*** has included career guidance, STEM promotion for young people and practical insights into the areas of sustainability and climate action. The project thus combines the commitment of companies in

42 <http://www.beteiligungsbericht.fb.hamburg.de/Download/Compliance-Rahmenrichtlinie.pdf>

43 <https://www.hamburg.de/umweltpartnerschaft/>

the Hamburg Metropolitan Region to clean technologies and climate action, with the promotion of young STEM talent (STEM stands for science, technology, engineering and mathematics). The CO₂ Monitor is the centrepiece of the project and will make data, especially investment in low-carbon technologies and associated CO₂ reductions, visible to the public in the coming years. Companies will then be able to showcase their commitment and their path to carbon neutrality. At the same time, they can introduce their company to young people. For school students, the project offers an opportunity to visit committed industrial and craft enterprises. Using the data collected there for the interactive CO₂ Monitor, the pupils learn how to process, analyse and visualise data, and thus increase their data competence.

- I Furthermore, Stadtreinigung Hamburg (SRH) was the first public company in Hamburg implement the **pilot project for a common good balance sheet** for 2020/2021 , which was included in the 2020 coalition agreement of Hamburg's governing parties, and to publish it at the end of 2022. In the common good balance sheet, a benchmark is set in an evaluation matrix for the core values of human dignity, solidarity, justice, environmental sustainability, transparency and co-determination.
- I The City of Hamburg has set itself ambitious climate targets for 2030. The implementing climate trade has a key role to play in this. Given the **importance of preventing a skills shortage in the building and finishing trades**, a round table was formed in 2022. The focus in building construction capacities is primarily on the recruitment of young skilled workers and on retraining measures. The data on unfilled training places in climate-related occupations underpins the need for active support of vocational orientation and further training, as well as the need for higher social status for skilled trades.
- I In its current government programme, the Senate sees Hamburg as a "City of Decent Work" and has set itself the goal of ensuring the principles of "Good Work" in all areas that can be influenced by the city. To this end, among other things an Al-

liance for Decent Work was established in 2022 together with employers and trade unions, the chambers, the employment agency, the job centre and the customs.

- I In the Hamburg Skilled Workers Network, the Hamburg Senate works together with the relevant labour market policy actors in a social partnership, with the aim of developing solutions for recruiting and securing skilled workers. Together with the Chamber of Commerce, the Chamber of Crafts, the German Trade Union Confederation, the Northern Business Association, the Hamburg Employment Agency and the Job Centre, a skilled labour strategy was developed back in 2013, which is currently being updated. Strategic areas of action include training, immigration (by skilled workers), attractive working conditions and the promotion of labour market integration for specific target groups. From the Skilled Workers Network, service structures were jointly developed, such as the Hamburg Welcome Centre, the Youth Employment Agency and the House for Health and Work. During the COVID-19 pandemic, sectoral dialogues were held in the Skilled Workers Network in order to share information on funding programmes and support services. Currently, the network of skilled workers is working on the development of Hamburg's continuing education strategy. The need for training in the implementation of measures to achieve the climate goals also plays a role in this.

Photo 37: The Factory Hammerbrooklyn © Mediaserver Hamburg / Christian Brandes



3.8.3 Indicators

8 DECENT WORK AND ECONOMIC GROWTH



Gross domestic product

The gross domestic product per inhabitant is x euros.

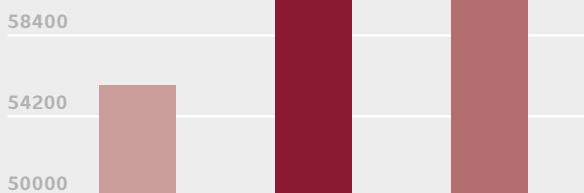
(Source: Statistical offices of the federal states)

The gross domestic product is the total value of the economic output of an economy. At the local level, it is the sum of all formally produced goods and documented services minus intermediate consumption and imports (gross value added). However, gross domestic product alone does not supply any information on specific local characteristics, such as the location of companies or the commuting situation of employees.

Moreover, it does not supply any information on the ratio of value added to the use of resources (through indicators such as raw material or energy productivity). The gross domestic product per inhabitant in the City of Hamburg varies over time. The most recent figure (2019) was 60,255.54 euros per inhabitant.

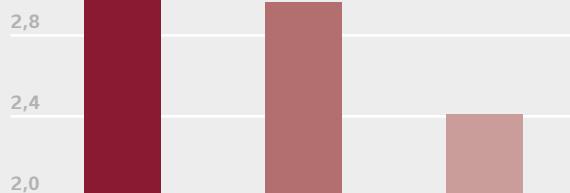
Gross domestic product (€ per inhabitant)

55,798 € 60,492 € 60,255 €
2011 2015 2019



Long-term unemployment rate (%)

3.0 % 2.96 % 2.41 %
2011 2015 2020



Long-term unemployment rate (%)

x per cent of the labour force is unemployed for more than one year.

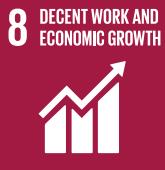
(Source: Federal Employment Agency, statistical offices of the federal states)

8 DECENT WORK AND ECONOMIC GROWTH



The long-term unemployment rate describes the proportion of people who have been registered as unemployed for a year or more with the employment agencies or with the providers of basic benefits for job-seekers under Book II of the German Social Code. Persistent unemployment has a major impact on the financial, social and health situation of those affected and their relatives, and can also affect the financial situation of the city. However, the indicator does not

take into account the gender or age of those not in employment. This means that no information is provided on gender-based improvements in the employment situation, including amongst young people. In Hamburg, the proportion of long-term unemployed persons has fallen continuously during the period under review. The most recent figure was 2.41 per cent (2020).



Family Seal companies – annual awards and current total number of certified companies

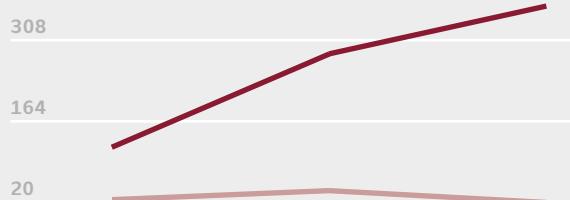
Of all the bearers of the Hamburg Family Seal (in total), x are companies newly awarded the Hamburg Family Seal in the year in question. (Source: Ministry for Social Affairs)

Since 2007, the "Hamburg Alliance for Families", an association of the Hamburg Chamber of Commerce, the Hamburg Chamber of Crafts and the Hamburg Senate, has been awarding prizes to particularly family-friendly Hamburg companies, institutions and public service providers. The target group is small and medium-sized enterprises with up to 250 employees. The family seal bearers support their employees in reconciling work and family in a special way. With the award, they can showcase their family friendliness to the outside world. The seal helps individual companies to recruit skilled workers, and brings the improvement of work-life balance into the public eye. In recent years, 30 to 45 companies per year have applied for the seal for the first time, and most existing family seal holders have also undergone the follow-up tests to retain the seal. During the COVID-19 pandemic, interest in the family seal dropped temporarily because presence audits were difficult in the companies. At present, however, demand is rising extraor-

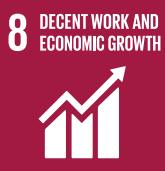
Family Seal companies

Per year	27 Num.	43 Num.	22 Num.
Total	120 Num.	286 Num.	371 Num.

2010 2015 2020



dinarily because the shortage of skilled workers has increased in many sectors. Good working conditions are becoming increasingly important for employees and companies. The total number of family seal companies in 2020 was 371.



Ratio of gross fixed capital formation to GDP

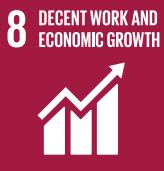
2010	2015	2020
24.5 %	21.6 %	18.1 %

Gross fixed capital formation is the value of fixed assets acquired by domestic economic units for use in the production process for more than one year. It comprises plant, buildings and other fixed assets. (Source: Statistics portal⁴⁴)

The economic performance and competitiveness of the German economy and, not least, a successful environmental and digital transformation, require a high level of investment. This must come primarily from the private sector, but also from the public sector. Between 1991 and 2020, the nationwide gross fixed capital formation in relation to GDP averaged 21.4

per cent; for Hamburg, the average figure for this period was 19.1 per cent.

⁴⁴ <https://www.statistikportal.de/sites/default/files/2023-02/AK NE Nachhaltigkeitsindikatoren.xlsx>



Employment rate (15-64-year-olds)

The proportion of persons aged 15-64 registered as employed subject to social insurance contributions is x per cent of the total population of the same age.

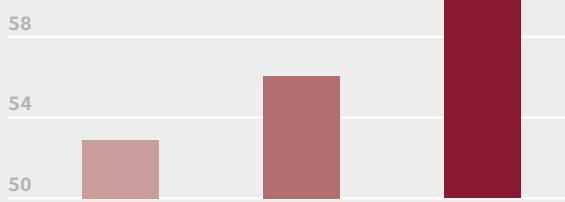
(Source(s): Federal Employment Agency, statistical offices of the federal states)

The employment rate indicates the share of 15-64-year-olds in employment subject to social insurance contributions (i.e. civil servants, self-employed and marginally employed are not included in this statistic) as a percentage of the total population of working age. It is thus similar to the share of the total employment rate in the population, since most of the

employed are in this age group. Overall, the rate permits conclusions concerning the social situation of the population. Employment ensures the financial independence of individuals, and contributes to the sustainability of a city. In Hamburg, the employment rate rose continuously from 52.89 % to 60.8 % during the period under review.

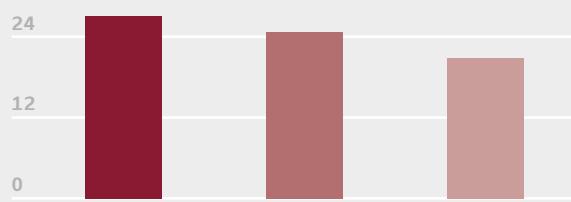
Employment rate (15-64-year-olds)

52.89 %
2011 **56.05 %**
2015 **60.8 %**
2020



Gainfully employed individuals on supplementary benefits (%)

27.04 %
2011 **24.62 %**
2015 **20.77 %**
2020



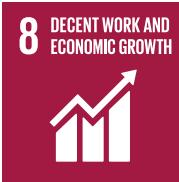
Gainfully employed individuals on supplementary benefits (%)

x per cent of benefit recipients capable of working are gainfully employed as well as receiving benefits under ALG II. (Source: Federal Employment Agency, statistical offices of the federal states)

This indicator relates to those persons who, on the reference date, in addition to receiving unemployment benefit under SGB III, also receive basic income (before 2023: unemployment benefit II) under SGB II. Accordingly, these are persons whose unemployment benefit is not sufficient to cover the needs of the beneficiaries. Unemployment benefits are "topped

up" with the corresponding benefits under SGB II. The need to claim basic benefits in addition to income from gainful employment points to difficulties in achieving sufficient income from employment. In Hamburg, the proportion of people receiving top-up benefits is declining. The most recent figure (2020) was 20.77%.





Employment rate – 55-64-year-olds (%)

2011	2015	2020
40.08 %	46.28 %	53.69 %

The proportion of persons aged 55-64 registered as employed subject to social insurance contributions is x per cent of the total population of the same age.

(Source(s): Federal Employment Agency, statistical offices of the federal states)

The employment rate indicates the share of 55-64-year-olds in employment subject to social insurance contributions as a percentage of the total population of working age (see "Employment rate – 15-64-year-olds"). A high employment rate in this age group indi-

cates not only financial independence, but also social inclusion. In Hamburg, the employment rate rose continuously from 40.08 % to 53.69 % during the period under review.

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE

3.9 SDG 9 – Industry, Innovation and Infrastructure

The **Sustainable Development Goal “Industry, innovation and infrastructure”** aims to build resilient infrastructure that is accessible to all. It also aims to promote inclusive and sustainable industrialisation and foster innovation. Furthermore, SDG 9 addresses industries that establish environmentally sound processes, use resources efficiently and use clean technologies. With SDG 9, the global community calls for a corresponding improvement in scientific research and the promotion of innovations.

SDG 9 highlights the importance of targeted support for innovation and the creation of resilient,

modern and sustainable infrastructure in the local area. This includes both the modernisation of technology used in transport and ensuring affordable and equal access to mobility infrastructure for all residents of the municipal area. Another part of a sustainable infrastructure is the further expansion of information and communication technology as well as targeted digitalisation processes.

Links to this SDG are found in the 2030 Agenda in SDG 3 (Good health and well-being), SDG 4 (Quality education) as well as SDG 11 (Sustainable cities and communities) and SDG 12 (Sustainable production and consumption).



Overview – the City of Hamburg's links to SDG 9

Qualitative aspects:

- | Promotion of decarbonisation in the economy
- | Innovation and digital transformation

Indicators:

- | Patent applications submitted to the German Patent and Trade Mark Office per capita of the population
- | State expenditure on research and development per capita of the population
- | Third-party funding per professor (FTE)
- | Number of large-scale collaborative research projects and coordinated programmes (regional and supraregional funding)
- | Start-ups
- | Highly-qualified professionals
- | Broadband internet access – private households

3.9.1

Introduction – implementation of SDG 9 in Hamburg

The Hamburg Senate supports the involvement of businesses in the transformation process towards sustainability in order to take advantage of the great opportunities, especially in the energy transition, for Hamburg and northern Germany. A high-quality, reliable, sustainable and resilient infrastructure is a central aspect in this process, which will be taken into account accordingly.

Stromnetz Hamburg GmbH is already investing in Hamburg's electricity grid to maintain high standards of reliability and robustness in the face of new challenges (such as electromobility). The transformation of the heat supply is being driven by the diversification of heat sources and the higher share of renewable energies.

Photo 37: Electrolyzer at H&R Ölwerke Schindler in the Port of Hamburg © Mediaserver Hamburg / DOUBLEVISION / Konstantin Becker



Hamburg's economic policy is committed to the de-carbonisation of the port, industry, logistics and air transport and promotes the development of a competitive green hydrogen economy. A cluster for the hydrogen economy has been established and synergies are being sought with the "Hamburg Renewables" cluster. A staff unit coordinates various projects and networking of partners from business and science. The Port of Hamburg plans to become climate-neutral by 2040 and is building an infrastructure to supply hydrogen to heavy-duty vehicles. The homePORT innovation campus in the heart of the port offers space for experimentation and collaboration.

In addition to the qualitative measures, the City of Hamburg also measures its contribution to SDG 9 in terms of the number of business start-ups, the proportion of highly qualified people and broadband coverage for private households. Hamburg thus follows the recommendations of the study "SDG Indicators for Municipalities", which was initiated by the Association of German Cities and published by the Bertelsmann Stiftung. These indicators are also relevant to many other German municipalities, and thus enable comparability.

3.9.2 Promoting decarbonisation in the economy through hydrogen

The City of Hamburg supports decarbonisation in the field of economy, i.e. the shift from the use of fossil fuels to carbon-free and renewable energy sources. One focus is on the development and integration of a Hamburg hydrogen economy. Embedded in the North German Hydrogen Strategy and within the guard rails of the Climate Plan and the Coalition Agreement, Hamburg's economic policy pursues the decarbonisation of the port, industry, logistics and air transport as well as the ***development of a competitive green hydrogen economy*** to enable an almost complete supply along the value chain of all customers interested in green hydrogen. In addition to climate action, there is considerable potential for future value creation, growth and competitiveness of the Hamburg economy.

In order to achieve these ambitious goals and to provide a common platform and networking opportunities for the actors from business, science and the city, Hamburg is focusing on the establishment of a Hydrogen Economy Cluster as a consistent continuation of its cluster policy, which has been successful for many years. Within its cluster strategy, Hamburg consistently promotes innovation, growth and employment in sustainable economic sectors. Hamburg's clusters are strategic fields of specialisation that give the location a clear competence profile that radiates far beyond the state's borders and attracts mobile capital, talent, expertise as well as companies and skilled workers of all qualifications.

The development of the hydrogen cluster structure will be implemented through organisational linkage with the already established and successful ***Hamburg Renewables (EEHH) cluster***. With the common theme of decarbonisation and the large overlap of participants, meaningful synergies can be tapped and the development of a hydrogen economy based on exist-

ing structures of the successfully established cluster can be advanced at high speed.

The **Hydrogen Economy Unit**⁴⁵ is part of the Ministry for Economy and Innovation. It began its work in 2021 in close cooperation with the Ministry for the Environment, Climate, Energy and Agriculture. The unit coordinates various networks and projects within the Senate involving partners from industry and science that serve to build a self-sustaining hydrogen economy. Examples include the coordinated monitoring and acceptance of the Moorbürg feasibility study and the ensuing processes, e.g. (i) concerning the dismantling of the power plant, (ii) the coordination of the North German Hydrogen Strategy, (iii) the publication of an industry- and port-based Hamburg import strategy for green hydrogen, (iv) Hamburg's application as a hydrogen technology centre for mobility applications, and (v) facilitation of the entire process on the "Important Projects of Common European Interest" (IP-CEI) involving hydrogen.

One example of a consistent strategy for decarbonisation is the approach of the **Port of Hamburg**. The Port of Hamburg has set itself the goal of becoming climate-neutral by 2040. In order to achieve this ambitious goal, fundamental changes are needed in transport in the port, but also on the grounds of the port terminals. At the moment, a substantial part of the transport and handling equipment used in the port is still diesel-powered. The conversion of all heavy goods traffic and handling equipment in the port is difficult to implement using only battery-electric drives. For this reason, *Hamburger Hafen und Logistik AG* (HHLA) is also relying on hydrogen as an energy carrier and is working on this together with several other companies in the newly founded Hydrogen Network Hamburg. The H2LOAD (Hydrogen Logistics Applications & Distribution) project of Hamburger Hafen und Logistik AG (HHLA) has been nominated by the German government to receive funding as an IP-CEI project (Important Projects of Common European Interest) of the European Union. HHLA is planning

to set up a hydrogen supply infrastructure at HHLA's Hamburg terminals. This will be used to refuel HHLA's heavy-duty vehicles. At the same time, the hydrogen filling stations will also be accessible to external vehicles.



45 <https://www.hamburg.de/bwi/wasserstoffwirtschaft/>

3.9.3

Further approaches to decarbonising the economy

One example of a specific measure is **climate action management for business locations**. With this measure, climate protection management is to be developed for selected commercial locations. Primarily, the realisation of basic components (e.g. potential analyses of "climate protection" in selected commercial areas or selective funding for the development of climate protection sub-concepts) is promoted, as this is to be regarded as a sensible preparation and setting of the course for more far-reaching measures in the area of "commercial areas" and "climate protection". The sustainable development of commercial sites supports the climate goals in the trade, commerce and services sector both directly, by contributing to the activation and networking of businesses, and indirectly, by reducing the need for new sealing. It can be assumed that sustainable business parks play a conditional variable in the ecosystem of innovation and investment capacity of companies in the medium to long term. The overall objective of the "GewerbeKlima.VorOrt" campaign is to prepare the companies (with approx. 5 to 50 employees) from the manufacturing sector located in Hamburg's commercial sites for the increasing requirements in climate protection and to motivate them to invest in CO₂ reduction. In addition, the campaign aims to promote an understanding of increasing risks of market displacement (e.g. through the expansion of CO₂ pricing). Therefore, the campaign can be seen as a structure-building and long-term active element (i.e. basis for further processes) in the tertiary sector and in strategic location policy.

Photo 38: View over Hamburg © Mediaserver
Hamburg / DOUBLEVISION / Konstantin Becker



In order to specifically support companies with climate action, there are various other activities in Hamburg. For example, the Hamburg Chamber of Commerce offers free introductory advice on all environmental and energy topics. The **advisory services offered by the Chamber's environmental consultants** are aimed at all member companies. The consultants provide free and independent environmental, energy

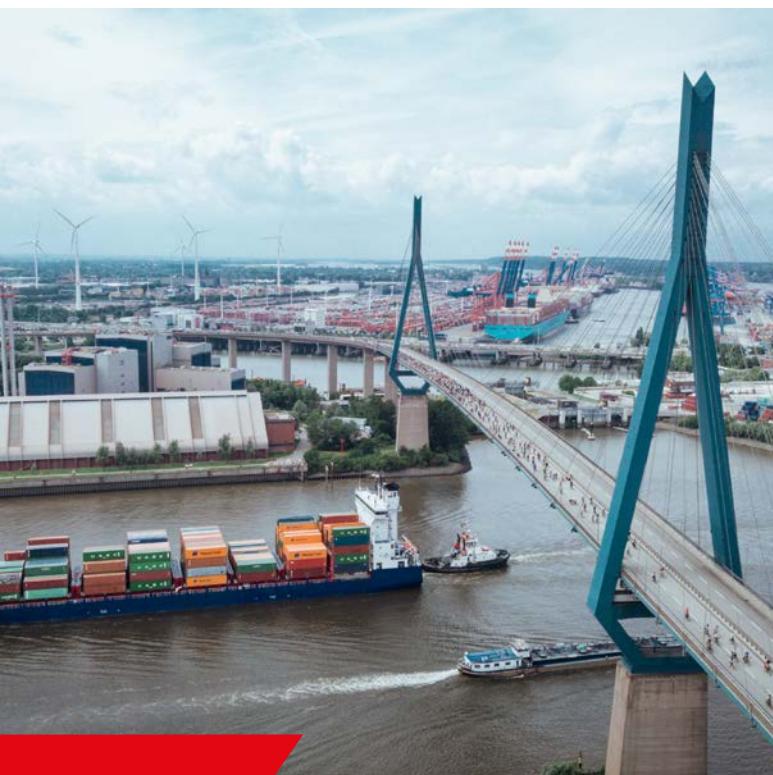
and resource efficiency advice. During the consultation, the advisory help identify potential savings are point out ways to make exhaustive use of them. Funding programmes are available for energy and resource efficiency measures in companies. The Chamber's environmental advisers help to identify suitable programmes. The Chamber's on-site advisory services are provided as part of **ZEWU-mobil**, a free advisory service for Hamburg companies on voluntary climate and environmental protection. This service is a crucial instrument of the "Hamburg Environmental Partnership Hamburg" for achieving climate goals in direct dialogue with the business community. The ZEWU-mobil team visits the companies on site and advises them together with experts on energy saving and funding opportunities.

The "**Companies for Resource Protection**" funding programme also initiates and supports voluntary in-

vestment projects in Hamburg companies that reduce environmental burdens through the more efficient use of resources such as energy, water and raw materials, and a reduction in CO₂ emissions. By taking over the funding areas of the "Energy Transition in Businesses" programme, in addition to energy efficiency, measures for the energy and heat transition are supported which go beyond the boundaries of the company (such as waste heat utilisation and sector coupling). The investment support directly reduces CO₂ emissions. In addition, by supporting efficiency checks and feasibility studies (as a basis for investment decisions), further CO₂-reducing measures can be initiated that can be used to set the course for the decarbonisation of production processes. The programme is thus a central tool for decarbonising industry and generating private and further public funding.

3.9.4

Photo 39: View of the Kohlbrand Bridge and Container Terminal
© Mediaserver Hamburg



Innovation and digital transformation

In 2021 the City of Hamburg developed a **Regional Innovation Strategy (RIS)** in close cooperation between business and science. The RIS is the result of an open and broad development process involving a total of over 300 people from business, science, research, education, culture and society. The aim is to develop innovative and sustainable solutions for important areas of society and the future. RIS as a whole has a broad understanding of innovation. According to this understanding, new technologies only unfold their full potential if they are embedded in processes of social change. Social and cultural developments therefore move into the focus of Hamburg's innovation policy and thus also take up social influences. The city is focusing on the five future topics of health, climate and energy, mobility, data science and digitalisation. Among other things, a **state innovation**

vation funding programme is to be established in the future to strengthen the transfer potential of excellent Hamburg research areas in science-centred cluster structures. This is intended to intensify the dialogue and cooperation between science and industry at a low threshold in order to establish an innovation ecosystem of start-ups, technology centres, company dependencies and transfer facilities around these research fields in the medium term. In this context, innovation promotion encompasses the entirety of monetary and non-monetary incentives to enable knowledge and technology transfer, knowledge- or technology-based company start-ups or qualification measures, among other things. Here, science acts as a motor to strengthen Hamburg as a location for innovation. The transfer competence of scientists is to be expanded, the training of specialists increased and a clear innovation competence profile developed in strategic research fields.

Furthermore, the competitiveness of Hamburg's universities in important federal and EU programmes is to be increased with the help of the state innovation funding in order to further improve the acquisition of third-party funding from these programmes. Besides the implementation of concrete measures, the strategy will also be continuously developed - in cooperation with politics, administration, business, science, culture and society - in order to anticipate future challenges and emerging future issues. Innovation thus becomes an integral part of urban and regional development in a global context.

In Hamburg, conducive conditions are created through various channels so that innovations can emerge. Another important player in this context is the Hamburg Port Authority, which operates the port management of the City of Hamburg and is responsible for all official matters relating to the Port of Hamburg. As a real laboratory and testing ground for innovations, the **homePORT innovation campus**⁴⁶ has been offering innovative port stakeholders, science, technology companies and start-ups a free space to try out,

experiment and collaborate since 2020. homePORT creates opportunities to develop product innovations and test them in real life in order to shape the maritime port industry of the future.

One example of an innovative pilot project in the field of digitalisation is **smartBRIDGE Hamburg**, which has been implemented on behalf of the Hamburg Port Authority since 2020. With the aim of optimising the maintenance management of the aging Köhlbrand Bridge (a landmark and "main artery" of the Port of Hamburg), the project relies on digital transformation. A software application creates a "digital twin", a real-time representation of the real bridge based on all its available condition data, in order to improve its maintenance by all the actors involved. In the form of the "digital twin", the Köhlbrand Bridge is brought to life in order to combine analogue and digital condition data. With the project, a sensor-based condition assessment is carried out almost in real time. Vital data from the classic structural inspection, load conditions and weather data are combined and evaluated using the Building Information Modelling (BIM) method. This procedure enables more precise damage forecasts to be made and contributes to forward-looking maintenance management. The overriding goal is to extend the life of the structure.

46 <https://www.homeport.hamburg/>

3.9.5 Indicators

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Patent applications submitted to the German Patent and Trade Mark Office per capita of the population

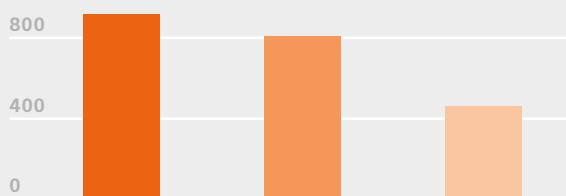
Per year there are x applications to the DPMA and PCT applications in the national phase by applicant place of residence. (Source: Data portal BMBF⁴⁷)

The number of patents applied for at the German Patent and Trade Mark Office in Hamburg averages 853 per year. The number of patents filed gives a first impression of the innovative capacity, but of course the quality of the patents filed remains more important. Nevertheless, Hamburg shows a considerable

number of patents filed, especially when the number of patents filed per capita is considered. Here, in the series published by the BMBF (1995 to 2021), Hamburg ranks third after Baden-Württemberg (23.73) and Bavaria (19.82), with 8.74 patent applications per 1,000 inhabitants.

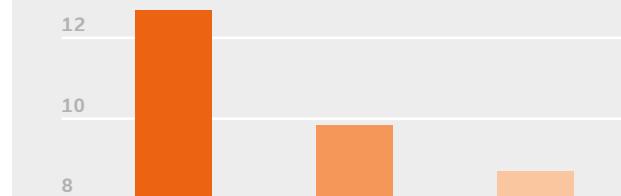
Patent applications submitted to the German Patent and Trade Mark Office per capita of the population

914 Num. 2010 **806** Num. 2015 **461** Num. 2021



Start-ups (new enterprises launched per 1,000 inhabitants)

12.67 Num. 2011 **9.83** Num. 2015 **8.71** Num. 2020



Start-ups (new enterprises launched per 1,000 inhabitants)

There are x new business start-ups for every 1,000 inhabitants.

(Source: Statistical offices of the federal states)

Business start-ups can help to create jobs and promote competition, and can also be an expression of an innovative, sustainable economic structure. This indicator provides information on the number of newly established commercial enterprises per 1,000 inhabitants, without providing information on the innova-

tion content of the respective start-up. Consequently, it can only reflect the actual degree of innovation of a city to a limited extent. In Hamburg, the trend has declined slightly over time, and most recently (2020) stood at 8.71 new business start-ups.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



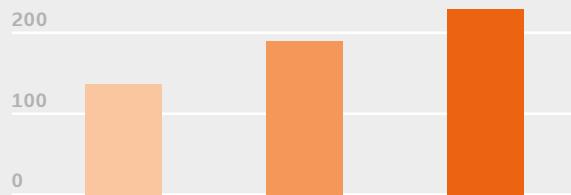
State expenditure on research and development per capita of the population (€)

*R&D (research and development expenditure) funding per capita is x euros.
(Source: Data portal⁴⁷)*

Hamburg's goal is to sustainably strengthen the innovative capacity and competitiveness of Hamburg companies, to increase research activities and to develop more marketable product and process innovations. A further aim is to strengthen arrangements for research and development cooperation between companies, and between companies and universities/research institutions. The expenditure incurred in this context is expenditure on research and development (R&D). Data on this is collected by the Federal Ministry of Education and Research, and is currently available for the years 2007 to 2019. Hamburg was able to significantly increase its R&D funding per capita between 2007 (136 euros) and 2019 (229 euros), and is thus in third place behind Berlin (230 euros) and Bremen (242 euros) as of 2019. The German average

State expenditure on research and development per capita of the population (€)

136 € 189 € 229 €
2007 2015 2019



over the entire period (2007 to 2019) is 137 euros. Over this period, Hamburg, with an average value of 200 euros per capita, is even in first place, ahead of Berlin (193 euros) and Bremen (198 euros).

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Highly-qualified professionals (%)

2011	2015	2020
19.91 %	20.59 %	25.45 %

*x per cent of employees subject to social insurance contributions (SvB) have an academic vocational qualification.
(Source(s): Statistical offices of the federal states)*

The proportion of highly qualified people in a city has various positive effects. In addition to increasing the economic performance and thus the future viability of (municipal) companies, the level of qualification also has economic effects – e.g. through business tax revenues for the city. However, the figure says nothing about the actual need for highly qualified professionals or the required degree of specialisation at a location. In Hamburg, the indicator has risen over the course of time, and most recently (2020) was 25.45 per cent.

ing about the actual need for highly qualified professionals or the required degree of specialisation at a location. In Hamburg, the indicator has risen over the course of time, and most recently (2020) was 25.45 per cent.

47 <https://www.datenportal.bmbf.de/portal/de/Tabelle-1.8.5.html>

48 <https://www.datenportal.bmbf.de/portal/de/Tabelle-1.1.11.xls>



Number of large-scale collaborative research projects and coordinated programmes (regional and supraregional funding)

This indicator records the collaborative research projects and cooperation projects of Hamburg's higher education institutions (Hamburg must be the lead institution of the project): leading-edge clusters (Leading-edge Cluster Competition of the Federal Government), BMBF collaborative projects, participation in large collaborative centres (e.g. German Centres for Health Research), Excellence Initiative/Excellence Strategy of the Federal Government and the Federal States, DFG Collaborative Research Centres, DFG Priority Programmes, DFG Research Groups, DFG Transregios, DFG Graduate Training Programmes, Hamburg State Research Funding. There are also other structured doctoral programmes, large foundation projects (e.g. Joachim Herz Foundation), and EU projects worth more than 300,000 euros and a duration of at least 2 years (no individual projects). (Source: Financial accounts of the Free and Hanseatic City of Hamburg)

2010	2015	2020
n/a	208 Num.	240 Num.

The number of collaborative research projects is subject to regular fluctuations, as the programmes expire during the year and/or new collaborative projects are added. Furthermore, the particularly striking increase

between 2015 and 2020 is also due to an improved research information system at one of the universities surveyed.



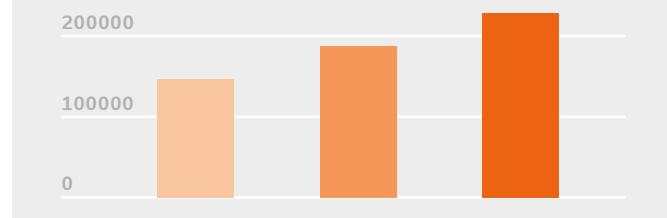
Third-party funding per professor (FTE)

Third-party funding income from the commercial and non-commercial sectors for teaching and research purposes per professor (excluding income from material testing and the like, from publications, fees, from economic activity, from the sale of assets, from the Professor-in Programme, from funding for universities of excellence, funding from institutions affiliated with universities and from non-university institutions, funding for scholarship prizes and funding for the promotion of individuals). Only those professors whose positions are not financed by third-party funds and who work full-time are considered as professors. The calculation is based on full-time equivalents (FTE). (Source: Federal Statistical Office, data published on university monetary statistics)

In the period from 2010 to 2020, third-party funding per professor increased by 55.5 per cent. This can be attributed to increased application activity on the part of the professors, and to some extent to better application advice from the universities. It will help to meet the socially relevant challenges of the future.

Third-party funding per professor (FTE)

146,077 € 187,009 € 227,086 €
2010 2015 2020



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE**Broadband internet access – private households (%)**

x per cent of households can use a bandwidth of at least 50 megabits per second.

(Source: Bundesministerium für Verkehr und digitale Infrastruktur, Statistische Ämter der Länder)

Comprehensive broadband coverage of private households is of indirect relevance to sustainability, as access to information and electronic services (e.g. e-medicine, e-government) or working in a “mobile office” can relieve pressure on private households by saving them time and money. Digital access to a wide range of educational and information services also contributes to intergenerational equity. The proportion of households in Hamburg that can use a bandwidth of 50 Mbit/s has developed positively over time. In 2020, broadband coverage for private households was 97.93 percent.

**Broadband internet access –
private households (%)****n/a**

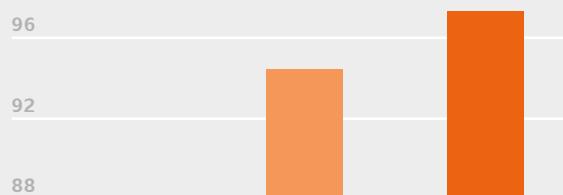
2011

94,42 %

2015

97,93 %

2020





3.10 SDG 10 – Reduced Inequalities

The **Sustainable Development Goal “Reduced inequalities”** aims to make participation in prosperity and the distribution of income more just, and thus reduce inequality within and among countries. All people, regardless of age, gender, disability, ethnicity, origin, religion or other differences, should have equal opportunities, be empowered and have their social, economic and political inclusion promoted.

Part of the targets of SDG 10 aims to reduce inequality within countries. For example, the income gap between the poorer part of the population and the rest of society is to be narrowed, with lower incomes growing faster than the average. Equal opportunities for all are to be created by abolishing discriminatory laws, policies and measures and establishing specific measures. SDG 10 calls for social participation to address the social needs of all people: affordable housing, functional and accessible public transport and the availability of recreational space. Inclusion, as an element of social participation, aims to ensure that all people, regardless of whether they are different from a

majority, can participate in social life on an equal basis.

Another part of the targets of SDG 10 aims to reduce inequality between countries. To achieve this, global financial markets should be better monitored and regulated, a planned and well-managed migration policy should be established, and official development assistance and direct investments should be promoted, especially in those countries where the need is greatest.

Municipalities and cities are particularly challenged to ensure equal access to social and technical infrastructures as well as access to the labour market for all. Policy interventions, especially fiscal, wage and social protection policies, help not only to achieve greater equality but also to promote inclusion and reduce inequalities.

SDG 10 is a cross-cutting issue for the 2030 Agenda and is reflected in many SDGs, especially SDG 1 (No poverty), SDG 3 (Good health and well-being) and SDG 4 (Quality education)



Overview – the City of Hamburg's links to SDG 10

Qualitative aspects:

- | Promotion of inclusion and integration

Indicators:

- | Rate of services for non-special forms of living linked to housing space
- | Rate of Budget for Work benefit recipients plus out-sourced workplaces of workshops for people with disabilities (WfbM)
- | Employment rate – foreigners
- | School drop-out rate – foreigners
- | Naturalisations

3.10.1 Introduction – implementation of SDG 10 in Hamburg

Achieving less inequality among people – regardless of origin, gender, religion, disability, age and/or sexual identity – is a common goal of all Hamburg's ministries and public agencies, because such a cross-cutting issue can only be moved through joint efforts. The City of Hamburg strives to enable all citizens to live without discrimination and social exclusion.

To achieve this, the standard systems in Hamburg are being strengthened to prevent or mitigate social inequality, to enable participation opportunities and to create equal opportunities. Starting with the comprehensive day care services, the Senate pursues the goal of ensuring high-quality early childhood education for children and families living in Hamburg, as well as good and low-threshold access to these services.

Comprehensive legal rights guarantee all children access to early childhood education. Since 1 August 2013, all children in Hamburg from the age of one have a legal right to five hours of care daily – including lunch – at a day-care centre. Furthermore, working parents in Hamburg have been entitled to a child-care place for up to 12 hours a day since August 2006. Since August 2014, five hours of care with lunch has been free of charge for all children from birth until they start school.

Children from socially disadvantaged families in particular benefit from attending day care centres as early as possible. Day-care centres offer important educational, experiential, developmental and testing spaces, which benefit children in particular who would otherwise only have limited access to these. At the same time, day-care centres can also relieve pressure on parents to a considerable extent.

The longer a child attends a day-care centre, the better their language skills. Families and children should therefore be encouraged to take advantage of day-care as early as possible (e.g. through parent-child

Photo 40: Wheelchair users the Hafencity
© Mediaserver Hamburg / Andreas Vallbracht / prachtvoll.de



centres, *Kita-Einstieg*, pilot projects). Furthermore, the quality of language education and support services will be further developed and adapted to the needs of children and families (e.g. through the restructuring of the state programme *Kita Plus* from 2024)

When young people transition from school to work, the Youth Employment Agency advises and supports them, and helps those who cannot find an apprenticeship or university place on their own to get one.

The Senate has launched various strategies and programmes that both individually and in their interaction strengthen social cohesion, mutual respect, the reduction of discrimination and the recognition of diversity. The various interlocking strategies for action include, for example, the Integration Plan, the State Programme to Prevent and Combat Right-wing Extremism, the Anti-Discrimination Strategy, the Plan of Action for the Acceptance of Gender and Sexual Diversity, and the Engagement Strategy.

Since 2012, the ***Hamburg Plan of Action to Implement the UN Convention on the Rights of Persons with Disabilities***⁴⁹ has been a key instrument of the Senate for advancing the implementation of the UNCRPD in all policy areas. In 2012, the Senate for the first time presented a Focus Action Plan defining specific interventions to implement of the UNCRPD in selected areas of action. The thematic areas include "work and employment", "health and care", "housing, urban development and transport", "education", "society (culture, sport, self-determined living, personal and protective rights, political participation)". The Action Plan was updated in 2015 and 2019. The next update will take place in the course of 2023. The measures laid down in the update will be implemented step by

step. Greater importance will be attached to monitoring these measures in the future.

Hamburg's Ministry for Social Affairs will coordinate the cross-ministerial update of the Hamburg Plan of Action to Implement the UN Convention on the Rights of Persons with Disabilities (UNCRPD), which aims to reduce inequality for persons with and without disabilities in the Free and Hanseatic City of Hamburg. The reduction of unequal treatment is being carried out based on the principle of "disability mainstreaming", i.e. inclusion is understood as a cross-cutting task. Implementation of the UNCRPD is therefore a binding obligation of all ministries of the City of Hamburg, i.e. each ministry is responsible for implementing the Plan of Action within its own area of responsibility, tasks and thematic areas. To better coordinate implementation, all Senate offices, ministries and districts have appointed dedicated focal points.

One important concern of the UNCRPD is that civil society be actively involved in the political strategies for implementing the Convention. Against this background, the update of the Hamburg Plan of Action 2023 to Implement the UNCRPD was carried out as part of a multi-stage, participatory process. The focal points of the ministries provided expert support throughout the entire participatory process, and regularly shared information through an inter-ministerial working group. The Senate Coordinator for Equality of Persons with Disabilities (SkbM) and the State Working Group for the Participation of Persons with Disabilities (LAG) are also continuously involved in the ongoing development of the Hamburg Plan of Action 2023 to Implement the UNCRPD. Numerous Hamburg residents with and without disabilities have submitted proposals and ideas and participated in forums to find solutions. These proposed measures are evaluated by the respective competent ministries, and will thus form the basis of the new Hamburg Action Plan 2023. Furthermore, the steering group of

⁴⁹ https://www.buergerschaft-hh.de/parldok/dokument/66188/uebereinkommen_der_vereinten_nationen_ueber_die_rechte_von_menschen_mit_behinderungen_bericht_des_senats_zum_stand_der_umsetzung_und_der_weiterentwick.pdf

State Councillors deals with the topics for the implementation of the UNCRPD twice a year.

Besides the UNCRPD, the Hamburg Equal Opportunities for Persons with Disabilities Act (HmbBGG) is another important instrument for reducing unequal treatment of persons with disabilities. Key projects from the HmbBGG were implemented in 2022: With Section 15a of the HmbBGG, the promotion of political co-determination of persons with disabilities and the associations representing them was enshrined in law. Using resources of the Hamburg Participation Fund to the tune of 150,000 euros p.a. (300,000 euros on a one-off basis in 2023), the Ministry for Social Affairs has been promoting low-threshold measures and projects since November 2022 that enable and strengthen the active participation and co-determination of persons with disabilities and their associations in shaping politics and society. The report on the status of accessibility (pursuant to Section 7 para. 3 HmbBGG) is also a milestone for an inclusive Hamburg society. A first report on the accessibility status was presented to the Hamburg Parliament in October 2022. Finally, the Arbitration Board for Persons with Disabilities (pursuant to Section 13a HmbBGG) has been in place since the beginning of 2023. It is tasked to resolve disputes and conflicts with public bodies, e.g. on the topics of accessibility in transport or communication and information dissemination (notices, public websites).

To promote the participation of people with disabilities, the city is also committed to the implementation of the legal basis and the further development of Hamburg's integration assistance. In this context, the so-called Hamburg Inpatients to Outpatients Programme was launched as early as 2005. The goal of the programme, which ran until 2013, was to transform inpatient forms of housing into outpatient residential settings, thus enabling the people living there

to have more self-determination and to participate in the community.

Hamburg has taken a pioneering role in the implementation of the Federal Participation Act. To promote the idea of community orientation, which is enshrined in the Federal Partial Participation Act, the model project for community-oriented integration assistance ("Living how I want to") was developed in 2020. The project has developed guidelines for community orientation, which the participating service providers and the Ministry for Social Affairs wish to follow in their professional work.

In addition to the qualitative measures, the city of Hamburg also measures its contribution to SDG 10 by the employment rate and school dropout rate for foreigners,⁵⁰ and the number of naturalisations. Hamburg thus follows the recommendations of the study "SDG Indicators for Municipalities", which was initiated by the Association of German Cities and published by the Bertelsmann Stiftung. These indicators are also relevant to many other German municipalities, and thus enable comparability.

⁵⁰ Foreigners are all persons who are not Germans within the meaning of Article 116 (1) of the Basic Law, i.e. who do not have German citizenship. This also includes stateless persons and persons with an unclear nationality.

3.10.2 Promotion of inclusion and accessibility

Inclusion is about the equal participation of all people in social life, and concerns people with disabilities in particular. The right to inclusion is enshrined in the UN Convention on the Rights of Persons with Disabilities.



Photo 41: 2 people laugh at each other
© Nathan Anderson auf Unsplash

Accessibility is a component of all thematic areas in the Hamburg Plan of Action to Implement the UN-CRPD. Creating accessibility is an important prerequisite for the equal participation of persons with disabilities. Accessibility can refer, for example, to the physical environment (such as buildings and roads, facilities in buildings, means of transport including the corresponding surroundings) as well as information and communication (including corresponding technologies and systems). These areas are barrier-free if they can be found, accessed, understood and used by persons with disabilities in the generally accepted manner without particular difficulty and, in principle, without special assistance. The Hamburg Equality for Persons with Disabilities Act aims, among other things, to require reporting on accessibility status. The report on the ***status of accessibility in public buildings with visitor traffic***⁵¹ (pursuant to Section 7 para. 3 HmbBGG) fulfils this obligation. A first report on accessibility status was presented to the Hamburg Parliament in 2022. Another example of the implementation of accessibility is the ***platform for barrier-free services for tourists*** implemented by Hamburg Tourismus in English and German. The Hamburg Tourismus website shows offers for various target groups of mobility-impaired guests during their stay in Hamburg. These include seven films about Hamburg in sign language or a day tour for guests with blindness and visual impairments. Offerings suitable for wheelchair users (e.g. hotels and leisure facilities)

⁵¹ <https://www.hamburg.de/contentblob/2626894/37b74ba-151484fee862b757106fb96ca/data/bpd-barrierefreies-bauen.pdf>

are marked throughout the website, and information on accessibility for the target group is also provided.

The Federal Partial Participation Act is another driver for strengthening the rights and participation opportunities of persons with disabilities. The 2016 law aims to improve the living situation of people with disabilities in terms of more participation and self-determination, taking into account the requirements of the UN Convention on the Rights of Persons with Disabilities.

How the Federal Participation Act is being implemented in Hamburg is reported on in the paper on the implementation status of the Act to Strengthen the Participation and Self-Determination of Persons with Disabilities (Federal Participation Act – BTHG).⁵²

The promotion of community orientation, which is enshrined in the Federal Participation Act, is the goal of the ***model project for community-oriented integration assistance (“Living how I want to”)***. The model project is aimed at adult people with cognitive, mental or physical impairments. In the project, for the first time, providers of integration assistance are working across agencies on the implementation of a community-oriented approach – together with the Ministry for Social Affairs and the Office for Integration Assistance. The project aims to enable people with impairments to live according as they wish to and to obtain the support that enables them to do so (participation in the sense of the Federal Participation Act). Five providers of integration support in Hamburg have developed professional guidelines for their community-oriented work in dialogue with the Ministry for Social Affairs and the Office for Integration Support. The team helps to design individual and needs-based support settings. From 2023 onwards, the Office for Integration Support will also be more closely involved in the processes than before. The project will be sup-

ported and evaluated by academics, and the results will be presented in mid-2024.

The ***Hamburg Inpatients to Outpatients Programme***⁵³ was launched as early as 2005. The aim of the programme was to expand outpatient support in the area of residential services for people with mental disabilities. Through the Inpatients to Outpatients Programme, more than 600 inpatient places were converted into outpatient services. This outpatient care has contributed to a significant change in the range of services for people with intellectual disabilities. Besides the quantitative success, there were also qualitative changes for people with disabilities and the people supporting them. The results were fully evaluated by the University of Hamburg and published in a report in 2015 (Evaluation of the Inpatients to Outpatients Programme in Hamburg). Outpatient care in the community has continued to progress in the years since, and is currently at a stable level.

52 https://www.buergerschaft-hh.de/parldok/dokument/65206/stand_der_umsetzung_des_gesetzes_zur_ststaerkung_der_teilhabe_und_selbstbestimmung_von_menschen_mit_behinderungen_bundesteilhabegesetz_bthg_in_hamburg.pdf

53 <https://www.agfw-hamburg.de/AGFW/Detail.aspx?id=17217>

Photo 42: Blind visitors in Hamburg © Mediaserver Hamburg / Andreas Vallbracht / prachtvoll.de



3.10.3 Indicators

10 REDUCED INEQUALITIES



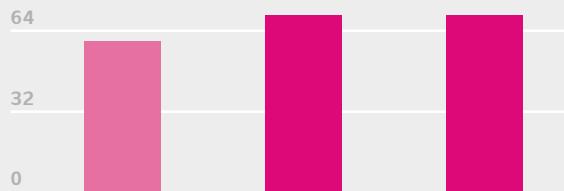
Rate of services in non-special residential settings

The rate of adult recipients of services in non-special residential settings in the community (formerly outpatient integration assistance services in own living space) is x per cent of the total of all integration assistance/ residential services including special forms of living (= "rate of inpatients to outpatients") in Hamburg (no external beneficiaries). (Source: Data Warehouse)

Self-determined housing for people with disabilities realises the right to equal choice in the sense of independent living pursuant to Art. 19 of the UN Convention on the Rights of Persons with Disabilities. The aim is to stabilise the rate of outpatients being moved into the community. The rate of services in non-special forms of living linked to housing space initially rose during the period of the data under review, but has recently stagnated. The figure for 2020 was 70 per cent.

Rate of services in non-special residential settings

60 %
2010 70 %
2015 70 %
2020



Rate of Budget for Work benefit recipients plus outsourced workplaces of workshops for people with disabilities

2010	2015	2020
n/a	n/a	36 %

The rate of Budget for Work benefit recipients plus employees of the WfbM in outsourced jobs is x per cent of the total of all recipients of integration assistance benefits for participation in working life in Hamburg (excluding external beneficiaries). (Source: Data Warehouse and institutional data)

10 REDUCED INEQUALITIES



Access to employment on the general labour market for recipients of services for participation in working life, and the creation of this access within the framework of existing possibilities, is carried out in line with Article 27 of the UNCRPD. The trend cannot be traced because the Budget for Work service, which is a component of the indicator, did not yet exist in

2010. Due to the replacement of the IT application PROSA, in which the data on benefits was processed (using the specialised OPEN/PROSOZ procedure at the end of 2019), for reasons of comparability data can only be provided from 2020. The most recent rate (2020) is 36 per cent.

10 REDUCED INEQUALITIES



Employment rate – foreigners (%)

The employment rate for foreigners is x per cent of the employment rate for the total population.

(Source(s): Federal Employment Agency, statistical offices of the federal states)

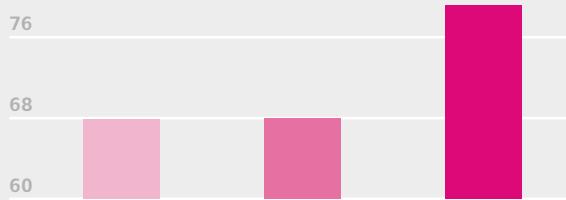
The employment rate among foreigners allows conclusions to be drawn concerning their integration into the labour market. Foreigners are all persons who are not Germans within the meaning of Article 116 (1) of the Basic Law, i.e. who do not have German citizenship. This also includes stateless persons and persons with an unclear nationality. A high employment rate among foreigners indicates both economic and social integration and participation in society, and ensures the financial independence of the people concerned. However, this does not provide any information on the freedom from discrimination of foreigners or people

with a migration background. Furthermore, reasons such as legal restrictions on taking up work can also have an effect on the employment rate. In Hamburg, the employment rate of foreigners has developed positively in relation to the employment rate of the population as a whole, and most recently (2020) the figure stood at 79.07 per cent.

By way of comparison, the employment rate of people with a migration background was as follows: 2014 – 64,7%; 2015 – 65,1%; 2016 – 63% (Integration Plan 2017, p. 57).

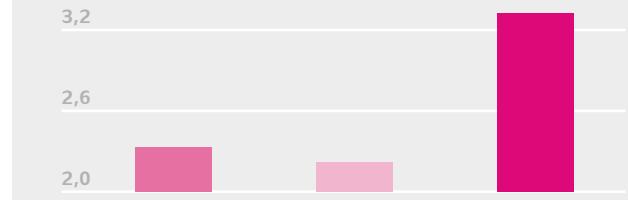
Employment rate – foreigners (%)

67.85 % 2011 67.98 % 2015 79.07 % 2020



Naturalisations (%)

2.33 % 2011 2.22 % 2015 3.32 % 2021



x per cent of the foreign population that obtained German citizenship within one year.

(Source(s): Statistical offices of the federal states, destatis)

The number of naturalisations per year is considered an important indicator for integration, because naturalisation generally helps an immigrant to identify more strongly with the society of their host country. In 2020, as a result of the restrictions to curb COVID-19, 1.47 per cent of the foreign population

in Hamburg obtained German citizenship within one year.

Addition of the number of naturalisations (Integration Plan 2017, p.23 and figures from the annex to paper 22/9944, p.3): 2015 – 5,891; 2020 – 4,505.

10 REDUCED INEQUALITIES



10 REDUCED
INEQUALITIES



School drop-out rate – foreigners (%)

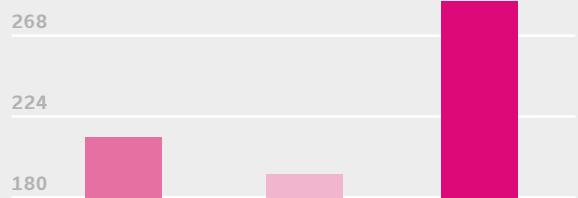
The school drop-out rate for foreigners is x per cent of the school drop-out rate for the total population. (Source: Statistical offices of the federal states)

Education plays a key role for young foreigners. Basic school education is the key to the world of work, and thus a prerequisite for economic integration. Foreigners are all persons who are not Germans within the meaning of Article 116 (1) of the Basic Law, i.e. who do not have German citizenship. This also includes stateless persons and persons with an unclear nationality. Young foreigners often face with problems in everyday education (e.g. discrimination or uncertain residence status). The most recent figures (2020) show that the ratio of school drop-out rates in Hamburg is 286.46 per cent. This means that among the school drop-outs in Hamburg, around three times as many of them are foreigners rather than Germans.

By way of comparison, the figures on the percentage of young school leavers with a migration background

School drop-out rate – foreigners (%)

212.82 % **192.62 %** **286.46 %**
2011 2015 2020



without any school-leaving qualification are as follows: 2014 - 7.6%; 2015 - 7.1%; 2016 - 8.1% (comparison group without a migration background – Integration Plan 2017, p. 45).



3.11 SDG 11 – Sustainable Cities and Communities

The **Sustainable Development Goal “Sustainable cities and communities”** calls for cities and settlements to be made inclusive, safe, resilient and sustainable. Implementing this goal aims to make urban development and settlement planning more sustainable. Well planned and managed, urban development can be sustainable and create prosperity for all. However, a variety of problems are evident for cities and municipalities, including a lack of affordable housing, inadequate or outdated infrastructure, limited open space, unhealthy air pollution and increased climate and disaster risk. The COVID-19 pandemic and other cascading crises reveal substantial inequalities within the urban space, and thus the importance of sustainable urban development.

Other targets of SDG 11 relate to reducing urban pollution, including air quality and waste treatment, and ensuring access to green spaces. The challenge is to develop cities and communities in a sustainable way that conserves land and resources. SDG 11 also calls for access to safe, affordable, accessible and sustainable transport

systems for all, and improved road safety. In particular, the expansion of public transport should be strengthened, with special attention to the needs of people in vulnerable situations, women, children, persons with disabilities and older persons. Links between urban and rural areas are also to be promoted. Another aim is to make urban planning processes participatory.

For a city state, SDG 11 is especially relevant, also because this SDG relates to many others. The issues of air pollution, recreational space and injuries caused to traffic accidents addressed in the targets of SDG 11 have strong links to SDG 3 (Good health and Well-being). SDG 12 (Sustainable consumption and production) is a prerequisite for reducing urban pollution and waste. To reduce the negative impact of disasters on the urban population and economy, climate action (SDG 13) is key. Curbing land take by transforming existing buildings, and the development planning called for to strengthen urban-rural links, also overlap with SDG 15 (Life on land).



Overview – the City of Hamburg's links to SDG 11

Qualitative Aspects:

- | Sustainable urban development and sustainable land management
- | Sustainable neighbourhoods
- | Sustainable building and renovation
- | Housing supply
- | Participation in urban development
- | Sustainable mobility

Indicators:

- | Inward development – housing
- | Living space
- | Land take
- | Land-use intensity
- | Recreational space
- | Rental prices
- | Subsidised new rental housing with rent and occupancy obligation
- | Homes for priority housing seekers through cooperation agreements, purchases of occupancy obligations as well as new rental housing subsidies
- | Subsidised modernisation
- | Completed residential buildings with renewable heating energy
- | Modal split for environmentally sound transport
- | Car density
- | Privately registered passenger cars with electric drive
- | Cycle route network
- | Traffic accident victims

3.11.1 Introduction – implementation of SDG 11 in Hamburg

As a cross-cutting task, SDG 11 is essentially the responsibility of the following ministries: the Ministry for Urban Development and Housing, the Ministry for Transport and Mobility Transition and the Ministry for the Environment, Climate, Energy and Agriculture. Responsibility for spatial implementation of the strategic goals lies with the Hamburg districts. This SDG contains many elements for which the City of Hamburg uses various instruments. The guidelines in the "Hamburg Measure" specify urban planning solutions and a compatible density and scope of development, the "PAUL" database serves as a land monitoring instrument for state planning, the Master Plan for Major Arteries describes areas of action for the future-oriented and low-carbon development of main roads, and Hamburg's framework programme for **Integrated Urban District Development (RISE)** brings together under one roof the federal and state programmes for urban development funding. This is designed to support the upgrading of neighbourhoods with special development needs, and stabilise them socially. Overall, the City of Hamburg is to undergo further future-oriented and low-carbon development. This should improve the quality of life and the amenity of public spaces, and promote a mixed-use city of short distances. By 2030, Hamburg aims to reduce CO₂ emissions by 70 % compared to 1990, and achieve carbon neutrality by 2045 (see SDG 13). The Senate has also adopted an "Agreement for Hamburg's Urban Green Spaces". In this agreement, Hamburg's ministries, districts and public companies commit to maintaining the proportion of green spaces despite the construction boom and population growth (see SDG 15).

The City of Hamburg is also creating the necessary conditions to encourage citizens to use and switch to eco-mobility and e-mobility, and to facilitate both. The Mobility Programme 2013 forms the basis for continuous transport development. It describes the general conditions that have an impact on transport

development, evaluates the existing mobility options, and identifies management needs as well as guidelines for mobility in Hamburg. The aim of the *Hamburg-Takt* plan is to increase public transport as a percentage of all traffic, and the Alliance for Cycling and Walking is also helping to increase the share of environmentally sound modes of transport.

The other key steps in the implementation of SDG 11 in the City of Hamburg in recent years include in particular:

- Population growth in the city of Hamburg has represented both a challenge and an opportunity in Hamburg's urban development for many years. It is necessary to create urban living areas in which the needs of all social groups are reconciled with the requirements of climate change mitigation and adaptation.
- The creation of adequate, safe and affordable housing has been pursued in the City of Hamburg through the housing construction programme since 2011. The city's goal is to achieve building permits for at least 10,000 homes annually. In new construction, 35% of the homes are to be built as publicly subsidised rental housing with rent and occupancy obligations over a term of 30 years. Furthermore, 1,000 homes per year are to be tied for 100 years. Between 2011 and 2022, a total of over 127,000 homes (of which over 32,000 are publicly funded) were approved in Hamburg, and around 94,000 homes (of which over 26,000 are publicly funded) were completed. The strategic basis for urban planning is provided by the "Agreement for Hamburg" and the "Alliance for Housing in Hamburg", as well as the agreement with the popular initiative "Rents for new homes on municipal land – Cheap forever! No profits from land or rent".
- Since 2014, this programme has been supplemented by the urban development plan "Prospects for urban development - green, fair, growing city on the waterfront", which specifies goals and areas of action for spatial development. The strategy "More city in the city" which the plan contains is intended to take equal account of economic, social and environmental needs by limiting the growth of settlement areas and using land primarily in existing settlements for inward development. According to the PAUL database, 87 per cent of newly built housing units in 2020 were built as part of inward development.
- The neighbourhood level is also important in Hamburg. Especially in new neighbourhoods, there is an opportunity to include climate change mitigation and adaptation in the planning process right from the beginning. Specific targets in the neighbourhoods are a high energy efficiency standard for buildings, an intelligent energy supply with renewables, a low-carbon mobility plan and modern waste and wastewater management. This is pursued intensively both in the district climate action plans and in the planning of Hamburg's urban development areas. Neighbourhoods with a special need for renewal are identified in the "Framework Programme for Integrated Urban District Development (RISE)", to ensure that they receive urban upgrading, an improvement in social infrastructure and social stabilisation.
- In addition to constructional energy standards, recreational and green spaces are also considered in the sense of triple inward development. The agreement on Hamburg's urban greenery has placed a large percentage of Hamburg's area under nature and landscape conservation. It also stipulates that areas of the inner city's green network will not be built on in the future if at all possible – or at least must be offset elsewhere through comprehensive compensation measures.
- Cross-boundary cooperation is promoted through participation in numerous cross-boundary committees and networks. Examples worth mentioning include the formats of the Hamburg Metropolitan Region, neighbourhood forums, regional parks and regional housing market conferences.
- Since 2016, the digital participation system DIPAS has provided the municipality and municipal companies with the opportunity to carry out digital participatory procedures. This gives Hamburg's citizens easy access to participation in planning projects.

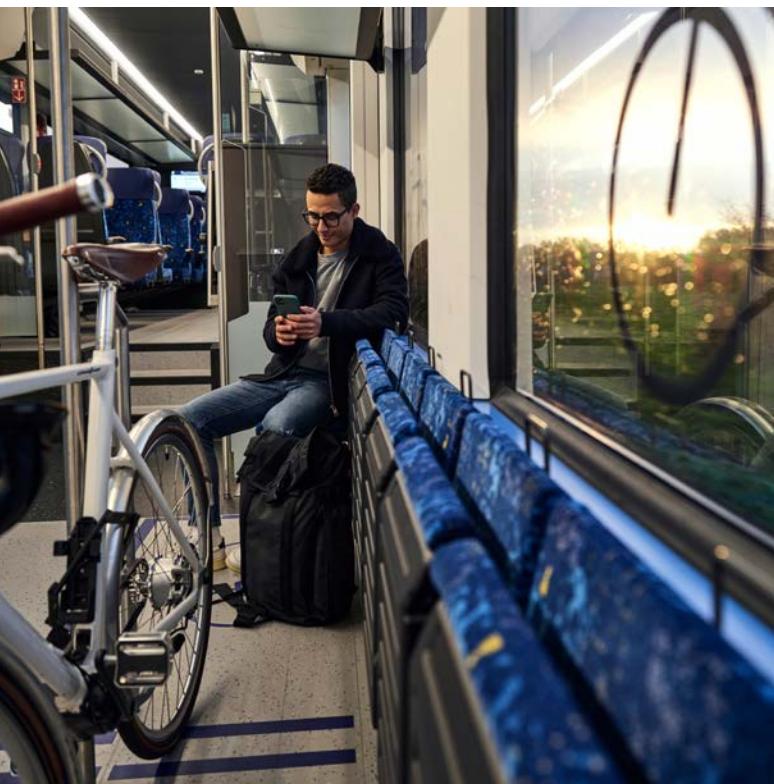
3.11.2 Sustainable urban development and sustainable land management

The City of Hamburg specifically promotes sustainable urban development. The urban development plan **Prospects for urban development - green, fair, growing city on the waterfront**⁵⁴ identifies key areas of action for spatial development in this regard. "More city in the city" is Hamburg's vision for the future development of the urban space. The goal was and is to provide space for the existing dynamic growth primarily within the existing settlement structure.

One of the most important tasks of urban development is therefore to find a good and fair balance for the different demands on land, which is a finite resource. Through the **Guidelines for a liveable compact city** (the "Hamburger Measure"),⁵⁵ the Senate and the districts specify appropriate urban planning solutions, as well as a compatible density and scope of development. The guidelines apply to different neighbourhood locations and all types of use. The aim is to use the limited land available efficiently and to enable sustainable and future-oriented settlement development. The guidelines thus also help implement the Senate's target of 10,000 building permits to be granted annually for homes, most of which are located in the existing settlement areas.

Hamburg focuses on municipal development that strengthens the city's urban qualities and offers a high quality of life in accordance with the goal of "More city in the city". The major arteries, as well as the urban spaces around suburban train stops and centres, hold great potential for diverse uses and compact urban structures at easily accessible locations. One current focus of Hamburg's urban development is therefore the **development of major arteries**.⁵⁶ The goal is to turn twelve major arteries and

Photo 43: A young man is on the hydrogen train with his bicycle
© Mediaserver Hamburg / Christian Brandes



54 <https://www.hamburg.de/perspektiven-stadtentwicklung/>

55 <https://www.hamburg.de/hamburger-mass/13910776/hamburger-mass/>

56 <https://www.hamburg.de/magistralen/>

the surrounding urban spaces into liveable public and green spaces, as well as places to live and work, for all. These new spaces are then to be linked with environmentally friendly mobility solutions to support a threefold inward development process. With the "Master Plan for Major Arteries", the Senate of the Free and Hanseatic City of Hamburg is creating a strategic approach that describes principles, processes, instruments and responsibilities, and defines areas of action. The purpose of the Master Plan is to further develop the main arteries, improve the amenity and quality of life in public spaces, and promote a mixed-use city of short distances.

Conversion, i.e. the reuse of land formerly used for other purposes (including railway land, port land, former brewery sites or hospital land) for new functions and facilities, has already been implemented in Hamburg for many decades. Since 2000, a total of around 700 ha of conversion land has been put to new use. This has limited the amount of new land take. Well-known examples of conversion projects are HafenCity (previously the port area), Central Altona (previously railway area) or the Tarpenbeker Ufer neighbourhood in Gross Borstel (originally Lokstedt freight station). With the new Grasbrook district, another urban neighbourhood with residential and commercial uses is currently being developed in the immediate vicinity of the port.

The **PAUL database (information of the State Planning Department on potential development sites)** has been the land monitoring instrument of Hamburg's State Planning Department for almost 30 years. The database contains comprehensive information on current sites with potential for residential and commercial use. In the annual consultations on updating the database, the ministries and district offices reach a consensus on developing the sites with potential. Among other things, the database allows conclusions to be drawn concerning urban development priorities.

As well as the aforementioned urban areas already mentioned for redevelopment through conversion, the new school building on Hinrichsenstraße can be

mentioned as an **example of a sustainable land management project**. Here, an intensive inner-city redensification was undertaken by building a car park on a brownfield site. The building was equipped with a digital room booking system, which should go a long way towards optimising the intensity of classroom use. The floor plans were constructed by creating compartments with very little circulation space.

3.11.3 Sustainable neighbourhoods

The Hamburg ***Framework Programme for Integrated Urban District Development (RISE)***⁵⁷ brings together under one roof the federal and state programmes for urban development funding. This is designed to support the upgrading of neighbourhoods with special development needs, and stabilise them socially. Hamburg is to be further developed as a fair and liveable city, and social cohesion is to be promoted. The quality of life in the neighbourhoods will be improved through investment in the educational and social infrastructure, in the residential environment, in the upgrading of public spaces, open spaces and green areas, and in the strengthening of supply structures. In the areas supported through RISE, potential for re-densification will be activated, potential for new construction will be developed and housing stock will be stabilised. This will help to relieve pressure on the housing market, and ensure an adequate supply of housing for different population groups. Currently, 29 RISE neighbourhoods are being supported in Hamburg. These are defined in the various federal and state urban development funding programmes. A total of 32 assisted areas are counted, as some neighbourhoods are defined in several urban development funding programmes (as of January 2023).

Photo 44: Port City Geesthacht
© Mediaserver Hamburg / Christian Brandes



One example of a ***new, sustainable neighbourhood*** quarter is the Jenfelder Au neighbourhood with over 1,200 residential units, which is being built on the 35-hectare site of the former Lettow-Vorbeck barracks in Hamburg-Jenfeld. The aim is to combine living and working in a small-scale and green quarter. The *Landesbetrieb Immobilienmanagement und Grundvermögen* (Hamburg's state company for real estate management) is responsible for marketing the land to be sold. The new neighbourhood should be attractive and affordable for families, as well as different generations, nationalities and income levels. Individual townhouses, joint buildings and multi-storey apartment buildings will form a varied cityscape. Part of

57 <https://www.hamburg.de/rise/>

the barracks building from 1934/35 has been listed and is to be preserved in the overall ensemble. One special feature is the management of water and energy: the drainage concept "HAMBURG WATER Cycle" will be implemented on a large scale for the first time. Rainwater, black water and grey water will be collected and used separately. The collected black water will be fed into a biogas plant, whose extracted biogas will generate carbon -neutral heat and electricity for the neighbourhood in its own combined heat and power plant.

Photo 45: View of the Gängeviertel
© Mediaserver Hamburg / ThisIsJulia Photography



3.11.4 Sustainable building and renovation

In the 2020 coalition agreement, it was agreed that a Building Competence Centre (BKZ) would be created for the City of Hamburg in the Ministry for Urban Development and Housing to deal with fundamental issues for the building industry in the city centrally. The BKZ was set up in 2021 at the Office for Building Regulations and Structural Engineering. Its objective was to strengthen the building sector in Hamburg so that the city can sustainably manage the increasingly complex building tasks and the increased demands on building in the public sector. The BKZ acts as a competent contact point and dialogue partner for all stakeholders in Hamburg, especially also concerning climate action, sustainability and digitalisation issues, and for the establishment of barrier-free accessibility. The long-term goal, which is also laid down in the coalition agreement, is to have conversions and refurbishments under the Climate Action Plan, and the creation of accessibility, coordinated and carried out at the same time as far as possible.

The BKZ functions as a central or overarching body that is to develop a view "of the big picture". The topic of climate action and sustainability will be viewed from this perspective and will have a significant impact on all areas of construction in the future. In this respect, a strong cross-linkage of this focus within the City of Hamburg as well as with the other thematic areas

of the Building Competence Centre (including BIM) is imperative. The establishment of the inter-ministerial "fixed regular meeting on climate targets for public buildings", in which the financial, environmental and urban development ministries will work together to achieve the climate targets, is one example of the way in which the BKZ is networked.

With the publication of its Climate Protection Act (*Hamburgisches Klimaschutzgesetz - HmbKliSchG*) in 2020, the City of Hamburg formulated climate action requirements for public buildings and announced that in future the *Federal Government's Sustainable Building Assessment System (BNB)* will be applied in state building measures ("The Free and Hanseatic City of Hamburg aims to introduce the Sustainable Building Assessment System at state level within a transitional period of five years from the entry into force of this Act, and to apply it in the construction of new public buildings and the substantial modernisation of existing ones as a general rule"). This means that, as a rule, new construction measures at the state level must be planned in accordance with the Sustainable Building Assessment System from 21 February 2025. The necessary preparations and steps for this are currently being developed and gradually implemented by the Building Competence Centre.

The issue of sustainable building is also considered in the **sale of municipal plots**. Since 2011, municipal land for multi-storey housing in Hamburg has been awarded according to planning quality. Using this tendering procedure, plots of land can be developed in more systematically through corresponding housing policy, urban development and energy specifications. Both *Landesbetrieb Immobilienmanagement und Grundvermögen* and the municipal companies such as *IBA Hamburg GmbH* and *HafenCity Hamburg GmbH* conduct such tenders. The tendering procedures are being continuously developed. During the 22nd legislative period the tendering procedures will be expanded

in the area of climate policy, thus consolidating the topic once again.

With regard to the **refurbishment of public buildings**, the climate targets of the City of Hamburg from the Climate Action Plan (By 2030, Hamburg will reduce energy-related CO₂ emissions by 70 per cent compared to the baseline year 1990. By 2045, the city aims to reduce emissions by at least 98 per cent in order to achieve net carbon neutrality) are an important frame of reference. For the public buildings, these were concretised as portfolio targets: The portfolio average of all buildings should reach at least the level of a KfW Efficiency Building or House (EG/EH) 55 by 2050, and buildings to be refurbished should reach at least the KfW level EG/EH 70. To be able to use financial resources as efficiently as possible, an assessment of the building portfolios and prioritised refurbishment are necessary. For this assessment and prioritisation, a practicable procedure was developed in the form of an Excel tool. The tool and the results of the assessment will enable the portfolio owners of public non-residential buildings to carry out the upcoming refurbishments cost-efficiently and effectively. It is expected to be applied in the Hamburg in the course of 2023.

3.11.5 Housing supply

Hamburg wishes to remain open to all people in the future and offer them adequate affordable housing in the city. The Senate of the Free and Hanseatic City of Hamburg first entered into an ***Agreement for Hamburg***⁵⁸ with the seven districts of the city in 2011, in order to create urgently needed housing. With an amended version in November 2021, the Senate and the districts agreed for the third time – after 2011 and 2016 – on a joint approach to achieve the goals agreed with the housing industry in the “Alliance for Housing in Hamburg” (see below). All districts are continuing their housing construction programmes and have agreed on target figures for the granting of building permits for 10,000 homes citywide per year. One key objective of the agreement is to speed up the approval process for housing projects. For example, all permits for housing applications are to be issued no later than six months after receipt. Between 2011 and 2022, almost 127,000 housing units were approved (2020: 10,007, 2021: 10,207 and 2022: 10,378). The agreement also incorporates climate change mitigation and adaptation by mentioning the Cent for Nature, the Agreement for Hamburg’s Urban Green Spaces and the RainInfraStructureAdaptation (RISA) project for information purposes. The Agreement for Hamburg also specifies in detail the proven “one-third mix”. For example, it stipulates that in projects on private land a share of 35 per cent of subsidised housing is to be created, if new planning law is created or exemptions are granted for projects with 30 or more residential units in preliminary decision or building permit procedures.

The key goal of the ***Alliance for Housing***⁵⁹ in Hamburg – also in its third version of 2021 – is to create affordable housing in Hamburg and relieve pressure in the tight housing market. The target of 10,000 newly approved homes per year, which has always been achieved since its introduction in 2016, will therefore continue to apply in the future. The agreement

⁵⁸ <https://www.hamburg.de/bsw/vertrag-fuer-hamburg/>

⁵⁹ <https://www.hamburg.de/bsw/buendnis-fuer-das-wohnen/>

between the Senate, housing industry associations and the municipal housing company SAGA, with the participation of the tenants' associations, includes concrete measures and objectives for the active and socially sound development of Hamburg's housing market. Hamburg is to remain a social metropolis for all with a high quality of life and balanced neighbourhoods. The Senate and the districts have created than enabling environment for this, among other things through streamlined approval procedures, the provision of affordable urban land and a further increase in Hamburg's housing subsidies. Urban land use planning and building permit procedures are being simplified and accelerated through a comprehensive digitalisation process. Thirty-five per cent of new housing construction in a building project on private land will involve publicly subsidised rental housing when new planning law is created or, in the case of projects with 30 or more residential units, when exemptions are granted in preliminary decision or building permit procedures. For the subsidised homes, the rent and occupancy obligations were set at 30 years from 2021, in order to secure favourable rents in the even longer term.

As part of **housing promotion**, the *Hamburgische Investitions- und Förderbank* (IFB Hamburg) is promoting the construction of affordable rental homes, and enabling the financing of owner-occupied homes. With low-interest loans, ongoing grants and subsidies for ambitious energy standards that exceed the legal standard, lifts or age-appropriate fittings, IFB Hamburg offers attractive financing options for investments in the Hamburg housing market. The modernisation of rental homes and owner-occupied homes is also promoted. From energy-saving measures to age-appropriate conversions and floor plan changes – IFB Hamburg offers grants and loans for investments in the housing stock, with and without social obligations. The development of spatial and social infrastructure is also supported. IFB Hamburg promotes neighbourhood development, the purchase of occupancy obligations, student housing in selected

neighbourhoods and construction measures in redevelopment areas.

With its report on the supply situation of households in urgent need of housing and on WA-linked housing construction in Hamburg, the Senate adopted a 7-point programme to expand supply capacities (**WA housing supply package 2030**) (see Bü-Drs. 22/8805).

Social preservation ordinances flank the Senate's strategy for new housing construction as a key instrument of housing stock policy to secure affordable housing. Especially in old neighbourhoods with an urban mix, and increasingly in neighbourhoods from the post-war period, demand is high. This is creating strong pressure for upgrading and displacement. In order to protect the resident structures, social preservation ordinances are being issued in these areas in accordance with the German Building Code. There are currently 15 areas with social preservation ordinances. These are protecting approximately 280,900 residents from the upgrading of their residential areas, which would drive rents upwards, and conversion of their rented flats into owner-occupied flats.

3.11.6 Participation in urban development

The **City Workshop**⁶⁰ was founded in 2012 as a Department for Citizen Participation, in what was then the Ministry for Urban Development and the Environment. Its aim was to establish a "new planning culture" in Hamburg. The work of the department rests on several pillars. The City Workshop holds regular events to discuss urban development topics "of overriding importance". By the end of 2022, 23 events had taken place since its founding. The department also acts as an advisory unit, and can be called upon by all ministries, district offices, etc. for expert support in citizen participation procedures. The third pillar offers tools and principles for citizen participation, which are developed by the department and made available through the public administration system.

The **Digital Participation System (DIPAS)**⁶¹ combines the Hamburg online participation tool used since 2016 with digital planning desks to create an integrated digital system for citizen participation. DIPAS is used wherever the city wishes to engage in dialogue with its citizens, i.e. in urban planning, when expanding cycle paths or when developing plans for climate action. With DIPAS, citizens can access digital maps, aerial photos, plans, 3D models and geodata from home, on the move or at events, and provide precisely localised feedback on planning procedures. DIPAS was developed as an open-source application to provide Hamburg's ministries, district offices, project development companies and public enterprises with an easy-to-use tool for digital citizen participation. It aims to provide Hamburg residents with easy and continuous digital access to participation in planning procedures. This enables the city to reach more people than is possible with on-site measures alone. DIPAS consists of an online and an onsite component, plus an overview component: the "DIPAS navigator", which maps all ongoing and previous procedures in

60 <https://www.hamburg.de/stadtwerkstatt/>

61 <https://www.hamburg.de/dipas/>

Hamburg. The City Workshop acts as the expert control centre for the use of DIPAS, and the State Geoinformation and Surveying Service as its technical control centre.

One example of participation in urban development is the ***development of the Horner Geest urban space***.

From November 2019 to April 2021 the Ministry for Urban Development and Housing (Office for State Planning and Urban Development) and the District Office Hamburg-Mitte (Office for Urban and Landscape Planning) jointly conducted the workshop planning procedure for the Horner Geest urban space vision 2030. The main aims of this neighbourhood planning procedure are to upgrade the urban space, to use all the opportunities for inward development in the neighbourhood (approx. 3,000 new homes) and to modernise the public infrastructure. The results of the process bring to light possibilities for further developing the Horner Geest urban space up to 2030.

Five interdisciplinary teams of architects and landscape architects each dealt with the task. They began by sketching out some ideas, which were reviewed and commented on by an assessment panel. With these recommendations and the information from the public participation procedure, they then worked out their designs. Finally, in April 2021, the appointed assessment panel selected one design as the basis for the subsequent framework planning. Five teams participated in the entire workshop process.

Throughout the process, there were numerous offers of information and participation for citizens and stakeholders. Besides this broad offer of participation, the interests of the residents were also represented in the specially formed assessment panel. Furthermore, the advisory councils and the neighbourhood conference were regularly updated, and

had the opportunity to put forward any questions or suggestions.

In the further course of the process, several public events, district tours and online participations took place:

- | The briefing of the five planning teams in November and December 2019
- | The first and second interim presentations in spring and autumn 2020
- | The final presentation took place through various formats (online participation, digital tours, exhibitions in public spaces, etc.) in the neighbourhood, as COVID-19 meant that analogue events were out of the question. A public final presentation via livestream took place on 6 April 2021.

Following completion of the urban and open space workshop planning procedure, the development of the framework plan will now begin. This will form the basis for the urban land-use planning procedure and the assessment of building projects.

The ***agreement with the people's initiatives "Keep land & housing - make Hamburg social! No profits from land or rent!"*** is another example of the integration of citizens' interests in urban development policy decision-making processes. As a result of the dialogue with the initiative, an agreement was reached to exclude housing plots from sale as far as possible, and to further increase the attractiveness of leaseholds in order to ultimately retain the power of disposal over land. Only citizens should decide on exemptions.

Furthermore, it is envisaged that at least 1,000 flats with a 100-year rent control will be built per year in the first subsidy line.

One aim of these measures is to permanently improve the Senate's ability to act on housing policy matters by securing city property.

As part of the ***Connected Urban Twins*** (CUT) project funded by the Federal Ministry of Housing, Urban De-

velopment and Building, the City of Hamburg is developing Urban Digital Twins (UDZ) together with the cities of Leipzig and Munich. The CUT project sets standards for a uniform understanding of the UDZ concept and data governance. With UDZ, networked data should enable urban planners and citizens to better understand complex urban development contexts, and make more informed decisions. The development of municipal digital infrastructure this involves will strengthen the data sovereignty of cities. Innovative digital tools and formats should make democratic participation easy. One focus here is on the further

development and replication of the DIPAS software developed in Hamburg. The CUT project is a pioneer for cross-city cooperation and knowledge transfer in the efficient introduction of Urban Digital Twins into urban planning processes. The intended project results, such as standardised technical components and innovative case examples of urban development and citizen participation, should facilitate use and self-development of UDZ in and by other cities, and form a foundation for the further growth of the approach beyond the project.

3.11.7 Sustainable mobility

The central objective of Hamburg's transport development planning is to ensure mobility for all, and goods on all transport routes, using all means of transport in the best possible way. This should take into account the protection of health, the environment and the climate. The sustainable mobility of people and goods is a basic prerequisite for a prosperous and liveable metropolis like Hamburg.

In order to actively shape mobility for today and for the future, guidelines and binding goals are essential. The goals of transport development planning were developed together with the Mobility Advisory Council and a cross-ministerial working group, and were incorporated into the paper "Mobility in Hamburg –Goals",⁶² published in 2017. This is the outcome of the first phase of ***continuous transport development planning***, and the guideline for the next phases.

The previous basis for the continuous development of transport was the ***Mobility Programme 2013***. It describes the general conditions that have an impact on transport development, evaluates the existing mobility options, and identifies management needs as well

⁶² <https://www.hamburg.de/bvm/mobilitaet-in-hamburg-ziele/>

as guidelines for mobility in Hamburg. It also defines and describes the areas of action and current measures of Hamburg's transport policy, as well as future options for action that are available.

For sustainable mobility it is important to promote the use of environmentally sound modes of transport (public transport, walking and cycling), and a more sustainable management of private motorised transport. Hamburg has set itself the target of increasing the share of these modes in all journeys from 64 per cent in 2017 to 80 per cent by 2030.

In the field of **public transport, the Hamburg "Takt" Plan** aims to provide users with an adequate public transport service available within five minutes by 2030. This will involve a considerable expansion of suburban train and services, plus integrated on-demand services taking passengers to means of public transport. In this way, public transport as a share of total traffic (routes) is to be increased from 22 per cent in 2017 to 30 per cent in 2030. The massive expansion of services (denser network and shorter intervals) is intended to persuade Hamburg residents to switch from private cars to public transport. The Hamburg Takt Plan implements a far-reaching paradigm shift in public transport from demand-oriented to supply-oriented planning.

With the **Alliance for Cycling and Walking**,⁶³ in 2022 the Alliance for Cycling concluded in 2016 was further developed and expanded to include walking. At the same time, the 2022 update replaced the cycling strategy of 2008. By updating the alliance, the environmentally sound modes of transport of the environmental alliance are now even more strongly networked and jointly implemented.

The widespread availability of charging infrastructure plays a decisive role in increasing growth and vehicle ramp-up in electromobility. With the **Master Plan for Publicly Accessible Charging Infrastructure**,⁶⁴ the

basis for a demand-driven charging infrastructure in Hamburg was created in August 2014. The aim was to enable as many e-vehicle users as possible to charge their vehicle at any time. The target of 1,000 publicly accessible charging points stated in the master plan was reached by the end of 2019. Since then, expansion of the charging infrastructure has continued. By the end of 2022, more than 2,000 publicly accessible charging points were already available. By 2025, the City of Hamburg plans to install a further 100 charging columns or 200 charging points per year on public roads.

One example of an actual project in the field of sustainable mobility in Hamburg is the **mobility laboratory**⁶⁵ at the Hamburg University of Technology. The results of the mobility laboratory are taken up by policy-makers and administrators and fed into the further development of transport development planning. Through lectures, seminars and research work, involvement in participatory processes in the city, and conceptual design thinking workshops, young citizens were actively involved in the core topics of integrated urban development from 2019 to 2023. The aim of this project is to develop a new perspective on different aspects and problems in the field of mobility, and to support the process of transformation in mobility behaviour.

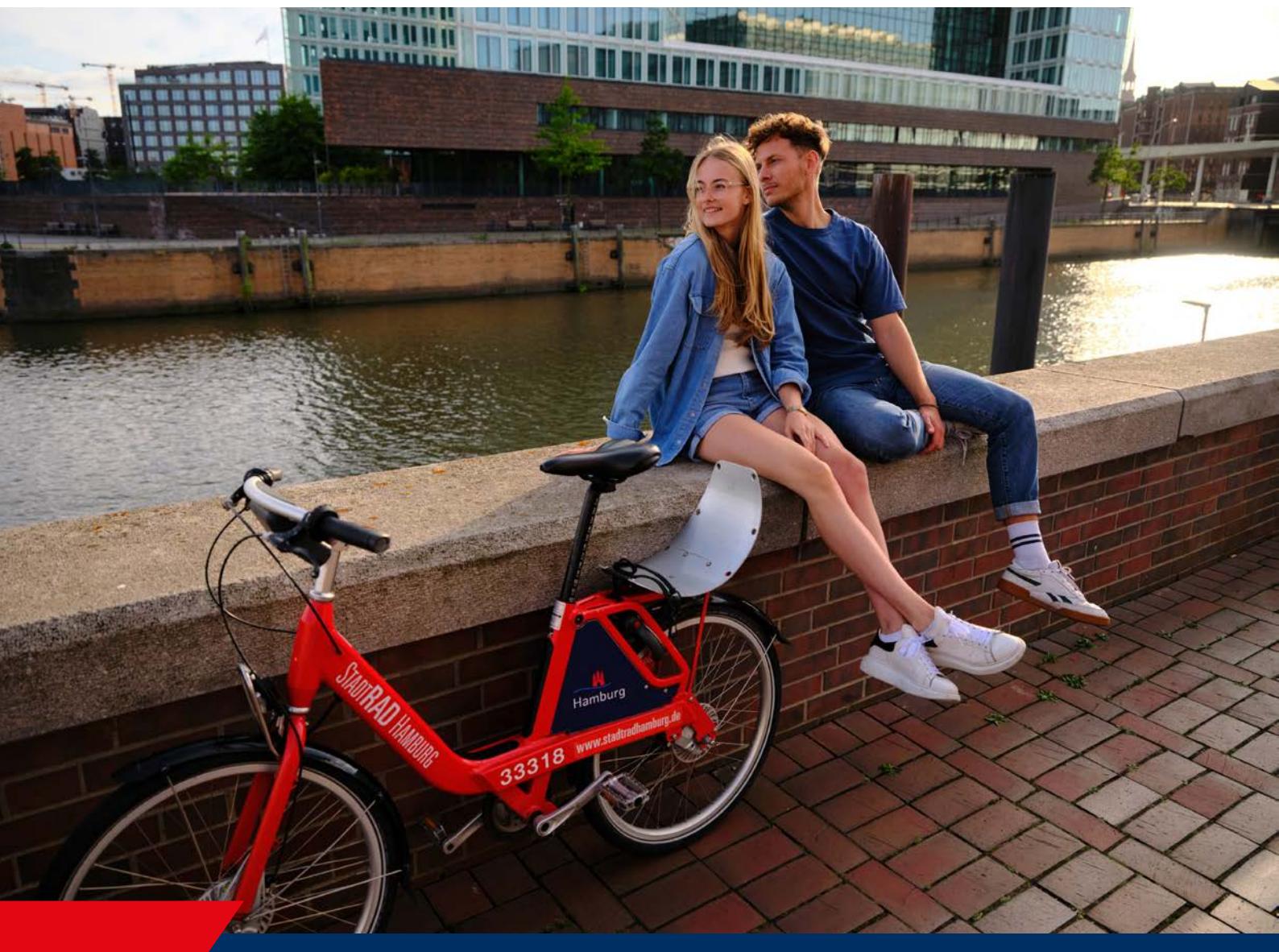
The results of the representative study on the mobility behaviour of Hamburg residents from 2022 show that the transport measures of recent years are already having an effect. For example, the proportion of journeys made by environmentally sound modes of transport increased by 4% to 68% compared to 2017. At the same time, the number of journeys made by private motorised transport fell by 29%. Among other things, the further expansion of public transport and the cycling infrastructure will help to achieve the agreed targets of 80% of trips being made using the environmentally sound modes of transport and a reduction in motorised traffic.

63 <https://www.hamburg.de/radverkehrspolitik-hamburg/5345604/buendnis-radverkehr/>

64 <https://www.hamburg.de/contentblob/4362700/58e4d12870ea16696073d63eb664dff/data/pm-26-08-2014-masterplan.pdf>

65 <http://mobillab-hh.de/>

Photo 46: Young couple using the city bike in Hafencity © Mediaserver Hamburg / Christian Brandes



3.11.8 Indicators

11 SUSTAINABLE CITIES AND COMMUNITIES



Inward development – housing

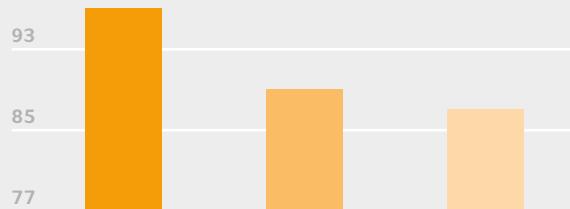
Realised land with potential for inward development (residential) is x per cent of the realised total land with potential (residential) in the respective year. (Source: Information on potential development sites from the State Planning Department (PAUL))

Inward development with high urban densities is land-efficient, creates a larger housing supply and at the same time promotes the emergence of vibrant neighbourhoods with mixed-use structures.

Furthermore, denser, mixed-use neighbourhoods support the "compact city" called for in the Leipzig Charter. The aim of the Ministry for Urban Development and Housing is to develop around 80 per cent of the land with potential for residential development in the inner city every year (see also description of the "Hamburg Measure"). The PAUL database (information on potential development sites from the State Planning Department) has been the land monitoring instrument of Hamburg's State Planning Department for almost 30 years. Sites with potential for residential and commercial use are recorded in the database. When a potential site is created, a note is added as to whether it has potential for "inward development". Potential sites that are located on unused or underused land within developed and contiguously built-up settlement areas are referred to as inward development sites. Sites with potential in Hamburg's peripheral zones have so far not been included as land

Inward development – housing

97 % 2010	89 % 2015	87 % 2020
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for inward development. The way in which potential sites are assessed is currently being revised due to changes in planning law and updating of the PAUL database.

The fact that the very high percentage of realised land with residential potential has decreased over the years is due, among other things, to the decrease in land for conversion and inner development. In 2010, 39 per cent of the realised residential land was on a conversion site. In 2015 it was 35 per cent, in 2020 31 per cent.

11 SUSTAINABLE CITIES AND COMMUNITIES



Living space (m² per inhabitant)

2010	2015	2020
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35.76 m²	38.51 m²	39.13 m²
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On average, x square metres of living space are available per person. (Source: Statistical offices of the federal states)

The living space per person has increased continuously in Germany over the years, partly due to households with fewer people on average. Since this is an average value, no distinctions are made as to how the living space is distributed. In Hamburg, the above

trend is also to be observed: over time, the available living space per person has continuously increased slightly, and in 2020 was 39.13 square metres per person.



Land take (%)

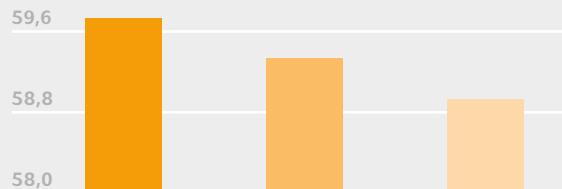
Land take for settlements and transport infrastructure is x per cent of the total area.

(Source: Statistical offices of the federation and the states)

Land take for settlements and transport infrastructure is made up of building space, open space, industrial and agricultural space, transport infrastructure space, recreational space and cemetery space, and can include both sealed and unsealed areas. The indicator thus measures land take for settlements and transport infrastructure as a percentage of the total area, and is to be seen in the context of the goal of focusing less on expansion and outward development and more on efficiency and inward development as urbanisation advances. Land take for settlements and transport infrastructure in Hamburg decreased

Land take (%)

59.72 %	59.33 %	58.92 %
2011	2015	2020



slightly over the period from 2011 to 2020. The most recent figure (2020) is 58.92 per cent.



Land-use intensity (ha per inhabitant)

2011	2015	2020
0.026 ha	0.025 ha	0.024 ha

In the city, x hectares of land are used for settlements and transport infrastructure per inhabitant.

(Source: Statistical offices of the federal states)

The limited amount of land available in the city is a non-renewable resource that should also be available to future generations. Often, different needs are in competition with each other, and it is necessary to weigh up and reconcile the demands and conflicting goals. Efficient land use can positively influence economic and social benefits without expanding the

use of land, for instance. However, the indicator only relates land used for settlements and transport infrastructure to population size, and does not provide any information about the qualitative management of the space. In Hamburg, land-use intensity decreased during the period under review. The figure for 2020 was 0.024 hectares per inhabitant.



Recreational space (m² per inhabitant)

2010	2015	2020
33.88 m²	31.37 m²	34.98 m²

Each inhabitant has an average of x square metres of recreational space at their disposal. (Source: State Geoinformation and Surveying Service)

Hamburg has a population of 1,853,935, and a total of 72,268,150 square metres of recreational space* (sports, leisure and recreation areas 63,960,426 square metres, cemeteries 8,307,724 square metres [area statistics based on data from the state surveying offices]). This was equivalent to 38.98 square metres per inhabitant in 2020. The goal of green/open space planning work in Hamburg continues to

be to allocate spaces for different uses (multi-coding or also multiple uses, e.g. green roof landscapes), to maintain the quantity of open spaces and to further develop the quality and functionality of living spaces.

*The terms "recreational space" and "open spaces" are not strictly defined.



Rental prices (€/m²)

2011	2015	2020
7.15 €/m²	8.02 €/m²	9.29 €/m²

The average net basic rent is x euros per square metre. (Source: Federal Institute for Research on Building, Urban Affairs and Spatial Development)

The Senate makes use of all possibilities granted by federal legislation to slow down the development of rents and to relieve pressure on tenants. Directly applicable here are the rent brake pursuant to Section 556d of the German Civil Code, which limits the amount of new contract rents in tight housing markets to 10% above the local comparable rent, and the cap pursuant to Section 558 of the German Civil Code, according to which rent increases up to the local comparable rent may not exceed 20% or in tight housing

markets 15% within three years. The Senate, together with the housing industry and the districts, continues to pursue the goal set in 2016 of initiating building permits for at least 10,000 homes each year. This has been achieved every year. Since 2011, 84,650 homes have been completed in Hamburg (as at: 31 December 2021). In this way, the Senate is helping to relieve the strained housing market in the medium and long term, because the construction of additional homes is the most effective means of combating rising rents.



Completed residential buildings with renewable heating energy (%)

2011	2015	2020
29.17 %	15.8 %	20.44 %

x per cent of newly completed residential buildings have renewable heating energy. (Source: Statistical offices of the federal states)

The use of renewable heating energy in the construction sector can contribute significantly to reducing CO₂ emissions. Furthermore, the use of renewable heating energy has positive economic effects on fixed energy costs (e.g. lower investment costs or elimination of CO₂ pricing) in private households. In Ham-

burg, the share of completed residential buildings with renewable heating energy has risen significantly again in recent years, following a decline between 2011 and 2015. The most recent figure (2020) was 20.44 per cent.



Subsidised new rental housing with rent and occupancy obligation

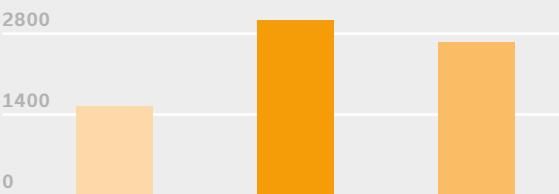
The total number of subsidised new rental homes approved by the Hamburgische Investitions- und Förderbank (IFB) in the 1st and 2nd subsidy categories of housing promotion is x residential units. (Source: Hamburgische Wohnungsbaukreditanstalt (until 2012), Hamburgische Investitions- und Förderbank (from 2013))

A high number of subsidised new rental residential buildings with rent and occupancy obligations makes a significant contribution to creating affordable housing for all in Hamburg. From 2011 onwards, a significant increase in housing construction overall and also in social housing construction was a central government goal of the Hamburg Senate. A high number of subsidised new rental residential buildings with rent and occupancy obligations makes a significant contribution to creating affordable housing for all in Ham-

burg. The highest value was reached in 2019, when 3,551 subsidised homes were approved. Since then, the value has been declining due to external factors. At the same time, in the new Alliance for Housing in Hamburg, the share of social housing in building projects with more than 30 residential units on private land with exemptions or new planning law was raised from 30 to 35 per cent. Hamburg has been at the top of all federal states for years with its approvals of social housing relative to population size.

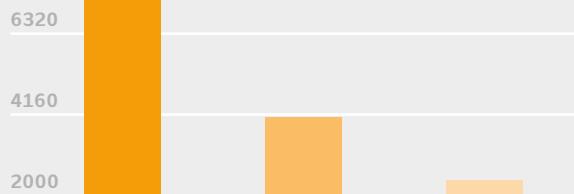
Subsidised new rental housing with rent and occupancy obligation (Residential unit- RU)

1,547 RU 3,028 RU 2,643 RU



Subsidised modernisation (Residential unit- RU)

7,380 RU 4,092 RU 2,405 RU



Subsidised modernisation (Residential unit- RU)

The value for this indicator is calculated as the sum total of all modernisations of rented and owner-occupied homes approved by the IFB (funding programmes: Modernisation of rented homes; Barrier-free conversion of rented homes; Barrier-free conversion of owner-occupied residential property; Thermal insulation in existing buildings). (Source: Hamburgische Wohnungsbaukreditanstalt (until 2012), Hamburgische Investitions- und Förderbank (from 2013))

Subsidised modernisations lead to an increase in the quality of homes in the existing stock in terms of basic living quality, accessibility and energy standards. In the course of the considerable increase in new housing construction, the take-up of subsidies for the existing housing stock decreased due to shifted capacities of developers, even though the modernisation subsidies

being offered remained just as attractive. The goal for the next few years is to achieve a significant increase in modernisation in order to meet the targets of the Hamburg Climate Action Plan. In 2020, the sum total of all modernisations of rented and owner-occupied homes approved by the IFB was 2,405.



Housing for priority housing seekers through cooperation agreements, purchases of occupancy obligations and new rental housing subsidies

2010	2015	2020
2,239 RU	2,228 RU	2,763 RU

The value for this indicator is calculated as the sum total of the supply obligations of the housing companies and cooperatives as defined in the cooperation agreements, the obligations purchased in the existing stock under the funding programme "Purchase of occupancy obligations", and the approval figures for new housing with priority household obligations in the respective year. (Source: Hamburg Ministry for Urban Development and Housing (BSW))

The supply of housing for households with special market access problems is being expanded through cooperation agreements with housing construction companies and cooperatives, the purchase of occupancy obligations in the existing housing stock and the construction of new rental flats with obligations for priority housing seekers (recognised priority obligations). Based on Hamburg's overall plan to improve the supply of housing to those recognised as urgently

in need of housing, the placement of so-called recognised priority households in housing could be significantly increased by 2020. In order to meet the increased demand due to the current high level of immigration, the city is in close consultation with the housing industry and further packages of measures are being implemented. The number of homes for priority housing seekers has recently increased significantly; in 2020 the figure was 2,763.

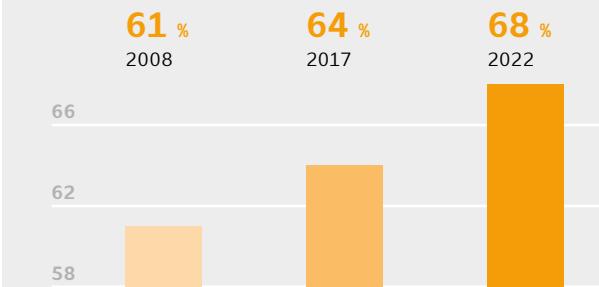


Modal split for environmentally sound transport

x per cent of the total traffic volume involves environmentally sound modes of transport
(Source: infas, MiD 2002, 2008, 2017)

The share of all journeys made in Hamburg accounted for by environmentally sound modes (walking, cycling and public transport) increased by 7% to 68% between 2008 and 2022. The increase was due in particular to the more frequent use of public transport, and cycling. The goal is to increase the share of journeys made by environmentally sound modes (walking, cycling, public transport) to 80% by 2030. This will have a positive effect on the quality of life in the city and help to reduce noise and air pollutant emissions.

Modal split for environmentally sound transport (as a % of total traffic volume)



Density of privately registered cars

Year	Value
2012	340 Num.
2017	334 Num.
2021	342 Num.

Networked and flexible mobility offerings make it easier to switch between different modes of transport, and enable convenient mobility without having to own a car. The goal is to further expand alternative mobility services in order to make the switch to public transport more attractive and to change the modal split. This includes the expansion of mobility service points (hvv switch), the increase of bike and car shar-

ing fleets, the expansion of bicycle parking both close to home and work and at public transport stops, as well as the expansion of on-demand during the period under consideration services and mobility management. During the period under review, the number of privately registered cars remained constant. The most recent figure (2021) was 342 cars per 1,000 inhabitants.



Privately registered passenger cars with electric drive

Date	Value
01/01/2017*	0.07 %
01/01/2020	0.35 %
01/01/2023	2.54 %

x per cent of all privately registered passenger cars have electric drive (including plug-in hybrids).
(Source: BVM/LBV Hamburg)

The drive transition is a significant lever for achieving the climate targets and reducing noise pollution as well as pollution with nitrogen dioxide (NO_2). Hamburg has already been promoting electric mobility for several years with numerous activities, such as the creation of charging infrastructure and parking con-

cessions for e-vehicles. Particularly in recent years, the share of electric vehicles has increased significantly.

*It has only been possible to distinguish between private and commercial owners since 2016.



Cycle route network

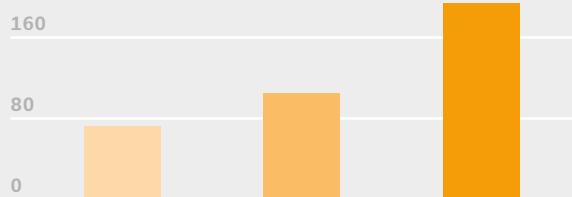
Length of completed cycle route network

(Source: Ministry for Transport and Mobility Transition)

In 2008, Hamburg successfully laid the foundation for promoting cycling with its Cycling Strategy. In 2016, the Cycling Strategy became the Alliance for Cycling, which was updated in 2022 and simultaneously expanded to become the Alliance for Cycling and Walking. To promote cycling, it is necessary to develop and continuously expand a good cycling infrastructure that is attractive for all target groups. This includes, among other things, the construction of cycle routes. The Hamburg cycle route network currently comprises 14 city-wide routes with a total length of almost 280 kilometres. This cross-neighbourhood and cross-district network brings together everyday bicycle traffic on routes with as little traffic as possible, and connects the residential areas of the inner and outer city with the district centres and the city centre. These routes form the basic framework of the city-wide cycling network, and at the same time form the backbone of the district networks. Expansion of the network is being driven forward systematically. By

Cycle route network

72.1 km
2012 104.3 km
2017 193.3 km
2022



2022, 193.3 kilometres of the bicycle route network had already been completed. The aim is to complete the cycle routes, including signposting and branding, during the 22nd legislative period, i.e. by the beginning of 2025 at the latest. Furthermore, several new cycle routes are to be developed and integrated into the network in the next few years in order to connect urban development areas and create new links.



Traffic accident victims (victims / 1,000 inhabitants)

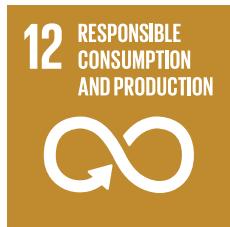
2010	2015	2020
5,20	5,74	4,28

This indicator captures the number of persons injured or killed in traffic accidents per 1,000 inhabitants.

(Source: Hamburg Ministry for Home Affairs and Sport, traffic statistics 2021)

The indicator "traffic accident victims" supports the assessment of general road safety, but without distinguishing between the different means of transport. Pedestrians and cyclists are more frequently and more seriously injured by cars, but the probability of car drivers being seriously injured in this context is very low. The indicator does not reflect this imbalance. The number of traffic accidents per 1,000 inhabitants has declined slightly in recent years. The number of road users involved in accidents, especial-

ly those killed and seriously injured, is to be further reduced. The goal is to ensure that Hamburg's roads offer a high standard of safety, that the number of traffic violations decreases, and that people interact with each other in road traffic in a considerate manner.



3.12 SDG 12 – Responsible Production and Consumption

The **Sustainable Development Goal “Responsible consumption and production”** relates inter alia to consumption by individuals, but also to changing the value creation patterns that underlie our production. SDG 12 aims to bring about the necessary change in our lifestyles and economic practices. Consumption and production must take place within the planetary environmental and social boundaries.

Based on the fundamental imperative of sustainable management and efficient use of natural resources, the targets of SDG 12 are geared towards halving food waste at the retail and consumer levels. Other targets include reducing food losses along production and supply chains, including post-harvest losses, achieving the environmentally sound management of chemicals, reducing waste generation, encouraging larger companies to integrate sustainability information into their reporting cycle, promoting public procurement practices

that are sustainable, ensuring that people have the relevant information and awareness for sustainable development and lifestyles, and eliminating fossil-fuel subsidies.

According to SDG 12, municipalities in the Global North must take responsibility by encouraging citizens and private companies to adopt more sustainable consumption and production patterns. They also bear responsibility for their own actions within the administration and for the public enterprises in which they are involved. For example, the general conditions for public procurement also have an impact on international supply chains.

SDG 12 is linked to SDG 4 (Quality education), especially with respect to Education for Sustainable Development, SDG 8 (Decent work) and SDG 9 (Industry, innovation and infrastructure). Waste avoidance and waste treatment (SDG 12) are also linked.



Overview – the City of Hamburg's links to SDG 12

Qualitative aspects:

- | Promotion of sustainable production patterns
- | Reduction of resource consumption
- | Sustainable disposal
- | Sustainable tourism
- | Promoting sustainability at events
- | Sustainability in public procurement and contracting

Indicators:

- | Raw material productivity GDP/DMIa including balance of intra-trade
- | Amount of waste:
 - | Generation of selected municipal waste (household and bulky waste)
 - | Generation of selected municipal waste (household and bulky waste, separately collected recyclables from households, biowaste)
- | Drinking water consumption - private households
- | Certified hotels

3.12.1 Introduction – implementation of SDG 12 in Hamburg

The public sector wants to use its role model function, expertise and market position in sustainability issues by also, through its actions, encouraging companies to produce or supply sustainable goods and services. The strategic topic of sustainable public procurement is an inter-ministerial one, for which institutional responsibility rests with the Finance Ministry's Procurement and Strategic Purchasing Department. The topic of green procurement is also addressed in the Ministry for the Environment, Climate, Energy and Agriculture in the area of "Energy- and Resource-Efficient Economy". The interfaces of the two ministries work closely together on this. Milestones in this context are the enshrinement of socially responsible procurement in Section 3a of the Hamburg Public Procurement Act, the enshrinement of environmentally responsible procurement in Section 3b of the Hamburg Public Procurement Act, the introduction of a "Green Procurement Guide" and the establishment of the "Competence Centre for Sustainability in Procurement" in the Ministry for Finance, which works together with the Ministry for the Environment, Climate, Energy and Agriculture.

Photo 47: Lattenplatz, Flohschanze
© Mediaserver Hamburg / ThisIsJulia Photography



The Senate is also pursuing the goal of continuously reducing the amount of general waste (municipal waste from households and commercial municipal waste), and increasing the separate collection rates for waste paper, waste glass and organic waste. With the recycling offensive, the share of recyclable materials in general waste has been reduced since 2010. Not only are new user units systematically being connected to the waste separation systems. Existing units are also under continuous review, and where possible – and necessary – they are being converted. The separate collection rate for waste paper increased from 50 to 77 per cent between 2010 and 2020. For waste glass, an increase from 47.2 to 62.7 per cent was achieved, and for organic waste, the share rose from 20.2 to 45.2 per cent. The amount of general waste from private households and commercial establishments decreased from 516,200 Mg to 442,700 Mg over the same

the period (2022: 421,600 Mg).

Other milestones in connection with SDG 12 include the "Fairtrade Town" project and the "Fair Week" (see the chapter on SDG 17), Hamburg as an "Organic City" (with links to SDG 2 and SDG 15), the "Hanseatic Materials Management" project, the "Hamburg CARD Green" project and the State Council resolution on the exclusive use of recycled paper in 2017.

In addition to the qualitative measures, the City of Ham-

burg also measures its contribution to SDG 12 on the basis of drinking water consumption, among other things. Hamburg thus follows the recommendations of the study "SDG Indicators for Municipalities", which was initiated by the Association of German Cities and published by the Bertelsmann Stiftung. These indicators are also relevant to many other German municipalities, and thus enable comparability.

3.12.2 Sustainability in public procurement and contracting

In Hamburg, green procurement has been standardised since 2013 through the Hamburg Public Procurement Act. In 2016, the Senate adopted a list of binding criteria, which it published in the ***Green Procurement Guide***.⁶⁶ The Guide specifies environmental requirements for the purchasing of services and goods. In 2019 the guide was aligned with the current status of legal requirements and guidelines. For the public procurement of goods and services, the City of Hamburg has decided to apply the Green Procurement Guide in the administration and to update it continuously, taking into account the experience gained. It recommends that public enterprises apply it. With the Guide, the Hamburg Senate has provided procurers in the central and decentralised procurement offices of the City of Hamburg with a tool that enables them to take environmental criteria into account in everyday procurement. Since the Guide came into force, environmental criteria have played an even more important role in the selection and awarding of contracts than they already did. The Guide provides procurers with concrete specifications for 19 product groups, which they can incorporate directly into their tenders. For the life cycle cost analysis, the relevant product groups (e.g. motor vehicles) have been identified and specific working aids have been made available. Life

cycle costs, reparability and recyclability, packaging, climate impact and resource consumption can now be taken into account in the award decision in addition to price. The Guide also includes a **negative list** of products that the administration is no longer allowed to purchase or use in the future. These include coffee machines with aluminium capsules, mineral water in disposable bottles, disposable tableware, and cleaning agents containing chlorine. More recently, genetically modified food as well as cosmetics and cleaning agents containing microplastics were added. Bidders can prove that their products possess the required characteristics with labels such as "Eco Top Ten" or "Blue Angel".

There are plans to develop the current Green Procurement Guide into a **Sustainability Guide** (NLF) by integrating social criteria. The Sustainability guide will focus on specific product groups, identify the aspects of sustainability aspects that can be implemented there, and present them in a practical way (aligned with the various instruments of public procurement law). To develop an ambitious and at the same time practical Guide, the Ministry for the Environment, Climate, Energy and Agriculture and the Ministry for Finance decided at the end of 2020 to perform this task as part of a stakeholder process. Due to various urgent assignments in the wake of the COVID-19 pandemic, the process was postponed at short notice and the Sustainability Guide will now be finalised by spring 2024. Furthermore, with a view to further developing the Sustainability Guide, there are plans to establish a monitoring system for the presentation of sustainable procurement.

One specific example in the area of sustainable procurement is the **exclusive use of recycled paper**. This was stipulated in the State Council resolution in 2017. The ministries and offices of the City of Hamburg, state enterprises and special funds are thus obliged to use only recycled paper with the "Blue Angel" eco-label. The state universities and public enterprises are recommended to use such paper. Printing orders to private companies for the production of brochures and printed matter are also to be placed on the ba-

sis of recycled paper. The City of Hamburg increased its rate of recycled paper use within the administration to around 99 per cent in 2021. By using recycled paper, the city saved 59,003,500 litres of water and 13,312,335 kWh of energy compared to virgin fibre paper (source: Papieratlas 2022).

Concerning public procurement, an **expansion of the Hamburg Public Procurement Directive** was adopted in 2021. As part of the expansion, detailed explanations on the principle of green procurement and the actual implementation of the principle in procurement law requirements were included.

In 2019 the **Competence Centre for Sustainability in Procurement** was also established. Since then, in cooperation with the Ministry for the Environment, Climate, Energy and Agriculture, the Competence Centre at the Ministry for Finance has been advancing the topic of sustainability in public procurement in the City of Hamburg. The Competence Centre can provide needs-based advice, and support research. It can also promote dialogue among contracting and procurement bodies, and can itself arrange bilateral contacts. Since 2020, a **nationwide dialogue among competence centres for sustainability in procurement** has taken place. The Hamburg Competence Centre initiated this regular dialogue with the competence centres of the other federal states. While this was initially used as an exchange of experience and support, joint market explorations and bidder dialogues are also planned for the future, up to and including possible cooperation on tenders.

3.12.3 Promotion of sustainable production patterns

One example of the promotion of sustainable production patterns in Hamburg is the ***PROFI Umwelt / PROFI Umwelt TRANSFER***⁶⁷ programme. As part of the programme, companies of all sizes with a production site in Hamburg from all sectors and technologies (as well as universities or research institutions cooperating with them) are supported in implementing sustainability. The programme is implemented by the *Hamburgische Investitions- und Förderbank* – Hamburg's development bank – on behalf of the City of Hamburg. The bank supports individual projects ("PROFI Umwelt") and collaborative projects ("PROFI Umwelt Transfer") that develop innovative products, processes or services which contribute to climate action and environmental protection. The focus is on resource and material efficiency as well as improvements in the circular economy. In "PROFI Umwelt", a total of 34 projects worth a total of almost 19 million euros have been approved since 2014 (as at the end of 2022). In addition to around 10 million euros in public funding, around 9 million euros in private funding also flowed into the funded projects for research and development.

Another example of the promotion of sustainable production patterns is Hamburg as an ***organic city***.⁶⁸ In 2016, Hamburg joined the Organic Cities Network with the aim of strengthening Hamburg's agricultural enterprises economically by enabling them to use the Organic City as a sales market. The focus is on the conversion of farms to organic farming and sales promotion. In the course of joining the network, companies in the organic sector from Hamburg and the Metropolitan Region joined forces to form an association (*hamburg.bio e. V.*) in order to increase the use of organic food from the region and to provide appropriate support in further developing organic value cre-

⁶⁷ <https://www.hamburg.de/material-und-ressourceneffizienz/13591086/staerkung-von-umweltinnovationen-durch-kooperations-und-transferprojekte-im-programm-profi-umwelt/>

⁶⁸ <https://www.biostaedte.de/bio-staedte/hamburg>

ation. In an inter-ministerial working group (AG Bio-Stadt Hamburg), representatives of the procurement desks of the Hamburg ministries inform and support each other on questions concerning the procurement of organic food in the various municipal institutions. The aim is for the city to set a good example through the use of organic products and to ensure a continuous increase in demand. For school catering, a new model contract concluded by the schools with the caterers has been in effect since October 2021. This

contract stipulates a binding organic share of 10 per cent of the goods used. By promoting organic farming in the Hamburg Metropolitan Region, the city is also contributing to SDG target 2.4 by increasing the share of agricultural land under sustainable agricultural management (see SDG 2).

3.12.4 Reduction of resource consumption

An important target for SDG 12 is promotion of the sustainable management and use of natural resources. One example in this regard in Hamburg is the Hanseatic Materials Management project,⁶⁹ which is funded among others by the city's Ministry for Culture and Media. Hanseatic Materials Management is a non-profit pool that "rescues" discarded material, high-quality props and scenery from large theatres and film sets and makes them available at low cost to creative projects without a large budget. This pool is a repository "for everyone - whether non-profit, commercial or private". The background to the materials pool is that in various areas (e.g. after trade fairs, events and film shoots) large quantities of the most diverse materials are disposed of every day. This procedure costs money and is anything but sustainable. At the same time, there is an urgent need for precisely these materials in cultural, educational and social institutions, as well as among freelance creative workers. In Hamburg, this gap has been filled by the materials pool since 2013. Usable materials and items are saved from disposal, collected in a warehouse close to the city centre – which now covers an area of over 1,000 square metres – and fed into a new sustainable cycle. To date, this is the first and only open repository of this size in Europe.

⁶⁹ <https://www.hanseatische-materialverwaltung.de/>

3.12.5 Sustainable disposal

The reduction of waste and the promotion of sustainable disposal is another central target of SDG 12. According to the Closed Substance Cycle Waste Management Act (Kreislaufwirtschaftsgesetz), waste management plans must be drawn up by the federal states in order to set targets and control waste management. This applies especially to waste prevention, recycling and the environmentally sound disposal of the various types of waste. The City of Hamburg's waste management plans are usually updated or reassessed every six years. Der **municipal waste management plan**⁷⁰ from 2017 is currently being revised. It describes the type, quantity, origin and whereabouts of the generated municipal and infrastructure waste, as well as its disposal.

The Waste Management Department of the Ministry for the Environment, Climate, Energy and Agriculture collects key statistical data on waste generation and waste disposal in Hamburg every year. The **municipal waste statistics**⁷¹ provide information on the quantity, origin and whereabouts of municipal waste. The term "municipal waste" includes household waste and similar commercial and industrial waste, as well as waste from facilities such as offices, commercial enterprises, shops and markets, and street sweepings. The statistics are published annually on the internet and made available for download.



Photo 48: Tiny houses as unusual workspaces or hideaways
© Mediaserver Hamburg / Christian Brandes

⁷⁰ <https://www.hamburg.de/contentblob/8069992/d5304cf9435bd-f6caddff6024af0b8b/data/d-awp-siedlungsabfaelle-2017.pdf>

⁷¹ <https://www.hamburg.de/recycling/4793242/statistik-siedlungsabfaelle/>

3.12.6 Sustainable tourism

Hamburg also has various activities to promote sustainable tourism. These include the ***Hamburg CARD Green*** – a variant of the “Hamburg CARD” – which is marketed by *Hamburg Tourismus GmbH* (Hamburg’s tourist service). It combines around 40 exclusively sustainable offers for tourists. The “Hamburg CARD Green Plus” also includes a public transport ticket. The card, which is only available in digital form, is meeting the growing demand for sustainable tourism. When purchasing the “Hamburg CARD Green”, an additional one euro can be donated to a local sustainable project.

The Hamburg Tourismus GmbH tourist service has also created an ***online platform for sustainable tourism offerings in Hamburg***.⁷² The website provides tips on sustainable excursion destinations, mobility options, accommodation, gastronomy and current events, thus arousing the curiosity of potential visitors. The services offered are designed to encourage tourists to stay and consume in a more sustainable way.

Photo 49: Hamburg Fair and Congress
© Mediaserver Hamburg / Hamburg Messe und Congress,
Romanus Fuhrmann



⁷² <https://www.hamburg-tourism.de/das-ist-hamburg/nachhaltigkeit-erleben/>

3.12.7 Promoting sustainability at events

Events of various kinds often require a large amount of resources, and at the same time offer the opportunity to address sustainable behaviour. As the sixth largest economic sector in Germany, the event industry faces the challenge of improving the resource footprint, and implementing its economic and social mandate in line with the 2030 Agenda. Since 2019, the Ministry for the Environment, Climate, Energy and Agriculture, together with the non-profit network Green Events Hamburg, has been conducting a participatory process with over 100 stakeholders to develop **criteria for sustainable events**. All line ministries and district offices are involved, as well as various event organisers. In a pilot phase, participants worked out answers to the questions of what "sustainable events" actually means, and what the major levers and challenges are for different event formats. The Senate decision on the binding definition of criteria for sustainable events is still pending.

Hamburg Cathedral is a partner in the pilot phase of the "Sustainable Events" project. Sustainability is becoming an increasingly important topic for **Hamburg Cathedral and the Hafengeburtstag ("Port Anniversary Festival")**. In the future, the department will deal with sustainability in the event sector both conceptually, operationally and in terms of communication. Since all events were cancelled during the COVID-19 pandemic, only limited knowledge could be gained in recent years. All measures must be subjected to both logistical and legal scrutiny, as the obligation to participate must be stipulated in the terms and conditions for participation. Further measures such as an environmental management system and the resulting recommendations, as well as the evaluation and maintenance of data, will be integrated. Furthermore, the topic of accessibility will also be a major focus in the design and implementation of events in the future.

Another example in the field of sustainable events is the staging of the men's **European Football Champion-**

ship⁷³ in 2024. Hamburg is one of the ten German cities hosting this major event. During EURO 2024, Hamburg intends to present itself as a cosmopolitan and hospitable metropolis, and prove that major sporting events can also be held sustainably. To ensure this, the City of Hamburg has convened a Sustainability Committee to plan the city's sustainability measures for the tournament. The Committee is led by the Sustainability Department in Hamburg's Environmental Ministry (BUKEA). Through an awareness plan, Hamburg will ensure that everyone feels welcome and safe. A further focus will be the environmentally sustainable design of the fan zones.

The task of the **Event Committee** is to collect incoming proposals for the use of coveted public spaces and evaluate them according to citywide criteria before the official approval procedure. The procedure is coordinated by *Hamburg Tourismus GmbH* in close consultation with the Ministry for the Economy, Transport and Innovation, the district authorities of Hamburg-Mitte and Altona, and HafenCity Hamburg GmbH. The aim is to make events in the city's sought-after areas more attractive for Hamburg and its population by providing external advice to the approving institutions and to prioritise events before the approval process. The event navigator on the website provides an overview of public and private open spaces throughout the city, and is intended to make users more aware of alternative spaces.

⁷³ <https://www.hamburg.de/euro-2024/>

3.12.8 Indicators



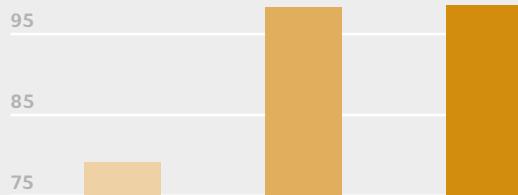
Raw material productivity GDP/DMI^a including balance of intra-trade (1994 = 100)

The indicator "total raw material productivity" as defined in the German Sustainable development Strategy 2016 compares the value of all goods submitted for final use (in euros, price-adjusted) relative to the mass of raw materials used domestically and abroad for their production (in tonnes). Final use covers domestic consumption, domestic investment and exports. The denominator of the indicator takes into account abiotic and biotic raw materials from the environment. (Source: Statistics portal⁷⁴)

After raw material productivity in Hamburg declined annually between 2004 and 2016, a reversal in this trend was evident from 2017 to 2019, i.e. the economy was less resource-intensive. In 2020, however, raw material productivity in Hamburg fell again. In Germany, raw material productivity increased by around 72 per cent between 1994 and 2019. The goal of the German Resource Efficiency Programme (ProgRess) is to double raw material productivity by 2020 relative to 1994. This target is clearly not being met.

Rohstoffproduktivität

79.1	98.2	98.5
2010	2015	2020



Drinking water consumption – private households (litres per inhabitant and day)

2011	2015	2020
138.39	134.69	138.57

On average, x litres of water are consumed per inhabitant per day. (Source: Statistical offices of the federation and the states)

Drinking water is one of the most precious resources, especially in view of increasing droughts and hot summers. In principle, Germany is a water-rich country and direct consumption has remained mostly constant over the last few years. In Hamburg too, there is basically sufficient drinking water available. None-

theless, the provision of water is always associated with energy expenditure and material input. The daily drinking water consumption of private households in Hamburg is 138.57 litres per inhabitant (2020).

⁷⁴ <https://www.statistikportal.de/sites/default/files/2023-02/AK%20NE%20Nachhaltigkeitsindikatoren.xlsx>



Amount of waste

This indicator shows the amount of selected municipal waste (household and bulky waste) in tonnes generated per inhabitant (UMK D3.1). (Source: Destatis)

In the figures of the Federal Statistical Office (Destatis), the amount of household waste includes household and bulky waste without the separately collected recyclables. The quantity including separately collected recyclables is more meaningful with regard to SDG 12 than the quantity without separately collected recyclables. The following indicator therefore also captures the total quantity including separately collected recyclables (waste glass, waste paper, packaging, organic and green waste, metals, textiles, etc.) nationwide. As the circular economy concept is increasingly implemented, the quantities of waste to be disposed of per inhabitant should also decrease. In 2020, however, the COVID-19 pandemic had specific effects that led to a counter-cyclical increase in the per capita quantity, in particular due to curfew restrictions, people working from home and limited holiday opportunities. Some of these factors are still having an effect today. An increase in production out-



put (i.e. gross domestic product, SDG 8.1.1) is usually associated with a higher amount of waste, although in the long term the link between these two quantities should be broken. On the production side, this can be achieved through in-house environmental management, which is supported, among other things, by the Eco- Management and Audit Scheme EMAS (SDG 12.6).



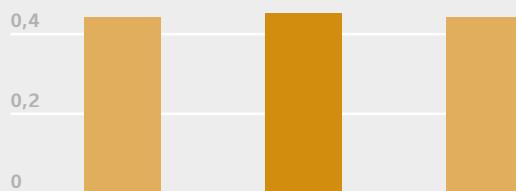
Amount of waste (including separately collected recyclables)

The amount of selected municipal waste (household and bulky waste, separately collected recyclables from households, biowaste) per inhabitant (UMK D3.2) is x tonnes. (Source: Bertelsmann Stiftung; Statistical Office North)

The indicator provides information on the amount of household waste (excluding waste electrical equipment) divided by the number of inhabitants. In addition to residual and bulky waste, this also includes all separately collected waste (waste glass, waste paper, packaging, organic and green waste, metals, textiles, etc.). The amount of waste in a city and the resulting need for disposal can be directly influenced by each individual through their consumption decisions. Over time, the amount of waste disposed of per inhabitant can be used to draw conclusions about the urgency and the necessary extent of waste prevention. In 2020, the amount of waste per inhabitant per year was 0.44 tonnes. The trend should also be seen against the background of an increasing number of inhabitants, and basically points to the importance of

Amount of waste (including separately collected recyclables)

0.44 t **0.45 t** **0.44 t**



observing the five-stage waste hierarchy of prevention (highest priority according to the German Circular Economy Act), followed by preparation for re-use, recycling, energy recovery and disposal.



Certified hotels

2010	2015	2023 (January)
n/a	n/a	14 Num.

A sustainability certificate recognised by the Global Sustainability Tourism Council is held by x hotels in Hamburg. (Source: GSTC⁷⁵. Based on a survey of the certification providers.)

In tourism, there are a multitude of certificates and standards that attest to operational sustainability. The certificates vary in terms of their characteristics and quality. The Global Sustainability Tourism Council has set itself the task of creating a standard for certificates in the various tourism sectors (e.g. hotel industry, tour operators), and thus making international certificates comparable. The Global Sustainability

Tourism Council is an initiative of the Rainforest Alliance, the United Nations Environment Programme (UNEP), the United Nations Foundation (UN Foundation), the United Nations World Tourism Organization (UNWTO) and other initiatives. Based on this, Hamburg Tourismus GmbH determined the number of certified hotels (currently 4 certified hotels).

⁷⁵ <https://www.gstcouncil.org/gstc-criteria/gstc-recognized-standards-for-hotels/>



3.13 SDG 13 – Climate Protection Measures

The **Sustainable Development Goal “Climate action”** calls for urgent action to combat climate change and its impacts. It includes specific measures for climate change mitigation and adaptation.

Today, climate change is affecting the entire world. The main goal of all countries is to limit the global temperature increase to well below two degrees Celsius. So far, 189 countries have ratified the Paris Agreement (as of 2021). According to the Agreement, to limit warming to 1.5 degrees Celsius above pre-industrial levels, global greenhouse gas emissions must peak before 2025. According to the Intergovernmental Panel on Climate Change (IPCC), the United Nations body responsible for the scientific assessment of climate change, by 2050 we must reach zero. To reach a tipping point for a sustainable future, emissions in all sectors must therefore be drastically reduced immediately.

The urban space is specifically affected by the impacts of climate change. Most of the existing infrastructure in urban areas is built according to

criteria that are not designed for climate change. Increasing heat, prolonged drought and heavy rainfall will prove to be major challenges for cities in the future. These will pose a great risk, especially for vulnerable groups. It is therefore essential that public actors help to achieve the 1.5 degree target, and enable states and municipalities to adapt to the impacts of climate change.

Besides mitigating greenhouse gas emissions, SDG 13 also includes education, awareness raising and capacity building for adaptation to climate change. In light of the visible impacts on agriculture, forestry, infrastructure and human health, decisive action is required. The challenges involved are complex, because climate action is closely linked to the other SDGs. This is particularly evident in relation to terrestrial and underwater biodiversity (SDGs 14 and 15), as global warming has a major impact on ecosystems. Increasing extreme weather events have a particularly strong impact on vulnerable groups (SDG 1 and SDG 10) and food security (SDG 2).



Overview – the City of Hamburg's links to SDG 13

Qualitative aspects:

- | Climate action in Hamburg
- | Adaptation to the impacts of climate change

Indicators:

- | CO₂ emissions per capita
- | CO₂ emissions of Hamburg – total emissions and by sector
- | Settlement area in the floodplain

3.13.1 Introduction – implementation of SDG 13 in Hamburg

Photo 50: Climate protection settlement Klein Borstel
 © Mediaserver Hamburg / Gem. Nutzungsbedingungen des HMG-Mediaservers.licensed for Hamburg Marketing GmbH (non commercial)



Climate action – meaning a rapid and comprehensive reduction of anthropogenic greenhouse gas emissions – is one of the most important tasks of our time. Hamburg is therefore making impressive efforts to reduce CO₂ emissions and take adaptation measures in order to protect people from the impacts of serious climate change. This should enable the people of Hamburg to live in a liveable, economically successful and affordable city in the future too. Hamburg is thus meeting its global responsibility to pursue climate action. Climate change mitigation and adaptation are the responsibility of the Ministry for the Environment, Climate, Energy and Agriculture.

Climate action in Hamburg

Hamburg has been successfully pursuing very ambitious climate action goals for years. With the first Climate Change Mitigation Strategy 2007-2012, the city had already set itself the target of saving a total of 2 million tonnes of CO₂ by 2012 compared to 2007, which it also achieved. The goal associated with the 2013 Master Plan for Climate Change Mitigation – saving a further 2 tonnes of CO₂ emissions by 2020 compared to 2012 with the city's own measures – was also achieved.

A first Climate Action Plan was adopted by the Hamburg Senate in 2015. Its first update, which further tightened up sectoral targets, was adopted by the Hamburg Senate in 2019. Finally, in 2022, a paper was presented for the second update of the Hamburg Climate Action Plan, which is planned for 2023. Here too, more stringent climate targets were formulated and adopted by the Senate.⁷⁶

- | Reduce CO₂ emissions by 70 per cent by 2030.
- | Reduce CO₂ emissions by 98 per cent by 2045 and, in conjunction with emission sinks, achieve net

⁷⁶ <https://www.hamburg.de/contentblob/16763680/bdac8f8d-932cbd784b9256426fc5b11b/data/d-eckpunktepapier2022.pdf>

carbon neutrality.

The modelling of scenarios for achieving new climate action targets, which were prepared by renowned institutes, served as the basis for the further development and increased ambition of Hamburg's climate targets. Projections were used to show how the new ambitious climate action targets for Hamburg can be achieved, and what contribution the private households sector, the tertiary sector, industry, the transport sector and cross-sectoral measures, can make.

The achievement of the formulated climate action targets and the sectoral targets is monitored using the polluter's balance sheet. At the same time, CO₂ the individual measures of the Climate Action Plan are monitored using a bottom-up methodology. The implementation status of Hamburg's climate action measures was presented at the end of 2022 in the interim report on the Hamburg Climate Action Plan (paper 22/9804). Almost 90 per cent of all measures agreed in the Climate Action Plan had either already been implemented, commenced or were under preparation at that time. These include, for example, the expansion of mobility hubs (hvv switch points), the development of the hydrogen economy cluster, the refurbishment of public buildings such as schools, and the use of emission-free buses and trains.

Another milestone is the ***Hamburg Climate Protection Act of 2020***, the amendment of which is planned for 2023 and is expected to entail a number of legislative changes from 2024 onward. The following amendments are planned, subject to a resolution by the Hamburg Parliament:

- Hamburg's climate action targets will be enshrined in law: CO₂ emissions are to be reduced by 70 per cent by 2030 compared to 1990. By 2045, five years sooner than previously planned, the whole of Hamburg is to live and work on a carbon-neutral basis.
- When replacing heating systems, the share of renewables is to be increased from 15 to 65 %. From

2024, there will be a support programme for this.

- The combined use of roofs for photovoltaic systems and green roofs as solar green roofs is also to become mandatory from 2027.
- Photovoltaic systems are to cover at least 30 per cent of the gross roof area from 2024, and will also become compulsory for existing buildings from 2024 if a complete renewal of the roof cladding is carried out.
- The expansion of the infrastructure for electricity, hydrogen and public charging points for electric vehicles is to be strengthened.
- The administration is to become carbon-neutral by 2030.
- This is designed to strengthen climate change mitigation and adaptation in the city's public enterprises.

The Hamburg Climate Report published by the German Meteorological Service in 2021 summarises the knowledge about climate change in Hamburg in the past, present and future. For example, the annual average temperature in Hamburg has already risen by 1.7°C since 1881. Since 1951, there has been an increase in heavy rainfall events. The Adaptation to the Impacts of Climate Change Department was established for the strategic further development of adaptation to climate change in Hamburg.

To do justice to the importance of education in social change processes towards a carbon-neutral society, specific education projects are also being supported through the Hamburg Climate Action Plan. For more details on the programmes "Climate schools" and "Energy to the power of 4", see SDG 4 "Quality Education" under "Education for Sustainable Development".

3.13.2 Adaptation to the impacts of climate change



Photo 51: Fuel cell hybrid bus © Mediaserver Hamburg / Gem.
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Hamburg Marketing GmbH

With the presentation of the first Climate Action Plan, the Hamburg Senate further developed the content and methodology of the "Master Plan for Climate Change Mitigation" and the "Action Plan for Adaptation to Climate Change", and merged the areas of climate change mitigation and adaptation. In the first update of the Hamburg Climate Action Plan, adaptation to climate change was presented partially, in a transitional path for climate adaptation. In the second update in 2023 this will no longer be addressed, as a separate **strategy for adaptation to climate change** is being developed along with the second update. In this respect, the overarching goal is to develop Hamburg into a climate-resilient city. This is primarily about averting hazards and minimising damage caused by climate change. But it is also about preserving the quality of life and positively developing it. This requires a comprehensive approach.

The Adaptation to the Impacts of Climate Change/RISA Department was established to strategically develop climate adaptation for Hamburg and to involve all actors in the city in this process. The Department is tasked with developing an independent, comprehensive strategy for Hamburg's adaptation to climate change.

The RISA (RainInfraStructureAdaptation) office is integrated into the Department. The RISA office controls the city-wide process for a sustainable rainwater management. The goals of RISA are to prevent heavy rainfall, to improve the urban climate and groundwater recharge by promoting a near-natural water balance, to protect water bodies through rainwater treatment and retention, and to manage rainwater as a resource.

Climate impact monitoring⁷⁷ is currently being developed into a climate information system for Hamburg,

⁷⁷ <https://www.hamburg.de/klimafolgen-monitoring/>

which will allow conclusions to be drawn concerning Hamburg's vulnerability to the effects of climate change, the success of previous adaptation measures and the need for further adaptation ones. This further development process will serve as the basis for the comprehensive strategy for adapting the city to climate change. This will pursue a city-wide upgrading of infrastructure and the protection of people from the negative impacts of climate change.

Photo 52: Solar ship on the Alster © Mediaserver Hamburg / Christian Hinkelmann



3.13.3 Indicators



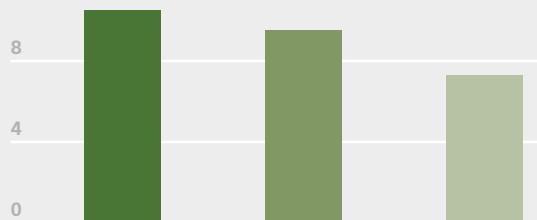
CO₂ emissions per capita

*CO₂ emissions per capita and year in Hamburg according to the polluter's balance sheet is x tonnes.
(Source: CO₂ polluter's balance sheet Statistical Office North)*

Hamburg bases its current climate targets on the polluter's balance sheet. A polluter's balance sheet shows how what CO₂ emissions are attributable to a federal state due to final energy consumption. Both primary energy sources, such as coal and natural gas, and secondary energy sources, such as heat and electricity, are included in the calculation. It is thus directly related to consumption behaviour and reflects the factors that can be influenced by climate action measures in Hamburg. The CO₂ emissions of Hamburg's citizens per capita and year in relation to the polluter's balance sheet decreased from 12.5 tonnes to 7.3 tonnes between 1990 and 2020. Compared to 1990, this represents a decrease of 41.8 per cent.

CO₂ emissions per capita

10.5 t
2010 **9.5 t**
2015 **7.3 t**
2020



CO₂ emissions of Hamburg – total emissions and by sector

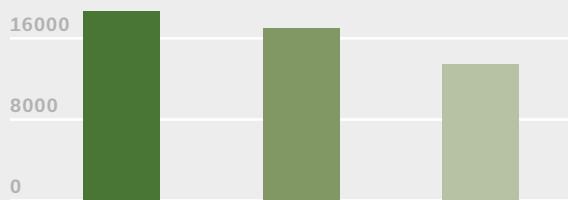
The CO₂ emissions of Hamburg according to the polluter's balance sheet show total emissions of x-thousand tonnes, distributed across the sectors private households / tertiary sector / industry / transport. (Source: CO₂ polluter's balance sheet Statistical Office North)

Hamburg's CO₂ balance sheet is compiled and evaluated by the Statistical Office North. Hamburg uses the methodology agreed upon by the Working Group of the Federal States on Energy Balance Sheets. Its climate targets thus refer to the polluter's balance sheet of the Statistics Office North. Due to method-

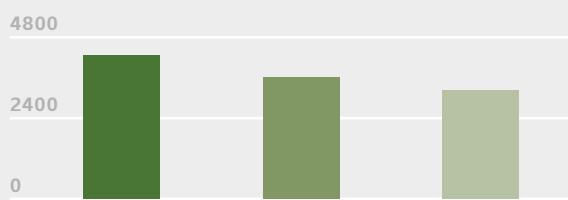
ological reasons associated with data collection, the final balance sheet for a given year can be provided after one year and nine months at the earliest. Over the course of time, both the total CO₂ emissions and the emissions in the individual sectors have declined.

CO₂ emissions of Hamburg – total emissions and by sector (in 1,000 t)**Total emissions**

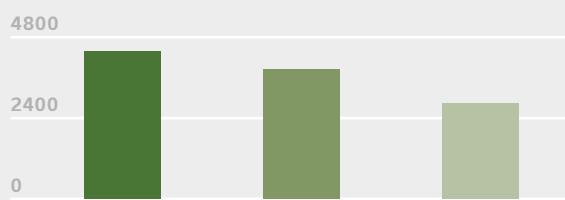
18.753
2010 **17.029**
2015 **13.515**
2020

**by sector****Private households**

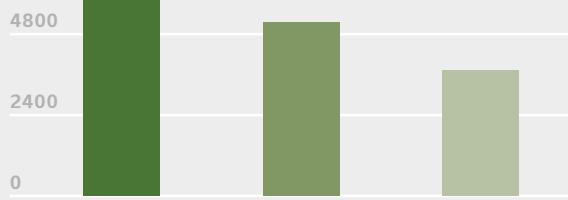
4,245
2010 **3,593**
2015 **3,215**
2020

**Tertiary sector**

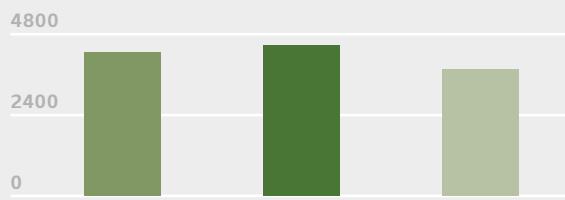
4,366
2010 **3,841**
2015 **2,843**
2020

**Industry**

5,899
2010 **5,135**
2015 **3,702**
2020

**Transport (including aviation)**

4,243
2010 **4,460**
2015 **3,755**
2020

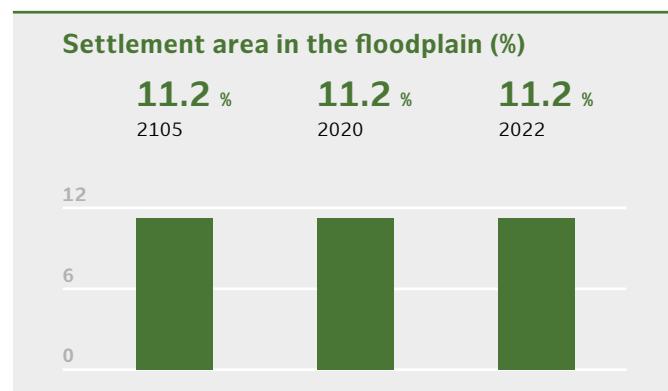




Settlement area in the floodplain (%)

In the city, x per cent of the land used for settlements and transport infrastructure is located in the officially designated floodplain, measured by area. (Source(s): Leibniz Institute of Ecological Urban and Regional Development, relevant responsible state authorities)

The designation of floodplains next to surface waters aims to reduce or even completely avoid damage caused by flood events (Section 76 Water Resources Act - WHG). The indicator shows what percentage of land used for settlements and transport infrastructure in a city is in an officially designated floodplain. In Hamburg, the most recent figure (2022) was 11.2 per cent. The indicator values thus remained constant during the period under review from 2015 to 2022.





3.14 SDG 14 – Life under Water

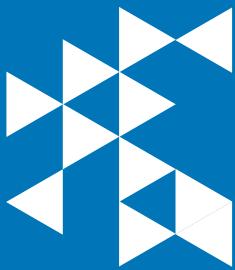
The **Sustainable Development Goal “Life below water”** calls for a significant reduction in pollution of the oceans and seas, especially as regards nutrients and waste. The world’s oceans – their temperature, composition, currents and life – drive global systems that make the Earth liveable for humanity. Rainwater, drinking water, weather, climate, coasts, much of our food and even oxygen in the air are ultimately provided and regulated by the ocean.

The targets of SDG 14 address marine pollution and overfertilisation, sustainable management and protection of marine and coastal ecosystems, ending overfishing and destructive fishing practices, expanding marine conservation areas, and a number of targets to improve the situation of small-scale fishers from countries of the Global South and other stakeholders in these countries.

In relation to the Global South, there are strong links to SDG 1 (No poverty) and SDG 2 (Zero

hunger), as fisheries play a major role in the income and nutrition of many poor populations. The links to SDG 6 (Clean water and sanitation) are also very obvious. This is because freshwater systems are connected to the sea via rivers. Pollution from human settlements thus strongly influences life under water.

For municipalities in the Global North, the adoption and implementation of measures to ensure water quality in the municipal space are especially important. This also includes instruments to protect marine and coastal ecosystems. In the municipal context, this refers above all to the reduction of land-based activities resulting in marine debris (e.g. microplastics from tyre wear) and nutrient pollution (e.g. from agricultural fertilisation). Similarly, considerate management of marine and coastal ecosystems, which are the responsibility of local authorities, and the sustainable use of marine resources, help to strengthen the resilience of these important ecosystems.



Overview – the City of Hamburg's links to SDG 14

Qualitative aspects:

- I Strengthening the sustainable management of coasts, seas and oceans

Indicators:

- I Phosphorus in flowing waters

Photo 53: Pedal boat on the Alster © Mediaserver Hamburg



3.14.1 Introduction – implementation of SDG 14 in Hamburg

Hamburg wishes to work together with Germany's coastal states and the federal government in implementing the Marine Strategy Framework Directive to ensure a good environmental status of the German North Sea. The city is actively working to ensure that the biodiversity of the North Sea is preserved and promoted, and that the commercial use of fish and shellfish is made sustainable. Implementation of the European Water Framework Directive (WFD) for the Elbe river basin will also reduce the input of nutrients and pollutants into coastal waters and thus into the North Sea.

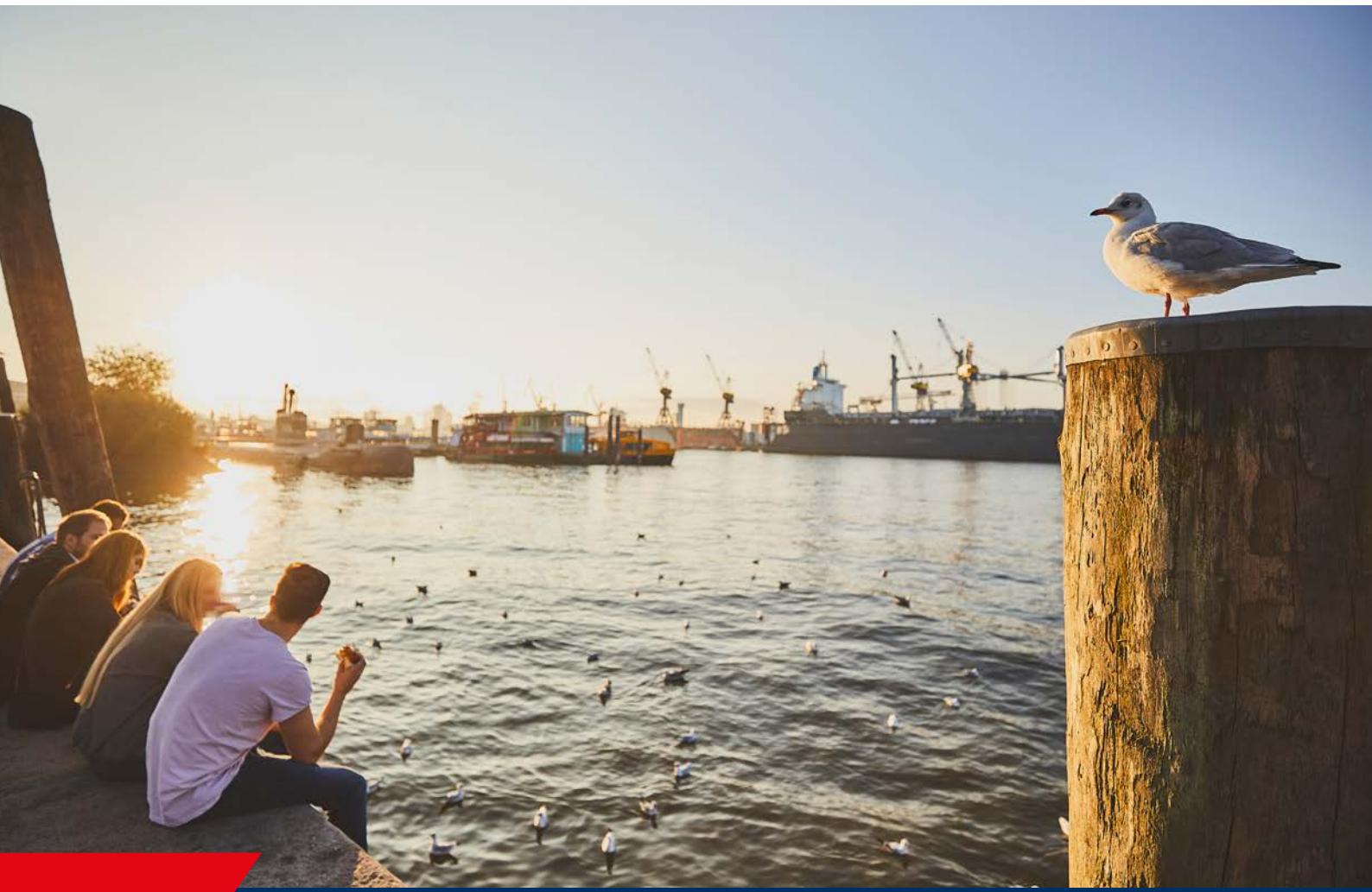
To extend Germany's leading international position in marine research and contribute to research into global climate change, in 2019 the Federal Ministry of Education and Research and the northern German states founded the German Alliance for Marine Research. The Association aims to strengthen cooperation between non-university marine research institutions and universities in the participating countries in thematic areas of national and international importance.

Marine research traditionally enjoys a high reputation in Hamburg and is also at home at numerous institutions. The subject area is an integral part of the Cluster of Excellence for Climate Research at the University of Hamburg, at the Max Planck Institute for Meteorology and at the Control Centre for German Research Ships. These institutions have an excellent scientific reputation and are internationally regarded as guarantors of top-level marine research. In Hamburg, the Ministry for the Environment, Climate, Energy and Agriculture is the lead ministry for "Life under water".

In addition to the qualitative measures, the City of Hamburg also measures its contribution to SDG 14 on the basis of phosphorus values in watercourses, among other things. Hamburg thus follows the rec-

ommendations of the study "SDG Indicators for Municipalities", which was initiated by the Association of German Cities and published by the Bertelsmann Stiftung. These indicators are also relevant to many other German municipalities, and thus enable comparability.

Photo 54: Sunday morning fish market © Mediaserver Hamburg / ThisIsJulia Photography



3.14.2 Strengthening the sustainable management of coasts, seas and oceans

To extend Germany's leading international position in marine research and contribute to research into global climate change, in 2019 the Federal Ministry of Education and Research, and the northern German states the Free Hanseatic City of Bremen, the Free and Hanseatic City of Hamburg, Mecklenburg-Western Pomerania, Lower Saxony and Schleswig-Holstein founded the ***German Alliance for Marine Research (DAM)***,⁷⁸ initially until 31 December 2025. On 17 October 2019, a decision was taken to manage the Alliance in the legal form of a registered association. As stipulated in the administrative agreement, the DAM serves to strengthen cooperation between the non-university research institutions of marine research and the universities of the participating states in thematic fields of national and international importance. The existing structures of the science system are to be supplemented by overarching networking and cooperation between the universities and the research institutions involved in marine research, and by focusing on the effective transfer of research results. A total of 13 marine research institutions have joined forces in the DAM, which aims to support the sustainable management of oceans and seas through cutting-edge research. This makes it one of the world's largest marine research alliances. Through the German Alliance for Marine Research, Hamburg has participated in the research missions "Conservation and sustainable management of marine areas" and "Marine carbon sinks as a pathway to decarbonisation".

3.14.3 Indicators



Phosphorus in watercourses⁷⁹

This indicator shows the percentage of the monitoring sites which show that concentrations of phosphorus in flowing waters comply with the guide values for good ecological status that are typical for those water bodies. (Source: Ministry for the Environment, Climate, Energy and Agriculture, Institute for Hygiene and Environment (HU))

Implementation of the European Water Framework Directive (WFD) for the Elbe river basin will reduce the input of nutrients and pollutants (such as phosphorus) into coastal waters and thus into the North Sea. The final objective of the WFD is to achieve the elimination of priority hazardous substances, and help achieve concentrations in the marine environment that are close to background levels for naturally occurring substances. Therefore, the indicator phosphorus in flowing waters is listed for both SDG 6 and SDG 14. For this indicator, the monitoring data of annually measured monitoring sites near the estuary of 18 water bodies are used. Particularly due to diffuse inputs, such as via rainwater, the guide values for good ecological status for phosphorus in water courses cannot be met at some of these monitoring sites in Hamburg. As part of the RainInfrastructureAdaptation (RISA) project, near-natural,



decentralised rainwater management and rainwater treatment are being promoted throughout Hamburg. One result of this is that the material inputs into water bodies via rainwater can be reduced. The diffuse inputs will also be reduced through the further development of near-natural riparian buffers and other accompanying measures.

⁷⁹ see also chapter on SDG 6



3.15 SDG 15 – Life on Land

The **Sustainable Development Goal „Life on land“** calls on the world to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Healthy ecosystems and their biodiversity are a source of food, water, medicines, housing and other material goods. They also provide ecosystem services such as air and water purification. Furthermore, the conservation of diverse biological life on land is also a normative task for humanity. SDG 15 includes numerous target to protect, restore and sustainably manage ecosystems. Improvements are to be achieved with regard to desertification, soil quality, deforestation, species extinction, poaching and trafficking of protected species, and the management of invasive species. Terrestrial and inland freshwater and mountain ecosystems are to be conserved and restored. Ecosystem and diversity values are to be integrated into political programmes and strategies. Countries of the Global South should be able to benefit from the use of diverse genetic

resources and be given special incentives to conserve forests.

SDG 15 has multiple links to other SDGs. Sustainable agriculture (SDG 2) contributes to biodiversity. Protection soil resources supports the achievement of SDG 6 (Clean water and sanitation), as soils filter and purify water on its way underground and thus support groundwater recharge. Soil protection is linked to the fight against climate change and its impacts (SDG 13), as intact soils can store large amounts of CO₂. The sustainable management of forests, which is addressed in SDG 15, can also contribute to the storage of CO₂ and thus have an impact on SDG 13. Furthermore, intact soils counteract summer heat stress through water storage and evaporation, and can mitigate runoff peaks during heavy rainfall. This is particularly important in cities (SDG 11). Likewise, green space planning in cities (SDG 11) is linked to biodiversity.

Municipalities thus play an important role in the protection of biodiversity. In Germany, in addition to the traditional protected areas, designation of which is the responsibility of the respective federal states, the areas of national natural

heritage make a significant contribution to the conservation and development of biological diversity. As described, the impairment of natural soil functions in the course of land use by settlement and transport areas leads to reduced rainwater infiltration and groundwater recharge. As

the number of green spaces in urban areas grows, the natural functions of soil can be ensured. In addition to creating more green spaces, measures also include the sustainable management and maintenance of municipal forest areas.

Photo 55: City Park Hamburg © Robert Pietsch





Overview – the City of Hamburg's links to SDG 15

Qualitative aspects:

- | Green spaces
- | Promotion of biodiversity

Indicators:

- | Unfragmented open spaces
- | Nature conservation areas
- | Landscape quality
- | Soil sealing
- | Sustainable forestry

3.15.1 Introduction – implementation of SDG 15 in Hamburg

Hamburg is a city with many green spaces and with a high quality of life. However, the city is not only characterised by a great diversity of habitats for wild plant species and wildlife. It also has a significant proportion of land under nature conservation, with over 37 nature reserves covering a total area of 7,422 hectares – which is equivalent to 9.83 per cent of the total land area. This share is to be further increased to over ten per cent in the future, and expanded by two more nature conservation areas. Institutionally, responsibility for SDG 15 rests with the Ministry for the Environment, Climate, Energy and Agriculture.

Photo 56: Liveable Hamburg Metropolitan Region
© Mediaserver Hamburg / Christian Brandes



However, Hamburg is doing much more for a „sustainable life on land“. For example, in 2016 the Senate already launched a financial instrument that is unique in Germany in 2016 with the introduction of the cent for nature, which creates environmentally sound financial compensation for land take resulting from construction projects.

Further milestones are the large-scale nature conservation project „Naturally Hamburg“ and the adoption of the natural forest structure project. Strengthening the maintenance and development of nature reserves and the so-called Green Network by increasing resources are just as conducive to a sustainable, green Hamburg as the city's green roof strategy.

Since 2011, Hamburg's „Long day of urban nature“ has also emerged as a „Green Asset“, in which more than 100 event organisers participated in 2022 and jointly organised more than 240 events on the theme of the „Miraculous Forest“. The „Hamburg is blooming“ campaign, which was carried out as part of the „Long day of urban nature“, stood out particularly in 2022. In 2023, the „Long day of urban nature“ on

17/18 June 2023 will be themed „Nature Conservation“.

The Senate is implementing SDG 15 in particular through the Agreement for Hamburg's Urban Green Spaces. This includes the following milestones:

- | Increase in nature conservation areas to 10 per cent of the city area (see above)
- | Securing of 23.2 per cent of the city area as a biotope network and 18.9 per cent of it as a landscape conservation area with modernised ordinances
- | Updating of the natural forest structure project

with regard to forest stands that are particularly valuable from a forestry or nature conservation point of view (small forest treasures) and old-growth islands

- | Increase in biotope value throughout Hamburg
- | Increase in the number of habitat types in Hamburg (in accordance with the Habitats Directive) with a good conservation status
- | Improved protection of the Green Network, especially in the inner city
- | Conclusion of an Agreement for Hamburg's Urban Green Spaces
- | Improvement of the protection of biotopes on

municipal land pursuant to Section 30 BNatSchG when leasing or maintaining these areas

- | Development of a programme on „Increasing biodiversity in developed areas“.

3.15.2 Green spaces

Since 1997, the Landscape Programme for the City of Hamburg has made a significant contribution to Hamburg remaining a green metropolis to this day. One of the aims of the Hamburg Landscape Programme is to link parks, playgrounds, sports areas, allotment gardens and cemeteries through wide green corridors or narrower green routes to form a green network (**Hamburg Green Network**).⁸⁰ This should make it possible to move around undisturbed by road traffic on footpaths and cycle paths in the greenery within the city, and out into the open countryside on the outskirts of the city. The first and second green rings, along with the 12 landscape axes, form the basic framework for the Green Network. The first green ring runs along the edge of the city centre on the former *Wallring* at a distance of about one kilometre around the city hall. The second green ring is about eight to ten kilometres from the town hall and connects the landscape axes. It runs along the edge of the densely populated city via large parks and green spaces, wider green corridors



⁸⁰ <https://www.hamburg.de/gruenes-netz/>

green route with an attractive strip of parkland between the Alster

- Bille - Elbe, see paper 21/20049.

Participatory planning formats as well as a wide range of information and communication offerings make a continuous contribution to public awareness of the green network.

The Agreement for Hamburg's Urban Green Spaces stipulates that inner city green space (up to and including the second green ring) will not be built on in the future. Where building nevertheless takes place on smaller areas, green losses are to be offset through compensation measures. Around 8 million euros per year are available for this purpose.

Back in 2014, the city launched the ***Hamburg Green Roof Strategy***.⁸¹ This made the Hamburg the first major German city to intensively promote the greening of roofs. The target is to green at least 70 per cent of both new buildings and roofs suitable for renovation. Until 31 December 2024, the Environmental Ministry will fund the voluntary greening of roofs and facades to the tune of 3.5 million euros. Property owners can receive up to 50 per cent of the costs as grants, which they do not have to repay. In dialogue, interested parties can discuss the benefits of green roofs with planners and members of public authorities. Furthermore, legal instruments are also used to promote the greening of buildings in Hamburg. With green roofs, Hamburg is also adapting to the impacts of climate change. Green roofs cool and humidify the air. This creates a pleasant climate in the city and in the building. They improve water management in the neighbourhood by retaining rainwater and allowing it to evaporate. Especially on near-natural extensive roofs, bees, birds, beetles or butterflies, for example, are given new places to retreat in the inner city. The green roof strategy as a whole is part of sustainable urban development. The target is to issue 10,000

⁸¹ <https://www.hamburg.de/gruendach-hamburg/4364586/gruen-dachstrategie-hamburg/>

3.15.4 Indicators

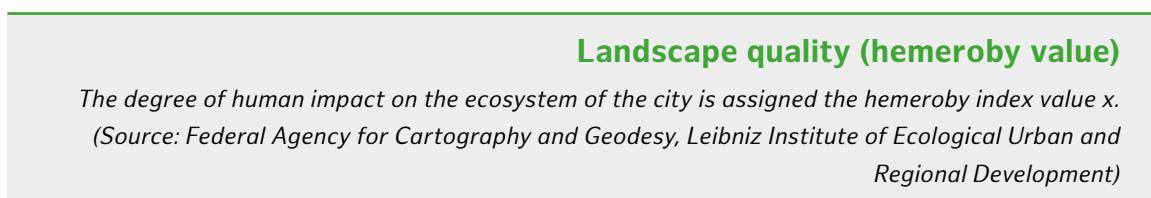
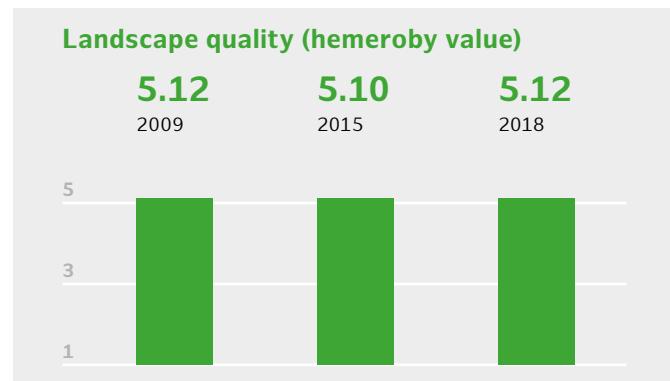
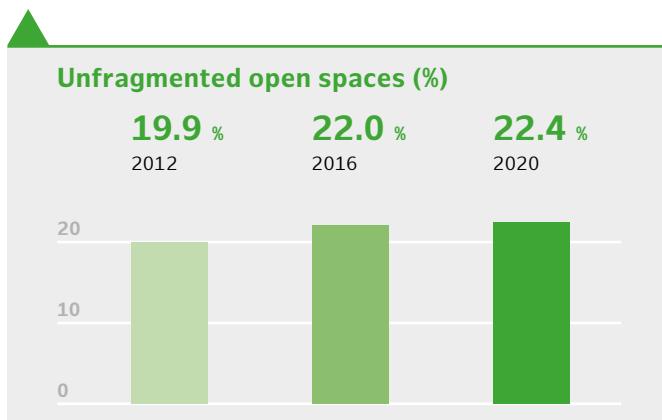


Unfragmented open spaces (%)

x per cent of the open spaces are not dissected by routes of the interurban transport network.
(Sources: Federal Agency for Cartography and Geodesy, Leibniz Institute of Ecological Urban and Regional Development)

The fragmentation of habitats has a major impact on biodiversity loss. Animal and plant species are separated from each other, and the remaining areas are often too small for the continuation of a species.

Accordingly, regions with low landscape fragmentation generally have the highest biological diversity. In Hamburg, the most recent figure for the proportion of unfragmented open spaces (2020) was 22.4 per cent.



Landscape quality is measured with the help of various parameters (e.g. the closeness of the vegetation to potential natural vegetation (PNV), the degree of soil sealing and compaction, the degree of change in humus form and microclimate, the use of fertilisers and pesticides, as well as water quality and the ob-

struction of water bodies). In 2018 the degree of anthropogenic impact on the ecosystem in Hamburg was assigned a value of 5.12 of the hemeroby index (1 = almost no human impacts, 7 = excessively strong human impacts).



Nature conservation areas (%)

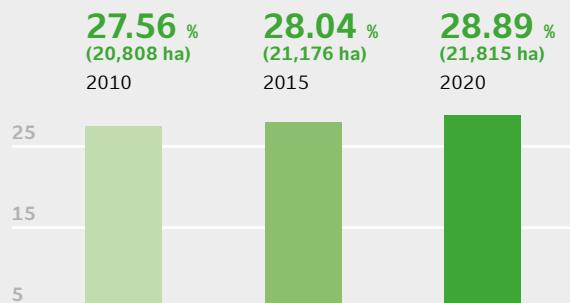
x per cent of the total city area comprises nature reserves (landscape and nature conservation areas).
(Source: Ministry for the Environment, Climate, Energy and Agriculture (BUKEA), Office for Nature Conservation, Nature Conservation Department (N3))

There is a need for sufficiently large nature reserves in cities where nature can unfold without burdensome human intervention. They contribute significantly to the preservation of biological diversity, and are con-

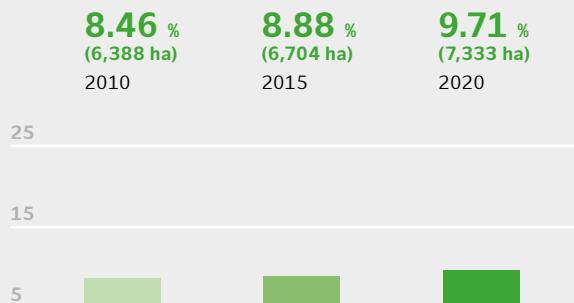
sidered important retreats and recreational areas for people. Hamburg's so-called Natura 2000 areas are fully protected as nature and landscape conservation areas.

Nature conservation areas (%)

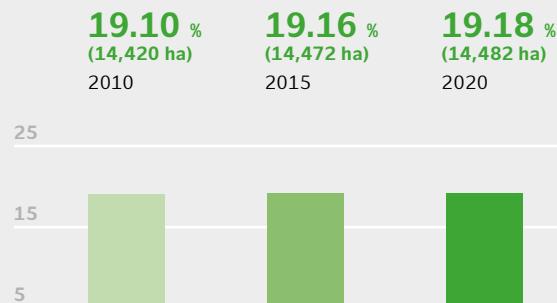
Total



Nature conservation areas



Landscape conservation area



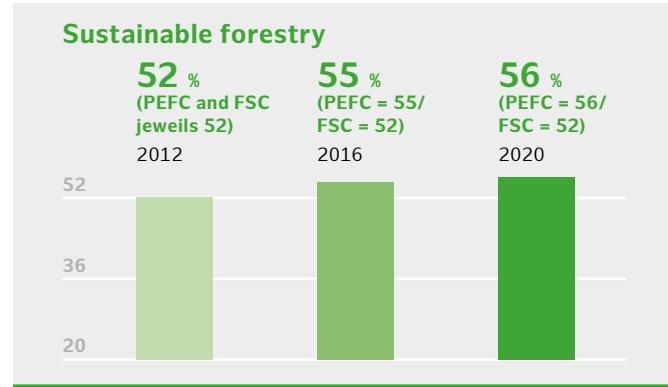


Soil sealing (%)

The indicator describes the extent of soil sealing in Hamburg.
(Source: <https://www.hamburg.de/versiegelung/>)

The sealing map of Hamburg shows the different degrees of sealing of the city area as a result of use and building development. The database is the current biotope map of the City of Hamburg. The age of the data collected on the biotope types varies from region to region, and is between two and eight years. The numerous biotope types were assigned to ten sealing classes, which are graded in increments of 10 per cent. This sealing assessment refers to the

above-mentioned data collection period. Construction projects in the recent past will only be reflected in future biotope mapping and sealing evaluations based on that. The 2021 evaluation shows that the trend towards a decrease in less sealed areas and an increase in areas with a high degree of sealing continues. The total sealed area in the city area amounts to 39 per cent for the evaluated period.



x per cent of the total forest area is certified forest according to PEFC or FSC. (Source: Ministry for the Environment, Climate, Energy and Agriculture (BUKEA), Office for Agriculture, Soil Protection and Brownfields; Agricultural Department, Division A13)



Forest areas certified to criteria of the Programme for the Endorsement of Forest Certification (PEFC) or Forest Stewardship Council (FSC) includes areas in which uniform standards are applied to maintain and improve the economic, environmental and social

functions of forest operations. During the period under review from 2010 to 2020, certified forest area as a percentage of the total forest area increased slightly. The value in 2020 was 56 per cent.



3.16 SDG 16 – Peace, Justice and Strong Institutions

The **Sustainable Development Goal “Peace, justice and strong institutions”** calls on the world to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

SDG 16 includes targets on peace, security and good governance, including transparency, accountability, the rule of law and political participation. In addition to significantly reducing all forms of violence, key demands include ending the abuse and exploitation of children, combatting illicit financial and arms flows and organised crime, and significantly reducing corruption and bribery. Effective and accountable institutions should be built at all levels and decision-making should be responsive, inclusive, participatory and representative. The participation of developing countries in global governance institutions should be strengthened.

Trust in the existing institutions and the democratisation of society for sustainable development

is strengthened by the public participation of citizens, associations and organisations in political decision-making processes, as well as the strengthening of regulatory systems and a reliable and functioning state. Municipalities have a great responsibility in this regard. The implementation of SDG 16 at the local level can be supported, among other things, by providing opportunities for citizens to participate. Incentives to actively participate in shaping social life within a municipality are also provided by promoting social engagement. In addition to such a form of participation, transparent and efficient administrations and finances help to achieve the goal of creating accountable institutions. Efficient and accountable institutions also create security for a peaceful society that enables the participation of all groups.



Overview – the City of Hamburg's links to SDG 16

Qualitative aspects:

- | Citizen participation
- | Sustainability in budgeting
- | Anti-corruption

Indicators:

- | Participation in elections to the German Bundestag
- | Participation in elections to the Hamburg Parliament
- | Participation in district assembly elections
- | Anti-corruption
- | Balance of income and expenditure in the core budget
- | Total expenditure in the financial year (core administration)
- | Tax revenues
- | Criminal offences

3.16.1 Introduction – implementation of SDG 16 in Hamburg

The City of Hamburg has long felt connected to the content of SDG 16, both with regard to public participation and the prevention of corruption and with regard to the promotion of a balanced budget and the anchoring of sustainability in the budgetary system. In the 2023 financial report, the individual SDGs were assigned to the guiding principles of the strategic priorities and areas of action.

Citizen participation in Hamburg began in the late 1990s. In 1996, popular legislation was enshrined in the Hamburg Constitution, and in 1997, direct democracy was introduced at the district level with the first referendum. Over the next few years, all forms of referendum became binding for the Hamburg Parliament and the Senate. The electoral law was also fundamentally changed and modernised. The most recent development in this context is the new unit for citizen participation and community centres, which is attached to the Ministry for Science, Research, Equality and Districts (BWFGB). Its focus is on the coordination, networking and quality development of citizen participation.

During the COVID-19 pandemic, when many traditional face-to-face formats could no longer take place, the Hamburg district offices succeeded in developing new citizen participation platforms. They also succeeded in digitalising tried and tested formats. Thus, in this case the pandemic acted as a driver of both further development of citizen participation, and improvements in the IT structure of digital participation formats.

Sustainability in budgeting is a key component for strong institutions and an efficient and transparent administration. With an annual budget volume of approximately 18 billion euros, the City of Hamburg has a significant amount of money at its disposal for the administration to carry out its tasks. In order to make the budget sustainable, Hamburg has made many

efforts in the past. For example, intergenerational budget management has been guaranteed since 2015. Since 2019, an SDG indicator table has been published in the city's Annual Report, and since 2020, reports on the sustainability strategies of the state finance ministries have been prepared. In 2021, sustainability was finally anchored in budget law.

Hamburg is consistently pursuing this path with its current budget and financial plans. It has thus laid the financial foundations for further positive and sustainable development and, at the same time, has been careful to ensure that financial obligations entered into during the COVID-19 pandemic are met (while at the same time complying with the debt brake to ensure intergenerational justice). For 2024, a structurally balanced budget will also be presented for the first time. In order to promote the impact orientation of budget management, the Act on the Further Development of Digital Financial Management also added section 1 to the State Budget Code: the principles of impact orientation - especially also with regard to gender equality and the principle of social, economic and ecological sustainability - are to be taken into account in the preparation and implementation of the budget. To make budget management more impact-oriented, with the Act on the Further Development of Digital Financial Management (*Gesetz zur Weiterentwicklung des digitalen Finanzmanagements*) Hamburg amended Section 1 of the State Budget Code (*Landeshaushaltssordnung* – LHO), to the effect that the principles of impact orientation – in particular with respect to the goal of gender equality and the principle of environmental, economic and social sustainability – must be complied with in budget preparation and execution.

Preventing corruption is also an important goal for the City of Hamburg. The Central Advisory Office at the Department of Internal Investigations (DIE),

which is attached to the Ministry for Home Affairs and Sport, has therefore been available not only to the administration, but also to all citizens and companies for questions on preventing and fighting corruption, since 1997. It also offers information events on the topic of corruption and supports the Hamburg authorities in implementing corruption resistance measures.

The biggest success stories in the implementation of SDG 16 in the City of Hamburg in recent years include in particular:

- | A Department for Citizen Participation and Community Centres was established.
- | The double-entry system⁸³ has ensured intergenerational budget management since 2015.
- | Sustainability was enshrined in budget law in 2021.
- | An SDG indicator table has been published in the Annual Report of the City of Hamburg since 2019.
- | Since 2020, reports on the sustainability strategies of the federal state ministries of finance have been prepared.

⁸³ The budgetary system of the City of Hamburg is structured according to the rules of the double-entry product budget. This means that the budget is structured according to services in the form of products, product groups, task areas and departmental budgets. The accounting system is based on the principles of double-entry bookkeeping (so-called state double-entry bookkeeping), and thus follows the accounting system that applies to businesspersons. The basis for this is the "Law on the Strategic Realignment of the Budgetary System of the Free and Hanseatic City of Hamburg - SNH Law - SNHG", which in particular revised the State Budget Code. This is based on the Act on the Strategic Realignment of the Budgetary System of the Free and Hanseatic City of Hamburg (*Gesetz zur strategischen Neuausrichtung des Haushaltswesens – SNHG*), which amended in particular the State Budget Code (*Landeshaushaltssordnung* – LHO).

3.16.2 Citizen participation and transparency

Photo 58: © Priscilla Du Preez auf Unsplash



The Senate has set out to make its actions even more transparent: With the Hamburg Transparency Act (HmbTG), the Hamburg administration enables all citizens to access official information, data and documents without having to apply. Furthermore, the City of Hamburg would like to improve its position in the area of citizen participation – in order to give Hamburg citizens better opportunities to put forward their ideas in the future. Against this background a ***contact point for citizen participation*** and community centres was created in the District Administration Office, which deals with participation quality development. The initial foundations for this were laid in 2020 with the ***Citizen Participation Report***.⁸⁴ The report serves as a basis for the conceptualisation and design of the contact point for citizen participation for the coming years. It provides an overview of the status quo of citizen participation in Hamburg and of the existing instruments of participation in the city. Based on that, it analyses the strengths and weaknesses of citizen participation in Hamburg. This is designed to serve as the foundation for further development of participation-related infrastructure and instruments over the coming decade. With this approach, the report complements the brochure "Shaping Hamburg Together", which was published in 2013 and focuses on the methodology of successful participation. The long-term goal is to simplify participation processes within the administration and make them more transparent for citizens. This also includes clear communication that discloses from the outset the aspects and open questions for which joint solutions can still be worked out in the respective process. In Hamburg's districts, easy-to-access citizen participation is practised on a wide range of topics together with local activists, e.g. as part of "local

⁸⁴ <https://www.hamburg.de/bwfgb/15261330/bericht-buergerinnenbeteiligung/>

partnerships for democracy". It is also being continuously developed.

With a ***training offensive for employees of the district offices on the topic of citizen participation*** launched in 2023, the City of Hamburg intends to further promote participation. In the training series "Crash course on citizen participation – law, attitude, goal, strategy, method" and "Participation of children and young people – in youth work and in district planning", the Ministry for Science, Research, Equality and Districts, in cooperation with the Social Work and Youth Work Training Centre, is supporting the Hamburg district offices in further developing the quality of participatory procedures. Overall, the support covers the areas of method development, counselling and further training.

Since 2022, Hamburg has been a member of the international ***Open Government Partnership (OGP)***⁸⁵ initiative. The OGP is committed to the promotion of open government. Through the implementation of national action plans, a wide variety of projects on transparency, citizen participation and the use of new technologies to improve government work are promoted and regularly evaluated. Currently (as of 2022), 78 countries are participating in the OGP. Furthermore, for some years now, the OGP has made it possible for sub-national or sub-federal administrative levels to participate directly and independently in a dedicated "local programme". Hamburg and Detmold are the German pioneers in this programme. The City of Hamburg has applied together with the Körber Foundation, and wishes to set up a programme to strengthen so-called data-driven governance and data-based citizen participation. For this purpose the Hamburg administration is building a data governance system for the city. This is designed to make public sector data, which is already openly available, even easier to find and use – both for the city's employees and for interested citizens. The Hamburg administration would like to share, use and (very significantly) protect the city's data. This is a new topic for Hamburg, which is

to be pursued under the term Public Data Responsibility. A further aim is to enable equal access to the various digital services for citizens.



⁸⁵ <https://www.opengovpartnership.org/members/hamburg-germany/>

3.16.3 Sustainability in budgeting

The City of Hamburg pursues various measures to anchor sustainability in the budget. For example, ***inter-generational budget management*** has been guaranteed since 2015. For 2024, a structurally balanced double-entry budget will be presented for the first time. The gradual reduction of the deficit introduced in 2015 will thus be completed, and the decades-long depletion of public assets stopped. Hamburg is the only federal state in Germany to pursue and successfully implement such an ambitious goal.

Since 2019, Hamburg has reported annually on the 17 Sustainable Development Goals (SDGs) in an ***SDG indicator table*** in the city's annual report. The results are also published in the interactive digital format ("geschaeftsbericht.digital"). With its set of indicators for the SDGs, the city is resolutely implementing the adopted roadmap for "Implementation of the United Nations Sustainable Development Goals in Hamburg". For the 2023/2024 double budget, Hamburg has identified a set of guiding principles for drafting and managing the budget budgeting and management of the budget. The indicators give an impression of whether the city is succeeding in achieving its goals in the various areas of action, and what progress has been made year-on-year. The development process is also accompanied by civil society – the Hamburg Sustainability Forum. This brings together numerous actors and casts an "outside eye" on the city's actions.

Sustainability was enshrined in law in 2021. To promote the impactfulness of budget management, the City of Hamburg amended the State Budget Code (*Landeshaushaltssordnung* – LHO) with the Act on the Further Development of Digital Financial Management (*Gesetz zur Weiterentwicklung des digitalen Finanzmanagements*), to the effect that the principles of impact orientation – in particular taking into account the goal of actual gender equality as well as the principle of environmental, economic and social sustainability – must be complied with in budget preparation and execution (Section 1 LHO). The principle of sustain-

Photo 59: View of the Binnenalster
© Mediaserver Hamburg / Andreas Vallbracht



ability complements the goal of intergenerational justice already pursued with the strategic realignment of the budget system. With the mandate now anchored in the LHO, the Senate and the Parliament are obliged to use suitable instruments and methods of impact orientation in the various phases of the budget cycle.

Hamburg is consistently continuing along this path of implementing **sustainability in budgeting** with its current budget and financial plans. With the 2023/2024 budget and the financial plans to 2026, the financial foundations for the further development of Hamburg as a city of the future and a sustainable metropolis have been created for these years, with a view to achieving three things: (i) protect the natural resource base on which life depends; (ii) satisfy social needs in the long term, and (iii) be able to maintain financial resources in the long term. To also remain able in the future to uphold the principle of sustainability as part of the budgetary system of the federal states, it will be necessary to master existing and future challenges. A sustainable metropolis must therefore possess urban resilience. This is the ability of a city to maintain its social, economic and environmental stability even in an extraordinary emergency, and to recover quickly from negative impacts. The budget and financial plans for the years 2022 to 2026 must be geared towards an ability to deliver financial policy responses to current crises such as the COVID-19 crisis, the Ukraine crisis or the climate crisis, and to manage risks accordingly. The aim is to secure the well-being of the citizens, as well as the natural resource base on which life depends, in the long term. Currently, repaying the obligations entered into to combat the COVID-19 pandemic, while at the same time complying with the debt brake, represents an important element for the intergenerationally fair financial and budgetary policy of the federal states.

Since 2020, the federal states, led by Hamburg, have submitted a report every two years to the Conference of Finance Ministers on the "Sustainability Strategies of the Finance Ministries and Administrations of the Federal States". This report also examines the issue of sustainability in the budgetary system, which in-

cludes the areas of budgetary law/state constitution, financial planning, budget preparation, budget implementation, reporting on the budget during the year and accounting.



3.16.4 Anti-corruption

The **Central Advisory Office for Anti-Corruption**⁸⁶ at the Department of Internal Investigations (DIE) has been available to all citizens, public employees and companies for questions regarding corruption prevention and the fight against corruption since 1997. It offers general and specific information events on corruption prevention, at which it transfers knowledge on forms of corruption, corruption prevention and anti-corruption in general in Hamburg. At the same time, it supports the Hamburg authorities in implementing corruption resistance measures. Information events are also regularly offered as part of official training and further education.

Photo 60: On the road in Hamburg
© Mediaserver Hamburg / Christian Brandes



Basic and advanced courses on the topic of "Corruption - what's that got to do with me?" and on "Corruption in areas particularly susceptible to it and in procurement" are offered to Hamburg's ministries and municipal companies. This offer is also aimed at supervisors as further training.

The events available to companies, firms and associations includes lectures on the topics "corruption – exit strategies", "corruption – working with commercial enterprises" and so-called "compliance training". Target group-specific training is also available, as is support in the creation of customised corruption prevention measures.

86 <https://www.die.hamburg/korruptionspraevention>

3.16.5 Indicators



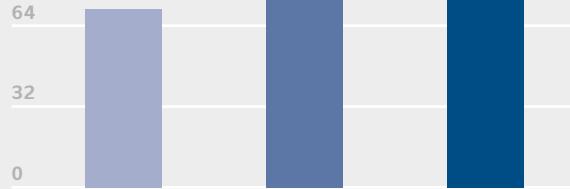
Participation in elections to the German Bundestag

x per cent of eligible voters in the state vote. (Source: Statistical Office North)

By voting in elections to the Bundestag, citizens determine the political composition of parliament and the MPs. As well as electing the Federal Chancellor and overseeing the Federal Government, one of the main tasks of the Bundestag is to legislate. The consequences of political decisions are therefore felt by all citizens in Germany. A high voter turnout strengthens democratic society and the legitimacy of popular representation. Voter turnout in Hamburg has risen steadily in the period under review from 2013 to 2021. In 2021 it reached 77.8.

Participation in elections to the German Bundestag

70.3 %
2013 **76.0 %**
2017 **77.8 %**
2021



Participation in elections to the Hamburg Parliament

2011	2015	2020
57.3 %	56.5 %	63.0 %

*x per cent of eligible voters in the state vote.
(Source: Statistical Office North)*

By voting in elections to the Hamburg Parliament, citizens determine the composition of the state parliament. The tasks of the parliament include legislation, oversight of the Senate and the election of the First Mayor. Because state and municipal responsibilities coincide, the consequences of political decisions are felt particularly keenly by citizens, and at no

other level are the opportunities for citizens to have an impact as great. A high voter turnout strengthens democratic society and the legitimacy of popular representation at state level. During the period under review, proportion of eligible voters in the state who voted rose to 63 per cent (2020).



Participation in district assembly elections

2011	2014	2019
57.3 %	31.1 %	46.8 %

x per cent of eligible voters in the state vote.

(Source: Statistical Office North)

By participating in the elections to the district assemblies, German and EU citizens elect their representatives at the local level. Through the district assembly, citizens participate in the affairs of the district and in the tasks of the district office. They can thus exert a certain amount of influence on what happens in their own district and in their immediate neighbourhood through their district representatives. Citizens are therefore directly affected by the decisions of the

district assemblies in their local setting. Due to the inclusion of non-German EU citizens, voter turnout conveys legitimacy and local democratisation beyond the German population. The background to the high voter turnout in the 2011 election year was the concurrent election to the Hamburg Parliament, in which, as experience shows, a higher number of eligible voters take part.



Anti-corruption

The indicator is measured by the number of information events on behavioural prevention for Hamburg Ministries, municipal enterprises, companies, businesses and associations, and in the context of official education and training. (Source: Central Advisory Office for Anti-Corruption of the Department for Internal Investigations (DIE))

The Central Advisory Office for Anti-Corruption at the Department of Internal Investigations (DIE) offers general and specific information events on corruption prevention, in which it transfers knowledge on forms of corruption, corruption prevention and the general fight against corruption in Hamburg. The number of presentations on behavioural prevention for Hamburg Ministries, municipal enterprises, companies, businesses and associations, and in the context of official training and further education, has been systematically recorded since 2017. Here, the trend in case numbers in the past few years has been affected by the restrictions caused by the COVID-19 pandemic. The figures for 2020 are due to the start of the pandemic and the associated cancellation of a large number of in-person training events. The transition to online presentations was gradual. Even in

Anti-corruption

178 Num.	34 Num.	128 Num.
2017	2020	2022



2022, the number of in-person lectures had not yet returned to the pre-pandemic level. Although the number of lectures has declined in direct comparison with 2017, a larger group of people was reached in 2022 due to the pandemic-related switch from face-to-face to online training.



Balance of income and expenditure in the core budget (€ million)

2010	2015	2020
-883.9	223.3	-631.3

*The balance of adjusted income and expenditure in the core budget (cameral) amounts to x million euros.
(Source: Hamburg Annual Report)*

The balance of income and expenditure provides information on the financial capacity of a city to autonomously shape the local economic, social and environmental frameworks. Basically, a positive trend has

been recorded in Hamburg since the financial crisis, interrupted only by the changes during the COVID-19 pandemic in 2020 and 2021. A positive trend is expected again for 2022.



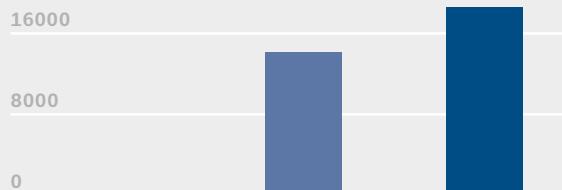
Total expenditure in the financial year (core administration)

The sum total of expenditure incurred in the financial year (administrative result and financial result) according to the statement of operating results, adjusted for transactions pursuant to Art. 40 of the Act on the Strategic Realignment of the Budgetary System of the Free and Hanseatic City of Hamburg (SNHG). (Source: Annual Report of the City of Hamburg)

Expenditure rose continuously due to normal effects, including price increases and salary increases. Recently, however, total income exceeded total expenses, so that surpluses could be achieved in the statement of operating results.

Total expenditure in the financial year (core administration) (Mio. €)

n/a	14,143	18,593
2010	2015	2020





Tax revenues (€ per inhabitant)

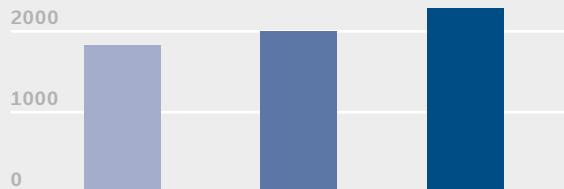
The average annual tax revenues of a municipality over the last four years amount to x euros per inhabitant. (Source: Statistical offices of the federal states)

Fiscal strength crucially determines the financial scope of a city, and gives some indication of its economic strength or structural weakness. However, it should be noted that tax revenues do not include any other revenues such as fees, charges, investment allocations at the federal level and general key allocations within the scope of the municipal fiscal equalisation systems. In Hamburg, there has been a positive trend in tax revenue per inhabitant over time. Revenue thus rose from 1,821.11 euros in 2011 to 2,271.35 euros in 2020.

Tax revenues (€ per inhabitant)

1,821.11 1,997.12 2,271.35

2011 2015 2020



Criminal offences (crimes per 1,000 inhabitants)

x criminal offences per 1,000 inhabitants are known to the police.

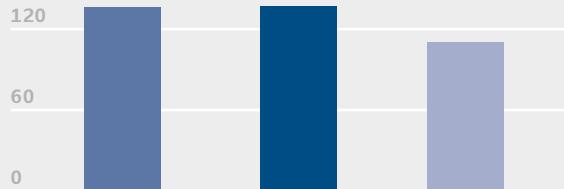
(Source: Sources: Statistical offices of the federal states.)

This indicator places the number of offences reported to the police within the municipality in relation to the number of inhabitants. This provides information on public and general safety. The number of registered crimes in Hamburg has been declining over the course of time. In 2020, the value was 109.87 recorded crimes per 1,000 inhabitants.

Criminal offences (crimes per 1,000 inhabitants)

136.0 136.39 109.87

2013 2015 2020





3.17 SDG 17 – Partnerships for the Goals

The **Sustainable Development Goal “Partnerships for the goals”** aims to strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development. SDG 17 focuses on cooperation between states.

SDG 17 formulates a large number of targets in the areas of financing the countries of the Global South through development aid and other financial flows, technology transfer to the Global South, more advantages for countries of the Global South in the international trade system, and the strengthening of political institutions in favour of sustainable development. The special role of the so-called least developed countries is highlighted in each case. Furthermore, the importance of multi-stakeholder partnerships with public, private and civil society partners is emphasised. SDG 17 also formulates targets for data collection, monitoring and accountability for achieving the goals. This also explicitly includes developing measures of progress for sustainable development that complement gross domestic product.

And while implementation of the 2030 Agenda is a central concern of many municipalities, it cannot

be realised as a global project. In particular, the countries of the Global North should support the countries of the Global South in capacity building for sustainable development, provide additional financial resources for this purpose and establish investment support systems. To strengthen implementation efforts, partnerships, cooperation arrangements and networks, e.g. project partnerships with other municipalities or partners from civil society, are increasingly being agreed upon. These arrangements support the development of partner capacities to implement the desired transformation processes. Action steps such as a targeted increase in fair trade, e.g. as part of Fairtrade Town certification, are measures of municipal development policy and, with the limited resources of a municipality, represent a promotion of global justice.



Overview – the City of Hamburg's links to SDG 17

Qualitative aspects:

- | Promoting global justice – engagement for Fair Trade
- | Partnerships with municipalities in the Global South

Indicators:

- | Fairtrade Town (number of previous awards/ title renewals)
- | Fairtrade Schools
- | Partnerships in countries of the Global South
- | Other Official Development Assistance (ODA) provided by Hamburg (excluding costs of university places)
- | Costs of university places for students from countries of the Global South in Hamburg

3.17.1 Introduction – implementation of SDG 17 in Hamburg

Concerning SDG 17, Hamburg combines the opportunities it has as both a state and a municipality in the field of development policy. Partnerships for the goals focus on North-South city-to-city partnerships as a form of action. Development cooperation is assigned to international cooperation as a cross-cutting task, and is coordinated by the Senate Chancellery. Operationally, all ministries, public enterprises, institutions and universities can participate in their own specialised ways. In particular, this involves "capacity building". Important areas of application are health care (hospital partnerships), fire and rescue services, waste management, water and wastewater, climate change mitigation and adaptation, and urban planning. Furthermore, the city provides financial support (ODA) for North-South projects of civil society actors, and for research relevant to development cooperation (especially in tropical medicine). The Senate Chancellery is also responsible for promoting education for sustainable development and public outreach work with a focus on fair trade.

Photo 61: © Niclas Illg auf Unsplash



The biggest success stories in the implementation of SDG 17 in the City of Hamburg in recent years include in particular:

- | Certification of the City of Hamburg as a Fairtrade Town
- | Establishment of a city-to-city partnership with León (Nicaragua)
- | Establishment of a city-to-city partnership/municipal climate partnership with Dar es Salaam (Tanzania)

3.17.2 Promoting global justice – engagement for Fair Trade

Hamburg is committed to promoting global justice as a **Fairtrade Town**.⁸⁷ The Fairtrade Town of Hamburg project focal point was created in October 2010, and has since been carrying out activities with various co-operation partners to raise awareness of fair trade. The City of Hamburg first received the title of Fairtrade Town in May 2011, awarded by Fairtrade Germany. Overall, the Fairtrade Town campaign serves to promote fair, sustainable engagement in the municipality – which means the City of Hamburg is fulfilling its global responsibility. Fairtrade Towns promote fair trade at the municipal level, and are the result of a successful networking of actors from civil society, politics and business who work together locally to promote fair trade. Fair trade creates awareness of fair production conditions and promotes socially and environmentally friendly production and trade structures. In Germany, the international Fairtrade Towns campaign is supported by the Fairtrade Deutschland e. V. association. Worldwide, there are over 2,000 Fairtrade Towns in more than 36 countries. In Germany, more than 800 municipalities are already certified as Fairtrade Towns and form a joint network.

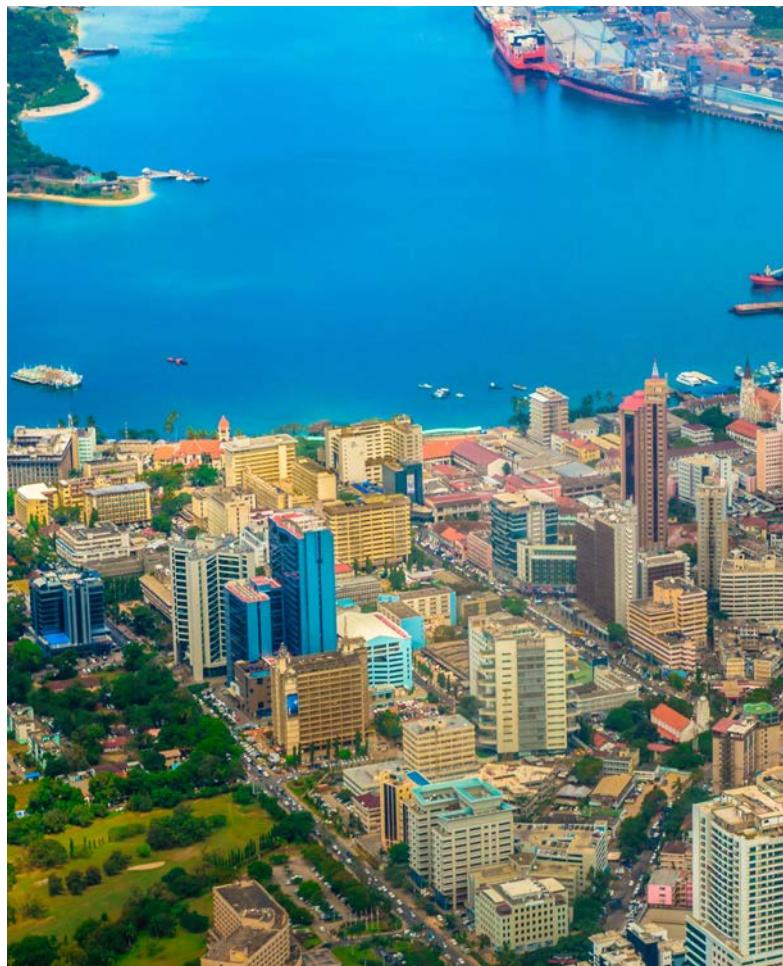
To become a Fairtrade Town, a municipality has to fulfil various criteria concerning the commitment to fair trade at different levels. In Hamburg, this concerns the establishment of a steering committee comprising representatives of civil society, business, politics, university and church as well as the registration of approx. 200 shops and 100 catering businesses that offer fair trade products. Furthermore, the Fairtrade City Hamburg project focal point will draw attention to this commitment through public outreach work. Another criterion is a council resolution on the exclusive purchase of fair trade coffee at the city hall. The public outreach criterion is met by the project coordinator organising regular events to involve civil society. At least ten schools, parishes

87 <https://www.fairtradestadt-hamburg.de/>

and associations should participate. Once all criteria have been met, the title of Fairtrade Town is awarded for two years. At the end of the two years, the title can be renewed through recertification, if the city demonstrates continued compliance with the criteria. Hamburg has already succeeded in renewing its certification four times in a row in 2013, 2017, 2019 and 2021. Overall, a growing number of companies, associations (e.g. sports clubs) and public institutions are involved in Fairtrade Town Hamburg. Since 2021, the activities have been bundled and their external impact strengthened through the campaign "Hamburg, make yourself fair!"

The City of Hamburg also participates annually in the nationwide campaign **Fair Week**.⁸⁸ During a Fair Week Hamburg a wide range of events and campaigns are held. The Fair Week is the largest action week for Fair Trade in Germany. The aim is to make the principles, goals and diversity of the Fair Trade movement accessible to a broad, interested public and to invite them to participate. The Fair Trade Week is organised by the Fair Trade Forum in cooperation with Fairtrade Germany and the World Shop Association. Every year, around 2,500 actions are planned and implemented by local groups and organisations. Each year, Fair Week focuses on a specific theme. In 2023, for example, the theme was "climate justice". Since 2011, the City of Hamburg has been bringing together the events of world shops, action groups, church groups, private companies, schools and gastronomic businesses as part of Fair Week Hamburg. It also organises the kick-off event as well as other events "of its own". As part of the Fair Week Hamburg, the **Hamburg Public Library** regularly puts the topic of "Fair and sustainably produced clothing" at the centre of its events. For example, there are "fabric and clothes swapping parties", sewing and upcycling workshops and a big fashion show by Hamburg fashion labels presenting sustainable fashion. Furthermore, the topics "fair production of cocoa and chocolate" are also addressed for school groups. A total of 15 to 25 events are scheduled per year.

88 <https://www.fairtradestadt-hamburg.de/mitmachen/faire-woche/>



3.17.3

Partnerships with municipalities in the Global South

Hamburg entered into its first "***Municipal Development Partnership***" with the **municipality of León (Nicaragua)** back in 1989. León is located north-west of the Nicaraguan capital Managua, and is the second largest city in the country with a population of around 150,000. Cooperation focuses on education and training, economic development and poverty reduction, environmental and climate protection, and the promotion of regional tourism. As part of the programme "Partnership Projects for Sustainable Local Development (NAKOPA)" of Engagement Global gGmbH, Hamburg is involved in various long-term projects. One of the particular successes in the area of sustainable development since 1997 has been the systematic installation of house connections to the public sewage pipes in poorer neighbourhoods, in order to improve hygiene conditions. The ongoing projects are financed by the monthly "leftover cent donations" made voluntarily by more than 20,000 employees of the Hamburg administration (active and retired).

Photo 62: View of Dar es Salaam, Tanzania
© Peter Mitchell auf Unsplash



Since 2010, the City of Hamburg has also been ***partnered with Dar es Salaam (Tanzania)***. This partnership with the East African port city is now supported by around 40 individual cooperation arrangements between public and civil society actors. A ***municipal climate partnership*** was also established within this framework in 2012.⁸⁹ Besides climate action, the most important areas of cooperation are urban planning, medical cooperation and the training of Tanzanian firefighters. Furthermore, numerous meetings of schools, youth organisations, church institutions and artist groups take place. The largest project realised so far as part of the municipal climate partnership is the establishment of a composting plant for the green waste of several large markets in Dar es Salaam. Together with other green waste, the organic biowaste

⁸⁹ <https://skew.engagement-global.de/hamburg-dar-es-salaam-tanzania.html>

is processed into compost, thus reducing greenhouse gas emissions. The plant has been in operation since 2021 and can serve as a model beyond Tanzania.

3.17.4 Indicators

17 PARTNERSHIPS
FOR THE GOALS



Fairtrade Town (number of previous awards / title renewals)

The city has already received the Fairtrade Town award x times.

(Source: TransFair e.V. (Fairtrade Germany))

Hamburg received the Fairtrade Town award from Fairtrade Deutschland e. V. several times during the

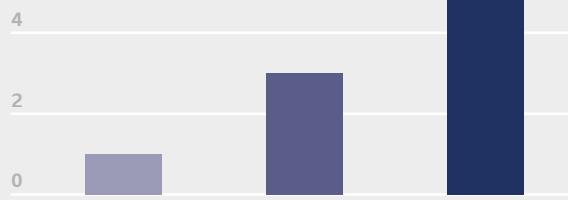
period under review. By 2021, the City of Hamburg has received the award a total of five times.

Fairtrade-Town

1.0 Num.
2011

3.0 Num.
2017

5.0 Num.
2021

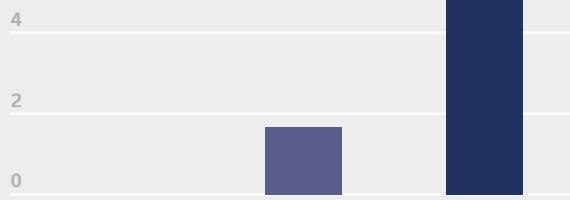


Fairtrade-Schools

n/a
2011

1 Num.
2016

3 Num.
2019



Fairtrade-Schools

In Hamburg, x schools have been designated as "Fairtrade Schools".

(Source: Fairtrade-Schools.de)

17 PARTNERSHIPS
FOR THE GOALS



Schools can also be certified by Fairtrade Deutschland e. V. as fair institutions ("Fairtrade Schools"). In Hamburg, three schools have received certification so

far, and another school is currently involved in the application process.

17 PARTNERSHIPS FOR THE GOALS



Partnerships in countries of the Global South (partnerships per 1,000 inhabitants)

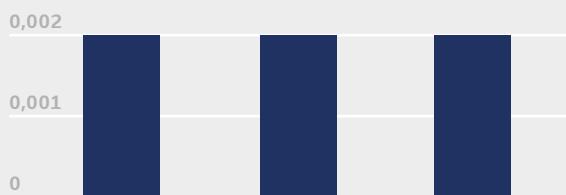
The city has x partnerships per 1,000 inhabitants in countries of the Global South (DAC countries).
(Source: Council of European Municipalities and Regions, statistical offices of the federal states)

Shaping global challenges together and creating local solutions through partnerships with countries of the Global South is one goal of city-to-city partnerships. These partnerships address issues such as climate action, water and waste management, neighbourhood development or education for sustainable development. This indicator provides information on the number of partnerships with partners in so-called DAC countries that are not limited in either time or

scope. The Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD) publishes a list at irregular intervals, the so-called DAC list, in which individual countries are designated as developing or emerging countries based on their development status and economic strength. In 2019, Hamburg had 0.002 partnerships per 1,000 inhabitants with DAC-listed countries in the Global South.

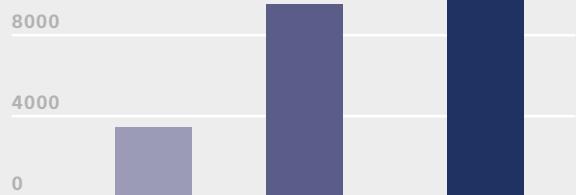
Partnerships in countries of the Global South

0.002 Num. 2010 **0.002** Num. 2014 **0.002** Num. 2019



Other Official Development Assistance

3,408 k€ 2010 **9,518** k€ 2015 **9,680** k€ 2020



Other Official Development Assistance (ODA) provided by Hamburg (excluding costs for university places)

In accordance with OECD DAC guidelines, the City of Hamburg provides other ODA (excluding costs for university places) to the tune of x euros. (Source: Federal Statistical Office)

17 PARTNERSHIPS FOR THE GOALS



Official Development Assistance (ODA) comprises the provision of financial, technical and human resources for official development cooperation as defined by the Development Assistance Committee (DAC), which is part of the Organisation for Economic Co-operation and Development (OECD). In Hamburg, the large

difference in the amount between 2010 and 2015 can be explained by the fact that since 2015, Hamburg's financial contribution to the Bernhard Nocht Institute for Tropical Medicine (around 5.5 million euros) has also been counted as ODA-eligible.

17 PARTNERSHIPS FOR THE GOALS

Costs of university places for students from countries of the Global South in Hamburg

In accordance with OECD DAC guidelines, the City of Hamburg provides costs for university places to the tune of x euros. (Source: Federal Statistical Office)

As part of municipal development cooperation, civil society partnerships between countries of the Global North and the Global South support mutual dialogue and learning. Allocating university places to students from countries of the Global South is one way of developing such a partnership. A change in the costs for such university places is only meaningful to a limited extent and can have many reasons, ranging between increased demand and rising administrative costs. The costs of university places for students from countries of the Global South have risen continuously, and most recently amounted to 56,987 million euros

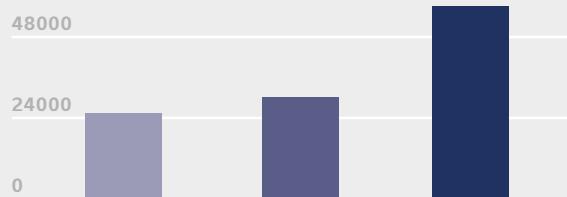
Costs of university places for students from countries of the Global South in Hamburg

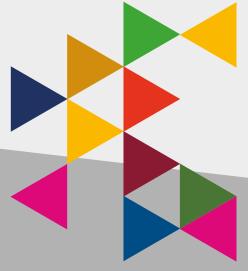
25,194 k€ 30,001 k€ 56,987 k€

2010

2015

2020





04

4 Outlook





Photo 63: Inner Alster with cherry blossoms

© Mediaserver Hamburg / Jörg Modrow

This presentation of the city's various activities shows that Hamburg is making an important contribution to local implementation of the 2030 Agenda. This first sustainability report is the starting point for the expansion and continuation of sustainability reporting. We aim to update the report every two years, so that we can map out a trend. At the same time, the indicators will be further developed according to changing political priorities and the data available.

A further focus of the update will be implementation of the mandate contained in paper 21/9700. This mandate requires us to define overarching targets within the monitoring system that will enable us to effectively implement strategic management of the Sustainable Development Goals in Hamburg.

By publishing this first report, we plan to make Hamburg's city-wide sustainability monitoring system digitally accessible to the city's employees and all citizens.

Overall, the City of Hamburg plans to rigorously continue along the path it has chosen to achieve greater sustainability in the years to come, and define the

further strategic direction for implementation of the 2030 Agenda. Some examples of key steps to be implemented in the city in the near future are outlined below.

Hamburg intends to reduce greenhouse gas emissions by 70% relative to 1990 by 2023, and achieve carbon neutrality by 2045. For the transport sector, there are two main levers. The first is the mobility transition. Here the key target is 80% of journeys made by environmentally sound modes of transport, and an associated reduction in motorised traffic. The second is the electrification of motorised mobility.

Further planned milestones for sustainability

- | Amendment of the Hamburg Climate Protection Act, Second Update of the Hamburg Climate Action Plan and elaboration of a strategy for adaptation to climate change
- | Further development of the Green Procurement Guide into a Sustainability Guide
- | Continued implementation of the measures identified in the Hamburg ESD Master Plan 2030
- | Implementation of the Active City Strategy
- | Introduction of BNB (German Assessment System for Sustainable Building) sustainability certification in Hamburg's state building sector from 2025, led by the Competence Centre for Construction (BSW)
- | Development of a Master Plan for Major Arteries by the end of 2023
- | Update of the Anti-Discrimination Strategy (goals and measures)

