

**Table 6 (A-1.4) Activity by Source Sector (from economic model data inputs)**

A-1.4: Activity by Source Sector (from economic model data inputs)			
Base Year	2021		
	Scope 1	Scope 2	Scope 3
Transport			
Transport need - passenger cars + motorbikes (M km/year)	1103		
Transport need - buses (M km/year)	11		
Transport need - trains/metro (M km/year)	0		
Transport need - light duty trucks (<3.5 t) (M km/year)	119		
Transport need - heavy duty trucks (>3.5 t) (M km/year)	106		
Buildings & Heating			
Heating demand (space heating + domestic hot water) (GWh/year)	2600		
Electricity			
Electricity demand within city boundaries (GWh/year)		1057	
Waste			
Collected waste within city boundaries (tons)			82343
Other (incl. IPPU & AFOLU)			

## 2.2 Module A-2 Current Policies and Strategies Assessment

Module A-2 "Current Policies and Strategies" lists and assesses existing policies, strategies, initiatives, or regulation from local, regional, and national level, relevant to the City of Aachens climate neutrality transition.

### 2.2.1 Description & assessment of policies

#### Assessment of the existing concepts of the City of Aachen

The Integrated Climate Protection Concept, IKSK 2020, is the most important ongoing concept for climate protection in Aachen. It was adopted in August 2020 by all parliamentary groups in Aachen City Council and therefore has a broad political basis. It comprises 70 measures of the city administration for the years 2021-2025 with the aim of intensifying and sustainably accelerating climate protection efforts. Fields of action with concrete measures are: Urban planning, energy supply, mobility, building refurbishment, communication, economy.

The annual CO<sub>2</sub> reduction through the implementation of measures in the individual fields of action are shown in Figure AP-7 (Chapter 1.9.). The graphic makes clear that the city administration has the least influence in the "Economy" and "Transport" fields of action.

The IKSK 2020 is flanked by other concepts and plans such as the AACHEN\*2030 Masterplan and the Transport and Development Plan (SUMP) for Aachen, which was adopted by the Mobility Committee in 2020 (see table AP-3).

**Table AP- 3 Current local concepts and plans relevant to the reduction of greenhouse gas emissions**

Type (decision date)	Name/Title	Contents / core objectives	Relev ance
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# 2030 Climate Neutrality Action Plan

Concept <b>not yet politically decided !</b>	Integrated climate protection concept 2.0 SECAP Aachen	<ul style="list-style-type: none"> <li>Climate neutrality scenario 2030</li> <li>Comprehensive action plan for city administration and city group</li> <li>Reduce greenhouse gas emissions by 95% compared to 1990 levels by 2030</li> <li>Duration: 2024-2030</li> </ul>	high
Legally binding plan (26.08.2020)	Integrated climate protection concept 2020 SECAP Aachen	<ul style="list-style-type: none"> <li>70 measures in 7 fields of action</li> <li>Reduce greenhouse gas emissions by 50% by 2030 compared to 1990 levels</li> <li>Term 2021-2025</li> <li>Costs: € 67 million per year</li> </ul> <a href="https://aachen.de/DE/stadt_buerger/energie/konzepte_veranstaltungen/klimaschutzkonzept/IKSK_Juni_2020.pdf">https://aachen.de/DE/stadt_buerger/energie/konzepte_veranstaltungen/klimaschutzkonzept/IKSK_Juni_2020.pdf</a>	high
Legally binding plan (27.01.2022)	AACHEN*2030 Land use plan 2030	<ul style="list-style-type: none"> <li>Presentation of the intended urban development for the entire urban area</li> <li>Presentation of the resulting type of land use</li> <li>Integrated overall view of municipal and official specialised planning in the urban area.</li> <li>Basis for development plans</li> <li>Takes into account open space, climate and soil protection</li> </ul> <a href="https://www.aachen.de/de/stadt_buerger/planen_bauen/materialien_planen_bauen/stadtentwicklung/stadt/aachen2030/masterplan/AC2030_beschlossen_masterplan_lowres.pdf">https://www.aachen.de/de/stadt_buerger/planen_bauen/materialien_planen_bauen/stadtentwicklung/stadt/aachen2030/masterplan/AC2030_beschlossen_masterplan_lowres.pdf</a>	high
Strategy (23.05.2019, 30.01.2020)	Mobility Strategy Aachen 2030 SUMP	<ul style="list-style-type: none"> <li>High road safety</li> <li>Environmentally and urban-compatible mobility</li> <li>City of short distances</li> <li>Reliable and convenient mobility services</li> </ul> <p>Efficient and affordable mobility for the city and its citizens</p> <a href="https://www.aachen.de/de/stadt_buerger/verkehr_strasse/verkehrskonzepte/VEP/Strategie2030/2030_Teil1/Strategie2030_Teil1.pdf">https://www.aachen.de/de/stadt_buerger/verkehr_strasse/verkehrskonzepte/VEP/Strategie2030/2030_Teil1/Strategie2030_Teil1.pdf</a> <a href="https://www.aachen.de/de/stadt_buerger/verkehr_strasse/verkehrskonzepte/VEP/Strategie2030/2030_Teil2/Strategie2030_T2_200716.pdf">https://www.aachen.de/de/stadt_buerger/verkehr_strasse/verkehrskonzepte/VEP/Strategie2030/2030_Teil2/Strategie2030_T2_200716.pdf</a>	high
Concept (23.01.2019)	Adaptation concept to the consequences of climate change	<p>Measures against the dangers of extreme/heavy rainfall</p> <ul style="list-style-type: none"> <li>Flood management</li> <li>Heat protection</li> <li>Water-sensitive planning</li> <li>Fresh and cold air corridors</li> <li>Green planning</li> </ul> <a href="https://www.aachen.de/DE/stadt_buerger/energie/klimaanpassung/anpassungskonzept_V7.pdf">https://www.aachen.de/DE/stadt_buerger/energie/klimaanpassung/anpassungskonzept_V7.pdf</a>	medium
Legally binding plan (01.05.2022)	Clean air plan 2009 with various updates, most recently 2022	<ul style="list-style-type: none"> <li>Optimisation of the bus fleet through SCRT retrofitting and early procurement of new buses (EuroVI and electric)</li> <li>30 km/h within the entire ring of avenues</li> <li>Expansion of cycle path network, cycle priority routes, secure parking facilities</li> <li>Expansion of electromobility and field trials with other low-emission drive types.</li> </ul> <a href="https://www.aachen.de/de/stadt_buerger/umwelt/luft-stadtklima/luftreinhalteplan_umweltzone/luftreinhalteplan_2022/luftreinhalteplan_aachen_03_fortschreibung_2022.pdf">https://www.aachen.de/de/stadt_buerger/umwelt/luft-stadtklima/luftreinhalteplan_umweltzone/luftreinhalteplan_2022/luftreinhalteplan_aachen_03_fortschreibung_2022.pdf</a>	high

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Strategy (11.12.2019)	Digital strategy for the city of Aachen	<ul style="list-style-type: none"> <li>Digital citizen service</li> <li>Big Data / Open Data</li> <li>Digital payment transactions</li> <li>Infrastructure</li> <li>Digital entrepreneurial world/trade</li> </ul> <a href="https://www.aachen.de/DE/stadt_buerger/politik_verwaltung/digitalisierung/digitale-strategie/digitale_strategie_aachen.pdf">https://www.aachen.de/DE/stadt_buerger/politik_verwaltung/digitalisierung/digitale-strategie/digitale_strategie_aachen.pdf</a>	low
Strategy (12.11.2020)	Integrated noise action plan	<ul style="list-style-type: none"> <li>in accordance with § 47d BImSchG and the EU Environmental Noise Directive, Directive 2002/49/EC</li> <li>Binding urban land-use planning</li> <li>Design of the street space</li> <li>Avoidance of vehicle traffic</li> <li>Speed reduction</li> <li>Promotion of e-mobility</li> </ul> <a href="https://www.aachen.de/DE/stadt_buerger/umwelt/laerschutz_neu/pdf_grafiken_fotos/LAP_AC_2021_Endfassung_27Jan2021.pdf">https://www.aachen.de/DE/stadt_buerger/umwelt/laerschutz_neu/pdf_grafiken_fotos/LAP_AC_2021_Endfassung_27Jan2021.pdf</a>	high
Strategy (pending)	Landscape plan	<ul style="list-style-type: none"> <li>Natural forest development through set-asides</li> <li>Tripling of nature conservation areas</li> <li>Enrichment of the outdoor areas with woody plants</li> <li>Restriction of fertilisation</li> </ul>	medium

Note: no claim to completeness, as of 02/24

The IKSK 2020 provides a framework concept in which the strategically important areas of action are described and the potential for rapidly reducing CO<sub>2</sub> emissions by 2030 is analysed and quantified in a differentiated manner. The latter amount to 363,000 tonnes by 2030 in the energy/energy, building renovation and commercial/industrial sectors and 83,000 tonnes in the transport sector. Considering all the action plans in the IKSK action programme, this results in a municipal CO<sub>2</sub> reduction potential of xy tonnes by 2030, corresponding to z % of the municipal emissions inventory. However, it also became clear in the IKSK that considerable reduction potential is not within the municipal sphere of influence but must be activated through corresponding political regulations at state and federal level. This applies in particular to the transport sector.

The IKSK 2020 is uploaded separately (see attachment *IKSK 2020*)

Overview of the most important information contained in the IKSK 2020 on the action plans up to 2025:

- Chapters 5.1 and 5.2 - Measures of existing concepts of the city, in particular the energy policy work programme for the European Energy Award.
- Chapter 5.3 - New measures in the 2025 action plan for the fields of action Urban planning - Municipal buildings - Energy supply - Mobility - Building refurbishment - Communication - Economy
- Chapter 5.4 - Brief profiles of the 70 measures from 5.3

A total budget of around € 181 million has been set aside for climate protection measures in the municipal budget for the years 2021-2025. Until 2020, the budget amounted to around € 5-10 million per year for climate protection measures in the areas of building management, forestry, municipal operations, climate and environment, which have contributed to the goal of climate neutrality. As can be seen in Table AP-4, the share of the climate protection budget in relation to the overall budget rose steadily from 2.16% to 3.42% in the years 2021-2024.

**Table AP- 4 Overview of the municipal budget**

	2021	2022	2023	2024	2025
Budget	23.538.000 €				
Climate protection		31.796.000 €			

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measures in the municipal budget			38.009.100 €		
				44.124.400 €	
					43.368.600 €
Total budget	1.091.248.900 €	1.096.580.400 €	1.191.050.900 €	1.289.291.900 €	tbd
Share of climate protection budget	2,16%	2,90%	3,19%	3,42%	tbd
TOTAL (2021-2024):	137.467.500 €				
TOTAL (2021-2025):	180.836.100 €				

Note: Overview of the municipal budget made available for additional climate protection measures and personnel in the years 2021-2025. The municipal budget for 2025 has not yet been politically decided, therefore subject to change.

**Table AP- 5 Current laws, subsidies and strategies of the state of North Rhine-Westphalia**

Type / Release date	Name/Title	Sector	Contents / core objectives	Relevance
Promotion (16.11.2022)	Incentive funding for municipal heat planning	Energy	Subsidy of up to 100 % for municipal heat planning	medium
Promotion (08.12.2020)	Framework directive for the implementation of the Coal Regions Investment Act in NRW	Energy	Implementation of the Federal Coal Regions Investment Act	medium
Strategy (09.11.2023)	Action plan for the expansion of the NRW charging infrastructure	Mobility	Expansion of private, public charging points in NRW by 2030	medium
Strategy (14.06.2023)	First climate protection package NRW	Energy	<ul style="list-style-type: none"> <li>• GHG reduction target for 2030 at 65 %</li> <li>• Accelerated expansion of RE</li> <li>• Supporting local authorities with climate protection and the heating transition</li> <li>• Increasing the energy efficiency of buildings</li> <li>• Climate neutrality in the economy</li> <li>• Sustainable means of transport and alternative drives</li> <li>• Natural climate protection through forests</li> </ul>	medium
Strategy (16.11.2022)	Action plan for heavy goods transport	Mobility	<ul style="list-style-type: none"> <li>• 80,000 zero-emission, heavy goods vehicles in NRW by 2030</li> <li>• 80 public charging points for road freight vehicles</li> <li>• Entire fleet climate-neutral from 2045</li> </ul>	medium
Strategy (31.01.2022)	Synthetic fuels action plan	Energy	<ul style="list-style-type: none"> <li>• Implementation of the hydrogen roadmap</li> <li>• Market ramp-up of synthetic fuels</li> </ul>	medium

Strategy (19.10.2021)	Carbon Management Strategy NRW (English version available)	Offsetting	<ul style="list-style-type: none"> <li>• CCU in industrial processes and fertilisation</li> <li>• CCS as part of the C-cycle</li> <li>• Utilisation of secondary raw materials</li> </ul>	medium
Strategy (09.11.2020)	Hydrogen roadmap NRW (English version available)	Energy	<ul style="list-style-type: none"> <li>• Electrolysers on a gigawatt scale</li> <li>• Utilisation of the natural gas network</li> </ul>	medium
Agreement (08.10.2022)	Coal phase-out 2030	Energy	<ul style="list-style-type: none"> <li>• BMWK and MWIKE agree to end coal-fired power generation in NRW by 2030</li> </ul>	high

Note: Current laws, subsidies and strategies of the **state of North Rhine-Westphalia** with relevance for climate and emissions protection (no claim to completeness, as of 02/24). Source:

<https://www.klimaschutz.nrw.de/mediathek/medien-und-downloads>

### Climate protection in North Rhine-Westphalia

North Rhine-Westphalia is to become the most modern and environmentally friendly industrial location in Europe and thus make its contribution to international climate protection. On 1 July 2021, the North Rhine-Westphalian state parliament passed the most ambitious climate protection law of any federal state to date. At its heart is the commitment to achieve greenhouse gas neutrality by 2045. To achieve this goal, corresponding transformation processes are being initiated in climate-relevant areas. The major fields of action for climate protection in NRW are the energy sector, industry, buildings and mobility, as well as the intelligent interlinking of these areas (sector coupling). The targets set out in the new Climate Protection Act: By 2030, emissions are to be reduced by 65 per cent compared to 1990 levels and by 88 per cent by 2040. By 2045, the country should be greenhouse gas neutral.

Climate protection is a central task of the Ministry of Economic Affairs, Industry, Climate Protection and Energy of the State of North Rhine-Westphalia (MWIKE). Department 712 Climate Protection Policy and Municipal Climate Protection is responsible for promoting municipal climate protection. This is supported by the state in a variety of ways - for example with the KommunalKlimaschutz.NRW project call - to promote local climate protection measures.

In addition to MWIKE, the Ministry of the Environment, Nature Conservation and Transport, the Ministry of Homeland, Municipal Affairs, Building and Digitalisation and the Ministry of Agriculture and Consumer Protection are also involved in the implementation of the first climate protection package, which was adopted by the NRW state government in June 2023.

An important decision to promote wind power in NRW was made in August 2023, when the black-green government abolished the regulation of a blanket 1000-metre minimum distance between wind turbines and residential areas.

The state government is investing a lot of money in implementing the measures from the climate protection package. More than one billion euros is being invested directly in climate protection. In addition, the measures contained in the first climate protection package will make over a further billion available in the coming years as part of European funding programmes. Added to this are subsidies for housing construction and the development of the regional economy, which are increasingly focussed on climate protection.

The energy transition and climate protection require the commitment of all stakeholder groups in the state: from large industrial companies to small and medium-sized enterprises, craft businesses, local authorities and all citizens. The state government's goal is to actively involve them all in the rollout of climate-friendly technologies. The pace of investment in climate-friendly infrastructure must increase considerably. To achieve this, the state has been pooling all previous initiatives in the field of climate protection and energy under the umbrella of the state company NRW.Energy4Climate since the beginning of 2022. The central task of the state company is to trigger the necessary investments in North Rhine-Westphalia, attract funding to North Rhine-Westphalia and thus advance the implementation of climate protection and the energy transition.

NRW.Energy4Climate GmbH is supporting the Aachen Climate City Contract with a BASIS commitment. Initial discussions on joint activities between the city administration and the state company have already taken place. A continuous informal exchange at working level is planned once a quarter.