POLITECNICO MILANO 1863

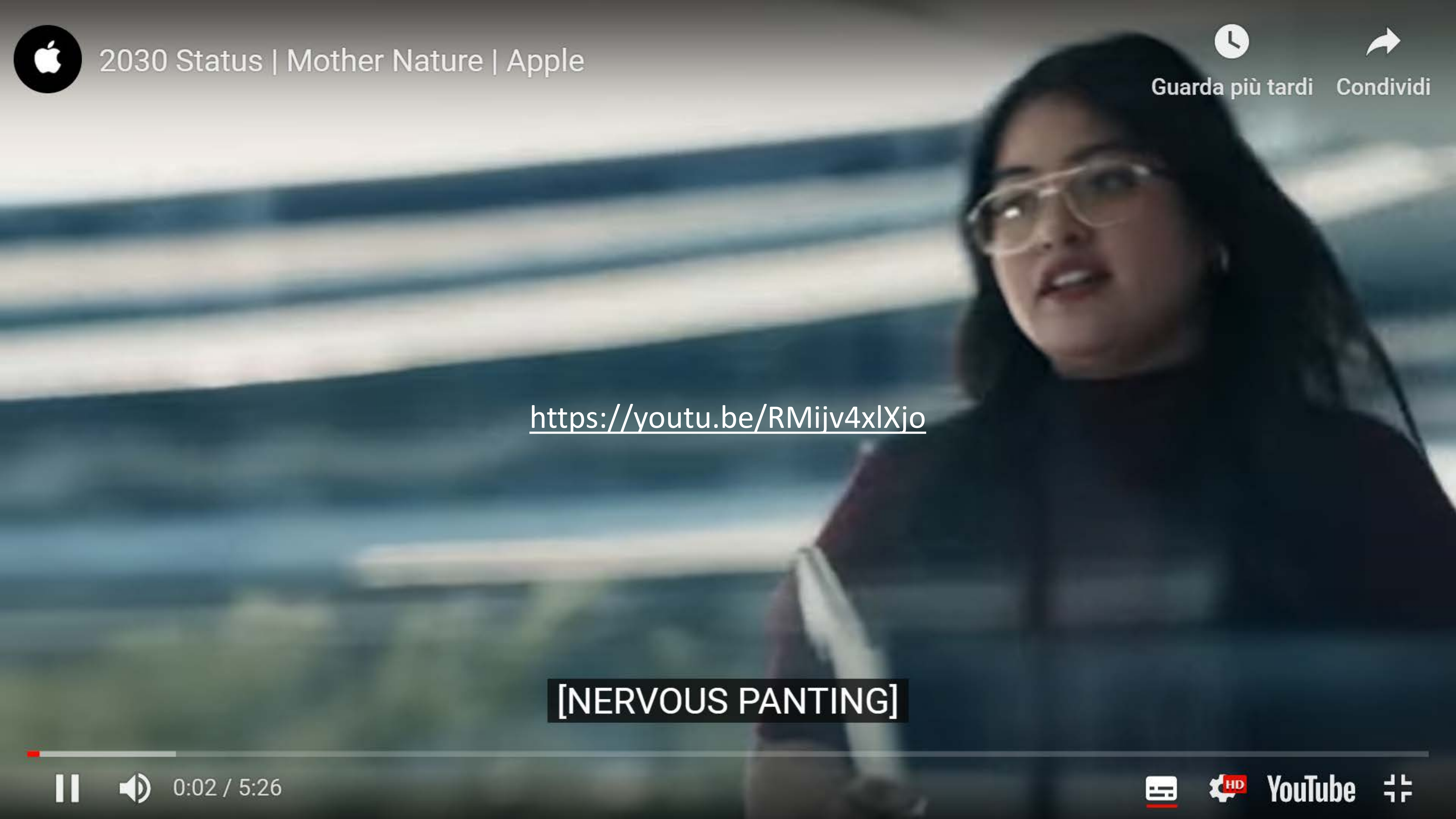
Sustainability: the impact on the AFC instruments

Marika Arena

Agenda

- Why sustainability is an issue
- The evolution of the regulatory framework
- The impact on the planning and control cycle
- The most recent trends in connection to sustainability reporting
- Guest speaker: Massimo Mondazzi (former CFO Eni Group)

Why sustainability is an issue?



https://youtu.be/RMijv4xlXjo

Companies as multi-stakeholder and multi-objective systems

The New York Times

BlackRock's Message: Contribute to Society, or Risk Losing Our Support

"Society is demanding that companies, both public and private, serve a ***social purpose****"*

"To prosper over time, every company must not only deliver financial performance, but also ***show how it makes a positive contribution to society****."*

He contends that if a company doesn't engage with the community and have a sense of purpose "it will ultimately lose the license to operate from key stakeholders."

The evolution of the regulatory framework

Evolution of the regulatory framework

- **Dir. no. 2014/95 Non Financial Reporting "NFRD"** 2014
- **Reg. no. 2088 Sustainable Finance Disclosure "SFDR"** 2019
- **Reg. no. 2020/852 "Taxonomy"** 2020
- **Delegated Act "Taxonomy" climate change** 2021
- **Corporate Sustainability Reporting Directive *"CSRD"*** 2022
- **"Social Taxonomy"** ex art. 26 Reg. 852/2020 2022
- **Delegated Acts "Taxonomy"** 2022
- Corporate Sustainability Due Diligence Directive 2024

Investors

Corporations

Evolution of the regulatory framework: the role of investors

The regulatory instruments introduced at the EU level are aimed at directing **financial investments** towards sustainable projects and activities.

To do that, policy makers moved from the creation of a policy infrastructure to create a common language and provide a **clear definition of what is 'sustainable'.**

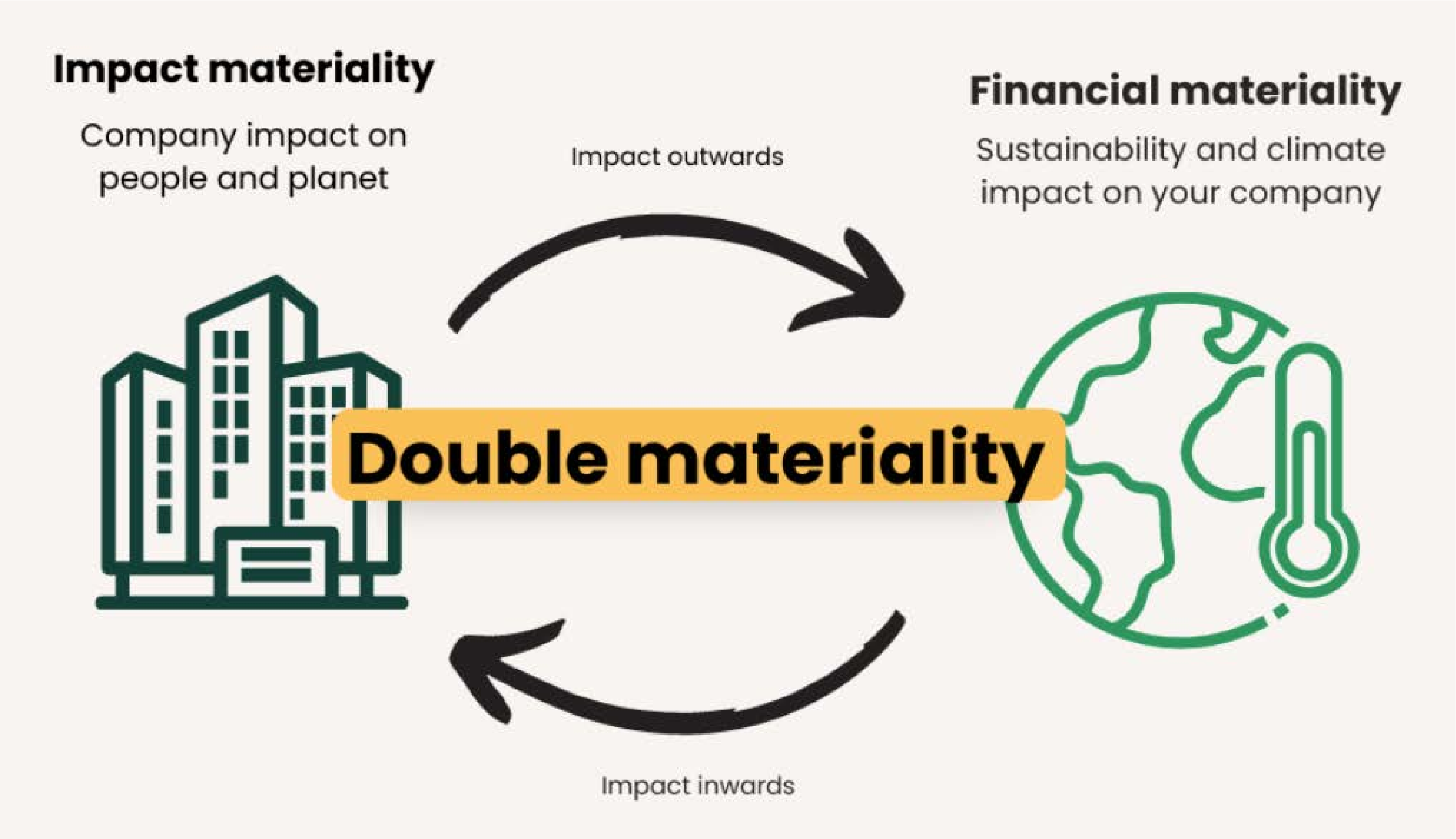
The EU taxonomy is a classification system that defines criteria for economic activities that are aligned with a net zero trajectory by 2050 and the broader environmental and social goals other than climate.

Evolution of the regulatory framework: the role of corporations

EU law requires **all large companies and all listed companies** (except listed micro-enterprises) to disclose information on what they see as the risks and opportunities arising from social and environmental issues, and on the impact of their activities on people and the environment.

Such disclosures help investors, civil society organisations, consumers and other stakeholders to evaluate the sustainability performance of companies.

Evolution of the regulatory framework: the role of corporations



CSRD DIRECTIVE

The CSRD directive

- extends the scope for **mandatory non-financial reporting** to all large companies and all companies listed on regulated markets
- implements a **mandatory report audit** with limited assurance
- introduces more detailed reporting requirements, included in the new mandatory **European Sustainability Reporting Standards (ESRS)** that is currently developed by the European Financial Reporting Advisory Group (EFRAG)

FINANCIAL TIMES

US COMPANIES TECH MARKETS CLIMATE OPINION WORK & CAREERS LIFE & ARTS HTSI

Corporate social responsibility + Add to myFT

More than 50,000 companies to report climate impact in EU after pushback fails

More than 50,000 companies will need to assess the impact of their operations on the environment in the EU, with the first wave starting in January after lawmakers overcame rightwing opposition to pave the way for the reporting requirements that will also catch multinational companies.

"Standardised, transparent, and comparable data will not just guide companies in their transition but also inform investors and consumers," said Tsvetelina Kuzmanova, senior policy adviser at climate think-tank E3G.

Initially more than 11,000 listed companies that will have to comply from the start of 2024 but the scope will expand to large non-listed companies and listed small and medium enterprises in 2025 and 2026, totalling around 50,000 entities.*

CSDD DIRECTIVE

The CSDD directive:

- will establish **a corporate due diligence duty**;
- the core elements of this duty are identifying, bringing to an end, preventing, mitigating and accounting for negative human rights and environmental impacts in the company’s own operations, **their subsidiaries and their value chains**;
- In addition, large companies need to have a plan to ensure that their business strategy is compatible with **limiting global warming to 1.5 °C** in line with the Paris Agreement.
- **Directors are responsible** for setting up and overseeing the implementation of the due diligence processes and integrating due diligence into the corporate strategy.

FINANCIAL TIMES

US COMPANIES TECH MARKETS CLIMATE OPINION WORK & CAREERS LIFE & ARTS HTSI

FTfm: Responsible Investing

Supply chains + Add to myFT

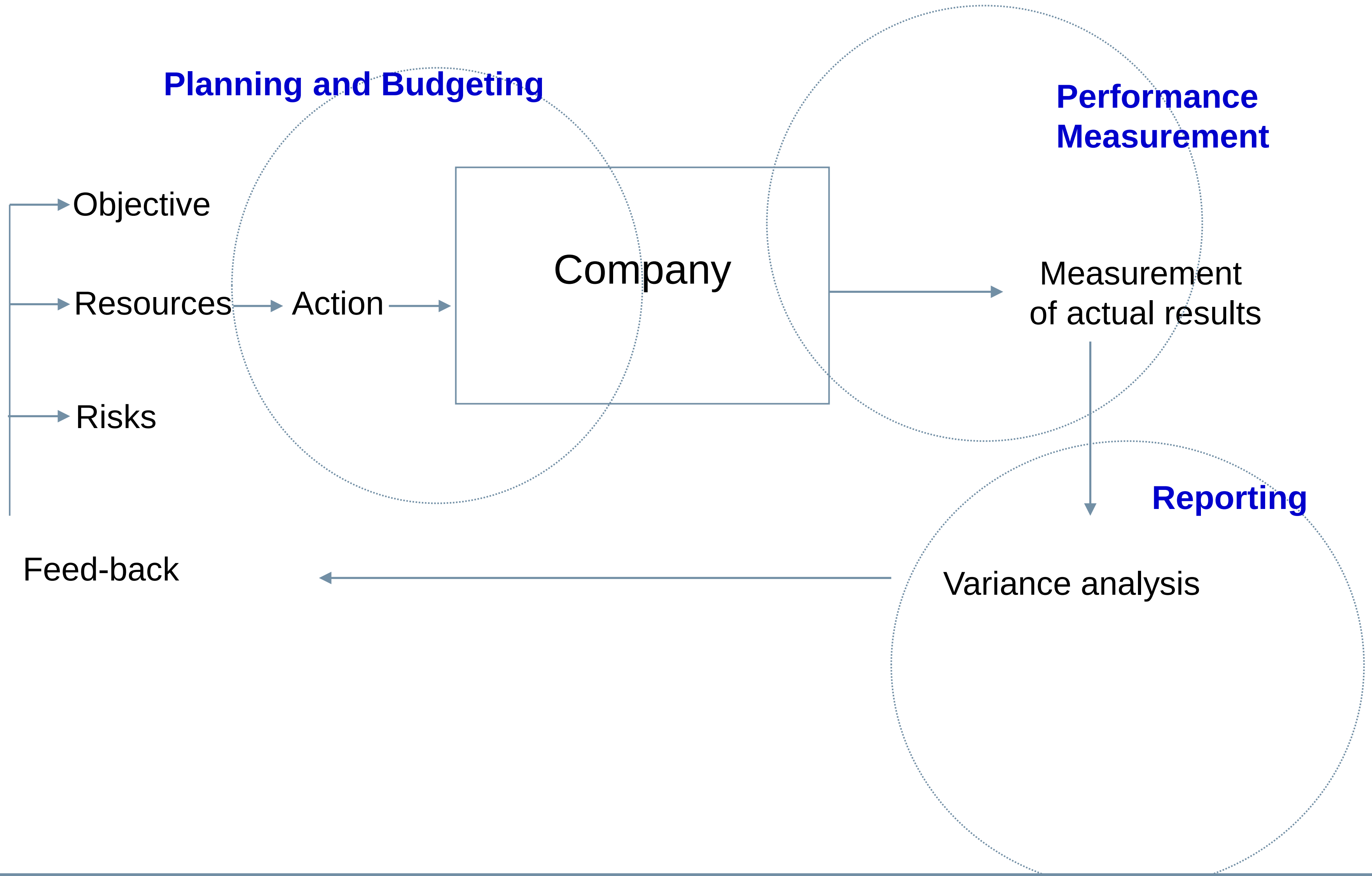
European companies forced to take a closer look at supply chains

New laws and shortcomings of just-in-time logistics mean businesses pay more attention to due diligence

To properly address supply-chain risk, companies need information about the carbon footprints, biodiversity impacts, and working conditions of suppliers which, for a big multinational, can number in the “tens of thousands” according to Thoms. They will often be based in parts of the world where information may be scant, and labour and environmental laws far removed from European standards.

The impact on the planning and control cycle

The impact on the elements of the planning and control cycle



The impact on the planning and control cycle: planning and budgeting

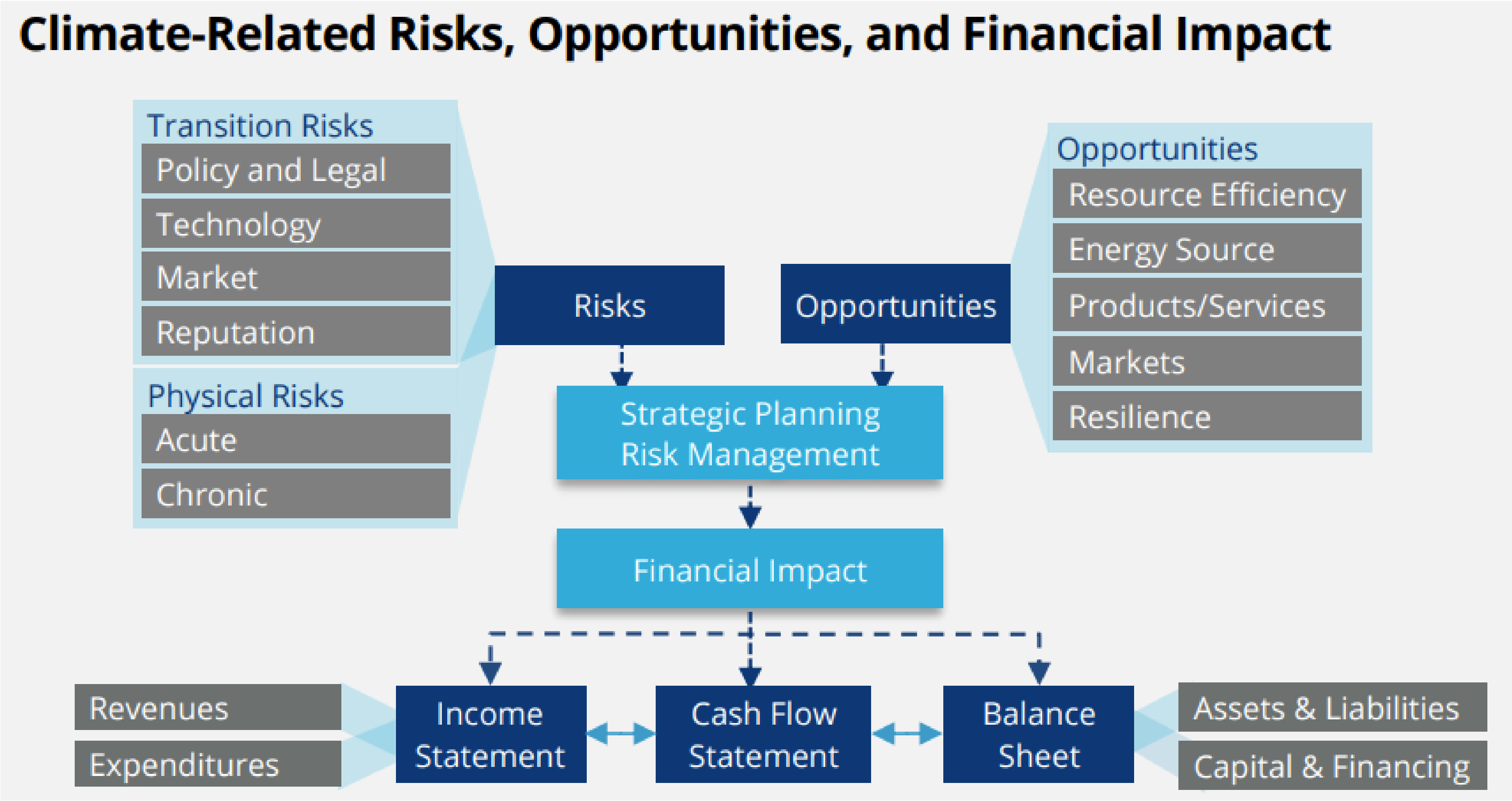
- Sustainability related risks and opportunities should be incorporated in the company's **business model and strategy**

- Companies should make explicit the **targets** related to sustainability and the progress towards their achievement

- Companies should make reference to the **1.5° climate scenario**

The impact on the planning and control cycle: planning and budgeting

The impact on the planning and control cycle: planning and budgeting



The impact on the planning and control cycle: planning and budgeting

Nestlé
Good food, Good life

SCENARIO ANALYSIS – POTENTIAL TRANSITION IMPACTS

Financial impacts are cumulative up until 2030:
- Low ≤ CHF1bn
- CHF1bn < Medium ≤ CHF4bn
- CHF4bn < High ≤ CHF7bn

Estimated directional cumulative discounted cash flow impacts until 2030

Transition risks	High emissions +4.0°C – +5.0°C	Intermediate emissions +2.0°C – +3.0°C	Low emissions +1.5°C
POLICY Action to constrain emission-intensive activities	**Low impact** • Carbon tax of USD40 per ton by 2030 with negligible financial impacts	**Medium impact** • Carbon tax of USD75 per ton by 2030 with moderate increase in costs of production, distribution and raw materials	**High impact** • Carbon tax of USD140 per ton by 2030 with significant increase in costs of production, distribution and raw materials
TECHNOLOGY Development of emerging technology to support a lower-carbon economy	**Low impact** • Minimal uptake of lower-carbon technology • No immediate or near-term material investments required	**Low impact** • Varying levels of uptake of lower-carbon technology, low investment levels required to maintain competitiveness	**Medium impact** • Widespread adoption of lower-carbon technology with moderate investments to meet market pressure and regulation • Input costs increase as suppliers pass on their own investment cost impacts
MARKET Shifts in supply and demand as consumers prefer sustainable alternatives	**Low impact** • Very low proportion of consumers adopting more sustainable choices with limited supply and demand shifts	**Medium impact** • Lower proportion of consumers adopting more sustainable choices with minimal supply and demand shifts	**High impact** • Higher proportion of consumers adopting more sustainable choices with wide-ranging supply and demand shifts

The impact on the planning and control cycle: performance measurement

- The **company's impacts on sustainability** should be considered in the performance measurement system
- The main instrument used in this respect is represented by **value drivers and non financial indicators**
- The unit of analysis is often "extended" covering the **value chain** (or part of it)

The impact on the planning and control cycle: performance measurement

Select indicators

Define the metrics and the information protocol

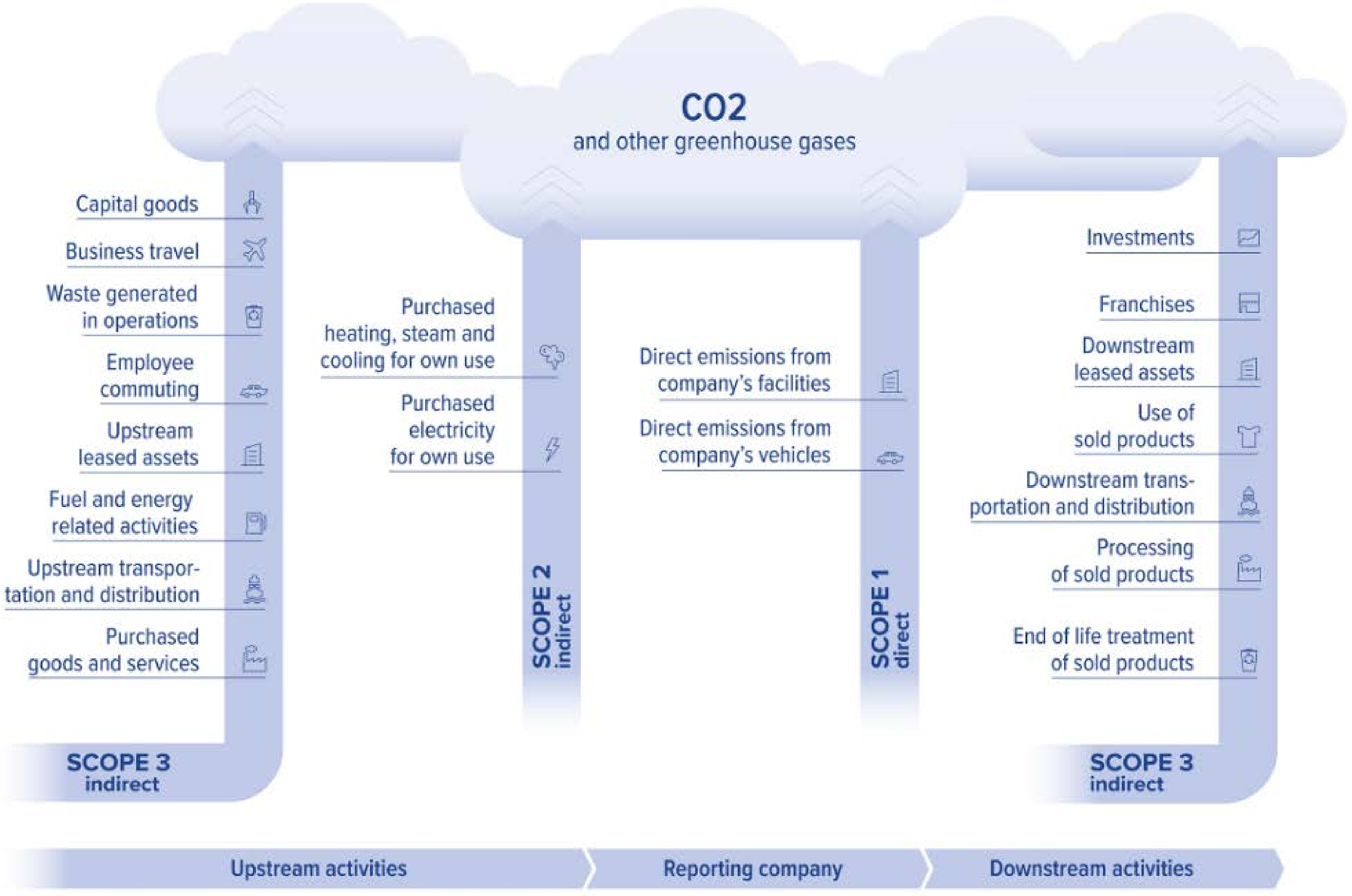
- **Key performance indicator**: Name of the indicator
- **Unit of analysis**: Which is the object of measurement?
- **Purpose**: Why the company wants to measure this indicator?
- **Metric**: How is the indicator calculated?
- **Frequency**: How often is the indicator reported?
- **Source of data**: Where data for calculation can be retrieved?
- **Responsibility**: Who is responsible for 1) defining a target; 2) reaching the target 3) monitoring the indicator?

The impact on the planning and control cycle: performance measurement

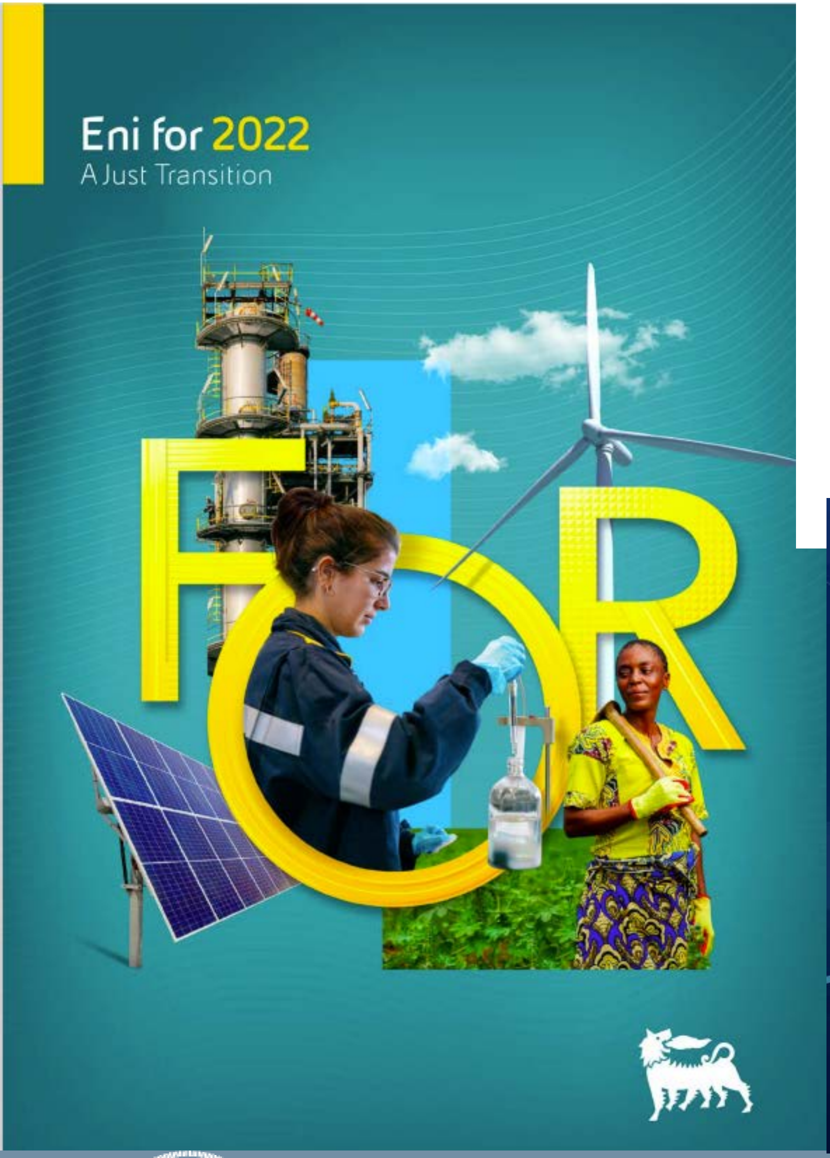
Scope 1 emissions: “direct” emissions: those that a company causes by operating its facilities (e.g. running machinery to make products, driving vehicles, heating buildings and powering computers)

Scope 2 emissions: “indirect” emissions created by the production of the energy that an organization buys.

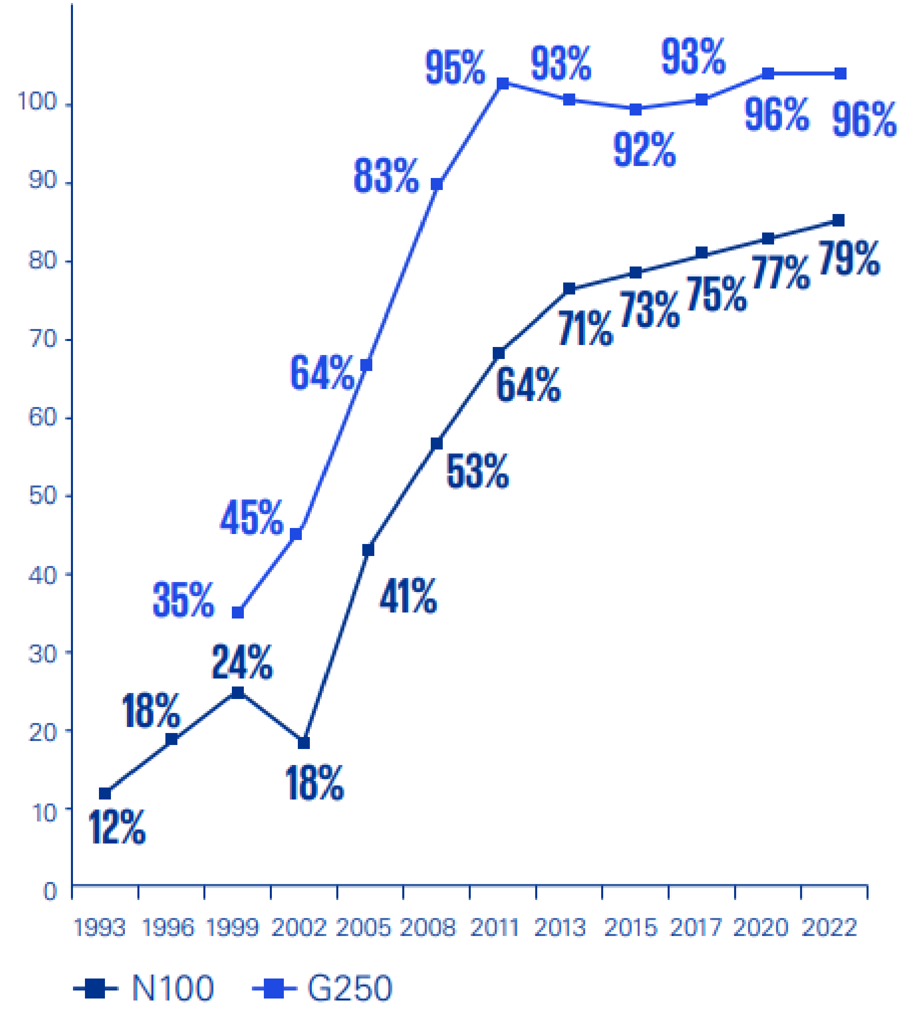
Scope 3 emissions: “indirect” emissions energy related covering emissions produced by customers using the company’s products or those produced by suppliers making products that the company uses.



The impact on the planning and control cycle: reporting

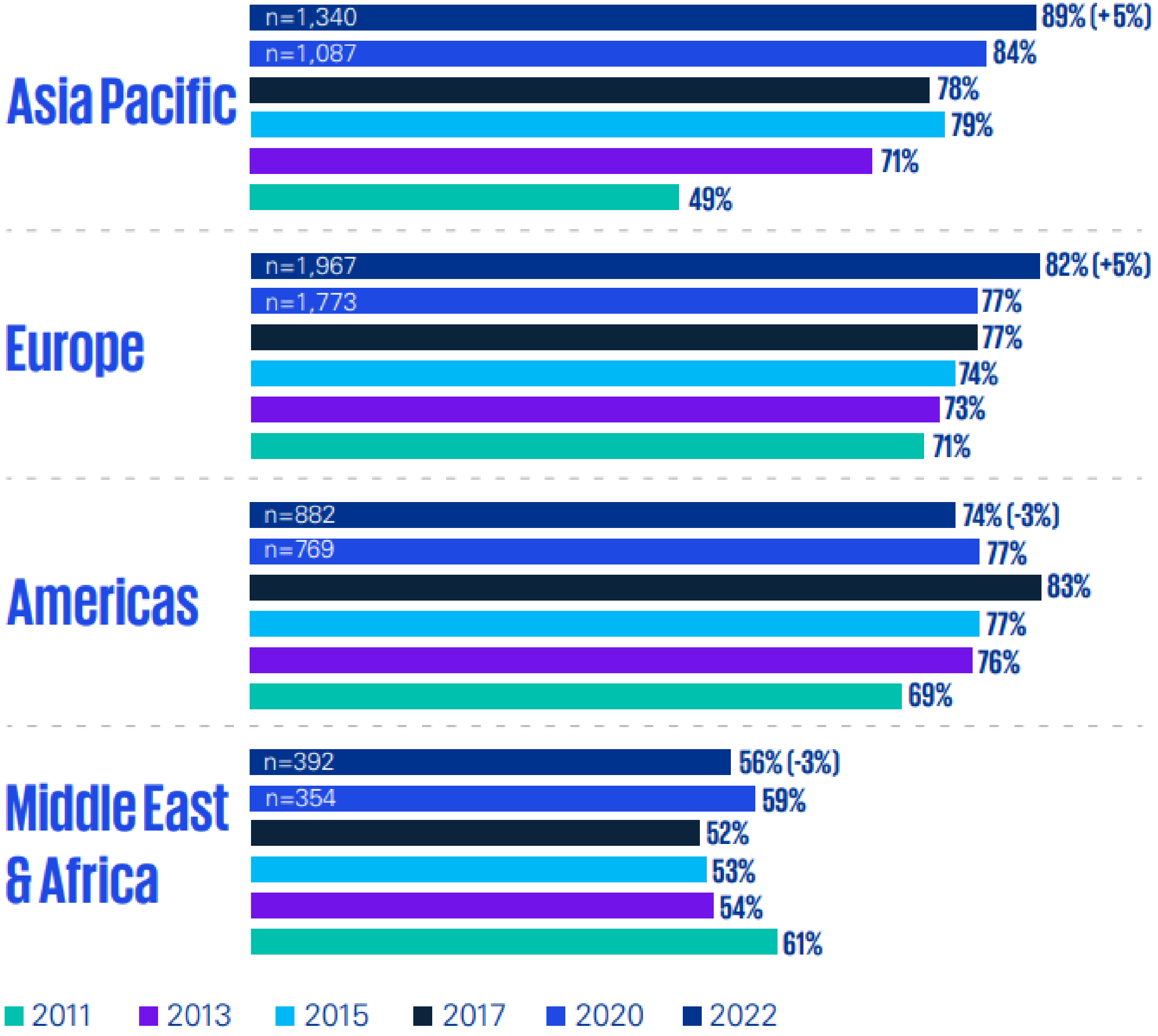


Diffusion of sustainability reporting



Base: 5,800 N100 companies and 250 G250 companies

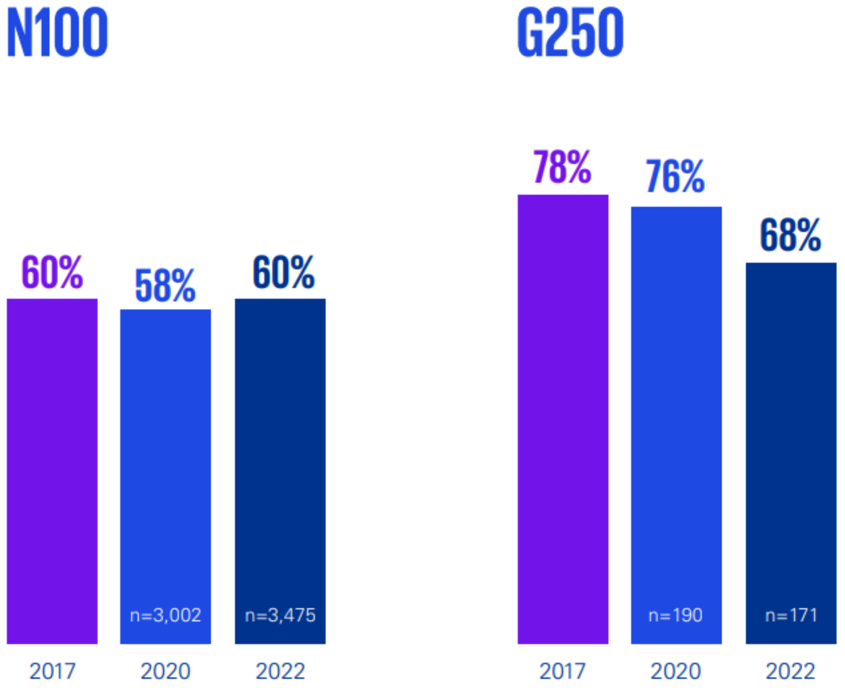
Source: KPMG Survey of Sustainability Reporting 2022, KPMG International, September 2022



Base: 5,800 N100 companies

Source: KPMG Survey of Sustainability Reporting 2022, KPMG International, September 2022

Diffusion of integrated reporting



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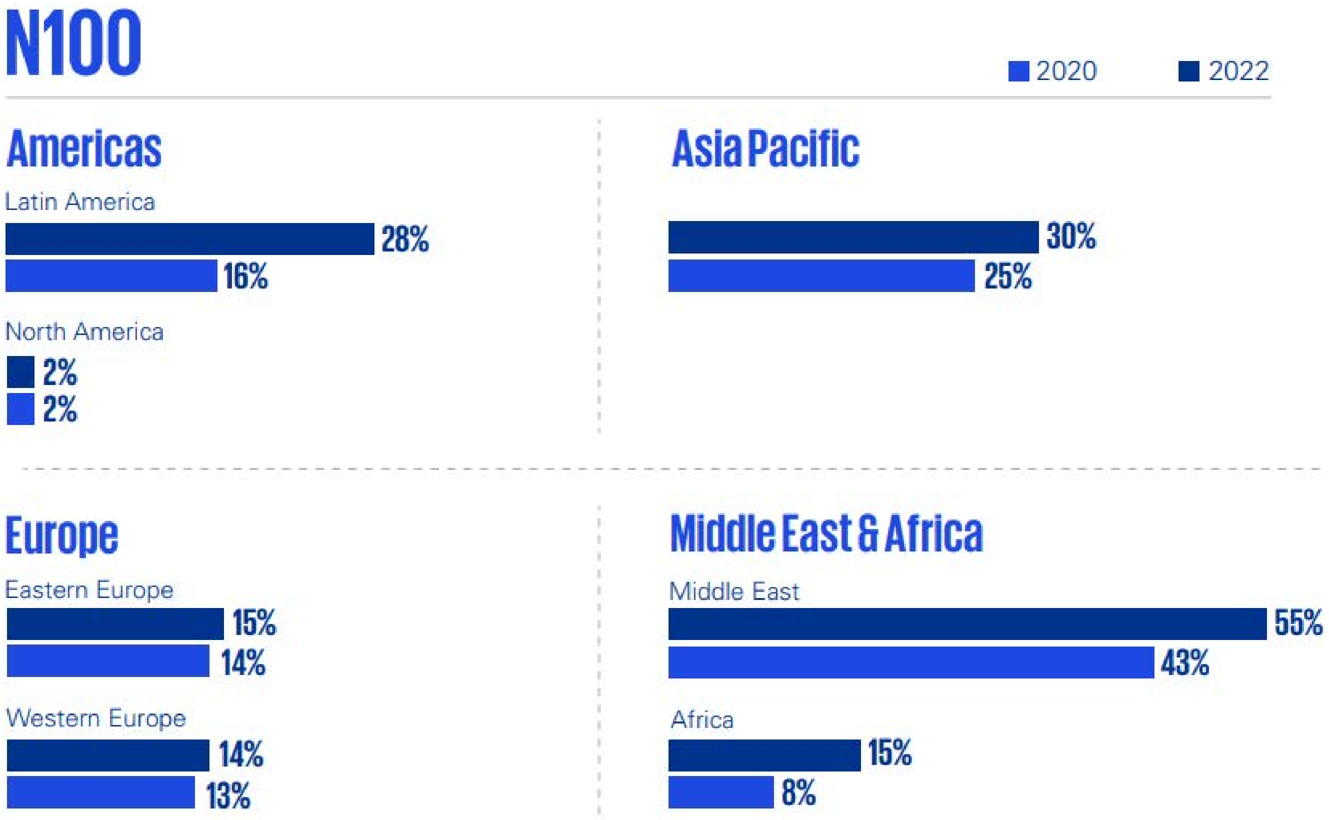


Base: 3,475 N100 companies that report on sustainability or ESG matters

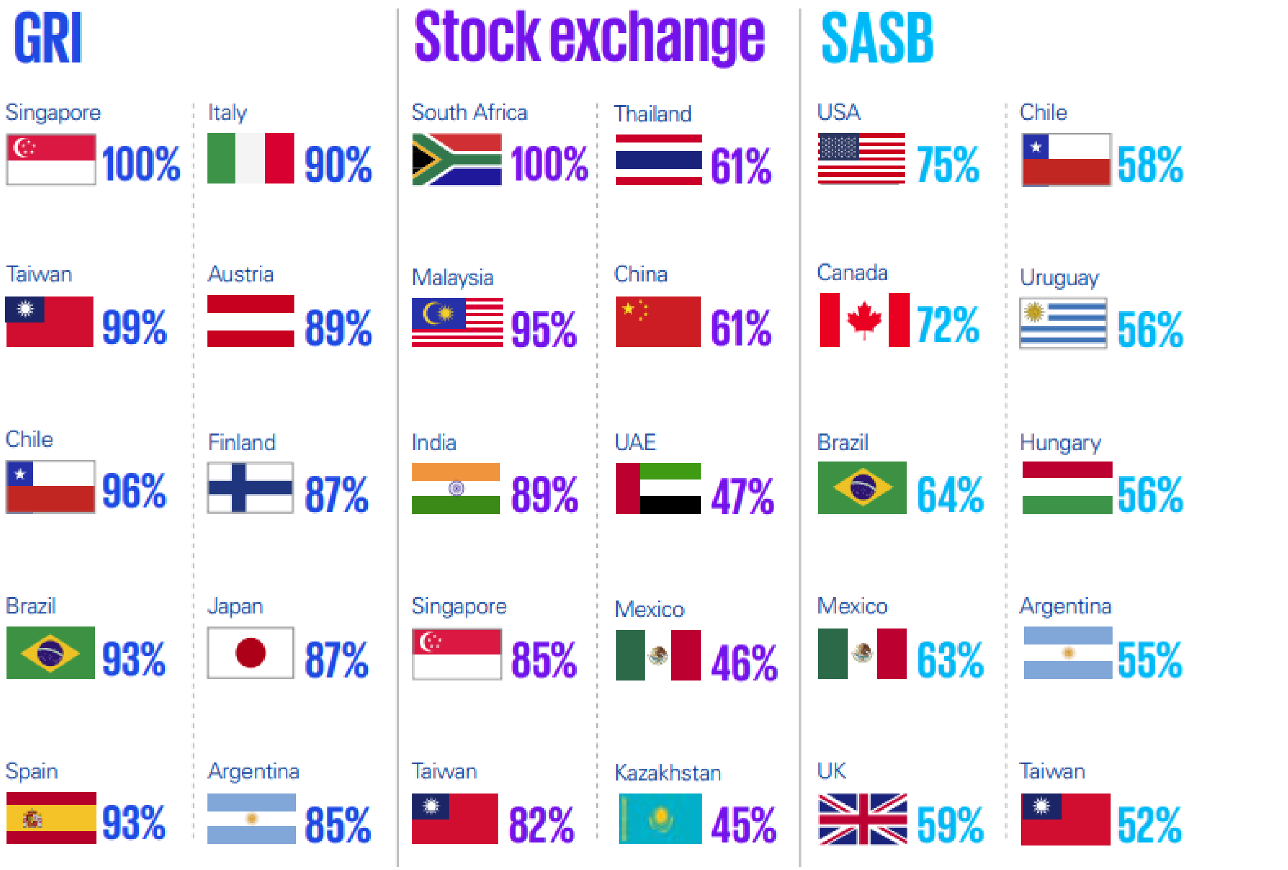
Source: KPMG Survey of Sustainability Reporting 2022, KPMG International, September 2022

Diffusion of different reporting frameworks

Many different frameworks and approaches … Around 100 sustainability and impact management and measurement models were identified from academic literature and practitioner field.

The diverse range of reporting standards currently used around the world **makes comparison across companies and markets challenging**.

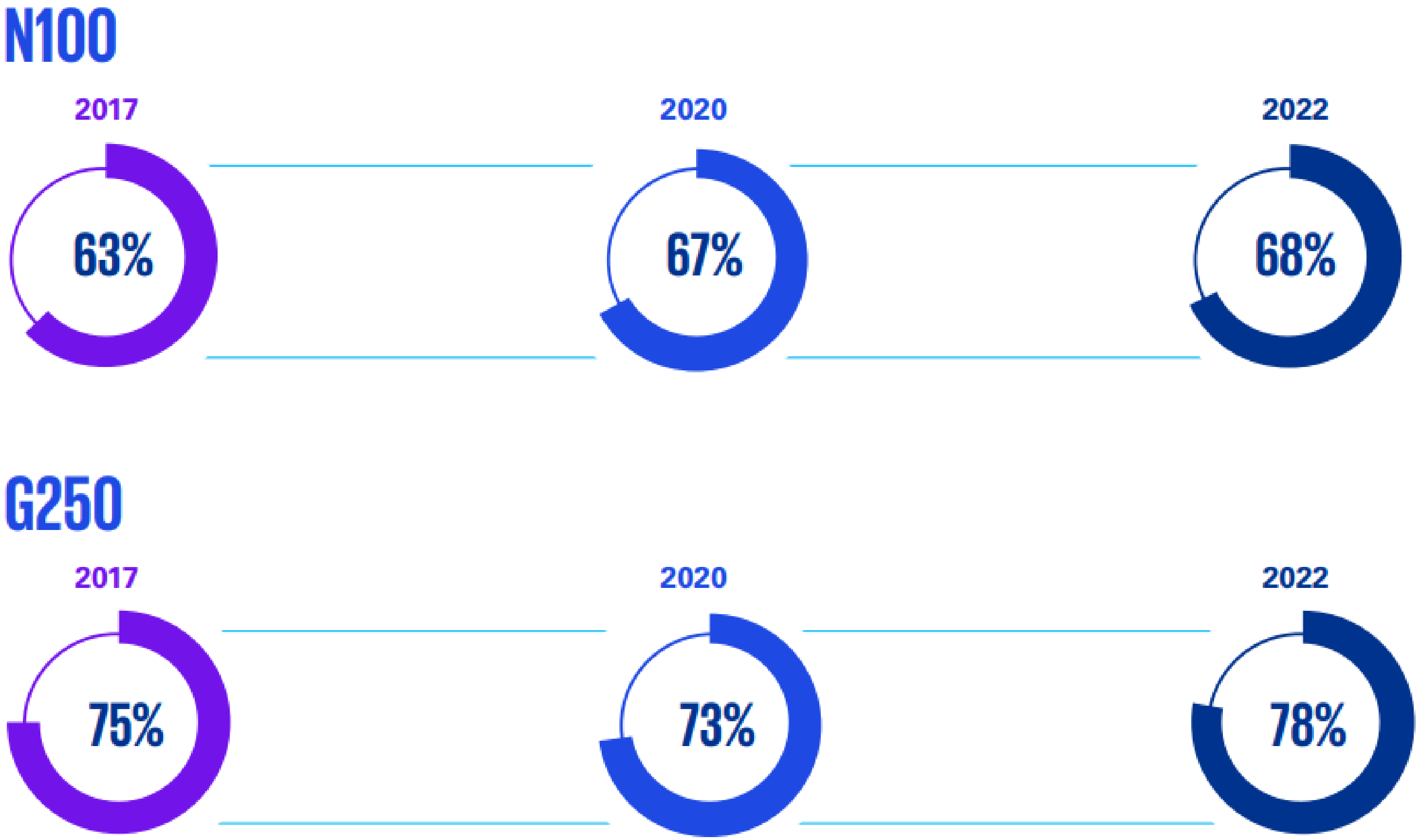
Figure 8: Top 10 countries, territories and jurisdictions by percentage of N100 companies reporting against GRI standards, stock exchange guidelines, and SASB standards (2022)



Diffusion of different reporting frameworks: Global reporting initiative

At present, GRI is the most commonly used reporting standard globally with increased adoption across both the N100 and G250.

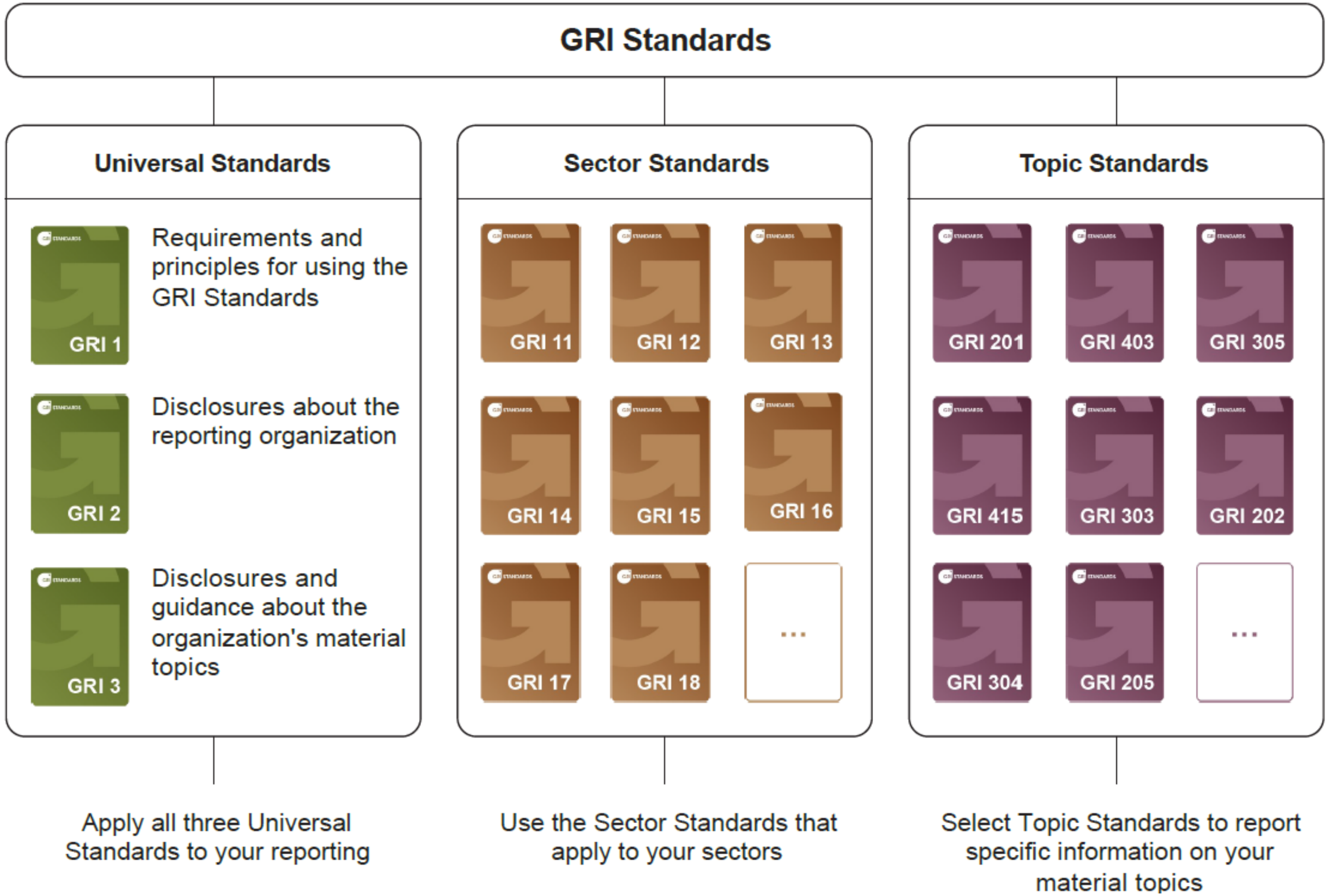
Since 1997, GRI has remained the incumbent standard for non-financial reporting



Base: 4,581 N100 and 240 G250 companies that report on sustainability or ESG matters

Source: KPMG Survey of Sustainability Reporting 2022, KPMG International, September 2022

Diffusion of different reporting frameworks: Global reporting initiative



Group Reports

Anglo American Foundation Report 2022

Integrated Annual Report 2022 (iXBRL viewer)

Integrated Annual Report 2022 (ESEF reporting package)

Integrated Annual Report 2022

Sustainability Report 2022

Ore Reserves and Mineral Resources Report 2022

Tax and Economic Contribution Report 2022

Climate Change Report 2022

United Nations Global Compact

The UN Global Compact (UNGC) is a principles-based approach to sustainability, derived from UN declarations. Our Communication on Progress highlights our progress toward implementation of the principles and our support for the UNGC's development objectives.

Anglo American is a signatory to the United Nations (UN) Global Compact Principles, through which we commit to:

- Supporting and respecting the protection of internationally proclaimed human rights
- Ensuring that we are not complicit in human rights abuses
- Upholding the freedom of association and the effective recognition of the right to collective bargaining
- Eliminating all forms of forced and compulsory labour
- Ensuring the effective abolition of child labour
- Eliminating discrimination in respect of employment and occupation
- Supporting a precautionary approach to environmental challenges
- Undertaking initiatives to promote greater environmental responsibility
- Encouraging the development and diffusion of environmentally friendly technologies
- Work against corruption in all its forms, including extortion and bribery.

Our approach to complying with the UN Global Compact Principles is integrated throughout this report.

UN Guiding Principles on Business and Human Rights

The UN Guiding Principles on Business and Human Rights (UNGPs) is a framework, which aims to show the progress an organisation is making regarding respecting human rights. Anglo American is committed to operating in a manner consistent with the guiding principles.

SDGs

We have developed our Sustainable Mining Plan through extensive internal and external engagement and analysis of critical opportunities and risks, including the UN Sustainable Development Goals (SDGs).

GRI Standards

The Global Reporting Initiative (GRI) standards were the first, common sustainability standards for organisations to report their sustainability impacts in a consistent and credible way, while meeting the needs of multiple stakeholders. Our sustainability report is prepared in accordance with the GRI standards core-level option.

Our GRI table is found on pages 101–103.

TCFD

The Task Force on Climate-related Financial Disclosures (TCFD) is a framework which enables companies to provide better information to investors across four key areas; climate change governance, risk, strategy and, metrics and targets.

Anglo American's response can be found on page 55 of this report and the Integrated Annual Report on pages 114–120.

EITI

We have been a signatory to the Extractive Industries Transparency Initiative (EITI) since its inception. This is built on the belief that to build trust and a sustainable licence to operate, we need to have open and inclusive conversations about the cost-benefits of mining. We remain committed to the multi-stakeholder group approach that lies at the heart of the EITI accountability process and aim to replicate this approach everywhere we operate including in countries which are not EITI signatories.

Voluntary Principles on Security and Human Rights

The Voluntary Principles on Security and Human Rights are an internationally recognised set of principles that guide companies on how to conduct their security operations while ensuring respect for human rights.

HOLCIM

2022

- → Climate Report 2022
- → Integrated Annual Report 2022 - English
- → Integrated Annual Report 2022 Website
- → Integrated Annual Report 2022 Summary - English
- → Integrated Annual Report 2022 Summary - German
- → Sustainability Performance Report 2022
- → Integrated Profit and Loss Statement (IP&L)
- → Glossary of Alternative Performance Measures

The most recent trends in sustainability reporting

European Sustainability Reporting Standards (ESRS)

In April 2021, the European Commission adopted a legislative proposal for a Corporate Sustainability Reporting Directive (CSRD) that requires companies within its scope to report using a **double materiality** perspective in compliance with European Sustainability Reporting Standards (ESRS) adopted by the European Commission as delegated acts. Under the proposed CSRD, EFRAG was appointed technical adviser to the European Commission developing draft ESRS.

Cross-cutting Exposure Drafts	
ESRS 1	General requirements
ESRS 2	General disclosures
Topical standards - Environment	
ESRS E1	Climate change
ESRS E2	Pollution
ESRS E3	Water and marine resources
ESRS E4	Biodiversity and ecosystems
ESRS E5	Resource use and circular economy
Topical standards - Social	
ESRS S1	Own workforce
ESRS S2	Workers in the value chain
ESRS S3	Affected communities
ESRS S4	Consumers and end-users
Topical standards - Governance	
ESRS G1	Business conduct

ESRS1 Climate change: Objective

To enable users of sustainability statements to understand:

a) **how the undertaking affects climate change**, in terms of material positive and negative actual and potential impacts

b) the **undertaking's past, current and future mitigation efforts** in line with the Paris Agreement and limiting global warming to 1.5°C

c) **plans and capacity of the undertaking to adapt its strategy and business model**(s) in line with the transition to a sustainable economy and to contribute to limiting global warming to 1.5°C

d) any **other actions taken** by the undertaking, and the **result** of such actions to prevent, mitigate or remediate actual or potential negative impacts

e) nature, type and extent of the undertaking's **material risks and opportunities** arising from the undertaking's impacts and dependencies on climate change, and how the undertaking manages them

f) **financial effects** on the undertaking over the short-, medium- and long-term time horizons of risks and opportunities arising from the undertaking's impacts and dependencies on climate change

Double materiality

Reference scenario

ESRS1 Climate change: Disclosures

ESRS 2 General disclosures	Impact, risk and opportunity management	Metrics and targets
• **DR related to ESRS 2 GOV-3** Integration of sustainability-related performance in incentive schemes ISSB • **DR E1-1** Transition plan for climate change mitigation CSRD CSDDD ISSB US SEC • **DR related to ESRS 2 SBM-3** Material impacts, risks and opportunities and their interaction with strategy and business model(s) CSRD ISSB US SEC • **DR related to ESRS 2 IRO-1** Description of the processes to identify and assess material climate-related impacts, risks and opportunities CSRD ISSB US SEC	• **DR E1-2** Policies related to climate change mitigation and adaptation CSRD • **DR E1-3** Actions and resources in relation to climate change policies CSRD Taxo. ISSB	• **DR E1-4** Targets related to mitigation and adaptation CSRD ISSB US SEC • **DR E1-5** Energy consumption and mix (including intensity per revenue) SFDR • **DR E1-6** Gross Scopes 1, 2, 3 and total GHG emissions (including intensity per revenue) SFDR ISSB US SEC • **DR E1-7** GHG removals and GHG mitigation projects financed through carbon credits CSRD ISSB US SEC • **DR E1-8** Internal carbon pricing ISSB US SEC • **DR E1-9** Potential financial effects from material physical and transition risks and potential climate-related opportunities Taxo. ISSB US SEC

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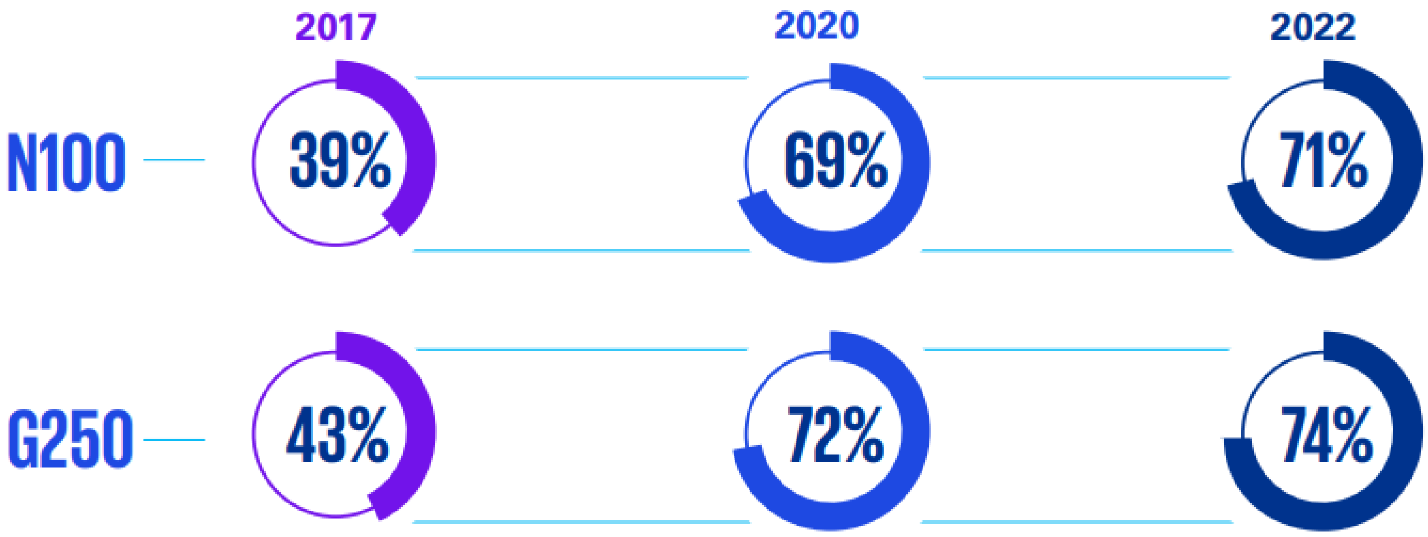
Other forms of reporting: SDG reporting

SDG reporting is increasingly widespread



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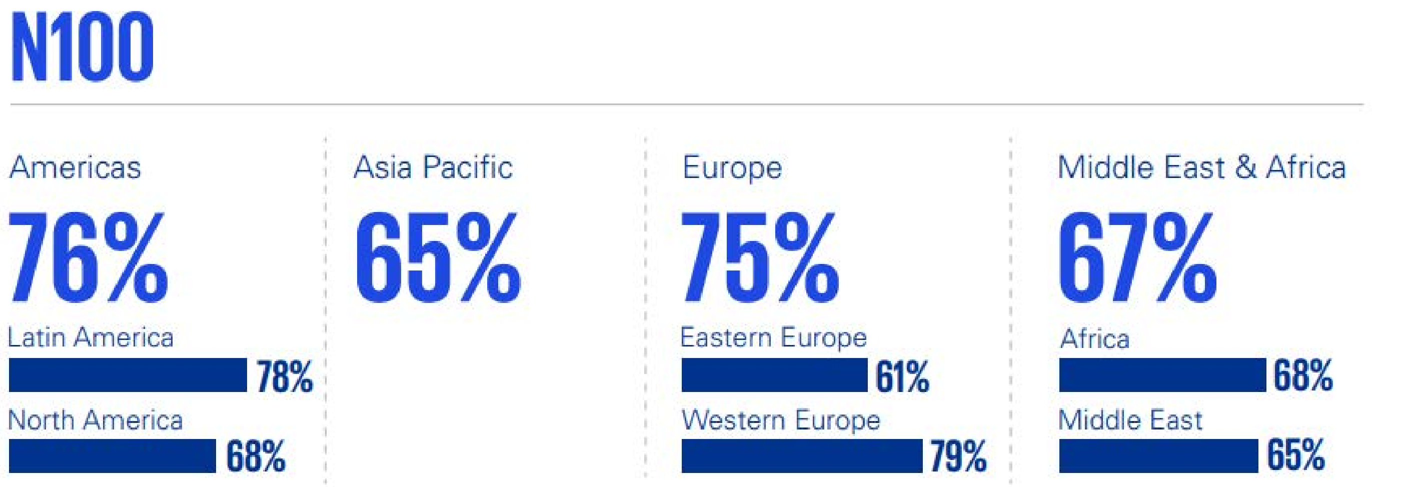


Other forms of reporting: SDG reporting (Bayer)

Sustainability Drives Value and Growth

A growing world population and the increasing burden on natural ecosystems are among the biggest challenges humanity is facing. This situation is further complicated by the effects of the COVID-19 pandemic and the war in Ukraine. Furthermore, both crises have clearly shown how important it is to protect health and ensure food security worldwide – and how these goals are in jeopardy.

As a global leader in healthcare and nutrition, Bayer can contribute more than any other enterprise to solving global challenges through its business. With this goal in mind, Bayer is committed to ambitious targets that it aims to achieve through its own business activity and the endeavors of its employees.

Sustainability is part of our corporate strategy

We consider sustainability to be at the core of our corporate responsibility – and it also safeguards our future growth. Sustainability is therefore an essential component of our corporate strategy, our business activities, our corporate values and the way in which we conduct our business. Sustainability is at the center of our corporate vision of "Health for all, hunger for none." The following strategic sustainability targets apply as a guideline for the actions of all divisions:

// Create inclusive growth and value added for society and our investors
// Reduce our ecological footprint
// Embrace responsible business practices along our value chain

Our contribution to the Sustainable Development Goals

We align our own strategic sustainability targets to the global Sustainable Development Goals (SDGs) of the United Nations, which apply through 2030. The global community lags behind the goals in many areas, which means that the contribution we as a company can make to achieving them becomes all the more important.

At Bayer, we are convinced that we can have a particular impact here, owing to our portfolio, our global reach and our innovative power. In this context, we consciously support those Sustainable Development Goals where there is a pressing need to act and where we can make the greatest impact through our businesses and their sustainability-focused transformation.

SDG 1 – No poverty

As farming is often the only source of income in low- and middle-income countries (LMICs), we help to fight poverty there through our engagement with smallholder farmers and by supporting women.

SDG 2 – Zero hunger

Our products and services help the global agricultural industry to increase production, and thus to feed a growing world population, while consuming fewer natural resources. This also benefits smallholder farmers in LMICs.

SDG 3 – Good health and well-being

Our products directly impact people's health. Some prevent diseases and others treat illnesses. This applies worldwide – but particularly in LMICs, where we endeavor to make existing products and services accessible and affordable.

SDG 5 – Gender equality

We work to achieve gender equality in our business and throughout our supply chain. Through modern contraception, we support women around the world in self-determined family planning. We promote equal opportunity within our company.

SDG 6 – Clean water and sanitation

Our products and services serve to reduce future water consumption in agriculture. We undertake to protect water resources, use them as sparingly as possible and further reduce water pollution.

SDG 13 – Climate action

We pursue a climate protection and decarbonization strategy that is aligned with the goals of the Paris Agreement. In our value chain, we promote resilient, low-emissions farming that helps to capture CO_2 through new methods.

SDG 15 – Life on land

By reducing the environmental impact of crop protection products (Crop Protection Environmental Impact Reduction, CP EIR), we support sustainable farming that helps to protect the environment within our value chain and to conserve biodiversity.

Other forms of reporting: SDG reporting (Stellantis)

Contributions to SDGs Table

6 CSR MACRO-RISKS / PILLARS	22 CSR ISSUES / CHALLENGES	1	3	4	5	6	7	8	9	10	11	12	13	14	16	17
Bringing a tangible impact on climate change	1 Vehicle CO_2 emissions								✓			✓	✓			
	2 Industrial and sites carbon footprint											✓	✓			
	3 Carbon footprint of the supply chain: purchasing and logistics								✓			✓	✓			
Driving Company transformation through the development of human capital	4 Management of Company transformation and social dialogue		✓	✓				✓								
	5 Attracting and developing all talent	✓		✓	✓			✓		✓					✓	
	6 Diversity and equal opportunity	✓			✓			✓								
	7 Health, safety and well-being in the workplace		✓													
Meeting changing customer expectations on mobility	8 Development of new mobility solutions (including autonomous vehicles)						✓		✓		✓		✓			✓
	9 Vehicle and service quality - customer satisfaction								✓							
	10 Vehicle safety		✓								✓					✓
Preventing ethics violatio	11 Ethics in governance and business practices											✓			✓	
	12 Responsible management of personal information								✓						✓	✓
	13 Responsible information to customers														✓	
Promoting protection and implementing responsible use of natural resources	14 Wise use of materials in the vehicle life cycle (including product recycling)					✓	✓		✓		✓	✓	✓		✓	
	15 Vehicle impact on air quality											✓	✓			
	16 Optimization of material cycles in manufacturing processes (including waste)											✓	✓			
	17 Control of industrial discharge and nuisances											✓				
	18 Sustainable water management in manufacturing					✓						✓				
	19 Protection of biodiversity											✓		✓		

Other forms of reporting: Impact weighted accounts

The aim of the Impact Weighted Accounts is to drive companies towards the creation of «financial statements» that:

- Integrate financial, social and environmental performance
- Inform investors' and managers' decision making

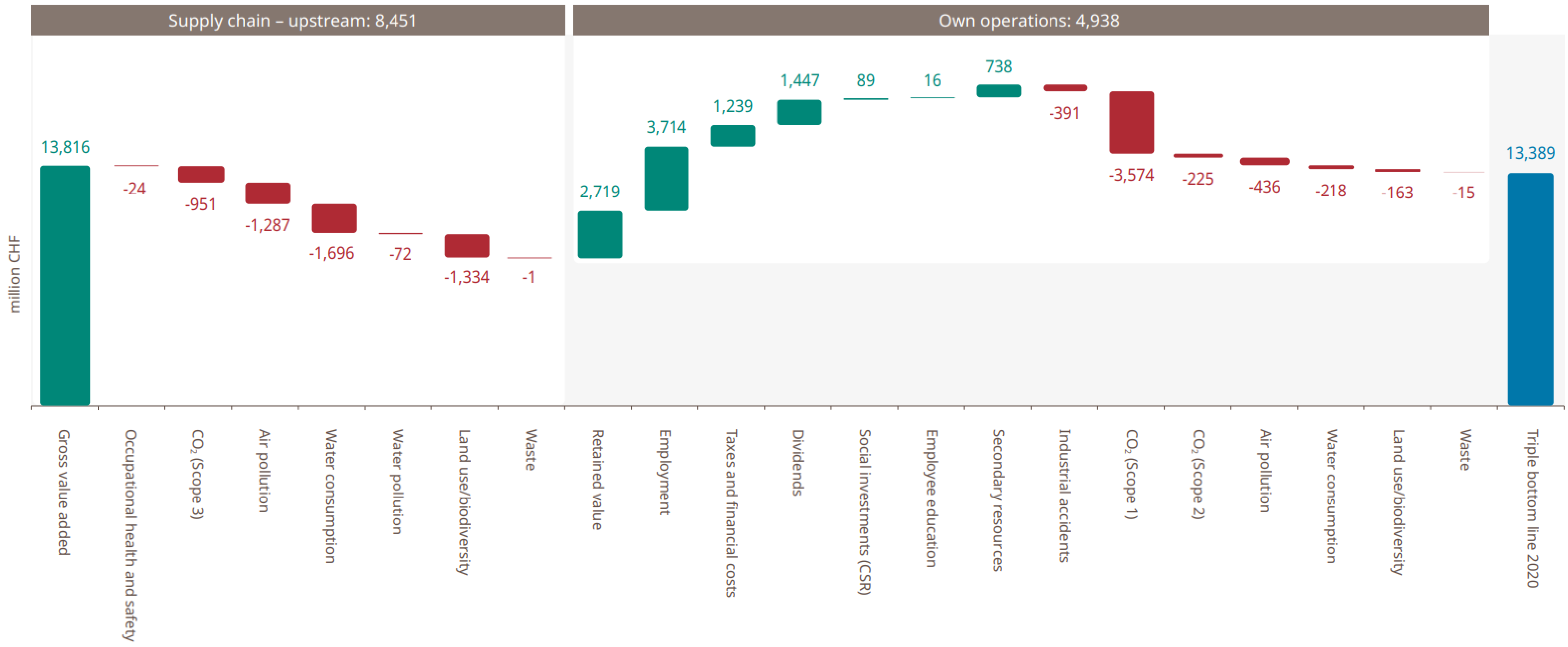
Pillars

- Employment: impact of an organization on its employees
- Environment: impact of an organization's operations on the environment
- Product: impact of an organization's products on the society and environment across the lifecycle

IWAI relies on the idea of monetization heavily

Other forms of reporting: Impact weighted accounts

Integrated Profit & Loss bridge (IP&L)



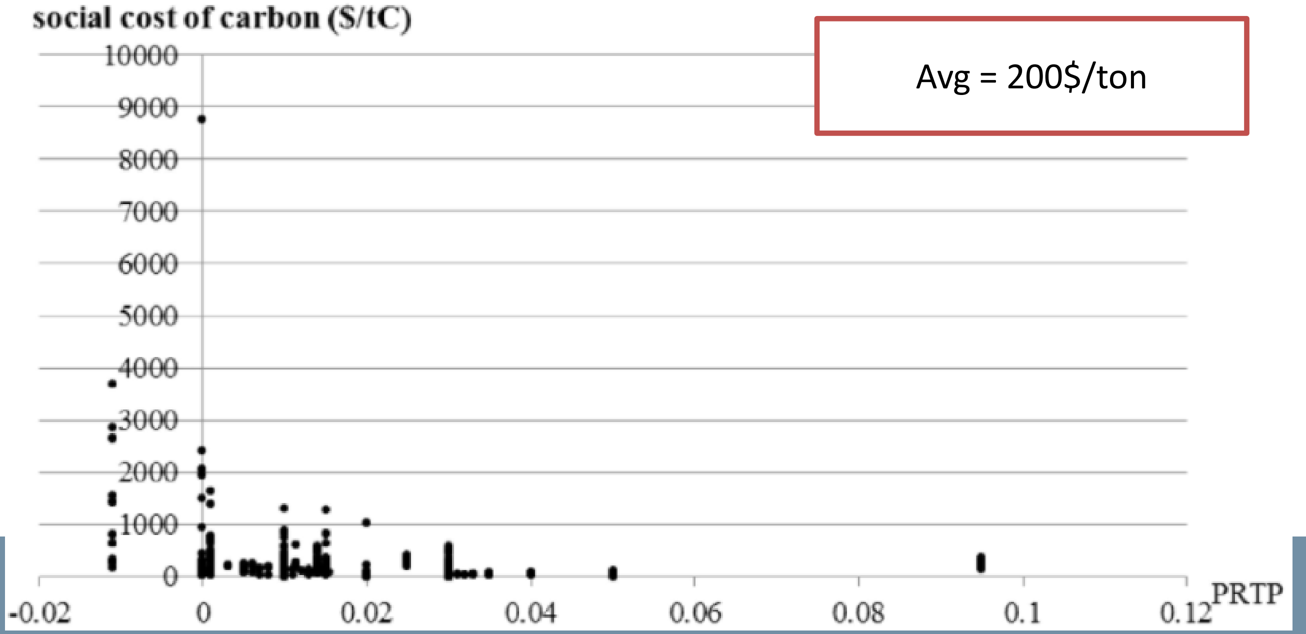
Other forms of reporting: Impact weighted accounts

The process of monetization consists in representing in monetary terms the quantifiable costs and benefits of an organization’s performance

Different models are available for different performance dimensions

Uncertainty is related to:

- The coexistence of alternative approaches to monetization
- These models rely on many assumptions

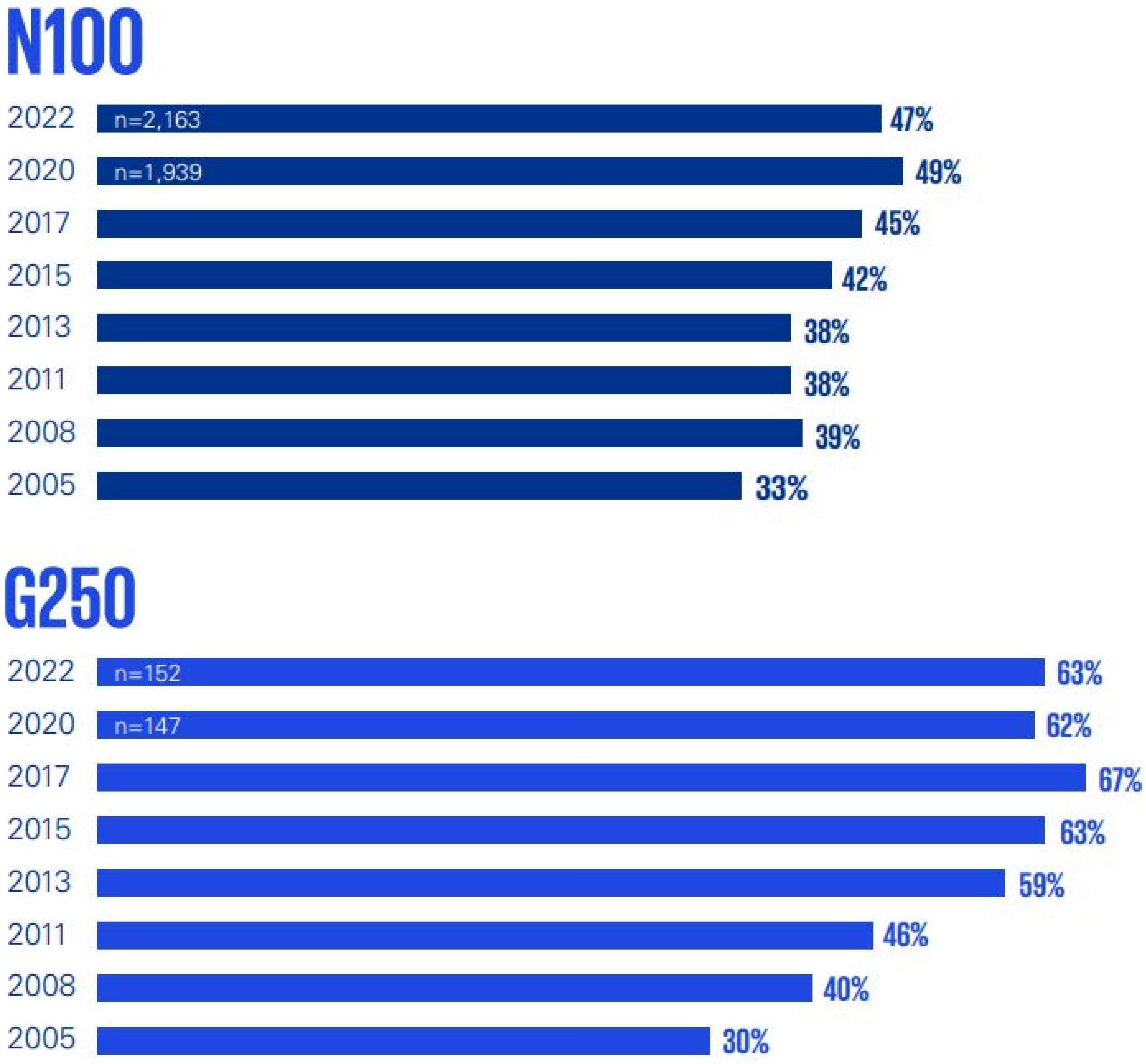


Avg = 200$/ton

Wang, P., et al. (2019). Estimates of the social cost of carbon: A review based on meta-analysis. *Journal of cleaner production*, *209*, 1494-1507.

Assurance services

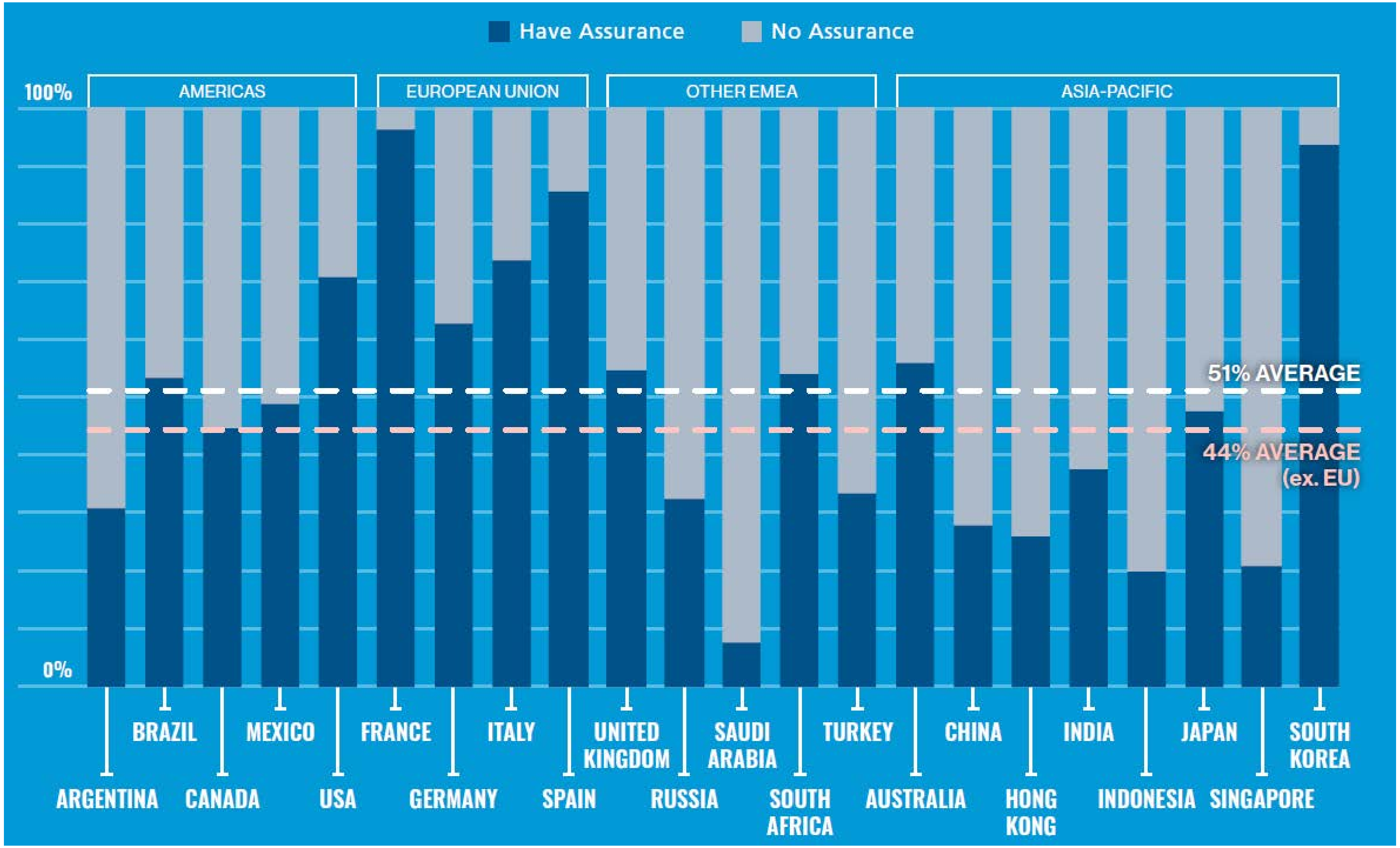
Many companies are introducing voluntary assurance over their sustainability reporting



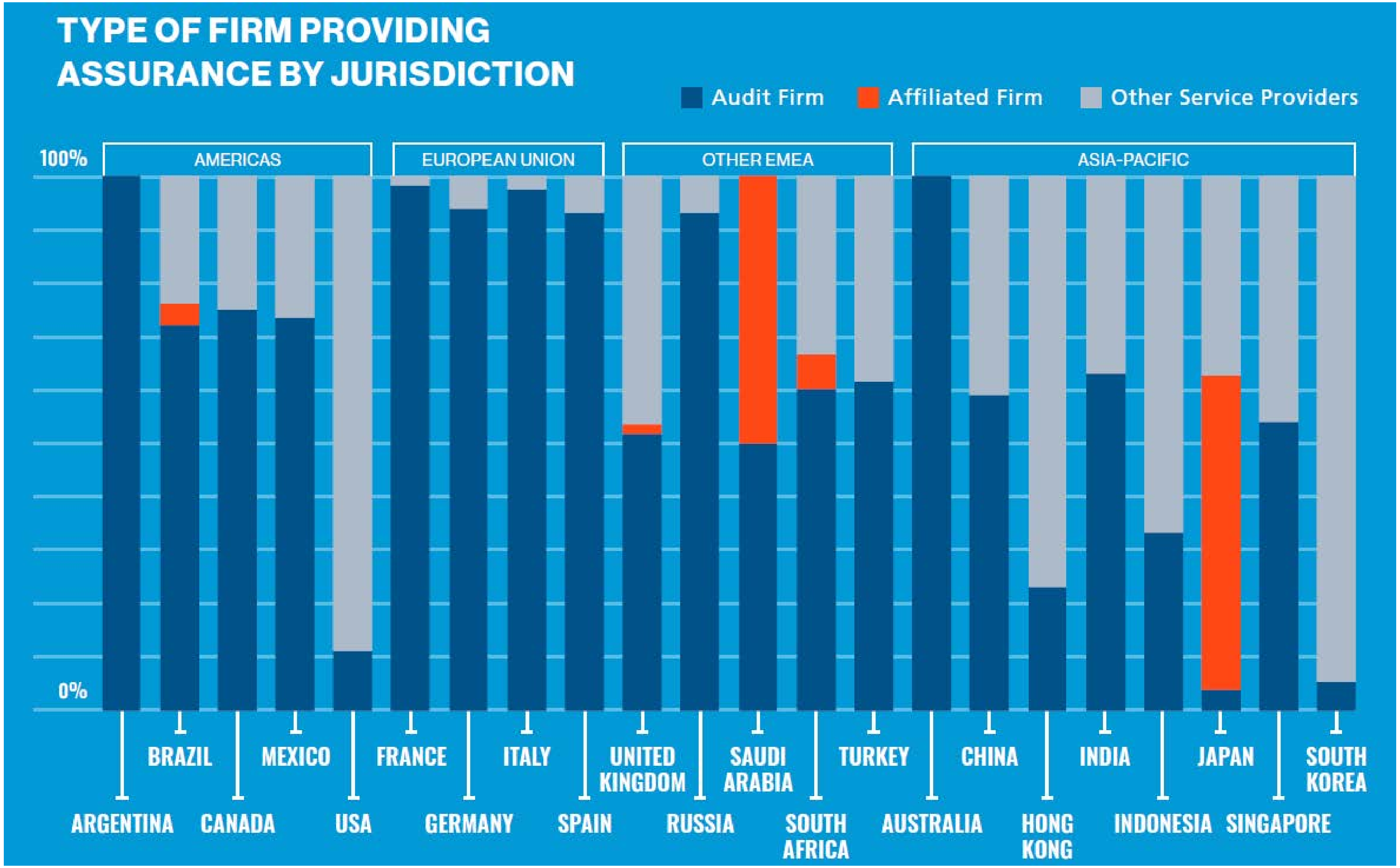
Assurance services

Percentage of assurance is based on the number of companies that provided assurance over reported ESG information (645) vs. the total number of companies that reported ESG information (1269).
If a company provided more than one assurance report (i.e., there were multiple metrics/
information individually verified), that company is only counted once.

Source: The state of play in sustainability assurance benchmarking global practice IFAC (2021)



Assurance services



Assurance services