Sustainability Management in the Aviation and Tourism Industry

Frankfurt University of Applied Sciences

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Section 5: Sustainability Management

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Fachbereich 3 Wirtschaft und Recht

Sustainability Management in the Aviation and Tourism Industry

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Content

- Introduction and Background
- Footprint
- Regulatory
- Industry Action
- **Sustainability Management**

Sustainability Management

Introduction

Key Driver “Finance”

Key Players – TCFD, GRI, CDP, Science Based Target

Management Systems – ISO, EMAS, ACI

Stakeholder's Expectations getting stronger – How to MANAGE expectations?

Investors

- Already sustainability focused investors
- Expect companies to disclose non-financial /CR data preferably according to TCFD
- Expect management of environmental risks
- Use rating agencies and own analytics to evaluate companies compliance and performance (best in class principles)

Regulators/Public opinion

- Airlines and Tourism Companies need to comply with existing laws and upcoming regulations and recommendations
- New laws are in discussion such as "Klimaschutzgesetz" and "Wertschöpfungskettengesetz" with high public attention and potentially high impact for Companies
- Fulfil legal restrictions and strive for further improvement

Employees

- Employees expect to contribute to societal and environmental challenges
- Important part of the attractiveness as an employer
- Employees want to get involved themselves

Customers

- **Corporate customers**
  - become carbon neutral and require to comply with selected ESG criteria also as prerequisite for future business
  - expect support for own brand
- **Private customers** expect airlines and tourism to act environmentally and societal responsible

“Environmentals” need to be embedded in Corporate Management Processes and Reporting

Environmental and sustainability related:

- KPIs
- Risk assessment
- Reports
- Measures
- Targets
- Responsibilities
- Communication
- Investment
- Management Processes and Structures
- …

Classic Corp. Reporting

Financials
- Revenue
- Cost
- Result
- Tax declaration

Annual Report
- Business Development
- Risk

Company Papers
- Brochures
- Other publications

Corp. Management Processes

- Strategic Planning and Investment
- Marketing & Sales
- Product Development
- HR
- IT
- Communication
- Operations Management
- Quality and Safety
- Procurement and Supply Chain
- **Financials**
  - Cost Accounting
  - Controlling
  - Reporting
  - IR, Governance
  - Risk Management

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Driven by Shareholders, Finance is asking for sound ESG data and analytics

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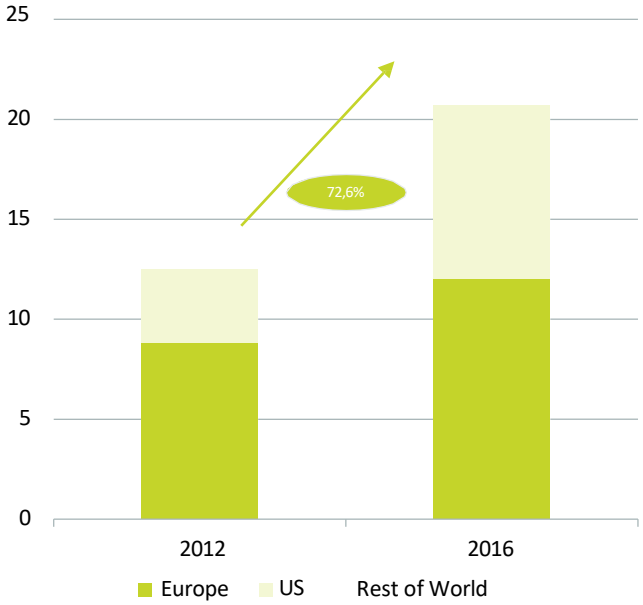
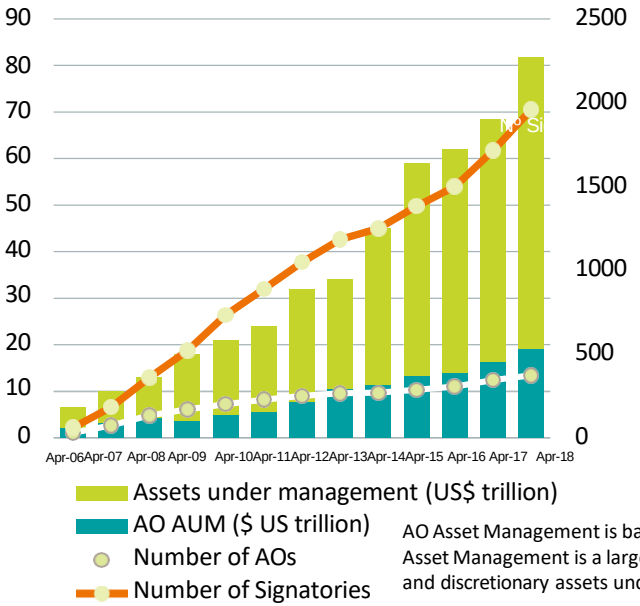
ESG-Asset growth[1]
(USD billion)



PRI Growth[2]



AO Asset Management is based out of New York. AO Asset Management is a large advisory firm with clients and discretionary assets under management (AUM)

The Global Sustainability Investment Alliance is a collaboration of membership-based sustainable investment organizations around the world. The GSIA's mission is to deepen the impact and visibility of sustainable investment organizations at the global level. Our vision is a world where sustainable investment is integrated into financial systems and the investment chain and where all regions of the world have coverage by vigorous membership based institutions that represent and advance the sustainable investment community.

The PRI (principle for responsible investment) is the world's leading proponent of responsible investment. It works to understand the investment implications of environmental, social and governance (ESG) factors and to support its international network of investor signatories in incorporating these factors into their investment and ownership decisions. The PRI acts in the long-term interests of its signatories, of the financial markets and economies in which they operate and ultimately of the environment and society as a whole.
The PRI is truly independent. It encourages investors to use responsible investment to enhance returns and better manage risks, but does not operate for its own profit; it engages with global policymakers but is not associated with any government; it is supported by, but not part of, the United Nations.

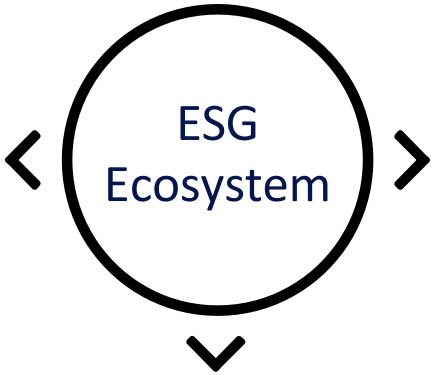
Source : 1) GSIA 2016,2014, 2) PRI

Many players in ESG Ecosystem provide input, assessment tools and communication platforms

Standard providers
Best practices for corporate reporting on range of economic, environmental and social impacts

SASB
GRI
CDP

Data collection



Multi-stakeholder Initiatives

World Economic Forum
IMPACT MANAGEMENT PROJECT
World Benchmarking Alliance
B Lab
wbcsd
TCFD
PRI Principles for Responsible Investment

UN SDGs

Commercial ESG ranking and rating systems
Analyze corporate sustainability data to come up with overall "ESG rating" based on proprietary methodology

ISS-oekom
MSCI
RepRisk
THOMSON REUTERS
FTSE Russell
SUSTAINALYTICS
TRUVALUE LABS
Bloomberg
CSRHUB®

All of these organizations have different methodologies and inputs for the rating process

European Commission
UNEP FINANCE INITIATIVE
The Prince of Wales's Corporate Leaders Group

Why reporting matters – examples from the carbon Disclosure Project

INFORM CUSTOMERS

- Large buyers use CDP data to benchmark suppliers year-on-year and measure a company's performance against peers.
- Nearly 50% of organizations will deselect a company based on environmental performance.
- 63% of large corporate buyers working with CDP are using our data to choose whether or not to contract a supplier.

ACCESS INVESTORS

- CDP data and scores feed into financial markets through Bloomberg, MSCI, Thomson Reuters and more.
- Investors like Schroders and CalPERS use CDP data to assess the carbon footprint of their portfolio and pick future winners and losers.
- CDP data powers financial products, like low carbon indices, and investment funds.

SEE THE OPPORTUNITIES

- 50% of companies using CDP say reporting helps their organization be more competitive, by identifying areas to increase efficiency, reduce impacts and reduce costs.
- 87% of companies responding to CDP have identified business opportunities and are taking action
- 225 of the world's biggest companies reported to CDP their total climate change opportunities at US$2.1 trillion.

BENCHMARK AGAINST PEERS

- Understand your progress and benchmark your company's performance against industry peers
- Set more ambitious targets: 69% of companies using CDP for over 3 years have emissions targets, compared to just 38% of first time reporters.
- Aim for a place on the CDP A List: a group of 180 companies recognized as leaders and which, as a group, outperform the stock market.

Source : CDP

Sustainability Management

- Introduction
- Key Driver “Finance”
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Who is the „Task Force on Climate-related Financial Disclosures" (TCFD)?

History and Background

- Was initiated after the Paris Climate conference in 2015 by the Financial Stability Board (FSB) .
- The Financial Stability Board (FSB) is an international body that monitors and makes recommendations about the global financial system.
- The TCFD's 32 members were chosen by the FSB to include both users and preparers of disclosures from across the G20's constituency covering a broad range of economic sectors and financial markets.

"Increasing transparency makes markets more efficient, and economies more stable and resilient."
—Michael R. Bloomberg, Chair

Mission

- The Task Force on Climate-related Financial Disclosures (TCFD) will develop voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers, and other stakeholders.
- The Task Force will consider the physical, liability and transition risks associated with climate change and what constitutes effective financial disclosures across industries.
- The work and recommendations of the Task Force will help firms understand what financial markets want from disclosure in order to measure and respond to climate change risks, and encourage firms to align their disclosures with investors' needs.

Core Elements of Recommended Climate-Related Financial Disclosures by TCFD

Governance
The organization's governance around climate-related risks and opportunities

Strategy
The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning

Risk Management
The processes used by the organization to identify, assess, and manage climate-related risks

Metrics and Targets
The metrics and targets used to assess and manage relevant climate-related risks and opportunities

Source: task force on climate related financial disclosures; https://www.fsb-tcfd.org/tcfd-knowledge-hub/#

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Who is the „Global Reporting Initiative" (GRI)?

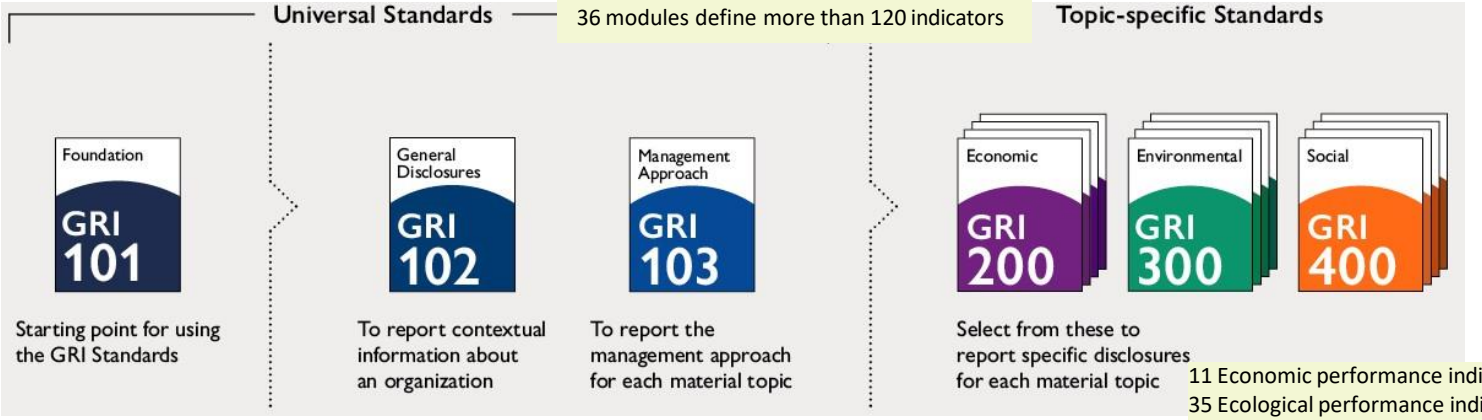
The Global Reporting Initiative (known as GRI) is an international independent standards organization that helps businesses, governments and other organizations understand and communicate their impacts on issues such as climate change, human rights and corruption. Source: https://en.wikipedia.org/wiki/Global_Reporting_Initiative

Vision:
A thriving global community that lifts humanity and enhances the resources on which all life depends.

Mission:
To empower decisions that create social, environmental and economic benefits for everyone.

The GRI produces global standards for sustainability reporting. They feature a modular, interrelated structure, and represent the global best practice for reporting on a range of economic, environmental and social impacts.

- GRI puts materiality center stage. Focus on the issues that matter most to business, rather than reporting on everything.
- For each material aspect, organizations must consider the impact inside or outside the organization



Source: https://www.globalreporting.org/standards/gri-standards-download-center/

Global Reporting Initiative GRI is well established and interlinked to other standards

ESG metrics

Examples of a company's internal and external stakeholders. Sustainability reporting aims to standardize and quantify the environmental, social and governance costs and benefits derived from the activities of the reporting companies accordingly. Some of the examples of the reporting measures to be used would be the quantified results of the CO2 emissions, working and payment conditions, financial transparency and alike.
For the assessment of the social impact created by the reporting organization, GRI standards were created according to international labor practices and the environmental impact by conducting an independent audit. **ISO 14010, ISO 14011, ISO 14012 and ISO 26000 set out a standard for assessing the environmental impact, while OHSAS 18001 lays down a health and safety risk management system**. For instance, **the ILO's eight core conventions** outline specific groups or population that require special attention: women, children, migrant workers and their families, persons belonging to national or ethnic, linguistic, and religious minorities, indigenous peoples, and persons with disabilities. In order to circumvent "greenwashing" or falsified reporting, the financial institution can conduct an independent audit of the investee or enter into a dialogue with the top management of the company in question.

European Commission Directive

In December 2014, EC has adopted a new directive obliging large multinational corporations to provide **non-financial disclosure to the markets**. The law applies to public companies with more than 500 employees. Companies that would provide such a reporting would be required to report on environmental, social and employee-related, human rights, anti-corruption and bribery matters. Additionally, these large corporations would be required to describe their business model, outcomes and risks of the policies on the above topics, and the diversity policy applied for management and supervisory bodies. **The reporting techniques are encouraged to rely on recognized frameworks such as GRI's Sustainability Reporting Guidelines**, the United Nations Global Compact (UNGC), the UN Guiding Principles on Business and Human Rights, OECD Guidelines, International Organization for Standardization (ISO) 26000 and the International Labour Organization (ILO) Tripartite Declaration.

Source: https://en.wikipedia.org/wiki/Global_Reporting_Initiative

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Who is the „Carbon Disclosure Project„ (CDP)?

CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts. Over the past 15 years we have created a system that has resulted in unparalleled engagement on environmental issues worldwide. Source: https://www.cdp.net/en

Areas of focus	Engage & inform	
Climate	Companies	Supply chain
Water	Cities	Investors
Forests	Governments	States and Regions

CDP covers:

- > 7,000 companies
- 50 % of global stock market value
- 655 Investors with 78,000 bn $

CDP provides:

- World's largest Database for primary data on Climate and Emission
- Climate related strategies
- Risk and opportunities
- Measures for improvement
- Scope 1,2,3 emission
- Certificate and emission trading

Source: https://www.umweltbundesamt.de/sites/default/files/medien/382/dokumente/06_praesentation_stakeholderdialog_risikomanagement_in_unternehmen_dreyer.pdf

CDP is the largest reposting institution for sustainability information

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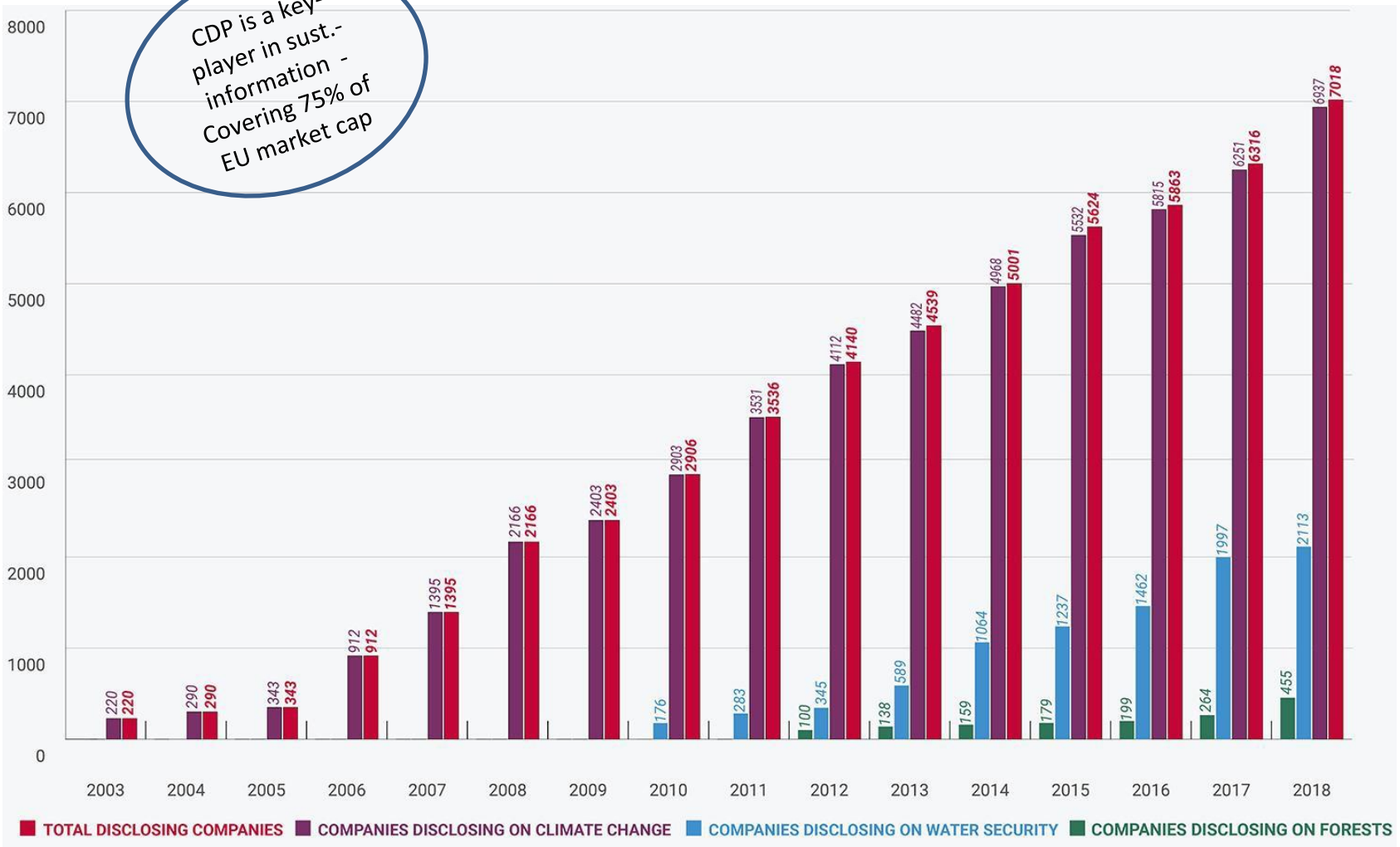
CDP is a key-player in sust.-information - Covering 75% of EU market cap



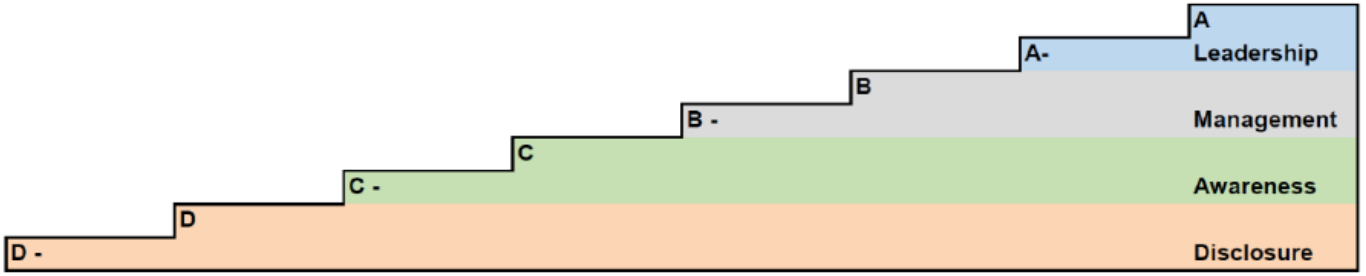
Source: www.cdp.net 2019

Carbon Disclosure Project – Scoring Methodology

If the minimum score threshold is not achieved, the company will not be scored on the next level (see below for figures).

Level	Climate Change	Water	Forests	Score band
Disclosure	0-44%	0-44%	0-44%	D-
	45-79%	45-79%	45-79%	D
Awareness	0-44%	0-44%	0-44%	C-
	45-79%	45-79%	45-79%	C
Management	0-44%	0-44%	0-44%	B-
	45-79%	45-79%	45-79%	B
Leadership	0-79%	0-79%	0-79%	A-
	80-100%	80-100%	80-100%	A

The final letter grade is awarded based on the score obtained in the highest achieved level. For example, Company XYZ achieved 88% in Disclosure level, 82% in Awareness and after the Management scoring category weighting has been applied 60% in Management will receive a B. If a company obtains less than 45% in its highest achieved level (with the exception of Leadership), its letter score will have a minus [3]. For example, Company 123 achieved 81% in Disclosure level and 42% in Awareness level resulting in a C-.



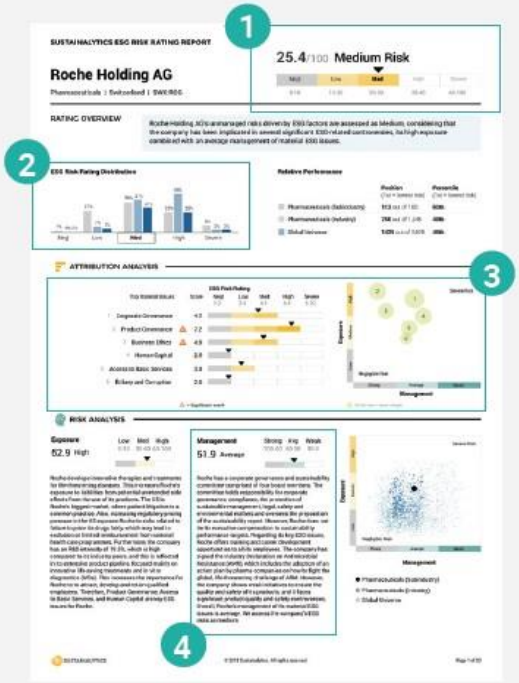
Results will be communicated to responders with their current level, indicating which areas of environmental stewardship they are performing well in, and which actions to target for improvement.

Source: cdp - http://b8f65cb373b1b7b15feb-c70d8ead6ced550b4d987d7c03fcdd1d.r81.cf3.rackcdn.com/cms/guidance_docs/pdfs/000/000/233/original/Scoring-Introduction.pdf?1524216279

“Look and Feel” of a CDP report

ESG Risk Ratings Output

1. Company ratings are categorized across five risk levels: negligible, low, medium, high and severe
2. A company's risk is measured against its industry peers and against the global universe
3. Companies are exposed to different ESG issues to different degrees. Exposure assessment is driven by sub-industry and company-specific factors
4. The magnitude to which a company is exposed to ESG risk and how well the company is managing that risk is measured and explained
5. Material ESG Issues (MEIs) are identified and brought into focus



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Science Based Targets

Science Based Targets is a joint initiative of CDP, the UN Global Compact (UNGC), the World Resources Institute (WRI) and WWF. Our goal is to enable leading companies setting ambitious and meaningful corporate GHG reduction targets.

Science-based targets specify how much and how quickly a company needs to reduce its emissions, in line with the Paris Agreement goals to limit global warming to well below 2° C.

Source: https://sciencebasedtargets.org

SBTi looks at the development of Emission Reduction Targets per industry sector

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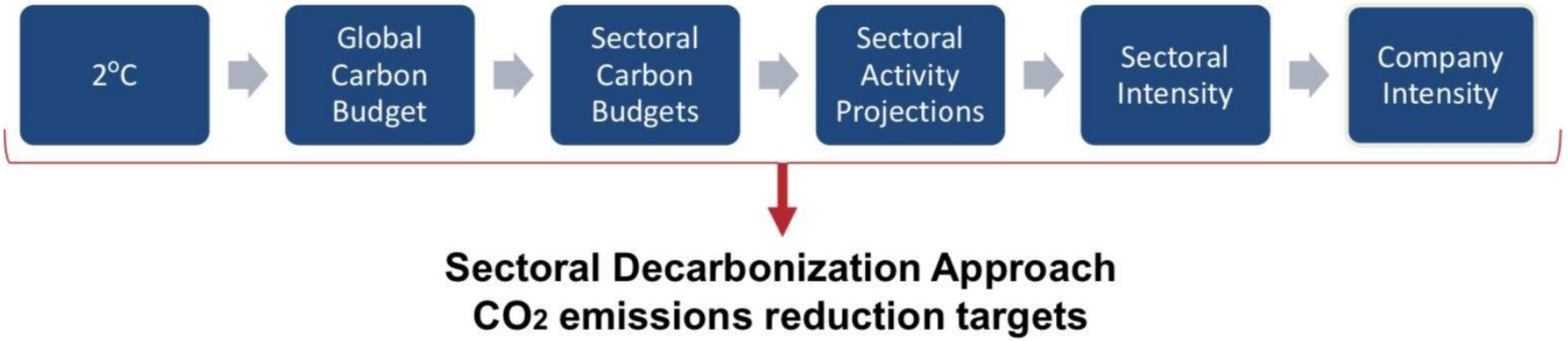
Mind the Science, Mind the Gap initiative: "Science Based Targets"

CDP DRIVING SUSTAINABLE ECONOMIES

THE GLOBAL COMPACT

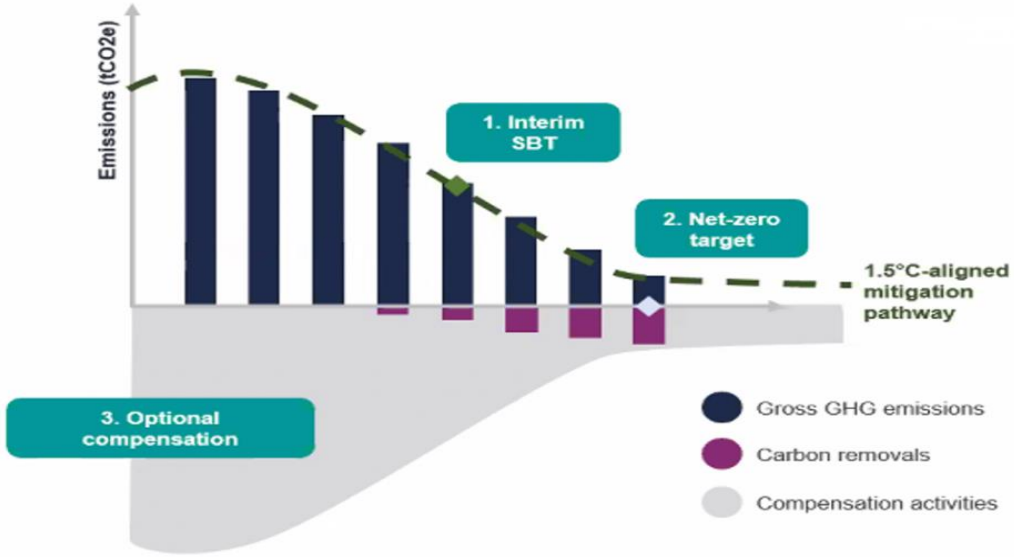
WORLD RESOURCES INSTITUTE

WWF CLIMATE SAVERS



Source: www.cdp.net | @CDP | susan.dreyer@cdp.net

The SBTi sectoral path for aviation is challenging and has been adopted only by few airlines so far



Source: Net-Zero Criteria Draft for Public Consultation

~23 airlines/ airline groups committed – only 3 (AA/ NZ/ LHG) with confirmed target

Target setting approach for airlines

- Based on the SBTi's Sectoral Decarbonization Approach (SDA) converging with the sector's Paris-aligned GHG intensity by 2050 – **a well below 2 degree target**
- **Decarbonization pathway** for the aviation sector is based on assumptions including forecasted sector growth, **availability of mitigation levers** and socio-economic factors
- To align with the Paris agreement, the aviation sector is required to r**educe average carbon intensity** by ~35-40% between 2019-2035, or **~65% from 2019-2050**
- SBTi strategy change: "**Our new strategy aims to 1.5°C-aligned corporate targets** as default option for companies

Source: sciencebasedtargets.org/companies-taking-action, SCIENCE-BASED TARGET SETTING FOR THE AVIATION SECTOR – Version 2, 08/2021

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Environmental Management System: Why and what is in for me!

EMS is a **structured** and **integrated Management Approach** to **continuously improve the Sustainable Environmental Performance** of a company by:

1. **stetting Targets,**
2. **defining and implementing Measures**
3. **checking, monitoring and reporting Results,**
4. **Leading from the Top Management.**

Targets and Benefits of an Environmental Management System:

- Ensure compliance with environmental law and regulations
- Minimize risk
- Optimize monitoring and reporting processes
- Optimize cost for environment protection
- Cost reduction (energy consumption, waste, etc.)
- Create options for market differentiation and advantage
- Build trust to external stakeholders
- Fulfil customer requirements

The “PLAN – DO – CONTROL – ACT” cycle

PDCA CYCLE
(PLAN-DO-CHECK-ACT)

PDCA-Cycles are used in NP-ACO for

- all working processes
- conception for IT-design
- communication
- management

The PDCA cycle was developed by W. Edward Deming and it is therefore called Deming-Cycle too. Deming was one of the most famous quality managers and made his PhD in Mathematical Physics 1928 in Yale[1].

[1] Crainer, S. (1999): Managementtheorien, die die Welt verändert haben, 287 p. (German edition of “Key management Ideas”)

define, measure, analyze, improve, control (DMAIC) can be integrated

ISO 14000 – Environmental Management

The ISO 14000 family of standards:

Environmental Management Systems (14001, 14002, 14004)
Environmental Auditing (14011)
Eco Labeling (14020, 14021, 14022, 14023, 14024, 14025)
Life Cycle Assessment (14040, 14041,14042, 14043) Environmental Aspects in Product Standards (ISO Guide 64:2008) Environmental Performance Evaluation (14031)
Greenhouse Gas Reporting (14064-1

Certification / auditing

Source: ISO 14000, https://www.nistinstitute.com/ems-140001.php

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EMAS is a voluntary environmental management instrument designed by the European Union

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Aim
Continuous improvement in the environmental performance of companies and other organisations

Means
Management system enabling organisations to evaluate, improve, measure and report on their environmental performance

Outcomes
Lower environmental impact, better efficiency and credible information on these issues

3 core elements

Performance
Actions implemented by the organisation improve environmental performance and legal compliance, in line with policy targets.

Transparency
These achievements are made public through the annual environmental statement.

Credibility
The environmental statement is verified by independent environmental verifiers who guarantee the value of the information disclosed.

Source: https://ec.europa.eu/environment/emas/emas_publications/publications_studies_en.htm#EMAS%20presentation%20for%20organisations

EMAS vs ISO 14000

The first difference is in the scope of **the body that writes the standard**. ISO 14001:2015 is issued by the **International Organization for Standardization**, which is recognized internationally and is agreed upon by 163 member nations. EMAS is distributed by the **European Union (EU),** and although it is recognized internationally, only EU countries agree upon the requirements (EMAS is governed by European Regulation (EC) No 1221/2009).

The biggest difference when comparing the requirements is that **EMAS has a stricter interpretation of how environmental processes are to be planned and managed**. For instance, ISO 14001:2015 requires you to identify your environmental aspects and impacts, while EMAS requires you to perform an initial comprehensive environmental review of your processes. Likewise, ISO 14001 requires you to define your external legal reporting based on the needs of external parties (such as legal agencies), while **EMAS requires external reporting through a regularly published environmental statement.**

When it comes to checking the EMS, there are a few differences. **ISO 14001:2015 refers to certification bodies that are accredited by national accreditation bodies that follow ISO rules**, but are not government regulated. On the other hand, **EMAS requires environmental verifiers (also auditors) to be licensed by governmental bodies.** Certification body auditors use other ISO standards to govern how they perform and plan their audits, while the EMAS audits are carried out according to the regulation and have determined verification intervals. **EMAS also includes a publicly accessible register of all registered companies**, which is not available with ISO 14001:2015.

Scource https://advisera.com/14001academy/blog/2018/04/03/iso-140012015-vs-emas-which-one-to-go-for/

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ACI Airport Carbon Accreditation

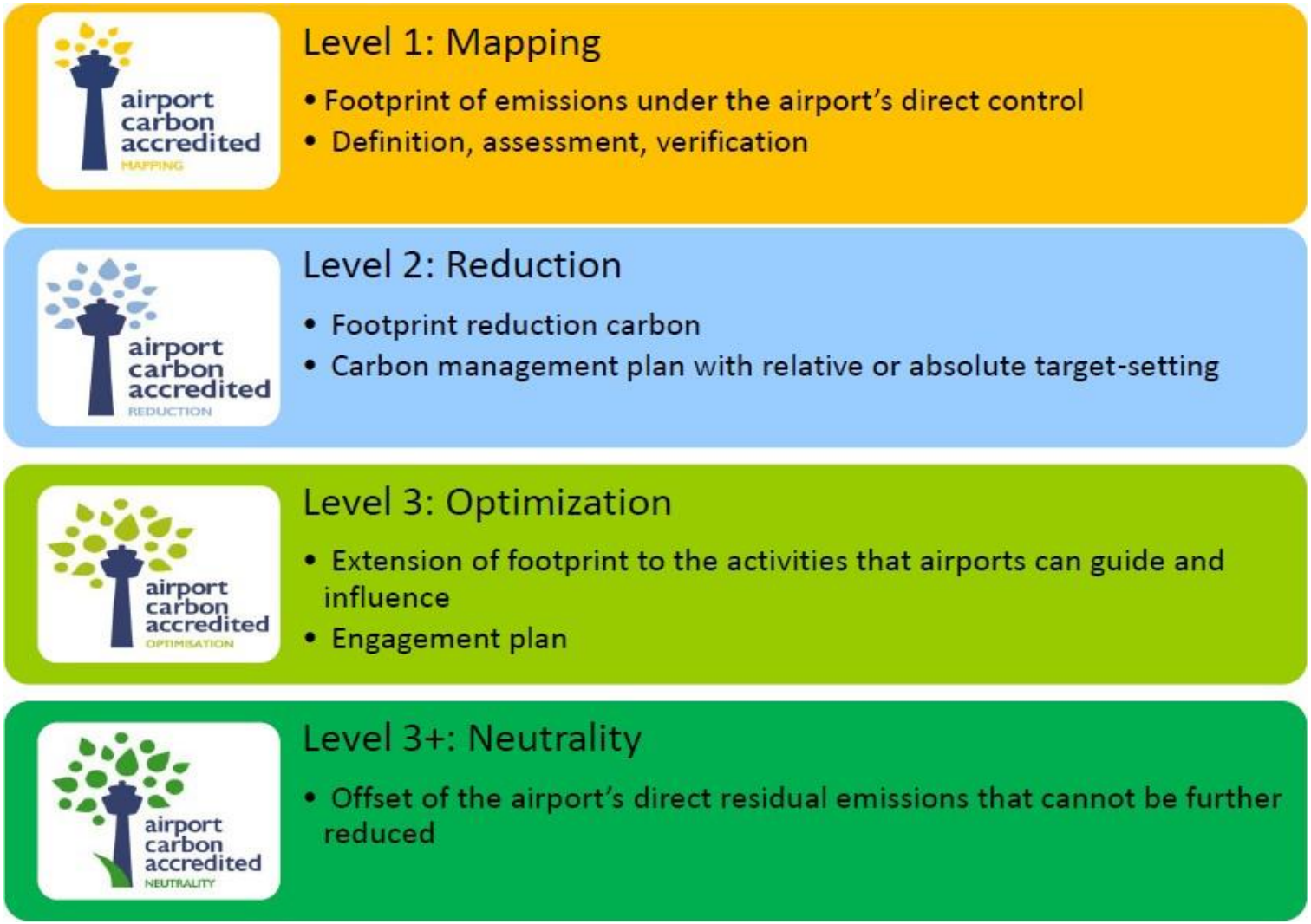
Airport Carbon Accreditation is the **only institutionally endorsed, global carbon management certification programme for airports**.
It independently assesses and recognises the efforts of airports to manage and reduce their carbon emissions through 4 levels of certification:

1. 'Mapping',
2. 'Reduction',
3. 'Optimisation' and
4. 'Neutrality'.

Airport Carbon Accreditation is also the only global airport specific carbon standard which relies on internationally recognized methodologies. It provides airports with a common framework for active carbon management with measurable goal-posts. The programme is site-specific allowing flexibility to take account of national or local legal requirements that individual airport operators have to comply with, while ensuring that the methodology used is always robust.

Source: https://www.airportcarbonaccreditation.org/

ACI Airport Carbon Accreditation



Source: https://www.airportcarbonaccreditation.org/

Summary of Chapter 5

Key messages on the management of ESG in the aviation sector

1. Main stakeholders expect an integrated steering of companies in the aspect of sustainability
2. Financial community is a strong driver for an ecosystem of integrated management and reporting on sustainability
3. Sustainability reporting is increasingly important and needs attention
4. The Science Based Targets Initiative (SBTi) provides aviation with the first CO2 reduction targets based on the Paris agreement
5. Environmental Management Systems formalize the environmental management of a company

Backup SMAT 5

Investors follow different strategies of incorporating sustainability in their investment decisions

Investments – Sustainable investing

Exclusionary and ESG-integrative strategies still predominant

	Exclusion	ESG Integration	Sustainability Focus	Impact
Definition	Exclusion of certain sectors or companies based on specific ESG criteria	Integration of material ESG factors into the financial analysis used by Portfolio Managers	Strategies with sustainability playing a significant role in the investment process	Investment in companies and projects with positive social and environmental impacts
Key requirements	Norms-based or values-based exclusions	Access to and consideration of material ESG information	Tilts toward SI themes, negative and/or positive screening	Measure and understand impacts of investments
Market size (USD trillion)	15.0	10.4	1.4	0.2
Market growth (CAGR 2014-16)	+12%	+17%	+15%	+57%
Stewardship	Exercising shareholder rights by proxy voting and (pro-)actively engaging with companies to discuss material ESG issues			
Measurement and reporting	Measure and report ESG and/or Impact performance of companies and investment portfolios			

UBS

Source: UBS Asset Management, for illustrative purposes only. Global Sustainable Investment Alliance, 2016 Global Sustainable Investment Review; The sum of these individual strategies, after adjusting for double counting since some assets are subjected to more than one category. "Sustainability Focus" includes the sum of "Positive/best-in-class screening" and "Sustainability themed investing" categories as defined in the GSIA report.

21

Back Up: CDP – Use Case of Reports

Investor Use Cases

ESG Integration
Multi-dimensional ESG risk scores can be incorporated into equity or bond valuations models and aggregated at the portfolio level

Best-in-Class Analysis
Comparable company scores support flexible applications for best-in-class analysis, including sub-industry, sector or regional approaches

Screening & Benchmarking
Overall ESG Risk Ratings and material ESG issue scores support risk-based ESG screens and enable robust benchmarking across and within sectors and sub-industries

Thematic Investing
Material ESG issue scores support thematic investment themes and provide meaningful new input for fund or index creation

Engagement & Voting
Material ESG issue framework effectively supports engagement with companies on priority ESG issues and informs voting decisions on E&S shareholder resolutions

GRI and CDP standards are aligned

GRI Standards and CDP's climate change questions (2017) are aligned, improving the consistency and comparability of environmental data, and making corporate reporting more efficient and effective.

GRI and CDP will work closely for future updates to the GRI Standards as well as for CDP's questionnaires. This is an important step towards global standardization of corporate natural capital disclosure to capital markets.

In addition to climate change and water, CDP engages with companies on their production and use of forests risk commodities. These commodities are responsible for deforestation globally. GRI does not cover this area specifically.

However, the information reported through CDP's forests questions could be included in a report prepared in accordance with the GRI Standards, if this topic has been identified as material. See clause 2.5 in GRI 101: Foundation for more information.

Source: https://www.globalreporting.org/standards/resource-download-center/linking-gri-and-cdp-how-are-gri-standards-and-cdp-climate-change-questions-aligned/

CDP Questionnaire structure

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CDP climate change questionnaire

Management

- CC1. Governance
- CC2. Strategy
- CC3. Targets & initiatives
- CC4. Communications

Risks & opportunities

- CC5. Climate change risks
- CC6. Climate change opportunities

Emissions

- CC7. Methodology
- CC8. Emissions data
- CC9. Scope 1 emissions breakdown
- CC10. Scope 2 emissions breakdown
- CC11. Energy
- CC12. Emissions performance
- CC13. Emissions trading
- CC14. Scope 3

Sign off

- CC15. Sign off

Source: www.cdp.net | @CDP | susan.dreyer@cdp.net

Science Based Targets uses IPCC, IEA and IAMC calculations and scenarios as target and benchmark

FRANKFURT UNIVERSITY OF APPLIED SCIENCES

International Panel for Climate change (IPCC)
Integrated Assessment Modeling Consortium (IAMC)
International Energy Agency (IEA)

Mitigation Pathways Compatible with 1.5°C in the Context of Sustainable Development

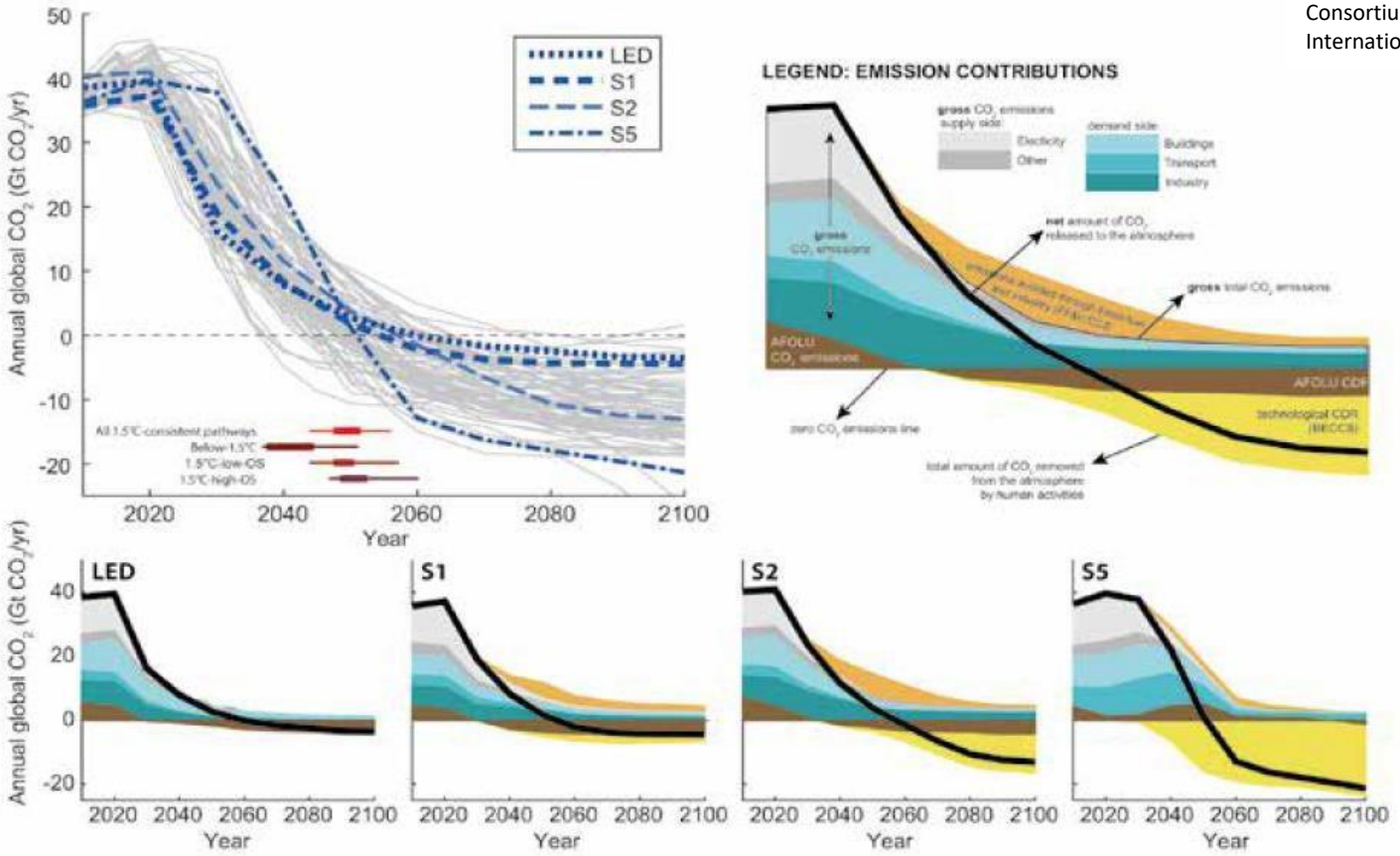

Figure 2.5 | Evolution and break down of global anthropogenic CO_2 emissions until 2100. The top-left panel shows global net CO_2 emissions in Below-1.5°C, 1.5°C-low-overshoot (OS), and 1.5°C-high-OS pathways, with the four illustrative 1.5°C-consistent pathway archetypes of this chapter highlighted. Ranges at the bottom of the top-left panel show the 10th–90th percentile range (thin line) and interquartile range (thick line) of the time that global CO_2 emissions reach net zero per pathway class, and for all pathways classes combined. The top-right panel provides a schematic legend explaining all CO_2 emissions contributions to global CO_2 emissions. The bottom row shows how various CO_2 contributions are deployed and used in the four illustrative pathway archetypes (LED, S1, S2, S5, referred to as P1, P2, P3, and P4 in the Summary for Policymakers) used in this chapter (see Section 2.3.1.1). Note that the S5 scenario reports the building and industry sector emissions jointly. Green-blue areas hence show emissions from the transport sector and the joint building and industry demand sector, respectively.

Source: https://www.ipcc.ch/site/assets/uploads/sites/2/2019/02/SR15_Chapter2_Low_Res.pdf

Example: Munich Airport's strategic field of action