



Measuring climate finance - everything needs to be done

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STATEC

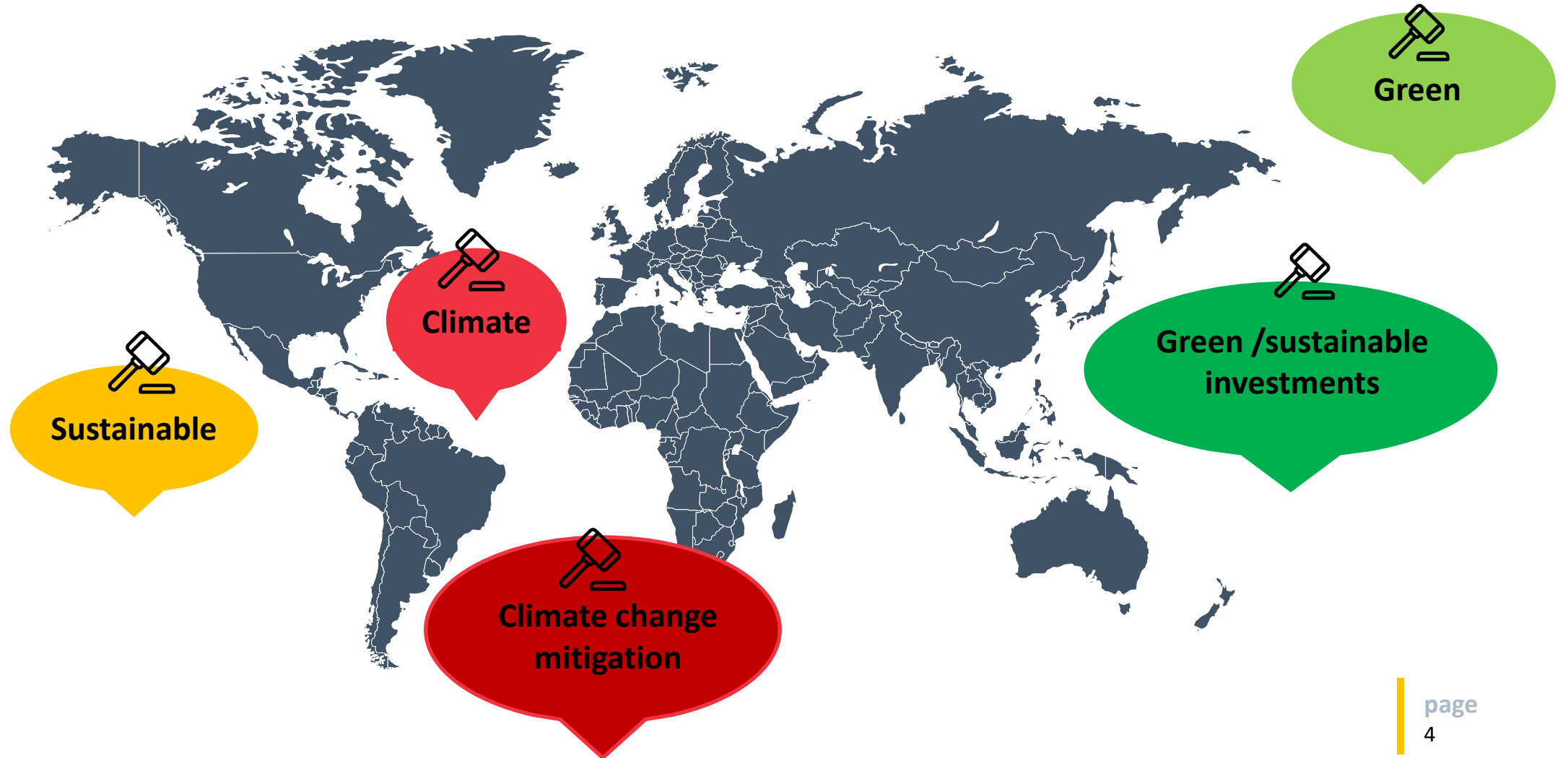
List of tasks

- 1 Clarify the terminology
- 2 Define the scope
- 3 Identify data sources
- 4 Select indicators

1

The terminology issue

What are we trying to monitor ?



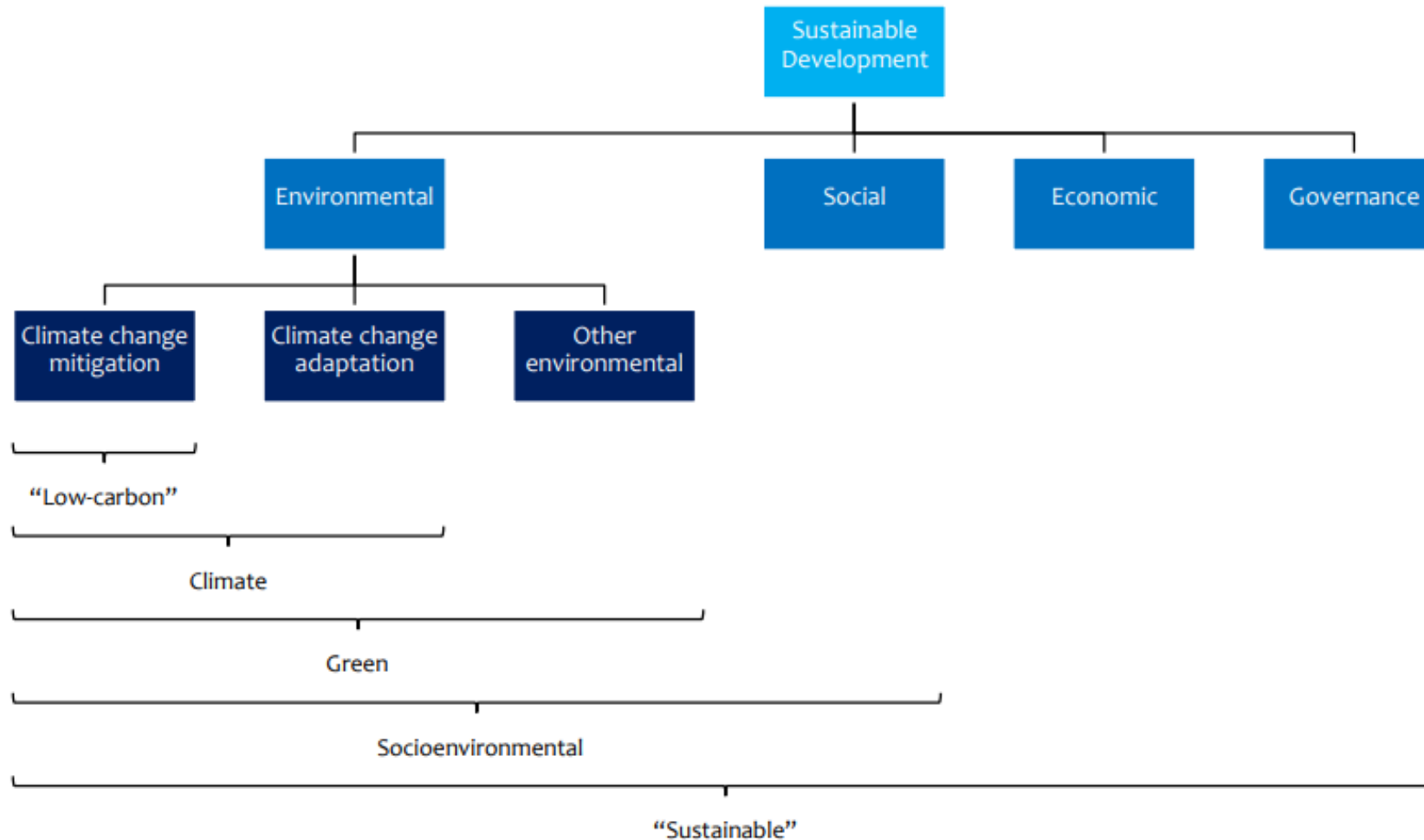
Bringing up light in the terminology

- Acknowledge the various terms
- Hierarchical structure



Acknowledge the various terms

Relationship between climate finance and other forms of green and sustainable finance



Some definitions

World bank:

“While there is no precise internationally agreed definition of climate finance at present, the term broadly refers to resources that catalyze low-carbon and climate resilient development.”

Secretary-General’s High-level Advisory Group on Climate Change Financing:

“Long-term financing for mitigation and adaptation strategies in developing countries from various public and private sources”

2

The perimeter issue

Clear definition is important, but the definition's perimeter is much more important

Choose sectors in scope

S12 Financial corporations

exception ? S127 (Captive financial institutions)

S13 Government sector

Choose receivers sector ?

S11, S14, S15 and/or only S2

1

Define activities in scope

NACE/ISIC K64-K66 (Financial services)

***NACE/ISIC M70** ? (Management consulting services)*

All NACE/ISIC?

2

Choose relevant financial products

F4 (Loans) ?

F5 (Equity & investment funds)

...

3

Select flows

- Financial transactions
- *Transactions in products and non-produced assets (P1, P6, P7)*
- *Distributive transactions (D3, D7, D6, D9)*
- Financial asset
- *Interest (D.41), dividends (D.42) and reinvested earnings (D.43)*

4

Why we need to measure climate finance ?

To follow the investment in climate change mitigation action

To quantify the financial burden related to climate change adaptation)

To identify the shift of investment from brown activities to green activities

To evaluate the impact of climate investment on GHG emissions

To quantify the size of support to fossil fuels

To evaluate the financial risk of the investment related to extreme events

To ...

3

The issue of data sources

Possible data sources (1/3)

Finance ministry

- Green budget (tagging approach)
EU survey 2023 : AT, DK, ES, FI, IE, IT, LU, NL, PT, SE
- Report on national sovereign sustainable bond

NSO

- National accounts - Financial accounts
- ETEA (environmental taxes by economic activity)
- ESST (environment subsidies and similar transfers)
- EPEA (environmental protection expenditure accounts)
- FFS (fossil fuel subsidies)
- CO₂ permits accounts

Table 1: Elements of the European Union Green Budgeting Reference Framework

ELEMENTS	LEVEL 1- Essential	LEVEL 2 - Developed	LEVEL 3 - Advanced
Coverage <i>Environmental objectives</i>	Climate-related	Climate-related Some other objectives	All objectives

Issues:
CEPA 1 is larger than climate!
Climate issues – also part of other CEPA! (ex. CEPA 8- R&D)

Possible data sources (2/3)

Financial sector supervisory commission

- Report on sustainable activities in the sector
- Report on the risk of the investment related to extreme events

National stock exchange

- List of financial equities, ...

Companies report

- ESG report (mandatory for banks)



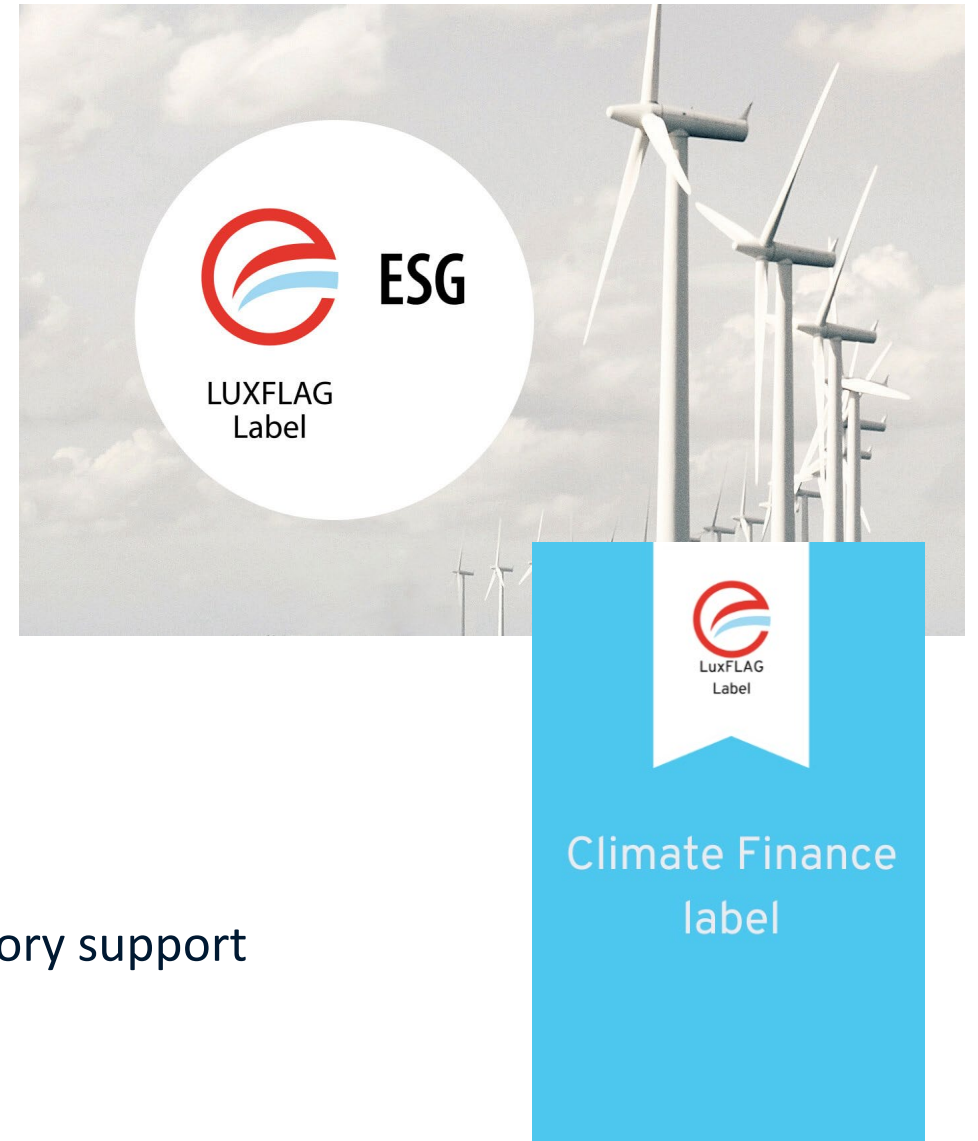
Possible data sources (3/3)

International/European sources

- EIB
- ECB
- Cohesion open data platform (EU funds)

Other sources

- Climate Finance & Green Bond Labelling institutions
- Public-private partnerships providing climate finance advisory support
- Forestry and Climate Change Funds



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The indicators issue

IMF dashboard

IMF | CLIMATE CHANGE DASHBOARD

[INDICATORS](#) | [COUNTRIES](#) | [ACCESS DATA](#) | [RELEASES](#) | [LEARN MORE](#)

Climate Change Indicators Dashboard

A statistical tool linking climate considerations and global economic indicators

- Economic Activity Indicators**
 - Greenhouse Gas Emissions
 - National Inventories and Targets
 - CO₂ Emissions, Intensities and Multipliers
 - Energy Transition
- Cross Border Indicators**
 - Trade-related
 - Direct Investment-related
- Financial and Risk Indicators**
 - Financial
 - Physical and Transition Risks
 - Forward-Looking Risks **NEW**
- Government Policy Indicators**
 - Environmental Taxes
 - Environmental Protection
 - Expenditures
 - Fossil Fuel Subsidies
- Climate Change Data**
 - Surface Temperature Change
 - Atmospheric CO₂ Concentrations
 - Change in Mean Sea Levels
 - Forest and Carbon **NEW**
 - Land Cover Accounts
 - Climate-related Disasters

IMF proposal – financial indicators

1/

The **Carbon Footprint of Bank Loans (CFBL)** is a country-level indicator, constructed as the average of **CO₂ emission intensities/multipliers** from the fuels burned in each sector, weighted by the sectoral share of outstanding domestic **loans from banks**.

2/

Green debt. **Green bonds and sustainability-linked bonds** are fixed-income securities designed specifically to support climate and environmental projects. They are an integral part of 'green finance', helping to mitigate the economic and social cost of climate change through market-based means.

3/

Nonlife insurance penetration.

Climate related disasters can cause significant financial instability. Countries where businesses and individuals are more likely to have insurance are better placed to mitigate this risk. This indicator shows the **average nonlife insurance premium to GDP**

ECB proposal



- 1/
Indicators on sustainable finance provide an overview of **debt instruments** labelled as “green”, “social”, “sustainability” or “sustainability-linked” by the issuer that are issued or held by the country. These indicators provide information on the proceeds raised to finance sustainable projects, and thus also on the progress of the transition to a low-carbon economy.

- 2/
Analytical indicators on carbon emissions financed by financial institutions provide information on the **carbon intensity of the securities and loan** portfolios of financial institutions, and on the financial sector’s exposure to counterparties with carbon-intensive business models.

- 3/
Analytical indicators on **climate-related physical risks** analyse the impact of natural hazards, such as floods, wildfires or storms, on the performance of loans, bonds and equities portfolios.

Source: Press release 24 January 2023- ECB publishes new climate-related statistical indicators to narrow climate data gap

Luxembourg

Country case : Luxembourg

In 2016, the Luxembourg Stock Exchange (LuxSE) launched the **Luxembourg Green Exchange (LGX)**, the world's first listing platform dedicated exclusively to green/sustainable/social bonds.

Currently, 346 issuers from 58 countries with 3335 active instruments.

Type of instruments	Number of active instruments (17/07/2023)	Amounts	Climate change related
Green bonds	939	442,5 billions EUR	Renewable Energy (811); Energy efficiency (562); climate change adaptation (177)
Sustainable bonds	544	na	Renewable Energy (491); Energy efficiency (69); climate change adaptation (434)
Social bonds	164	na	-
Sustainable linked	81	na	?

Source: Luxembourg Stock Exchange data, authors' calculation

Country case : Luxembourg

In September 2020, Luxembourg (rated AAA) issued a **sustainable sovereign bond** for a amount of 1,5 billions EUR. This 12-year loan has a negative interest rate of -0.123%.

Allocations (in millions EUR)

Categories	2018	2019	2020	2021
Green	140	158	148	157
<i>of which climate mitigation</i>	<i>119</i>	<i>127</i>	<i>136</i>	<i>137</i>
Social	78	108	139	174

Source: State Treasury data, authors' calculation

Country case : Luxembourg

Financed emissions (FE) – the volume of weighted carbon emissions incorporated in loans given to highly intensive economic activities;

the weight is equal to the percentage share of the investment held by financial institutions in a private company

in millions CO₂-eq tons

Instruments	Holders	2018	2019	2020
Debt securities + Listed shares	S122: Deposit-taking corporations except central banks	0,364	0,391	0,749
	S124: Non-Money market funds investment funds	152,312	161,840	187,547
	S128-129: Insurance corporations & Pension funds	1,870	1,933	2,416
Bank loans	S122: Deposit-taking corporations except central banks	3,160	3,024	2,850

Source: ECB data

For comparison purpose: Emissions (inventory) = 9,4 millions tons CO₂-eq
Footprint =11,7 millions tons CO₂-eq

Country case : Luxembourg

Analysing the climate change mitigation and climate change adaptation as economic sectors.

Produce climate change accounts based on a selection of climate-change related goods and services

in millions EUR

	2005	2021
Climate-change adaptation	93	94
Climate-change mitigation	91	124

Source: DevStat-Prognos final report, july 2023

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The pending question

How NSOs can contribute ?

- 1 Define scope and statistical framework
- 2 Centralize public and private statistics and disseminate them
- 3 Establish dedicated accounts:
« climate finance accounts »
- 4 Produce combined (monetary + physical) tables or dashboard for analysis

i.e. impact of climate investments on GHG emissions



Questions to the audience

1/ Should NSO work on climate finance ?

2/ What should be the scope of climate finance?

International flows only or also domestic ?


Financial transactions only or also distributive transaction ?


3/ Should NSO work on climate finance accounts ?

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