Multi-year Expert Meeting on Enhancing the Enabling Economic Environment at All Levels in Support of Inclusive and Sustainable Development, and the Promotion of Economic Integration and Cooperation, seventh session

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Policy space in the face of increasing climate and nature crises

What role for central banks?

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EUROPEAN CENTRAL BANK

EUROSYSTEM

Policy space in the face of increasing climate and nature crises

What role for central banks?

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Disclaimer

The views expressed in this presentation are my own and do not necessarily reflect those of the European Central Bank or the Eurosystem.

Overview

1. Impact of climate change on policy space
2. Financing the green transition
3. What role should the government play?
4. What role for central banks?
5. Greening the international financial architecture

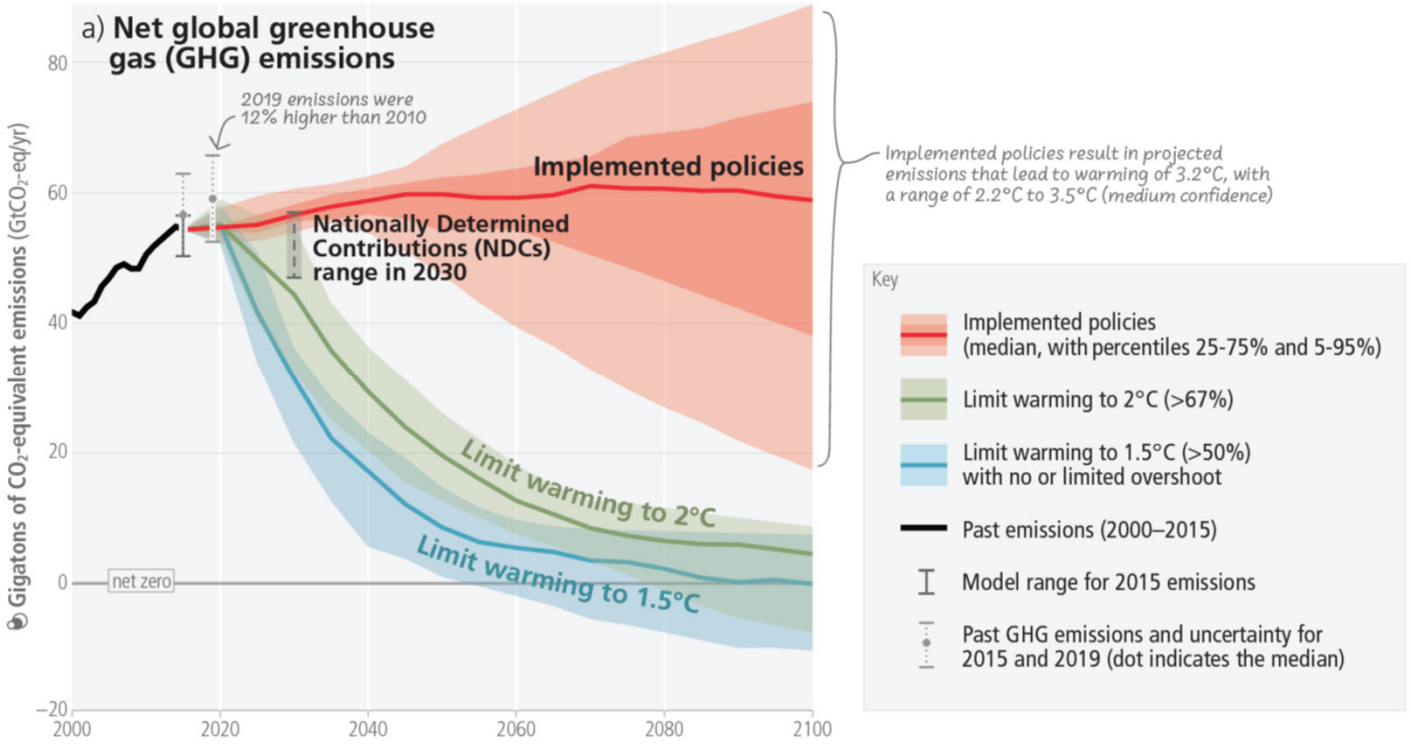
Key messages

- Climate change and nature degradation have a severe impact on the macroeconomy and financial stability and reduce policy space, including for investment.
- The climate investment gap is huge and needs to be addressed holistically.
- We need to see urgent action *inter alia* by governments, central banks and via greening the international financial architecture.

1

Impact of climate change on policy space

Scientific evidence on climate change: where do we stand?



Source: IPCC Synthesis Report (2023)

The world will likely see global warming of **1.5°C already between 2023 and 2027** on a temporary basis with increasing frequency (World Meteorological Organization, 2023)

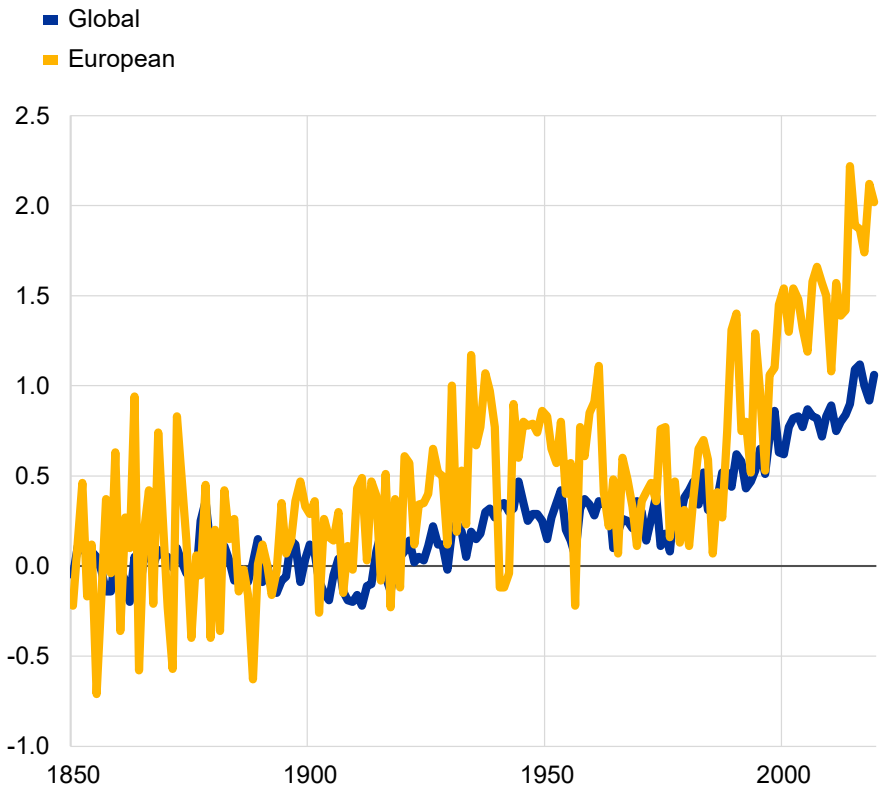
Limiting further warming involves **rapid, deep and immediate** GHG emission reductions

The **choices and actions** implemented in this decade will have **impacts now** and for **thousands of years**

Urgency to transition

Global and European temperatures are increasing

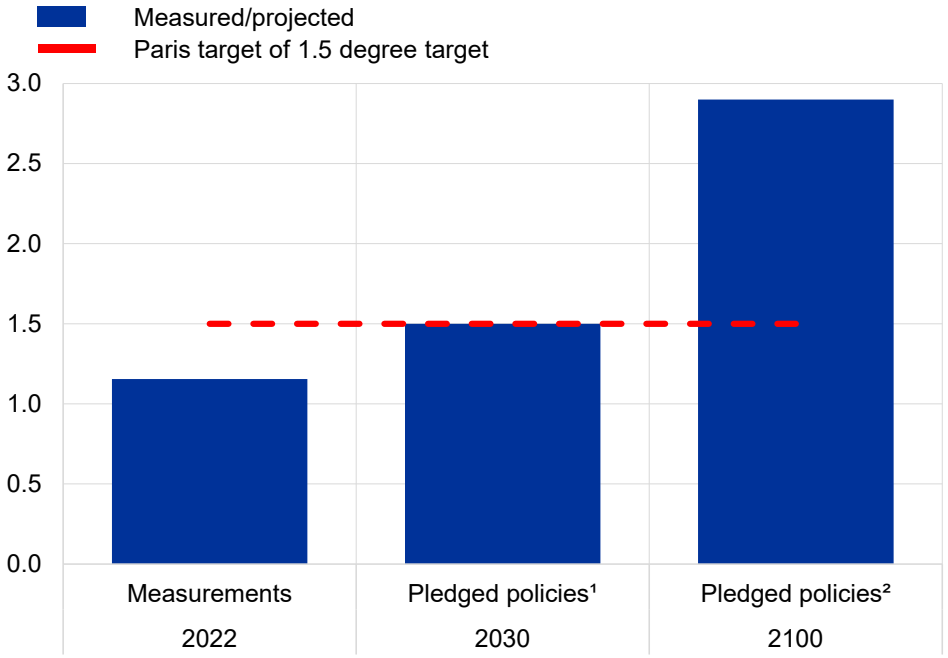
(degrees Celsius difference compared with pre-industrial levels)



Source: Met Office Hadley Centre.
Notes: Temperature anomalies are shown compared with the pre-industrial period between 1850 and 1899.

Measured and projected increases in global mean temperature, in different scenarios

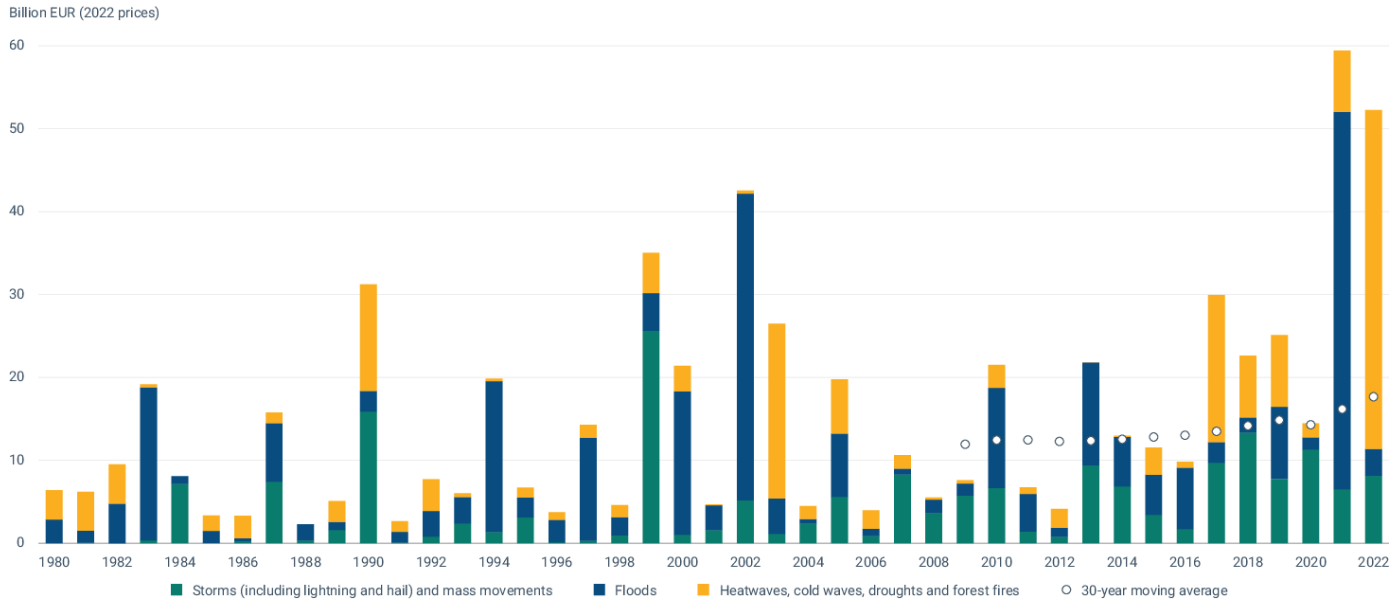
(Degree Celsius)



Source: ECB based on Copernicus, IEA and UNEP.
Notes: 1. Announced pledges in IEA World Energy Outlook scenarios 2021. 2. Unconditional nationally determined contributions to the Paris Agreement from Global emission gap report 2023. Increases compare to the pre-industrial reference period. The IPCC estimate that current stated policies will result in 3.2 degrees in 2100. All estimates are highly uncertain

Economic losses from weather and climate-related events

Annual economic losses caused by weather - and climate-related extreme events in the EU Member States



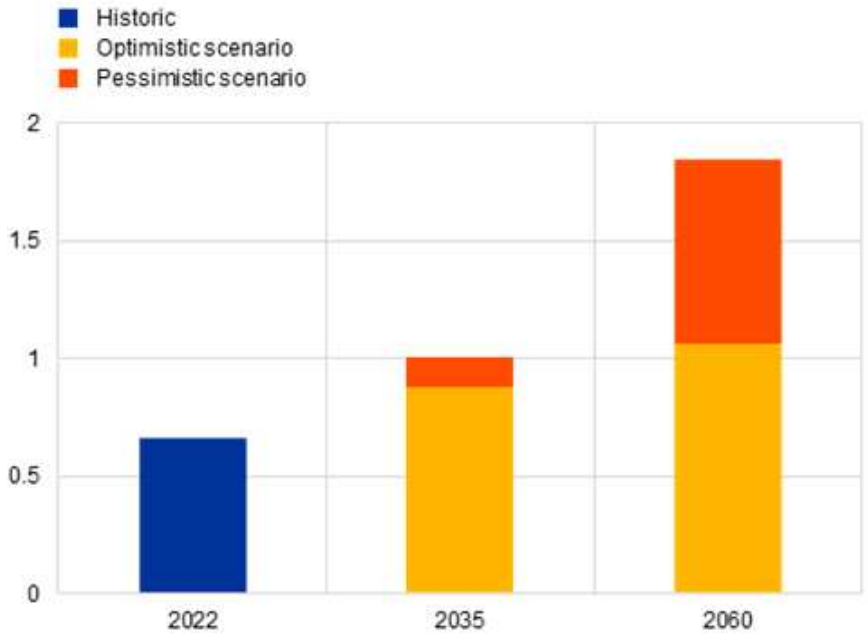
Source: European Environmental Agency

In August 2023 Slovenia was hit by **intense floods** that are estimated to **have caused damage** to homes, infrastructure and business **equal to 8% of GDP.**

More frequent and extreme climate events will increase inflation

Impact of heatwaves on food price inflation in Europe

(percentage points)



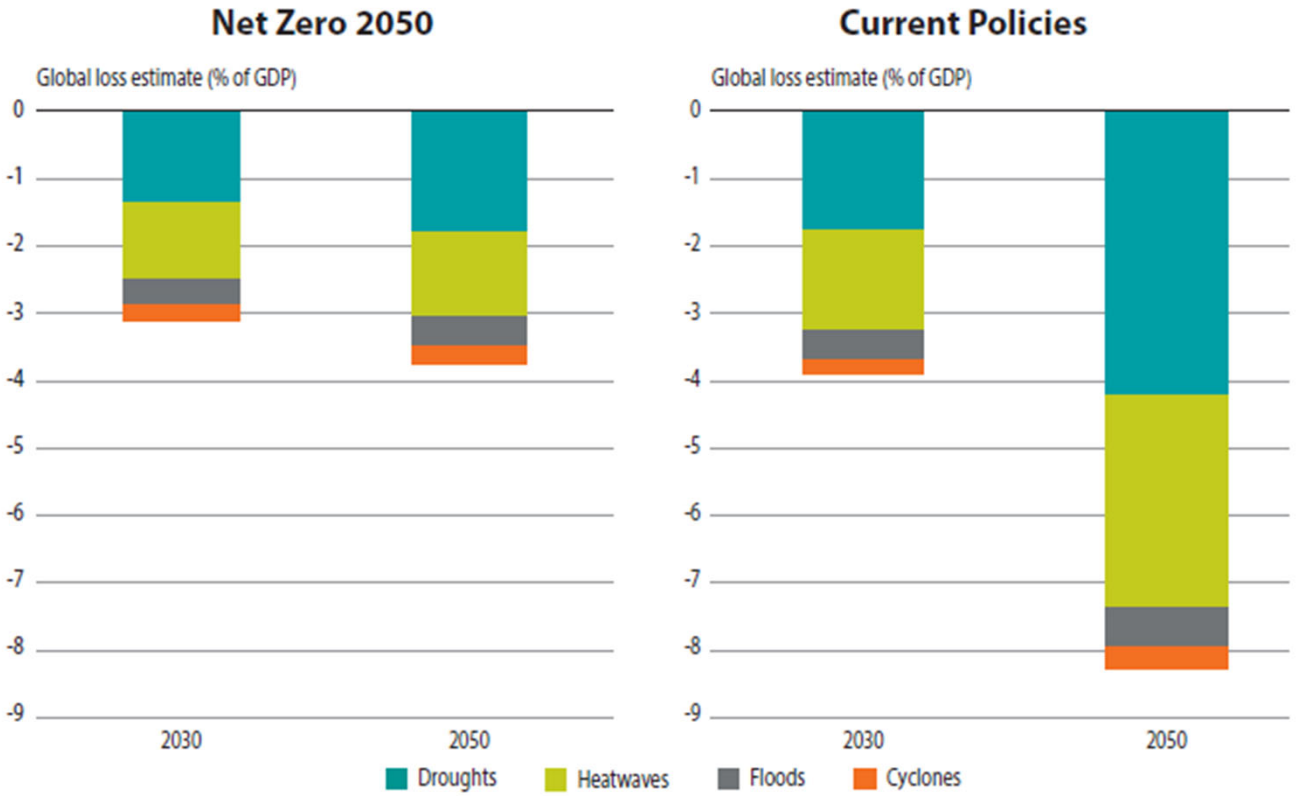
Source: Kotz et al (2023).

Notes Estimated with a global panel regression approach using monthly prices and high-resolution climate data. Cumulative deviation of food inflation from baseline after 12 months due to extreme temperatures from June to August are shown. The chart is based on combining elasticities of a 1°C increase in temperatures with results from 21 global climate models. Projected temperatures of a 2022-like summer (i.e. in the upper tail of the temperature distribution) in future climates are retrieved from climate model results under an optimistic ("below 2°C by 2100" according to Representative Concentration Pathway (RCP) 2.6) and a pessimistic ("hot house world" according to RCP8.5) emissions scenario. Impacts could be reduced through ambitious adaptation to warmer climates

Share of food prices in Harmonized Index of Consumer Prices (HICP) for the euro area around 20%.

For some low-income African economies this share is between 50-70%.

Impact on GDP by acute physical risk will be massive – NGFS scenarios



Note: Phase IV results for NiGEM using Climate Analytics input. Damages shown correspond to 90th damage percentile for droughts, heatwaves, and cyclones (floods are represented by a point estimate).

Incorporating chronic physical risk leads to estimated global GDP losses of around 15% by 2050.

These estimates do not account for

- Sea level rise
- Tipping points
- Effects of migration

Selection of other climate change fallouts

- Climate change **reduces total factor productivity.**
- Climate change **may impair bank lending.**
- **Impact on wealth**
- **Greater uncertainty and volatility** due to climate change.
- **Distributional impacts** – both within as well as across countries
- **Labour market implications** across
- **Implications for health**

➔ **Climate change will impact via supply, demand and financial channels**.

Policy space in EMDEs under pressure from all directions

- **Fiscal constraints and rising debt levels**
  - Increased expenditure on adaptation and recovery; debt for climate recovery
  - Climate vulnerability and sovereign credit ratings
  - Higher borrowing costs
- **Reduced Growth and Revenue Potential**
  - Impact on Key Sectors
  - Informal Economy
- **Opportunity Costs of Mitigation Commitments**
  - Cost of Transition
  - Conditionality of Finance
- **Loss of Human Capital**
  - Health Impacts
  - Migration and Brain Drain
- **Exchange Rate and Trade Pressures**
  - Exchange Rate Volatility
  - Trade Imbalances

2

Financing the green transition

Investment needs and funding sources

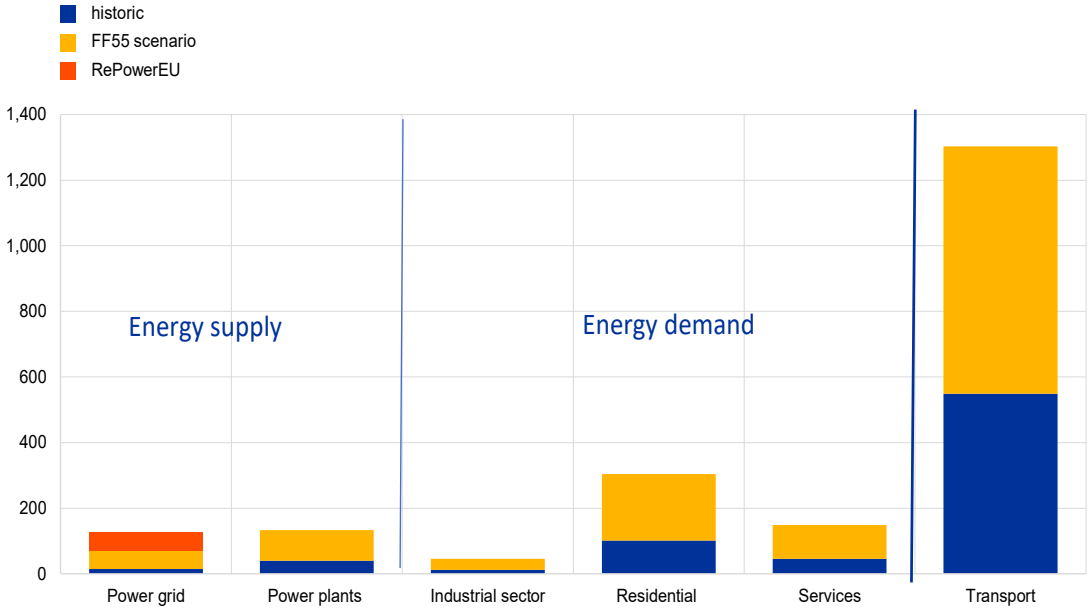
What it takes to finance a greener future

- **UNEP (2024 Emissions Gap Report)**
  - Global annual investment in climate change mitigation have to reach up to USD 11.7 trillion annually by 2035 (around 10% of global GDP)
  - Balance between private and public finance will differ across regions, reflecting economic structures and development stages.
  - Private sector likely to take the lead in commercially viable technologies and public sector focusing on areas that require significant upfront capital or carry higher risks.

Massive green investment needs also in the EU

Green investment needs by category

(EUR billions, annually for the period 2021-2030)



Sources: European Commission (2023).
Notes: The annual green investment needs until 2030 for energy systems and transport summarise historical investment figures (2011-2020, in blue), the additional investment needs due to the Fit-for55 package (yellow) and RePower EU (orange).

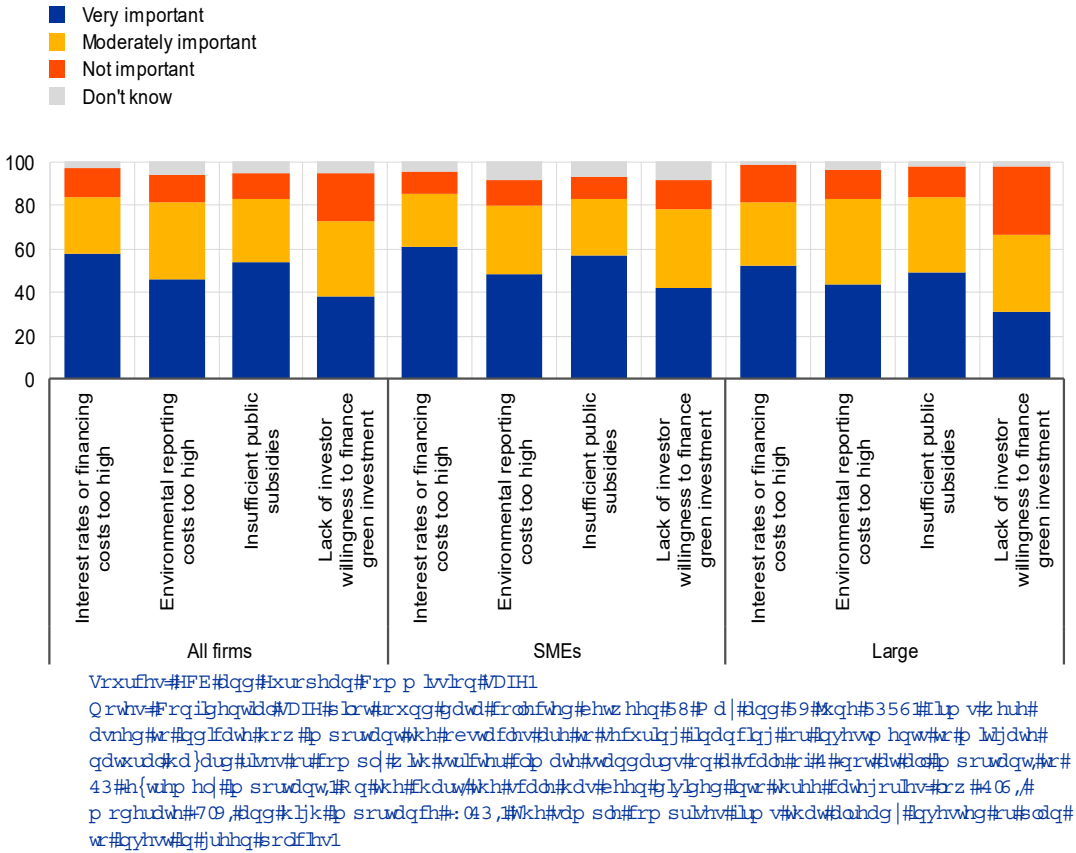
Green investment needs of €1.24 tn p.a. 2021-2030: increase of €477 bn (3% of GDP) p.a., compared to the last decade (European Commission).

- Transport sector: most investment needs.
- Funding by the public sector around 20-25%.
- 40% of **NGEU envelope** (€723.8bn) used for climate.
- Better **framework conditions** needed to mobilise sufficient private funding.

Obstacles of euro area firms to secure financing for green investments

- **Survey on the access to finance of enterprises (SAFE)**:
- Majority of firms indicate **too high interest rates**, **financing costs** and **insufficient public subsidies** as being very important obstacles to securing financing for green investment.
- **Public loan guarantees**, **internal funds** and **equity play** an important role in directing resources towards the greening of the economy.

Obstacles to securing financing
(percentages)



A. Ferrando, J. Groß, J. Rariga: Climate change and euro area firms' green investment and financing – results from the SAFE, Economic Bulletin Issue 6, 2023.

Holistic policy approach to support massive green investment needs

Financial policies

- Advance incorporating climate risks in **banks' risk management framework**
- **Deepen capital markets** to improve access to different types of finance, including venture capital

Structural policies

- Simplify and harmonise **regulatory framework** for green investment projects
- Set-up efficient **patenting framework** to promote green innovation and its financing
- Increase availability of **skilled** staff to scale up new technologies

Fiscal policies

- Incentivise green investment through **carbon pricing**, **green subsidies** and **policy certainty**
- **Green public investment** in infrastructure and nature-based solutions
- Phasing out of inefficient fossil fuel subsidies

Structural factors for green investment in EMDEs

- **Risk perceptions:**
  - Economy-wide cost of capital higher in EMDEs, for debt and equity
  - Home biase in fund allocation
  - Governance, policy uncertainty
- **Green sector risks:**
  - Green infrastructure costs
  - Economy more fragmented, less integrated supply chains and typically smaller companies
- **Issues related to ESG ratings:**
  - Lower ESG ratings and lower disclosures in EMDEs
  - ESG rating poor indicator of climate impact (correlated more with firm size)

Structural barriers for green investment in EMDEs

- **Index or rating-driven investment by NBFI:**
  - Large share of index- or rating-driven investment favouring large companies
  - Free-float levels are important
- **Lack of climate policy stringency:**
  - Policy stringency seen as important driver for green FDI inflows in EMDEs
  - Regulatory measures lead to higher level of green innovation which leads to larger green investment.
  - Country‘s share of green exports and absence of portfolio inflow restrictions main driver of investment funds‘ asset allocation towards green investment.

3

What role for governments?

Three main strands of action needed by governments

Leveraging investment in green transition requires

- Scaling up green finance
- Carbon pricing
- Improving understanding of climate and nature risks for the macroeconomy

4

What role for central banks?

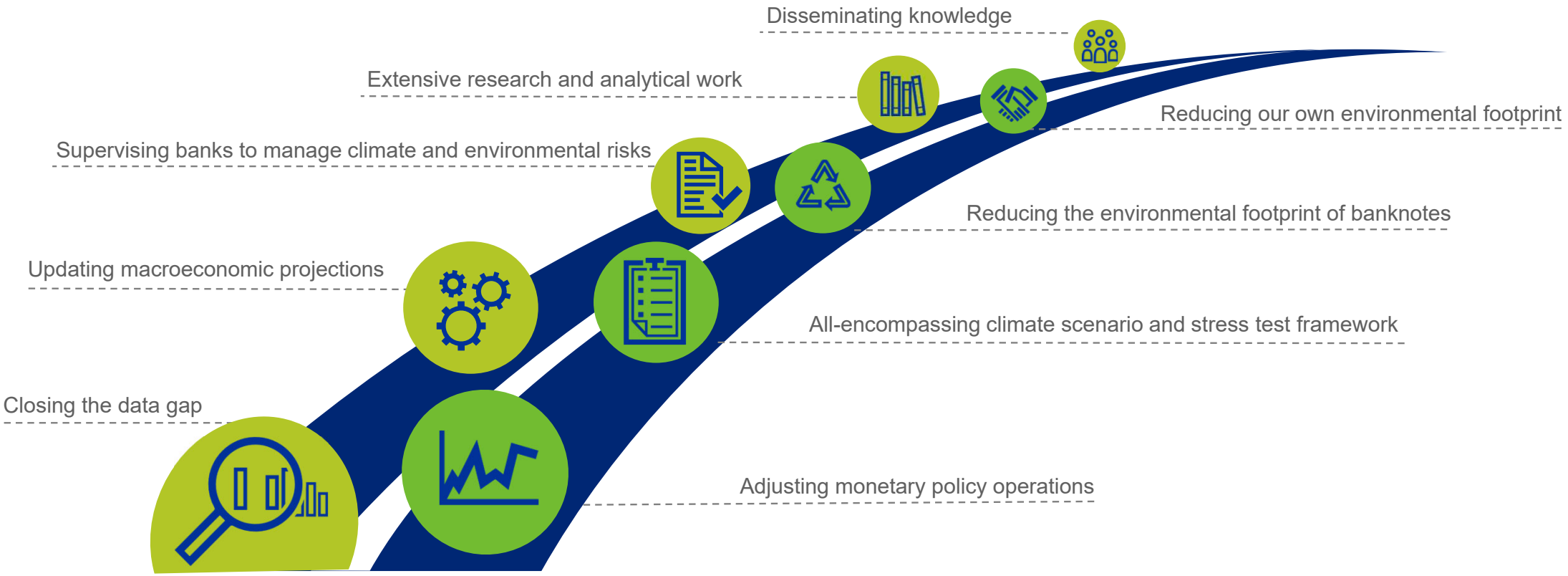
What the ECB has done so far

Relevance of climate change for monetary policy

Climate change and the green transition **impact** macroeconomic indicators such as **inflation**, growth and employment, financial stability, and the **transmission of monetary policy**

Climate change affects the value and risk profile of assets on balance sheet, thereby leading to **greater climate-related financial risk**

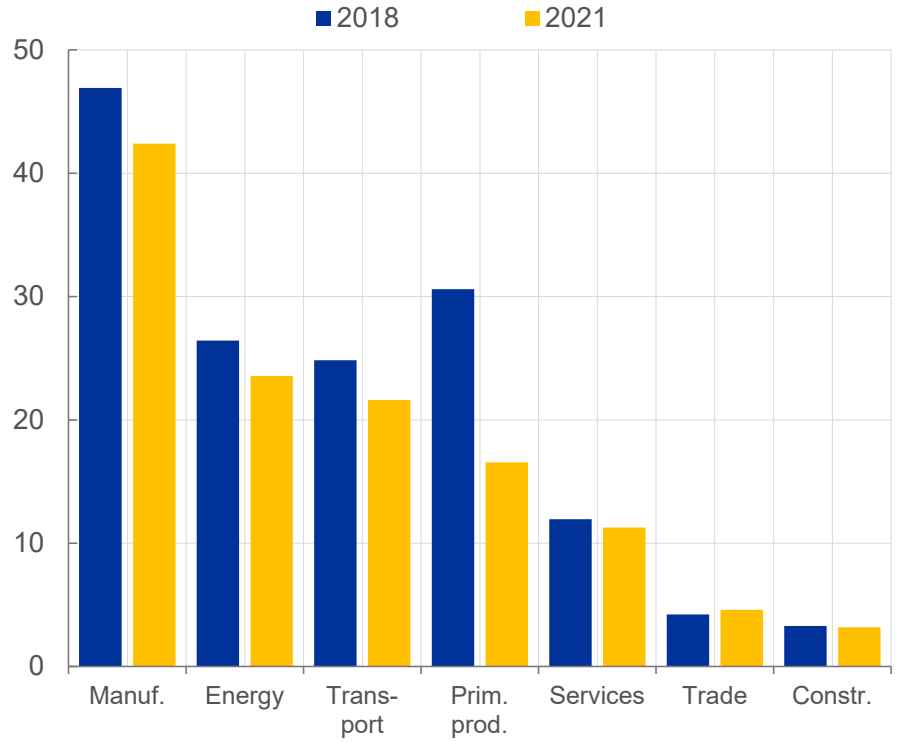
ECB has integrated climate actions in many fronts



Financed carbon emissions are declining…

Financed emissions for bank loans

(million tonnes of CO2 emissions, euro area banks)



Sources: ESCB calculations based on data from RIAD, Centralised Securities Database (CSDB), Securities Holding Statistics (SHSS) and ISS. Bank Lending Survey.
Notes: Scope 1 for euro area bank loans (for single entity level). Sector classification following NACE level 1 revision 2. "Manuf." is manufacturing, "Prim. prod." is primary production, "Constr." is construction.

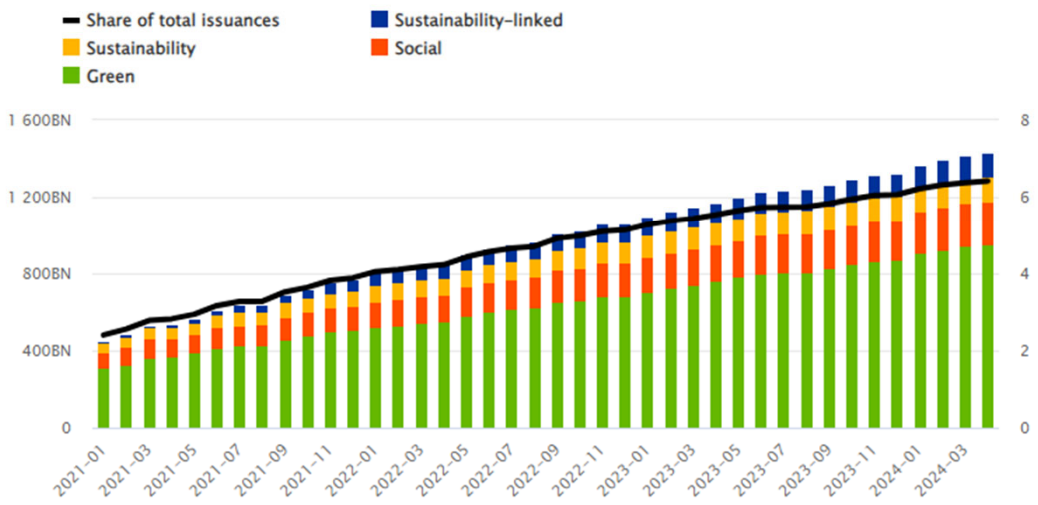
… and EU sustainable debt securities issued trend upwards

The **outstanding amount of sustainable debt** securities issued in the euro area **has more than doubled in the last three years.** As of March 2024 **is equal to around 1.300 billion.**

However, the relevance of these instruments in the overall debt securities market remains minor.

Chart 1 – Euro area issuances of sustainable debt securities – all levels of assurance

(Left-hand scale: EUR, outstanding amounts at face value; right-hand scale: percentages)



Source: Centralised Securities Database (CSDB).

Notes: "Share of total issuances" refers to the amount of all sustainable securities as a share of all debt securities issued in the euro area.

Focus area on navigating the transition towards a green economy

Understanding the impacts, risks and the financing needs of the green transition is **essential to deliver on price stability**

What we will look into:

- Assess **green investment needs** and its **funding**
- Analyse the **structural consequences** arising from the **transition**
- Explore within our mandate the case for **further climate change considerations in monetary policy instruments and portfolios**

5

Greening the international financial architecture

Expand and strengthen climate financing mechanisms

- **Green Climate Fund (GCF) expansion:** Increase contributions to the GCF and simplify access for developing countries, ensuring predictable and adequate funding for climate adaptation and mitigation projects.
- **Debt-for-climate swaps:** Allow developing countries to reduce debt burdens by committing to specific climate actions. Institutions like the IMF and World Bank could facilitate these arrangements.
- **Global green bond standards:** Establish internationally recognized standards for issuing green bonds to attract private capital to developing countries.

Guarantee private sector risk mitigation

International guarantees and insurance: Institutions like the World Bank's MIGA should expand guarantees to cover climate investments, reducing risks for private investors.

Risk mitigation: MDBs to offer political risk insurance, step up credit enhancement.

Aligning global standards and avoiding unintended consequences

Harmonize reporting standards: Ensure global environmental, social, and governance (ESG) standards are tailored to reflect the needs also of developing nations.

Avoid unintended consequences of regulation on bank lending to EMDEs: Review of Basel framework with respect to project finance and risk mitigation provided by MDBs and other public financial institutions.

Thank you!