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# The macroeconomic impacts of EU climate policy and the future of EU climate funding

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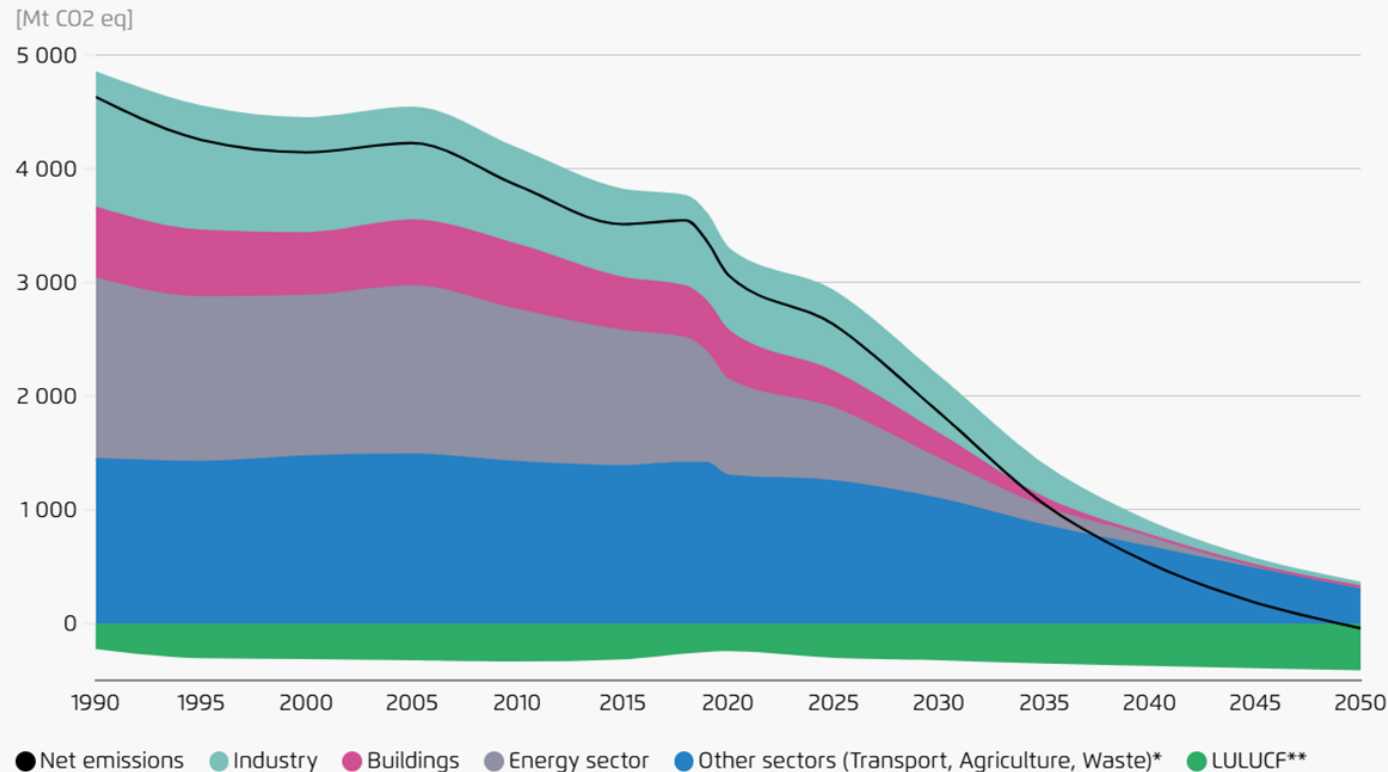
Webinar

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Christopher Schröder, Agora Energiewende  
13th November 2024

# Boosting investments will be key in making the implementation of the Green Deal a success.

## EU Gas Exit (GEXIT) Pathway – GHG emissions by sector, EU



- New Commission to adopt a 2040 climate target around 90% GHG emission reduction
- Reaching this target will require carbon pricing, regulation but also *boosting investments*
- Investment needs reflect not only costs but bring about huge structural change in the economy

# Two new Agora publications – Simulation of macroeconomic impacts of the transition and policy recommendations to secure the future of EU climate funding.



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# EU climate policy between economic opportunities and fiscal risks

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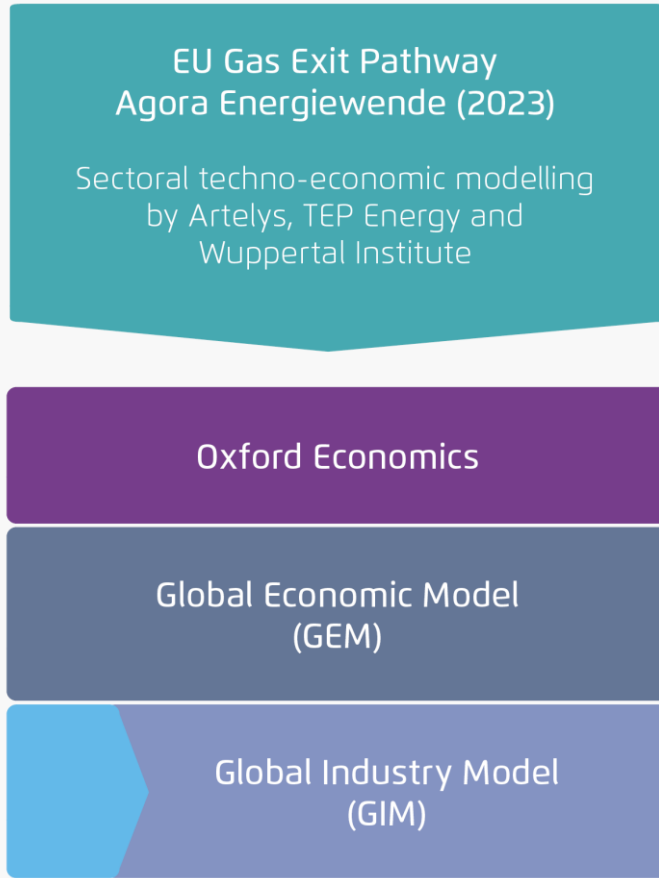
Assessing the macroeconomic impacts of Europe's transition to climate neutrality

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# The implementation of the EU Green Deal will transform the European economy and national budgets. An Agora project offers new insights.

## Modelling framework



*How will the EU economy be affected by the green transition?*

→ GDP, employment, consumption, inflation, manufacturing GVA, energy costs...

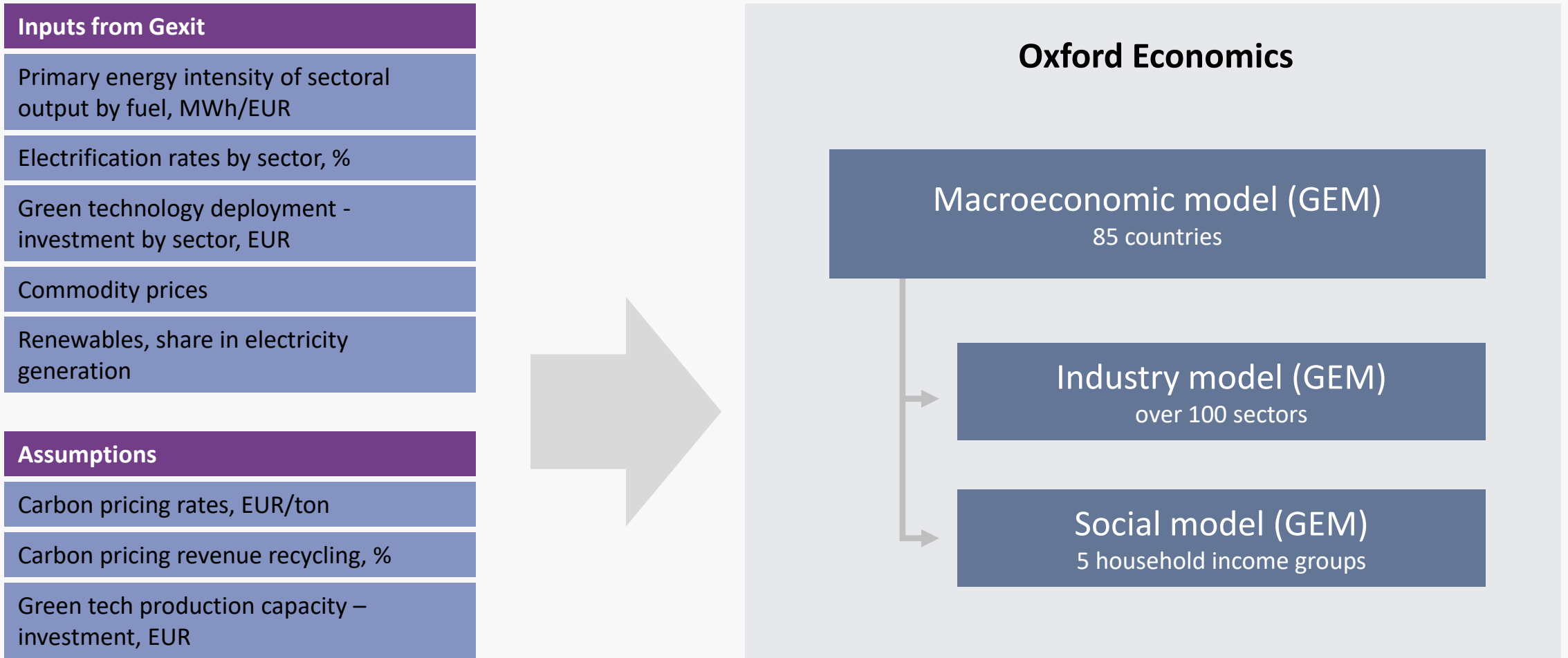
*How will public budgets be affected?*

→ Debt levels, tax revenue, borrowing costs...

*Our approach*

- Collaboration with Oxford Economics to model these economic and fiscal implications of reaching climate neutrality in the EU by 2050.
- Analysis covers the EU as a whole and five Member States: France, Germany, Italy, Poland and Spain.
- Three policy scenarios explore different policy mixes.

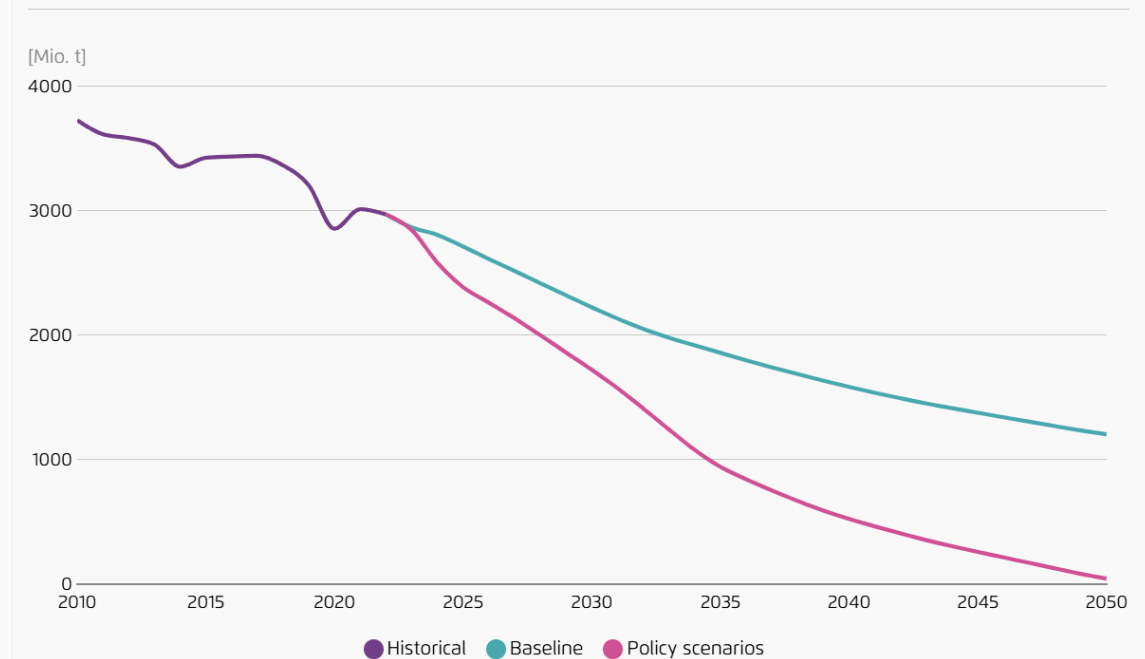
# Integrating techno-economic modelling results into macroeconomic models allows for precise estimations of clean investment wave and other important features of the transition



# Three policy scenarios – The same emission reduction pathway can be achieved with different policy mixes.

Area/Scenario	Core	Lower Pricing	Conservative Policy
Redistribution of carbon revenues to households	33%	100%	33%
Green investment support	Medium.	Medium-high (grants cover 10 percentage points of capex more)	Medium.
Extra budget cuts to cover climate spending	No	No	Yes (overall spending remains at baseline levels)
Monetary Policy	Looking through transition-induced inflation	Looking through transition-induced inflation.	Taylor rule

Carbon dioxide emissions by scenario



Source: Oxford Economics (2024)

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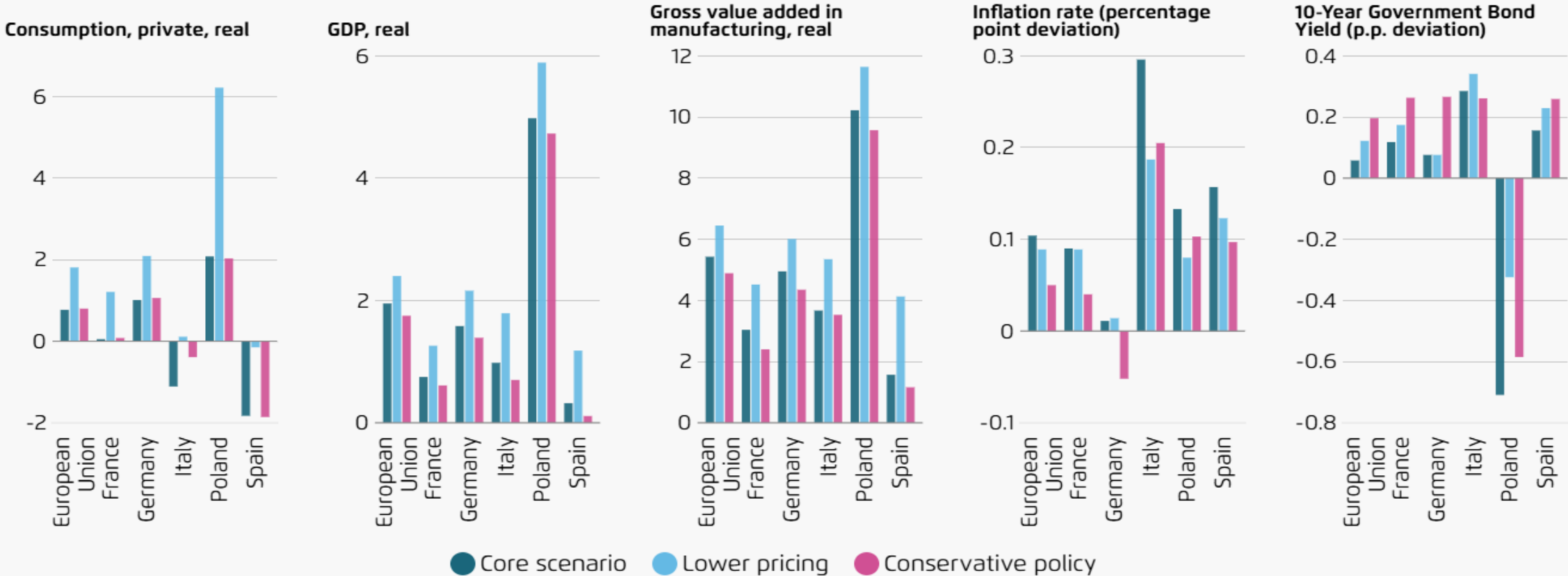
Key findings regarding impacts on the  
economy and public budgets

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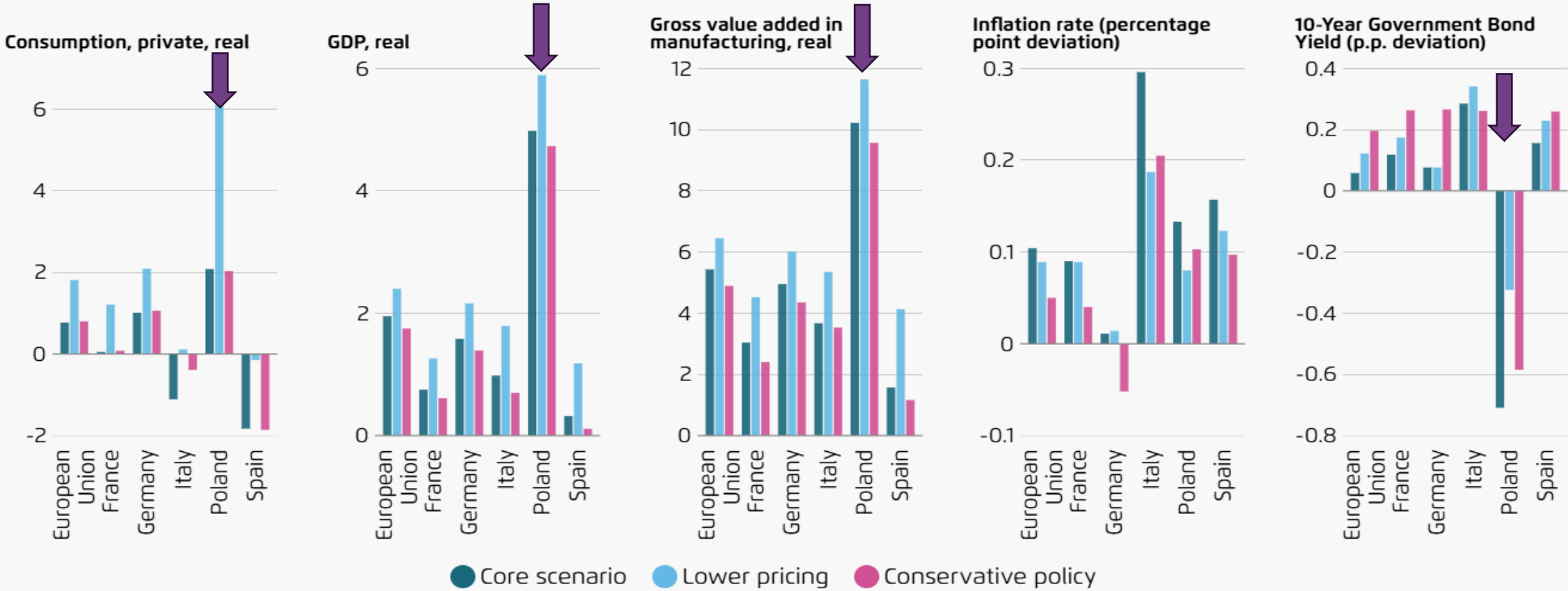
# The EU can both reach ambitious 2040 climate targets and grow its economy, driven by strong investment demand.

Key macroeconomic outcomes in each scenario for the year 2040 – percent deviation from baseline



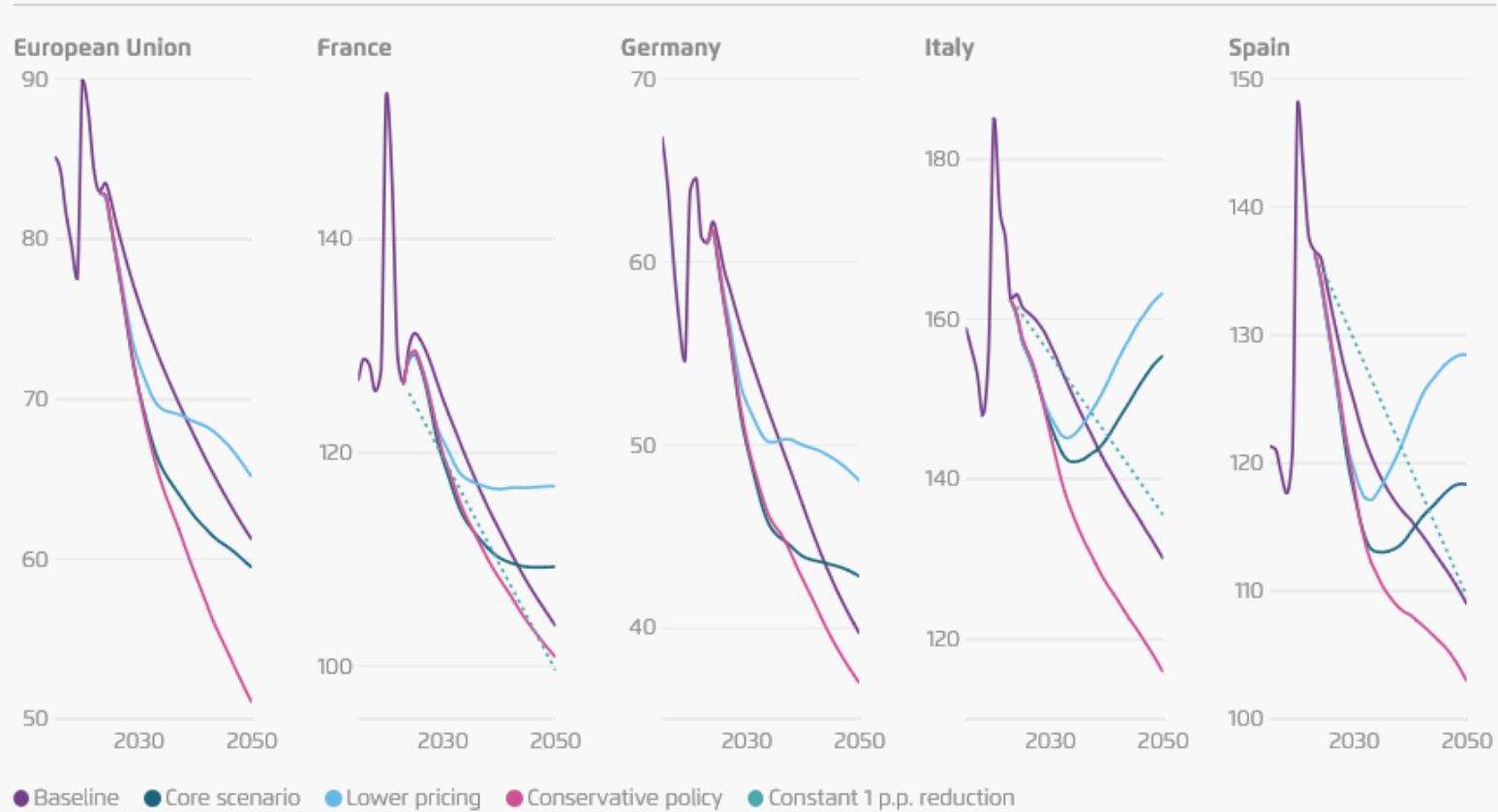
# In spite of higher carbon intensity, the transition in Poland is an economic success story. This is largely due to investment-driven expansion in manufacturing.

Key macroeconomic outcomes in each scenario for the year 2040 – percent deviation from baseline



# Broadly positive effects on public debt levels, at least until the mid-2030s, when debt in Italy and Spain is set to rise without extra budget cuts.

Government debt by scenario: EU average and Euro Area countries  
Percent of GDP



Source: Oxford Economics.

- **Clean growth reduces public debt levels:** This holds across the board, at least initially.
- **Public debt in Italy & Spain is set to rise in the mid-2030s:** This is due to for various reasons.
- **The transition is not budget neutral:** decline in fossil fuel tax revenues will offset carbon revenues in some countries.
- **Extra budget cuts can prevent debt from rising, but:** they carry political, social and economic risks that are not modelled.

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# Investing in the Green Deal

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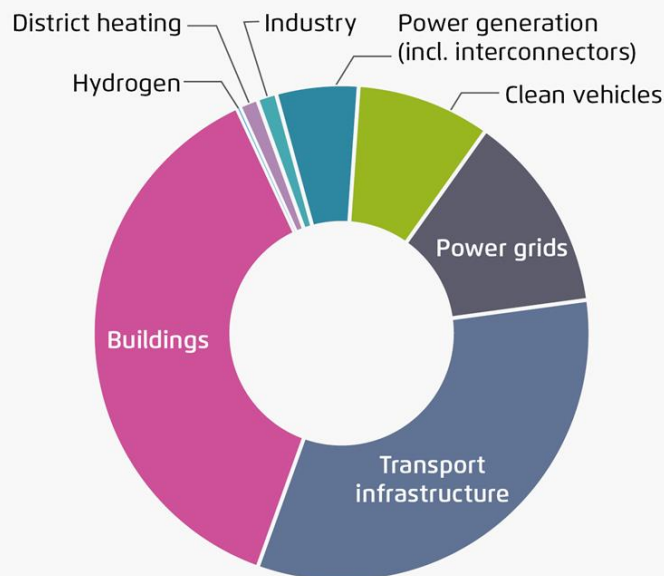
How to increase the impact and ensure the continuity of EU climate funding

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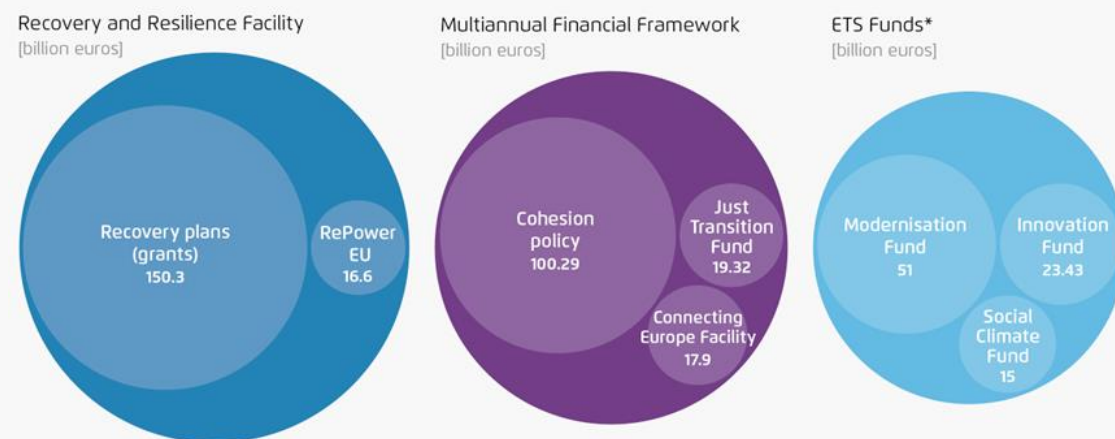
At least 462 bn euros in additional investments is needed every year. Public funding needs vary across sectors but make up about a third of total spending.

### Sectoral composition of public climate investment needs in the EU, 2023–2050



→ About 1 % of EU-GDP, or **171 bn euros** in 2023 prices, of public funding is needed every year for energy system, resource efficiency and energy efficiency investment

### Relevant climate spending across the EU Budget 2021–2027

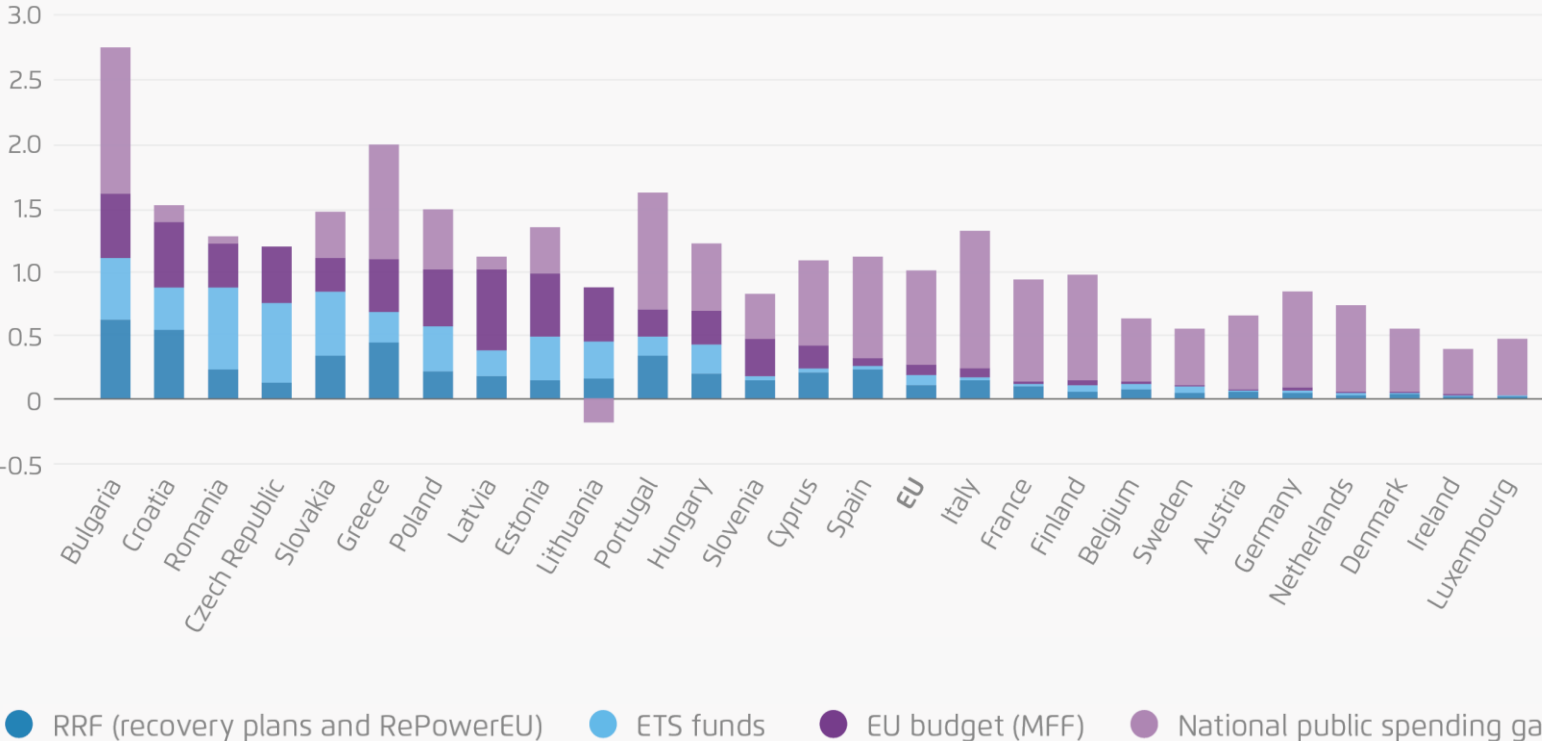


→ the 2021–2027 EU budget makes available **391 billion euros** in grants for clean energy, resource and energy efficiency investment

# Current EU climate funding covers a third of the public spending gap. A climate funding cliff is looming after 2026.

## EU-level contributions to closing national public climate spending gaps

Annual averages, 2021–2027  
GDP [%]



Three factors risk leading to a **climate funding cliff** after 2026:

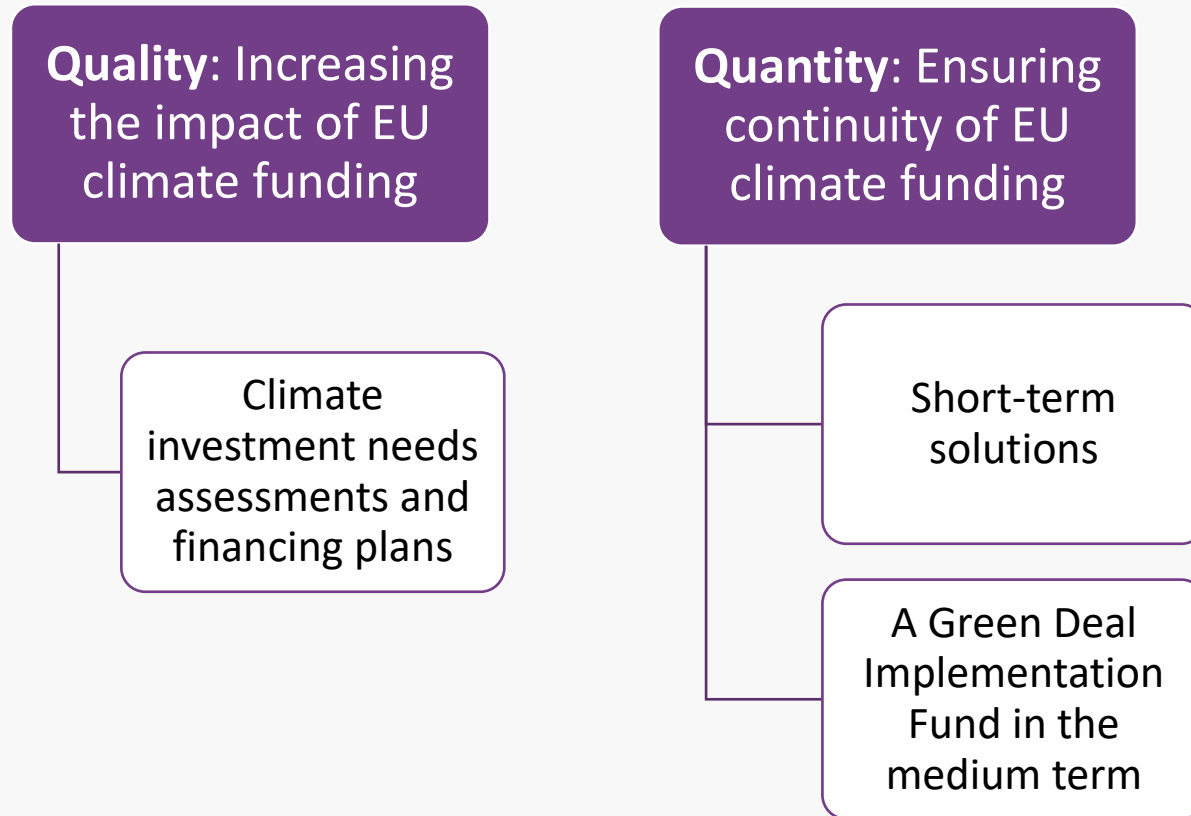
- Repayment of NextGenEU debt is not yet secured
- End of the ‘Recovery Fund’ by 2026 will leave a funding hole of 170 billion euros
- New fiscal rules will require debt reduction from EU countries that together account for 40% of EU GHG-emissions

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Our policy recommendations –  
how can we ensure the needed quality  
and quantity of EU climate funding?

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# EU-level climate funding becomes ever more important. How can we increase the quality and ensure the adequate quantity of EU climate funding?





# Two recommendations to help ensure an adequate level of EU climate funding in the short term ( 2025-2027)

## 1. Frontloading of national ETS2 revenues

### *Why?*

- **Early investments in clean heating and mobility solutions essential:** to keep carbon price under the ETS II in check and reduce future compensation payments

### *How?*

- **Frontloading of national ETS2 revenues could generate at least 36.2 billion euros before 2028:** Temporary facility at EU level would enable frontloading for interested Member States.

### *Benefit?*

- **Frontloading would not affect national budget deficits:** Repayment would happen by handing over a conservative share of future allowances to the EU facility.

## 2. Early replenishment of InvestEU

### *Why?*

- **InvestEU is a useful de-risking mechanism to crowd in private finance:** It should be replenished to ensure its operation until the end of the budget cycle

### *How?*

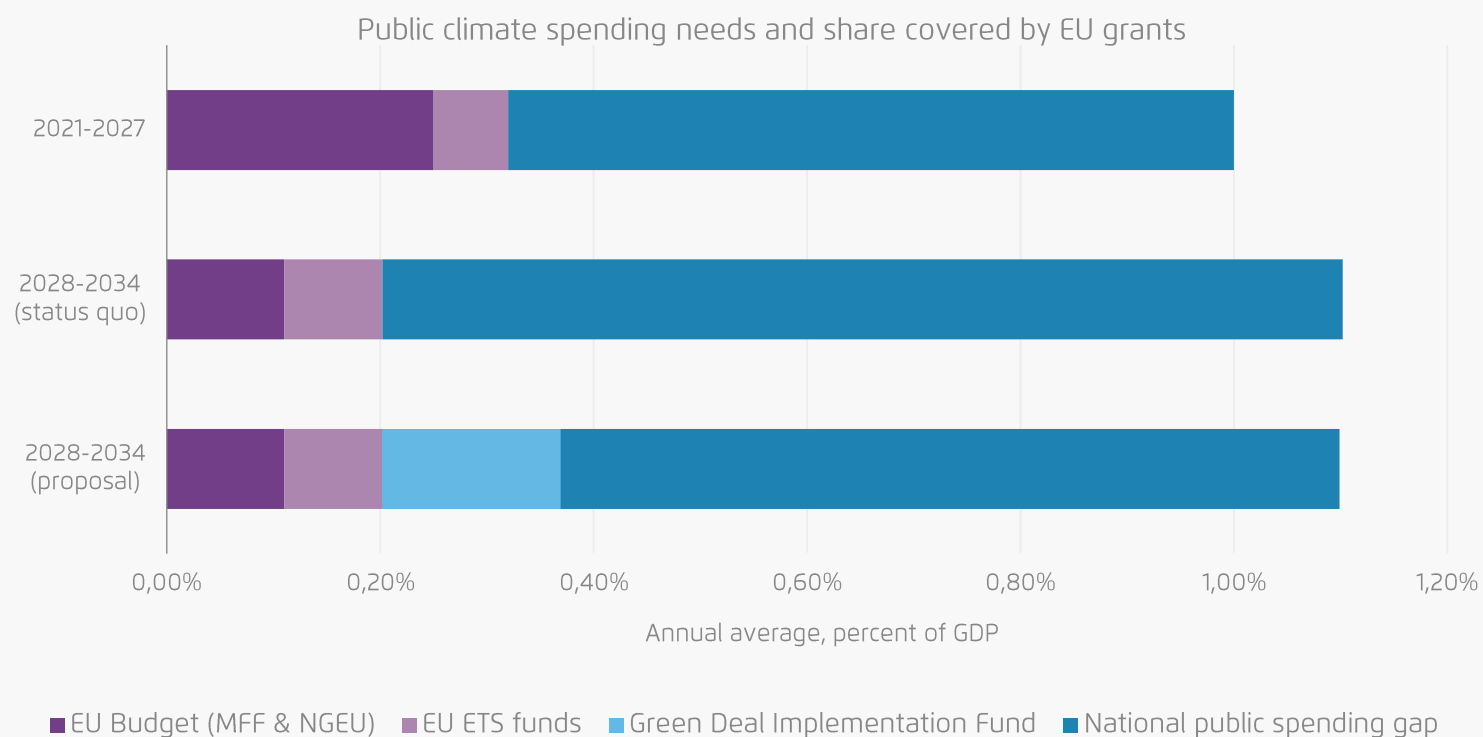
- **Spending delays justify the early repurposing of a small share of EU funds:** Flexibilities under 'Member State compartment' would provide for a **guarantee of 21.5 billion euros** to trigger up to 245 billion euros in additional investments before 2028.

### *Benefit?*

- **De-risking investments to strengthen industrial competitiveness:** E.g. counter guarantees for scaling-up cleantech manufacturing.

# Ensuring continuity of EU climate funding in the medium term with a new Green Deal Implementation Fund (2028–2034)

## Proposed future EU climate funding level compared to the present cycle and a status quo-scenario



- **260 billion euros in grants** over seven years or approx. 0.17 % of EU-27 GDP
- **Maintain EU cofinancing share:** One third of public climate funding gap
- **50 billion euros for strategic clean tech manufacturing**
- Support investments in **residential sector and select infrastructure**
- **Mix of new own resources** can generate the required revenues. Small amount of debt is a feasible option

## Key Takeaways

- 1 The EU can both reach an ambitious 2040 climate target and grow its economy.** The EU will likely aim for a 90 percent greenhouse gas emission cut by 2040. The related green investments would help increase the EU GDP by around two percent. The transition in Poland is an economic success story.
- 2 Italy and Spain – among the five countries analysed – will need additional fiscal consolidation for them to deliver both on their climate and debt reduction goals over the long term. Most EU governments cannot rely on carbon pricing revenues alone to finance their climate investment programmes.** These findings call for more flexibility for climate investment in fiscal rules, the examination of new revenue sources to complement carbon pricing and a strengthened role of EU-level climate funding.
- 3 Governments should urgently identify national investment needs and develop financing strategies for implementing the Fit-for-55 package.** This would remove a crucial information barrier and improve the overall impact of EU climate funding.
- 4 To ensure the continuity of funding levels, the EU should frontload future ETS2 revenues, replenish InvestEU and establish a dedicated fund to bridge the looming funding cliff in the medium term.** The 260 bn EUR fund can be financed with a balanced mix of New Own Resources. A small amount of debt is one of the feasible options to stretch the financing burden.

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Thank you for  
your attention!

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Do you have any questions or comments?

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