



'ASK-AN-EXPERT' CARBON PRICING WEBINAR

27 SEPTEMBER 2023

**SESSION: OECD NET EFFECTIVE CARBON
RATES AND THE INCLUSIVE FORUM ON
CARBON MITIGATION APPROACHES**

Assia Elgouacem,
Acting Head of Tax and Environment,
Centre for Tax Policy and Administration



Outline

1. OECD methodology on carbon pricing

- Scope of positive carbon pricing instruments
- Fossil fuel subsidies as negative carbon prices

2. Recent developments in carbon pricing

- Net effective carbon rates by components, countries, fuels and sectors

3. Other recent developments

- Energy price hikes and fiscal responses

4. Inclusive Forum on Carbon Mitigation Approaches (IFCMA)

- Objectives
- Status

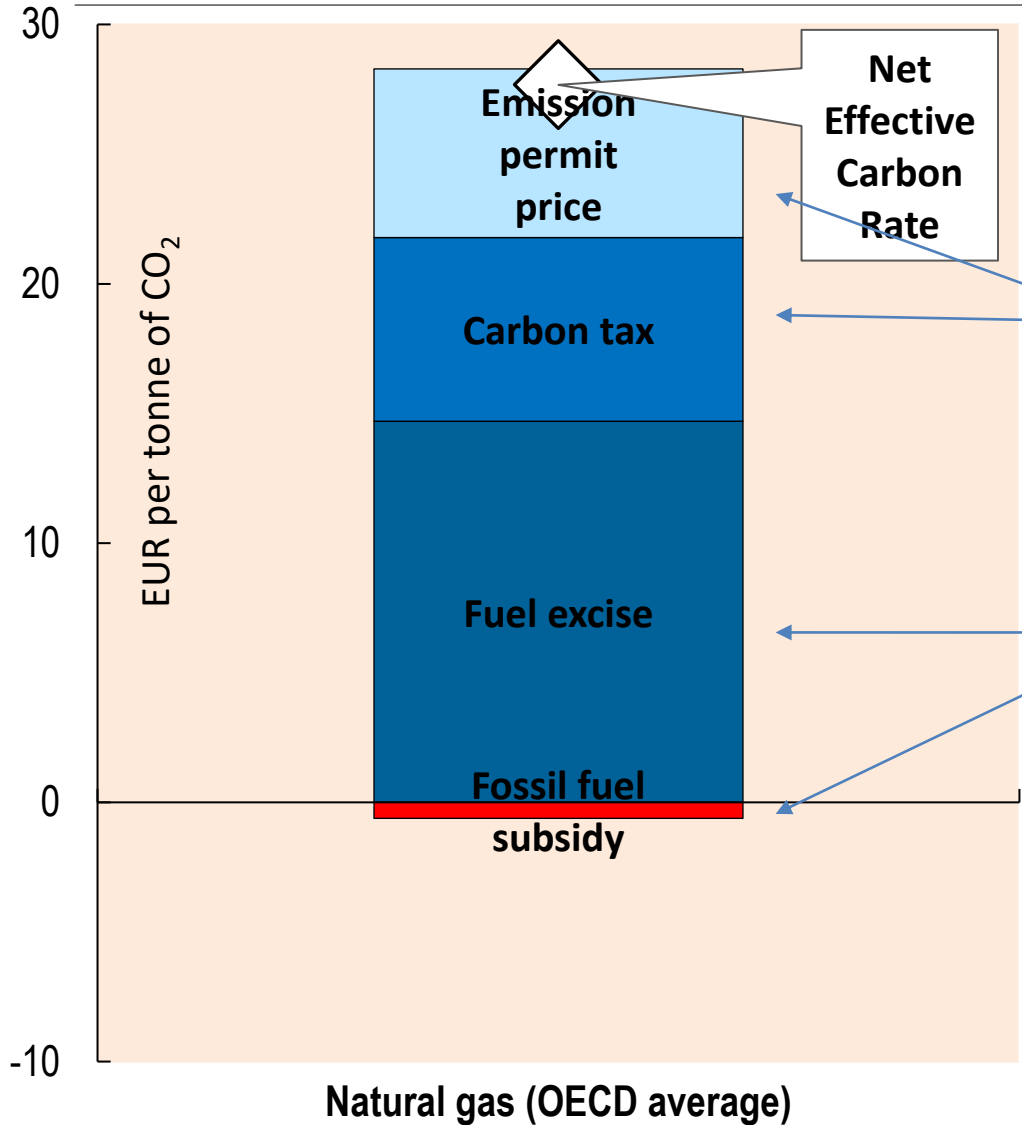


Outline

1. OECD methodology on carbon pricing



Carbon pricing instruments scope



Policy intention is to price carbon

Policy result is to price carbon



Scope, measurement, definitions

- Positive carbon prices”: carbon taxes, emissions trading systems permit prices, fuel taxes (OECD Effective Carbon Rate - ECR)
 - Price charged is proportional to CO₂-emissions
 - Price signal at the margin
 - Effective rates: disaggregated by fuel, user type, sector, country; accounts for preferential rates and exemptions (“tax incentives”)
- Negative carbon prices: fossil fuel subsidies as budgetary transfers that decrease pre-tax prices for domestic fossil fuel use



Outline

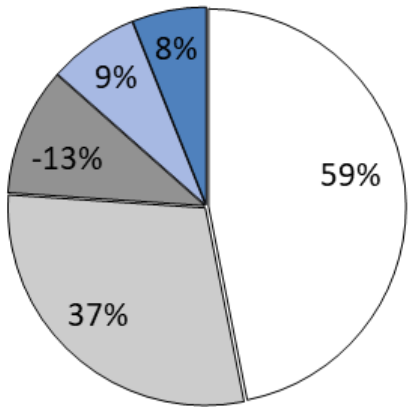
2. Main results for net effective carbon rates



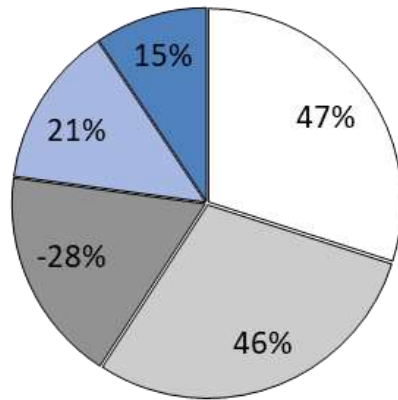
Most GHG emissions are untaxed or taxed at moderate rates

Share of emissions priced at different level

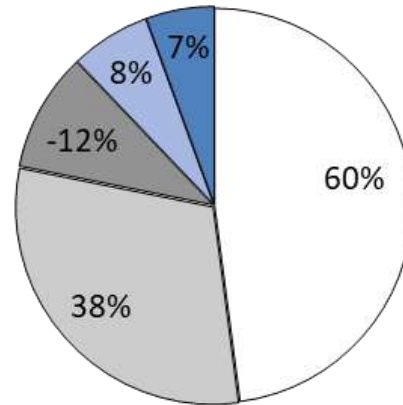
All countries



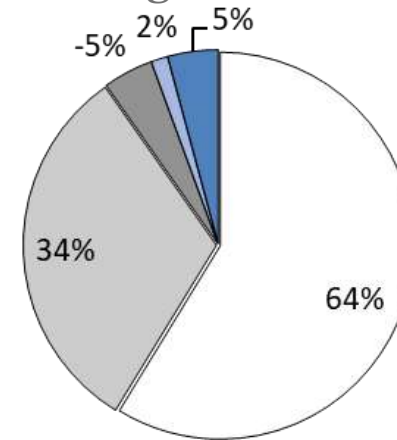
OECD countries



G20 countries



ODA-eligible countries



Thresholds in EUR / tCO₂e

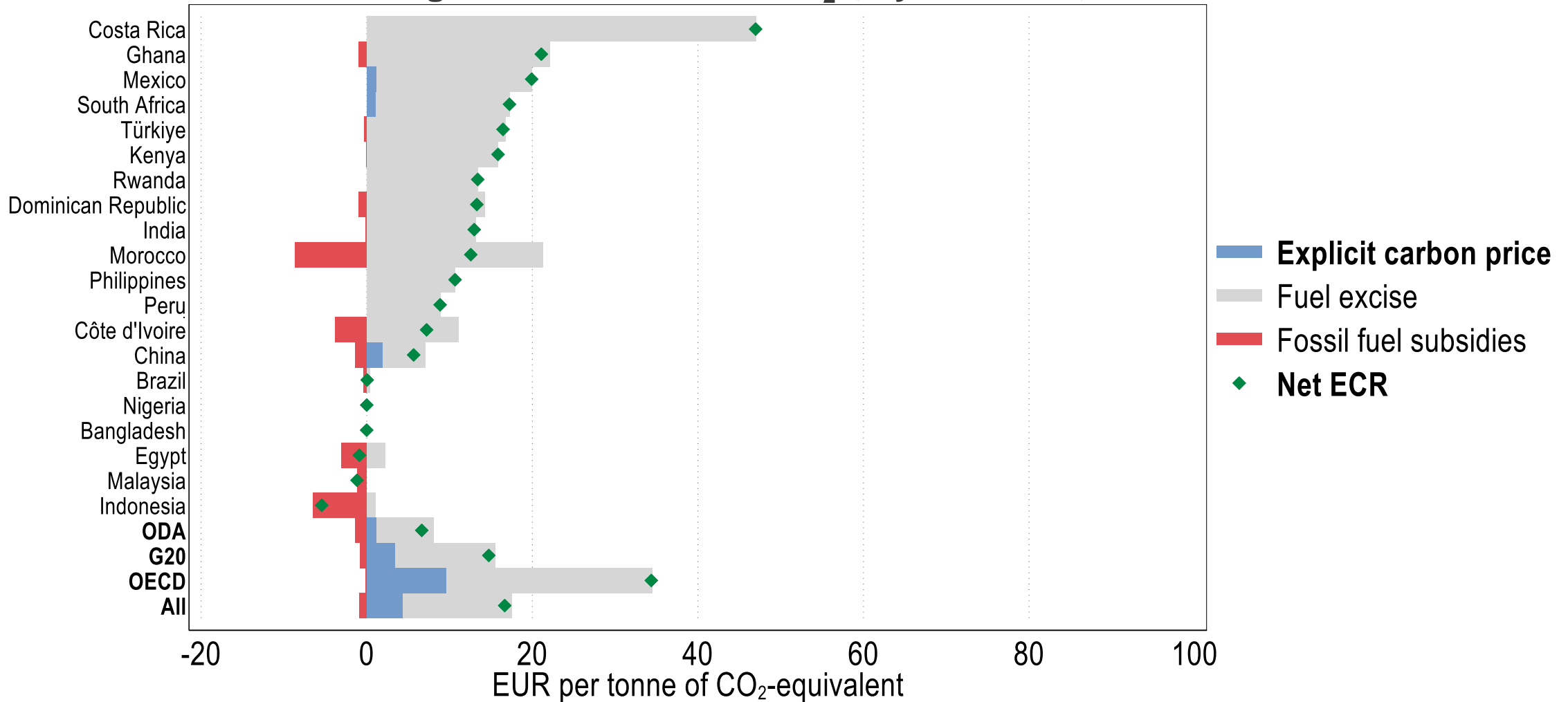
□ <=0 □ (0,30] □ (30,60] □ (60,120] □ >120

Note: weighted average, G20 except Saudi Arabia
Source: OECD (2022), Pricing Greenhouse Gas Emissions



Fuel excise taxes are the main component of net effective carbon rates

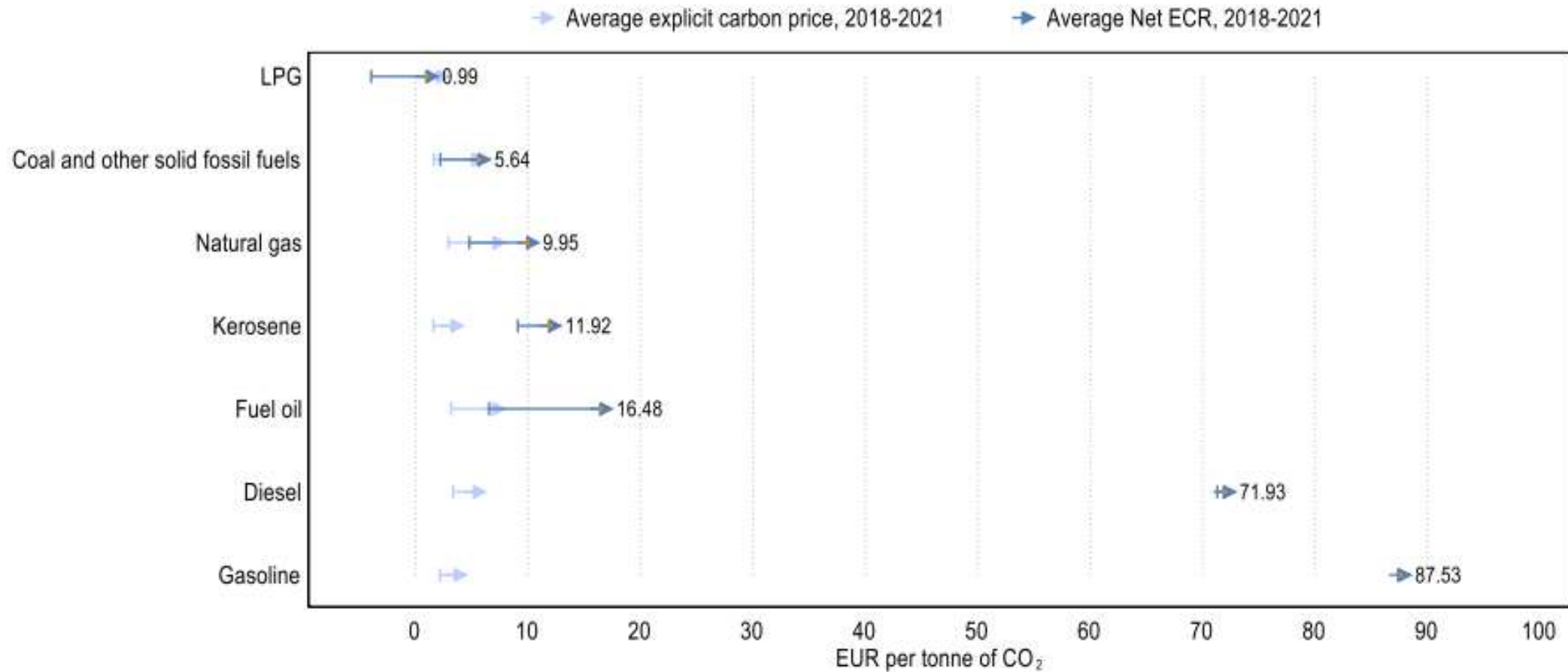
Average net ECR in EUR / tCO₂e, by countries, 2021





Fuels are unequally priced

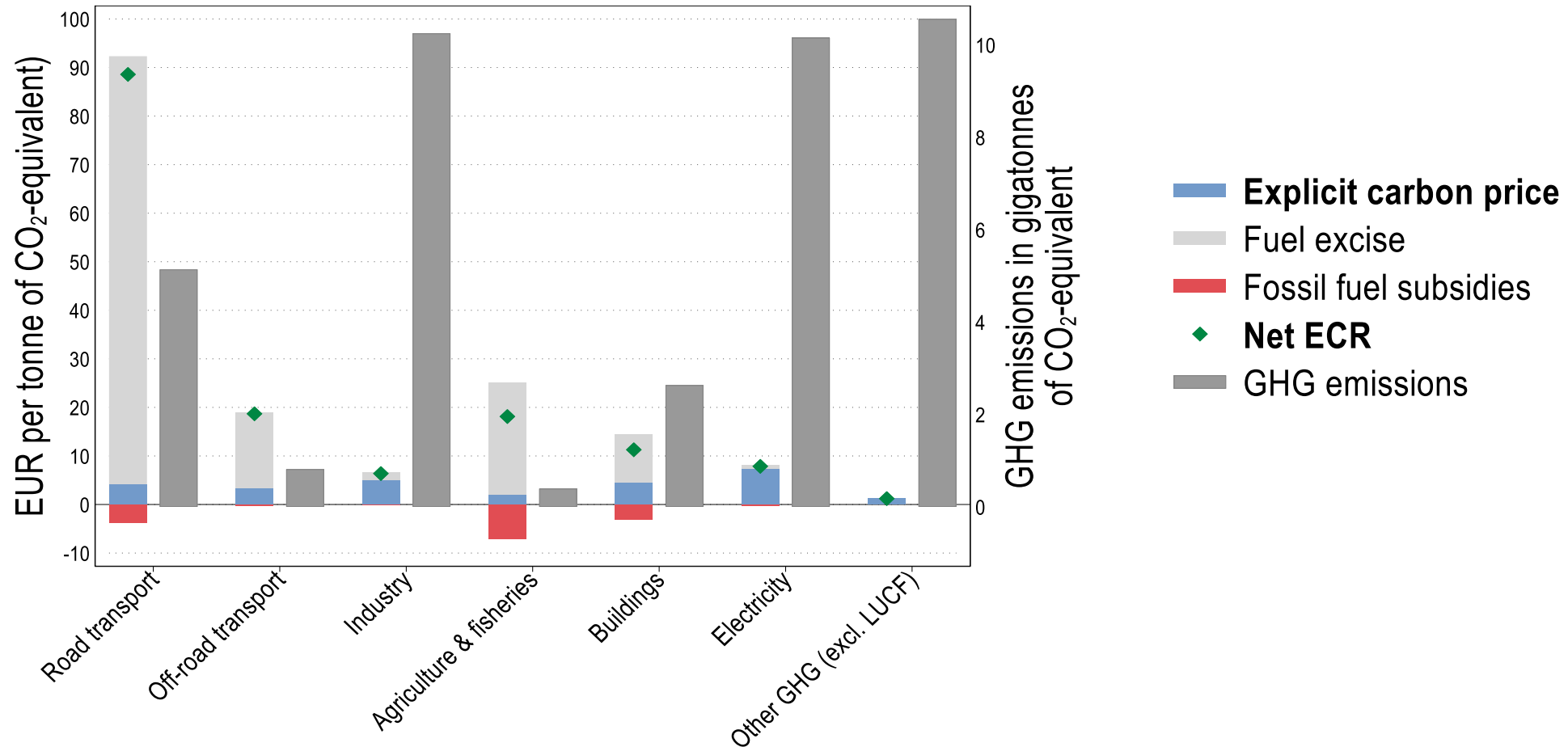
Average net ECR in EUR / tCO₂e, by fuel, all countries, 2018-2021





Net ECRs vary widely depending on sectors

Average net ECR in EUR / tCO₂e, by sectors, all countries, 2021



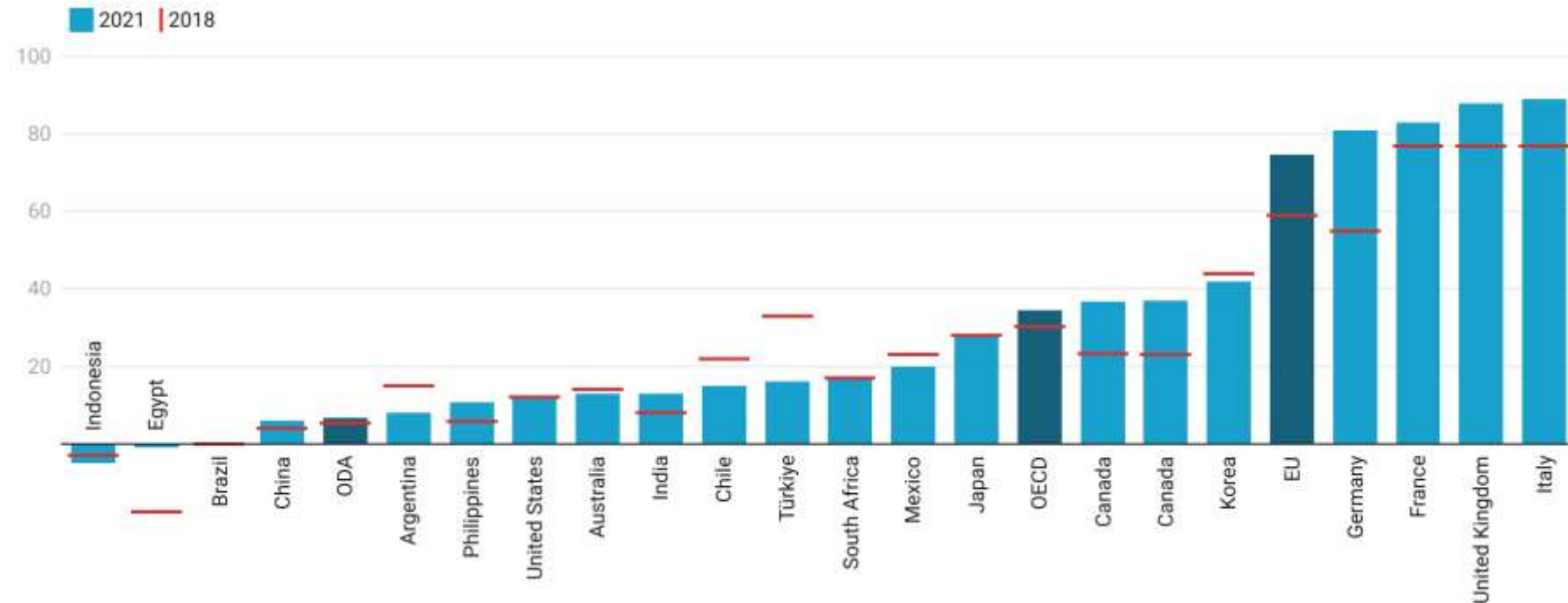


Evolution between 2018 and 2021

- Coverage (share of emissions subject to nECR > 0) rised

Coverage	2018	2021
Carbon tax	5.0%	5.8%
Emissions trading system	10.3%	19.0%
Fuel excise	23.9%	23.8%
Fossil fuel subsidy	22.4%	22.2%
Net Effective Carbon Rate	32.1%	40.7%

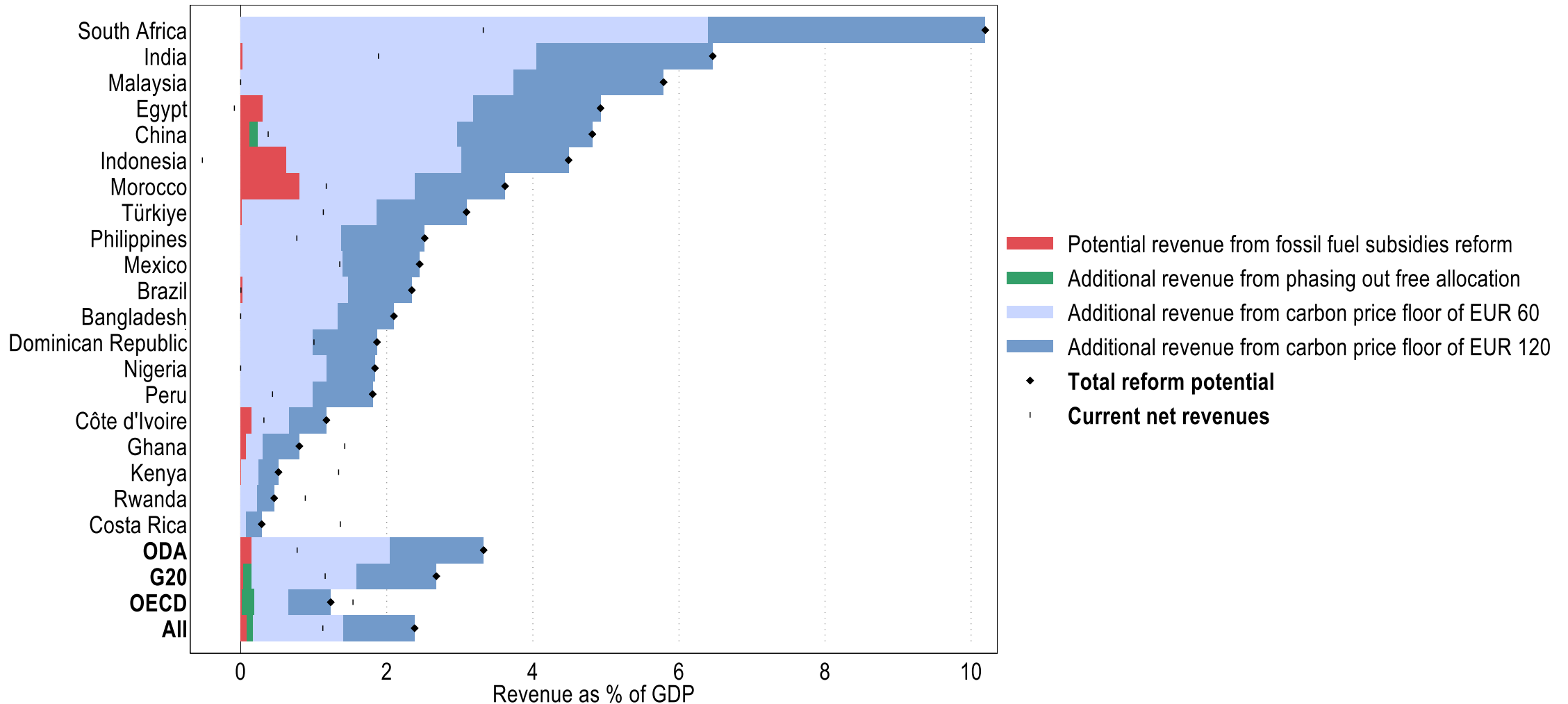
- Differences between countries increased





The revenue potential varies widely across countries

Revenue potential in % of GDP, by countries, 2021



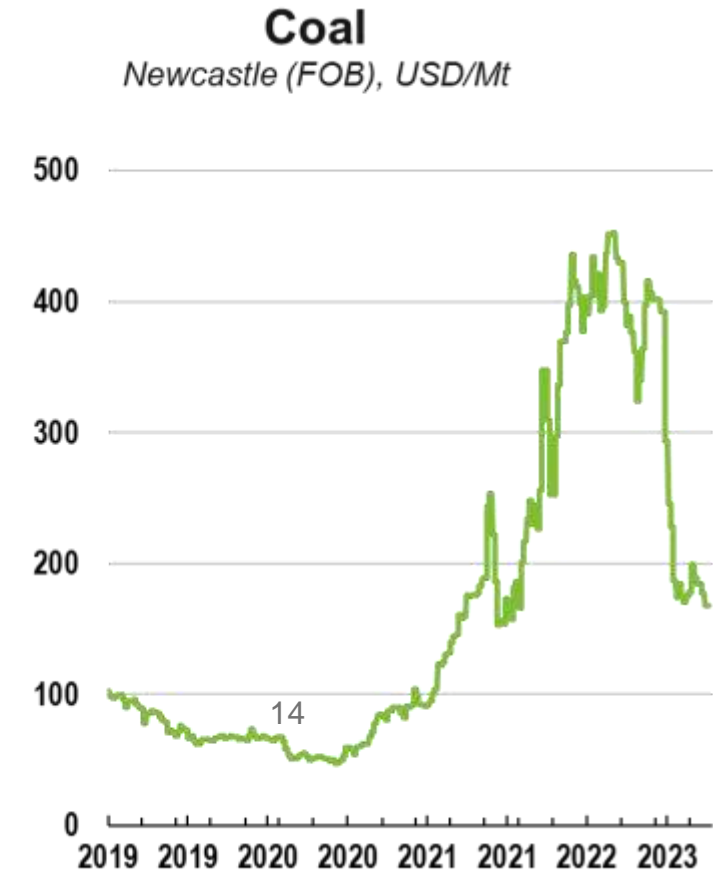
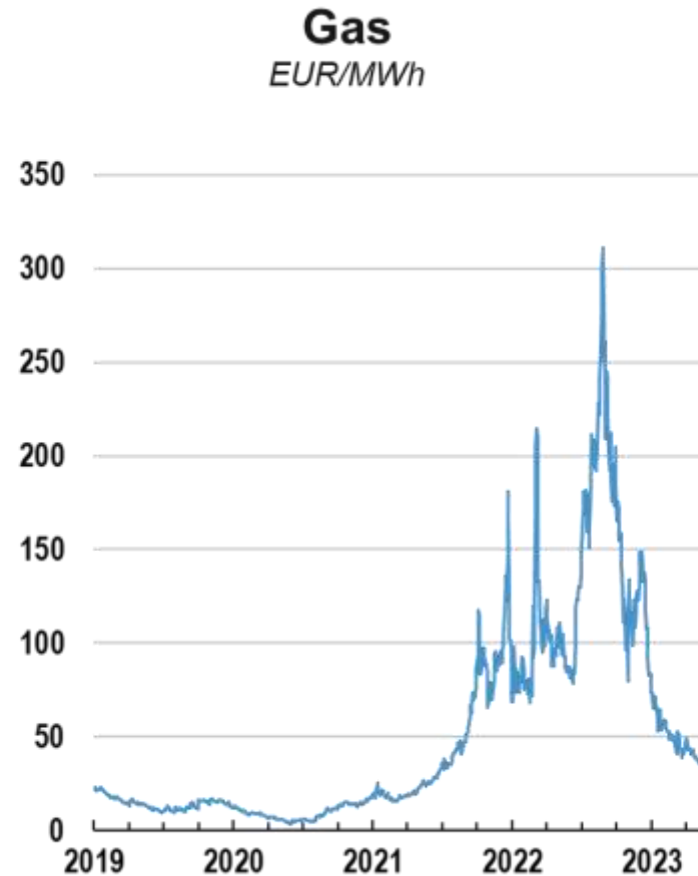


Outline

3. Other recent developments



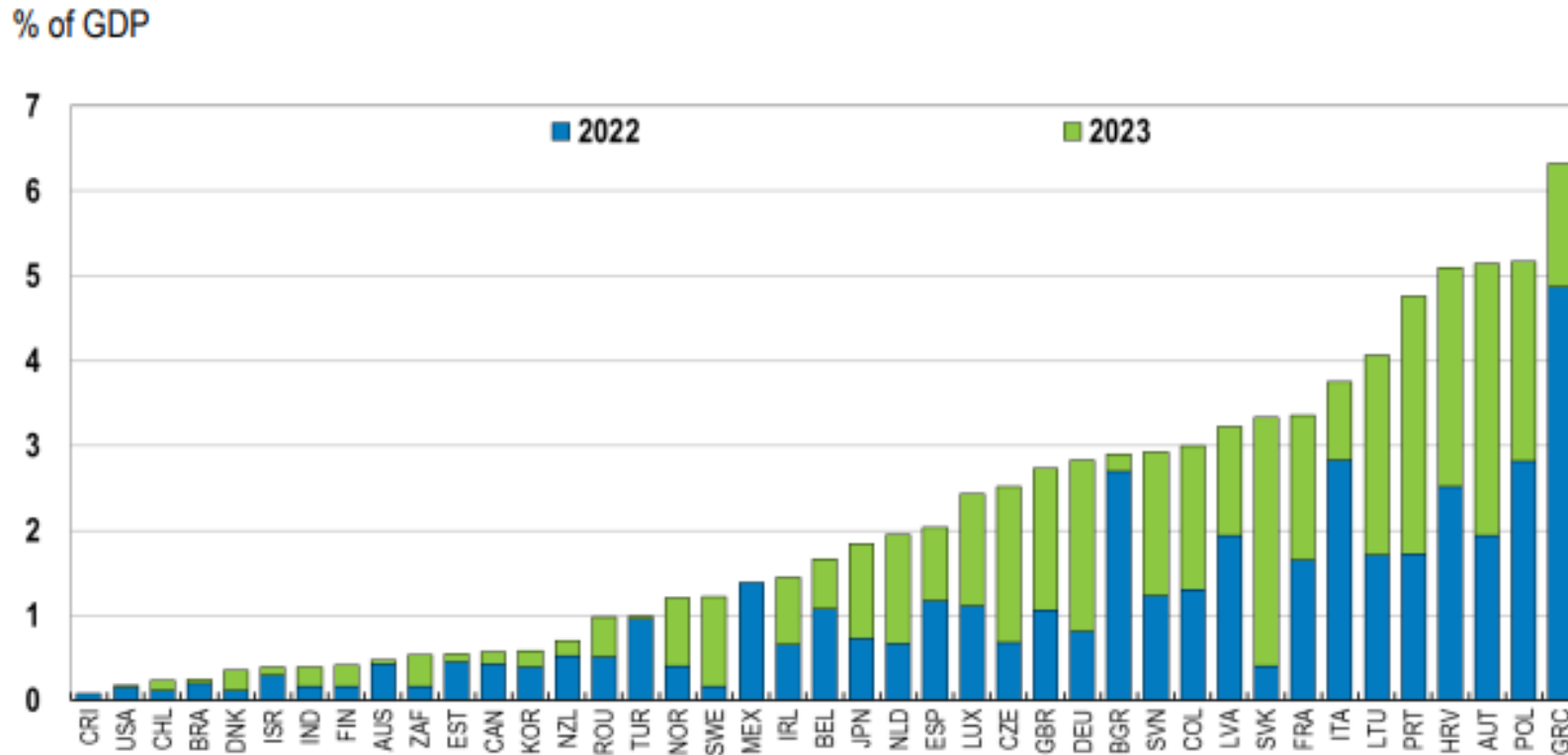
2022 energy price hike



Source: Hemmerlé, Y., et al. (2023), "Aiming better: Government support for households and firms during the energy crisis", *OECD Economic Policy Papers*, No. 32, OECD Publishing, Paris, <https://doi.org/10.1787/839e3ae1-en>.



Strong fiscal response - % of GDP

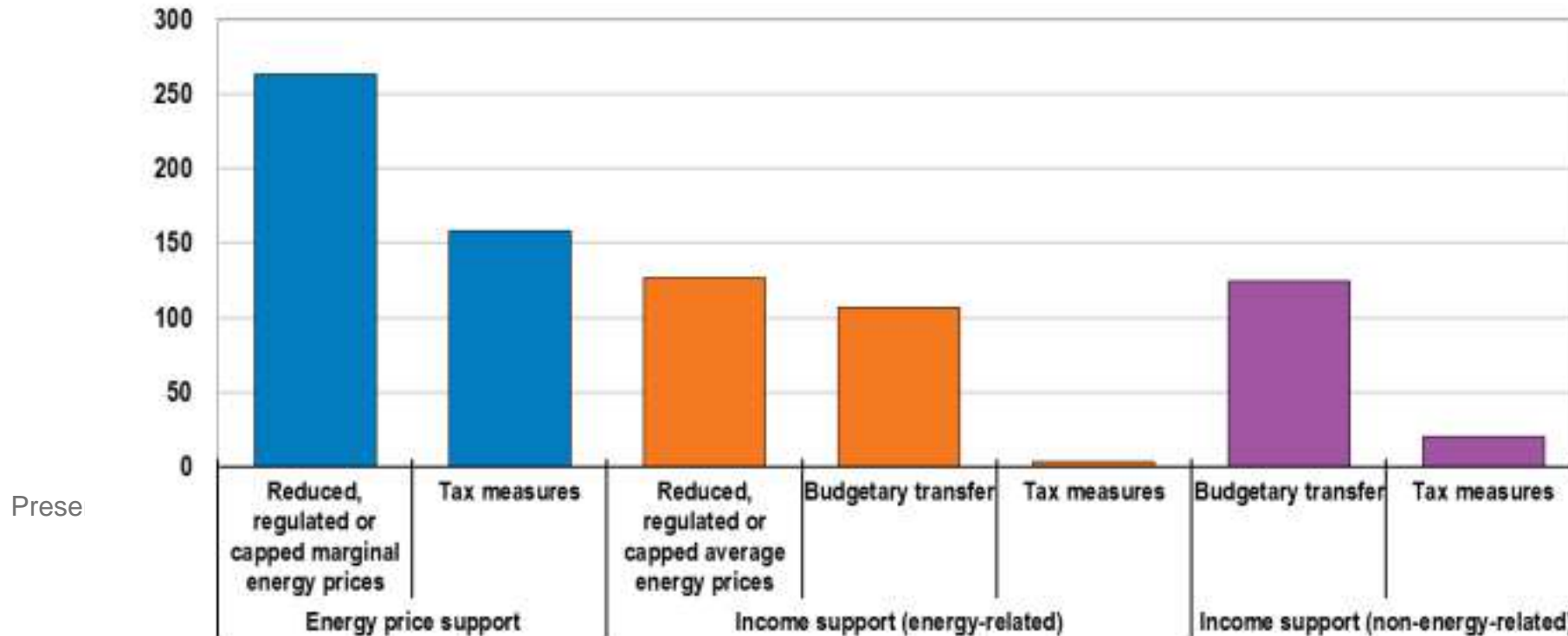


Source: Hemmerlé, Y., et al. (2023), "Aiming better: Government support for households and firms during the energy crisis", *OECD Economic Policy Papers*, No. 32, OECD Publishing, Paris, <https://doi.org/10.1787/839e3ae1-en>.



Support measures have mainly been aimed at reducing energy prices

Total measures, USD billions in 2022-23

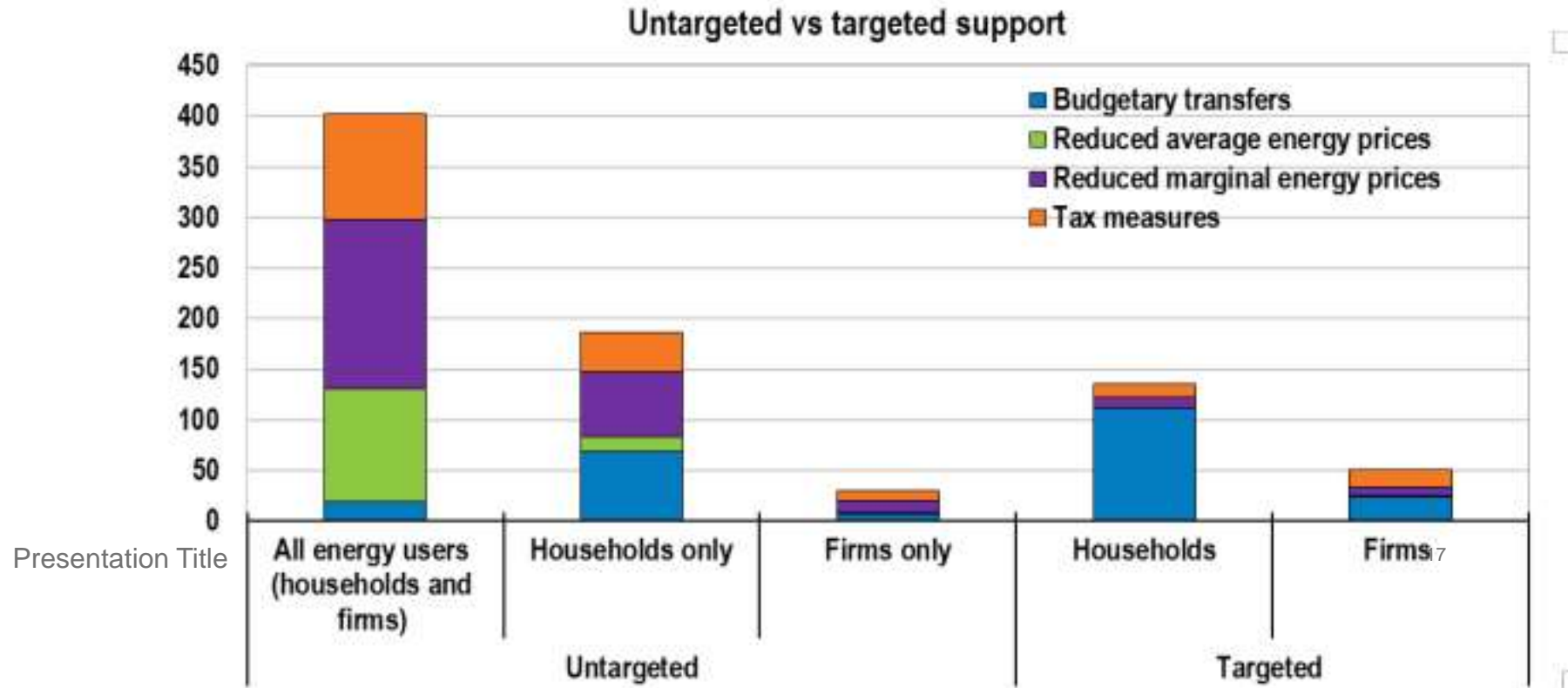


Source: Hemmerlé, Y., et al. (2023), "Aiming better: Government support for households and firms during the energy crisis", *OECD Economic Policy Papers*, No. 32, OECD Publishing, Paris, <https://doi.org/10.1787/839e3ae1-en>.



Support measures are largely untargeted

Total measures, USD billions in 2022-23

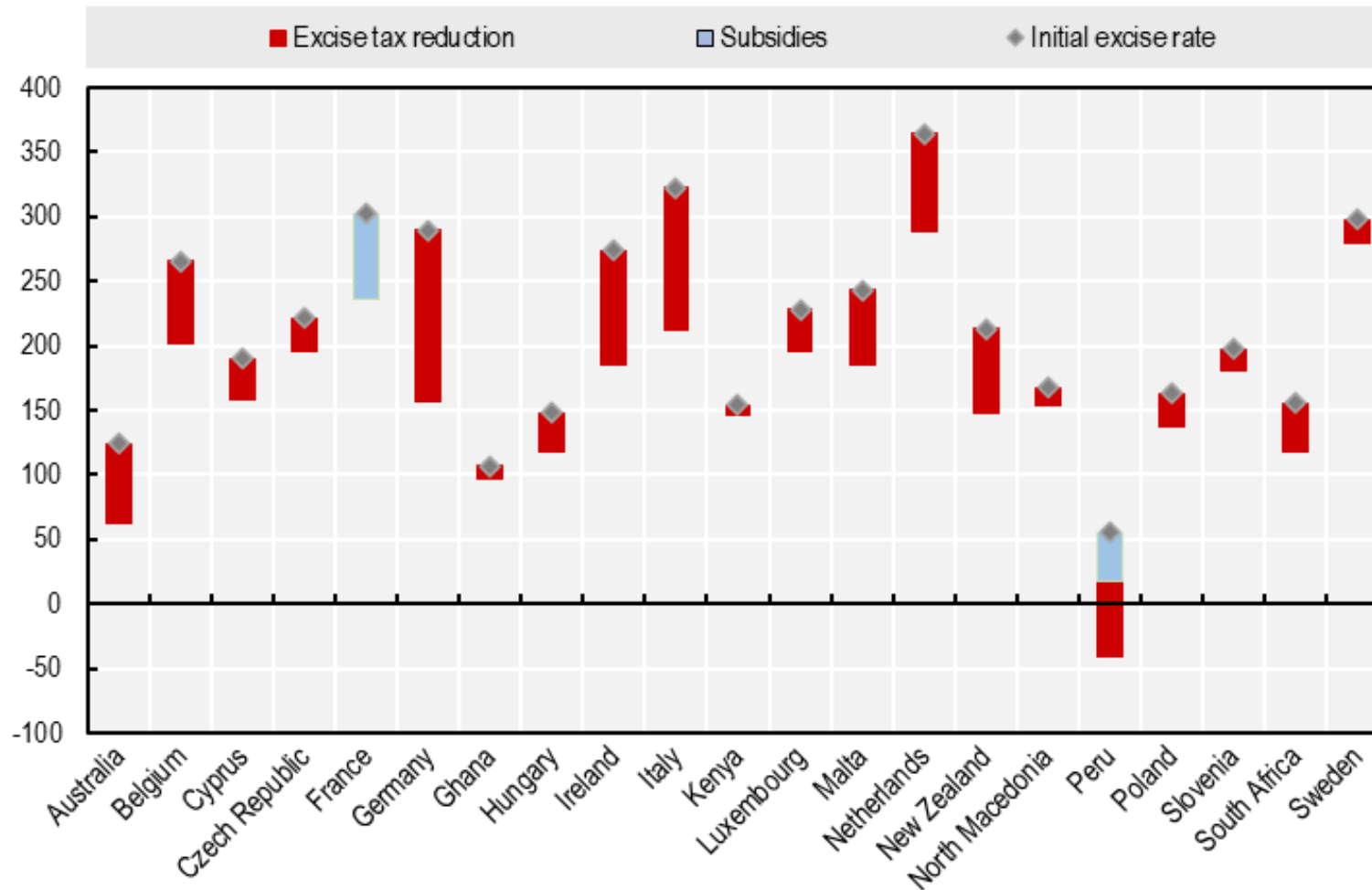


Source: Hemmerlé, Y., et al. (2023), "Aiming better: Government support for households and firms during the energy crisis", *OECD Economic Policy Papers*, No. 32, OECD Publishing, Paris, <https://doi.org/10.1787/839e3ae1-en>.



Excise tax reductions and subsidies lowered effective carbon rates

Excise tax reductions and subsidies for automotive gasoline in selected countries, in EUR/tCO₂





Building resilience to future shocks

- The energy transition and disruption in energy markets might cause **volatility in energy prices to persist**
- **Renewed spikes** in energy prices may warrant discretionary top-up payments and a more targeted approach
- **Medium and long-term solutions** to future energy shocks through **investments in energy efficiency** and **low-carbon energy sources and technology**



Outline

4. Inclusive Forum on Carbon Mitigation Approaches



Inclusive Framework on Carbon Mitigation Approaches (IFCMA) – Key objectives

The Inclusive Forum on Carbon Mitigation Approaches (IFCMA) is designed to help optimise the global impact of emission reduction efforts in countries around the world by:

Facilitating data and information sharing

Enabling evidence-based mutual learning and mutual understanding

Providing a platform for inclusive multilateral dialogue

- **IFCMA brings together a diverse range of countries, on an equal footing basis to:**
 - Take stock of mitigation policies and map them to their emissions base
 - Estimate the impacts of mitigation policies on emissions
 - Explore methodologies for computing carbon intensity of goods and sectors
- Connects representatives from **three key policy communities** (environment, tax, and structural economic policy)
- **IFCMA is not intended to serve as a standard-setting body, nor as a forum to rank country policies.**



IFCMA workstreams

Inclusive multilateral dialogue

- **Inclusive multilateral dialogue to help optimise the global impact of efforts to mitigate GHG emissions**
- Member-driven selection of topics for discussion, covering a wide range of fields related to climate change
- Focused on facilitating, evidence-based peer-learning and mutual understanding

Stocktaking & mapping of policies

- **Develop and apply a standardised typology to enable a systematic stocktake of mitigation policies.**
- Map policies to their emissions base to identify the share of greenhouse gas emissions they cover.
- Support work under the UNFCCC / Paris Agreement with improved comparability of policies.

Estimating the impacts of policies on emissions

- **Develop and apply a consistent methodological approach to estimate the effects of policies on emissions.**
- Couple country-specific sectoral models with economy-wide models to develop robust estimates.
- Exchange expertise on modelling approaches and build capacity.

Exploring methodologies for computing carbon intensity

- **Survey carbon intensity measurement methodologies using sector, installation, and product-level data.**
- Review challenges faced by firms in collecting and verifying supply chain data.
- Consider the role of governments in supporting measurement and use of carbon intensity metrics.



Membership (as of 21 September)

Objective is to be as inclusive as possible to ensure the IFCMA's work is globally relevant and reflects the full spectrum of country contexts

- Currently **56 members**, covering a broad range of countries from all regions, including 13 G20 member countries + EU
- All members participate on equal footing and have an equal say in discussions and decisions
- Decision-making and approvals take place on a **consensus basis**

1. Argentina	15. European Union	29. Lithuania	43. Romania
2. Australia	16. Finland	30. Luxembourg	44. Singapore
3. Austria	17. France	31. Malta	45. Slovakia
4. Belgium	18. Germany	32. Mauritius	46. Slovenia
5. Bulgaria	19. Greece	33. Mexico	47. South Africa
6. Cameroon	20. Hungary	34. Monaco	48. South Korea
7. Canada	21. Iceland	35. Netherlands	49. Spain
8. Chile	22. Ireland	36. New Zealand	50. Sweden
9. Croatia	23. Israel	37. Nigeria	51. Switzerland
10. Czech Republic	24. Italy	38. Norway	52. Türkiye
11. Colombia	25. Jamaica	39. Peru	53. United Kingdom
12. Costa Rica	26. Japan	40. Philippines	54. United States
13. Denmark	27. Kazakhstan	41. Poland	55. Uruguay
14. Estonia	28. Latvia	42. Portugal	56. Zambia



Thank you

Further information on our work:

assia.elgouacem@oecd.org