# MEASURING CARBON PRICING – OVERVIEW OF RELEVANT OECD WORK

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Working Group on Trade-related Climate Measures – WTO TESSD
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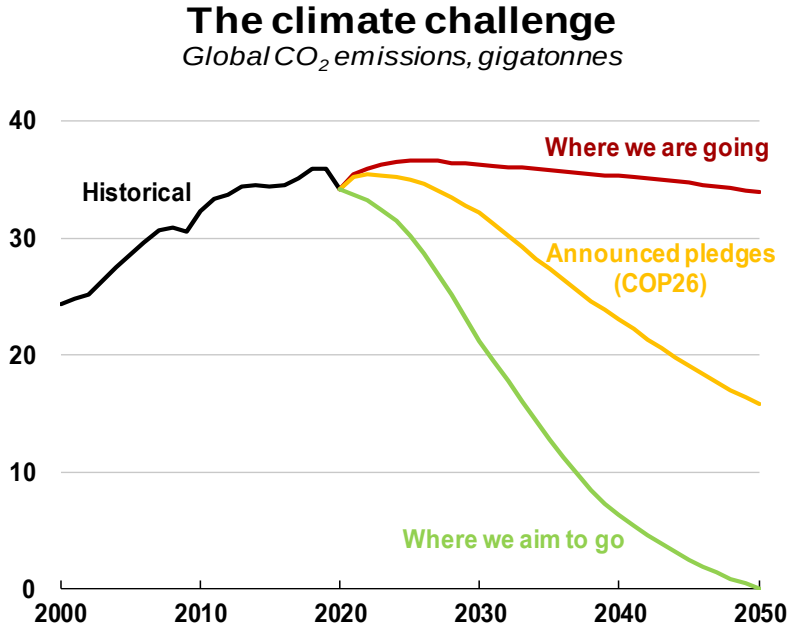
BETTER POLICIES FOR BETTER LIVES

# More ambitious actions are needed to be on track to net-zero




Source: IEA, 2021
Note: Limiting warming to 1.5°C requires -45% GHG emissions by **2030** compared to 2010.

- A price floor of 60 EUR would clearly help but would still leave considerable distance to target
- In the transition to net zero countries will proceed at different speed and using different policies
- The diversity of mitigation policy approaches makes it difficult to compare their effectiveness and incidence
- Concerns over competitiveness and carbon leakage remain
- How to ensure that the level of ambitions in individual jurisdictions can be lifted

# Towards a dialogue on climate policies

- The OECD proposes an **Inclusive Forum on Carbon Mitigation Approaches** to:
  - Improve global understanding and comparability of policy effectiveness
  - Allow climate policy performance and commitments to be better assessed
  - Inform global dialogue and decision-making on best practices
  - Help driving greater climate ambition globally avoiding negative cross border spillovers

- The **Forum** will support more ambitious climate policy by :
  - Creating inventories of climate policies (price and non-price)
  - Measuring how climate policies compare and meet emission reductions commitments

# Benchmarking and assessing policies

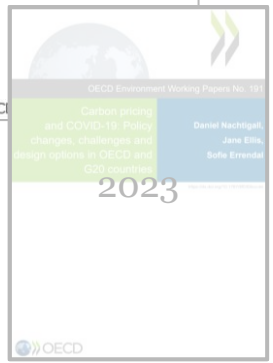
| | |
|---|---|
| 1. Stocktaking and mapping of policies | • Inventories of countries' price-based and non-price-based climate mitigation policies<br>• A basic taxonomy common across countries<br>• Considering also non-mitigation policies with significant effects on emissions |
| 2. Estimating impacts on emissions | • Assess the effectiveness of price and non-price-based policies in reducing emissions<br>• Country and industry/sector-specific estimates of emission reductions |
| 3. Comparability of mitigation approaches | • Developing methodologies and possible metrics to compare policies<br>• Assessing the cost effectiveness of different measures and packages |

# Carbon market platform - Strengthening the response

The Carbon Market Platform (CMP) launched as a G7 initiative (2015) to enhance international co-operation among countries and organisations to develop effective, sustainable and ambitious carbon pricing policies.


→ More climate-negative carbon pricing policy changes occurred during COVID-19, however most of these were time-limited measures.

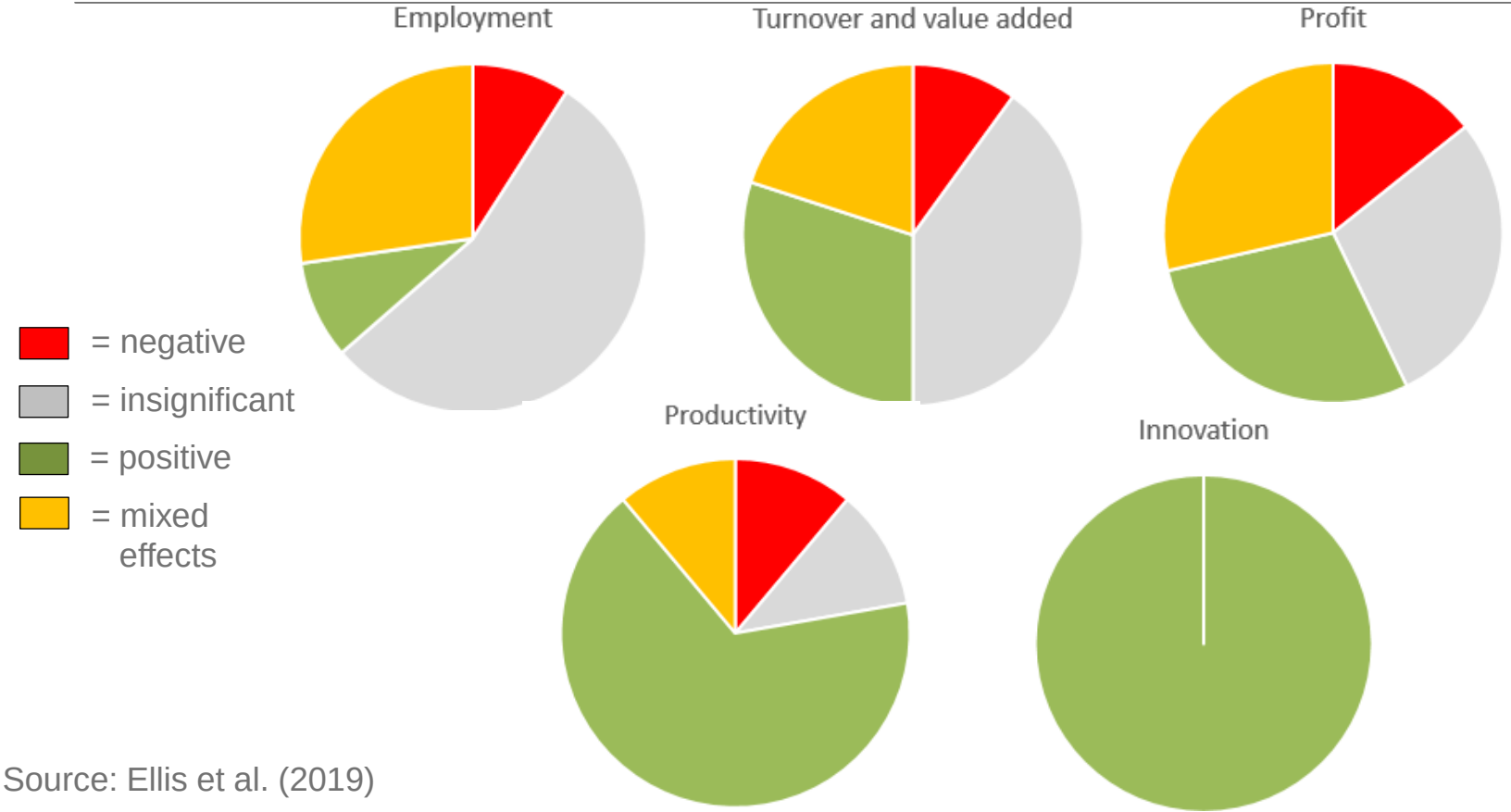
[*2022: Carbon pricing and COVID-19 - Policy changes, challenges and design options in OECD and G20 countries]*




→ Ongoing work: investigates the role of carbon pricing in transforming pathways to reach net-zero emissions and carbon pricing in food systems.

*[Expected in 2023: The role of carbon pricing in transforming pathways to reach net-zero emissions: Outlining potential issues and options in food systems]*

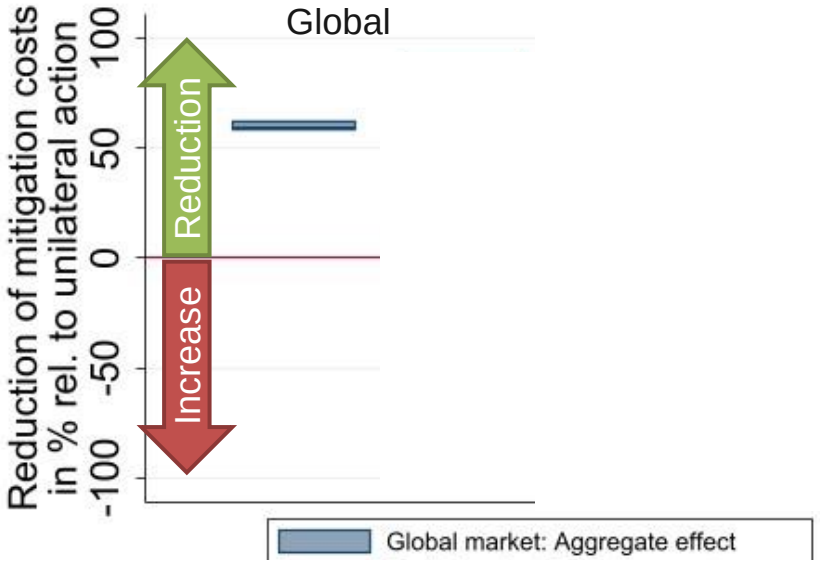
# Economic effects of carbon pricing: Review of 21 ex-post studies




Source: Ellis et al. (2019)

# Benefits from (sub-)global carbon markets

Distribution of economic effects of (sub)-global co-operation




Global co-operation would reduce mitigation costs by 58 – 63%: USD 249 – 320 billion/year

Gains are distributed unevenly across countries:

- Most countries would benefit directly
- Some countries may not benefit directly
- Yet, aggregate benefits would be large enough to make every country benefit

Sub-global carbon markets would yield fewer economic benefits (absolute and relative terms)

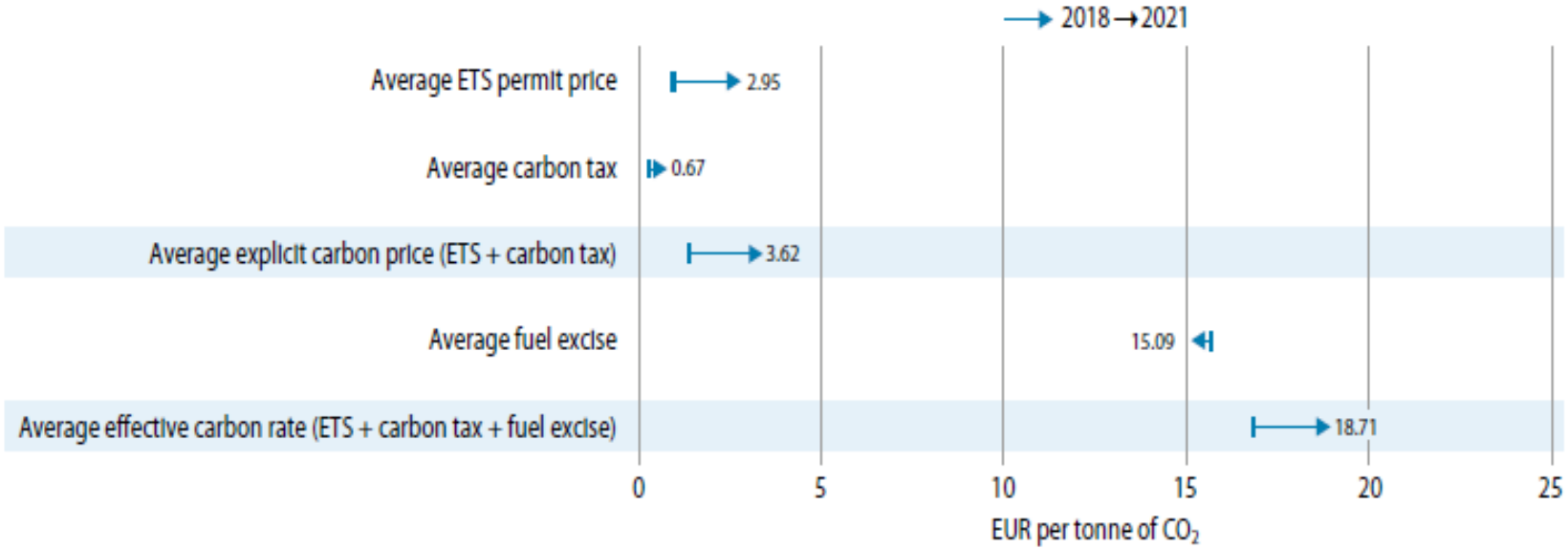
Extending the coverage of international co-operation beyond $CO_2$ emissions would reduce mitigation costs further by **25-42%**

Source: Nachtigall et al. (2021)

# (NET) EFFECTIVE CARBON RATES

# The average effective carbon rate (ECR) has risen modestly but remains relatively low

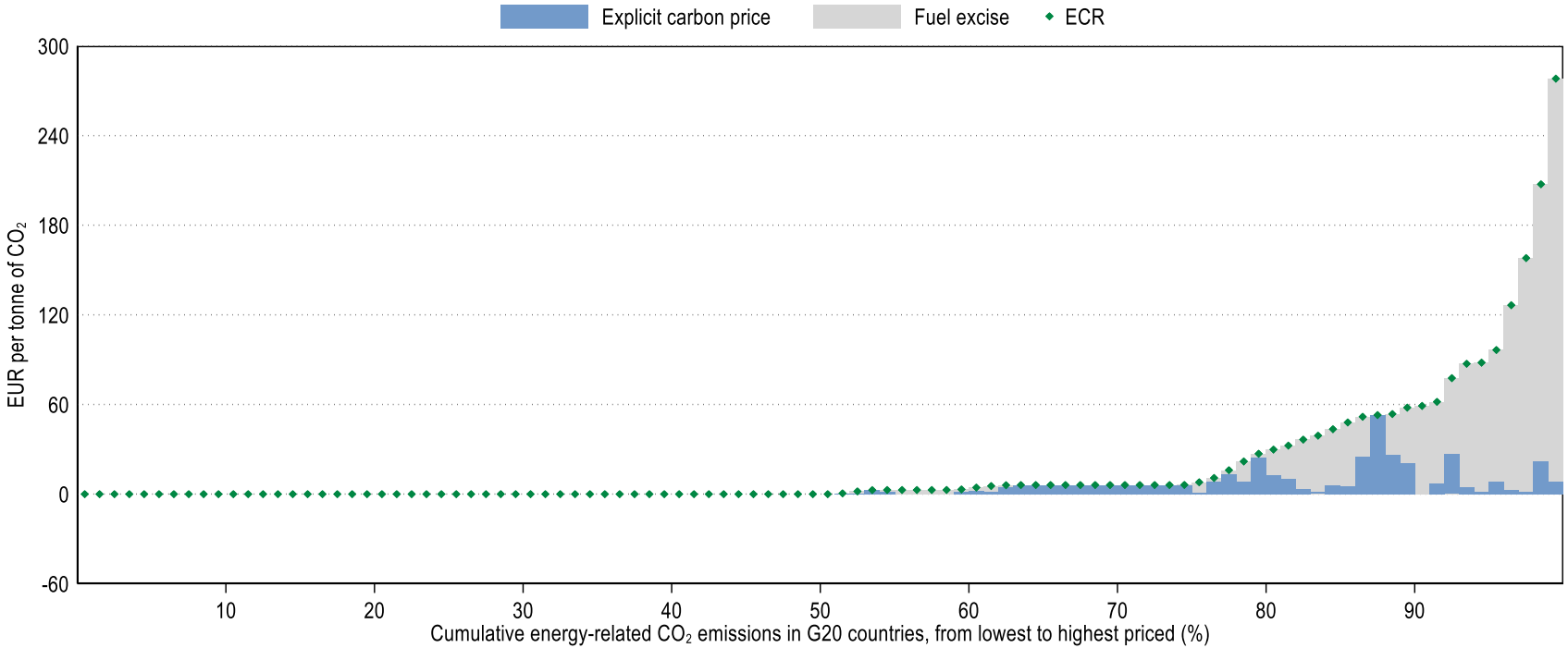
Average effective carbon price by instrument, G20 countries, 2018-2021




http://oe.cd/carbonpricing-g20

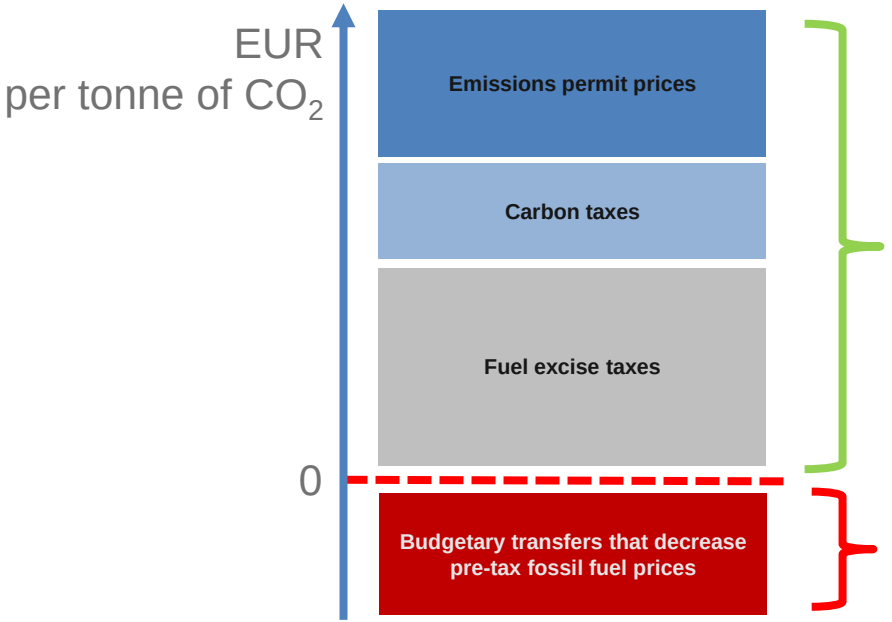
# One reason for the low average ECR is the large proportion of unpriced emissions

The distribution of effective carbon prices across $CO_2$ emissions from energy use, G20 countries, 2021




http://oe.cd/carbonpricing-g20

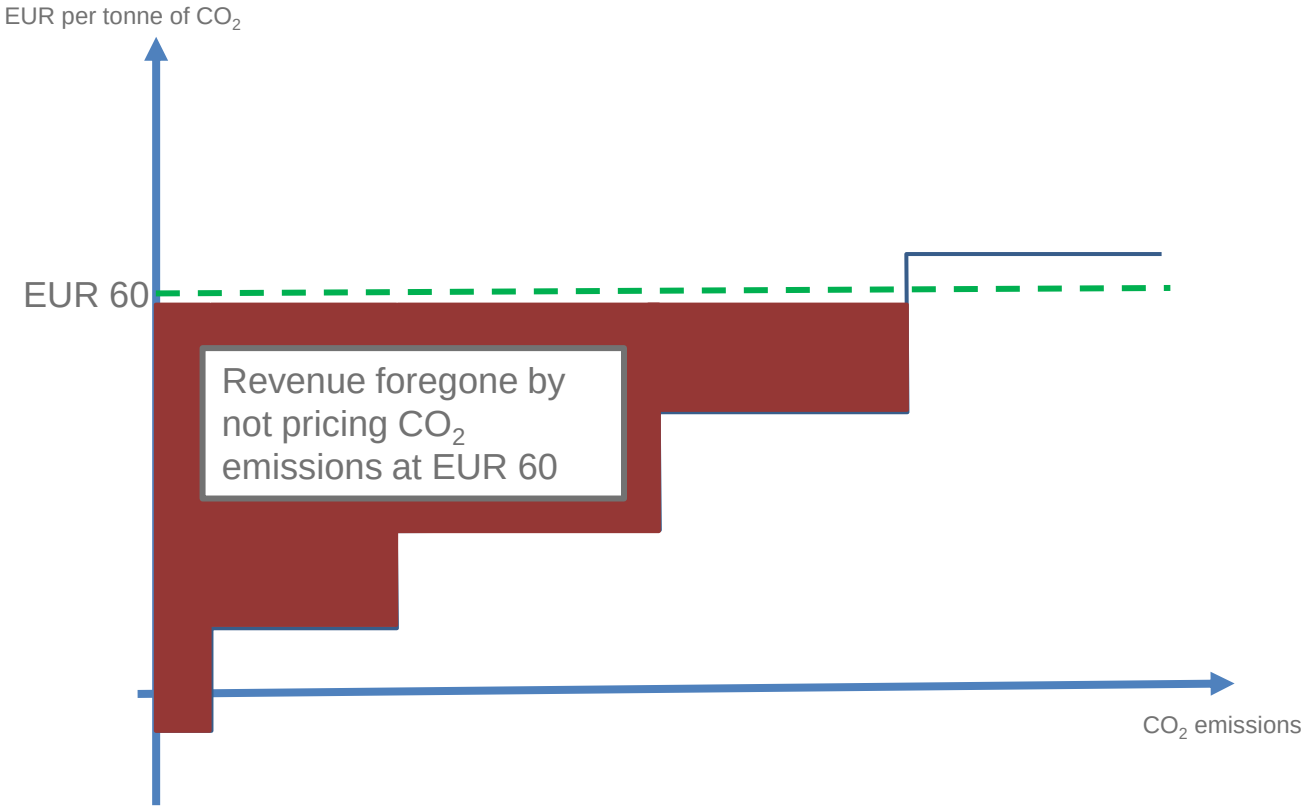
# Net effective carbon rates on fossil fuels




Positive effective carbon prices (measured by CTPA)

Negative effective carbon prices calculated from the Inventory data and customised data collection (CTPA-ENV-TAD) – joint OECD Taxation working paper in preparation.

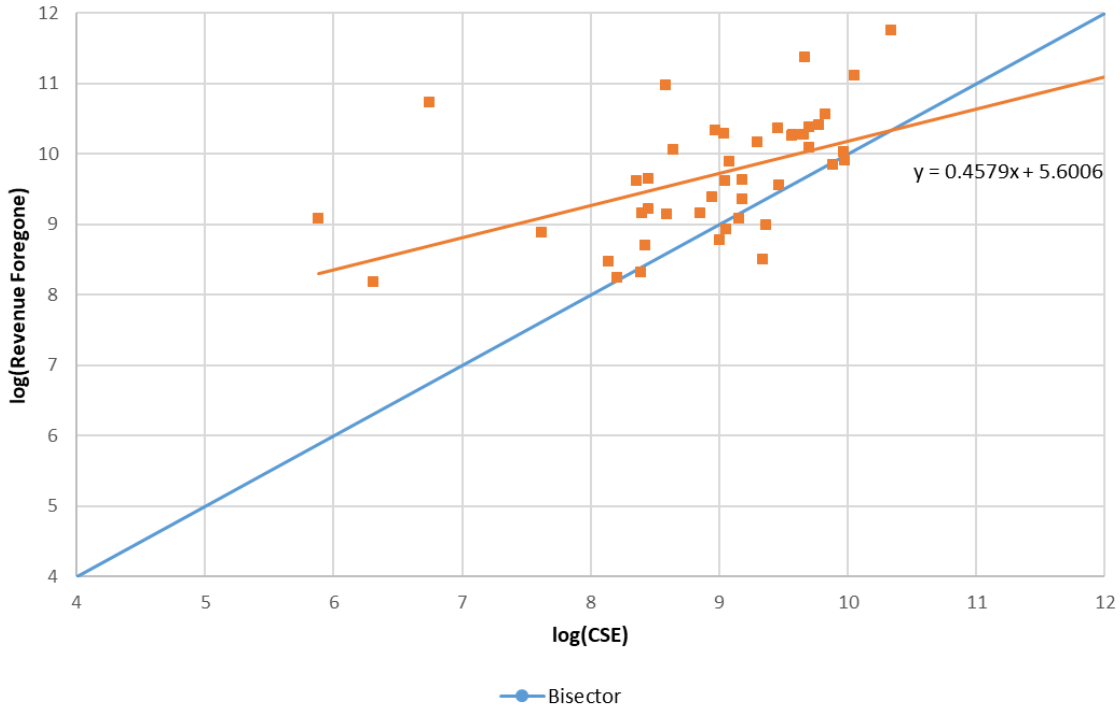
# Revenue foregone against an external benchmark



# Towards an new indicator of FFS

- **Calculating FFS through this approach allows for the construction of new indicators that are:**
  - Comparable across countries and over time.
  - Straightforward to interpret.
  - Useful to compare amount of FFS reported by countries.

# Net ECR vs CSE in the OECD Inventory



# THANKS!

More information:

www.oecd.org/climate-change
www.oecd.org/environment/cc/carbon-market-platform/
https://www.oecd.org/tax/tax-policy/tax-and-environment.htm
https://oe.cd/carbonpricing-g20
www.oecd.org/fossil-fuels/

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