Carbon Market Platform – 2nd Strategic Dialogue

Key Messages on Aligning Policies

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OECD
BETTER POLICIES FOR BETTER LIVES

Outline

1. Mitigation and transformation
2. Evidence on carbon pricing
3. Policy alignment

Mitigation and transformation

- Climate change, Paris Agreement: two degrees or less – zero net emissions in the second half of the century
- Requires deep cuts in emissions starting now
- Focus on low carbon long-lived assets (or face much higher costs later)

→ What are the incentives, from carbon taxes and from emissions trading systems, to abate carbon?

Effective Carbon Rates

(marginal and average effective carbon rates)

Mitigation and transformation

Policy objective

Emission abatement

Extreme: carbon pricing is the alpha and omega, anything else is (at best) second best or drives up costs;

More moderate: other market failures (“myopic consumers”, principal agent problems, R&D, support for emerging technologies)

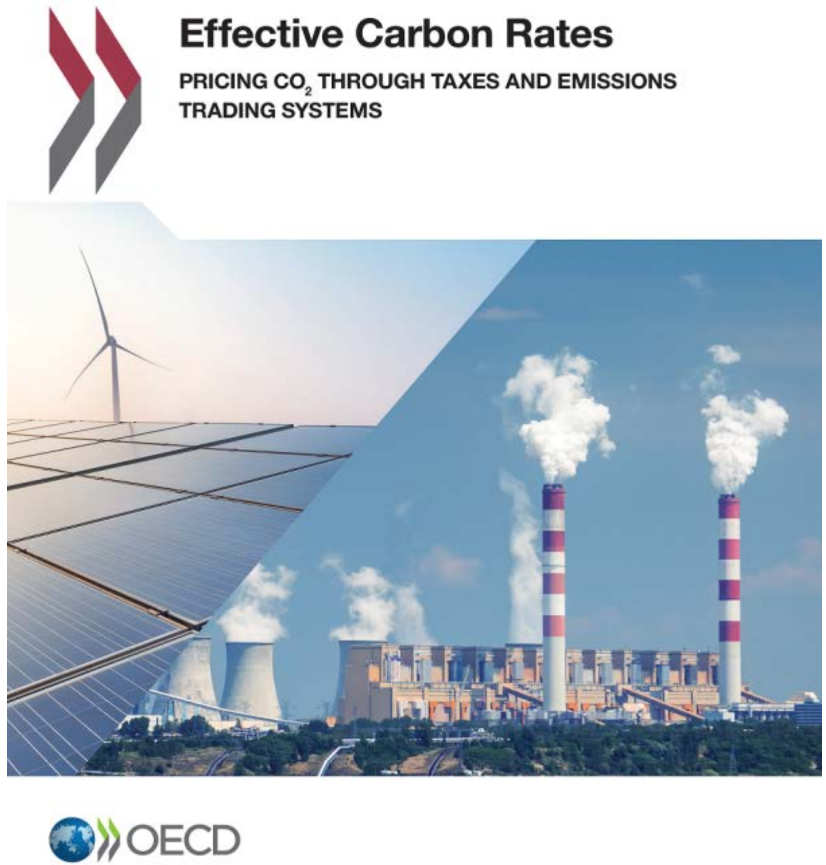
Low-carbon transition

Policy alignment (e.g. market design)

Investment in infrastructure and long-lived assets (strategic incentives, relevance of average rates with free allocation)

Role for energy efficiency regulation, direct investment support? Fiscal policy (EFR), industrial policy (environment policy?)

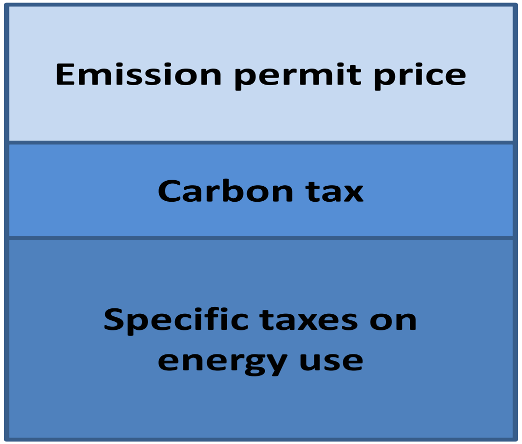
(Marginal) Effective Carbon Rates



(Marginal) Effective Carbon Rates

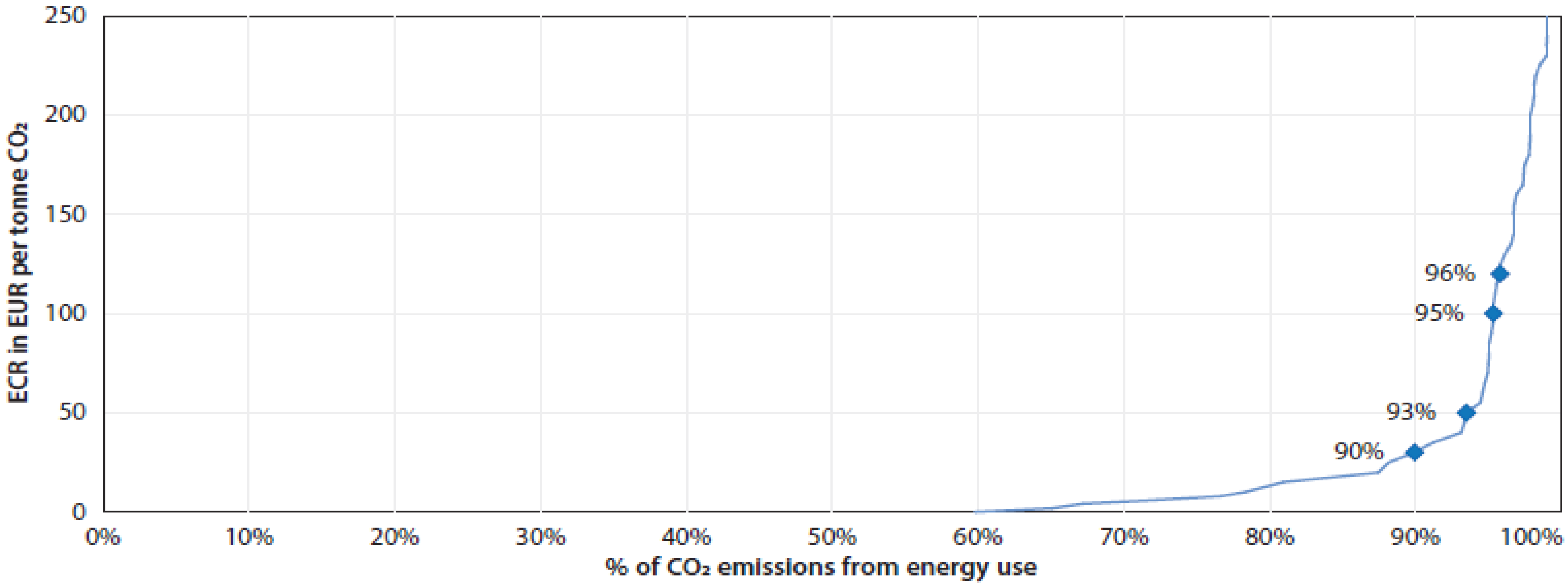
- Effective carbon rates (ECRs) are the total price on CO_2 emissions from energy use as a result of market-based policy instruments.
- Estimated for six economic sectors in 41 OECD and G20 countries, representing 80% of global carbon emissions from energy use

Effective Carbon Rate
(EUR per tonne of CO_2)



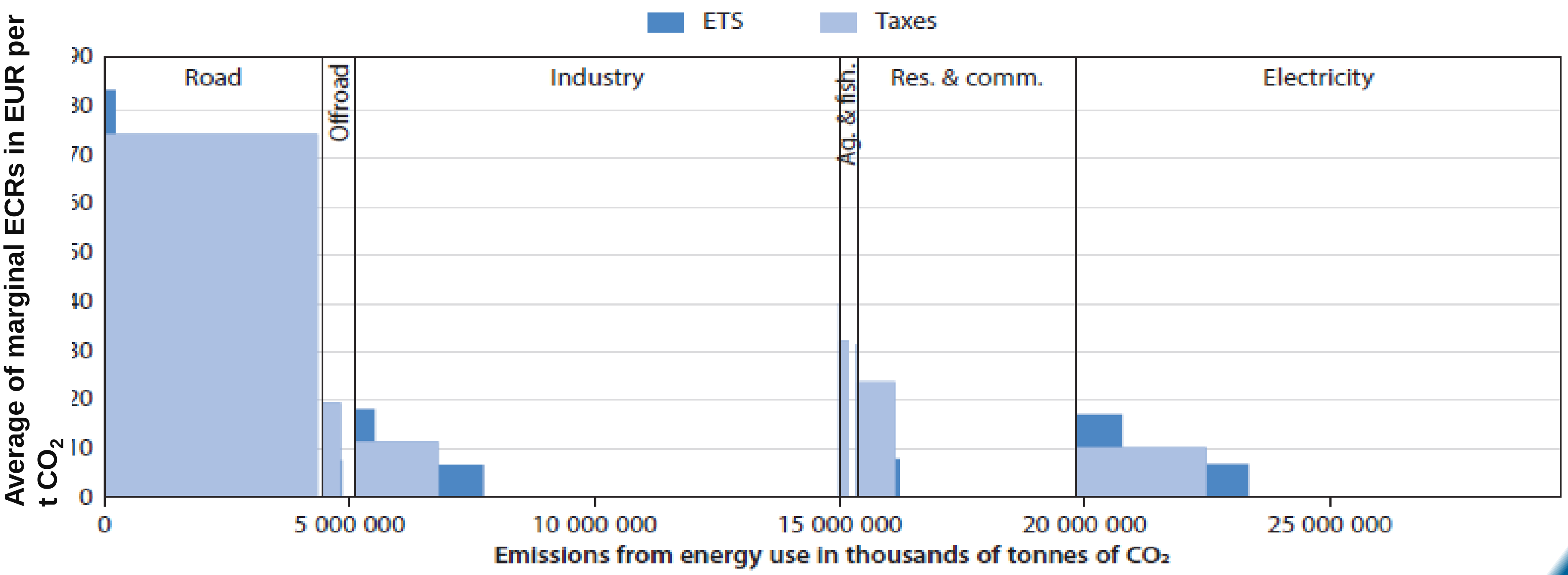
(Marginal) Effective Carbon Rates

Distribution of ECRs across 41 countries



(Marginal) Effective Carbon Rates

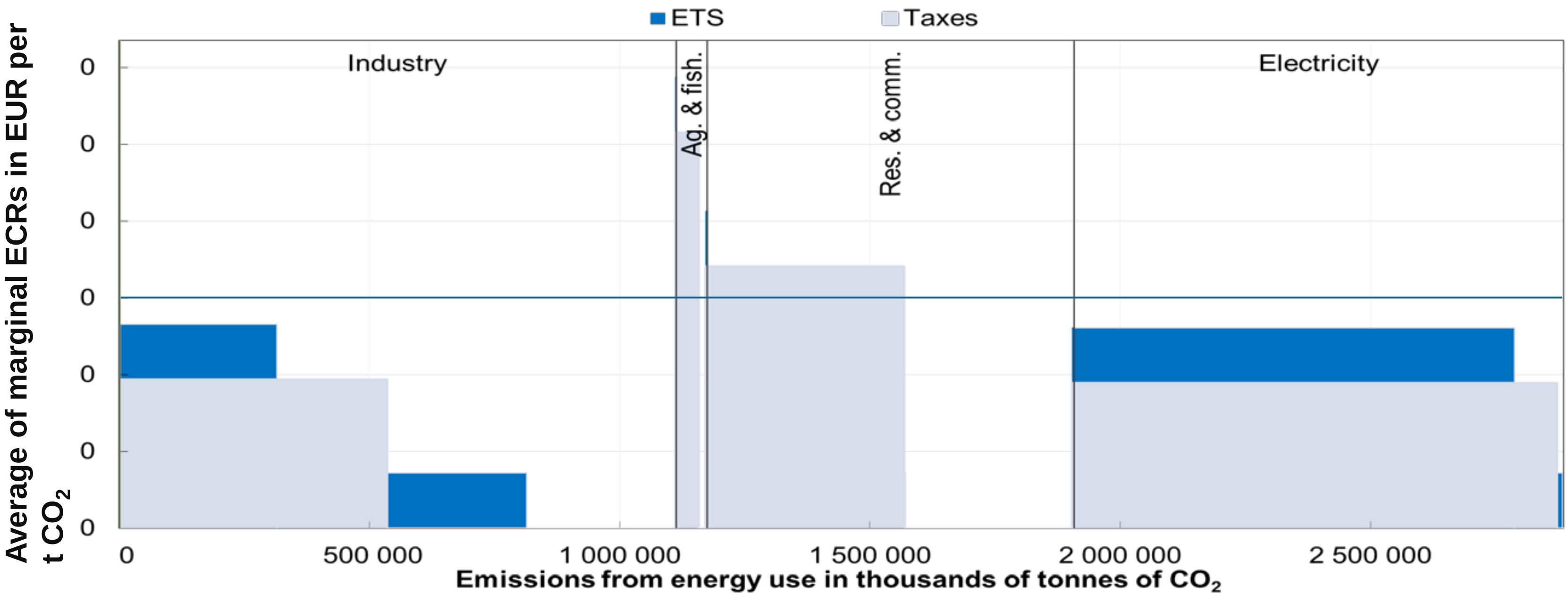
Average of marginal ECRs across 41 countries by sector, showing ETS and Tax component



(Marginal) Effective Carbon Rates, EU 21, non-transport

Average of marginal ECRs, EU 21,

ETS and Tax component



Average effective carbon rates

Work in progress

- Why do we care? Choice between mutually exclusive investment projects in a context where there is economic rent (Devereux and Griffith, 1998).

- In ETS, **allocation rules** affect average rates and **can affect project ranking** unless allocation is technology neutral. In other words, compensation via free allocation can distort investments in long-lived assets.

Policy alignment

- FFS: see Ron Steenblik's presentation

- Tax policy:

  - Personal income tax: company cars, commuting costs, employer-provided parking, mortgage interests,…

  - Corporate income tax: potential for unintended technology bias

  - Interactions between environmental fiscal reform (including carbon pricing) and tax policy → what is the best use of revenues?

- Regulatory policy, market design:

  - Is deregulation and spot pricing ideal for the transformation to high-fixed cost generation?

  - Are transport policies sufficiently innovation-oriented?

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