# **Executive summary:**

# Evidence from an expert survey on carbon pricing

by Moritz A. Drupp, Frikk Nesje, and Robert C. Schmidt

We present evidence from an expert survey on carbon pricing. Our results are reported in two studies: The first focuses on carbon price recommendations and their drivers, while the second analyzes policy design recommendations, including instrument choice and revenue use.

Drupp, M.A., Nesje, F., & Schmidt, R.C. (2024). **Pricing Carbon: Evidence from Expert Recommendations**. *American Economic Journal: Economic Policy*, 16(4), 68-99. The full text is available via:

https://www.aeaweb.org/articles?id=10.1257/pol.20220571

## Selected key findings are:

- There is a strong consensus that a uniform global carbon price should be higher than the existing global average carbon price.
- The average (median) global carbon price recommendations are \$50 (\$40) for 2020, \$92 (\$70) for 2030, and \$224 (\$100) for 2050 per (metric) ton of CO<sub>2</sub>. Recommendations are heterogenous and skewed towards high carbon prices.
- A majority of experts can agree on short- and medium-term global carbon price levels, and on unilateral carbon price levels in most countries. Specifically, based on ranges of carbon prices indicated to be acceptable, a majority can agree on global carbon prices of \$30-35, \$40, or \$50 in 2020, and \$50 or \$60 in 2030.
- There appears to be little evidence for "free-riding" in carbon price recommendations.
  Indeed, unilateral price recommendations with border carbon adjustment tend to be
  significantly higher than global ones. However, there is a clear income-dependency, as the
  effect is strongest for experts from the richest countries, and insignificant for those from
  the poorest countries.
- Border carbon adjustment facilitates higher price recommendations and may help to foster agreement on carbon prices. Yet, there is strong consensus that existing carbon prices are too low even in the absence of border carbon adjustment.
- Experts who favor carbon taxes recommend carbon prices that are more than 30% higher than those by experts who prefer cap-and-trade.

Nesje, F., Schmidt, R. C., & Drupp, M.A. (2024). **Designing Carbon Pricing Policies Across the Globe**. *CESifo working paper* No. 11424.

The full text is available via: <a href="https://www.cesifo.org/DocDL/cesifo1">https://www.cesifo.org/DocDL/cesifo1</a> wp11424.pdf

#### Selected key findings are:

#### • Instrument choice for unilateral carbon pricing:

Almost twice as many favor a carbon tax (49%) over a cap-and-trade scheme with (23%) or without (6%) a price collar. Notable exceptions include experts from Germany and Spain, who recommend cap-and-trade more often, and experts from China, who provide a clear recommendation for cap-and-trade with a price collar.

#### • Border carbon adjustment:

Three-quarters of experts, and a majority in almost all countries, strongly recommend border carbon adjustment to address competitiveness concerns.

## • Revenue use for unilateral carbon pricing:

Guidance on revenue-use from carbon pricing is very nuanced, with considerably lower support for lump-sum transfers to households than reflected in recent academic and policy discussions.

- When asked to indicate one "most recommended option", the option Transfers to particularly affected households is most favored (24%). The option Equal lump-sum transfers to households ranks second (but at solely 15%), followed by Reduction of distortionary taxes (15%).
- When respondents could choose several revenue use options, the strongest support is for Green R&D (59%). The second most frequently suggested usage is Transfers to particularly affected households (56%), followed by a Reduction in distortionary taxes (43%).
- There are clear differences across continents and countries. For experts' most recommended options, Equal lump-sum transfers to households ranks first among North American experts (30%), whereas this option is most preferred by only 2% of Asian experts who have strongest support for Green R&D (22%). Among European experts, Transfers to particularly affected households ranks first (25%).

For further details on the survey, results, implications and conclusions, please consult the two respective studies.