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Why is carbon pricing in some countries more successful than in others?

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Evidence presented based on

Klenert, D., Mattauch, L., Combet, E., Edenhofer, O., Hepburn, C., Rafaty, R., Stern, N. (2018). Making Carbon Pricing Work for Citizens. Nature Climate Change 8, 669–677. Available at: https://www.nature.com/articles/s41558-018-0201-2

Franziska Funke and **Linus Mattauch**· **Why is carbon pricing in some countries more successful than in others?** August 10, 2018 by Guest Post https://ourworldindata.org/carbon-pricing-popular

- Putting a price on carbon is the most effective economic tool for meeting Paris Agreement goals on mitigating CC

- Main Policy Instruments: Carbon Taxes and ETS

- BUT the level of carbon pricing varies widely and there is too little coverage of emissions to achieve the targets of the Paris Agreement

- Behavior Economics and Political Science insights on how the design of carbon pricing reforms and the use of revenues could enhance their acceptability

Over the last decade

- Carbon pricing has been increasingly taken up as part climate policies around the world
- 51 carbon pricing schemes have been implemented or are scheduled for implementation
- 25 of these are in the form of ETS, predominantly introduced at the subnational level
- 26 in the form of carbon taxes, mostly implemented at the national level.
- Among the countries that have already submitted their Nationally Determined Contributions to the Paris Agreement, 88 countries have stated their intent to implement carbon pricing as part of their national climate policies

But Carbon prices vary widely across existing schemes

- Sweden –US$139/$tCO_2$

While the Swedish economy grew by 60% since the introduction of the Swedish carbon tax in 1991, carbon emissions decreased by 25%

- High-Level Commission on Carbon Prices (2017) - achieving the goals of the Paris Agreement requires a carbon price of

  $40-$80/tCO_2 by 2020

  $50-$100/tCO_2 by 2030

- Currently, less than 20% of current global greenhouse gas emissions are covered by a carbon price and most prices are below the $40-80/$tCO_2$ range.

- Even though carbon pricing schemes are spreading, their global scale and ambition is not yet in line to achieve the necessary emissions reductions.

How can more ambitious carbon pricing policies be introduced?

- Carbon price design that meets equity and efficiency goals alone is not sufficient; political acceptability is crucial.

- Global carbon pricing revenues are already substantial (USD $33 billion in 2017) and are likely to increase in the future.

  The way in which carbon pricing revenues are spent plays an important role in determining whether a carbon pricing initiative will be successful.

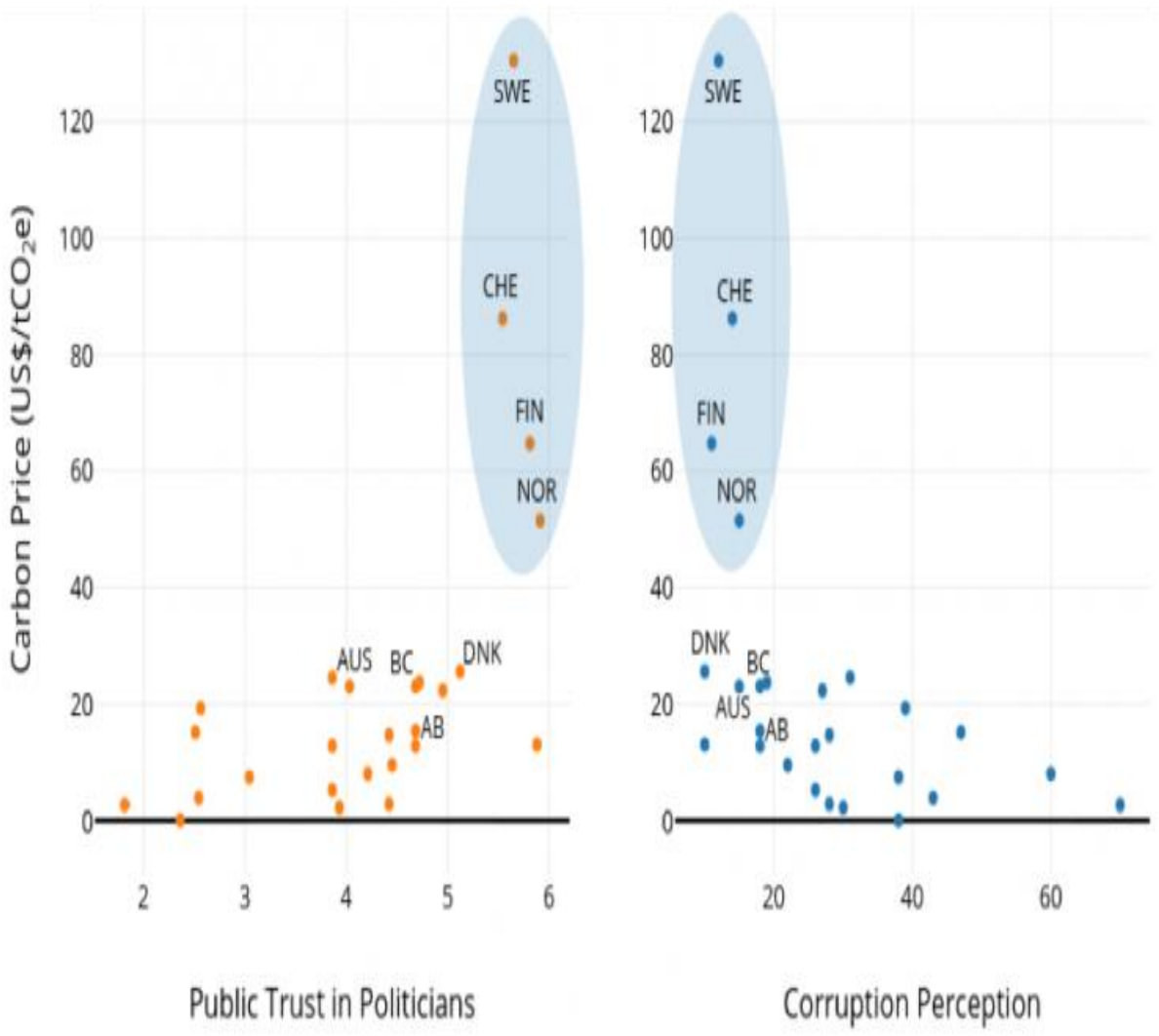
Behavioural Issues

- Citizens tend to ignore or **doubt the corrective ("Pigouvian") effect** of carbon pricing but may be convinced if revenue is earmarked for a specific purpose such as green spending or transfers to disadvantaged households

- **Labelling** of the carbon price may alter perceptions of its desirability. Re-labelling a carbon price as a "CO_2 levy", as done in Switzerland and Alberta, or speaking of "fee and dividend”

- **Visible revenue recycling** may be advisable. Some recycling methods, such as transfers to households or public investment, might be more visible to the public than tax cuts

Political Science



- Ambitious carbon pricing is often correlated with **high political trust** and **low corruption levels**

Finland, Norway, Sweden and Switzerland, are currently the only countries that have carbon prices above 40$/$tCO_2$.

If trust is low, revenue should thus be recycled using a transparent, trust-boosting strategy to enhance its acceptability.

- A policy reform is more likely to be successful if its costs are diffused and the benefits are concentrated.

Success may be more likely if **the benefits** of carbon pricing reform are **concentrated** on constituencies who will actively support the policy's passage and preservation.

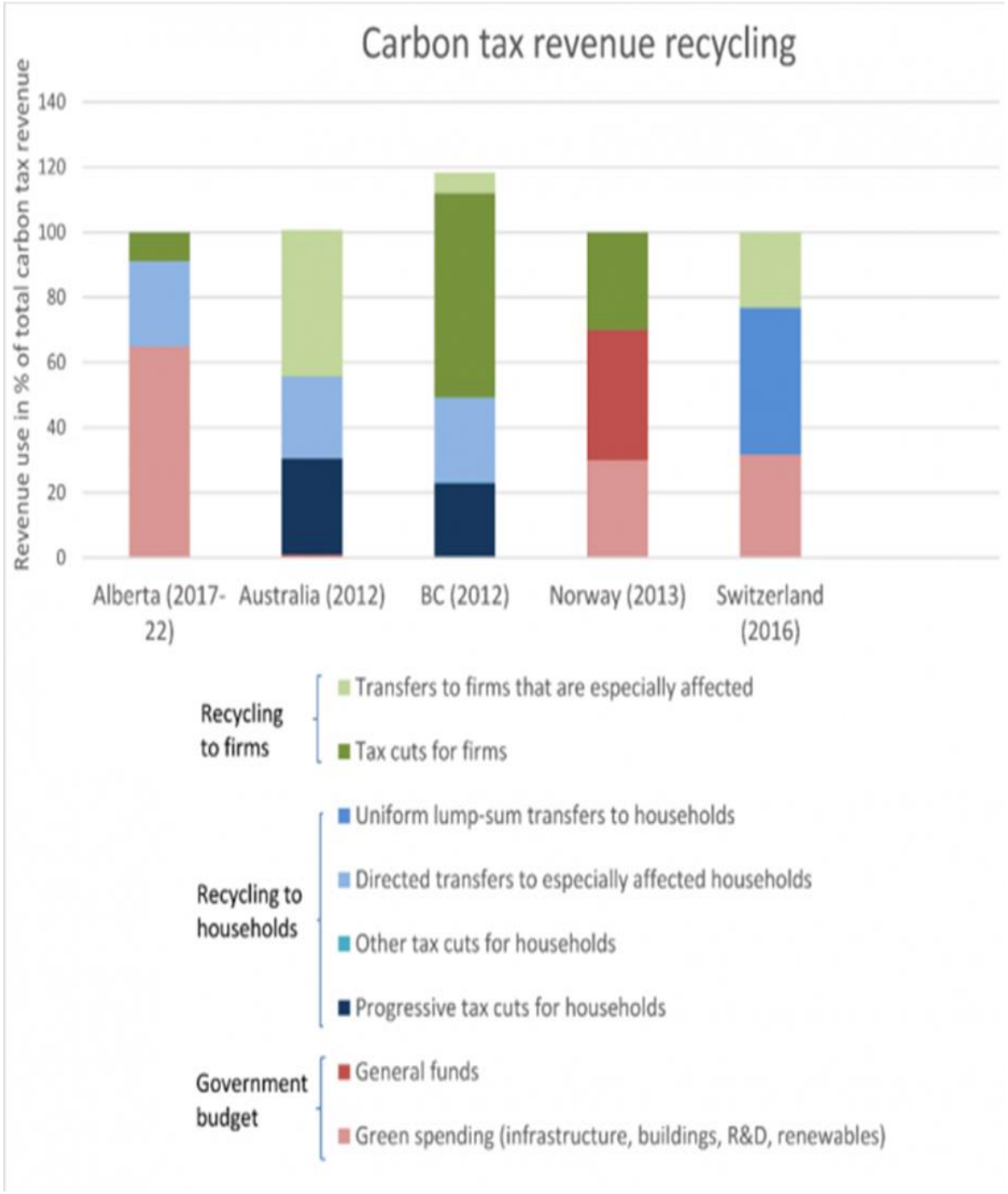
Carbon pricing schemes are more likely to survive successive partisan changes in government if they benefit constituencies across the political spectrum.

Reality: mixed strategies for spending the carbon pricing revenue

- Sweden's world-leading carbon tax partly owed to extensive public dialogue and social deliberation.
- Alberta's successful "carbon levy" are split between green spending and compensation for those who are disproportionately affected by carbon pricing.
- British Columbia: all carbon tax revenues go to households and firms, creating strong constituencies in favour of carbon pricing.

- Australia: Introduced in 2012, the recycling strategy was designed "by the book", insights on equity and efficiency.

Due to problems of political credibility, and a public debate too focused on technical details, the tides quickly turned against the Australian carbon price. The system was abolished in 2014.



Message

- No "one size fits all" solution: lump-sum dividends, green spending, targeted transfers or tax cuts also appropriate.

- In reality we experience mixed recycling strategies.

- Ultimately, designing revenue recycling mechanisms with an eye on **behavioural insights** and in accordance with the **political context** can help make carbon pricing a political success.

- However, while carbon pricing is necessary for decarbonization, it will not be sufficient.

- Other market failures, such as spill-over effects in research and development, need to be addressed with targeted instruments.

- Public interventions are necessary to transform existing infrastructure, for example in the electricity and transport sectors.