# How to make carbon pricing (taxes) acceptable

# Is that at all possible?


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"Should we put a price on carbon?"
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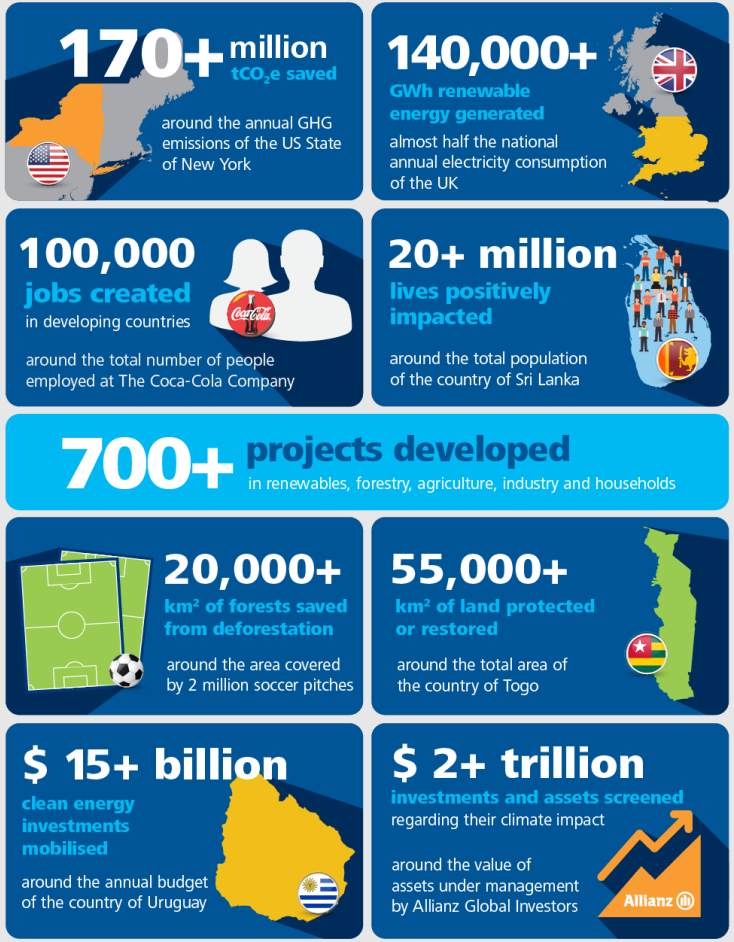

# Approach

**Scope:** Identifying why voters do not like carbon taxes (outside EU ETS), and their preference to different tax designs and communication devices

**Synthesis of findings from 39 empirical studies** testing people's preference for carbon/Pigovian taxes, its associated designs and commu ation devices

**Methods :** qualitative (focus groups) quantitati scret hoice experiments, lab experiments, quasi

25 countries & 2 Canadian provinces with a carbon tax

**# of studies conducted in countries:**

- 6 studies: Sweden, USA
- 5 studies: Norway, Switze
- 2 studies: Denmark , Germany,
- 1 study: Austria, Canada, Czech nd, Spain, Turkey

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# Example: studies reviewed

| Study (listed in order of publication year) | Location, year and type of policy intervention tested | Methodological details | Empirical findings |
|---|---|---|---|
| Steg, Dreijerink and Abrahamse, 2006 | **Where and when:** Groningen, Netherlands, 2003<br><br>**Type of policy intervention:** 16 hypothetical pricing policies aimed at reducing household $CO_2$ emissions. | **Methodology:** Quantitative analysis based on survey questionnaire testing psychological factors. The characteristics of these policies are emblematic of taxes (referred to as 'push' policies in study), subsidies (referred to as 'pull' policies), regulations (referred to as 'curtailment'), and measures to promote energy efficiency.<br>**Data collection:** 112 responses from mailed survey questionnaires. | **Explanations of aversion to/acceptance of carbon taxes:** People found subsidies more effective and acceptable than 'coercive' measures such as taxes, even when taxes were perceived to increase the cost of high-carbon behaviour. Regulations that limit consumption were perceived less effective than measures that promote energy efficiency.<br>**Use of carbon tax revenues:** Carbon taxes were seen to be acceptable and effective when tax revenues were earmarked to subsidise low-carbon options, rather than to be recycled into general funds. |
| Dietz, Dan and Shwom, 2007 | **Where and when:** Virginia and Michigan, USA, 2004<br><br>**Type of policy intervention:** Eight hypothetical policies proposed to reduce the burning of fossil fuels. | **Methodology:** Quantitative analysis based on survey questionnaire testing psychological factors predicting policy support for different hypothetical policy interventions.<br><br>**Data collection:** Mailed survey responses from 316 Michigan and Virginia residents. | **Explanations of aversion to/acceptance of fuel taxes:** Trust in different actors (environmental institutions, industry and government) played an important role in determining support for environmental action, with lowest trust in industry, and highest in environmental NGOs.<br><br>**Preferred policy intervention:** Policies that increased the costs of fuel consumption, such as a gas tax, had the least acceptance. 75% of the sample supported shifting subsidies for fossil fuels to cleaner forms of energy. |
| Hammar and Jagers, 2007 | **Where and when:** Sweden, no date provided<br><br>**Type of policy intervention:** Hypothetical increase of existing carbon tax on transport fuels. | **Methodology:** Quantitative analysis of survey questionnaire<br><br>**Data collection:** 932 responses from questionnaire mailed to a random sample of the Swedish population (with addresses drawn from national register). | **Explanations of aversion to/acceptance of increase in fuel taxes:** Those who did not have cars, or drove infrequently, were more inclined to support increasing the fuel tax, and believed that the polluters should pay for the pollution that they caused (that is, those who drive and pollute more should pay more). However, those who used cars frequently were more likely to favour distributing the costs of mitigation equally across the car-driving population (that is, car drivers reduce pollution by the same amount, regardless of how frequently they drive). Therefore self-interest motivates in part how people perceive which |

Appendices for carbon and Pigovian taxes

# Key findings: Main concerns about carbon/Pigovian taxes

The **personal costs** of a tax would be too high.

Carbon taxes are regressive, having a disproportionate negative impact on **low-income households**.

Carbon taxes are not an **effective way to discourage high-carbon behaviour**.

**Government's 'hidden' motive** is to increase fiscal revenue rather than curb emissions (i.e. lack of trust in politicians).

# Factors that affect preference for different tax designs

1. **Tax rate:** people do not like high tax rates

2. **How carbon tax revenues are used:** Due to lack of trust in politicians, people prefer clearly marking how revenues are used, with order of preferences being:
    1. Earmarking for emission reduction projects (improves perceived effectiveness of carbon tax)
    2. Redistribution to ameliorate regressive effects of taxes
    3. Revenue neutrality of carbon taxes

3. **People's aversion to carbon taxes decreases over time:** opportunity to assess costs and benefits of carbon taxes (particularly with measuring and communicating effects of tax)

# Policy recommendations on options for introducing carbon taxes

**Phasing in carbon taxes over time** through trial periods, or introducing the tax at a low rate but having commitment devices to increase the rate to more efficient levels.

**Earmarking carbon tax revenues** to finance mitigation projects when this enhances acceptability.

Alternatively, and preferably, using the carbon tax revenues for **social redistribution and revenue neutrality**, whenever possible.

Using **information-sharing and communication devices** to improve trust and credibility, before and after the introduction of a carbon tax.

# Thank you!

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