

# Climate policies and firms' value

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# Winners and losers from climate policies

What are the effects of climate policies on firms' values?

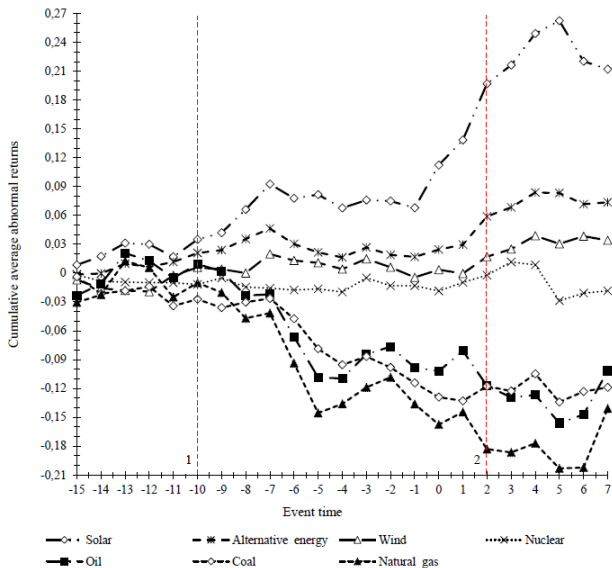
**Carbon bubble:** Climate policies lead to a collapse in (fossil-fuel based) firms valuation, possibly leading to a global recession

**Win-win hypothesis:** Climate policies encourage technologies that enhance business performance

⇒ Reality falls in between these two extremes, some firms benefit, some lose

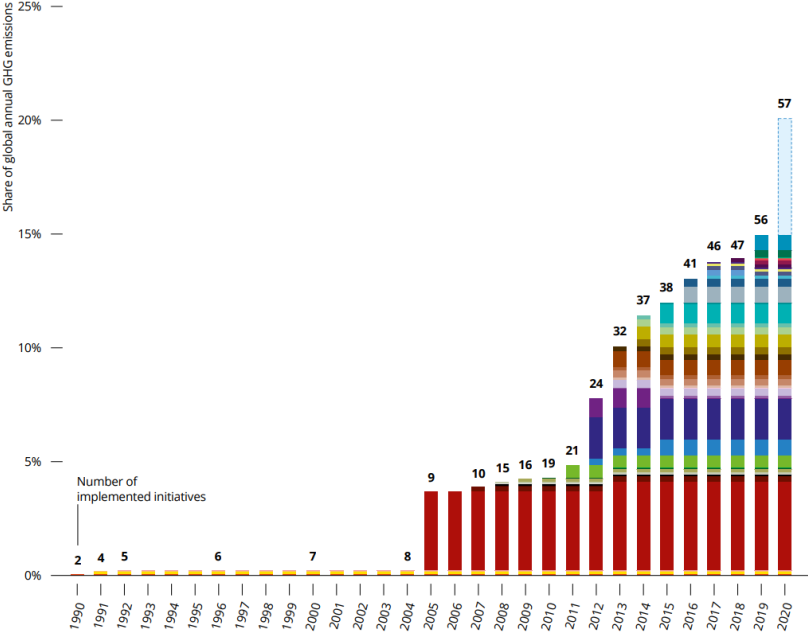
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## Illustration: Effect of the Paris Agreement

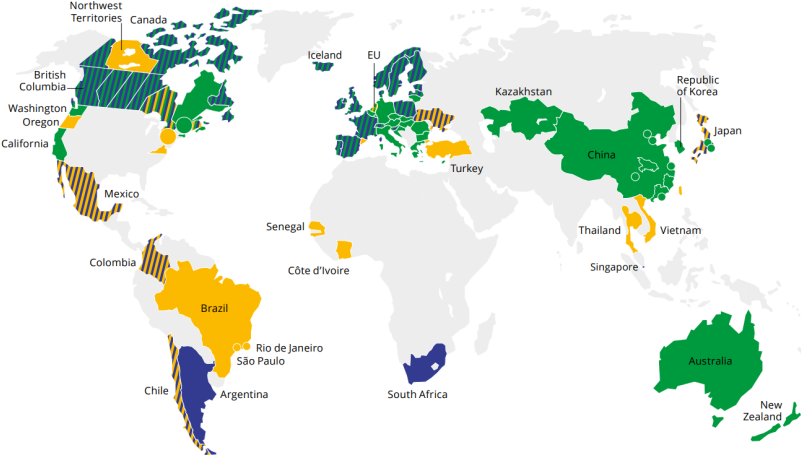


Source: Mukanjari (2019)

# Global climate policy rollout



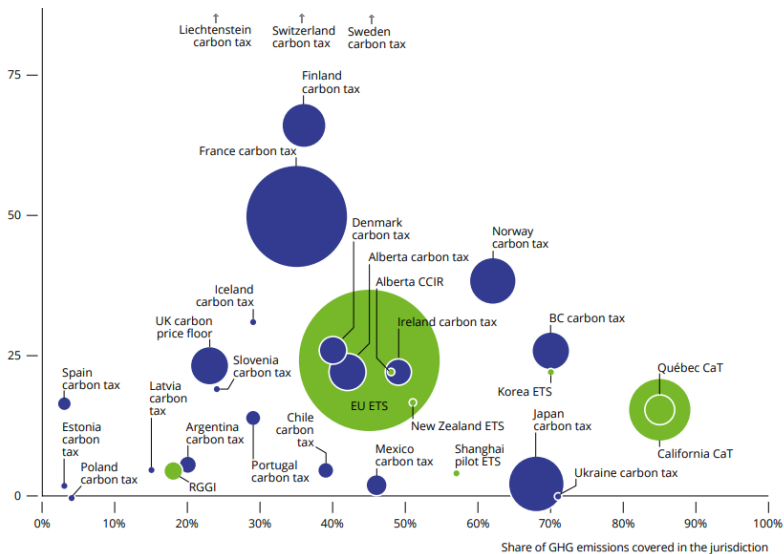
# Global climate policy rollout



<span style="color: green;">●</span> ETS implemented or scheduled for implementation	<span style="color: blue;">●</span> ETS and carbon tax implemented or scheduled
<span style="color: blue;">●</span> Carbon tax implemented or scheduled for implementation	Carbon tax implemented or scheduled, ETS under consideration
<span style="color: orange;">●</span> ETS or carbon tax under consideration	ETS implemented or scheduled, carbon tax under consideration
	ETS and carbon tax implemented or scheduled, ETS or carbon tax under consideration

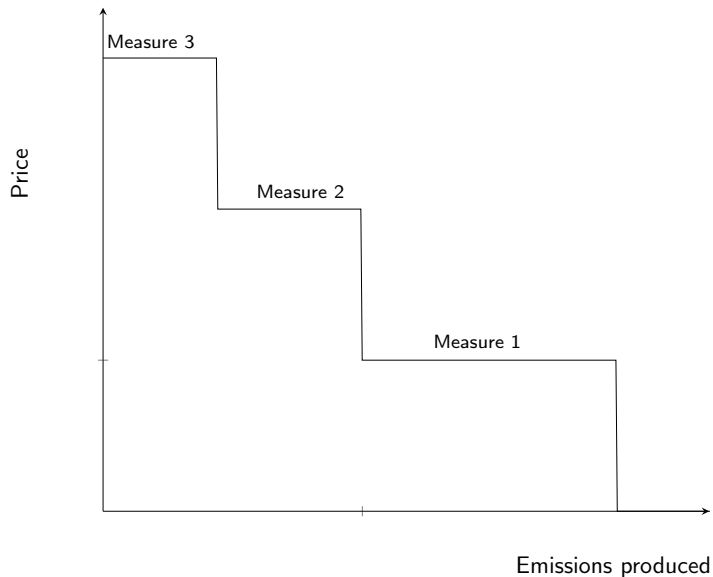
Source: World Bank (2019)

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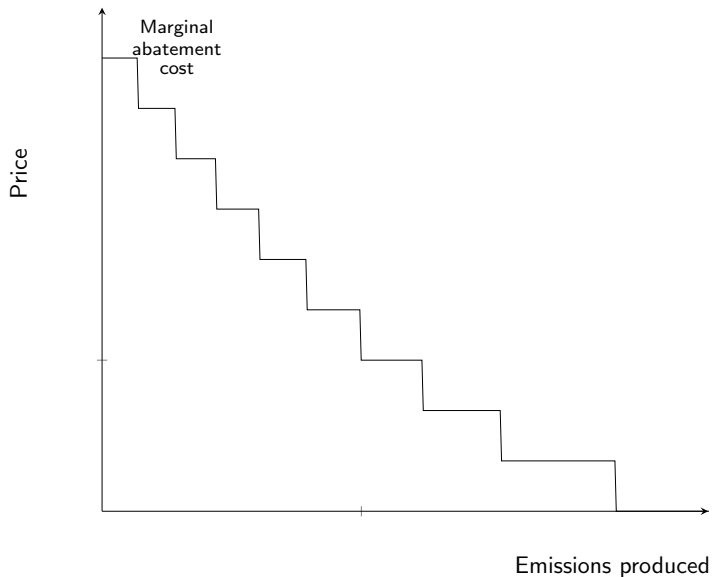


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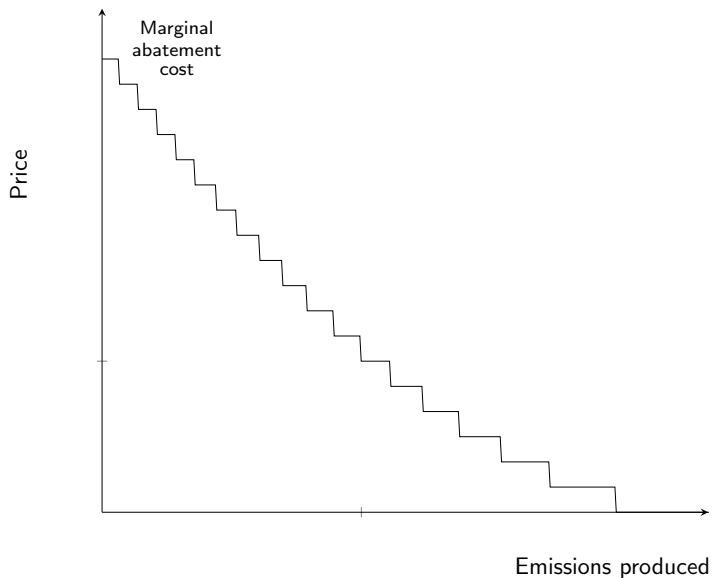


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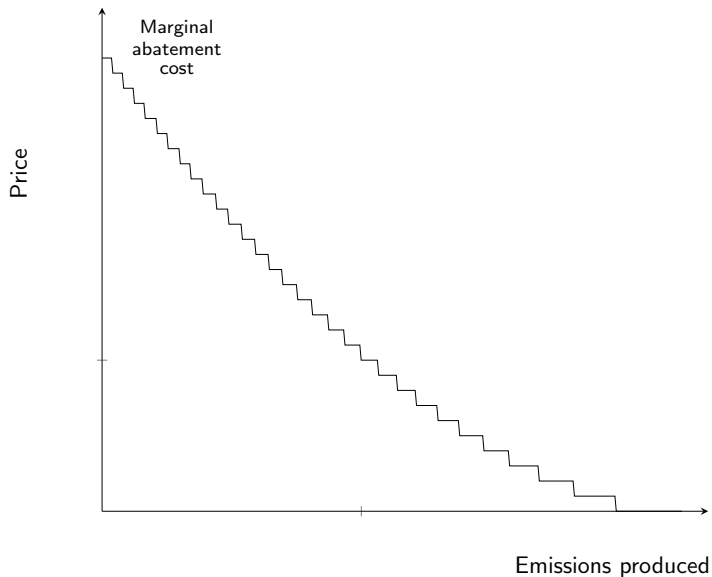




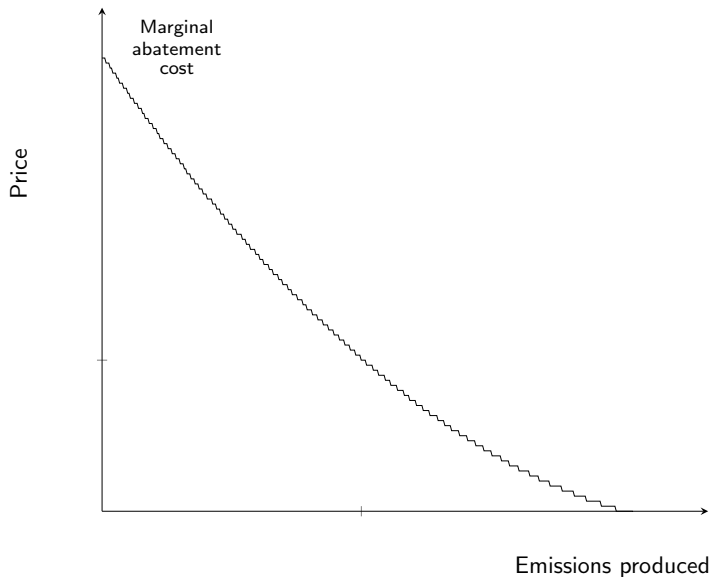
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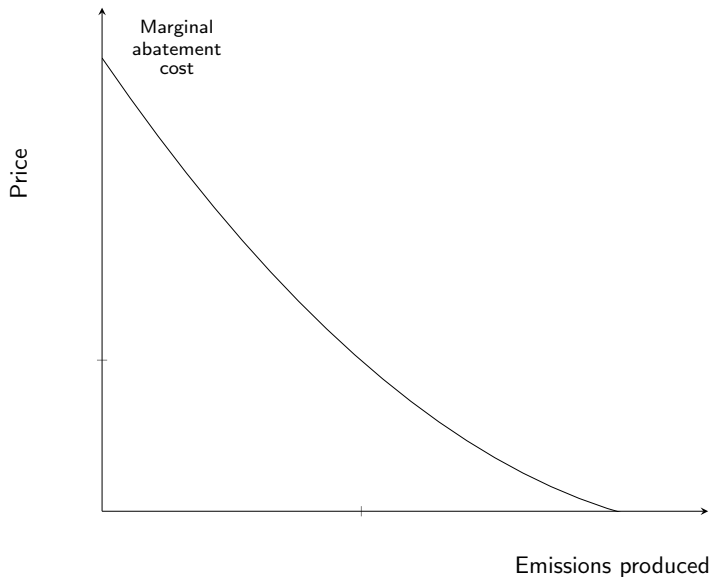
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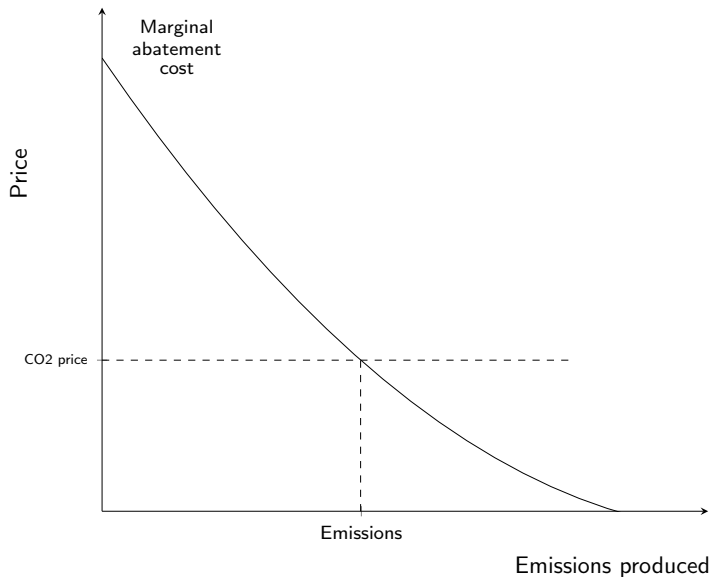
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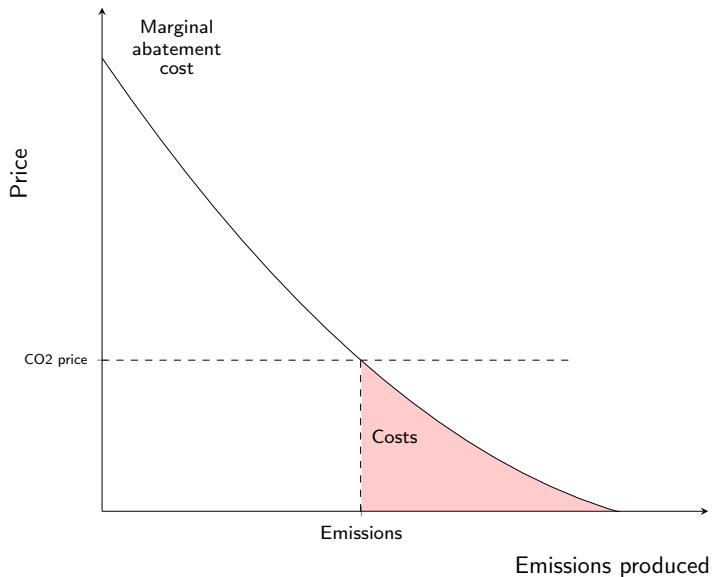
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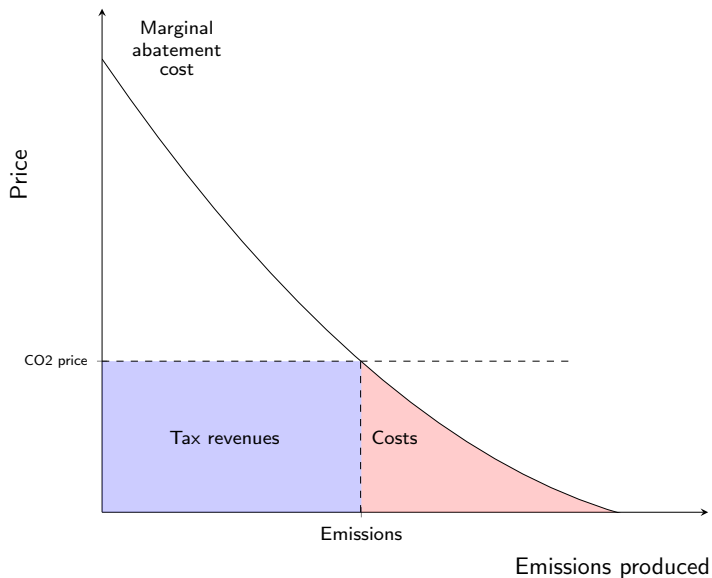
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What do we do with the tax revenues?

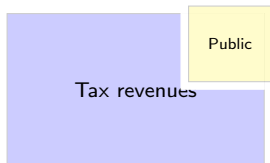


Tax revenues



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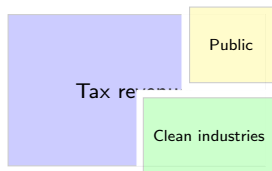


1. Keep the public funds

⇒ Reduce taxes elsewhere

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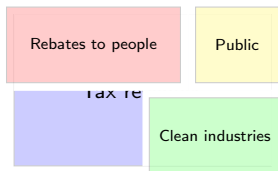
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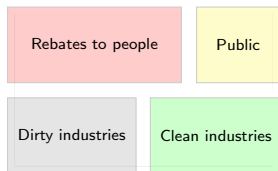
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3. Pay as rebates to people  
⇒ Buy political acceptability
4. Pay to polluting industries  
⇒ Prevent industry relocation

# Winners and losers from climate policies

## Example 1: EU Emissions Trading Scheme



Source: Thomson Reuters  
© FT

Dirty industries  
(43 %)

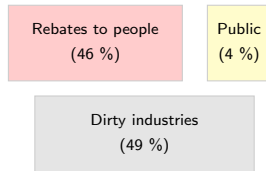
Public  
(7 %)

Clean industries  
(50 %)

1. 43 % free permit allocation for industries in trade-intensive and carbon-intensive sectors (cement, steel, pulp)
2. Of auction revenues,
  - ...88 % in renewables, green R&D, etc.
  - ... 8 % not used for climate actions

# Winners and losers from climate policies

## Example 2: Canadian federal carbon pricing



1. 49 % Output-based pricing system for large industries, pay if above a benchmark, receive money if below
2. 51 % Federal fuel charge of (\$50 in 2022), of with
  - ...90% paid back as rebates
  - ...10% collected by the governments

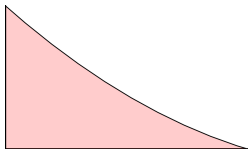
### Effects of carbon pricing per household (2.6 people)

	Ontario	Manitoba	New Brunswick	Saskatchewan
Average cost	\$564	\$470	\$547	\$956
Rebate	\$697	\$583	\$797	\$1419
Difference	\$133	\$113	\$250	\$473

Source: CBC News

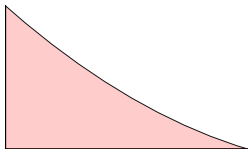
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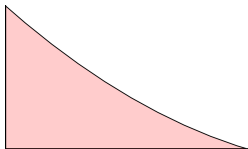
Climate policies also lead to large **transfers** between firms, public sector and consumers – how these are distributed determines who wins and loses from stricter policies





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