

Emissions Reduction Policy Instrument Comparison Table

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Policy Instrument	Regulation	Subsidies	Cap & Trade	Fee & Dividend
Description, Examples, Other Names	Command & Control, Environmental Rules	Renewable Subsidies Feed In Tariffs R&D subsidies	Kyoto Protocol, EU Emissions Trading Scheme	Carbon Tax with 100% Redistribution and Border Adjustments, British Columbia Carbon Tax ¹
Currently sounds	Good	Good	Familiar/Complex	Unfamiliar
Effectiveness at reducing emissions domestically	Weak ²	Weak ³	Moderate ⁴	Strong ⁵
Effectiveness at reducing emissions Internationally	Negative ⁶	Negative ⁶	Weak to Negative ⁷	Strong ⁸
Overall global effect at reducing emissions	None	None	Small	Strong
Industries that benefit	Very few	Clean energy picked by politicians: big renewables, nuclear	Emitters who receive free permits	Wide range of clean energy and efficiency industries "picked" by the market.
Industries that lose	Inefficient emitters, old coal fired electricity	Few	Emitters who don't get free permits	All emitters
Politicians like it?	Indifferent	Yes, they make new friends	Yes, they make new friends	Indifferent
Banks like it?	Indifferent	Indifferent	Yes, potentially big profits to be made	Indifferent
Overall cost to taxpayers	Low	High	Moderate	Low
Domestic Beneficiaries	None	Rich & Middle class ⁹	The Rich ¹⁰	Lower Energy Spenders
Political Sustainability	Medium	Low ¹¹	Low ¹²	High ¹³
Best choice at reducing emissions	✗	✗	✗	✓

Notes

¹ Price stopped rising at \$30/tonne; Complex redistribution; No border adjustments; Popular with the electorate.

² Blunt instrument; applies inconsistently; sometimes overcome by legal challenge.

³ Governments bad at picking winners, losers good at picking governments; Resulting energy glut lowers prices, increasing demand.

⁴ Free permits given to the big emitters to avoid carbon leakage; Volatile price signal puts investors off. Successful innovation lowers permit prices, dis-incentivising further innovation. Neutralises generous efforts of population to reduce their emissions.

⁵ Price signal applies downward pressure on emissions during booms and busts alike; Politically sustainable escalating carbon price sends a strong, clear signal for investors to create low carbon and efficiency products and services.

⁶ Fossil fuel becomes cheaper abroad.

⁷ Carbon leakage difficult to avoid because Cap & Trade carbon markets are complex to reconcile/harmonise.

⁸ Border adjustments avoid carbon leakage and provide an incentive for other countries to implement carbon pricing: It is preferable to collect and redistribute the tax domestically, rather than watch exporters pay duties to foreign governments.

⁹ Investors receiving the subsidies (directly or indirectly, e.g. Feed in tariffs).

¹⁰ Big emitters given free permits, which is tantamount to printing money and giving it to rich people.

¹¹ Energy becomes more expensive if subsidy costs get added to fuel bills.

¹² Even if the revenue is rebated to citizens, dividend would be i) unpredictable, making it difficult for households to budget, ii) difficult to explain, so perceived as opaque, iii) a mismatch to higher energy costs, owing to permit trading by city speculators.

¹³ 100% of the revenue is rebated so low/medium energy spenders can still afford their same lifestyle even when the carbon price becomes high. N.B. Revenue and dividend fall as significant emissions reduction occurs, so even low energy spenders will need to switch/substitute eventually. Simple long division used to calculate dividend, so transparent.