

## The strengths and weaknesses of carbon tax design options

DESCRIPTION	ECONOMIC EFFICIENCY	ENVIRONMENTAL EFFECTIVENESS	SOCIAL/EQUITY	POLITICAL VIABILITY	ADMINISTRATIVE CONSIDERATIONS	EXAMPLES
1. REVENUE FLOWS TO EXCHEQUER	Increases overall tax burden and could have competitiveness impact	Depends on rate	Rich households tend to pay more overall, but poorer households pay relatively more. Could also affect rural households	Tends to be unpopular in countries where distrust in Government is an issue.	Requires adjusting one tax already in place so administratively simple	Ireland
2. REVENUE LOWERS LABOUR TAXES	If labour taxes too high, this might be preferred	Depends on rate	Can be regressive. Proportion of revenue can be used to increase benefits for elderly, unwell, unemployed.	Can suffer from same distrust issues as 1, and there is <a href="#">some evidence</a> that it tends to be least popular with voters (along with 1) <sup>1</sup>	Requires adjustments to three systems already in place (carbon & income taxes, and benefits) so relatively straightforward	British Columbia, CA Germany
3. UNIFORM LUMP-SUM TRANSFERS TO HOUSEHOLDS	Could be most efficient if labour taxes are optimal	Depends on rate	Egalitarian, perceived as equitable because all households receive an equal share of the revenue, and poorer households generally better off	Quarterly or annual "dividend" is highly salient, and can avoid some negative connotations of "tax"	Involves new mechanism for redistributing revenue so administratively challenging	Switzerland Canada
4. REVENUE ON GREEN INVESTMENTS (TARGETING AFFECTED GROUPS)	Depends if investment programmes address market failures	Superior to 1,2,3, because revenue used on deliver further decarbonisation	Revenue used to alleviate fuel poverty and/or to target affected communities/regions	Investment programmes <a href="#">tend to be</a> popular internationally <sup>2</sup>	Many admin systems have dislike for "hypotheccation" of revenue	Norway Alberta, CA Washington, US (Rejected 5 November 2018)

1) <http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2017/12/How-to-make-carbon-taxes-more-acceptable.pdf>

2) Voters tend to believe additional government support to help them reduce emissions is necessary: <http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2017/12/How-to-make-carbon-taxes-more-acceptable.pdf>