The use of revenue from green fical reform

Eike Meyer | Reunión de expertos “Instrumentos económicos para la internalización de costos ambientales” | Santiago de Chile | 27 March 2019

Deutsche Gesellschaft
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Presentation outline

1. Introduction
2. Revenue potential of green fiscal reform
3. Options for using revenue
4. Considerations on how to use revenue
5. How is revenue used today?

Introduction: environmental taxes and their revenue

Environmmental taxes…

… the only environmental policy instruments, that do not cost money but create revenue.

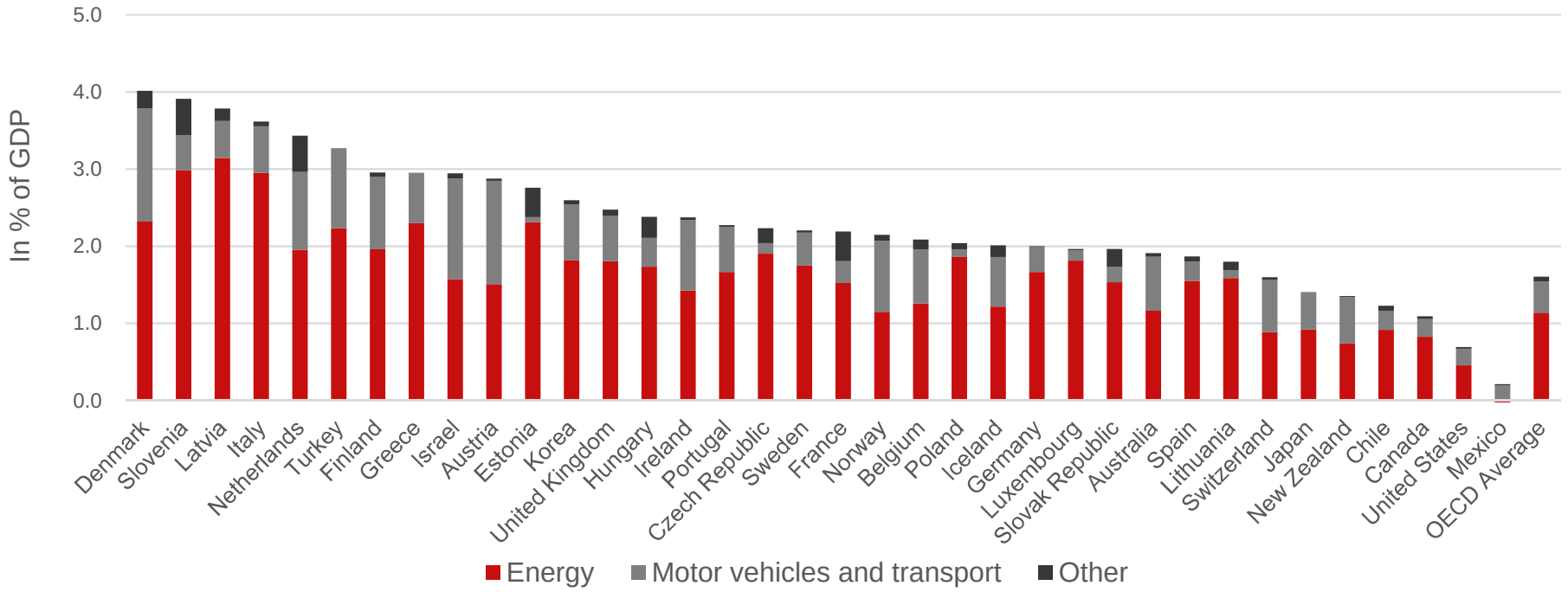
… usually highly unpopular.

… their revenue creates desires all around:

- „It´s a tax, the revenue must not be earmarked.“
- „It´s an environmental tax, of course the revenue must finance environmental goals“
- „It hurts the poor/companies, of course the revenue must be used to compensate them.

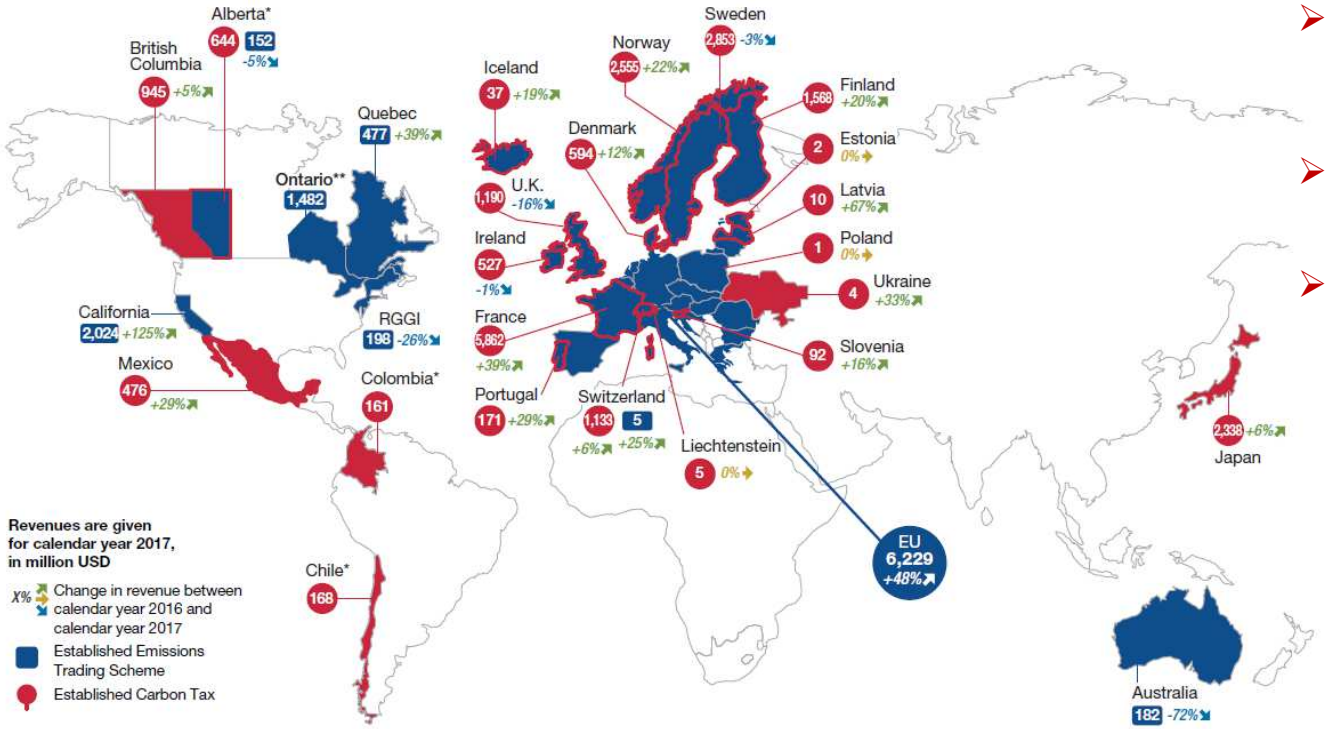
Current revenue and revenue potential of green fiscal reform

Revenue from environmentally related taxes in OECD countries (2014)



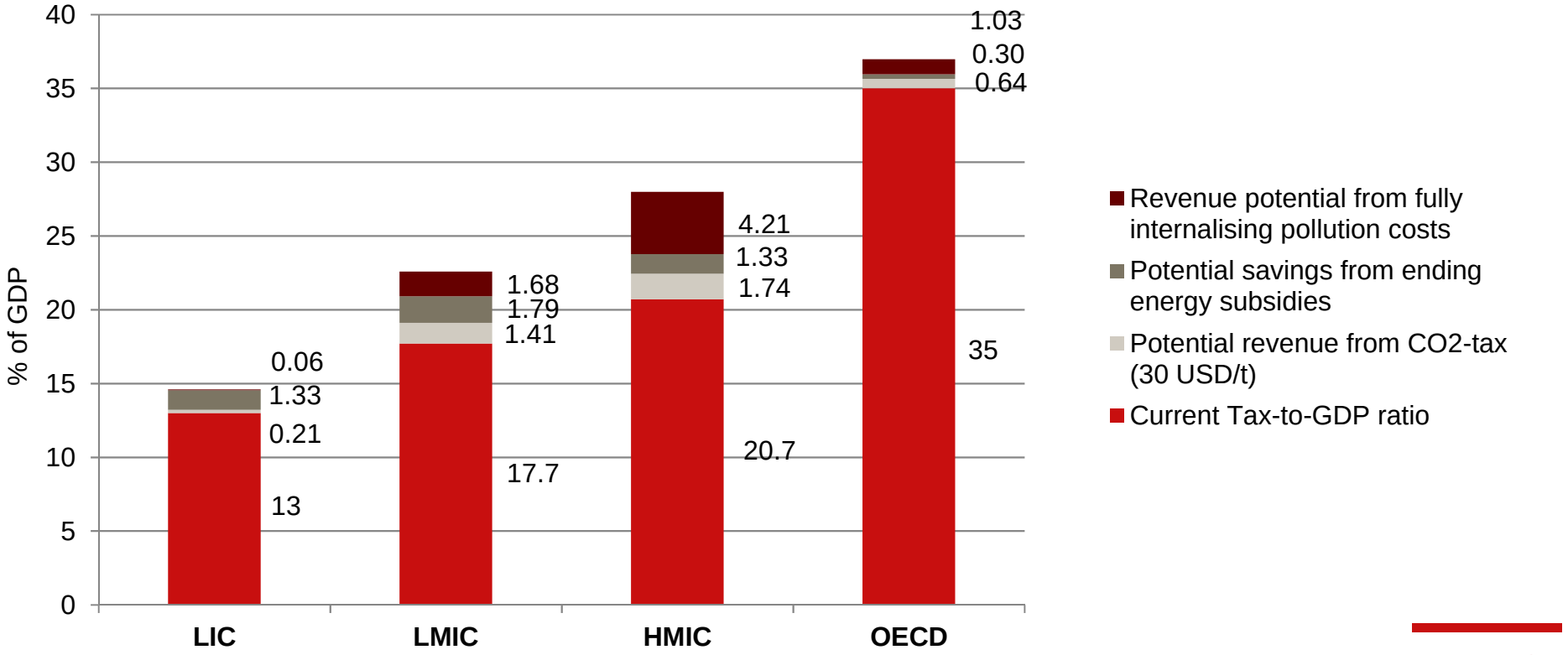
 | Source: OECD Stat, 2014 (https://stats.oecd.org/Index.aspx?DataSetCode=ENV_ENVPOLICY#)

Carbon pricing revenue globally in 2017 (million USD)

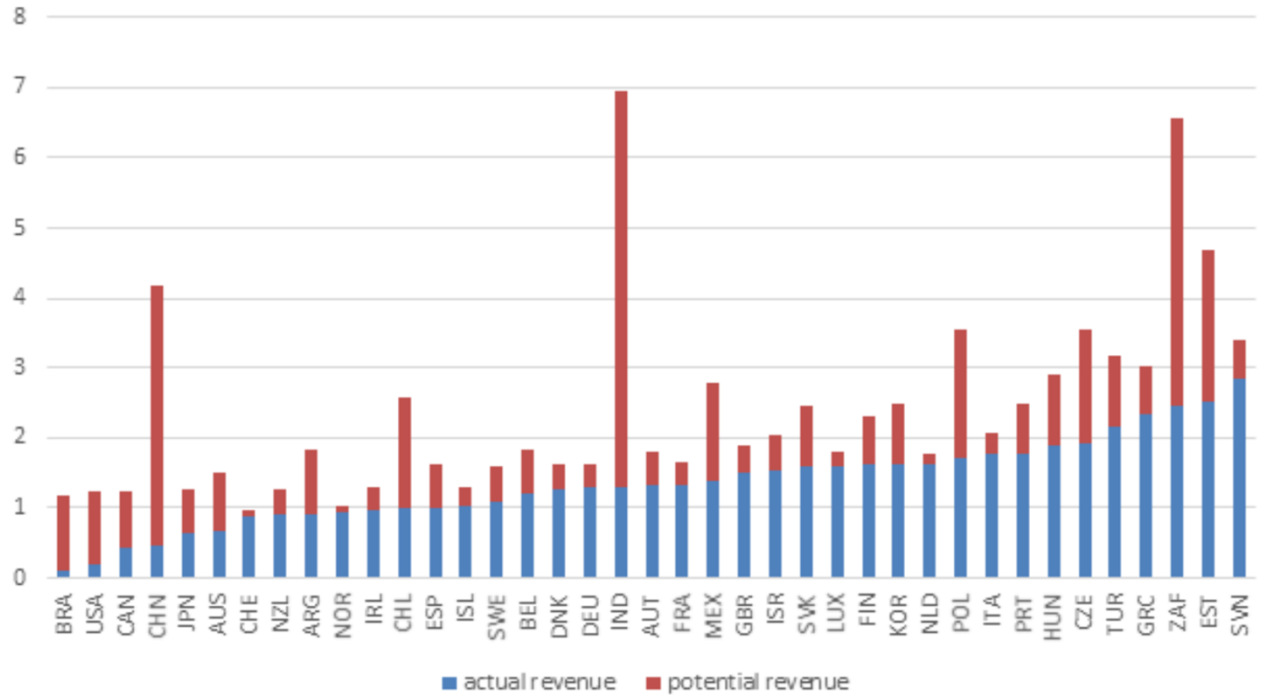


- Emission trading plus carbon taxes
- 2016: USD 22bn
- 2017: USD 33bn

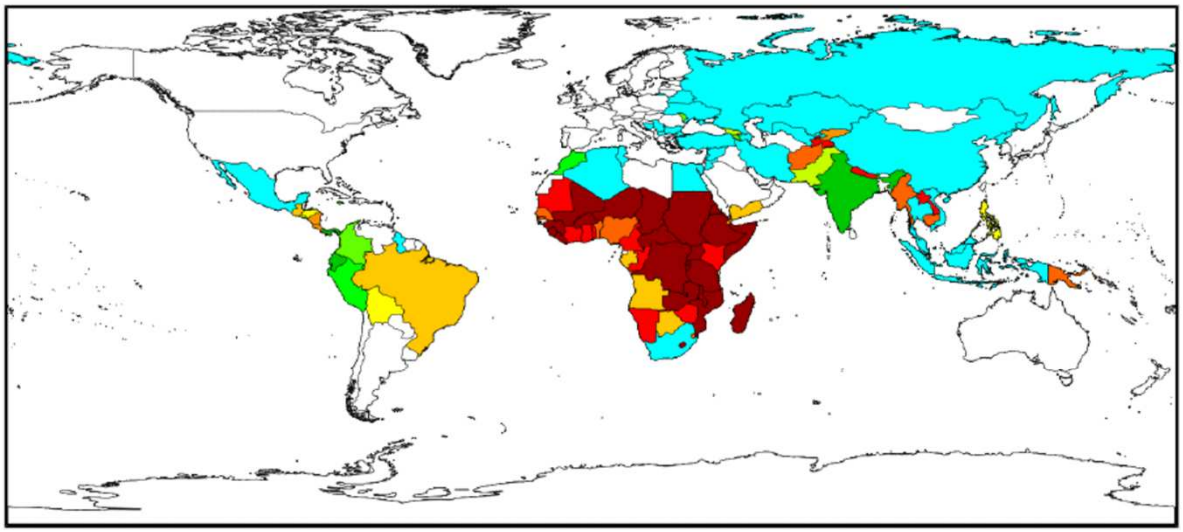
Average revenue potential of socially optimal energy taxation in countries in different income groups

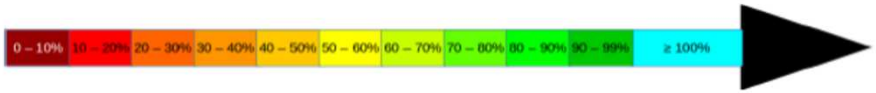


Revenue potential from carbon pricing at 30 EUR/t in selected countries

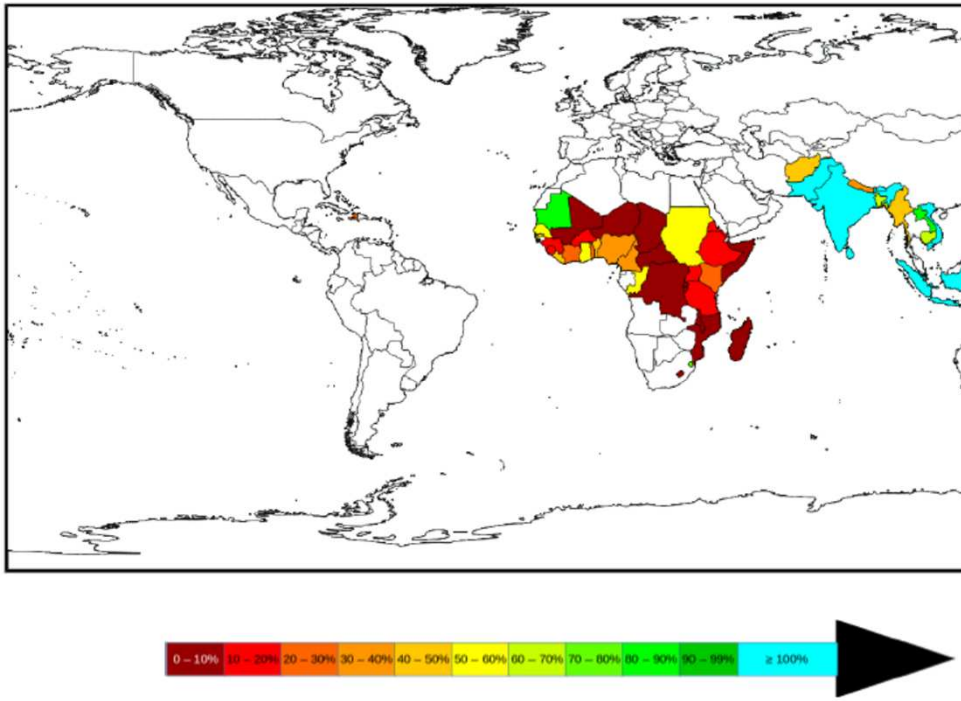


Contribution of carbon prices consistent with a 2°C-scenario to financing infrastructure investment needs necessary for achieving the 2030 Agenda.





Contribution of carbon prices consistent with a 2°C-future to financing invhealth, education and food security in line with the 2030 Agenda.



Options for using revenue from green fiscal reform

Options for using environmentally related tax revenue

- Fiscal consolidation
- Increased spending
- Green spending
- Reducing labor taxes
- Reducing capital or corporate taxes
- Directed social ransfers
- Uniform transfers

Legal aspects of using environmental tax revenue

- In many countries earmarking of tax revenue is not possible or limited (total coverage principle)
- In certain circumstances, tax-financed special assets can be created
- Even without earmarking, tax revenues can be attributed to a purpose by political declaration („soft earmarking“)
- Non-tax revenue can always be earmarked.

Use of revenue from environmentally related taxes in OECD countries (OECD, forthcoming)

	Generated Revenues *(EUR million)*	Constrained revenues		Unconstrained revenues *(%)*	Constrained revenue use in detail					
		Legal earmarking	Political commitment		Tax policy changes	Inter-governmental transfers	Transport-related funding	Green and energy-related spending	Compensation to energy users	Other
Excise taxes on fuels[1]	419 107	36	2	62	1 (*4*)	6 (*9*)	25 (*15*)	2 (*12*)	0.004 (*2*)	2 (*7*)
Carbon taxes	14 236	43	22	35	52 (*7*)	0	0	3 (*4*)	2 (*1*)	4 (*1*)
ETS permit auctions[2]	6 905	78	8	14	0	0	19 (*9*)	45 (*55*)	22 (*6*)	1 (*3*)

Considerations on how to use revenue from green fiscal reform

General wisdom of public economics on using revenue from environmental taxes

- Focused on efficiency and equity
- If the initial tax system is suboptimal, using revenues to correct distortive labor taxes perform well both for equity and efficiency.
- Trade-off: Corporate/capital tax reductions are most efficient but least equitable.
- If the tax-system is (close to) optimal, lump-sum payments perform best in terms of equity and efficiency.

And yet…

Benzin 5 DM ● Tempo 100 ● Hasch frei ● NATO auflösen

Grüner Alptraum

Die linke Basis schockt die Realos! Auf dem Parteitag von Bündnis 90/Grüne in Magdeburg beschlossen die Delegierten das Wahlprogramm 1998 – ein Horrorkatalog! Beispiele: Ein Liter Benzin soll bald 5 Mark kosten, Haschisch und Marihuana sollen legalisiert werden. Die NATO soll abgeschafft, das Asylrecht aufgeweicht werden. Lähmendes Entsetzen bei der Grünen-Führungsspitze. Fraktionschef Joschka Fischer aschfahl: „Nun bin ich die Außenminister-Diskussion los." SPD-Kanzlerkandidat Gerhard Schröder: „Ein Benzinpreis von 5 Mark ist einfach irrsinnig! Mit mir nicht machbar!" Außenminister Kinkel (FDP): „Deutschland darf nicht an den wirtschaftspolitischen Geisterfahrern überlassen bleiben."

Das Alptraum-Programm der Grünen – Seite 2.

(Bild-Titelblatt, 9. Mai 1998)

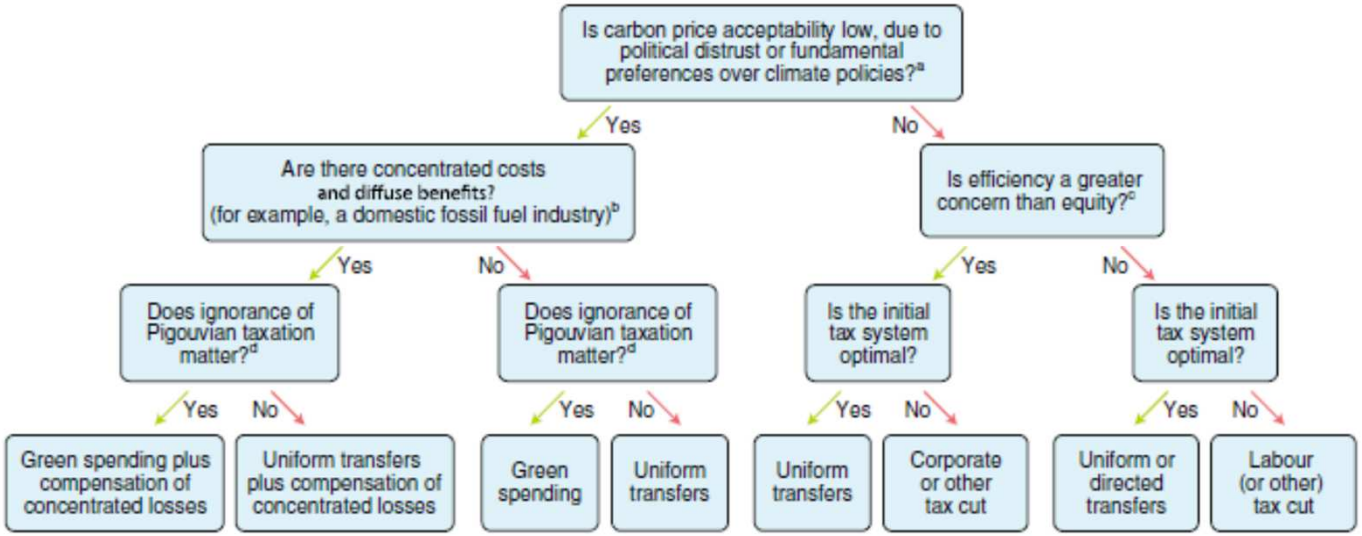
Additional considerations on acceptability of revenue use

- Political trust
- Support for climate policy
- Is Pigouvian taxation understood?
- Distribution of costs and benefits

Recycling mechanisms ranked for effciency, equity and acceptability (Klenert et al. 2018)

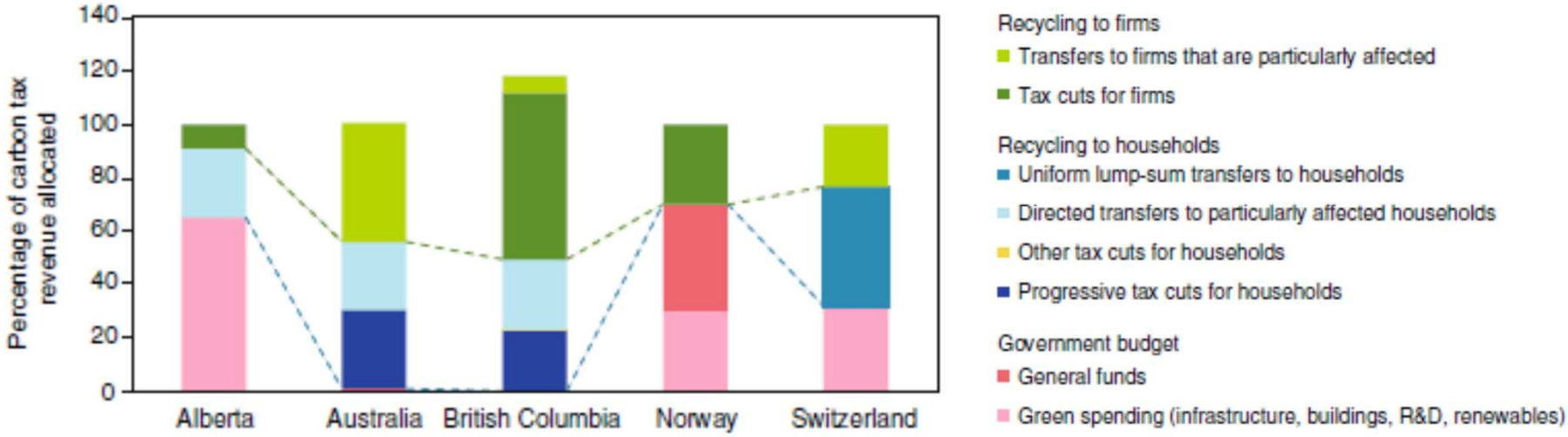
Recycling mechanism	Efficiency	Equity	Acceptability
Labour tax (initial system non-optimal)	+	+	0
Labour tax (initial system optimal)	0	0	0
Capital/corporate tax (initial system non-optimal)	+	–	0
Capital/corporate tax (initial system optimal)	0	–	0
Directed transfers	0	+	+
Uniform transfers (initial system non-optimal)	0	+	+
Uniform transfers (initials system optimal)	+	+	+

Decision-tree for carbon pricing revenue recycling (Klenert et al. 2018)



How is revenue from carbon pricing used today

Real-world revenue recycling (2013)



Thank you!

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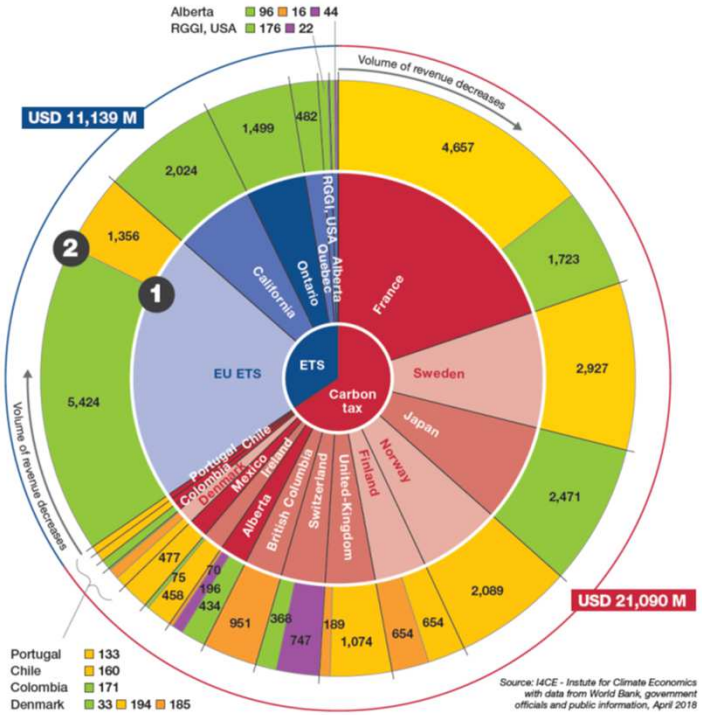
Use of carbon pricing revenue (2017)



1 Year of implementation

- Carbon tax since 2013
- Carbon tax between 2008 and 2013
- Carbon tax before 2007
- Emissions Trading Scheme since 2013
- Emissions Trading Scheme between 2008 and 2013
- Emissions Trading Scheme before 2007

2 Revenue uses

- Earmarking
- General budget allocation
- Tax exemptions
- Direct transfers