

What does make carbon taxes acceptable?

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Context and research questions

Two observations:

- 1 Need to reduce greenhouse gas emissions to prevent dangerous interferences with the climate (e.g. + 2°C)
- 2 Governments setting (more or less) ambitious targets

Several questions:

- ▶ Does the public share these targets?
- ▶ How would they achieve these targets?
- ▶ What role would they give to the public sector?
- ▶ Is there any gap between the public and economists, e.g. what role for carbon taxes?

Survey

- Qualitative semi-direct interviews carried out face to face by students
- Heterogeneous sample of 39 individuals
- Interviews lasting from 15 to 45 minutes (≈ 30 on average)
- Five open questions and [follow-up questions](#)
- Qualitative survey as a base for a quantitative study
- Quantitative survey as a base for CGE modelling

Questions

- 1 What ways are there to reduce energy consumption?
(For businesses? For households?)
- 2 How can reductions in energy consumption be encouraged?
(Who would be targeted? Has the public sector any role to play?)
- 3 What are your forecasts for future energy prices?
(How will you react? Would you like to see the government intervening? Helping who?)
- 4 Carbon taxes are often mentioned as a measure to reduce energy consumption. Are they a good idea?
(What features would make them more acceptable to you?)
- 5 How should tax revenues be used?
(Here are three options: funding environmental projects; redistribution to most affected households; tax rebates for households and firms)

Main results

- 1 **Households are supposed to reduce energy consumption thanks to energy saving measures and tips**
- 2 Large willingness to see the public sector more involved in education, suasion, advertisement
- 3 Carbon taxes may not be a good solution: they probably not work. . . more taxes for less money!
- 4 Tax revenues should be used for environmental purposes: for what else do you want to use them?

Saving energy

Measures	Households	Businesses	Public sector
Energy saving tips			
Reduce heating consumption	15	1	
Reduce air conditioning		2	
Reduce water consumption	12		
Turn off lights	12	10	
Use energy-efficient lighting	6	1	
Use bicycles	4	2	
Use public transport	13	2	
Pool cars	3		
Use hybrid/electric car	3	1	
Turn off computers	1	7	
Turn off other appliances	10		
Use energy-efficient street lighting			2
Promote eco-friendly behavior		6	2
Print less		5	
Sort waste	3	2	
Buy local food	4	1	
Buy A-label appliances	3		
Install efficient isolation	5	3	1
Install solar panels	6	2	
Install video-conference appliances		1	
Market instruments			
Reduce train fares			1
Increase flight prices			1
Tax carbon			2
Give tax rebates to efficient infrastructure			1

Table 1: Number of times energy saving measures were mentioned

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Role for the public sector (1)

Interventions	N
Awareness-raising and suasion	
Promoting energy savings	23
'Green schooling'	4
Promoting renewables	3
Creating new labels	1
Diffusing smart metering	1
Taxes	
Increasing prices (e.g. electricity, waste)	4
Subsidies	
Giving tax rebates to green firms and households	11
Subsidizing public transports for low-income households	4
Subsidizing (very general)	2
Subsidizing efficient appliances	2
Subsidizing local food	1
Subsidizing homeowners to improve energy efficiency	1
Developing infrastructure	
Developing bikeways	1
Developing recycling facilities	1
No intervention	
No role to play	2

Table 2: Number of times government interventions were mentioned

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Role for the public sector (2)

- ▶ 'It has to inform the public. For instance, by publishing fact-sheets or through advertisements' [F, 46]
- ▶ 'Children should be educated to this issue. And more: subsidizing organic farming and keep financing awareness-raising campaigns' [M, 23]
- ▶ 'Raising awareness is important. That is the role of the public sector, there should be an ecological system to be proposed to everybody!' [F, 24]
- ▶ 'It should raise awareness through awareness-raising campaigns showing the worldwide effects of energy, water, etc. overconsumption' [M, 23]

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Carbon taxes: ineffective

- Effectiveness:

- ▶ 'I only see increased bills [...]. Though, why not, if it could incite the population to reduce energy consumption, but I do not really think so.' [F, 46]
- ▶ 'Taxing more? I do not know... [...] We are forced to consume, it is not with a tax that this is going to change' [M, 30]
- ▶ 'I am not sure a tax can reduce energy consumption. Those with money will keep consuming' [F, 30]

- Motivational crowding-out:

- ▶ 'Energy taxes could end up discouraging efforts. [...] A system of sanctions would be more fair' [M, 57]
- ▶ 'She saves energy already and there is no reason to tax current efforts. She would feel unfair and instead of saving more she would do the opposite. This because her previous efforts would not be rewarded' [F, 53]
- ▶ 'This would generate the opposite outcome since for those already saving energy this would be perceived as totally unfair as they already save energy. Thus, she would stop saving energy. Since be paying, better enjoying then' [F, 23]

Carbon taxes: a wily subterfuge

- Trust in the government:
 - ▶ 'The government says what you have to do and you do not really know where the money goes [...] Perhaps the government one day will tax our own exhalation of CO₂ and discourage sports' [M, 25]
 - ▶ 'To accept [...] it would be necessary to know where tax revenues go' [F, 23]
- Purchasing power:
 - ▶ 'We pay enough taxes already. It would be better to invest more in awareness-raising and communication' [M, 23]
 - ▶ 'The situation is already sufficiently difficult with respect to the current crisis. Paying an additional tax seems to me a bad idea, above all in time of crisis' [F, 46]

Carbon taxes: unfair

- Distributional effects:

- ▶ 'Those with money will keep consuming. At the end of the day, we always hit those without it' [F, 30]
- ▶ 'On the one hand, it would force people to get involved, but on the other hand, it would be unfair for those already facing financial issues' [M, 23]
- ▶ 'We must guarantee a certain equity across people [. . .]. It is necessary that people can keep living' [F, 65]
- ▶ 'This tax should be proportional to income and consumption' [M, 31]

- Tax thresholds:

- ▶ 'We should have taxes on those that over-consume, targeting everybody, and is the government that should intervene to set a norm, an yearly average consumption. So to establish a tax that would be fair for any consumer, whoever she is' [M, 30]

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Use of revenues: environmental purposes!

- Earmarking (in general):
 - ▶ 'It is necessary to know what to do with the results of the tax' [M, 22]
- Earmarking for environmental purposes:
 - ▶ 'It seems normal that revenues would be used in the energy domain' [M, 57]
 - ▶ 'It is clear that such tax has to provide funding to ecological projects, first of all because this is the denomination of the tax' [M, 30]
 - ▶ 'Tax revenues should definitely be used for environmental projects' [F, 23]
 - ▶ 'Tax revenues should be used in the field of energy and the environment in general. It must be a closed circle. The tax has to pursue its target and allow things to improve' [M, 60]
 - ▶ 'It is an energy tax, so its revenues should be used to develop green technologies' [F, 34]
 - ▶ 'The money obtained would be invested in renewable energies and this would allow to find new efficient solutions. It would be getting two birds with a stone!' [F, 20]

Use of revenues: social cushioning, what for?

- Social cushioning:
 - Need to address distributional effects:
 - ▶ 'First of all it is about benefiting the least-advantaged people' [M, 80]
 - ▶ 'Above all it is necessarily to help retired individuals that need to be well heated' [F, 53]
 - No need to address distributional effects:
 - ▶ 'It would be as always, with losers benefiting of these revenues' [M, 30]
 - ▶ 'There are already so many subsidies for poor people, and we should not mix up different problems' [M, 25]
 - What, distributional effects?
 - ▶ 'So, we go nowhere! If we pay more and give back part to others, the money goes nowhere! The target would be to invest for the future. Otherwise we are stuck with fossil energy!' [F, 24]
 - ▶ 'I do not see the link and I do not see why energy consumption would be used as a pretext to help the most affected households' [M, 23]
 - ▶ 'Such system should not cost more than it yields' [M, 80]
 - ▶ 'A tax rebate for everybody? [...] There must be more taxes elsewhere then or it would decrease the budget of the public sector and this implies less infrastructure' [M, 52]

Use of revenues: neutrality, why? (1)

- ▶ 'If the revenues would be used for something different the government would lose its credibility regarding how urgent the situation is. Actually if it is so urgent and important to stop over-consuming, why should tax revenues be used for things other than saving the planet?! That is illogical' [F, 23]
- Addressing distributional effects? Simply too burdensome:
 - ▶ 'To me, it seems too complicated' [M, 26]
 - ▶ 'Really too complex and hard to realize' [F, 46]
- Revenue neutrality:
 - ▶ 'I imagine using tax revenues as allowances to individuals, or firms' [M, 29]
 - ▶ 'Taxing is about making individuals aware of how dear is energy. This is to me the government's role, it could push it through the population by decreasing another tax' [M, 26]
 - ▶ 'Using it as a bonus to reduce taxes to households and firms deserving it' [M, 60]
 - ▶ 'Households and firms that did an effort would deserve a tax rebate' [F, 29]

Use of revenues: neutrality, why? (2)

- ▶ 'Tax rebates do not make any sense. At the end people could consume what they saved' [M, 23]
- ▶ 'This would increase the purchasing power of households and the solution is actually reducing household's consumption' [M, 23]
- ▶ 'Reducing taxes if one installs solar panels or other renewable energies may be a solution. But again, those with money will benefit' [F, 32]

Conclusions

Citizen's perspective may be relatively distant from the one of economists:

- The expected role of the public sector is not to introduce new taxes but rather raising awareness
- Subsidies are better than carbon taxes
 - Carbon taxes perceived as ineffective, directly
 - If there is any effectiveness, this relies on the use of revenues (indirectly)

Possible implications:

- ⇒ Need to address learning costs, e.g. by making net benefits salient
- ⇒ At this stage, earmarking tax revenues for environmental purposes may give the largest acceptability
- ⇒ For the time being, any policy targeting voluntary efforts may enjoy great support

Thank you for your attention!

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Online S. Carattini & A. Baranzini (2014):
'Paying Enough Taxes Already? Testing the Acceptability of
Carbon Taxes with Survey Data',
Working paper available at SSRN:
<http://ssrn.com/abstract=2461674>