Carbon taxation: The French experience, 2014–2019

Katheline Schubert
Paris School of Economics, University Paris 1

Coalition of Finance Ministers for Climate Action
Workshop on Carbon Taxation
3–4 October 2019
Climate policy aims in many countries at decarbonizing electricity generation.

In France, electricity generation is already largely decarbonized, thanks to nuclear.

Hence climate policy has to deal with emissions more difficult to reduce, in transport and heating mainly.

To do so a carbon tax is essential.

2 failed attempts.

Context in 2013–2014: steady decline of the oil price over the past few years.

Strategy prepared in 2013 by the Committee for Ecological Taxation, chaired by Christian de Perthuis.

2014: introduction of the tax, under the form of a "carbon component" added to the existing energy consumption tax (TICPE).
• Characteristics of the tax:
  • Set at 7€/tCO₂ in 2014.
  • Offset by an equivalent reduction of TICPE for oil.
  • Commitment of the government to a ramp-up of the tax the following years.
  • Entities covered by the EU-ETS get reimbursement.
  • 3/4 of the revenues targeted to the financing of the CICE, a tax credit for competitiveness and employment, the rest going into the general budget.

• The reasons why the government decided to put in place the carbon tax and people didn’t protest:
  • The people: because of the combination of the low rate and the low oil price, the tax came almost unnoticed.
  • The government: same reason, plus it needed money to finance the promised reduction of the corporate income tax, through the CICE.
The situation in November 2018

- The increase of the carbon tax initially planned has been accelerated in 2018.
- Catch-up of the tax on diesel oil.
- Large increase of the oil price between 2017 and 2018.
- Tax cut for the richest.
- The Yellow vest protest.

<table>
<thead>
<tr>
<th></th>
<th>Sept. 17</th>
<th>Sept. 18</th>
<th>c/l</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>super unleaded 95</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>consumer price:</td>
<td>1.37</td>
<td>1.56</td>
<td>18.4</td>
<td>13.4</td>
</tr>
<tr>
<td>energy taxes</td>
<td>0.78</td>
<td>0.82</td>
<td>3.9</td>
<td>4.9</td>
</tr>
<tr>
<td>producer price and margin</td>
<td>0.59</td>
<td>0.74</td>
<td>14.5</td>
<td>24.4</td>
</tr>
<tr>
<td>diesel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>consumer price:</td>
<td>1.22</td>
<td>1.48</td>
<td>25.8</td>
<td>21.1</td>
</tr>
<tr>
<td>energy taxes</td>
<td>0.64</td>
<td>0.71</td>
<td>7.6</td>
<td>11.9</td>
</tr>
<tr>
<td>producer price and margin</td>
<td>0.58</td>
<td>0.77</td>
<td>18.2</td>
<td>31.2</td>
</tr>
</tbody>
</table>
The carbon tax is regressive

Its effects on households’ purchasing power depend essentially on 3 criteria:
- revenue
- localization (rural/urban)
- equipments (fuel oil boiler/gas boiler/electric heating, diesel car/gasoline car/no car)

Vertical heterogeneity, but also large horizontal heterogeneity

Graphique 4. Transferts par unité de consommation pour différents types de ménages

Which climate policy in France after the Yellow Vests?
Redistribute the carbon tax revenues fairly

- The carbon tax is perceived as unjust, and as just another tax to finance public spending.
- Micro-simulations exploring different redistribution scenarios show that it is possible to minimize the loss for households belonging to the 5 1st deciles.
  - Scenario 1: lump sum redistribution by consumption unit to all households
  - Scenario 2: 500 €/year to 1st decile, 400 €/year to 2nd decile, etc.
  - Scenario 3: transfers decreasing with the revenue, avoiding too large losses in the middle of the distribution, + geographical differentiation
- Recommendation: redistribution of all new carbon tax revenues with transfers decreasing with the revenue and function of geographical criteria; in complement, mechanisms to help the most vulnerable households changing the most polluting equipments.
Graphique 5. Distribution des transferts nets avec compensation forfaitaire neutre

Source : Calculs de l’auteur.

Graphique 6. Distribution des transferts nets avec la « proposition Terra Nova »

Source : Calculs de l’auteur.

Graphique 9. Distribution des transferts nets avec des transfert décroissants avec les revenus
Which climate policy in France after the Yellow Vests?
Make the tax transparent and share the effort

- Pedagogy, communication and transparency in the use of the revenues of the tax; building a collective project.
- Sharing the effort: the sense of injustice is increased by the existence of many exemptions at the national level.
  - 15% of CO₂ emissions are not taxed, and 31% are covered by the EU-ETS, at a much smaller price (around 20€/t CO₂, against 44.6 €).
  - Symbolic case of aviation and maritime transport.
- Why should French people make efforts when the most emitting countries do not?
  - Exemplarity, spillover effect
  - That our children cannot say: they knew and they did nothing.
Which climate policy in France after the Yellow Vests?
A mix of instruments

- Standards, regulations:
  - give an implicit price to carbon, higher than the tax for a given emissions reduction;
  - are often regressive as well;
  - may cause a rebound effect.
  - However their cost is hidden, and they appear as more fair, hence a better acceptability.

- A mix of instruments, to complement the carbon tax:
  - subsidies to R&D;
  - green public investment (infrastructure, networks).
  - instruments allowing to deal with agents’ myopia, cognitive biases and credit constraints.
Which climate policy in France after the Yellow Vests?
Can French people be reconciled with the carbon tax?

Douenne & Fabre, French Attitudes over Climate Change and Climate Policies, mimeo 2019

- Large representative survey.
- Elicit knowledge, perceptions and values over climate change.
- Examine opinions relative to carbon taxation.
- Assess the support for other climate policies.
- Study the determinants of attitudes in terms of political and socio-demographic variables.

- Limited knowledge but high concern for climate change.
- Large rejection of the carbon tax redistributed lump-sum (10% approve, 70% do not approve).
- Majority support for stricter norms and green investments.
Preferences for different modes of redistribution
"La Convention Citoyenne"

- 150 citizens, representative of the French population.
- Meetings during 6 weekends of 3 days.
- Information provided.
- Objective: "Design concrete measures to help citizens in the climate transition, and define complementary measures (and how to finance them) to help France reach its ecological objectives, and in particular cut its GES emissions by at least 40% in 2030 compared to 1990.
- The government commits itself to submit theses measures to a vote of the Parliament or to a referendum.

A suivre !