Is rationing carbon for travel a fair, efficient and realistic solution?

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In the wake of the pandemic, the carbon tax at Europe’s borders is now on the agenda, but the domestic version, aimed at individual travel, is also likely to enter the presidential debate. Experts and economists will not give it up. CO2 emissions from transport keep increasing and no one can see how they can be curbed. But can we discuss the carbon tax again after the Yellow Jacket protests in France that it previously provoked and at a time when energy prices are rising spectacularly, putting serious pressure on the purchasing power of low-income households? Would rationing carbon-based travel be a more radical but also fairer alternative?
How can we meet our climate commitments?

Today, the objective of achieving “carbon neutrality” by 2050, set by the French National Low Carbon Strategy\(^1\), remains so abstract and we certainly do not have the means to meet it. Neither technological innovations (improved engines, electric cars, etc.) nor incentives to use less polluting means of transport (cycling, public transport, etc.) are succeeding in reducing CO2 emissions from the transport sector in France\(^2\). Up until 2018 experts and politicians were banking on a gradual increase in the carbon tax to reduce the volume of emissions. However, it came up against the Yellow Vests movement and the rejection of the Citizens’ Climate Convention. It was denounced as inequitable insofar as it disproportionately affects the poorest households, and it is also ineffective because it has little effect on the lifestyles of the richest\(^3\), who are the largest emitters of CO2.

Rationing, a future alternative to the carbon tax?

This idea, which has been promoted for several years by activists and researchers in France (M. Szuba, P. Calame, F. Ruffin, etc.), would have at least two advantages that the tax does not have: it would prevent people from emitting more CO2 than the amount decided at the national level, and it would give each French person the right to emit the same amount of CO2, regardless of his or her financial means. Distributing the quantity of carbon to be emitted individually in this way makes the collective effort to combat the climate crisis concrete. This idea is being raised in the debates, as we heard during the Green Party presidential primaries. While the discussions between supporters and detractors remain largely at the level of principles and theory, the University of Paris, under the direction of transport historian and engineer Arnaud Passalacqua, has conducted a study for the Mobile Lives Forum that shows how it would be possible to ration travel and what its effects would be.

How would carbon rationing work?

Each French person would be allocated the same amount of CO2 for their journeys, converted into quantities of fuel, according to a number of criteria such as household composition, place of residence and health conditions. The onus would thus be on those whose lifestyles emit the most carbon, in other words, the richest. Remember that 40% of French people have never taken a plane\(^4\) and that the higher one’s purchasing power is,
the more greenhouse gas-emitting means of transport are used. The system would also be designed for companies which, with their quotas, would be responsible for the CO2 emissions of their employees’ work-related travel.

From a technical point of view, rationing could be based on existing and efficient control systems for fuel distribution and air travel management. For flexibility, implementation would be phased in gradually until 2050, a national agency would be in charge of allocating carbon allowances, and everyone would have a personal credit-card style card to use when buying fuel and air tickets.

**It is possible and instructive**

The model has even been applied to real profiles of French people, with progressively rationed CO2 being allocated so as to achieve the greenhouse gas emission reduction trajectory set by the French National Low Carbon Strategy. This test clearly shows the extent of the transformation necessary for our lifestyles and for our territories: the development of the territory to prioritise daily lives lived in proximity; real, credible and comfortable alternatives to the internal combustion engine car and the plane, for daily life (electric cars, networks of cycle tracks, buses, coaches and trains with a fixed timetable...) as well as for travel (European network of trains...); the reorganization of work in order to improve citizens’ quality of life; reorganization of work to limit frequent, long-distance journeys or journeys requiring a car as much as possible (teleworking, assigning employees to the site closest to their home, etc.); and also devising a new industrial policy to produce lighter vehicles that emit less CO2.

**Let’s put it to the test!**

Of course, this radical but fairer alternative to the carbon tax immediately opens up new questions: should rationing be extended to other areas of consumption such as housing, to give everyone more latitude in the way they organise their lives while respecting their CO2 quotas? Is rationing on a national scale sufficient, when goods and people of other nationalities would still be able to move around without constraints? To answer these questions, we need to conduct experiments in France, as was done in Lahti, Finland.

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**Notes**

1. The transport sector is currently the leading greenhouse gas emitting sector in France (30% of national emissions in 2015). The National Low Carbon Strategy aims to completely decarbonise transport by 2050.
Movement
Movement is the crossing of space by people, objects, capital, ideas and other information. It is either oriented, and therefore occurs between an origin and one or more destinations, or it is more akin to the idea of simply wandering, with no real origin or destination.

Teleworking
The remote performance of a professional activity away from the company by means of telecommunication tools, at home or in a telecentre.

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7 https://en.forumviesmobiles.org/marks/teleworking-12891