### 1. Projects



# Reducing the carbon footprint of mobility: what are the right policies for France?

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In 2019, transport accounted for 30% of greenhouse gases in France, discounting international travel. Far from being under control, these emissions have continued to rise, unlike those of other economic sectors, increasing by 11% since the 1990s. When the National Low-Carbon Strategy (or SNBC, for Stratégie Nationale Bas Carbone) was implemented in 2015 to cut transport-related emissions by a factor of 33 by 2050, the message was: we're taking note of the problem and ambitiously rising to the challenge. Five years on, can we say that a real "mobility transition" is under way in France?

### Research participants

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### 1. The research

The research was conducted by a team from the MRTE lab (Mobilities, Networks, Territories, Environment) at CY Cergy Paris University. In with the same vein as the international research project entitled "Decarbonized Mobilities: A Poorly Initiated Transition," which looked at policies to decarbonize travel in 14 countries, the study

focuses on the case of France. Are mobilities in France transitioning towards lower-carbon modes? How are governments and other stakeholders managing the goal of reducing travel-related CO2 emissions? How does this translate into public policy?

The project's methodology was based on 31 interviews conducted with 40 actors at the European, national and local levels, through four cases studies: Ile-de-France, the urban region of Grenoble, the Natural Regional Park of Grands Causses in Aveyron, and the island of Reunion. It also relied on the analysis of multiple legal texts and grey literature documents related to the public policies and their associated actors. A corpus of media content was also compiled from 549 press articles.

### 2. The results

# 2.1. Research findings: the transition efforts to limit the carbon footprint of mobilities do not match the state's aims

• Limiting the carbon footprint of mobilities: a consensual but systematically secondary objective that is neglected in public policies.

Although all interviewed actors agreed on the need to limit the carbon footprint of mobilities, there is a discrepancy between the stated ambitions and their implementation. At the local level just as at the national or European level, the objective of limiting the carbon footprint of mobilities is regularly eclipsed or relegated to a secondary objective, in favor of developing the offer of transport options.

### • The urgency of the climate emergency is not taken into account

Over the 2015-2018 period, transport-related greenhouse gas emissions were 10% higher than the targets set by the SNBC in 2015. Faced with this situation, the ceiling for the sector's short- and medium-term emissions was raised by 15% in the new version of the SNBC finalized in 2020, pushing back most of the efforts required to achieve its final target of reducing emissions by a factor of 33 by 2050. In addition, the Mobility Orientation Law (or LOM, for Loi d'orientation des mobilités) includes the target of achieving carbon neutrality by 2050, but it has not been the subject of an environmental impact assessment. The pace and scale of the proposed actions, which don't include the aviation sector for instance, are not up to the challenge.

# • The order of importance of the levers of action is reversed in favor of technological improvements and the actors of automobility

Avoid, Shift, Improve: The UN's classification of mobility-related CO2 reduction strategies distinguishes three main levers of action: the first is simply to stop making some trips (avoid); the second is to perform trips that can't be avoided by using non- or less-carbon-emitting modes (shift); and the third is to reduce, through technological improvements, the carbon footprint of trips that can't be avoided or shifted to other modes (improve). However, just like at the international level, French policies aiming to limit the carbon footprint of transportation favor avenue technological fix, as part of an overall goal to promote green growth and strengthen French industry. Policies thus prioritize the actors and mechanisms of the dominant travel modes, especially those related to cars.

The avoidance of carbon-based travel remains the weak point of public policies, despite analyses showing that the rising curve of transport-related carbon emissions since 1960 is strongly correlated to the increase in people's movements.

### A major omission: travel policies are not designed in coordination with other spheres of social life

Travel policies are not designed in coordination with the other mobility-related sectors: land use, work, leisure, tourism, health, etc. For example, despite their health benefits, active mobilities don't even appear in the organization chart of the Health Directorate (Direction de la Santé).

# 2.2. A lack of political vision at the root of this mismatch between commitments and implementation

This is because of inconsistent policies, resulting in the institutional fragmentation of their implementation and conflicting objectives.

### Compartmentalized policies with no over-arching vision

At the national and local levels, there is no cross-sectional policy that encompasses mobility, the environment, social and economic issues, nor is there a link between national and local policies. Instead, these different issues are dealt with in a sectional way, in silos. For example, within the Ministry for the Ecological and Solidarity Transition, the different branches each pursue their predominant objective, without any real coherence. The Directorate General for Energy and Climate (DGEC, for Direction Générale de l'Énergie et du Climat) manages part of the state's environmental and industrial goals related to air quality, energy and decarbonization, notably through the SNBC; but its approach is based primarily on technological solutions. The Directorate General for Infrastructure, Transport and the Sea (DGITM, for Direction Générale des Infrastructures, des Transports et de la Mer), that supported the National Mobility Convention (Assises Nationales de la Mobilité) and the Mobility Orientation Law (LOM), aims first and foremost to meet travel demands by relying mostly on modal shifts and developing supply. The Directorate General of Planning, Housing and Nature (DGALN, for Direction Générale de l'Aménagement, du Logement et de la Nature) could play a cross-sectional role by addressing the issue of mobility avoidance, particularly through its land-use planning policies, but it is hardly engaged in policies aiming to limit the carbon footprint of mobility.

### • The modes of public action in crisis

Through calls for projects, the state makes local authorities compete for the necessary funds to carry out local experiments. This system exhausts the energy of local actors with time-consuming application procedures. Moreover, the limited nature of these experiments - in terms of duration, geographical scope, and budget - often prevents these initiatives from being sustainable at the level of the given territory or from spreading to other territories.

In addition, there is great inequality with regards to the requirements demanded when implementing the tools for decarbonizing mobilities. Mobility policies are based on tools such as Urban Mobility Plans (or PDU, for Plans de Déplacement Urbains) for towns or regions, and Employer Mobility Plans (or PDME, for Plans de Mobilité Employeur) for

businesses. These tools are designed to create rules that must be followed. However, in practice, the implementation of these measures is often not verified, and their results over time are poorly monitored.

Finally, the policies to limit the carbon footprint of mobilities are limited in their effectiveness because of insufficient economic means and a lack of coordination with fiscal tools.

## • Lifestyles and social justice issues are inadequately reflected in transportation policies

While the creation of a "Ministry for the Ecological and Solidarity Transition" in 2017 displayed the ambition to build a just transition, issues of social and territorial justice aren't sufficiently integrated into mobility policies. Public actors don't fully grasp the diversity of people's mobility practices and lifestyles across different territories; therefore, policies don't sufficiently take them into account, which undermines the ability to construct fair mobility policies. Individual carbon footprints differ depending on income, and this, for instance, is something that wasn't sufficiently considered in the carbon tax project.

From a territorial point of view, actors often have a dualistic vision of centers vs peripheries, or dense vs sparsely populated territories. As a result, cities find themselves pitted against the rest of the national territory, which itself is regarded by some actors as a homogeneous whole characterized by a high dependence on cars, when in fact, territorial specificities would require a finer vision and better understanding of the mobile and immobile practices of its inhabitants.

### Actors who are able to raise the issue of social practices and realities are not sufficiently involved in policy making

There are actors who are concerned with these social issues - in particular, civil society through NGOs, think tanks and associations, as well as local collectives such as residents' associations - but they are still rarely included in the policy making. While citizens, as experts on their own lifestyles, may have a key role in bringing their interests to elected officials, current forms of consultation are still limited and ineffective.

### • Representations that are hard to shake

Finally, the construction of policies to limit the carbon footprint of mobilities remains imbued with dominant representations related in particular to the place of cars whose impacts are underestimated, while other alternative and less carbon-emitting mobilities are insufficiently mobilized. Indeed, relevant actors still greatly underestimate the importance of cycling in terms of job numbers and sales turnover. As for walking, it has been completely forgotten in mobility policies.

More broadly, the way such carbon-reducing policies are created calls for an overall review of the dominant value systems and representations: What is our relationship to cars (vehicle type, ownership, rental, sharing, etc.)? How will roads be used in the context of decarbonization (priority uses, sharing the roads with other modes, etc.)? What is a fair taxation? What value do we give to mobility and immobility? How can we design a territory that is pleasant to live in and conducive to limiting the carbon footprint of mobility?

# 3. Four levers to immediately reduce the carbon footprint of mobility in France

The decarbonization of French mobility practices by 2050 can only be achieved if we agree to deeply rethink the place of mobility in people's lifestyles and territories. To implement this crucial political project, four levers, that have so far been ignored or discarded, could be activated.

### • Changing approach: ensuring fairness in policies for decarbonizing travel

Convene an assembly where citizens would define what place they wish to give to mobility in their lifestyles in order to debate all of its implications (land use, health, family, work, social life). Take into account the diversity of lifestyles, jobs and territories in terms of mobility, by drawing on the work of NGOs and associations, to design appropriate travel policies.

Systematically assess the social and environmental impact of the recommended measures, before and after their implementation. For example: assess the effectiveness and fairness of using a price signal.

# • Changing priorities: prioritizing the avoidance of carbon-based movements instead of improving their energy performance

At the national level, admitting that the policy of improving the energy performance of fuel and vehicles (aircrafts, cars, etc.) is not enough to reduce the volume of travel-related carbon emissions by a factor of 33 by 2050. Worse, it simply delays most of the necessary actions.

Always favour the avoidance of carbon-emitting trips including air travel (living more locally, telecommuting, walking, cycling, public transport, night trains) or, failing that, favour the deployment of shared transport (carpooling, car-sharing, etc.).

In the territories, task the Authorities for the Organization of Mobilities (Autorités Organisatrices des Mobilités) with setting up multimodal tenders (for walking, cycling, public transport, carpooling) to limit the carbon footprint of travel, regardless of the transport mode used.

Locally, continue the accommodations implemented after the lockdown (network of wide roads for cycling...) and promote alternative ways of getting around (cycling, walking...).

### • Changing the industrial policy: giving up the individual, heavy, SUV-type vehicle

Develop a transparent industrial policy that economically and socially supports the necessary transformations in the aviation and automotive sectors, and that is more independent of these sectors' companies, which are currently over-represented in existing consultation bodies.

Develop a production line of light vehicles (especially for people who are dependent on motor vehicles), bicycles (electric bikes, cargo bikes, etc.) and hydrogen-fueled public transport.

Deconstruct the widespread representations surrounding cars (freedom, speed, power...) in favor of more modern alternative representations of mobility (well-being, health, conviviality, sensoriality). For example, banning advertising for the most polluting vehicles.

### Changing methods: developing new public policy tools

To ensure the coherence of the new policies, create an inter-ministerial directorate for mobility that coordinates the actions of the concerned ministries (health, transport, land use, etc.).

Stop local authorities pitting against each other for state funding, give them a sustainable budget to carry out local transition policies and deploy these experiments that have been tested and shown favourable results.

Implement indicators that are conducive to carbon-free travel: a carbon account for individuals and businesses, the real cost of the individual car, the health benefits of walking and cycling, etc.

### Download the synthesis (in French only)



### Réduire l'empreinte carbone de la mobilité : quelles politiques en France ?

Synthèse de recherche - Septembre 2020

En 2019, les transports émettaient en France 30% des gaz à effet de serre. Cela sans compter les liaisons internationales, qu'elles soient aériennes ou maritimes. Surtout, loin d'être maîtrisées, ces émissions continuaient à augmenter contrairement à celles des autres secteurs économiques : +11% depuis les années 1990. Avec la mise en place en 2015 d'une Stratégie Nationale Bas Carbone visant à diviser (par 33) les émissions du secteur d'ici 2050, on pouvait croire qu'il s'agissait de prendre acte du problème et de relever le défi avec ambition.

Cinq ans plus tard, peut-on dire qu'il existe une réelle dynamique de « transition mobilitaire » en France ?

Le Forum Vies Mobiles a mené l'enquête et lancé une équipe de recherche pilotée par Jean-Baptiste Frétigny qui, pendant deux ans, a interrogé les principaux acteurs publics des transports et de la mobilité européens, nationaux et locaux, analysé les grands textes législatifs et réglementaires sur la transition et les discours tenus dans la presse. Une quarantaine d'acteurs ont été interrogés et plus de 500 articles analysés.

#### LES PRINCIPAUX RÉSULTATS :

- Non, la France n'a toujours pas enclenché sa « transition mobilitaire », au sens où il n'existe pas de projet politique cohérent permettant de réaliser les arbitrages nécessaires pour atteindre les objectifs de réduction de l'empreinte carbone liée aux déplacements dans les temps requis. Il est urgent d'agir à l'échelle nationale comme locale.
- Il existe une compartimentation trop importante entre les objectifs de la Stratégie Nationale
  Bas Carbone, qui prévoit de réduire significativement les émissions à l'horizon 2050 et les
  politiques de déplacement portées notamment par la Loi d'Orientation des Mobilités, qui
  vise, elle, essentiellement à développer l'offre de transports. Cette compartimentation se
  retrouve également entre les politiques de transport et celles des autres secteurs qui
  déterminent pourtant les déplacements (tourisme, travail, aménagement).
- Parmi les leviers possibles pour réduire l'empreinte carbone de la mobilité, l'innovation technologique, qui fait la part belle au secteur de l'automobile, est largement privilégiée.
   Cette situation résulte en partie d'un imaginaire qui valorise la croissance sans limite des mobilités et privilégie la technologie pour apporter des réponses aux problèmes climatiques (passage du thermique à l'électrique, etc.). Le levier de l'évitement des déplacements, très efficace, est trop peu mobilisé.
- On constate un déficit d'expertise et une prise en compte insuffisante des modes de vie des Français et de leurs empreintes carbones ainsi que de la diversité des situations territoriales dans les politiques actuelles de décarbonation des déplacements. Les associations, les Organisations Non Gouvernementales ainsi que les aspirations citoyennes sont insuffisamment écoutées pour permettre de mettre en place des politiques efficaces, mais aussi justes.

### **Mobility**

For the Mobile Lives Forum, mobility is understood as the process of how individuals travel across distances in order to deploy through time and space the activities that make up their lifestyles. These travel practices are embedded in socio-technical systems, produced

by transport and communication industries and techniques, and by normative discourses on these practices, with considerable social, environmental and spatial impacts.

En savoir plus x

### Lockdown

The lockdown measures implemented throughout 2020 in the context of the Covid-19 crisis, while varying from one country to the next, implied a major restriction on people's freedom of movement for a given period. Presented as a solution to the spread of the virus, the lockdown impacted local, interregional and international travel. By transforming the spatial and temporal dimensions of people's lifestyles, the lockdown accelerated a whole series of pre-existing trends, such as the rise of teleworking and teleshopping and the increase in walking and cycling, while also interrupting of long-distance mobility. The ambivalent experiences of the lockdown pave the way for a possible transformation of lifestyles in the future.

En savoir plus x

### **Associated Thematics:**

### **Policies**

- Ecological transition
- Public transport
- Cycling & Walking
- Cities & Territories

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