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Let's put the autonomous vehicle on the road to sustainable mobility!

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Autonomous vehicles have the potential to transform our mobility system, a system that is essentially based on individual, privately owned cars. The benefits of such a transformation in terms of sustainability are nevertheless uncertain, since to a large extent they depend on the way in which public policies employ the technology towards the goal of sustainable development.

While autonomous vehicles hold much promise, they also carry risks. Firstly there are social risks, because this technology is likely to threaten the livelihoods of large numbers of drivers. There are also environmental risks: in urban areas with high parking prices, homeowners could send their vehicles to park on the outskirts of cities,

generating many “empty miles”; autonomous vehicles could also lead to a fall in the cost of home deliveries, triggering a sharp increase in delivery-related travel. Furthermore, in some territories the development of private and cheap robot-taxis could compete with public transport and challenge current economic models.

There are thus very contrasting visions of the future of the autonomous vehicle, and its actual development will be partly determined by the way in which it is integrated into the mobility system. For example, encouraging the sharing of private, autonomous cars requires the creation of incentives such as reserved parking areas along with special pricing for parking and traffic. Similarly, characteristics of the movement of autonomous shuttles and robot-taxis—such as vehicle size, the routes/zones they operate in, according to what schedules, etc.—should be designed in such a way as to complement the public transport network, particularly underground railways, trams and trains. Efforts to encourage pooling between the transport of goods and the transport of passengers should also be envisaged. Finally, the transition of the transport sector must be accompanied by support policies to encourage former drivers to retrain in new occupations, in particular those created by autonomy (vehicle maintenance, fleet management, passenger services, etc...).

Public policies relating to the development of the autonomous vehicle must therefore be part of a strategic plan to ensure that this technology is used to improve sustainable mobility. The aim is to guide the development of the technology, through regulation (for example, should we only authorize autonomous shared vehicles in cities?), industrial orientations (should industrial actors be encouraged to find solutions adapted to the city, but also peri-urban areas, for example by dedicating specific funds?) and infrastructure (which facilities should be developed to encourage certain usages of autonomous vehicles?). Autonomous mobility makes it possible to envisage radical transformations: it is vital that we anticipate and guide them.

We are at a pivotal moment for considering the future of the autonomous vehicle: on 19 September, the [French National Conference on Mobility \(Assises nationales de la mobilité\)](#) was opened; the following weeks will also see the start of discussions on the revision of the “Autonomous Vehicle Plan”. During this time it is crucial that the French government more clearly affirms its intention to use this technology to facilitate a more sustainable and inclusive mobility. In parallel with the industrial battle between economic actors, there are also different visions of our urban future for us to consider. Guiding the development of technology and its integration into our society is a necessity in view of the ecological challenges, but also an opportunity to create an original model of autonomous mobility based on the rich French ecosystem.

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