

## The French Master plan for electric vehicle charging infrastructure (Schéma directeur des infrastructures de recharge pour véhicules électriques : SDIRVE)



### Facts & Figures

#### Organization

The French government (legal frame) ; local authorities and private players : implementation

#### Type of initiative

National strategy to improve electric mobility

#### Target Group

Local authorities, citizens and end-users

#### Duration

Global Mobility Act (LOM according to its French acronym) from December, 24th of 2019 : created the SDIRVEs

2021 : first SDIRVEs implemented at local levels



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### Description of the Initiative

The 2019 LOM allowed local public actors to plan the deployment of electric vehicle charging infrastructures (hereafter IRVE according to its french acronym) aimed at a public use on their territory, through the elaboration and implementation of “Master plans for the development of open-to-public electric and hybrid rechargeable vehicle infrastructures” (SDIRVE according to its French acronym).

Competent players for elaborating SDIRVEs are local stakeholders and local authorities. More precisely, this competence usually comes under the jurisdiction of local authorities organising mobility (regional or city authorities) or energy distribution (local mixed unions). Most of local authorities from wider to smaller scales are thus concerned.

In addition, the “Climate and Resilience” law of August, 21st of 2021 made SDIRVE

compulsory for territories covered by a ZFE (e.g. French urban areas with action plans to reduce air pollution) without however specifying a timeframe.

The main objective of a SDIRVE is to ensure the deployment of an easy to reach recharging infrastructures :

- with good coordination between public and private project owners
- taking into account local environmental and mobility policies
- adapted to the evolution of needs for all electric and plug-in hybrid vehicles, both for local and transit traffic
- compatible with the electric grid.

Although more than 90% of recharging is done at home or at the workplace, it is still essential to provide open-to-the-public recharging facilities to support the deployment of electric vehicles. Such supply remains



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indeed necessary in some occasions : for occasional recharging, for private individuals who do not have a private car park or for professionals when travelling for instance. What link can be done with mobility planning or mobility management ?

- Financial incentive: a 75% reduction of the connecting costs to the public electricity grid is provided for charging infrastructures planned in a SDIRVE.
- Furthermore, the SDIRVEs allow a division of labour between public and private stakeholders for the deployment of the planned charging stations. Monitoring of SDIRVE after its implementation makes it possible to assess the deployment of the charging points and, if necessary, to readjust the initial scheme. Two benefits can emerge : 1°/ a better cost allocation between private and public stakeholders and 2°/ a better management between e-mobility demand aims and actual and future e-mobility supply.

### Implementation

Implementation is done by local stakeholders, either public or private ones. The SDIRVEs allow to better match public and private responses

### Lessons learned

Regarding the necessary efforts to achieve the 2030 and 2050 global decarbonations goals, the main challenge is to settle the best possible coordination of public and private interventions and investments. A smart global and local planification as the SDIRVEs appears to be one of the key means to achieve it.

### Impact

As this new tool only started to be implemented in 2021, it is still too early to assess its proper effects on e-Mobility management.

Nevertheless, 50,000 charging points had been deployed in France by January 1st of 2022, even though the initial target was 100,000 charging points. However, this figure already represents an increase of almost 60% in one year. The SDIRVEs implementation should help increase these figures in the future.



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