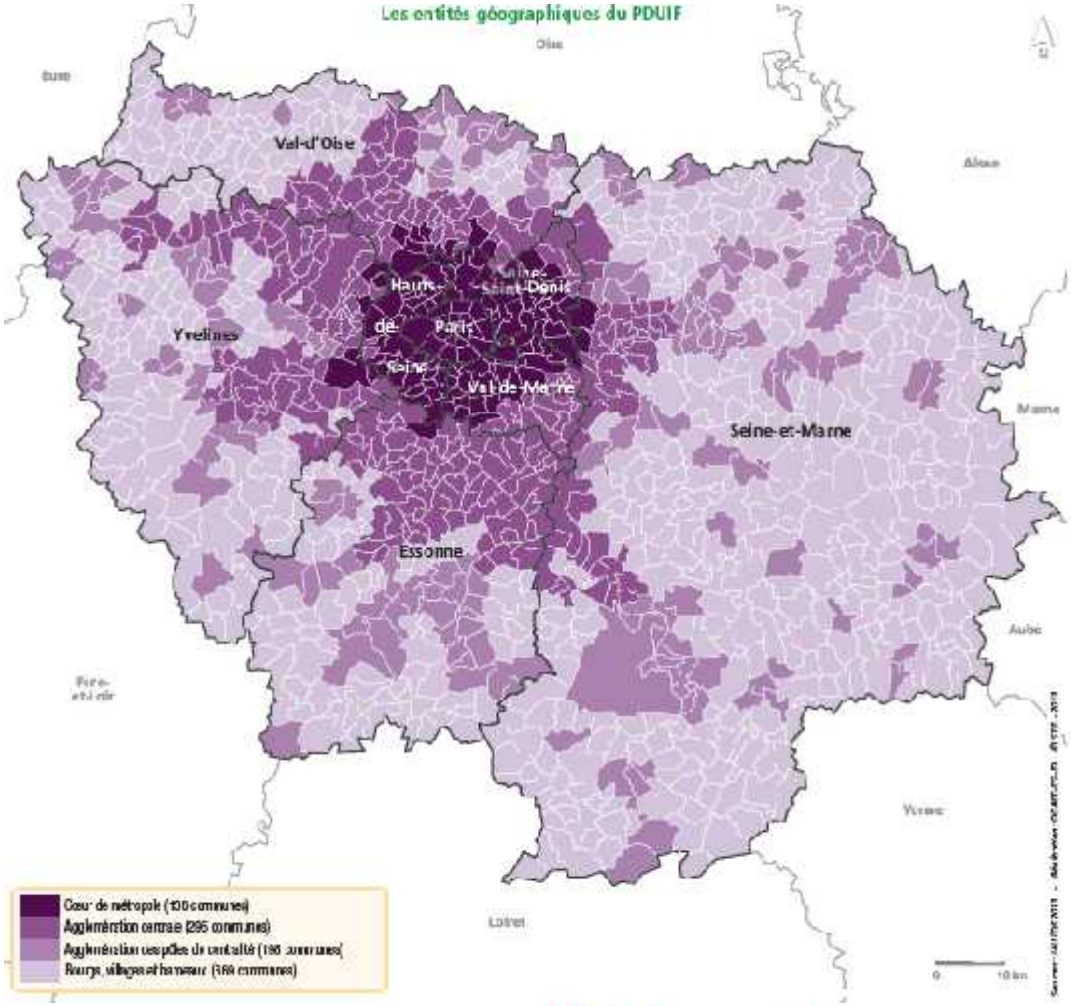
Ile de France plan for the deployment of Alternative Fuelled Vehicles (AFVs)

îledeFrance

1. Challenges

- The Ile-de-France (Paris Region) territory:
  - 11,7 million inhabitants
  - Very dense urban core : 75% of the region population lives on 20% of the territory
  - 2020: 12,4 million inhabitants

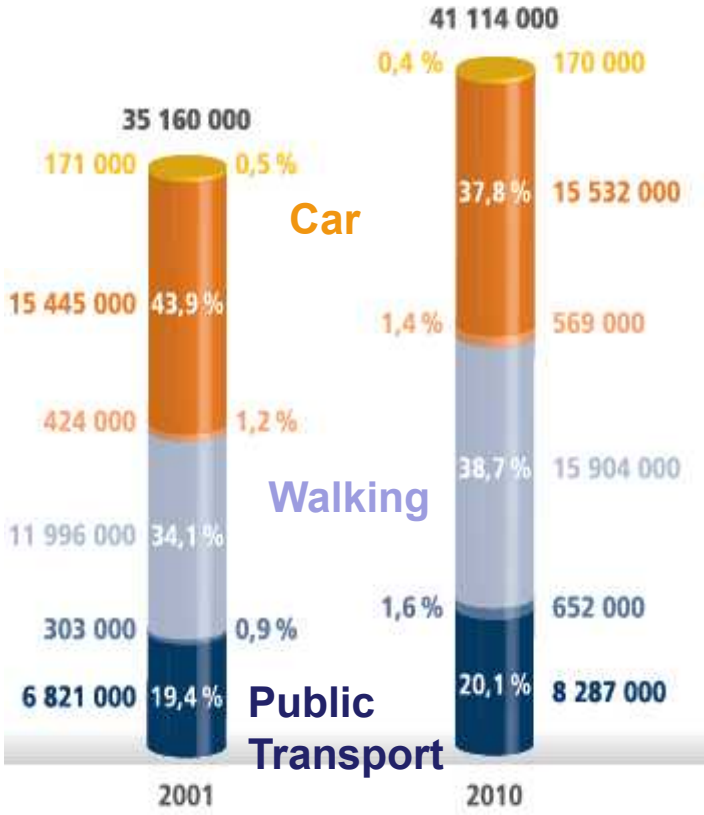


écran

1. Challenges

- 2001-2010: a positive development for public transport…
  - An increased use of public transport : +21%
  - A stagnating use of car : + 0,6 %
  - 41 million trips/day, distributed as follows:
    - 40%: active transportation mode (walking & cycling)
    - 38%: motorized vehicles
    - 20%: public transport
  - Daily trips: mainly short distances (under 10 km in average)
    - ➔ high potential to develop AFVs

Number of daily trips in the Île-de-France Region

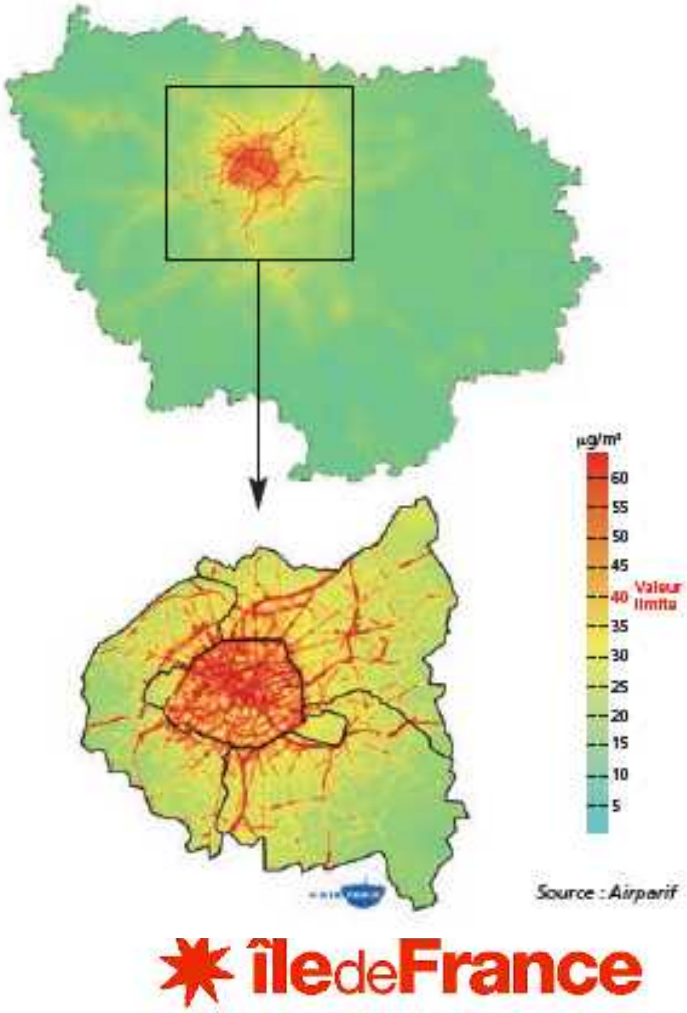


1. Challenges

- …. insufficient given the environnemental issues at stake
  - Private fleet: about 4,8 million vehicles, 60% of which are diesel cars
  - Air quality: high levels of particulate pollution experienced in the urban area
  - Road transport in Île-de-France (passenger cars and freight transport) responsible for more than 50% of nitrogen oxides emissions and 25% of particulate emissions
  - Greenhouse gases emissions : necessity of a 20% reduction in transport greenhouse gas emissions to achieve the "20-20-20" targets by 2020 in Île-de-France

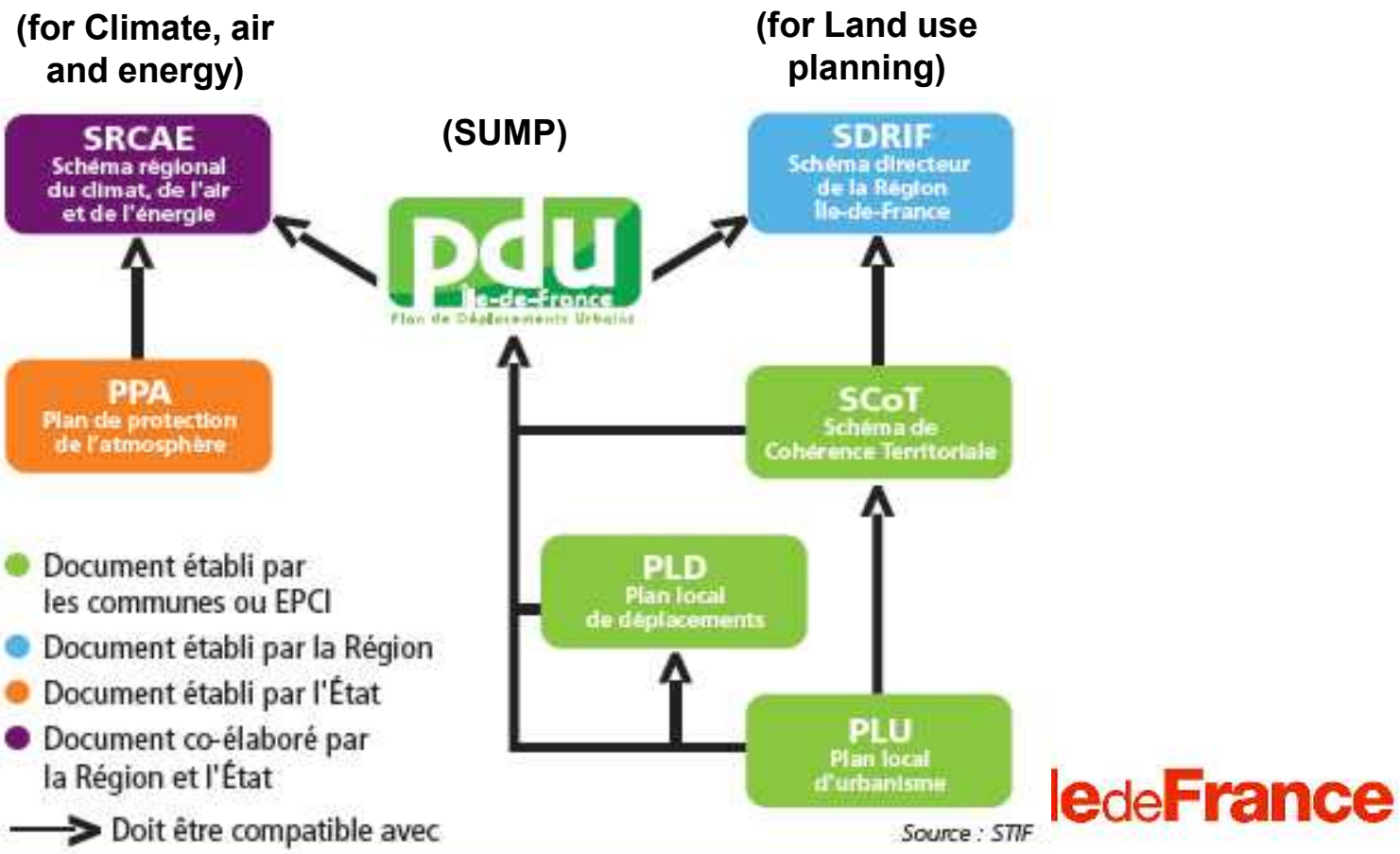
➔ Opportunity to develop AFVs

Nitrogen oxide in the Ile-de-France Region - 2010



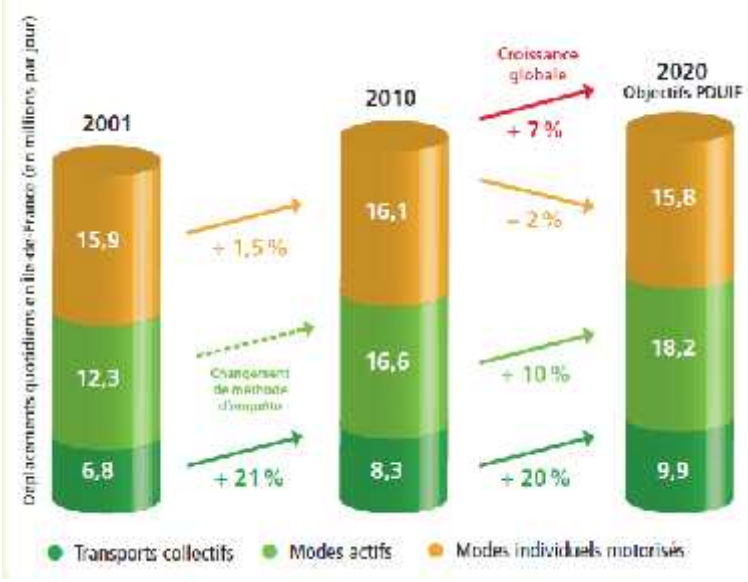
2. Commitment of the Region in sustainable development

New regional masterplans



3. SUMP 2010-2020: the set up of ambitious targets

- The objectives of a new modal shift :
  - Context: increase in trips of 7%
  - Increase in the use of public transport (+20 %) and active transportation modes (+10%)
  - Reduction of car travel (-2%)
- Encouraging the development of AFVs
  - National objective: 2 million AFVs by 2020
  - Contribution of Île-de-France: 400 000 AFVs by 2020



îledeFrance

4. Autolib': the first full electric and open-access car sharing service in Paris

- Public service delegation contract:
  - Launched by a group of 19 municipalities of the dense regional urban core, including Paris
  - Electric cars (Blue Cars) supplied by the Bolloré industrial group
  - Inaugurated in Paris in December 2011
- Autolib' currently offers:
  - More than 2 500 vehicles
  - 871 stations
  - 5 000 charging points, 1 000 of which are open to private vehicles
  - More than 40 000 subscribers
  - Available in 63 municipalities
  - Perimeter extended to 402 municipalities of the urban core

îledeFrance

Autolib' service fees and use rates

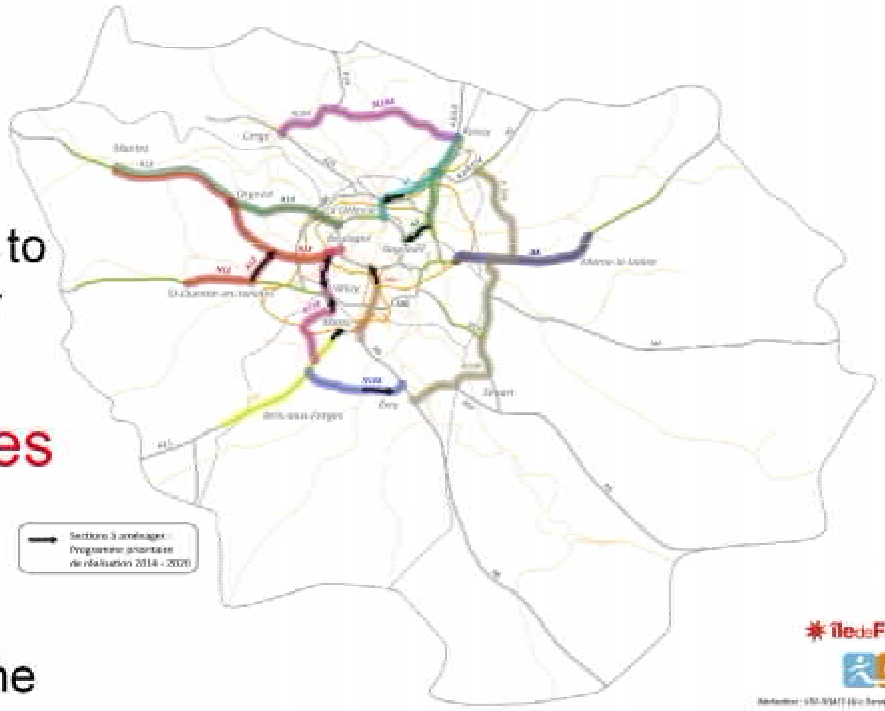
Membership	Subscription fees	Rates per each 30 min interval		
		First 30 min	Second 30 min	Additional 30 min
1 year	€120 per year (€10 per month)	€ 5,5	€ 5,5	€ 5,5
1 month	€25 per month	€ 6,5	€ 6,5	€ 6,5
1 week	€10 per week	€ 7	€ 7	€ 7
1 day	€ 0	€ 9	€ 9	€ 9

5. A new regional policy to encourage the use of AFVs and achieve the SUMP targets

- Creation of a network of charging points:
  - Objective : implementing 16 000 public charging points in the urban area
  - Density of charging points: 1 CP/750 inhab. Or 1 CP/375 jobs
- Development of gas compression stations:
  - Experimentation: objective of 6 stations by 2017
- Development of shared services with AFVs
  - car pooling, car sharing

5. A new regional policy to encourage the use of AFVs

- Promoting AFVs in mobility priority segments:
  - Increasing the part of AFVs in public fleets
  - Encouraging the public partners to get at least 25% of AFVs in their fleets by 2020
- Encouraging local authorities to develop measures in favour of AFVs:
  - Preferential areas or pricing in the Park & Ride
  - Dedicated lanes

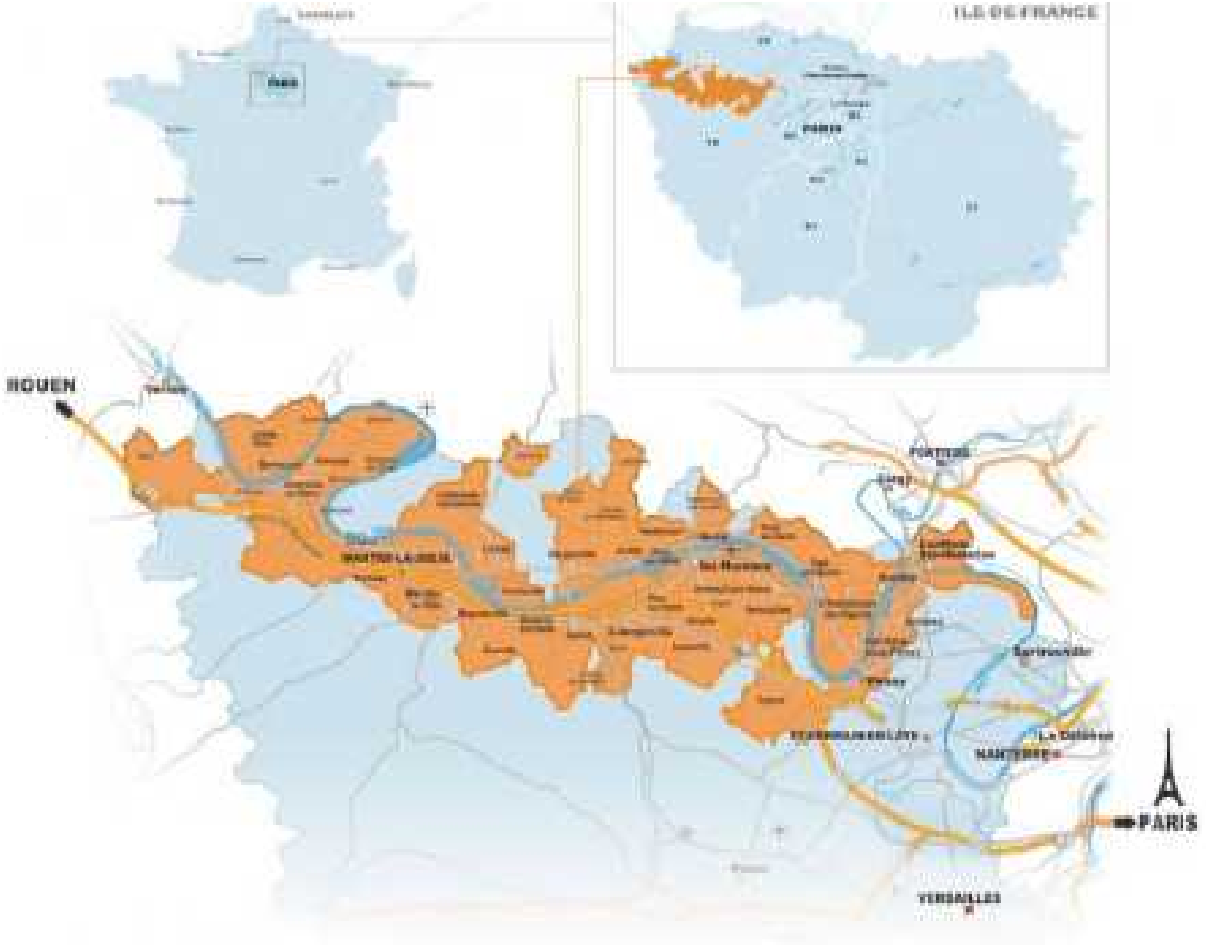


5. A new regional policy to encourage the use of AFVs

- The Region also aims at organizing a regional network of supporting partners
- Gathering public and private stakeholders involved in AFVs to:
  - Promote the deployment of AFVs:
    - Charging points
    - Shared services
    - Other measures
  - Collect data: quantitative and qualitative
  - Consider the opportunity of setting up a regional operator…

6. Examples of charging points networks supported by the Region

- Seine Aval
  - Project stake holder: Local Planning and Development Authority EPAMSA
  - Territory:
    - 400 000 inhabitants
    - 120 000 jobs



6. Examples of charging points networks supported by the Region

- Seine Aval: 2011-2012 SAVE Project

65 Véhicules Electriques

35 Kangoo ZE

20 Fluence ZE

10 Nissan LEAF

130 Points de charge

16 Points de charge Renault Mantes et SQY

48 Points de charge publics

66 Points de charge privés

40 Pionniers

22 Grandes entreprises

3 PME

4 Enseignes de grande distribution

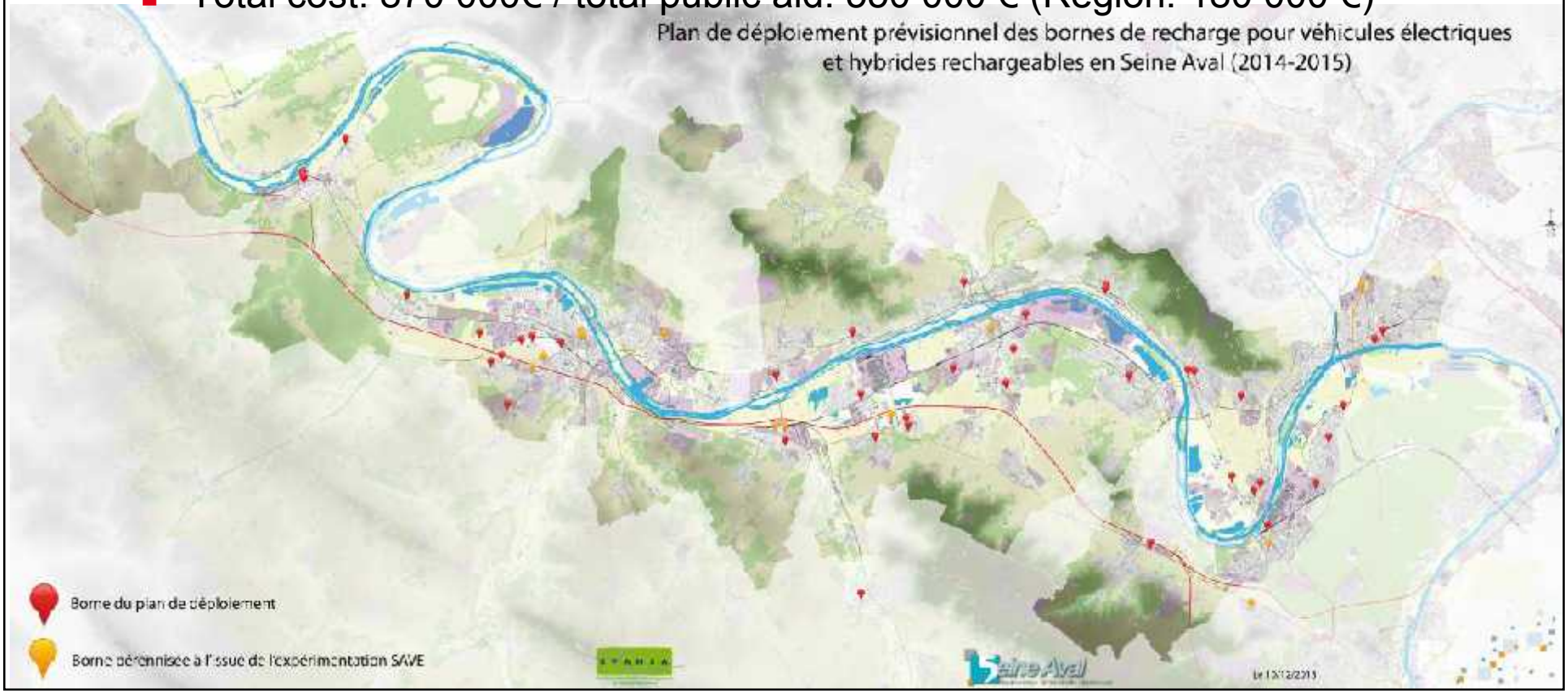
1 Université

6 Collectivités locales

4 Particuliers Artisans

6. Examples of charging points networks supported by the Region

- Seine Aval: 2014-2015 new deployment
  - 43 charging stations / 86 charging points
  - Total cost: 870 000€ / total public aid: 550 000 € (Region: 180 000 €)

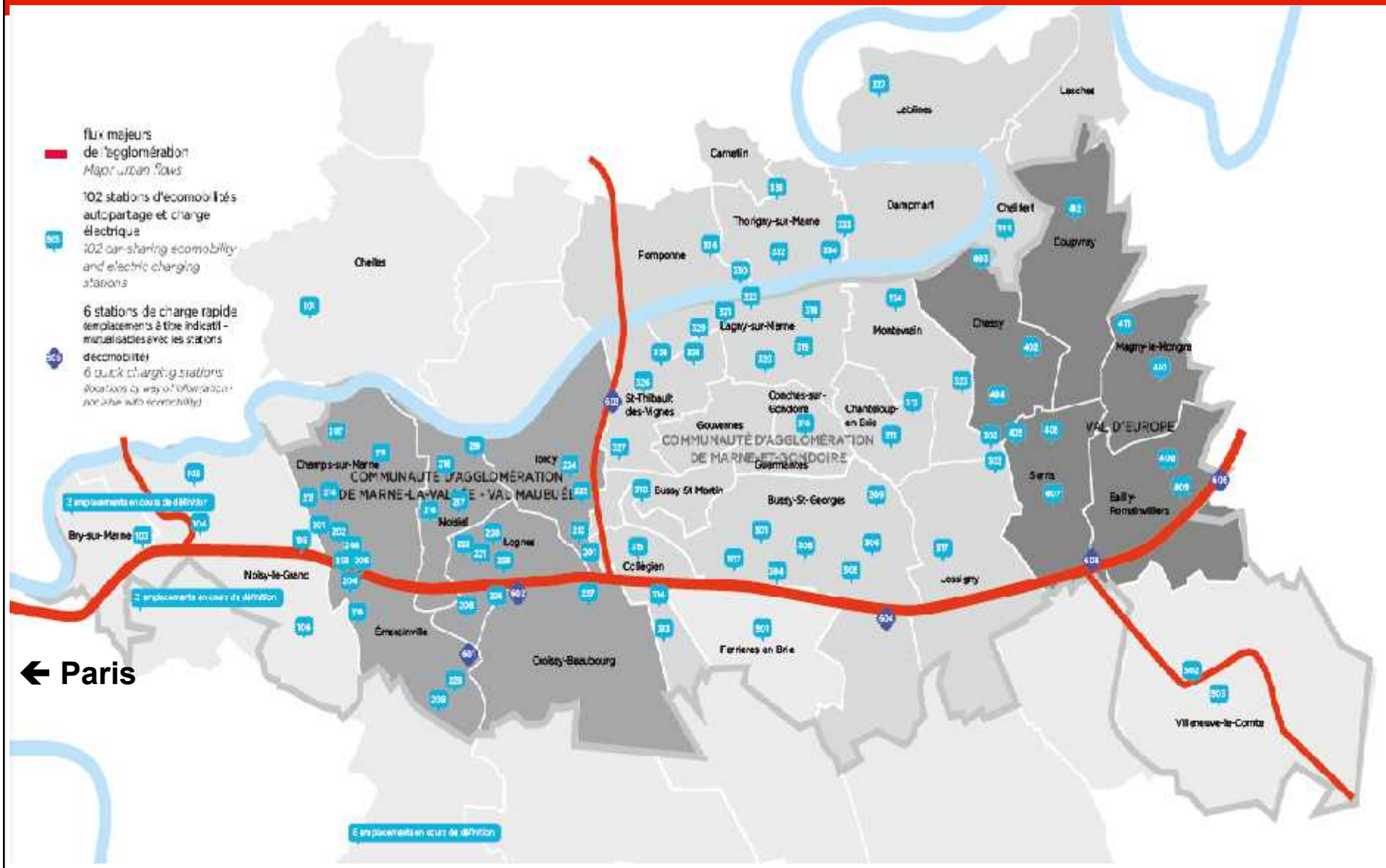


6. Examples of charging points networks supported by the Region

- Marne-la-Vallée
  - Project stake holder: Local Planning and Development Authority EPAMARNE
  - Territory: 300 000 inhabitants / 140 000 jobs
  - 125 charging stations/256 CP
  - Combined with a car sharing and ecomobility platform, in association with the European MOLECULES project
  - Total cost: 3,3 Million €
  - Total public aid: 1,5 M€ (regional aid: 750 000 €)

Station locale type
Typical local station

îledeFrance



écran

îledeFrance

recharge

Des bornes de charge pour tous types de véhicules.
Charging stations for your EVs.

auto partage
VOITURE ÉLECTRIQUE

Une voiture électrique à disposition pour vos déplacements courtes distances.
EV Car-sharing for your local needs.

covoiturage

Un lieu de rencontre covoiturage avec des trajets visibles sur cette station.
Car-pooling interface and meeting point.

deux roues

7. Role of Ile de France Region in European projects

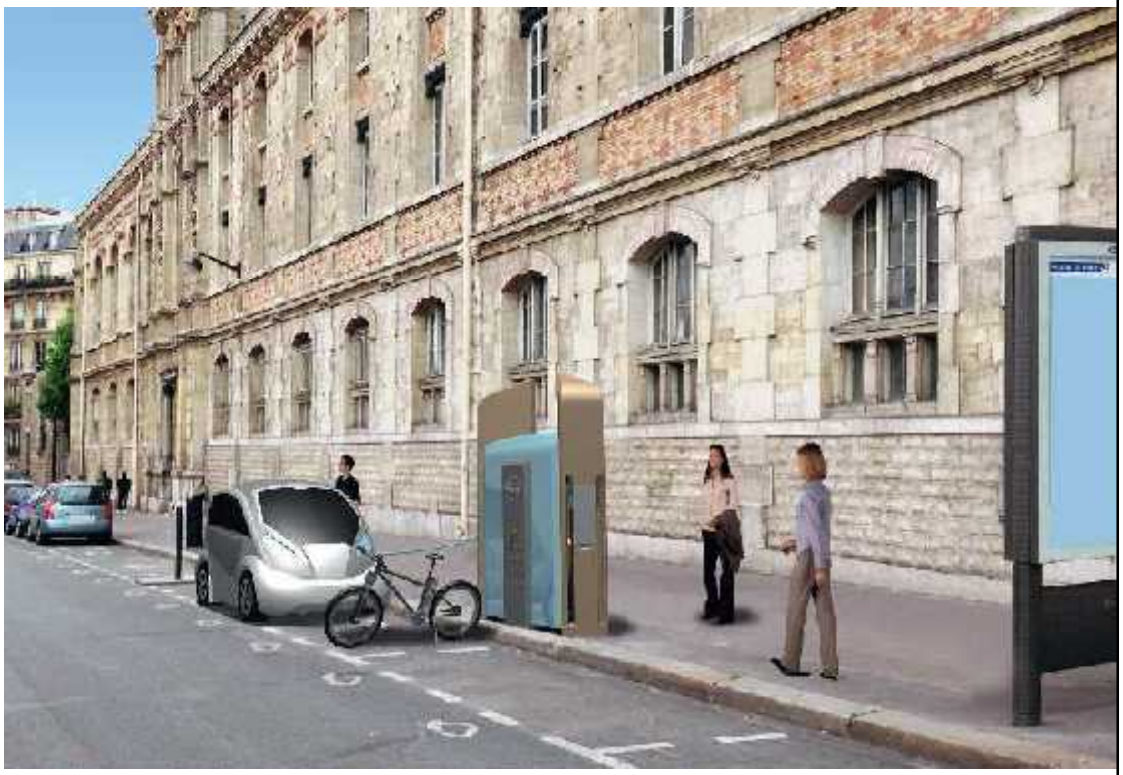
- Association to the European MOLECULES project
  - Key elements of the program:
    - to enhance intermodality with a fleet of electric vehicles
    - To offer a wide range of mobility services.
  - First demonstration that incorporates a wide range of services: car sharing, car pooling, passenger information
  - One single platform, developped by 3 large scale pilots in Barcelona, Berlin and Grand Paris
  - 2 territories in Île-de-France : Marne-la-Vallée and Neuilly-sur-Seine

7. Role of Ile de France Region in European projects

- CAFFENE Project: City Alternative Fuels For Environnemental New Knowledge
  - Overall aim: to provide new key information and understanding to reduce the use of fossil fuels in urban environnements:
    - Guidelines, best practices, recommendations, impact and scalability of the set of measures implemented in the different city regions…
  - AFVs include:
    - electric, plug-in hybrid and fuel cell vehicles,
    - internal combustion engine vehicles on sustainable gaseous or liquid fuels
  - The project will cover both private and public transport

6. Examples of charging points networks supported by the Region

- City of Paris
  - Project stake holder: City of Paris
  - Territory:
    - 2,3 million inhabitants
    - 1,8 million jobs
  - Autolib': 1 000 existing charging points
  - New deployment : 900 charging points



Thank you for your attention