



NEW MOBILITIES EMERGING IN PARIS

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Why Paris must take action

- Pollution is a source of concern because, in certain areas with heavy traffic, greenhouse gas emissions are reaching alarming levels.
- Particle levels are also high because of the large number of diesel vehicles:
 - 90% of utility vehicles,
 - increase of private vehicles running on diesel in Paris, from 40% to 75% in 10 years.

Political Objectives

- Political approach
 - Reset the balance in the sharing of road use between public transport vehicles, cyclists, pedestrians, etc.
 - Reduce car traffic
 - Encourage new mobility operators to emerge
- Decision to fight pollution
 - Limit the environmental impacts of traffic
 - Develop 'ZAPA' - priority action zones for air quality ("Grenelle 2" Law)
 - Encourage "soft" modes
 - Encourage use of electric vehicles

Some figures

- Development of bus lanes and cycle paths (700 km),
- Launched In 2007 “*Vélib*”, the public bikesharing system with 20 000 bicycles has now 250 000 annual subscribers with a daily ridership of 110 000 rentals. (among 200 millions journeys since 2007)
- More than 50% of journeys are made on foot.

2 new services which respect the environment have been launched:

- “*AUTOLIB*” / passenger transport
- “*VERT CHEZ VOUS*” / goods delivery

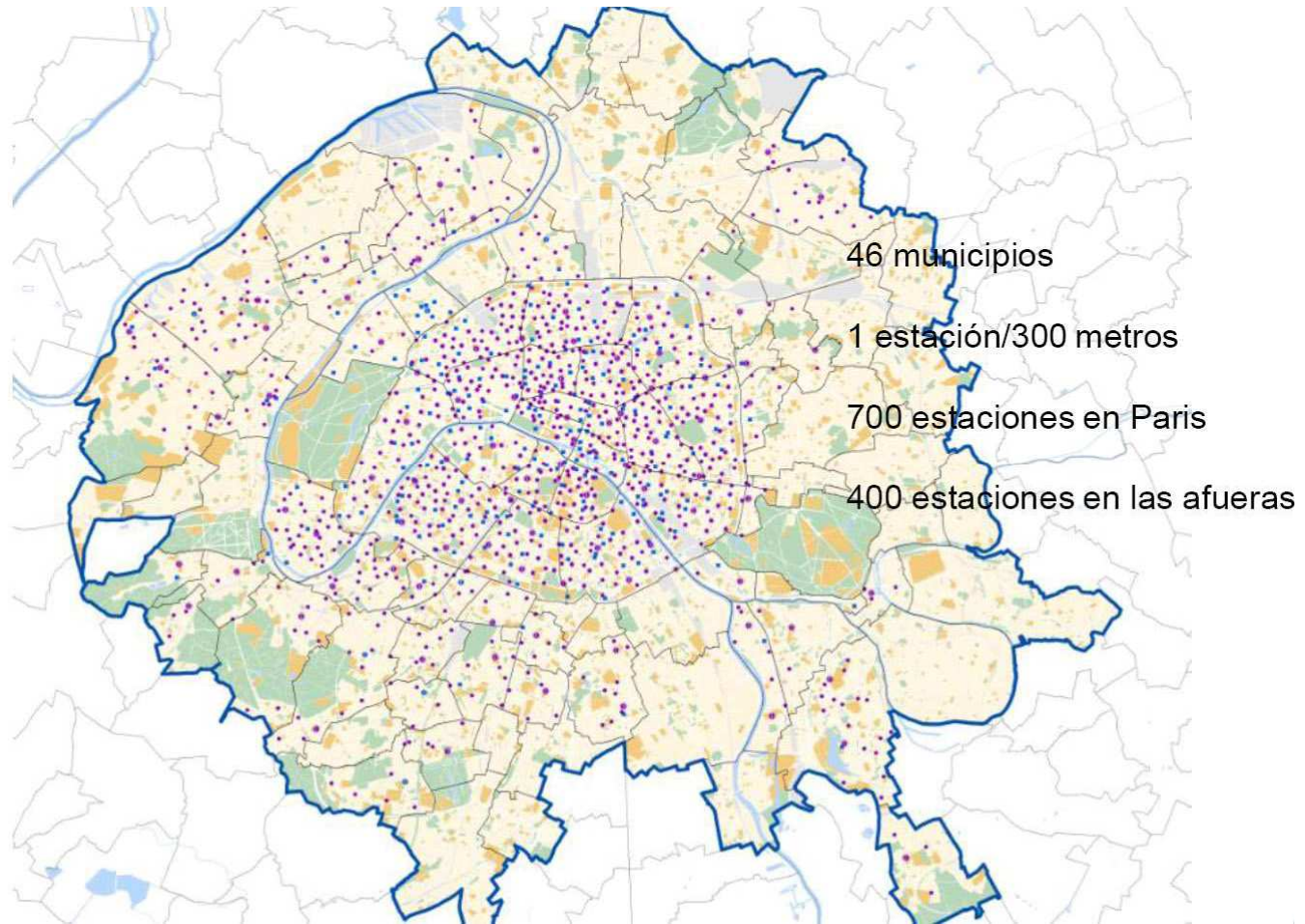
AUTOLIB'

Autolib' is an electric car sharing service, a follow-up to successful Velib' system. It provides its costumers with the use of a vehicle and a park place in a destination station (that can be reserved)





A dense network in the Paris area



The scale of AUTOLIB'

- The service uses 3000 electric vehicles. Known as “blue cars”, they are present throughout the *Ile de France* Region.
- It comprises 1100 stations including 700 in Paris (500 on-street and 200 in structures). Paris has, on average, one station every 300 metres. The service operates 24H a day.
- At the heart of the agglomeration, Inner Paris carries the highest percentage of traffic, making dedicated parking spaces necessary.
- On top of its 4 million inhabitants, Paris is visited each year by 20 to 30 million tourists, potential customers for *Autolib*.

Design of the Autolib' Project

- Autolib' is designed on a public-private partnership basis.
- The private partner takes care of all the necessary outgoings (stations, vehicles, running costs, royalties on revenue).
- The public partner provides some public space and pays an amenity grant (50K€ / station). The 700 Parisian stations represent a contribution of 35M€.
- The agreement duration is 12 years.

Expected Impact – First Results

- The system is designed to encourage the inhabitants not to use their own vehicle.
- Public transport and *Autolib'* can be combined.
- The 3000 “blue cars” could eventually replace 20 000 private cars. According to surveys, 20% of users interviewed thought they could manage without the second car of their household.
- *Autolib'* was launched in December 2011. Today, 600 stations are operational in Paris.
- The service has 35 000 subscribers and is used 2500 times a day. A vehicle is used for a daily duration of about 2 to 2 ½ hours.

Ecofriendly Urban Mobility for Goods



Some Facts

- While city-dwellers' behaviour and aspirations are more than ever oriented to less noise, less pollution, less congestion.... they still demand performance and efficiency for the delivery of goods.
- Regulations and legislators are evolving and many devices are appearing: shorter delivery time-slots, smaller vehicles, ZAPA, eco-tax, congestion charging, pedestrian areas, meeting areas, etc...
- Economic players are aware of their eco-responsibility and work towards this. However, transport costs remain strategic, priority issues.

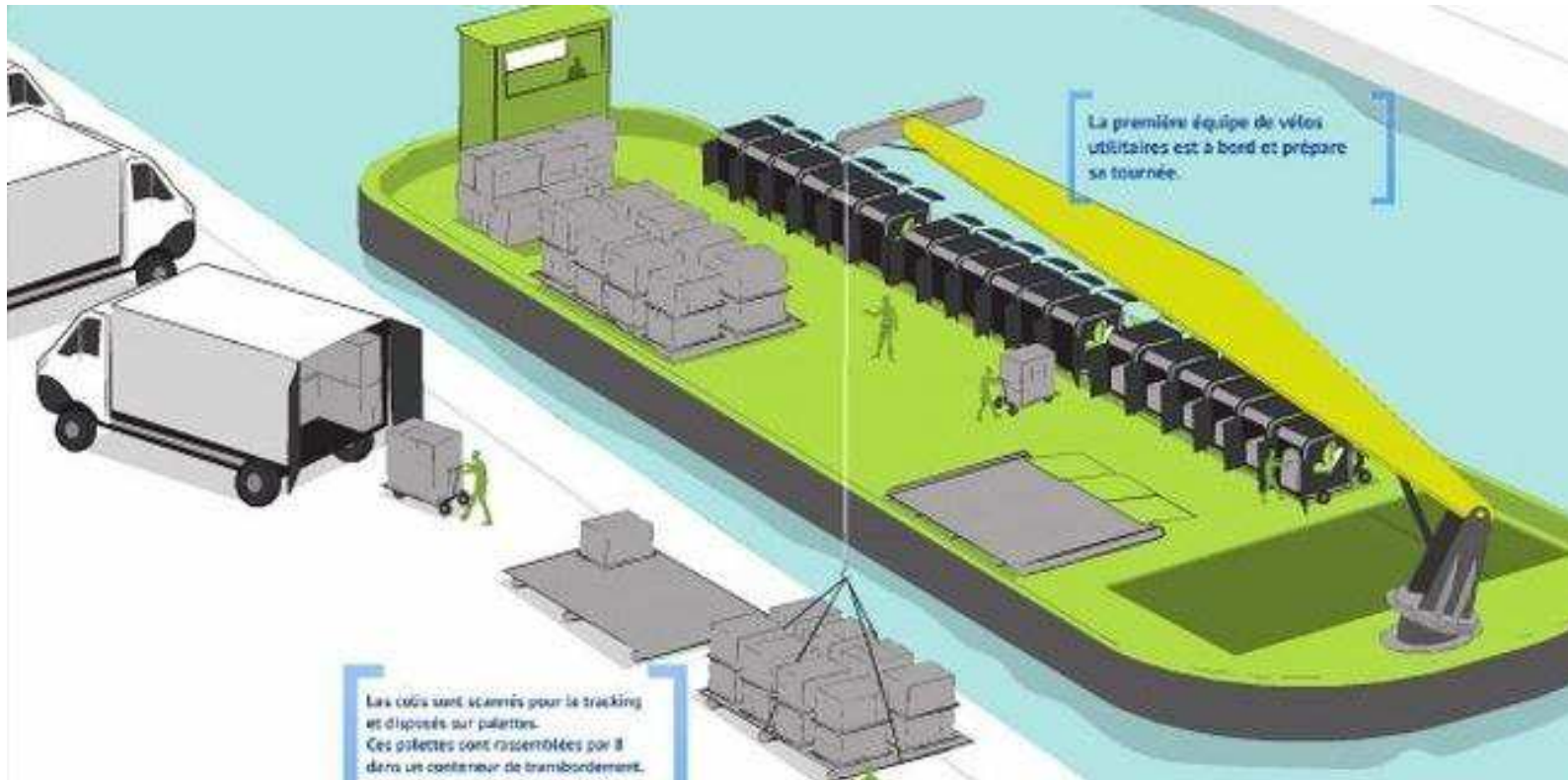
Vert chez vous

This company was formed in 2011 and specialises in the logistics of final delivery.

It is based on two principles:

- the use of vehicles that are 100 % clean
- a unique information system that ensures both economic and qualitative performance of the service

Floating logistics space and Electric utility bike



Electric Utility Bike: 2m³, 200 Kg load

- Makes it easy to transport up to 200 kg of goods in a radius of 10 km.
- Uses 2 to 3 removable batteries, each enabling it to cover around 12 km.
- Equipped with front and back suspension, ensuring the smoothness of ride necessary for fragile items.
- The most fluid and productive vehicle for local town journeys, it is authorised to use bus lanes and cycle paths. Its commercial speed is higher than that of a normal car.
- It allows doorstep delivery and never causes parking-related nuisance (double parking, etc.)



Functioning Principles

- The barge (floating logistics space) makes a daily return trip between two points along the Seine. It carries goods, bikes and delivery staff with the aim to deliver to all districts of Paris within the day.
- To this end, the company operates a fleet of 18 bikes used by three delivery teams: **at each stop, each of the three teams does a 1 ½-hour round carrying 2m³ of goods, before meeting the barge two stops further on.** Each deliverer makes 4 rounds per day, from East to West then West to East, thus delivering 8m³ of goods.

Increased productivity, improved service

- Allows distribution of double the volume of traditional rounds from a static warehouse.
- By grouping and concentrating the flow of goods, *Vert chez Vous* optimises delivery costs and offers more accurate delivery slots of 1 ½ hours, as opposed to the usual slot of a half-day, sometimes even a day.
- This solution turns the barge into a true roaming logistics platform, solving many urban logistics issues, including difficult access in the heart of the city, environmental and noise nuisances, congestion and the number of supply vehicles required.

A unique management tool

A “SO MO LO” approach enabling the exploitation of opportunities provided by geolocation tools, Smartphones and social networks.

Information which travels in both directions (ease of receiving last-minute information from client or consignor).

Transparent, 100 % real-time traceability.

Hyper-performing, 100 % secured WEB functioning.

A Smartphone application that can be used by all transport information users (consignor– carrier– recipients, professional or private).

Conclusion

The apparition of new mobilities in large towns results from a change of behaviour and lead to new organisations. There is a complementarity of approaches for passenger and goods transportation in large towns.

These approaches are inevitably multimodal

Thank you for your attention

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