HAROPA-Ports of Paris

Urban Logistics by waterways

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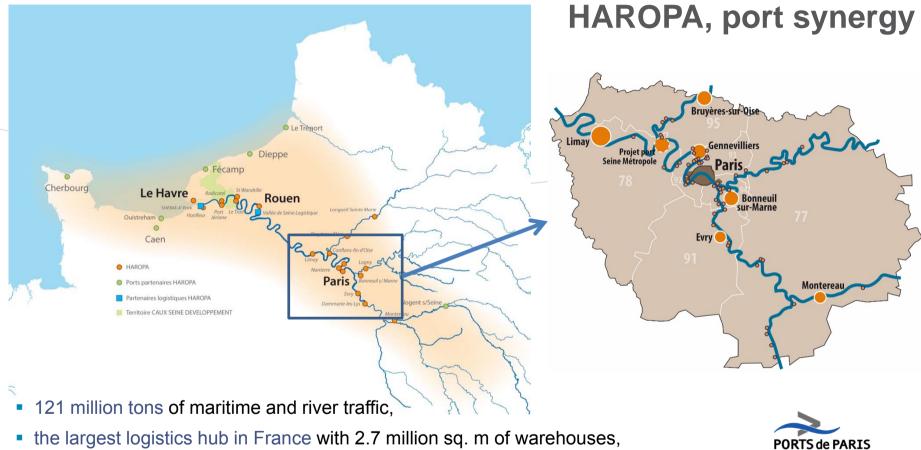
23rd May 2018



HAROPA Alliance

LE <u>HA</u>VRE + <u>RO</u>UEN + <u>PA</u>RIS PORTS





NHAROPAT

- the largest logistics hub in France with 2.7 million sq. m of warehouses,
- € 1.2 billion investments for the coming years,
- 160,000 direct and indirect jobs.

HAROPA, port synergy

LE HAVRE

ROUEN

PARIS

Deep sea port leader

- Reception port for giant container vessels without any tidal constraints
- Asia = 1st market (55% share)

The largest Europe grain port

- Specialist on **cereals** and **breakbulk**
- Hub consolidation for North / South trade (West Africa)

Top inland port in France

- 1000 ha port area,
- 1 M sq. m logistics warehouses

Maritime traffic

(2017): 93 Mt

Containerized traffic

(2017): 3 M TEUs





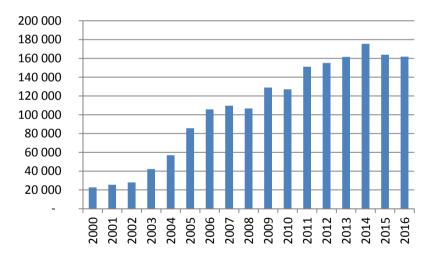




HAROPA, port synergy

River traffic of containers between Le Havre and Paris Region (Ile-de-France)

TEUs







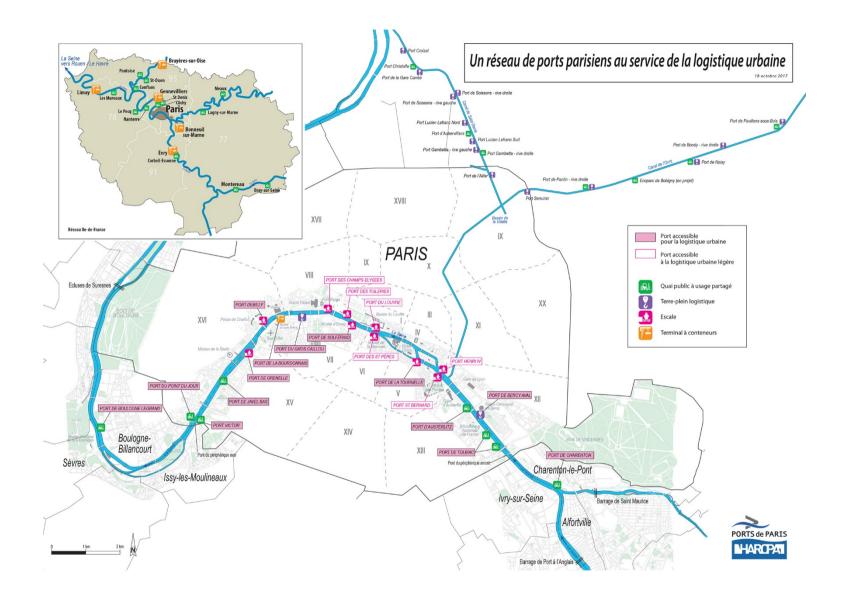
Inland waterways city distribution



1st inland port in France, 2nd in Europe

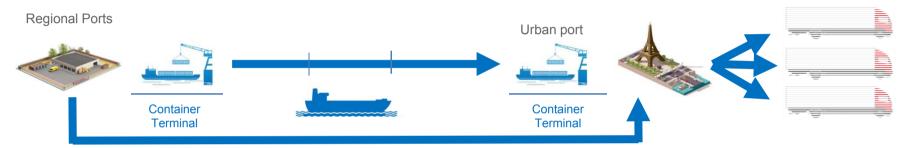


- 70 ports network
- Land : 1 000 ha
- Warehouses: 1 000 000 m²
 (400 000 m² property of Ports of Paris)
- 1st world inland port for tourism: 7,5 Millions passengers/year
- Create a link between regional platform and urban ports in the inner city
- Enhance mobility of goods and reduce CO2 emissions
- Use of clean road vehicules for the last mile distribution (Euro-6 Gasoil, Gas, Electric, etc.)

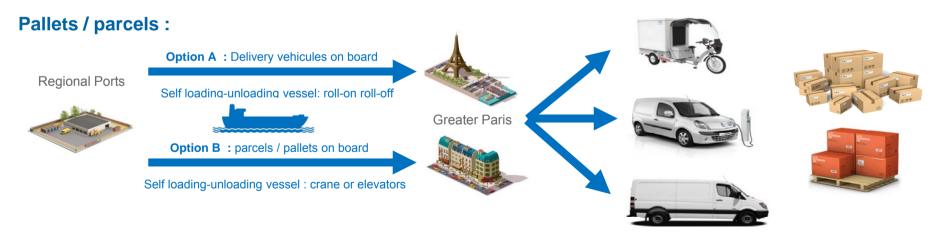


HOW TO USE WATERWAYS FOR CITY DISTRIBUTION?

Containers / Swap bodies :

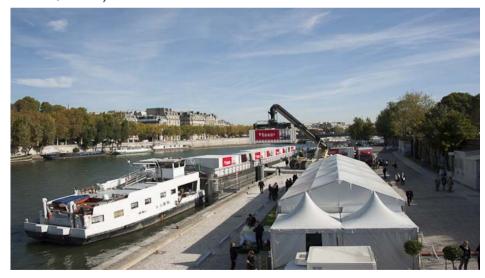


Self loading-unloading vessel : crane or roll-on roll-off



Franprix

- 40 swap bodies / day delivering 300 shops
- A public/private success story
- European innovation
- A solution to environnemental issues (↓CO2, ↓NOx, ↓congestion, ↓accidents, etc.)









Operational since august 2012 80 meters long vessel Swap Bodies 24 & 27 feet









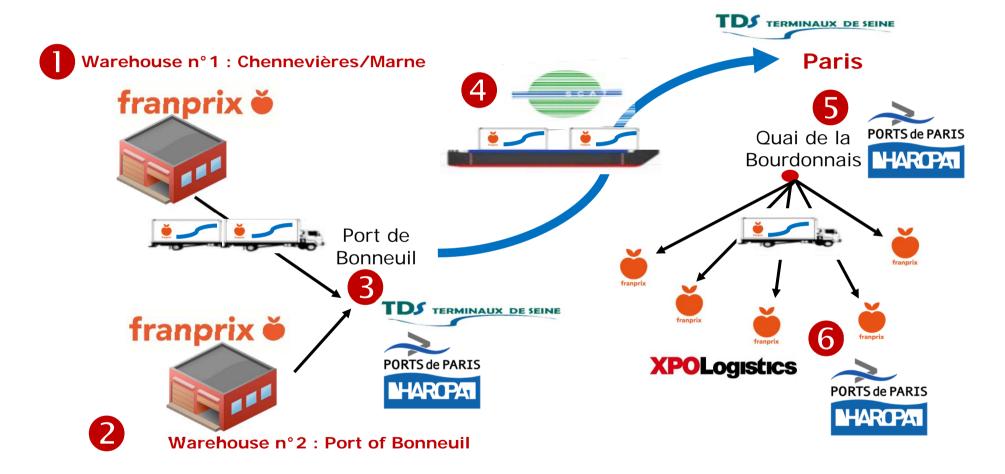
Euro-6 trucks, PIEK noise norm

Gas trucks are coming in 2018-2020

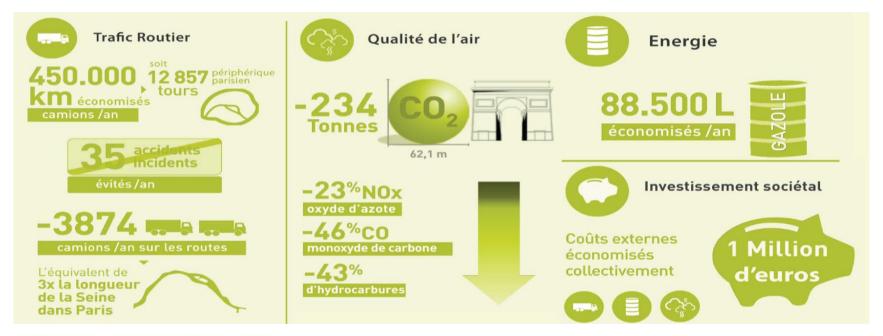




FRANPRIX: SUPPLY CHAIN DIAGRAM



ENVIRONMENTAL BENEFITS









This new operation must be seen as a system

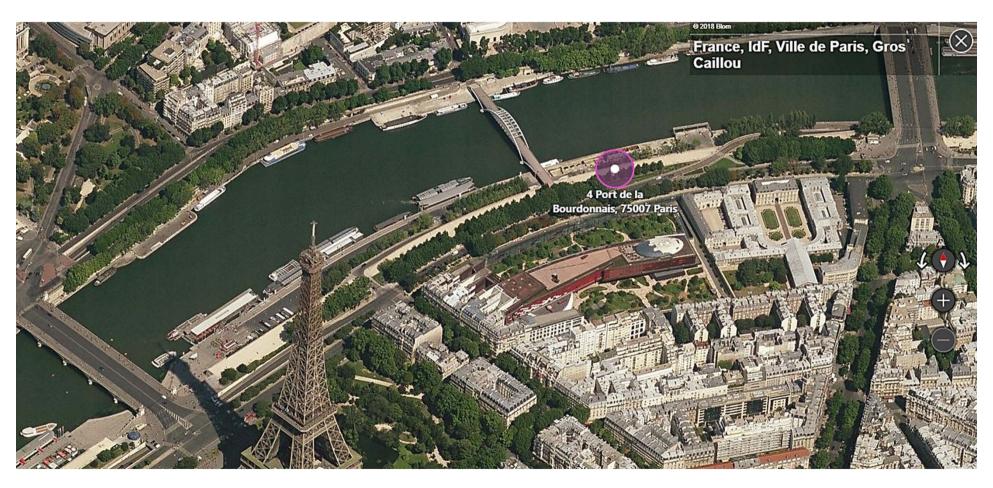
- We created conditions to handle swap bodies or containers in the center of Paris every day.
- The system can be connected to any other platform in Paris region and even to Normandy (Rouen, Le Havre).
- The transhipment platform is fully open to other clients
- It's a new way to deliver Paris for a lot of carriers

Urban Integration:

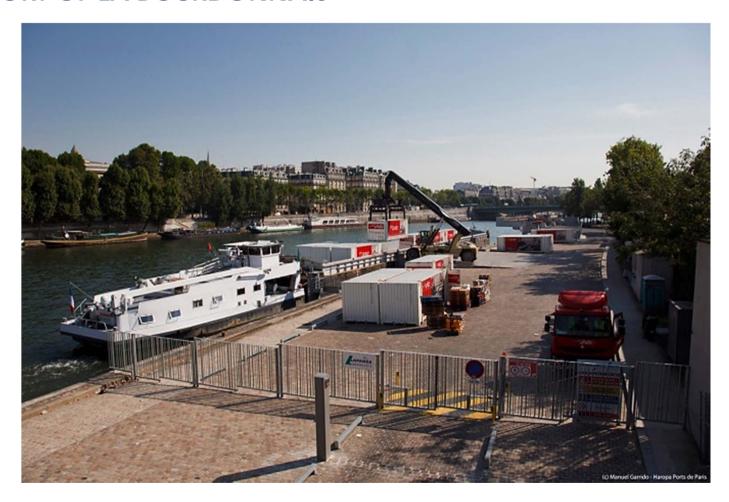
- High quality materials (light, pavements, fences, etc.)
- Cohabitation between pedestrians and freight activities
- Agreement with the City of Paris: time-sharing activities on ports



FRANPRIX: PORT OF LA BOURDONNAIS SITUATION

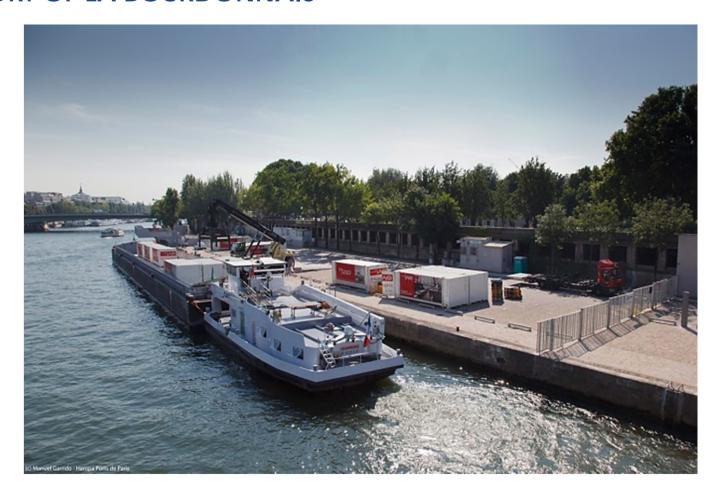


PORT OF LA BOURDONNAIS



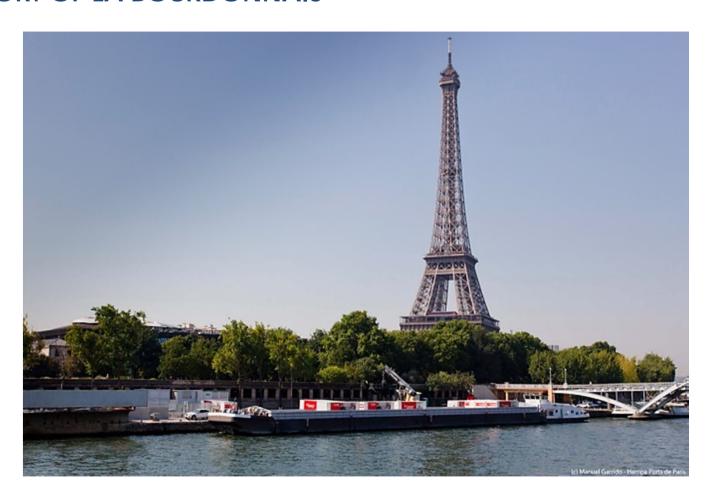


PORT OF LA BOURDONNAIS





PORT OF LA BOURDONNAIS





BUILDING MATERIALS EVACUATION ON PORT OF LA BOURDONNAIS



City Distribution: self loading-unloading vessels



New boats for new clients

- Distribution
- Parcels deliveries
- Restauration
- Cars distribution













Crane Barge

• 86 m x 11.55 m

Maximum tonnage: 2,152 t

Capacity: 144 TEU

• Crane characteristics: 30 tons max. distance 30







Pallet/roll self-unloading vessel

- 70 m x 6.5 m ground capacity thus 450 m²
- Capacity: approximately 900 pallets
- Air draught: approximately 5 m







Roll-on Roll-off self-unloading vessel

- 80 m long
- Adaptable to all Ile-de-France (Paris Region) quays
- Hybrid-powered, and 100% electric in cities





Distri-Seine, developed by CFT/Coalis – Prototype COP21 Décembre 2015

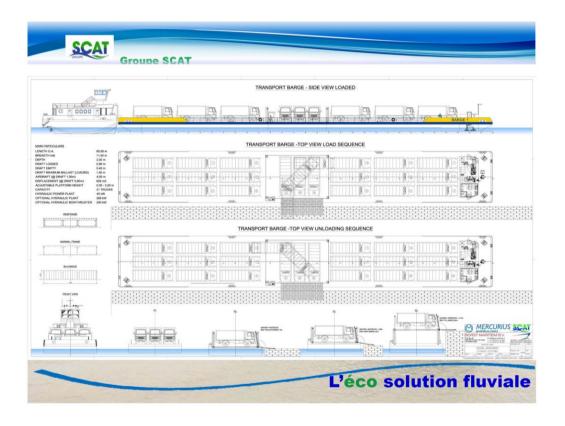








Roll-on Roll-off self-unloading vessel developed by SCAT company





Pallet Shuttle Barge developed by Blue Line Logistics (Belgium / France)

















Palets and rolls

Containers







Roll-on Roll-off: deliveries vehicles

Building materials and waste



Waste by inland waterways









- Cinders
- Papers
- Plastics
- Bulk
- Industrial
- Materials



Waste in containers







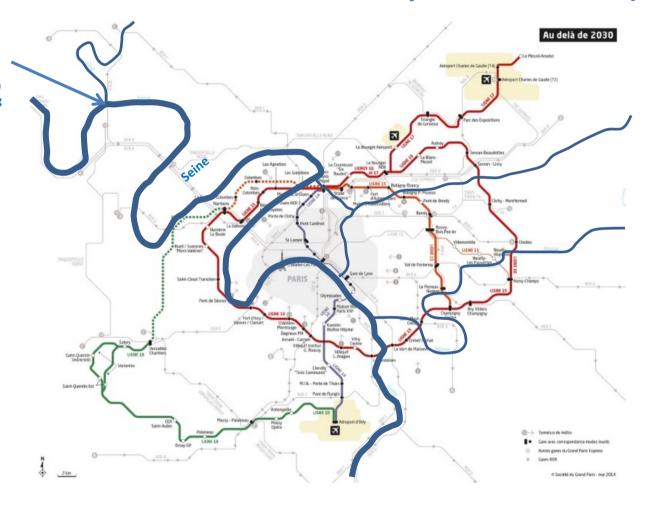




Construction of a new subway : Greater Paris Express

Port Seine Métropole Ouest:

New port (100 ha) to handle building materials and waste



Inland
waterways will
be used to
bring building
materials and
evacuate
building waste

Innovative concepts







