

A digital twin to support
the energy and ecological
transition of ports



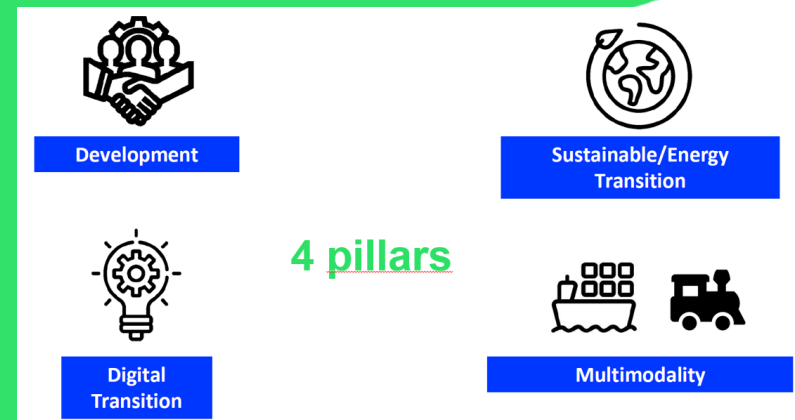
HAROPA
PORT Le Havre
Rouen
Paris



HAROPA PORT

France's leading port

- No. 5 port in Northern Europe
- No. 1 French port for foreign trade and container traffic
- No. 1 European river port for passenger transport
- A population catchment area with 25m consumers:
 - The no. 1 consumer market in France and no. 2 in Europe
 - The no. 1 logistics region in Europe



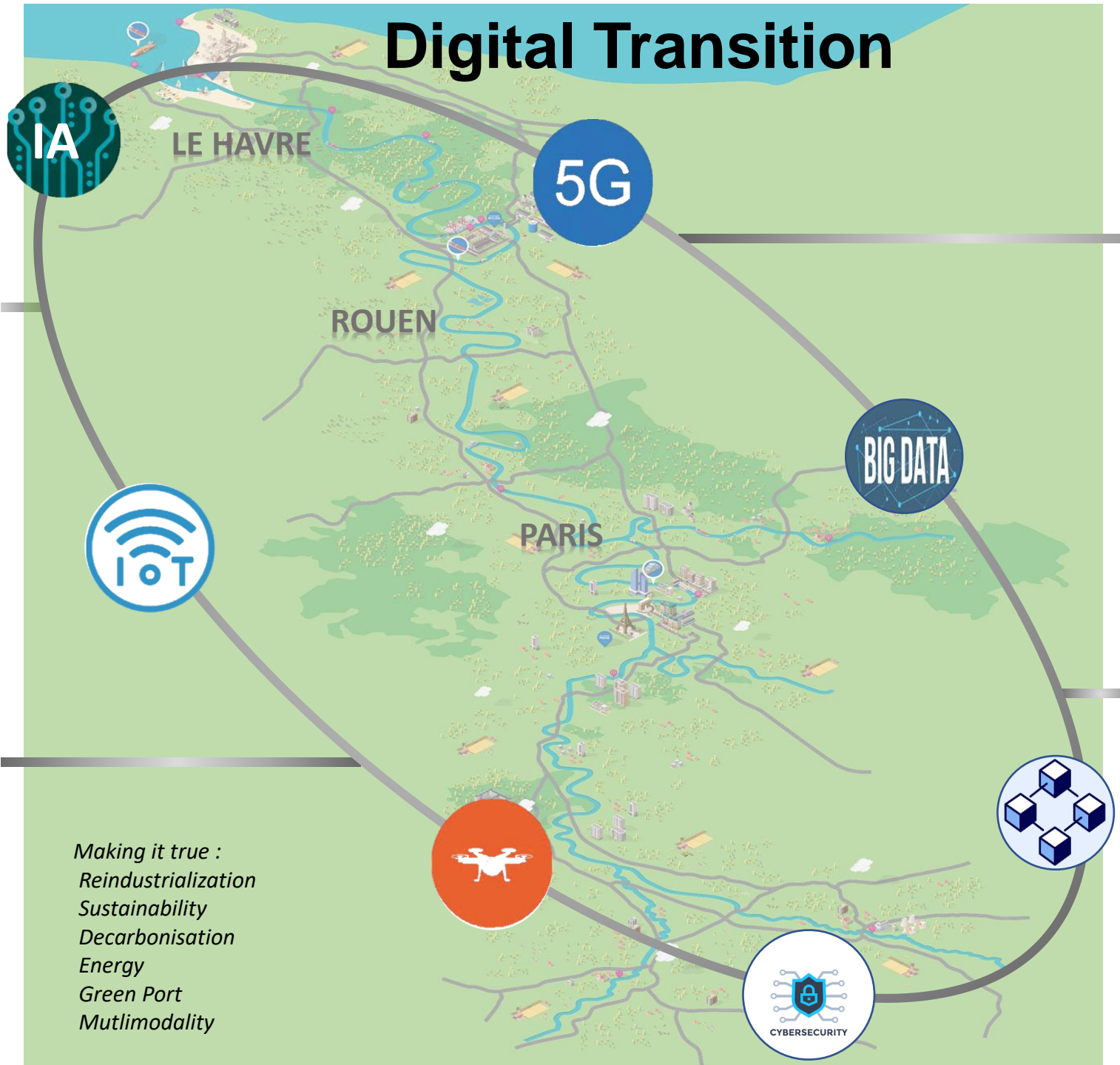
Digital Transition



FLUIDIFY AND SECURE
GOODS TRANSIT ON THE
SEINE AXIS THANKS TO
ADVANCED
TECHNOLOGIES



BE AN INNOVATION
INCUBATOR IN A
DYNAMIC ECOSYSTEM



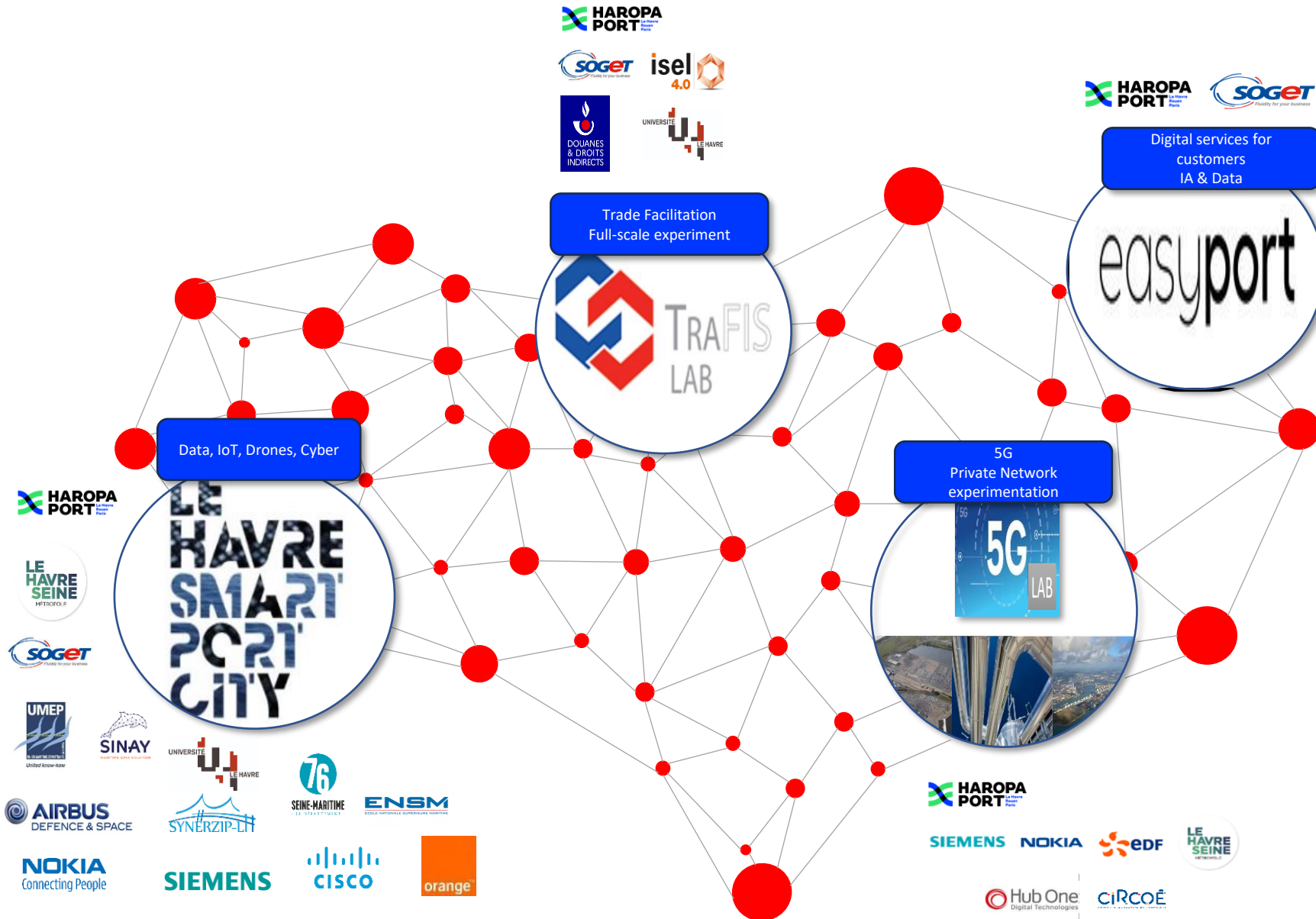
MAKE INNOVATION AN
OPERATIONAL
PERFORMANCE LEVER



DEVELOP A NEW MODEL
OF INTEGRATED URBAN
AND INDUSTRIAL-PORT
TERRITORY

Making it true :
Reindustrialization
Sustainability
Decarbonisation
Energy
Green Port
Multimodality

HAROPA PORT - Innovative Digital Ecosystem



SOGET and HAROPA PORT launch a new digital startup

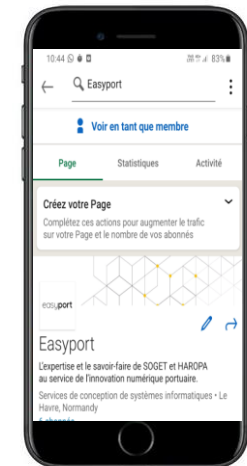
easypport

**The software world
and the port universe
raise the anchor
for Innovation!**

The easypport grouping is an economic interest grouping founded in 2022 between SOGET, a software publisher from Le Havre and HAROPA PORT, a major river-sea port on the Seine axis.

To offer to the actors of the Supply Chain, the best experience of the port passage and the goods

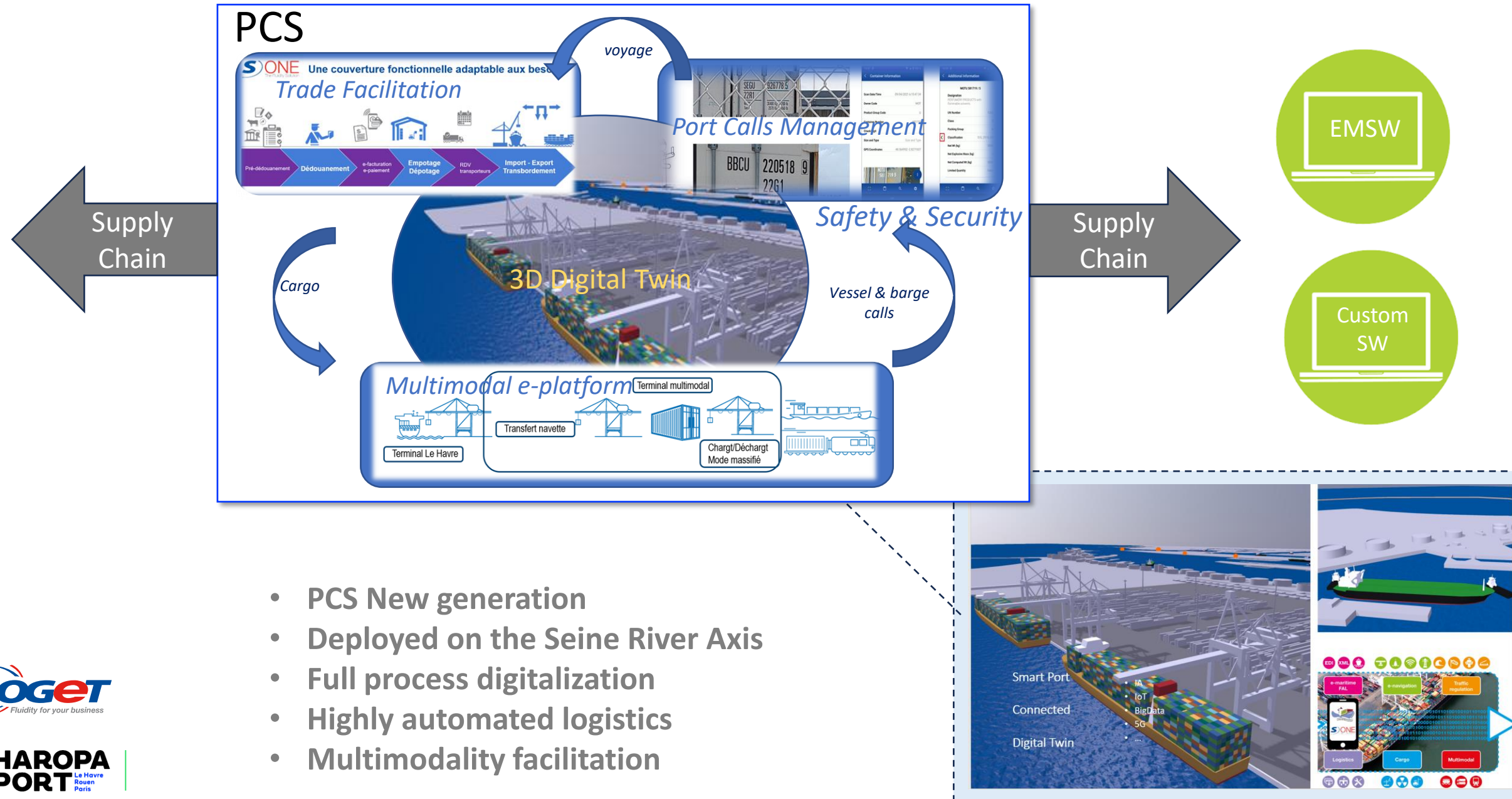
Founded in 2022, easypport's mission is to optimize and make your port flow more reliable and to ensure an optimum transit time. It is at the service of the port world to offer you innovative solutions to go even further in the fluidity of commercial exchanges.



[More about Us »](#)



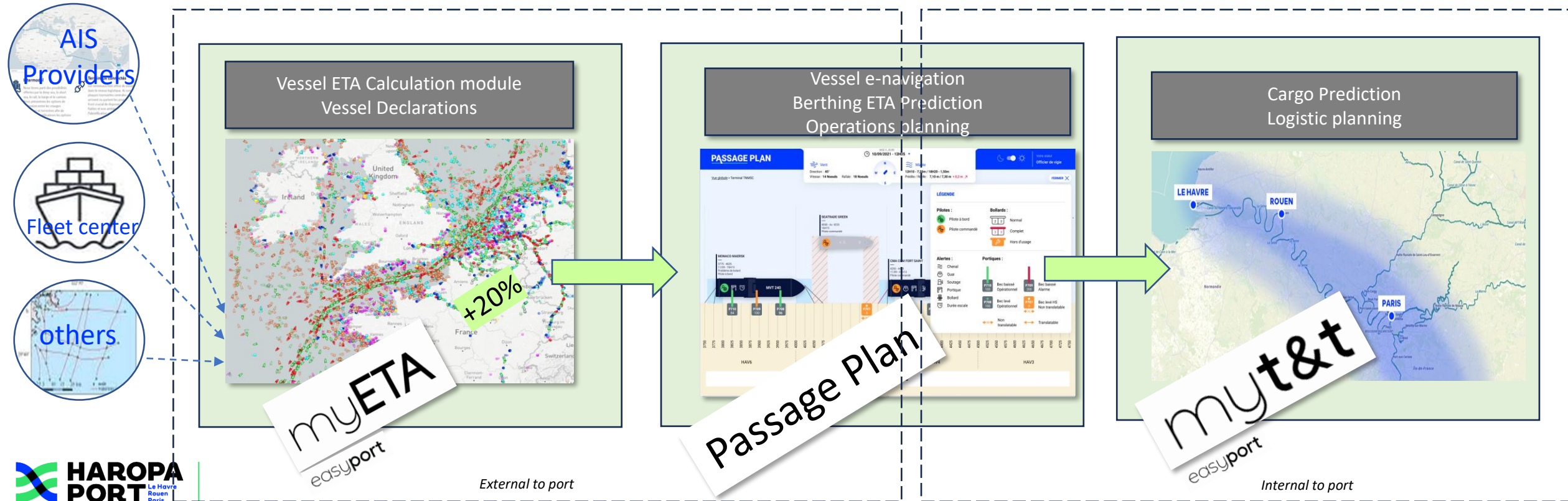
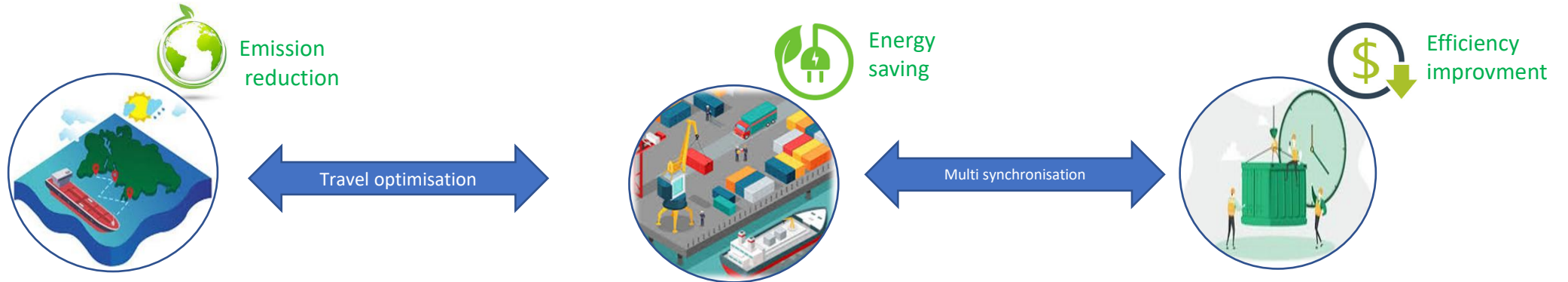
PCS 4.0 – Streamline & secure goods on the Seine axis



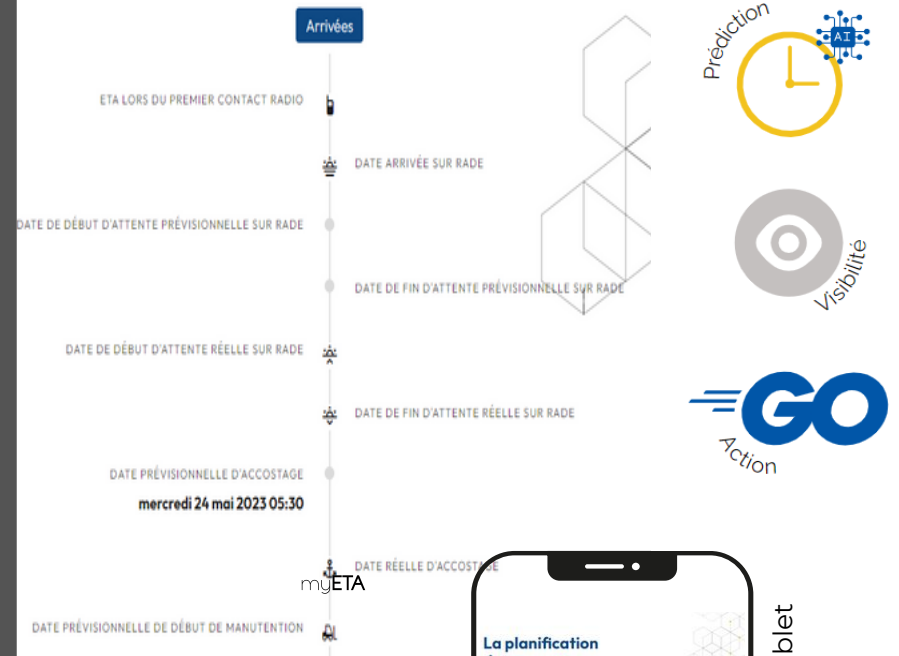
- PCS New generation
- Deployed on the Seine River Axis
- Full process digitalization
- Highly automated logistics
- Multimodality facilitation

A Digital twin for seamless vessel operations

(Phase 1 achieved)



myETA When will your goods arrive at HAROPA PORT ?

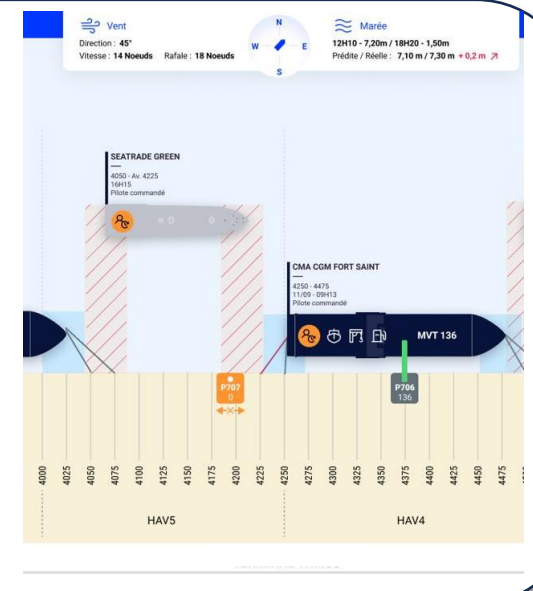
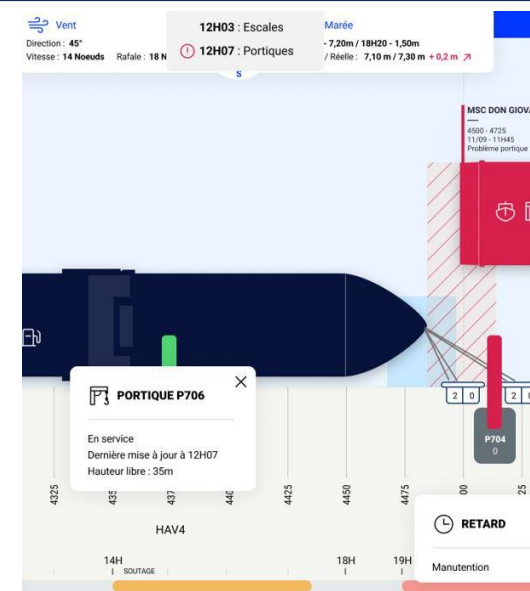
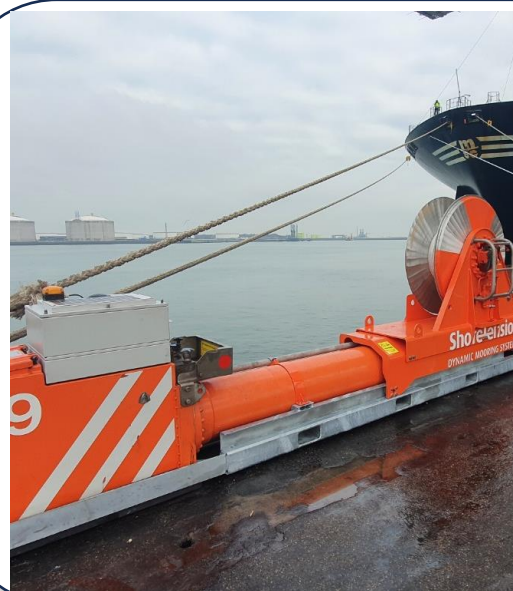
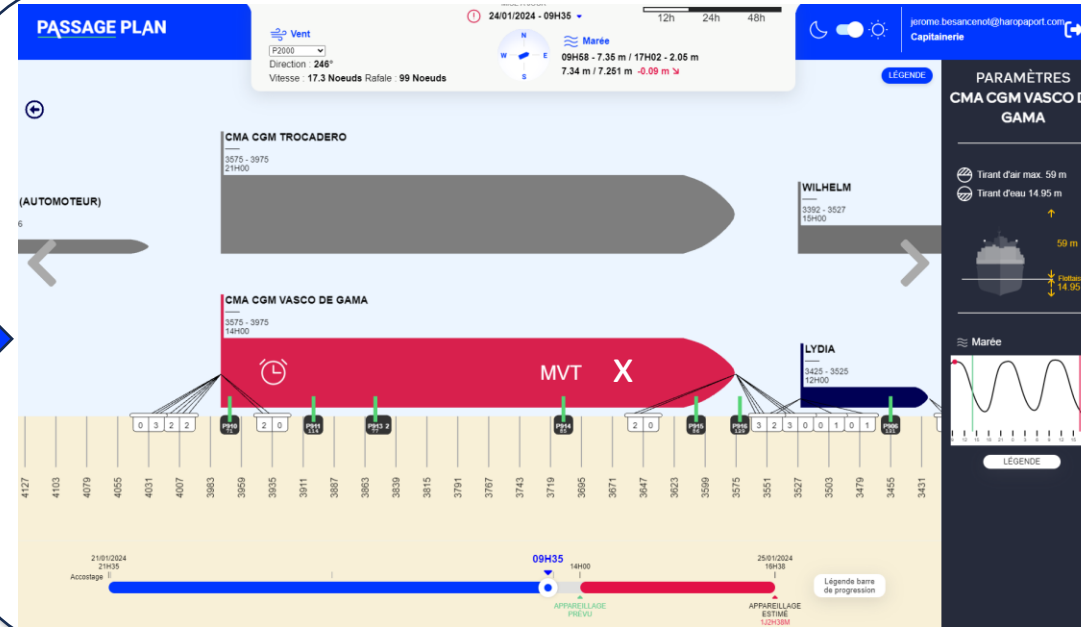
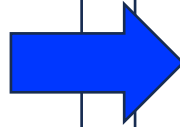


smartphone & tablet

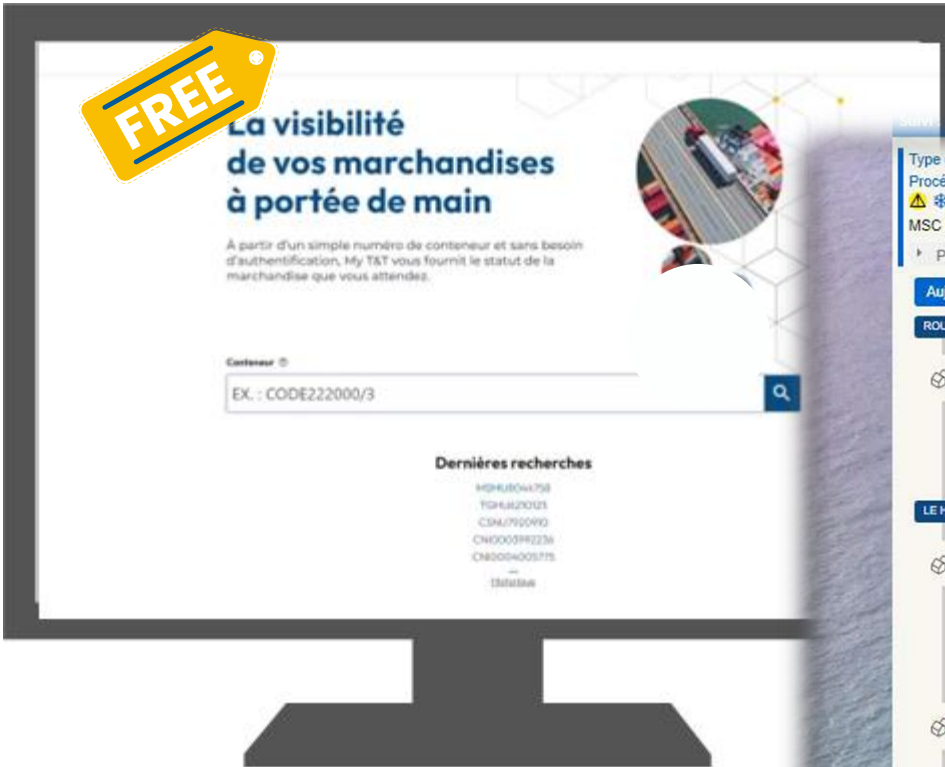
easypport

Passage Plan : digital modeling of quayside port operations

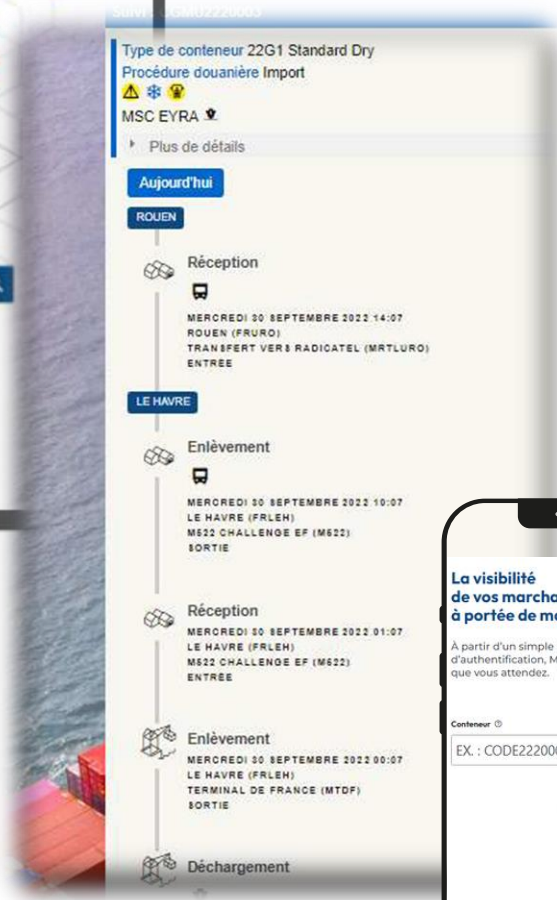
- Nautical information (real & predictive)
- Operational information (real & predictive)
 - Berth stay
 - Ship draft
 - Ship air draft
 - Clear under keel
 - Tide progression
 - Wind, gusts
 - Mooring tension and lines
 - Metric points, mooring bollard
 - Gantry crane states, location
 - Ongoing progress report
 - Operations
- Stakeholders' agendas sharing
- complementary system to the PCS



myt&t visibility of your goods' movements



easypport



smartphone & tablet

Precise measure for GHG reports



Reduce internal costs related to meeting CO2/GES and CSR regulatory obligations.



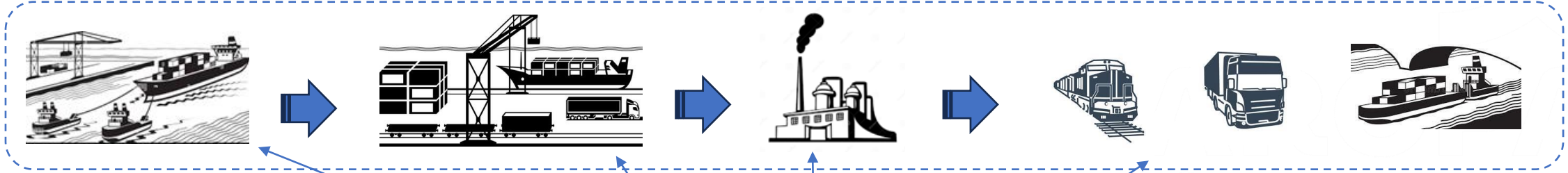
Check the relevance of choices and collaborate positively with transport providers.



Use reliable indicators to initiate an improvement plan and share objectives with customers.

A digital twin for greening Port operations (phase 2 in 2025)

Green Energy needs



Predict activities

Planify activities

Activities follow-up
energy Consumption

Synchronise activities &
connect multimodality

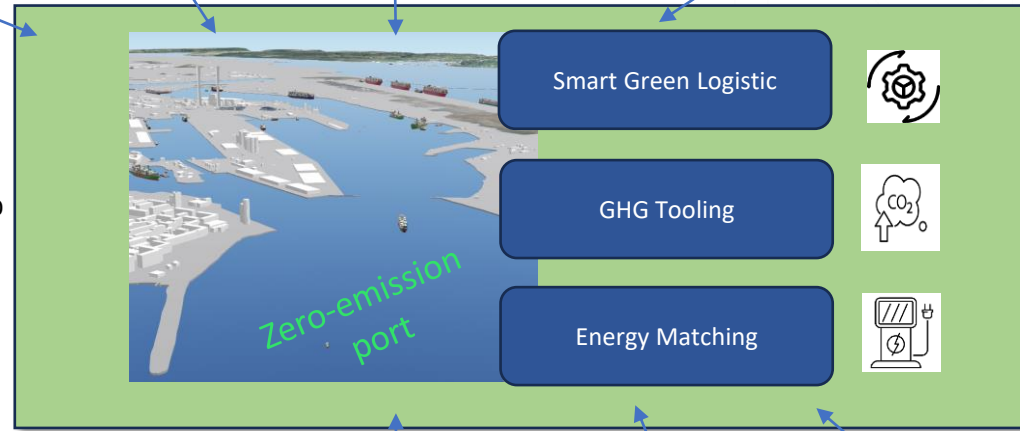
MAGPiE
SMART GREEN PORTS

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Funded by the European Union

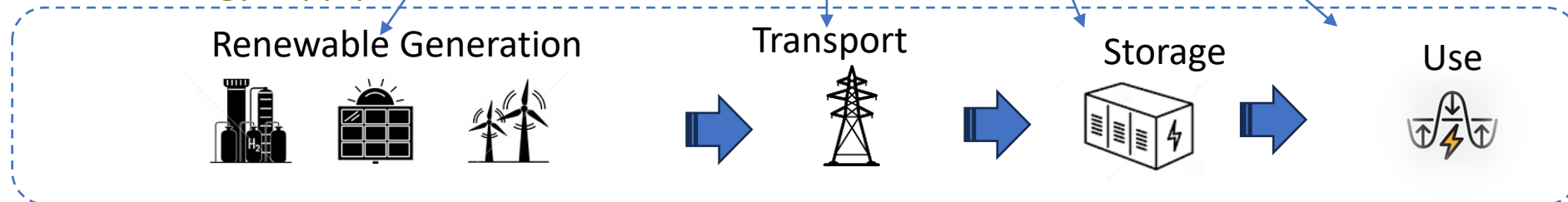
Port of Rotterdam
HAROPA PORT
PORTO DE SINES
DeltaPort

WP 4 – Digital Twin



Barriers to progress :
Change Management
Additional data to be defined
How to Collect Data ? (regulation/incentive)
Sharing Data
Port Role in energy production

Green Energy supply



Planify energy needs

Optimise energy production

Optimise energy storage

Optimize energy consumption

Thank you for your attention !



Connection makers

