



# Implementing GRIP-ESMS in the Port of Vukovar

DANUBE COMMISSION

Expert Meeting on the Development of Ports and Port Operations  
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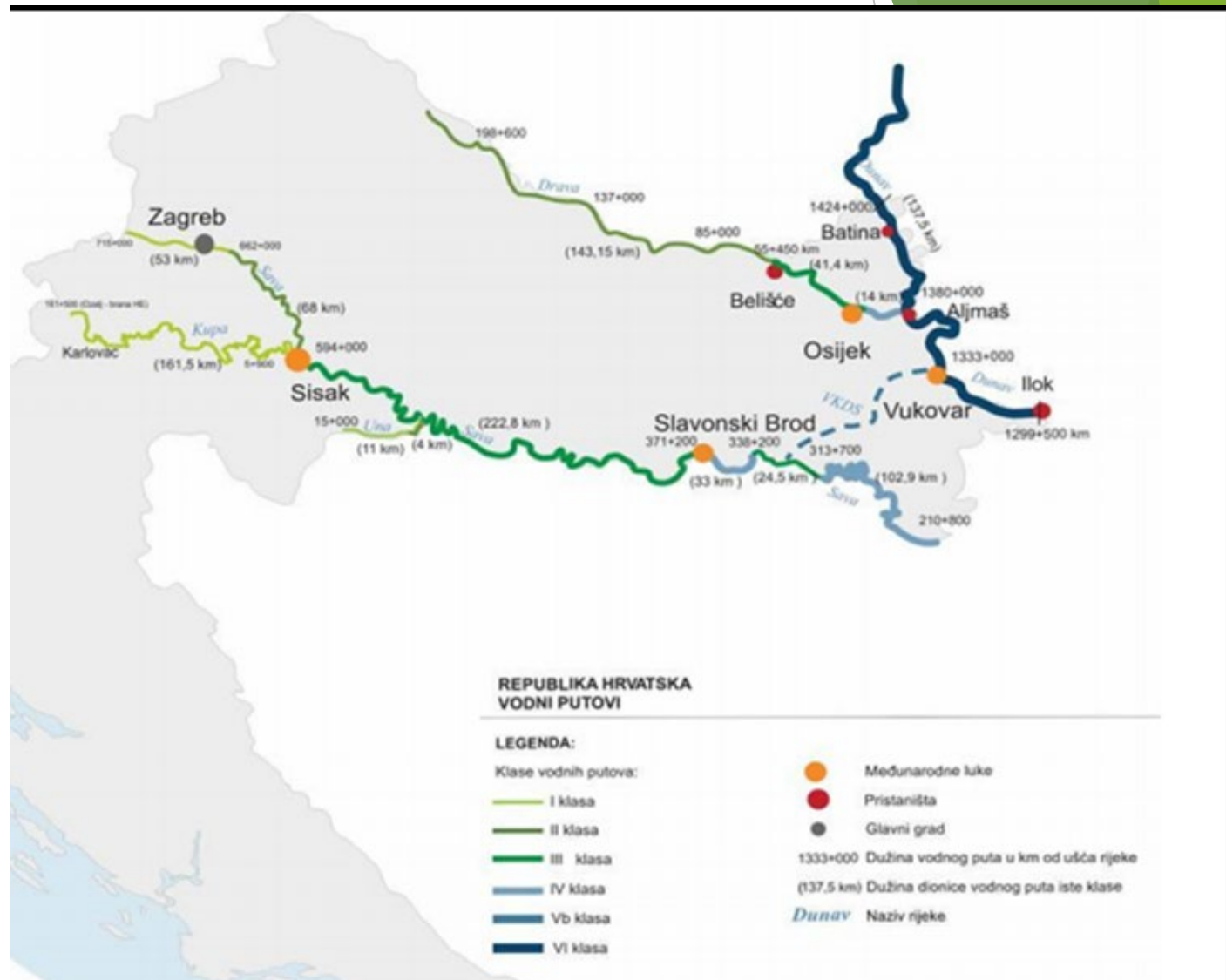
Miroslav Mađarac, Port Authority Vukovar



# Port Authority Vukovar

- ▶ Public institution
- ▶ Established by Government of Republic of Croatia in 2001
- ▶ Act on Inland Navigation and Inland Ports
- ▶ Construction and maintenance of port infrastructure
- ▶ Danube River waterway from rkm 1295+500 to rkm 1433+100 (137,6km)
- ▶ Cargo Port of Vukovar
- ▶ 4 Passenger docks for river cruise vessels

# Map of Inland Waterway



# Port of Vukovar

- Located on the rkm 1335 on the right bank of Danube river
- Two port operators
- Port area 26 ha
- transshipment and storage of general cargo, bulk cargo, heavy cargo, port towing service, parking services

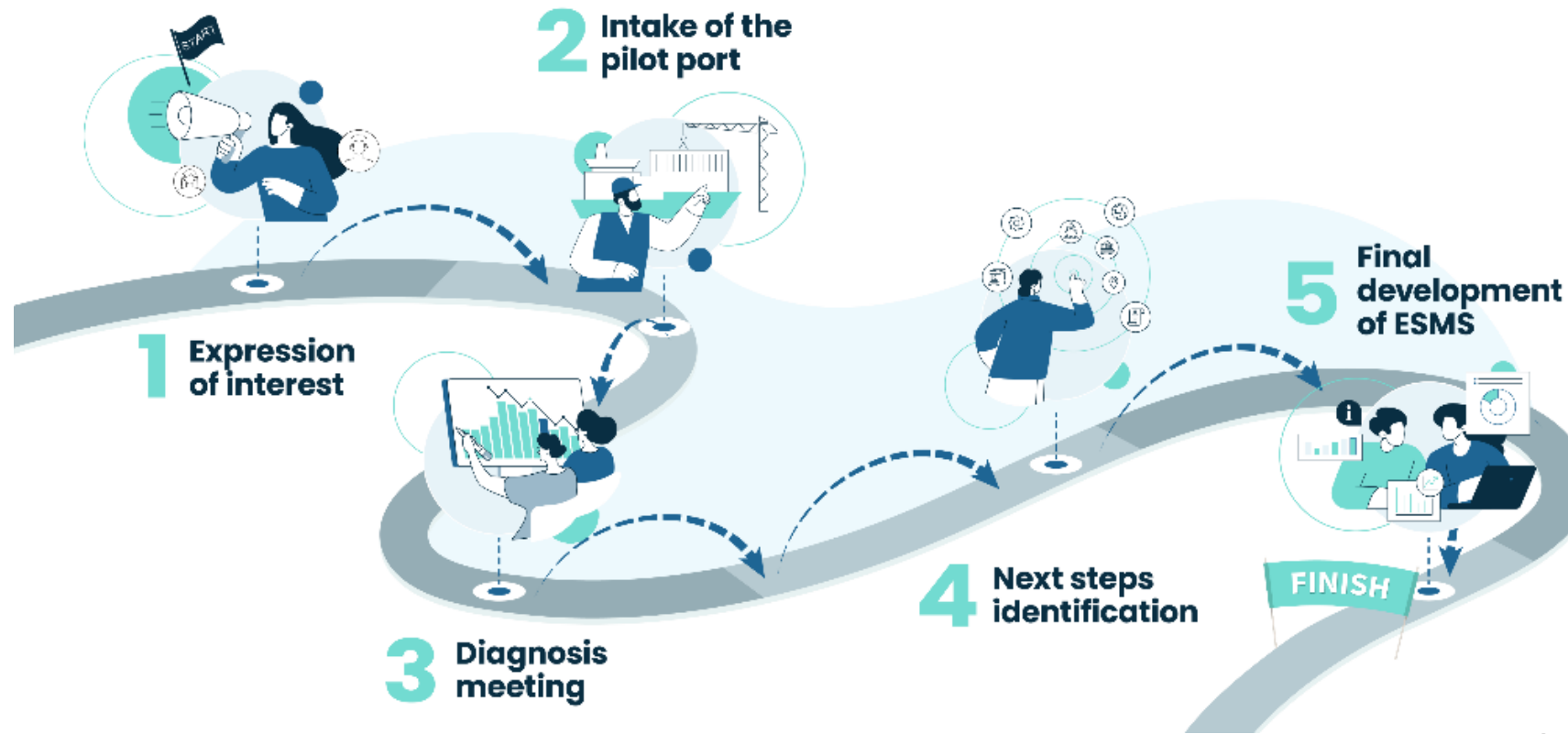




## Passenger docks

- ▶ located on the right bank of Danube river (Ilok, Vukovar, Aljmaš, Batina)
- ▶ floating facility classifies as one berth
- ▶ from 1 up to 3 vessels alongside docking
- ▶ water supply
- ▶ communal waste disposal

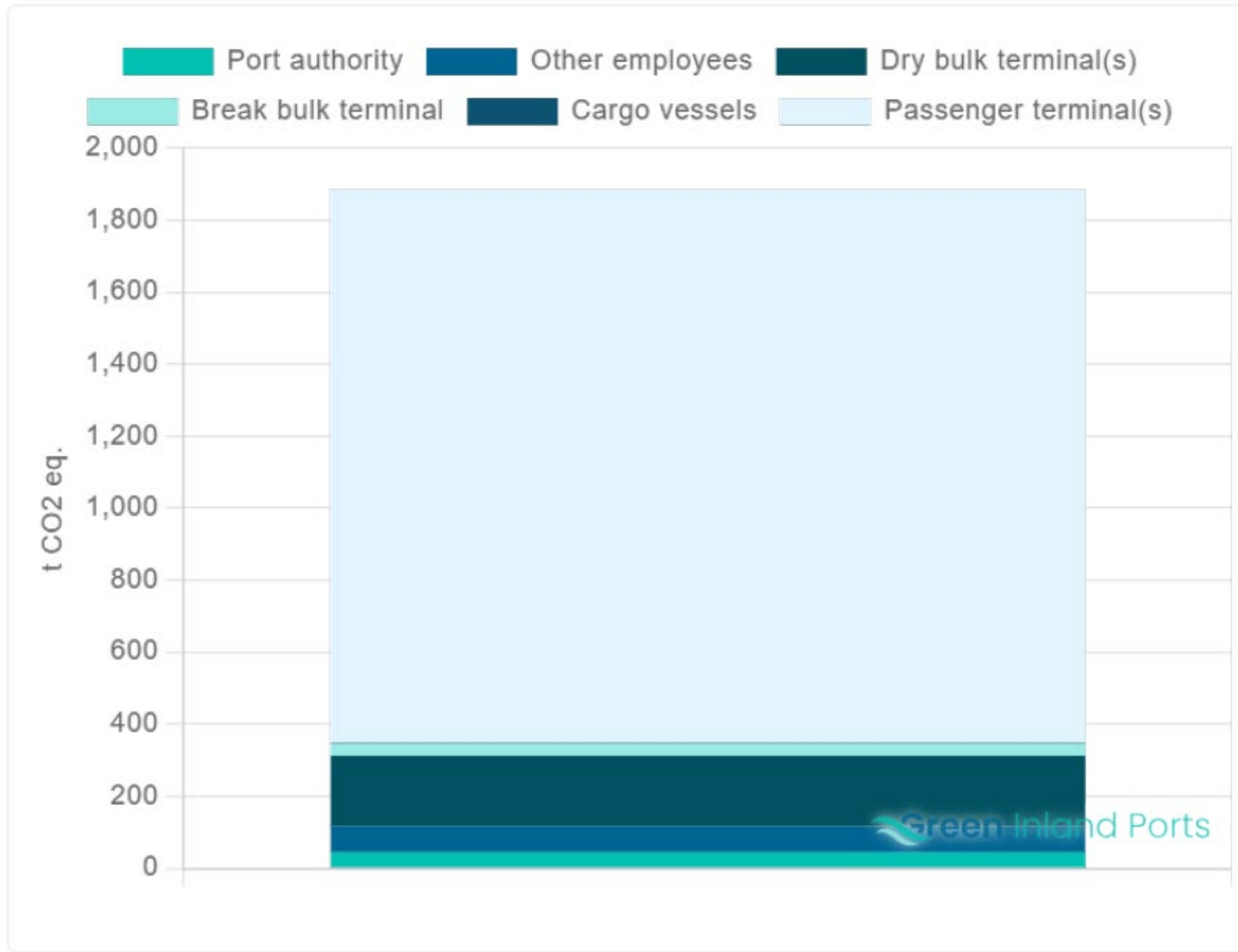
# Port Authority Vukovar in GRIP Pilot - Port Process



# Application of GRIP tools in Port of Vukovar

- **The Port Environment Impact Calculator**
  - estimate the environmental impact of port
- **Environmental Maturity Index Tool (EMIT)**
  - self-assessment the level of environmental maturity
- **Digital Maturity Assessment Tool (DMAT)**
  - self-assessment the level of digital readiness and digital maturity

# Pilot Results - The Port Environment Impact

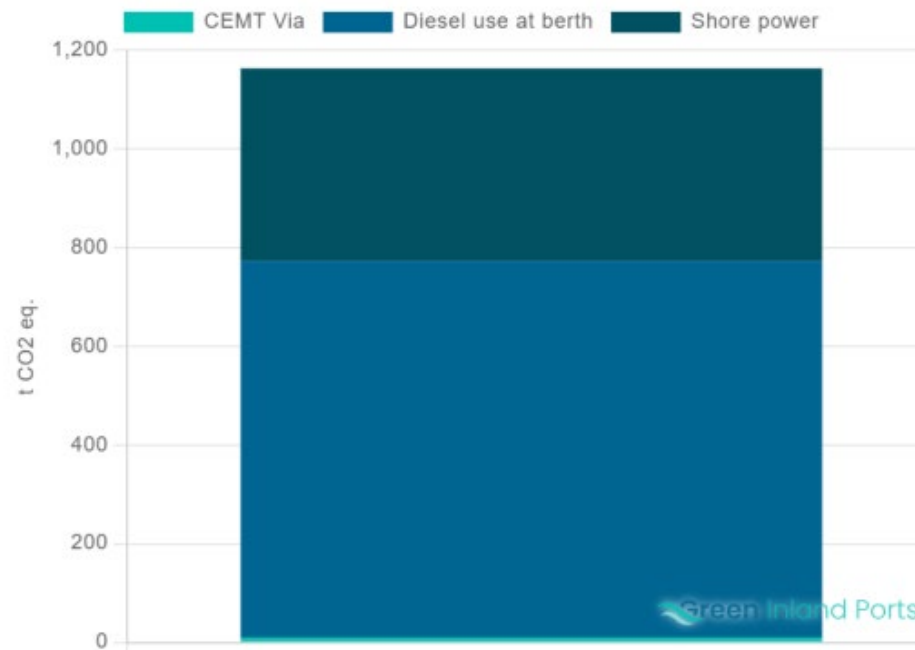
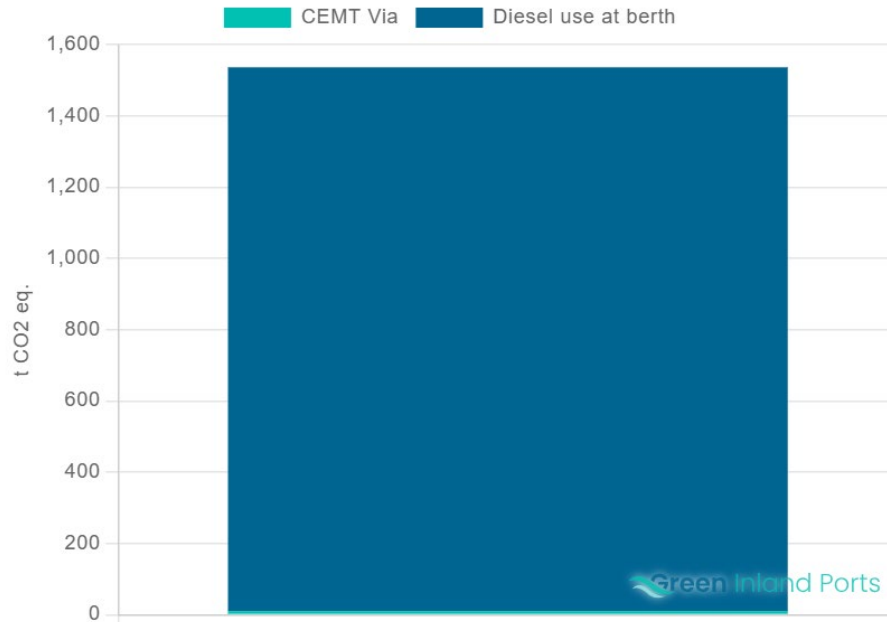


1. Passenger terminal 1,540 t CO<sub>2</sub>
2. Dry bulk 190 t CO<sub>2</sub>
3. Break bulk terminal 33 t CO<sub>2</sub>
4. Port authority 44 t CO<sub>2</sub>
5. Cargo vessels 10 t CO<sub>2</sub>
6. Other employees 71 t CO<sub>2</sub>

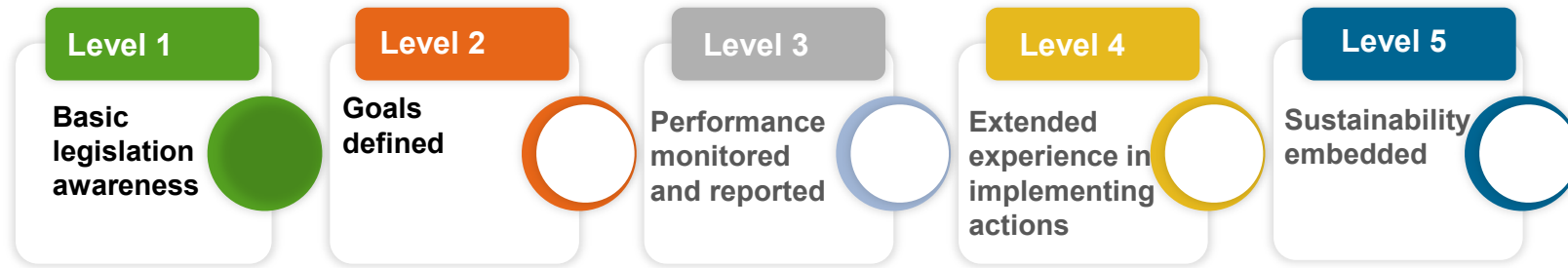
# Example for improve environmental impact

- ▶ 50% of the passenger vessels utilize OPS
- ▶ Reduce 388 t CO<sub>2</sub>, cca.25%

Passenger terminal(s) - Global warming

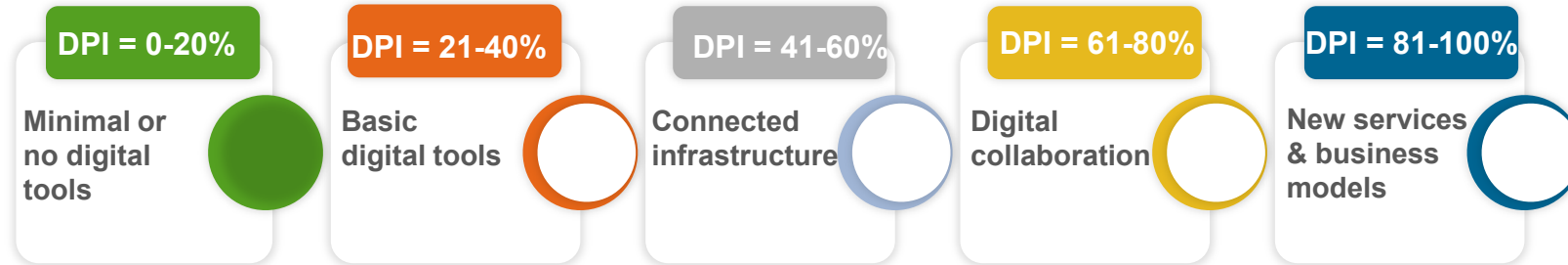


# Pilot Results - Environmental Maturity Index Tool (EMIT)



- ▶ Port of Vukovar at the level 2
- ▶ Port use defined environmental objective and regulation at national level, national strategy
- ▶ Improvement - integration national environmental goals into concrete port-level action

# Pilot Results - Digital Maturity Assessment Tool (DMAT)



- ▶ Port of Vukovar at the level 2
- ▶ Ports use simple digital tools mainly for administrative tasks, without integrating them into infrastructure or wider operations
- ▶ Improvement - establishment PCS shared among Danube ports



Thank You For Your Attention

Miroslav Mađarac

Public Institution Port Authority Vukovar

[office@luv.hr](mailto:office@luv.hr)

[www.luv.hr](http://www.luv.hr)