Port IoT for Environmental Leverage

Preparing for the Future of Ports: EU funded tools, technologies & policies

23rd June 2020
Why PIXEL?
How PIXEL proposes to drive digitisation towards Port of the Future

- Centralised Management
- PIXEL as integrator + tool
- Democratisation and awareness
PIXEL pilots
Usage in real life port scenarios

- **PORT OF MONFALCONE**
  Intermodal transport use-case

- **PORT OF BORDEAUX**
  Energy management use-case

- **PORT OF PIRAEUS & PORT OF THESSALONIKI**
  Port-city integration use-case

**PEI use-case (transversal to all ports)**
PIXEL tool for achieving greener European Ports: the PEI

- Open IoT platform
- Existing/new sensors connected
- Relevant literature & mathematical toolbox
- Single Indicator Measure GreenPolicy

PEI
Technological platform
Port Environmental Index Tool
A closer look to **PEI usage**

<table>
<thead>
<tr>
<th>What PEI is</th>
<th>What PEI is not</th>
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<tr>
<td>• <strong>PEI</strong> is a single indicator reflecting how much port (as a whole) activities impact the environment, serving as decision support.</td>
<td>• <strong>PEI</strong> is not a standalone solution. It needs to be used altogether with PIXEL technological setup.</td>
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<td>• <strong>PEI</strong> is a tool for comparing environmental performance by a port between two time points.</td>
<td>• <strong>PEI</strong> is not a tool for auditing a port nor punishing it upon environmental sanctionable issues.</td>
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<td>• <strong>PEI</strong> is a tool for comparing environmental performance among ports.</td>
<td>• <strong>PEI</strong> does not require an expensive, ultra modern equipment asset.</td>
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<td>• <strong>PEI</strong> is an affordable, open source tool normalized per cargo, able to be used in any port size-independently.</td>
<td>• <strong>PEI</strong> is not a observe-analyse-automatically act tool. It needs human interpretation and application towards real operations in a port.</td>
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<td>• <strong>PEI</strong> is a real-time software tool that improves its accuracy in direct proportion to IoT/reliable sources usage.</td>
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THANK YOU!!

Q&A?

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