



MAGPIE  
SMART GREEN PORTS

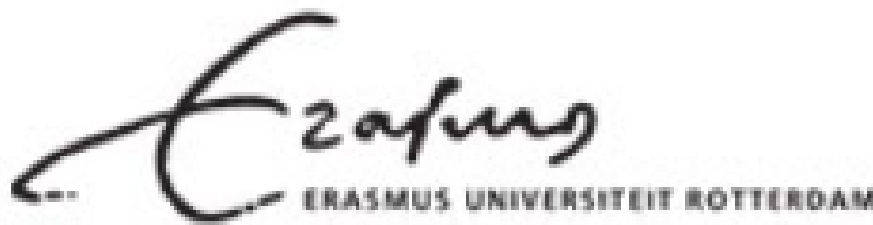
SMART GREEN LOGISTICS TOOL

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Introduction

- **Aim** - Objective is to optimize the hinterland transportation planning of the arriving containers by **minimizing cost, time and emissions**. The tool will provide an interface for the port authorities to balance cost, time and emissions while testing the impact of certain **policies** on the hinterland transportation network
- **Value proposition** - A shared interface for the port authorities and the shippers is proposed for the 24-48 hour operational transportation planning. An additional interface for the port authorities for the tactical level planning is proposed



KPIs

- Total Transportation Costs
- Capacity Utilization
- Lead Time Performance
- Emission Performance

Lessons Learned

- **Barriers** -
  - Access to real shipment data to test the tool
  - Access to the transportation service capacities and prices
  - Online computation time
  - Collaboration between port authorities and shippers for the operational planning
- **Scalability** -
  - Port-specific use cases for tactical decision-making
  - Clarity on shipper decision-making processes



Current Progress Status

Pending Start	WIP	Done
<ul style="list-style-type: none"><li>• Tactical planning module</li><li>• Tactical planning evaluation PA API design</li></ul>	<ul style="list-style-type: none"><li>• Operational planning module</li><li>• Shipment data generation module</li></ul>	<ul style="list-style-type: none"><li>• Tool scoping &amp; positioning</li><li>• Hinterland network definition</li><li>• Data Model &amp; API Design</li></ul>



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