

CHANGING DRY BULK FLOWS FOR THE IWW
TRANSPORT: PERSPECTIVE OF NPRC

TOGETHER WE CAN DO SO MUCH MORE

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NPRC.EU



NPRC AT A

GLANCE

COOPERATION WITH APPROX. 160 MEMBERS

Daily > 200 barges sailing

▶ **DRY BULK, CONTAINERS & PROJECT CARGO**

Approx. 14 million tonnes transported on European inland waterways

▶ **A TURNOVER OF APPROX. €150 MILLION; 50 EMPLOYEES**

With teams in Rotterdam, Antwerp, Duisburg and Mannheim

▶ **FRONTRUNNER IN DIGITALIZATION & SUSTAINABILITY**

'Data Driven' company and transition to cleaner fuels



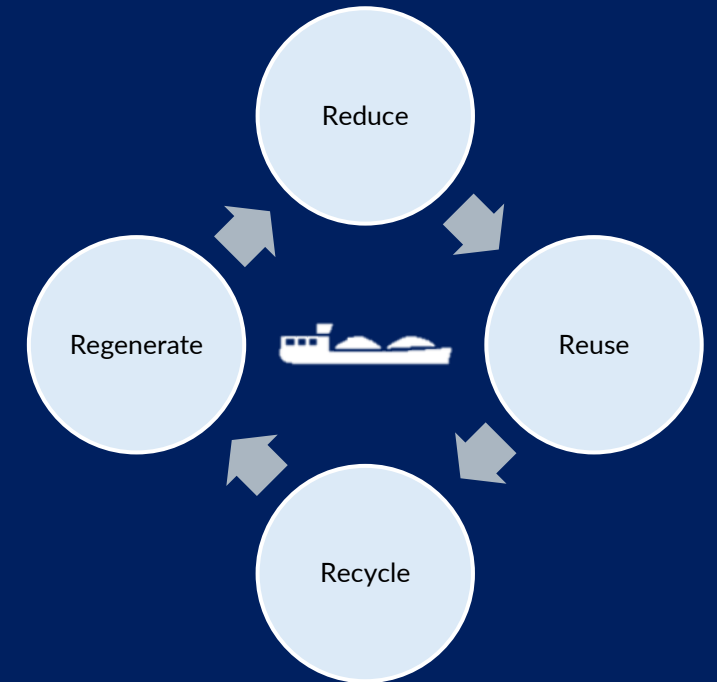
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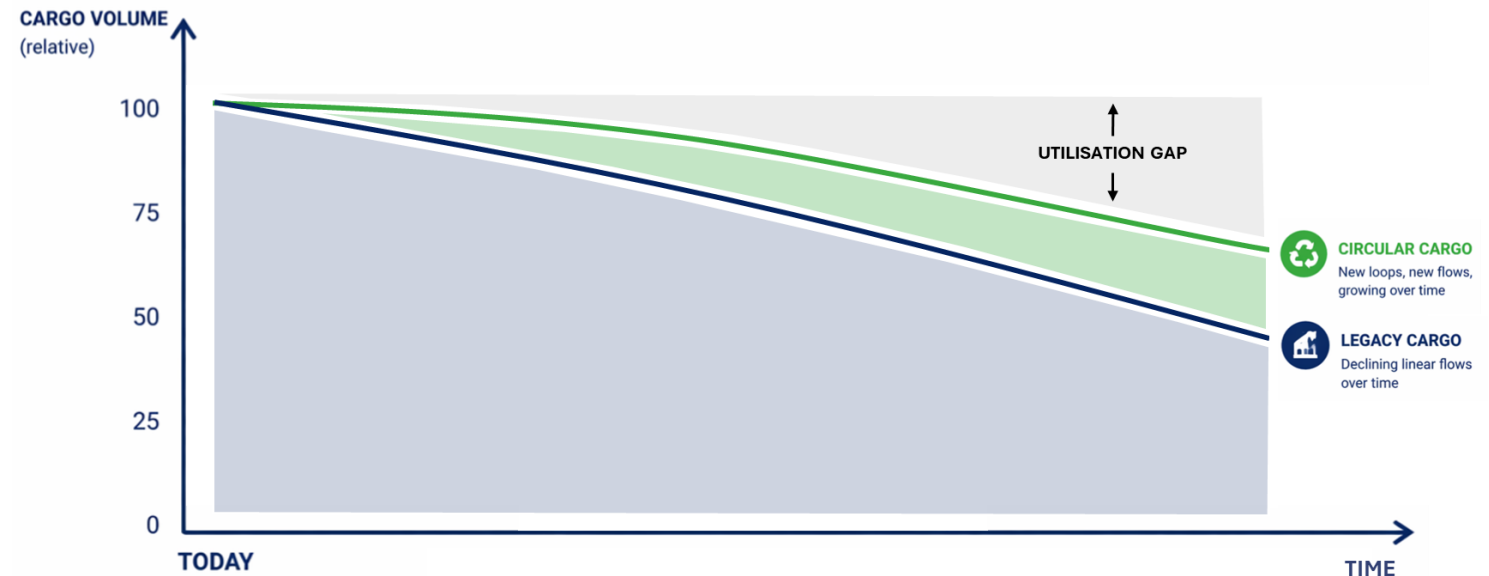
TRANSITION IS CHANGING **CARGO**, NOT JUST **BARGES**

- The energy transition debate often starts with fuels and emissions
- For IWW, the bigger impact is changing cargo flows
- Legacy cargo flows are declining
- Circular loops create new transport patterns
- Fleet developments and cargo developments influence one another



LEGACY CARGO IS DECLINING FASTER THAN **NEW FLOWS** MATURE

- Coal and fossil feedstocks are structurally declining
- Circular cargo is growing, but is limited in size and potential
- New flows grow slower than old flows decline
- Asset utilisation comes under pressure and / or fleet is structurally declining



MOST ATTRACTIVE **CIRCULAIR** **CARGO FLOWS**

- **Metals & scrap:** aluminium, copper, scrap metal
- **Construction circularity:** aggregates, concrete, reclaimed steel
- **Waste valorisation:** ash, biomass residues
- Dense, heavy, corridor-based flows
- *Less valuable cargo...what does this mean for the barges of the future?*



CIRCULARITY CREATES MORE TRANSPORT MOMENTS

- Collection
- Sorting
- Pre-processing
- Recycling
- Remanufacturing
- Redistribution



NETWORK ORCHESTRATION BEATS SINGLE BARGE OPTIMISATION

- More origins and destinations per flow
- Smaller and more frequent shipment sizes
- Higher need for cargo aggregation
- As complexity increases, orchestration becomes even more valuable
- Security of Supply continues to be a top priority



THE NPRC OPPORTUNITY: BECOME THE CIRCULAR SUPPLY-CHAIN ORCHESTRATOR

- Cargo aggregation across members
- Matching of return cargo / fleet optimisation using AI
- CO2 reporting
- Realtime insights and data sharing via digital solutions



IN SUMMARY

- Legacy cargo erosion beats circular cargo growth
- Circular cargo creates recurring flows and adds complexity to the logistic puzzle
- Scale, data sharing and orchestration are preconditions for adding value
- Fleet developments and cargo developments influence one another



TOGETHER WE CAN DO SO MUCH MORE

