



ResC4EU

RESILIENT SUPPLY CHAINS FOR EUROPE

Interactive Demonstrator

... for Energy Savings



Try it now



<https://resc4eu.greentwin.app/demonstrator-1>

Overview

This demonstrator is an interactive visualisation tool that allows users to explore how selecting energy-efficient maritime, rail, and multimodal supply chain routes, instead of standard transportation methods, reduces carbon footprint and operational costs. The demonstrator evaluates both transport-based emissions (distance × transport mode) and energy-based processing emissions at nodes (ports, warehouses, distribution centers) throughout the supply chain. By visualising complete supply chain networks and their environmental impact, users can make informed decisions about route selection and understand the trade-offs between route length, transport mode, and energy efficiency. The demonstrator is publicly accessible via the ResC4EU platform: <https://resc4eu.greentwin.app/demonstrator-1>

Opportunities

Reduce Supply Chain Emissions

Identify lower-carbon transport routes by comparing maritime, rail, road, and multimodal alternatives, enabling more sustainable logistics decisions.

Improve Energy Efficiency

Evaluate both transport and energy consumption across the supply chain to uncover opportunities for reducing energy use and operational costs.

Support Resilient Decision Making

Explore alternative supplier and transport configurations to assess environmental trade-offs and build more sustainable and resilient supply chains.

How It Works

The demonstrator guides users through an interactive workflow:

Step 1 - Explore the Supply Chain Network by viewing all available nodes (ports, warehouses, facilities) and their locations on an interactive global map with zoom and pan controls.

Step 2 - Select a Predefined Supply Chain Route to see the complete path with all intermediate segments, transport modes, and distances. The route highlights on the map.

Step 3 - View Detailed GWP Analysis by opening the side panel showing comprehensive environmental data including transport emissions, energy emissions at nodes, and total route GWP.

Step 4 - Compare All Routes to see how different supply chain options stack up in terms of distance and environmental impact, using the built-in route comparison tool.

About the ResC4EU Project

The ResC4EU project aims to support EU businesses, especially small and medium sized enterprises (SMEs), to become more resilient and sustainable and be able to quickly adapt to supply chain disruptions such as experienced during COVID-19 crisis, geopolitical tensions or disasters by adopting advanced technologies. ResC4EU will provide an open space for collaboration, develop and provide models and tools that can assist SMEs in detecting and anticipating disruptions in their supply chains, and offering SMEs tailored support and training programmes as part of the ResC4EU Net-Zero Industry Academies. Further, manufacturing SMEs in need of implementing advanced technologies will be brought together with tech-savvy SMEs providing innovative solutions.

For more details: <https://cordis.europa.eu/project/id/101137643/results>



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Demonstrator Owner

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