

Cross-cutting IT
systems and
platforms

Transport planning
and execution



Route energy & emissions Intelligence module

Developed by :



Project by :



Funded by the
European Union

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Operational fields

Technologies

Solutions



ROUTE ENERGY & EMISSIONS INTELLIGENCE MODULE

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Solution description

The Energy Module is designed to estimate travel time, energy or fuel consumption, and emissions (CO₂ and NOx) based on road infrastructure and vehicle characteristics. Users can input data either manually or via an API.

The tool uses a speed model influenced by infrastructure features like speed limits, lanes, curvature, and vehicle details. Route options include user-defined paths or automatic shortest-path calculations. Results can be accessed through a web interface or a REST API, both requiring an API key from SINTEF for access.

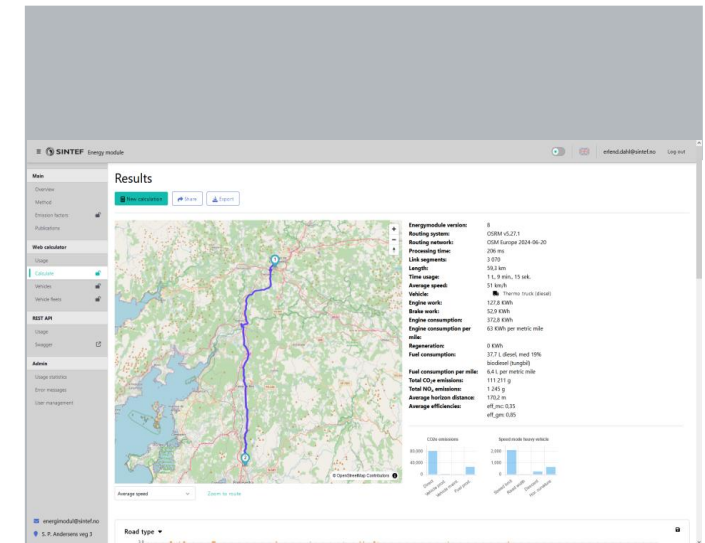


Benefits

- **Accurate Environmental Impact Analysis:** Provides precise estimates of energy consumption and emissions (CO₂, NOx), supporting greener transport planning.
- **Customizable and Flexible Routing:** Users can define routes manually or let the tool calculate the most efficient path based on infrastructure data.
- **Detailed Infrastructure Insight:** Considers road features (e.g., lanes, speed limits, tolls) to improve accuracy in route performance evaluation.
- **Interoperability via API:** Easily integrates with other models or systems through a REST API, enabling seamless data exchange
- **Decision Support:** Assists policymakers, transport planners, and logistics operators in making data-driven, sustainable decisions.

Main beneficiaries:

- Carriers
- LSPs



Technology readiness level : 5
Implementation stage : *Pilot*

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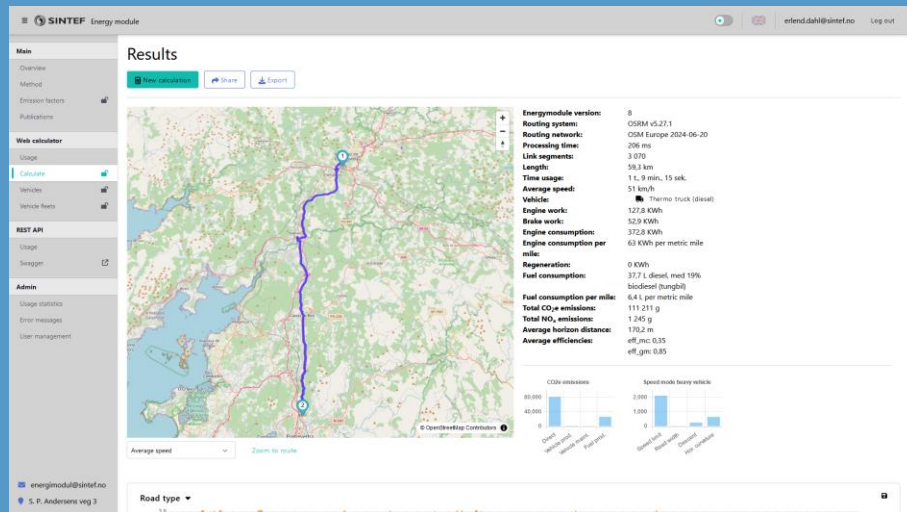
Solutions



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Share your contact details and we'll get in touch with you!



Would you like to know more?
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