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H2Accelerate TRUCKS
Large scale deployment project to accelerate the uptake of Hydrogen Trucks in Europe

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H2A TRUCKS

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Project Overview

- Call year / Call topic: [2022] / [HORIZON-JTI-CLEANH2-2022-03-03]

  Large scale demonstration of European H2 Heavy-Duty Vehicle along the TEN-T corridors

- Project dates: [01/02/2023 – 31/01/2029]
- % stage of implementation 01/11/2023: [12.5 %]
- Total project budget: [~110 M€]
- Clean Hydrogen Partnership max. contribution: [~30 M€]
- Other financial contribution: [RCN (~400 k€) The Research Council of Norway + SERI (~319 k€] Federal Department of Economic Affairs, Education and Research EAER State Secretariat for Education, Research and Innovation SERI

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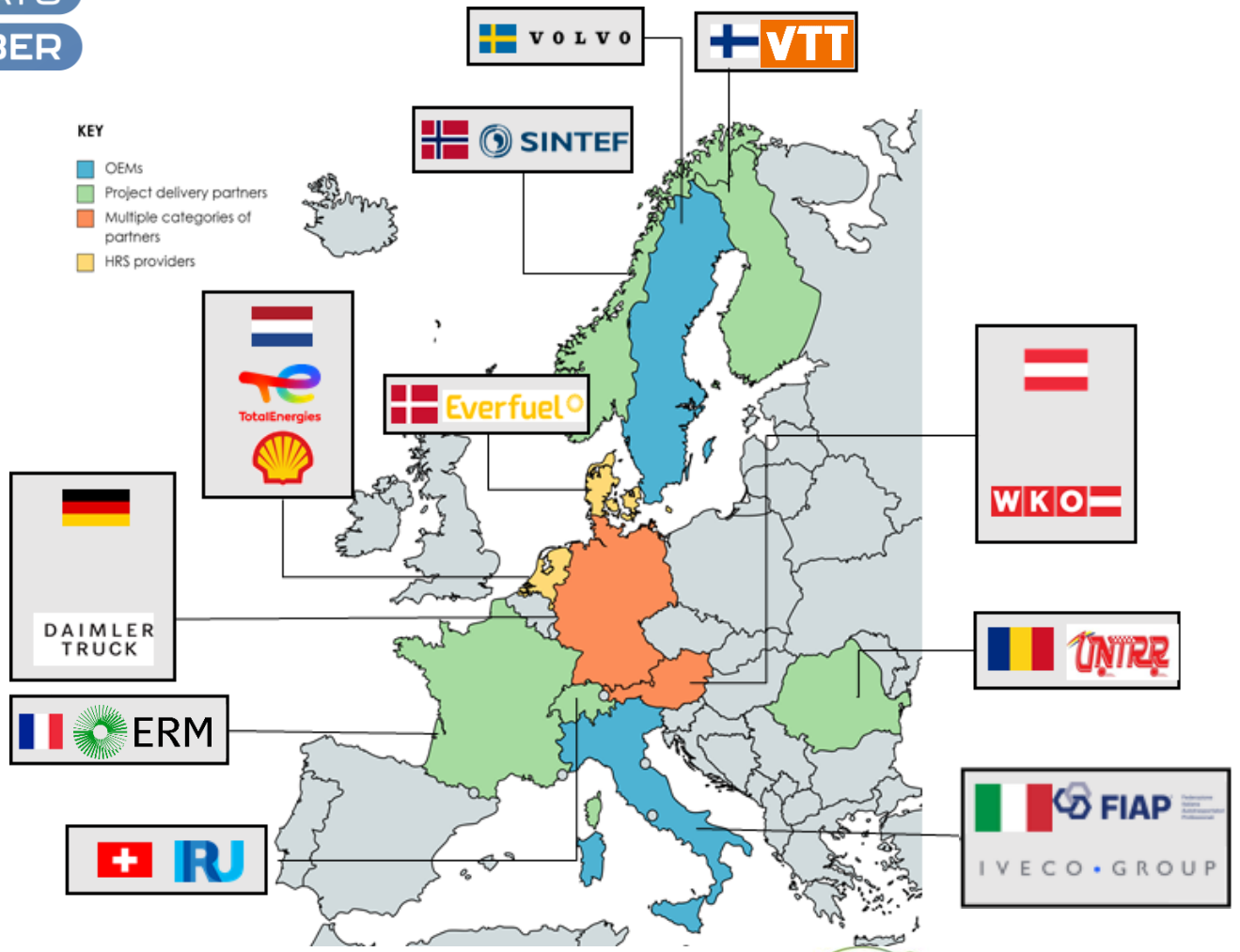
Partners and truck deployment



TENT-T corridors where H2Accelerate members intend to deploy hydrogen trucks and refuelling infrastructure.

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Co-funded by:

The Research Council of Norway

Federal Department of Economic Affairs, Education and Research EAER
State Secretariat for Education, Research and Innovation SERI

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Project Summary

Overall goal:

To support the transition of fuel cell trucks from technically proven but high-cost demonstrators to a viable commercial choice for operators across Europe.

Main objectives:

1. Deploy 150 fuel cell trucks between 41 and 44 tons in 9 European countries by the end of 2029.
2. Operate the trucks on an HRS network designed for zero-emissions truck deployment, operated by Everfuel, Shell and TotalEnergies.
3. Analyse technical, environmental, economic and attitudinal data to display the viability of H_2 fuel-cell trucks as a solution to decarbonise road freight.
4. Raise awareness of the benefits of using green H_2 for trucking in Europe through a wide range of targeted communication activities.

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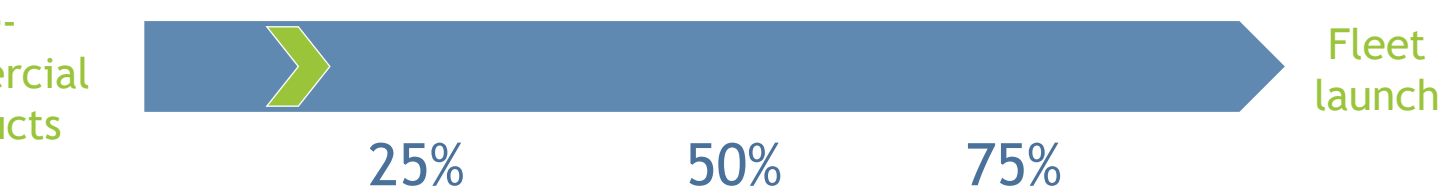
Project Summary

- The European truck manufacturers included in the project are in the forefront of the development of fuel cell-powered heavy-duty trucks and are, through the project, developing their technologies beyond state-of-the-art in terms of performance, reliability and cost.
- The project will contribute to scaling up the truck manufacturers capabilities to produce higher volumes of trucks, thereby facilitating the mass market deployment in the thousands from 2030.

- Three leading refueling station operators will, as associate partners, contribute to increased supply of green hydrogen along the TEN-T corridors, rendering Europe in the forefront of the decarbonization.

Project Progress/Fleet Launch

Achievement to-date



- Project activities include:
  - OEMs preparations for fleet launch
  - Adaptation of manufacturing facilities to accommodate FC truck production
  - Preparations for Homologation and Type Approval
  - ✓ Initial Dialogue with end-users and HRS network operators
  - Establishing maintenance and service networks along TEN-T corridors
    - Design of maintenance strategy for truck operators, local partners, OEMs
    - Preparation of maintenance facilities for H_2-powered vehicles
    - Training of maintenance personnel
  - ✓ Developing and agree on protocols for data monitoring and analysis
  - Assessment of HSE issues and preparing an adequate safety plan
  - ✓ Establishment of a dissemination and exploitation plan

Project Progress/Market Readiness

Achievement to-date

Prototypes demonstrated → Marked ready FC Trucks

25% 50% 75%

- All Truck Manufacturers have demonstrated hydrogen fuel cell-powered truck prototypes on in-house testing tracks and public roads.
- The prototypes are now being tested with respect to, for example:
  - Operation under demanding climate conditions (cold/hot) and topography (e.g., altitude >1500 m)
  - Range per refueling (topic description KPI: > 600 km), Daimler Trucks reported > 1000 km (LH2)

Project Progress/Team Building

Achievement to-date Commitment & Good dialogue

25% 50% 75%

- Project Kick-Off meeting Brussels, Feb.1st 2023:

- Project meeting Gothenburg, Oct.23rd -24th 2023:

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Dissemination Activities

- The Dissemination Plan includes (published/target):
  - Targeted press releases (1/10) and white papers (1/5) (mainstream + industry related)
  - Dedicated end-user group meetings to encourage new operators to adopt H_2 FC vehicles
  - Conferences and events for key stakeholder representatives to access project results
    - *truck end-users, policy makers and the wider truck industry*
  - Share lessons learnt/experiences (best practice)
  - Presentations and exhibits at industry specific events
  - Specific and dedicated outreach activities in Eastern Europe
  - ✓ LinkedIn account
  - ✓ Webpage: [H2Accelerate Trucks - H2Accelerate]

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Synergies With Other Projects And Programmes

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Interactions with HRS projects funded under EU programmes

- Lighthouse I (TotalEnergies) – 9 stations (CEF-T-2021-AFIFGEN)
- H2Accelerate Inaugural Station Deployment (Shell) – 8 stations (CEF AFIF)
- H2Accelerate Expansion Network part 1 (TotalEnergies) – 12 stations (CEF-T-2021-AFIFGEN)
- GREATER4H Project (Everfuel) acquired funding for 12 additional stations (CEF)

GREATER4H

Fuel availability is naturally a pre-requisite for a successful launch of the 150 HD Trucks.

Synchronized deployments lead to better end user experience and business cases for infrastructure providers and truck manufacturers alike.

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Thank you for your attention!

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