

Welcome to the age of frictionless mobility



NEVOMO

Introduction & Company Purpose

A unique railway innovation improving inefficient legacy infrastructure & enabling a new era for railways worldwide



Hyperloop and MagLev-inspired railway technology

Nevomo is a **European deep-tech company** introducing an efficient frictionless upgrade to legacy railway infrastructure



Flexible stepwise upgrade of legacy infrastructure*

- **MagRail Booster** – enhancing the capacity of existing tracks by introducing efficient propulsion, electrification & automation
- **MagRail** – a further increase of speed & reduction of OPEX by adding magnetic levitation



Accomplishments

- Tech adoption by the biggest global railway players
- Globally unique technology, strongly supported by the European Commission
- Full-scale functional prototype

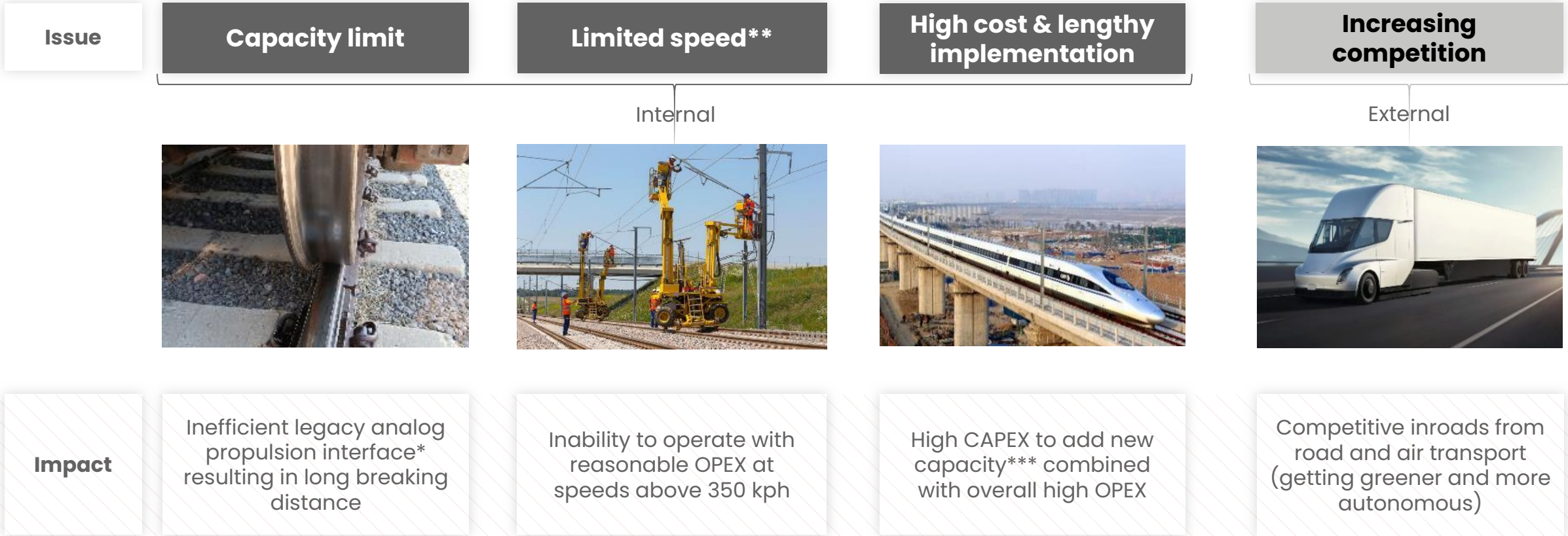


Ambition

Enabling railways to **transform current infrastructure & rolling stock** (still based on a 19th-century core traction tech) into **the preferred mode of transport of the 21st century** (fully automated & digitalized)

Railway industry faces four major problems

Issues with full digitalization of legacy infrastructure prohibit railways from meeting the growing demand

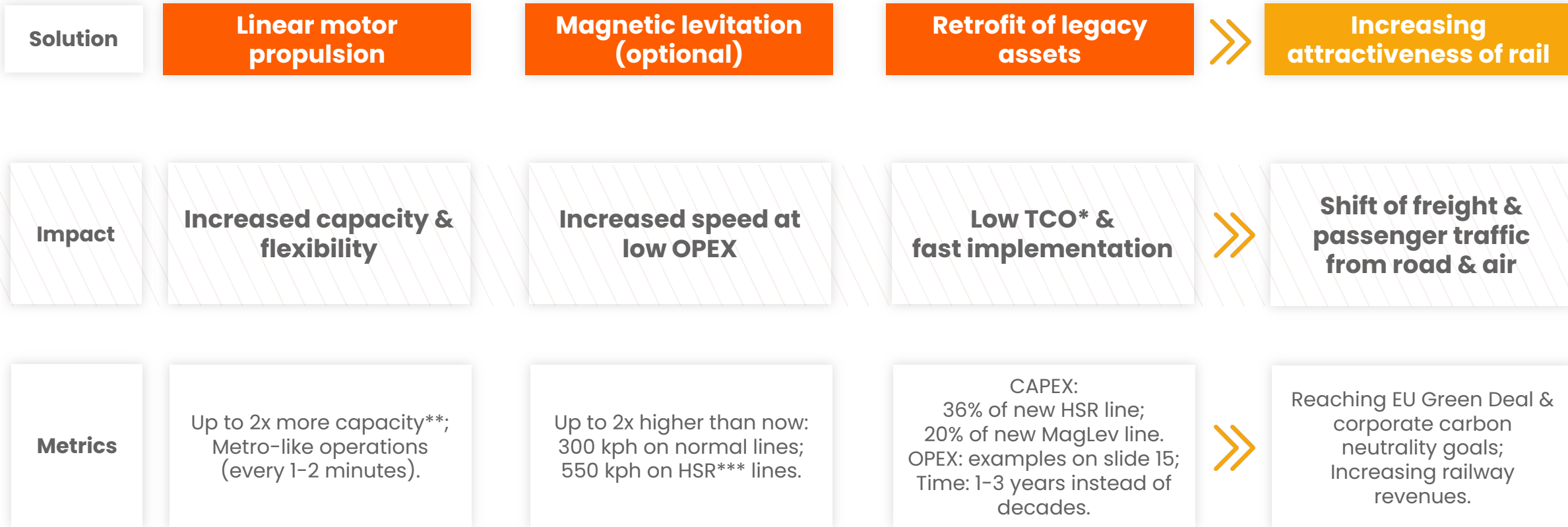



European Green Deal 2030 target is at risk – railways are unable to adapt their networks to increase freight market share to 25% and double the number of transported passengers

78m ton CO2 reduction at risk

Nevomo's solutions

Increasing capacity & flexibility of operations on existing lines, improving speed at attractive CAPEX & reduced implementation time



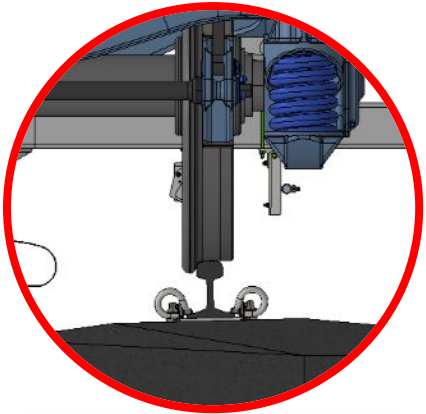
Climate goals achievability		78m ton CO2 reduction achievable – EU level	500m ton+ CO2 reduction achievable – global level	Corporate carbon neutrality strategies more achievable
------------------------------------	---	--	--	---

MagRail Booster & MagRail explained

Introducing new, fully-digital & contactless mode of propulsion and frictionless suspension as the interface between vehicles and infrastructure

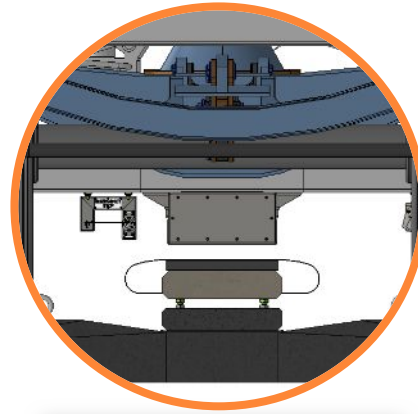
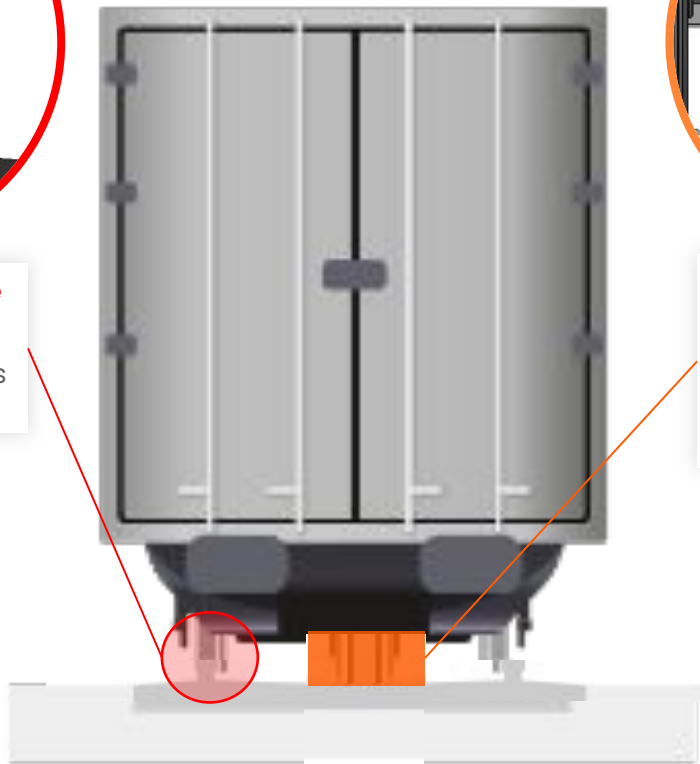
MagRail Booster*

Vehicle retrofit
Infrastructure retrofit



Limited wheel use

For rolling & guidance only, no traction forces transmitted

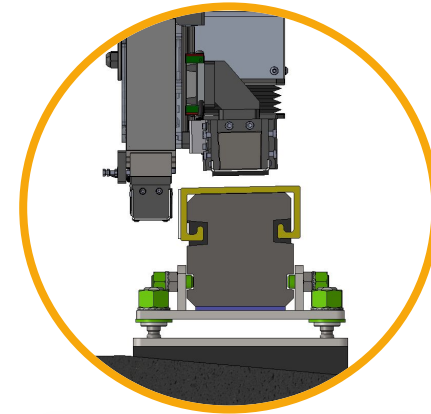


Direct contactless linear motor propulsion

Slippery effects eliminated

MagRail

New vehicle
Infrastructure retrofit



Frictionless suspension – magnetic levitation

Overcoming speed limits at attractive OPEX, incl. maintenance costs



Limited wheel use

For low-speed rolling only

Roadmap: upgrade from legacy towards interoperable, frictionless future

MagRail allows a phased-in upgrade of legacy railways with components implementing automation, electrification & full digitization



* under evaluation a simplified version of Booster called Slider - not requiring permanent retrofit of existing vehicles
 *** or even 360 kph | 225 mph, which is currently planned on the fastest High-Speed Rail lines in Europe
 ** interoperable

Nevomo's MagRail transforms railways by adding needed features

Solving railways' challenges with a portfolio of MagRail solutions

MagRail features:

Automation & electrification



More power & better dynamics



Flexibility



Velocity



Applications:

- › **Automated**, flexible shunting
- › Shuttling of wagon-groups
- › **Electrification** of terminals
- › **Higher loading limits** on inclines
- › Faster acceleration out of passing tracks
- › **Faster acceleration/ deceleration** in stations
- › Dedicated pods operating with **high frequency & high flexibility**
- › **No locomotives needed** – easy adaptation to demand fluctuations
- › High-speed passenger travel (**550 kph**) with levitation

Benefits:

Capacity ↑

Flexibility ↑

TCO*

↓

Our technology is ready for piloting on real infrastructure

MagRail Booster is heading towards pilot implementation with leading infrastructure managers starting in 2023/2024



Cooperation with:

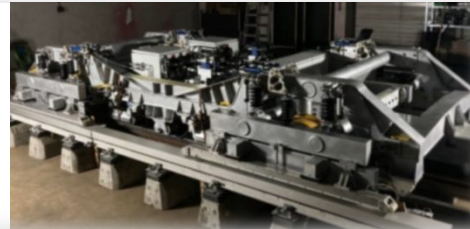


RFI plans to co-finance Bologna San Donato with "Europe's Rail" funds*. Other railways & suppliers have been invited.



Test center

Expected 2024/2025 (1st phase), after current Europe's Rail project



After successful tests of combined propulsion & levitation focusing on Cargo Booster delivery



Full-scale test track

H1/2023



First demonstration

Q4/2019



Medium-scale test track

Q1/2021

Go-to-market: targeting end users & industrial partners

Starting with Cargo Booster & subsequently moving towards passenger applications, Nevomo is commercializing MagRail using a staged approach

Activation

Workshops/pre-evaluations with end users to get their attention.

Target: Making MagRail known and considered for network upgrade/expansion plans



Evaluation

MoU or Cooperation Agreement: active involvement in product development via feasibility studies, use cases & specifications.

Target: Customize solutions to customer needs and reduce market failure risk.



Pre-commercial pilots

First revenues from pre-commercial pilots, to be turned into commercial operations for end users after homologation (safety approval).

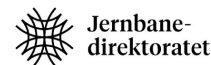
Target: Reference projects for scale up phase..



Commercial

Broad commercial rollout after homologation.

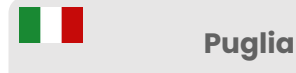
Target: Dominating innovative railway freight solutions segment to prepare ground for broad network passenger deployment.



MagRail certification center with RFI



Reactivation of a local line – Lol stage



First MagRail tender expected in 2023

Industrial partners*

Component suppliers, co-integrators

Partners & potential acquirers



Creating a strong industrial partner ecosystem

Leveraging Nevomo's in-house capabilities with strong suppliers of other key components and services

Feasibility studies

IDOM 

Vehicle*



IoT, connectivity, security

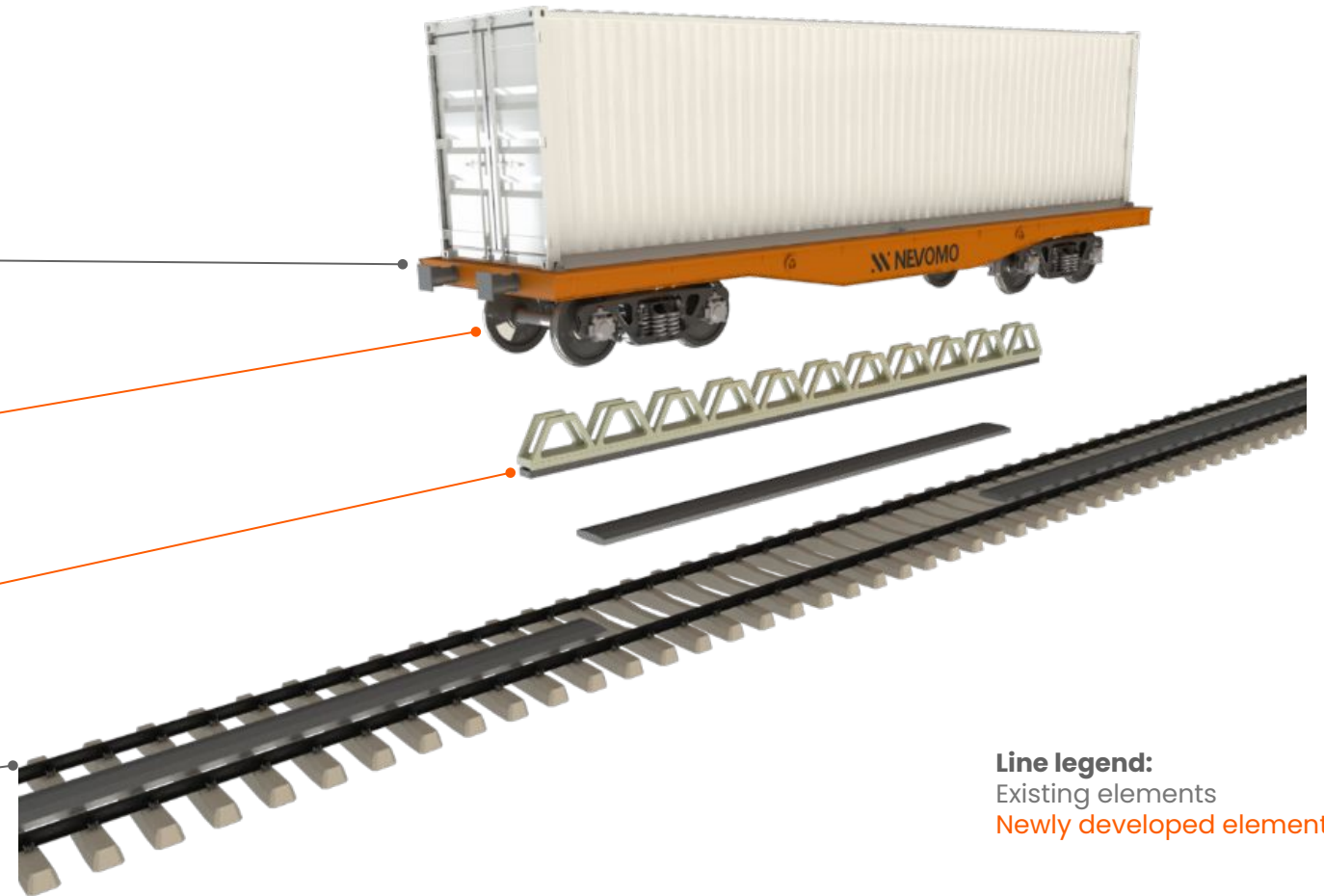


Materials


ArcelorMittal

Infrastructure

 plastwil de bonte
CONCRETE SLEEPERS



Line legend:
Existing elements
Newly developed elements

Management team, founders & key advisors

Approx. 60 team members: experienced managers, renowned experts, researchers & engineers with background in railways, maglevs & banking



Przemek "Ben" PACZEK
CEO
& Co-Founder

15y in management, finance
& sales in banking & real estate



Stefan KIRCH
Chief Business Development Officer
& Co-Founder

Formerly **Deutsche Bahn**
15y in railway infrastructure
management



Kacper KONIARSKI
Product Development Director
& Co-Founder

4y in mechanical engineering
& R&D project management



Jan SZPETULSKI-LAZAROWICZ
COO/CFO

Formerly **Mazars, EY, PlayWay**
18y in management & Finance in
consulting, technology & gaming



Sebastian KALUZA
R&D Director

Formerly **Alstom**
10y in railway maintenance
& technology implementation



Johannes BRAUN
Senior Advisor

Formerly **Siemens, Alstom**
+30y in project management in railways
(incl. construction of **SHANGHAI TRANSRAPID MAGLEV**)



Amos RON
Senior Advisor

Formerly President of the **Israel
Ports and Railway Authority**
+40y in infrastructure & energy



Vladas LASAS, Ph.D.
Senior Advisor & Investor

Co-founder of **Carbon War Room** (with Sir
Richard Branson)
Honouree of 2012 Oslo Business for Peace Award
+40y in logistics, cleantech & high-tech

Contact details

Przemek "Ben" PACZEK

CEO & Co-Founder

+41 76 635 16 31

+48 793 217 337

b.paczek@nevomo.com

Disclaimer:

General

This Presentation does not constitute or form part of, and should not be construed as, an offer to sell or an invitation, solicitation, or inducement to purchase or subscribe for securities with respect to any transaction, nor shall it or any part of it form the basis of, or be relied on in connection with, any contract or commitment whatsoever. The Presentation does not constitute either advice or a recommendation regarding any securities.

Accuracy of information and limitation of liability

No representations or warranties, express or implied are given in, or in respect of the accuracy or completeness of any information included in the Presentation.

Forward-looking statements

The Presentation contains forward-looking statements relating to the Company's business, financial performance and results and/or the industry in which it operates. These statements are subject to inherent uncertainties and qualifications and are based on numerous assumptions. Nothing in the Presentation should be construed as a profit forecast. The Company's actual results may differ materially from those discussed in the forward-looking statements.



NEVOMO