Welcome to our future destination
IN 2050...

...WE TRAVEL OVER A CONTINENT BY HYPERLOOP AS IF IT IS ONE BIG CITY...

AND...

...THE SUPPLY CHAINS ARE CONNECTED WITHIN SEVERAL HOURS
THE DEMAND FOR PASSENGER AND CARGO TRANSPORT WILL TRIPLE TOWARDS 2050

€ 69.000.000.000.000

GLOBAL INFRASTRUCTURE INVESTMENTS REQUIRED TO ACCOMMODATE THIS DEMAND

2 Extrapolated from https://outlook.gihub.org/
FUTURE PROOF INFRASTRUCTURE IS NEEDED

EFFICIENTLY IMPLEMENTED

EFFICIENT IN ENERGY

COST EFFECTIVE

...AND COMPETITIVE IN CAPACITY AND SPEED
This is Hyperloop

Transport in a low-pressure pipe system  Closed environment implemented below and above ground  Magnetically levitating and propelled
Hyperloop to decongest Amsterdam Airport Schiphol by substitution of short-haul flights

Hyperloop Network:
- Connection to major airports and cities in 600 km radius
- Network Length: ±2.200 km
A DUTCH PILOT ROUTE FOR CARGO TRANSPORT
MINIMIZING INFRASTRUCTURE FOOTPRINT,
MAXIMIZE CONSTRUCTION SPEED
Imagine the size of a mature hyperloop industry in 30 years

1 million kilometers of rail

€ 3 trillion
Expected cumulative investments in the hyperloop network globally by 2050

€ 20-40 billion
Annual revenue with a European hyperloop network of 10,000 Km
HOW DO WE GET TO THIS SUSTAINABLE HYPERCONNECTED WORLD THAT WE ENVISION?
HYPERLOOP DEVELOPMENT PROGRAM

GOAL
Develop and test hyperloop together with private and public partners

Ministry of Economics
Ministry of Infrastructure
€4.5 M
€3 M

Province Groningen
€3 M

Total program €30 M

€22.5 M

Safety
Technology
Standards
Public adoption

Ecosystem
Integration
Socio-/Economic costs & benefits

ASSOCIATED PARTNERS
ESTABLISHMENT OF THE EUROPEAN HYPERLOOP STANDARD

Technical partners
Established market players

Approval by all European countries for setting the European hyperloop standard

A European hyperloop system is exportable worldwide and a leverage to be the global standard
COVENANT
ENABLING THE PHYSICAL INTERNET
MARKET POTENTIAL FOR CARGOLOOP

Average of 15 million tonnes annually per road*

The core Cargoloop market of low-density, high-value cargo (LDHV) accounts for 30-40% of total freight volumes more than 6 million tons on an average major road**

Growth of e-commerce in 2020: 27.6%***

* Calculations based on: Eurostat data 2019
** Calculations based on: https://www.grandviewresearch.com/industry-analysis/e-commerce-market
*** https://www.emarketer.com/content/global-ecommerce-update-2021
THINK BIG, START SMALL
BUT MOST OF ALL, START

2050
European Network

2040
Realization of the first Dutch network and international connections.

2030
A Cargoloop pilot implemented with stakeholders in Regional Context
HYPERLOOP TEST FACILITY
*Image is exemplary and not represents actual design of the center
European Hyperloop Center

Objective - **Test TRACK**

Proving the technical feasibility of hyperloop by demonstrating the technology, fully integrated in “lab” environment.

**Results**

- Information on hyperloop technologies, safety, and implementation (air-lock, loading, switch, control, communications, etc.)
- Unmatched implementation know-how for further product development;
- An inspiring reference project for employees, customers, and public, **positioning** to trillion EUR market.

*Image is exemplary and not represents actual design of the center*
European Hyperloop Center

• Currently in permitting phase
• Prototype engineering
• EHC foundation established to create ecosystem in North-Netherlands

• Everyone is welcome to propose new developments especially cross-country routes!

*Source: Groningen Bidbook*
Only together we can reach our destination
Contact

Nisha Bakker
Ecosystems and Partnership Development
nisha@hardt.global | +31(0) 6 1127 7370

Max Wink
Business Developer
max@hardt.global | +31(0) 6 4185 9110