

Hightech innovatie- kansen voor bedrijven

De mogelijkheden en uitdagingen rond Hyperloop

Met

- Lucienne Krosse | Thematic lead Sustainable Cities, EIT InnoEnergy
- Thijs Smit | Innovation Manager, NS
- Coen de Ronde | Director Hyperloop Development Program



Holland High Tech
Global Challenges, Smart Solutions

Speakers



Coen de Ronde

Director
Hyperloop Development Program



Lucienne Krosse

Thematic Lead Sustainable Cities
at EIT InnoEnergy



Thijs Smit

Innovation manager
at NS

Transport and Mobility Today

- Transport responsible for 30% GHG emissions
- Demand passenger and freight transport will grow 2.5x by 2050
- Transport infrastructure investments of € 69.000.000.000.000+ are required towards 2050

- Increasing traffic congestion
- Options to extend existing infrastructure are diminishing

- Increasing urbanization and densification
- Lack of affordable housing
- Lack of green/healthy environments within cities



Transport and Mobility 2050

- Europe decarbonized
- Affordable, accessible, liveable sustainable cities / regions
- Travel and transport 'on-demand' available and affordable for everyone
- The option to live anywhere with acceptable commuting times



How? Disrupt the way we travel and transport.



FASTER



GREENER



BETTER



SMARTER

Hyperloop

Hyperloop Development Program



Coen de Ronde

Director

Hyperloop Development Program



HYPERLOOP DEVELOPMENT PROGRAM **AT HOLLAND HIGH TECH**

Coen de Ronde, Director Hyperloop Development
Program (HDP)

NOVEMBER 1ST, 2022

HOW DOES HYPERLOOP WORK?

Low-pressure environment reduces drag

No noise | Low energy usage

Tube isolates from the environment

High reliability | Low maintenance cost

Tube reduces infrastructure footprint

Easy spatial integration | Low construction cost

Driverless vehicles remove human error

High reliability | Low operating cost

Magnetic suspension and propulsion remove friction

No noise | Low energy usage | Low maintenance cost

Magnetic lane-switch enables non-stop network operations

Reduced trip times | High reliability | High capacity



THE PARTNERS

- More than **25** international partners in public-private cooperation
 - Industry
 - Knowledge institutions
 - Governments
- Working together to accelerate hyperloop development





2020
Launch of the
 hyperloop
development
program

2022
Groundbreaking of the
 European
Hyperloop Center

2023-24
Testing at the
 European
Hyperloop Center

2026
1st minimal viable route



2030
1st corridor between cities

2040
Realization of
regional networks

2050
Realization of
European network





INTEGRATION



INTEGRATION



GET IN CONTACT

 [HYPERLOOPDEVELOPMENTPROGRAM.COM](https://hyperloopdevelopmentprogram.com)

 COEN.DERONDE@HYPERLOOPDEVELOPMENTPROGRAM.COM

Hyperloop – vanuit het NS perspectief



Thijs Smit

NS – Strategie en Innovatie

Innovation manager

Ga naar www.menti.com en gebruik de code 77 70 00 2

 Mentimeter

Instructions

Ga naar
www.menti.com

Voer de code in
77 70 00 2



Of gebruik een QR code



Dank voor je aandacht



emailadres



www.hollandhightech.nl



Holland High Tech
Global Challenges, Smart Solutions