

An aerial, dusk-time rendering of a futuristic urban landscape. A prominent feature is a sleek, white, curved hyperloop track that winds through the city. The city itself is a mix of modern, multi-story buildings with glass facades and traditional, lower-rise structures. A large building with a green roof is visible in the center. The ground is a mix of paved areas, green spaces with palm trees, and parking lots. The overall atmosphere is one of advanced technology integrated into a modern urban environment.

# HYPERLOOP

TRANSPORTATION TECHNOLOGIES

[www.hyperloop.global](http://www.hyperloop.global)

**HYPERLOOP**  
TRANSPORTATION TECHNOLOGIES

[WWW.HYPERLOOP.GLOBAL](http://WWW.HYPERLOOP.GLOBAL)



# HYPERLOOP

TRANSPORTATION TECHNOLOGIES

[www.hyperloop.global](http://www.hyperloop.global)



**HYPERLOOP** Bibop Gresta  
TRANSPORTATION TECHNOLOGIES Chairman & Co-founder

[WWW.HYPERLOOP.GLOBAL](http://WWW.HYPERLOOP.GLOBAL)

TICKETLESS, FRICTIONLESS AND SUSTAINABLE:  
O IMPACTO DAS INOVAÇÕES DISRUPTIVAS NA LOGISTICA BRASILEIRA







2 Weeks Delay





32% Wasted



A series of concentric circles in a light blue color, centered on the text, creating a ripple effect.

# What's Hyperloop?







Built on proven  
technologies





# How it Works

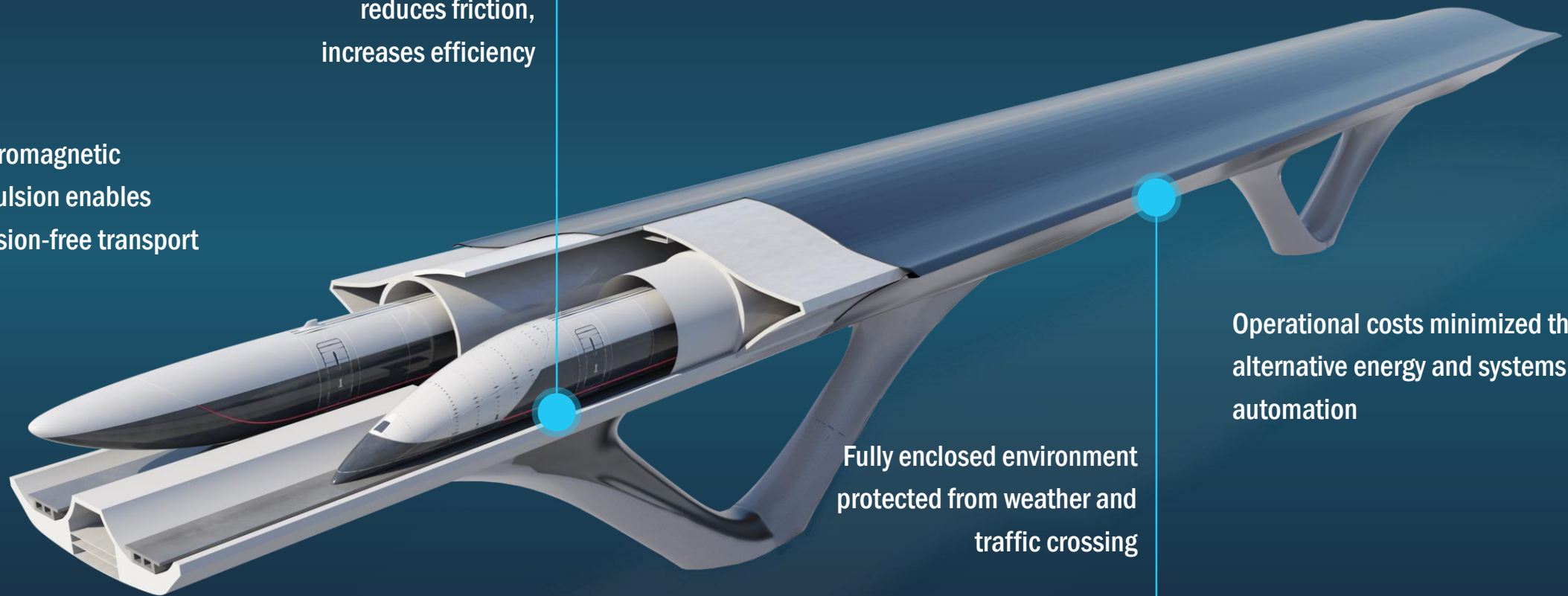
EFFICIENT

ENERGY  
POSITIVE

PROFITABLE

Levitated capsule  
reduces friction,  
increases efficiency

Electromagnetic  
propulsion enables  
emission-free transport



Fully enclosed environment  
protected from weather and  
traffic crossing

Operational costs minimized through  
alternative energy and systems  
automation





5KM URBAN SECTION









ABU DHABI STATION

**HYPERLOOP** URBAN WALKWAY

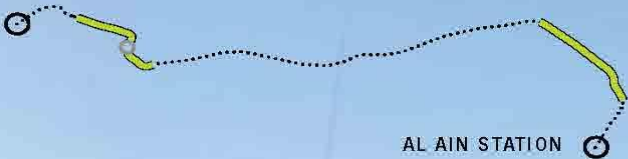
AL AIN STATION

5KM URBAN SECTION





ABU DHABI STATION



AL AIN STATION

30KM TYPICAL SECTION

***HYPERLOOP TYPICAL SECTION***











HYPERLOOP



Hyperloop is redefining how you commute,  
travel and connect



# Capsule

30 M LENGTH | 20 TONS WEIGHT  
2.7 M DIAMETER



PASSIVE MAGNETIC LEVITATION

ELECTROMAGNETIC PROPULSION



**1,223**

KM/H MAX / LEVITATION  
AT 40 KM/H



**28-40**

PASSENGER  
CAPACITY



**160,000+**

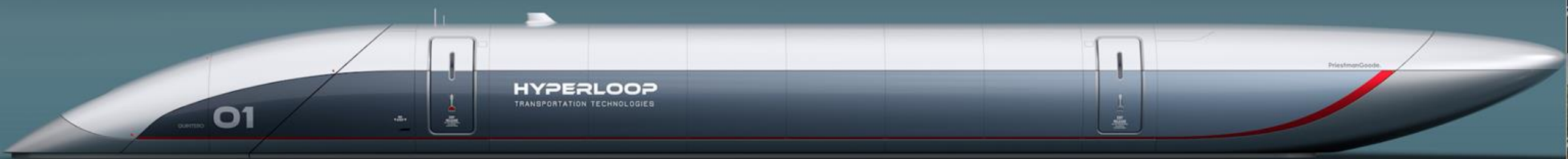
PASSENGERS  
DAILY



**4,000+**

CARGO  
SHIPMENTS DAILY









A new CAPSULE experience!

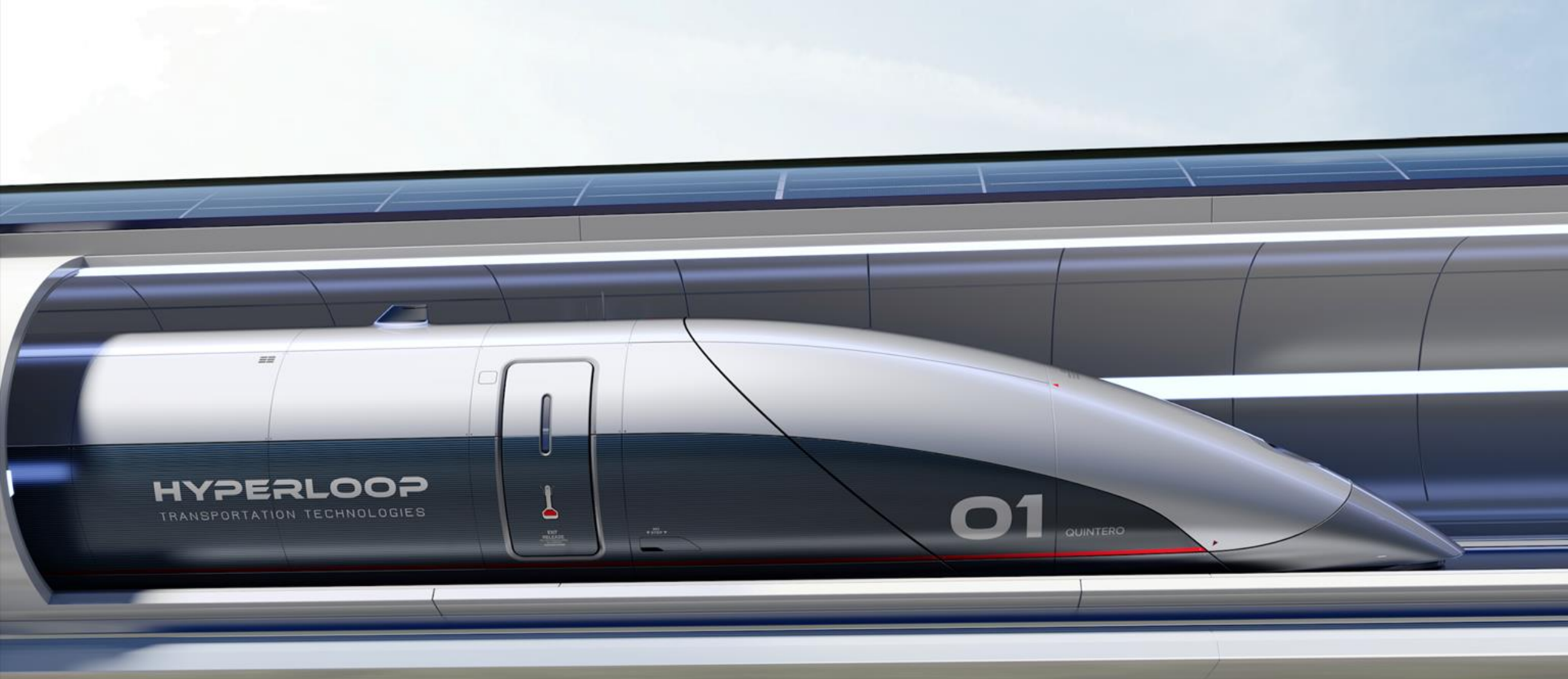




# TRAVELING

Safety | Comfort | Seamless | Connectivity





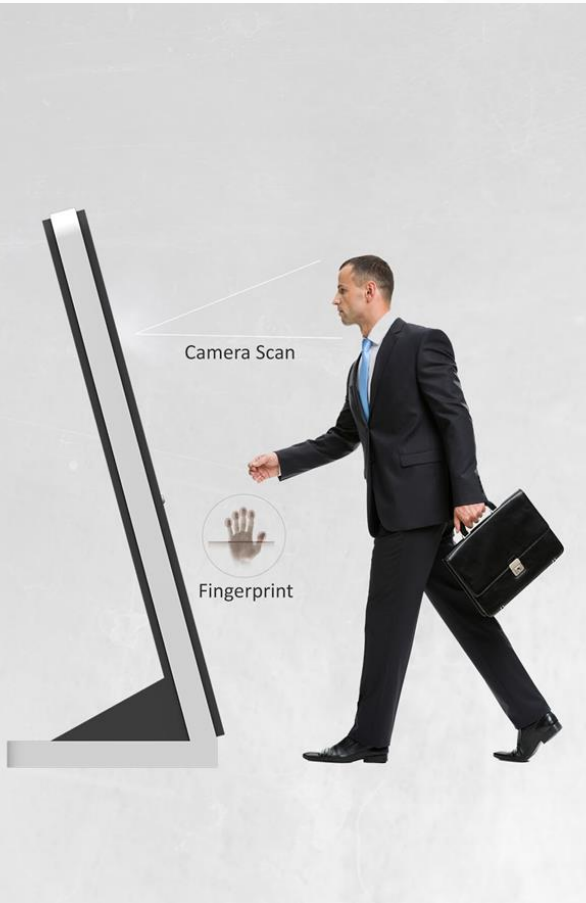
## PASSENGER-CENTRIC Travel Platform

- A. Class free
- B. Design for fulfilled passenger
- C. Multiple interior experience
- D. Integration with passenger-centric technologies



# Biometric ID

## HyperloopTT PX





# Augmented Window

HyperloopTT PX





# Personalized Space

HyperloopTT PX



(25°)

Monday, FEB 24

8 kph 23% 24hr 18"

FRI

SAT

SUN

Sun	Mon	Tue	Wed	Thu	Fri	Sat
24	25	26	27	28	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

(19)



Travel Assistant  
HyperloopTT PX

HYPERLOOP  
ARE WE  
THERE YET?

You have  
60km left.

HD



The background of the image is a blurred photograph of a group of people in what appears to be a meeting or collaborative work environment. Several individuals are visible, some looking towards the camera and others looking away. The image is intentionally out of focus to create a sense of depth and context for the text overlay.

# AUGMENTED **WINDOWS**

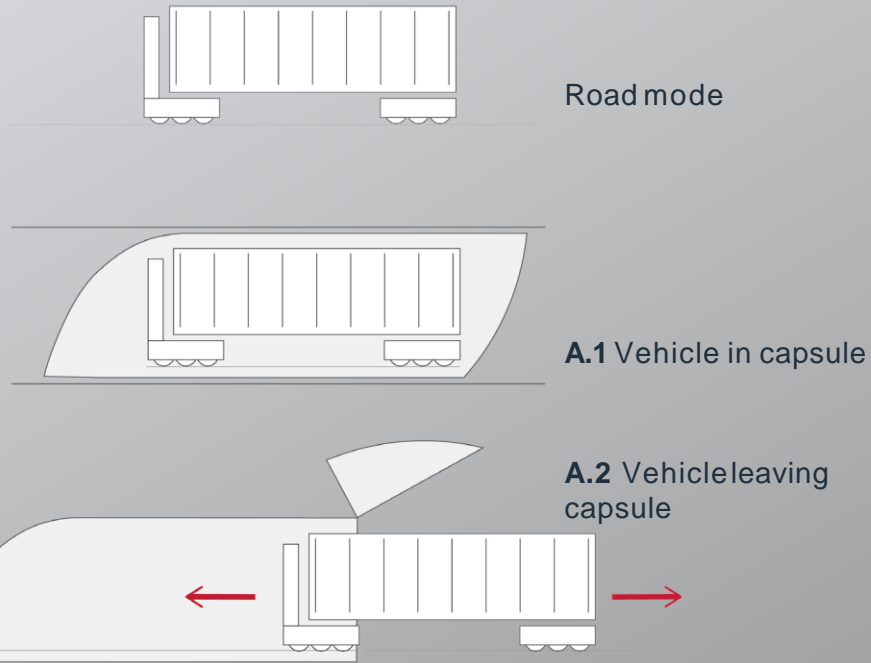




## Vehicle typologies

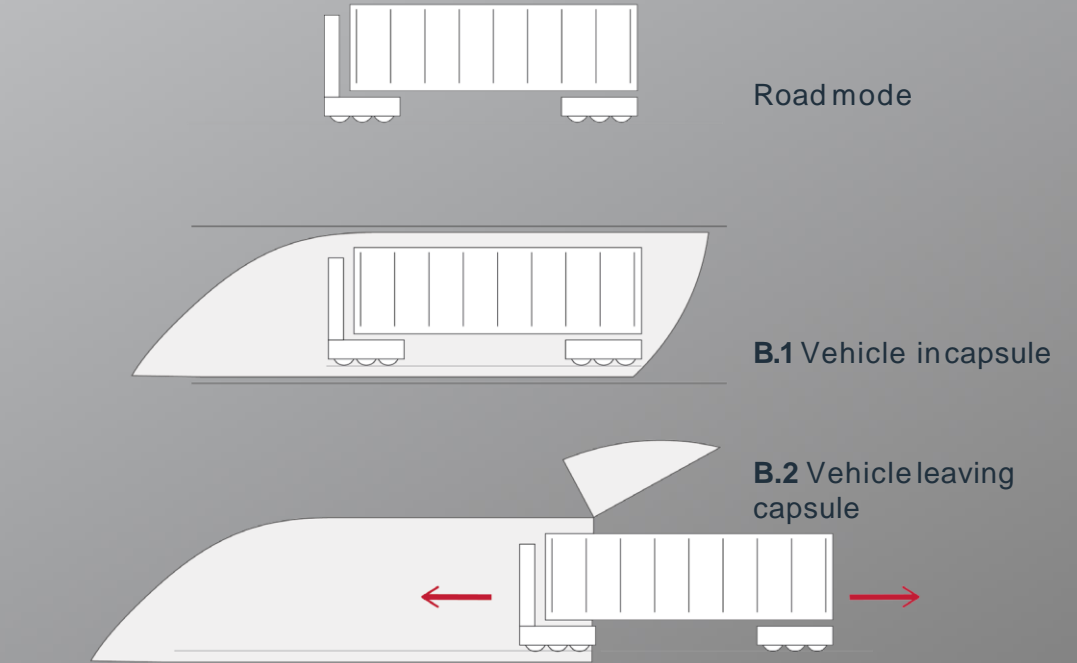
### A. Vehicle in capsule inside a low-pressure tube

This typology makes use of a vehicle that utilizes a pressurized capsule to travel inside the low-pressure tube at subsonic speed.

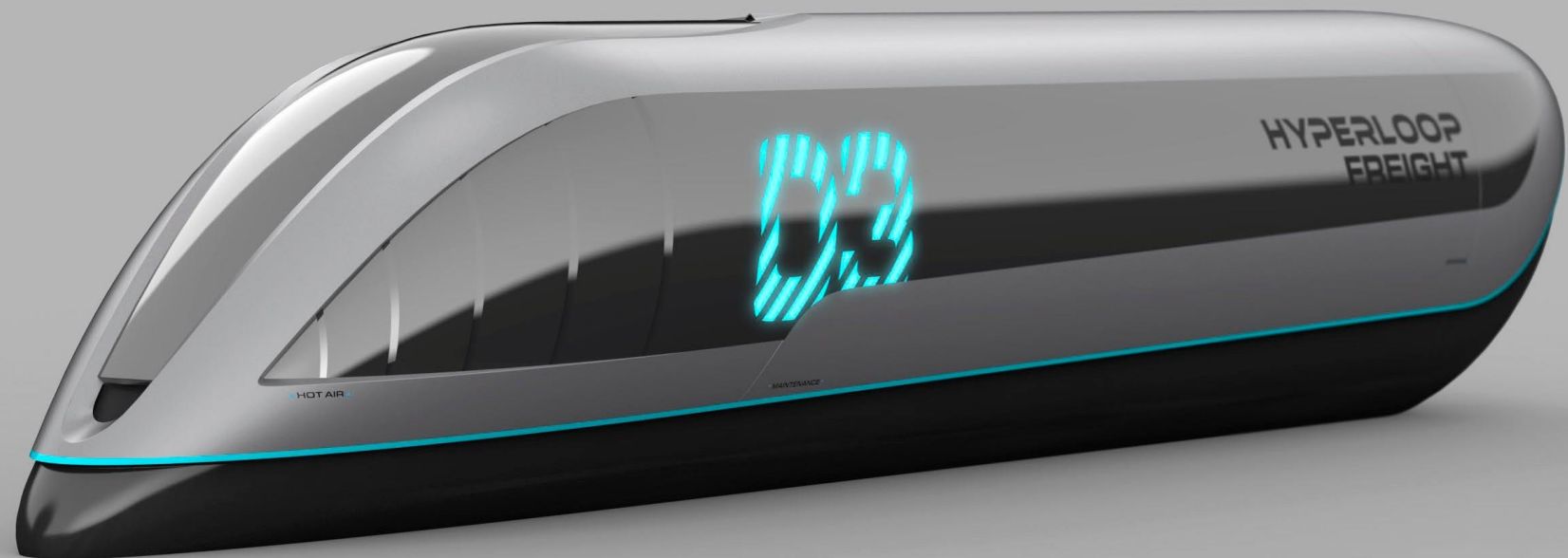


### B. Vehicle in capsule inside a non-pressurized tube

This typology makes use of a vehicle that utilizes a streamlined non-pressurized capsule to travel inside the tube at high-speed train velocity.

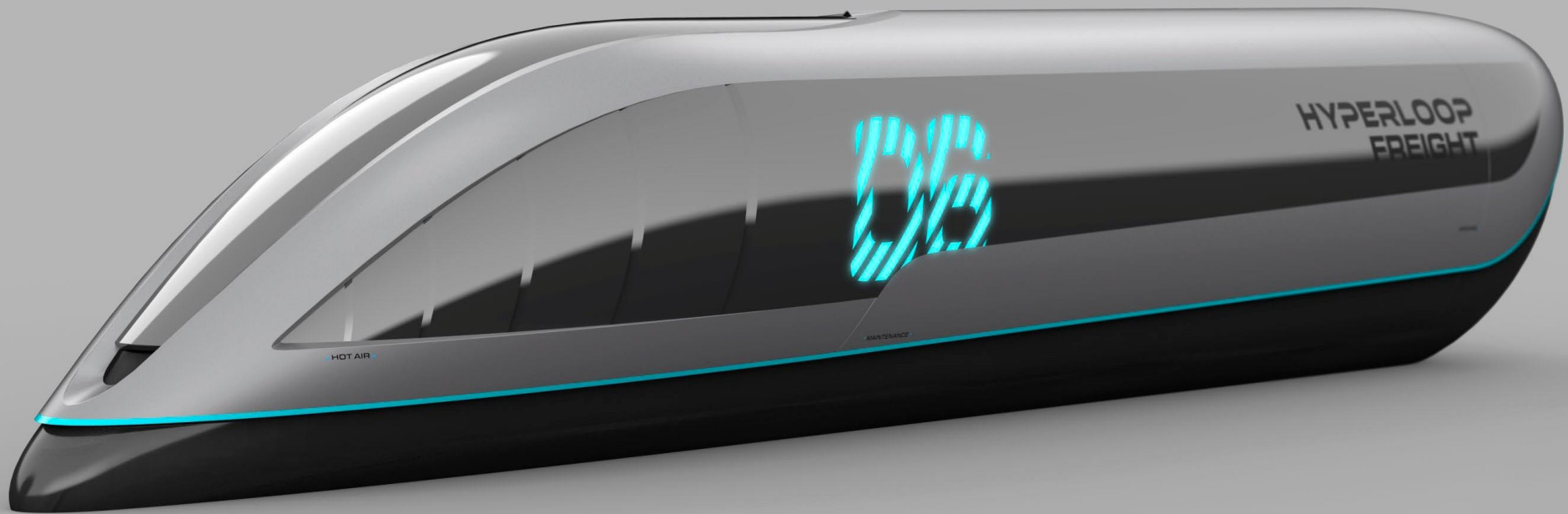


## Pressurized Capsule – Front view





## Non-pressurized Capsule – Front view

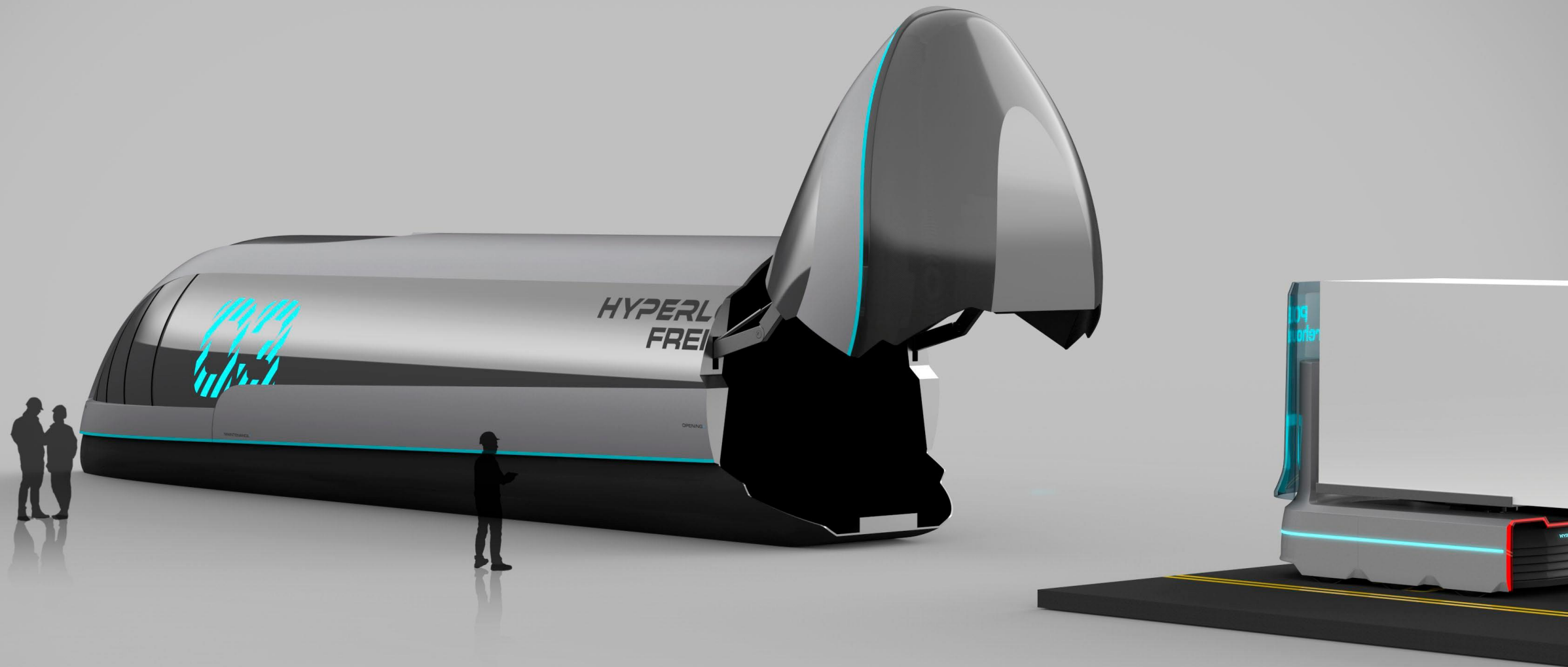


## Capsule and vehicle – Rear view

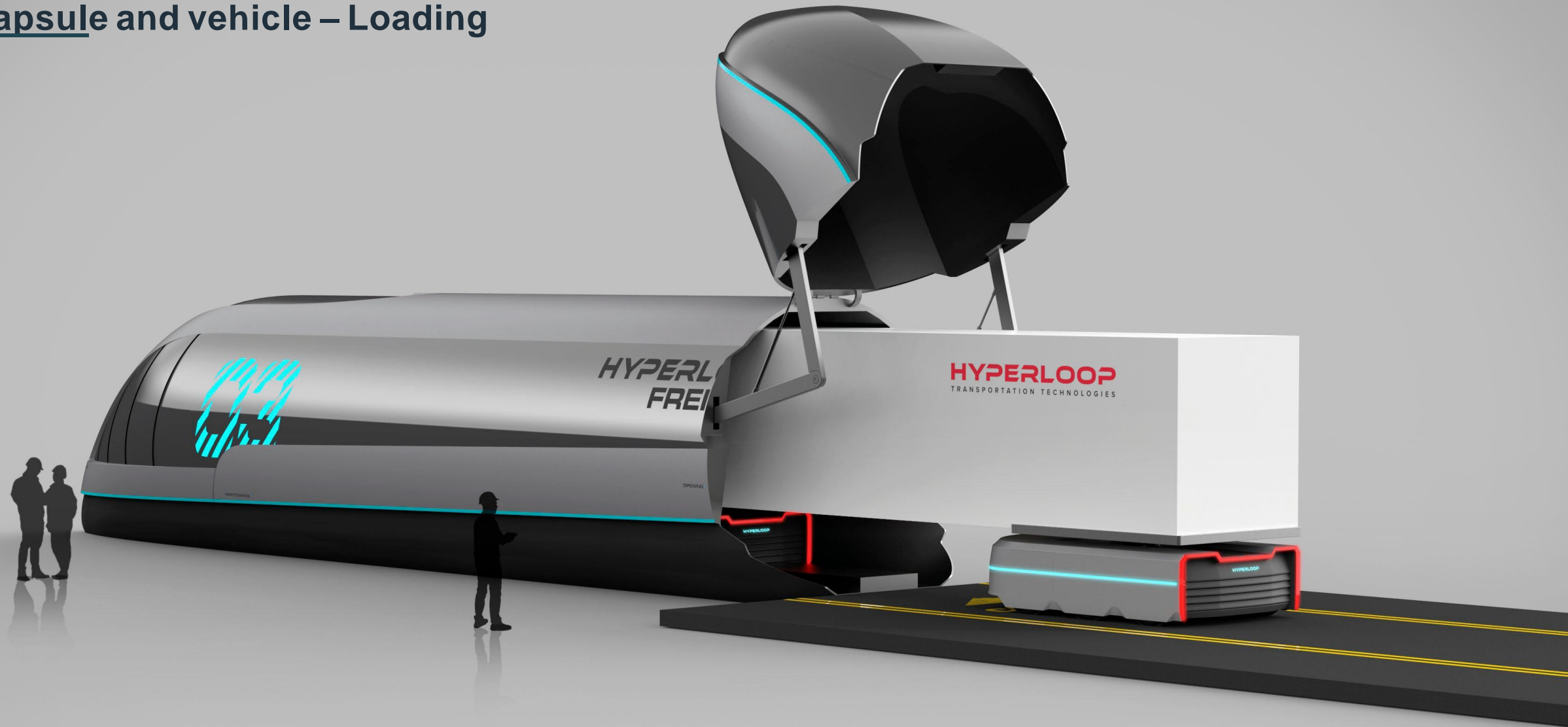




## Capsule and vehicle – Opening



## Capsule and vehicle – Loading

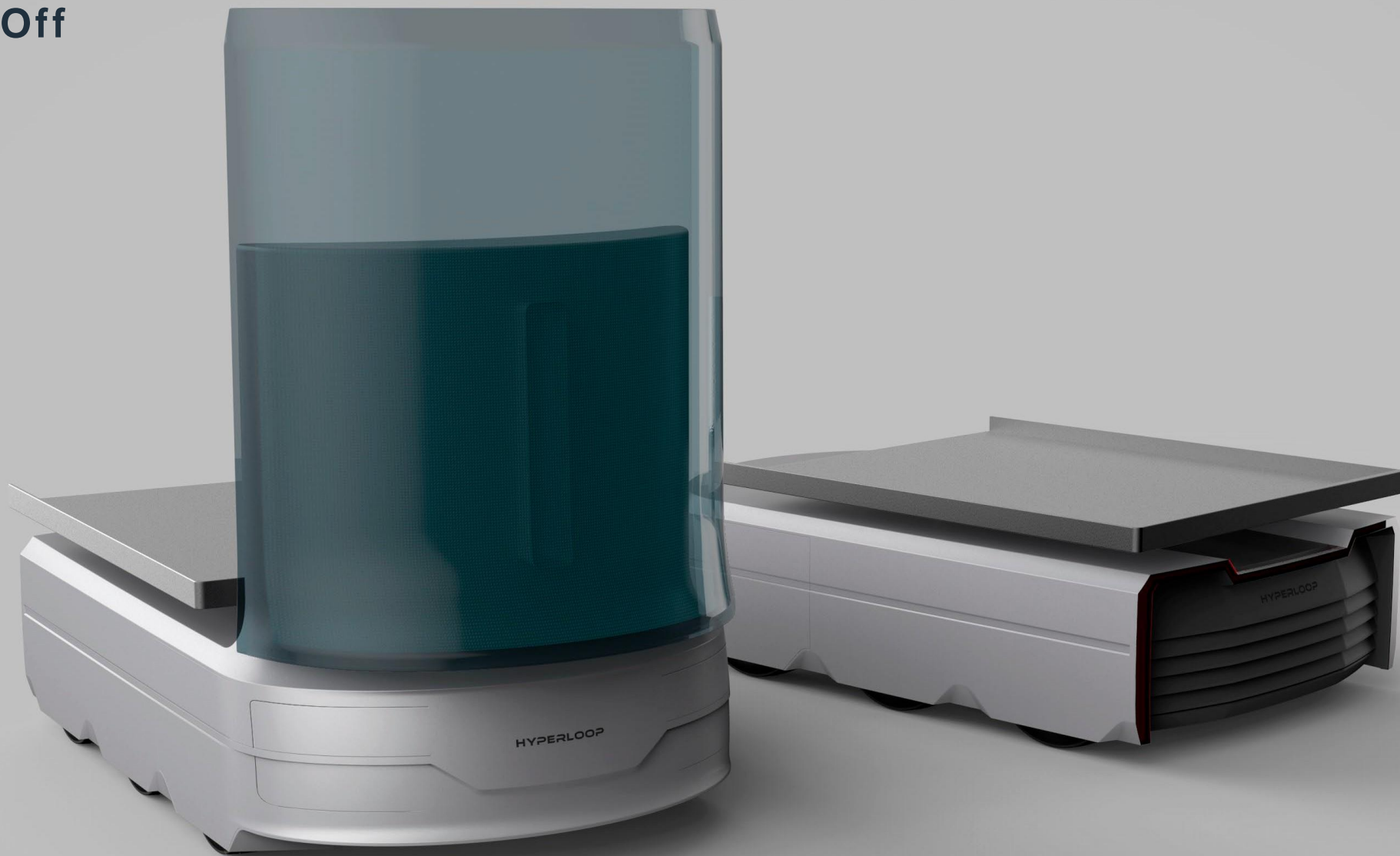




## Capsule and vehicle – Rear detail



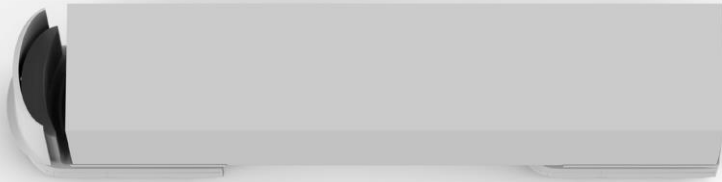
## Vehicle –Off





## Vehicle –Turning

Running straight



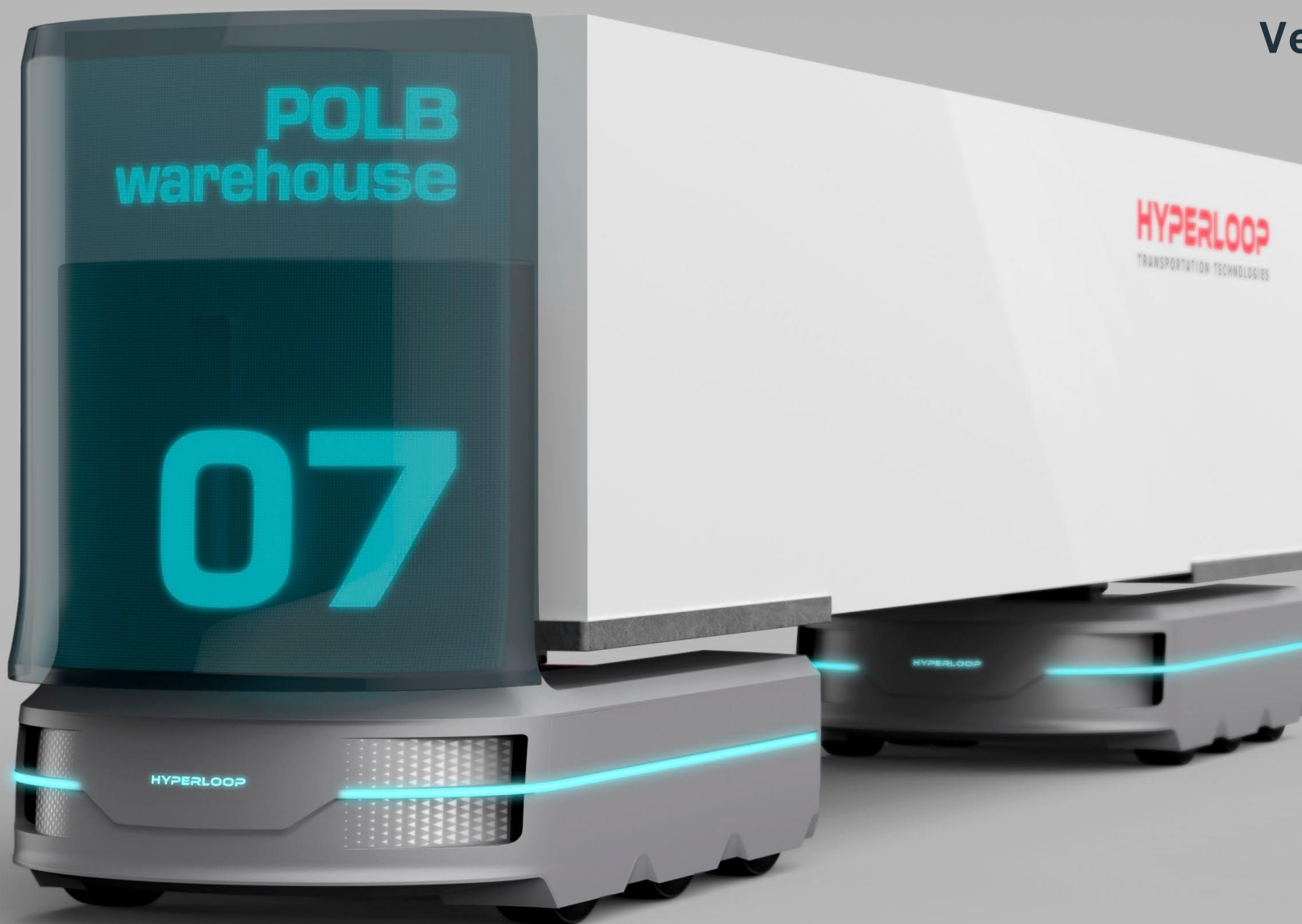
Turning



The load rest on two modules.  
These modules act as two pivot  
points when turning.

That makes the turning radius  
smaller than current trucks.

## Vehicle – Front view



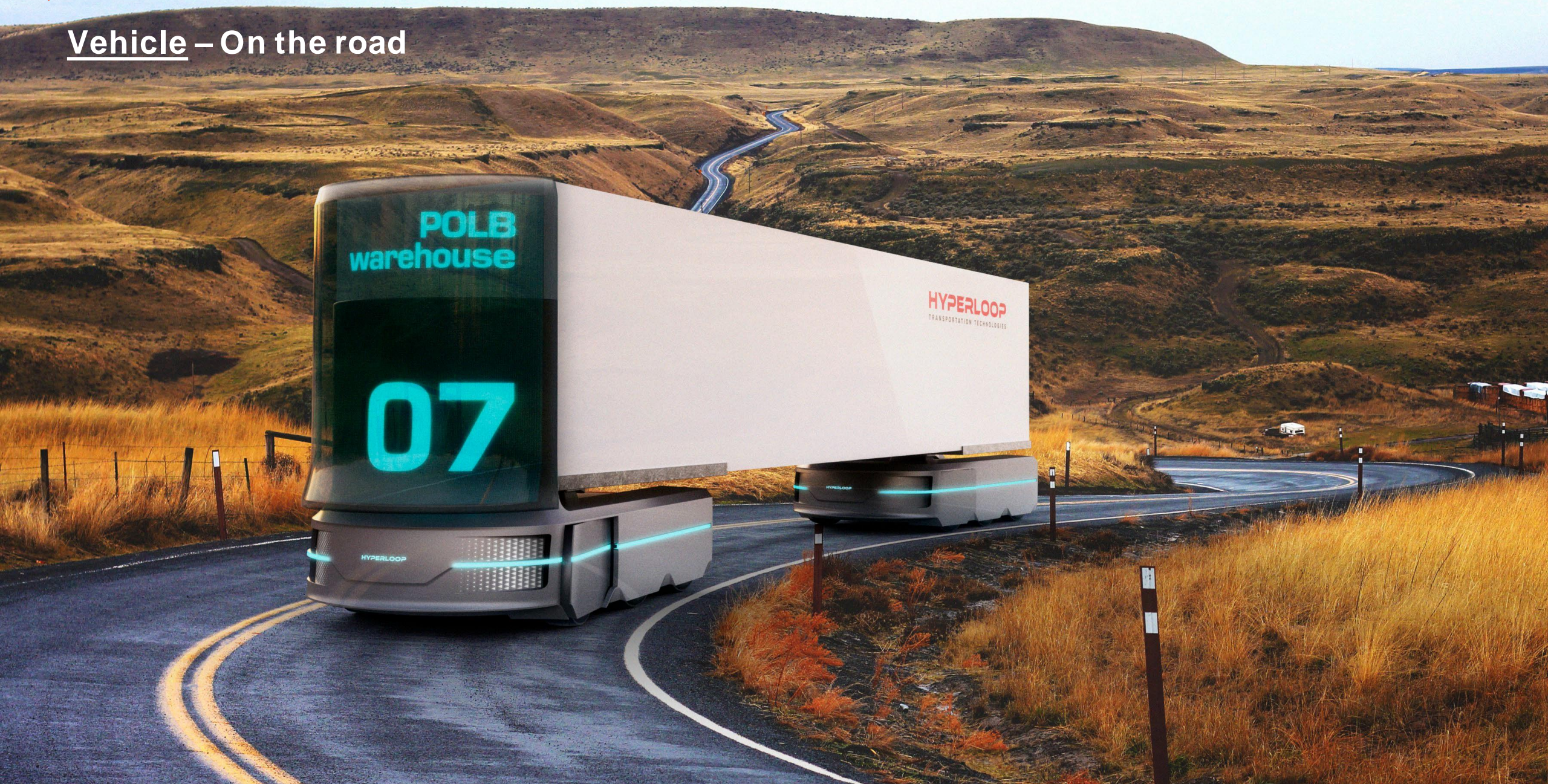


## Vehicle – Rear view





## Vehicle – On the road



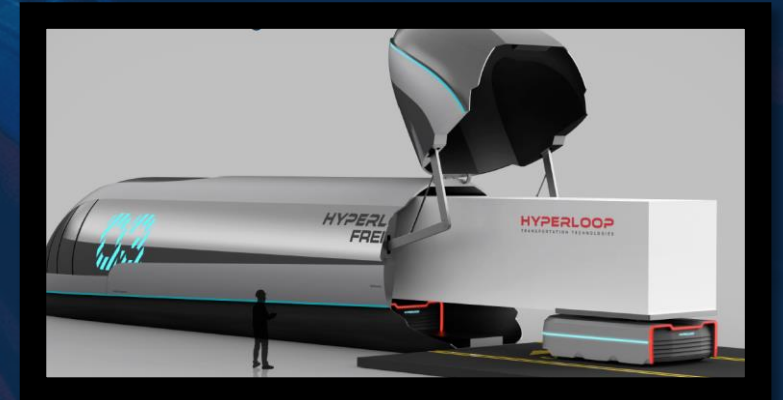
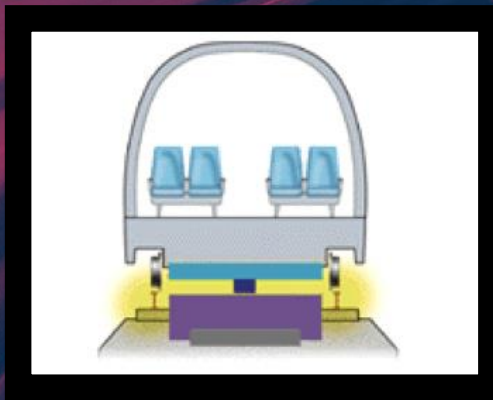
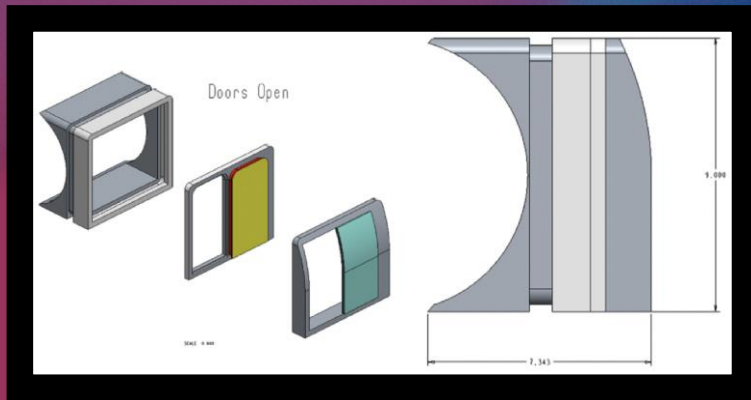


# ESTRUTURA P&D BRASIL

## DOCKLOCK SYSTEM

## LEVITATION SYSTEM

## CARGO CAPSULE







AEREOESPACIAL



AERONÁUTICA



MATERIAIS  
AVANÇADOS



TECNOLOGIAS  
SUSTENTÁVEIS



IMPRESSÃO  
3D



MAGNÉTICOS



EXPERIÊNCIA DO USUÁRIO/  
PASSAGEIRO



CONSTRUÇÃO  
CIVIL

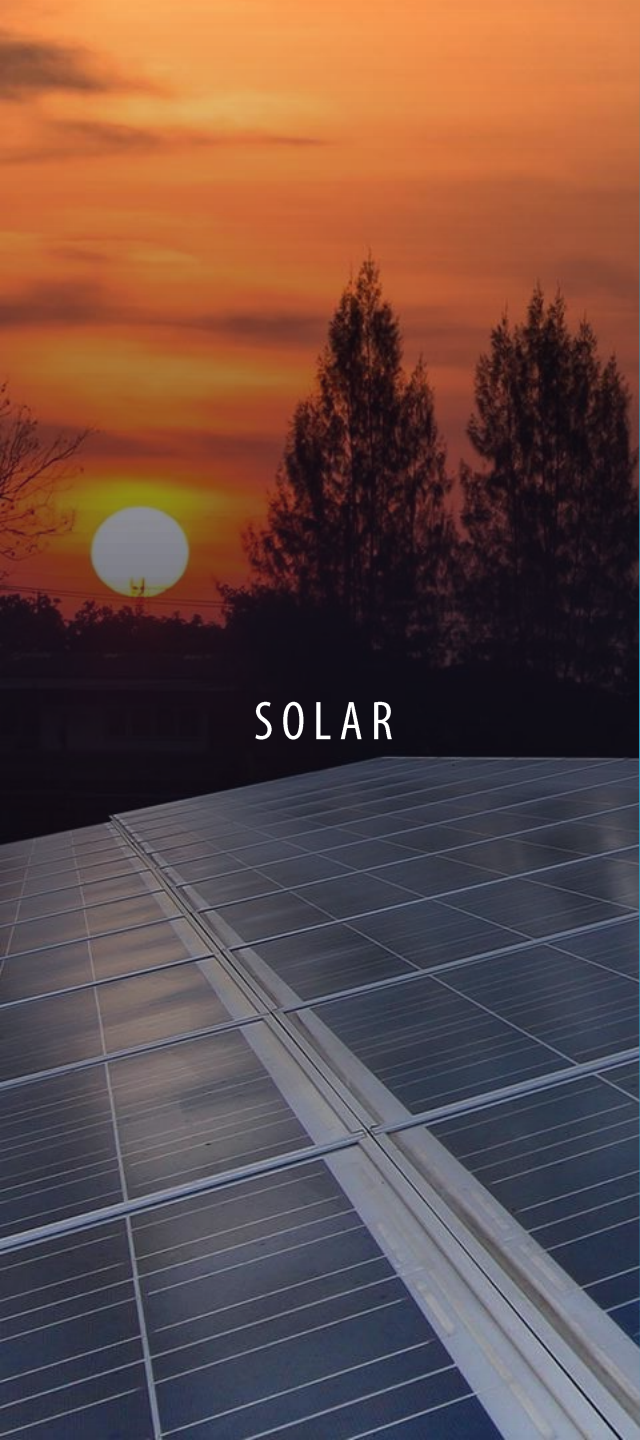


BATERIAS &  
GRAFENO

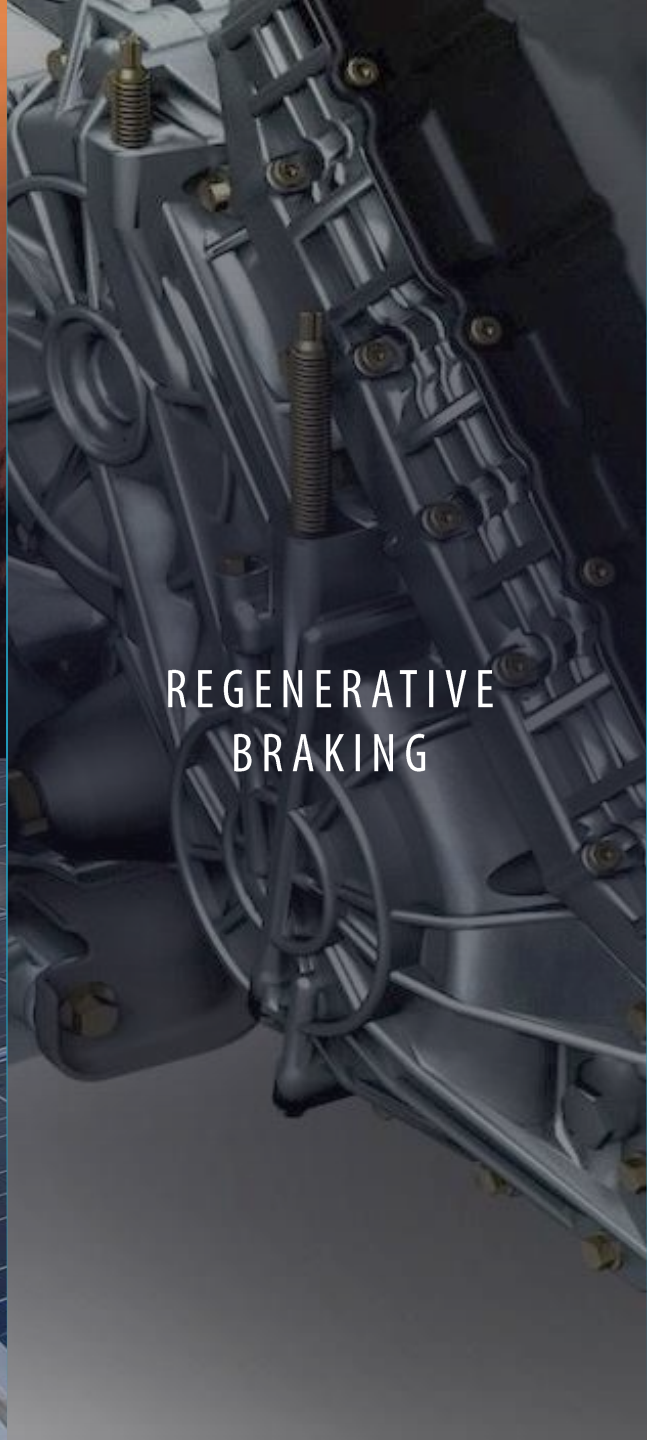


FUTURE OF  
PRODUCTION





SOLAR



REGENERATIVE  
BRAKING



GEO THERMAL



WIND



# HyperloopTT is energy net-positive



Solar Panels

Regenerative Braking

---

Total energy  
generated per year  
856,230,000 kwh\*



Acceleration

Capsule Systems

Vacuum

---

Total energy  
consumed per year  
743,185,000 kwh\*

Energy coverage  
115%

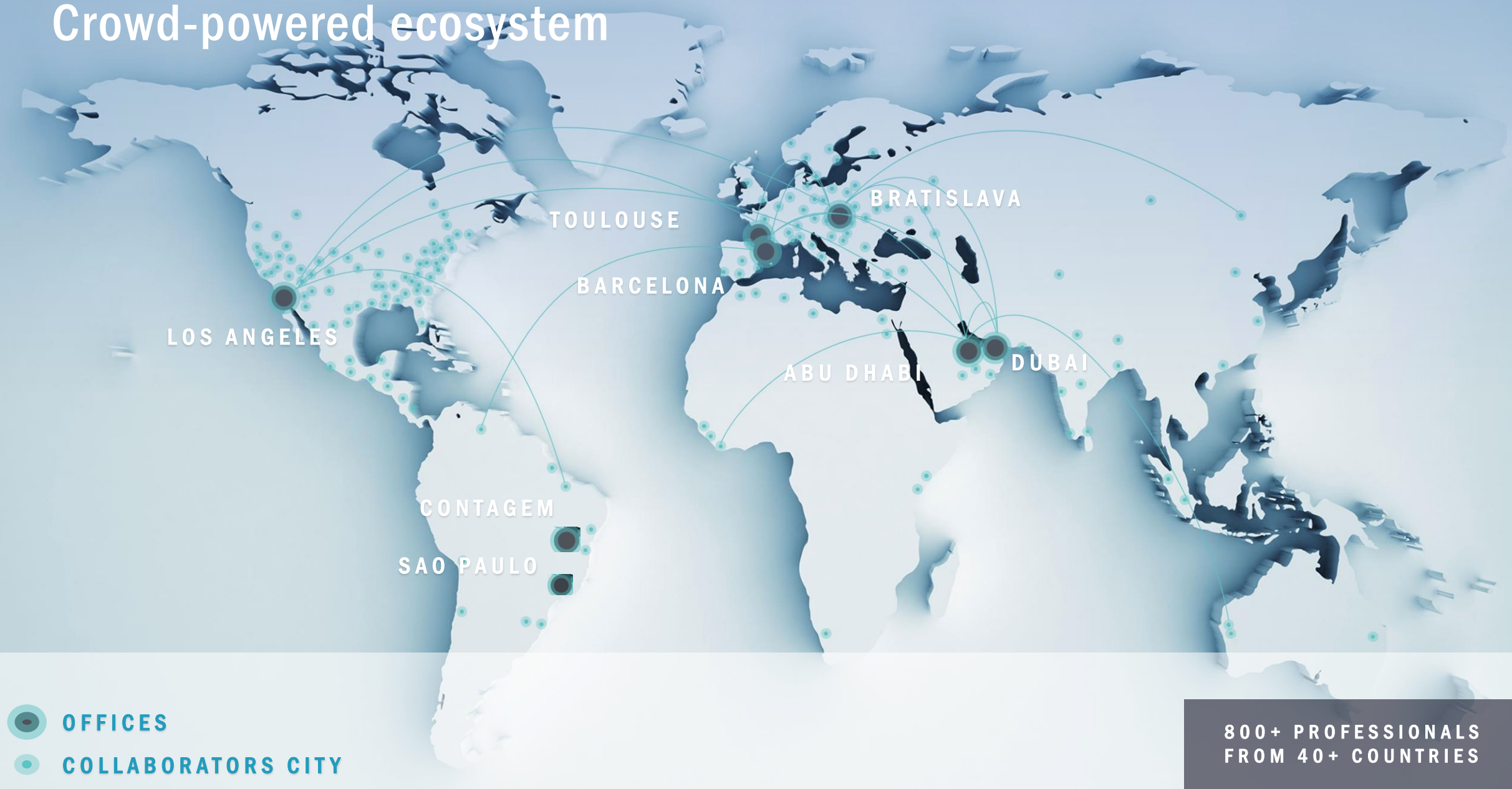
\* Energy measurement based on route  
between Toronto and Ottawa (Canada)



An aerial photograph of a city, likely Dubai, with a blue overlay. A white Hyperloop track is visible, curving through the urban landscape. The text "How we're building Hyperloop" is overlaid in white.

# How we're building Hyperloop

# Crowd-powered ecosystem





Citizen-funded

**70K**

Contributed hours have powered HyperloopTT before  
accepting a single investor dollar

# Strategic Partnerships

- Expertise within core team
- Decades of development
- Low burn rates
- Minimal barriers to entry
- New market opportunities







His Highness Sheikh

Falah Bin Zayed Al Nahyan

announces strategic partnership agreement with

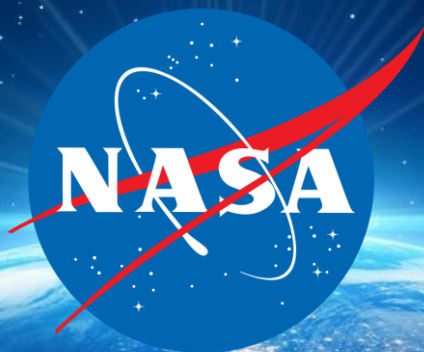
**HYPERLOOP**  
TRANSPORTATION TECHNOLOGIES

(Abu Dhabi, January 22, 2017)



**YVONE CAGLE**  
**NASA Astronaut**  
**HyperloopTT Ambassador**

# HyperloopTT has signed **A SPACE ACT AGREEMENT**



**SHAWNA PADYA**  
**CSA Astronaut**





ACADEMY



**\$ 7 Billion**  
**Hyperloop™ Brand Value**  
Advertising Value Equivalency (AVE)





# World's first crowd-powered company

Crowd-powering is a new form of business collaboration, leveraging the crowd to solve problems, enhance productivity, and create value.

Harvard Business School  
conducted a case study on how HyperloopTT  
defines and uses its crowd-powered ecosystem  
to  
disrupt the transportation industry.



H A R V A R D | B U S I N E S S | S C H O O L

N9-817-134

MAY 8, 2017

LYNDA M. APPLGATE

TERRI L. GRIFFITH

ANN MAJCHRZAK

## Hyperloop Transportation Technologies: Building Breakthrough Innovations in Crowd-Powered Ecosystems

*I believe that entrepreneurs can change the world. Elon Musk and Jeff Bezos are trying to change the world but they have billions of dollars. What if you have a passion to change the world but don't have access to that kind of personal wealth? We believe that we are not only transforming the nature of transportation, we are also defining the future of work in the 21<sup>st</sup> century.*

— Dirk Ahlborn<sup>1</sup>

WORLD  
ECONOMIC  
FORUM

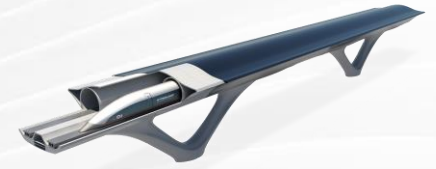
WORLD  
ECONOMIC  
FORUM





Hyperloop is  
happening now

# Construction Milestones | HyperloopTT System



## Vibranium™ capsule

- Dual-layer smart sensorized composite material
- Monitor structural integrity



## Vacuum by Leybold

- Joint development of HyperloopTT vacuum system with Leybold
- Detailed design and fabrication of HyperloopTT vacuum unit



## Full-scale test track

- Full-scale tube test track in Toulouse R&D Center
- Continued R&D on tube materials: Steel/concrete/carbon fiber



## Inductrack™ by LLNL

- Passive magnetic levitation
- Exclusive license from Lawrence Livermore National Laboratory



## Reinsurance by Munich RE

- Munich RE deemed HyperloopTT technology feasible and insurable
- First insurance framework for HyperloopTT commercial systems

Abstract:  
Hyperloop Transportation Technologies  
Risk Report

Expanding together the boundaries of transportation and insurability

## Certification by TÜV SÜD

- First set of Hyperloop Core Safety Requirements and Certification Guidelines have been produced



Add value.  
Inspire trust.

Generic Guideline for  
the Certification of  
Hyperloop Systems

Extract: Core Safety Requirements







LOS ANGELES,  
**UNITED STATES**

RESEARCH & DEVELOPMENT CENTER



GREAT LAKES,  
**UNITED STATES**

P3 AGREEMENT



MINAS GERAIS,  
**BRAZIL**



RESEARCH & DEVELOPMENT CENTER





**TOULOUSE,  
FRANCE**



**RESEARCH & DEVELOPMENT CENTER**



**BRNO,  
CZECH REPUBLIC**



**FEASIBILITY STUDY**



**BRATISLAVA,  
SLOVAKIA**



**FEASIBILITY STUDY**





KIEV,  
UKRAINE

COMMERCIAL LINE



ABU DHABI,  
UAE

FIRST COMMERCIAL AGREEMENT  
FEASIBILITY STUDY  
ROYAL SUPPORT



ANDHRA PRADESH,  
INDIA

FEASIBILITY STUDY





**JAKARTA,  
INDONESIA**



**FEASIBILITY STUDY**



**TONGREN (GUAZHU),  
CHINA**



**COMMERCIAL LINE**



**SEOUL,  
SOUTH KOREA**



**R&D COLLABORATION**





XO SQUARE TOULOUSE (France)





XO Square Toulouse (France)





**R&D center in Toulouse**  
**300 m + 1 km full-scale prototype**





HYPERLOOP  
TRANSPORTATION TECHNOLOGIES

#HyperloopTT

SAAVEDRA

SAAVEDRA  
000













The background is a dark blue gradient with a complex, abstract pattern of concentric circles and radial lines, creating a sense of depth and movement, similar to a camera lens or a tunnel.

Will history  
know your name?

Join the team!

[hyperloop.global/join](https://hyperloop.global/join)



# HYPERLOOP

TRANSPORTATION TECHNOLOGIES

## Coming soon!



HYPERLOOP  
TRANSPORTATION TECHNOLOGIES

#HyperloopTT

Stay connected on FACEBOOK

**Bibop G. Gresta**  
**HyperloopTT**

Join the team!

[hyperloop.global/join](https://hyperloop.global/join)

Stay connected on INSTAGRAM

**#MrBibop**  
**#HyperloopTT**