



**VICHYPER**

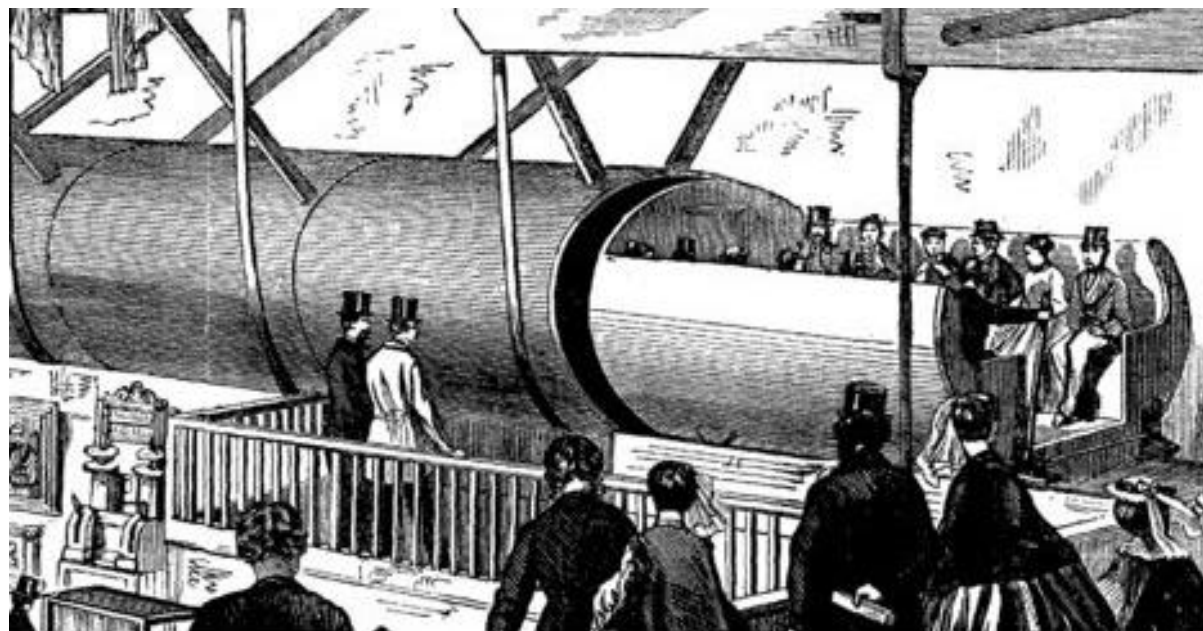
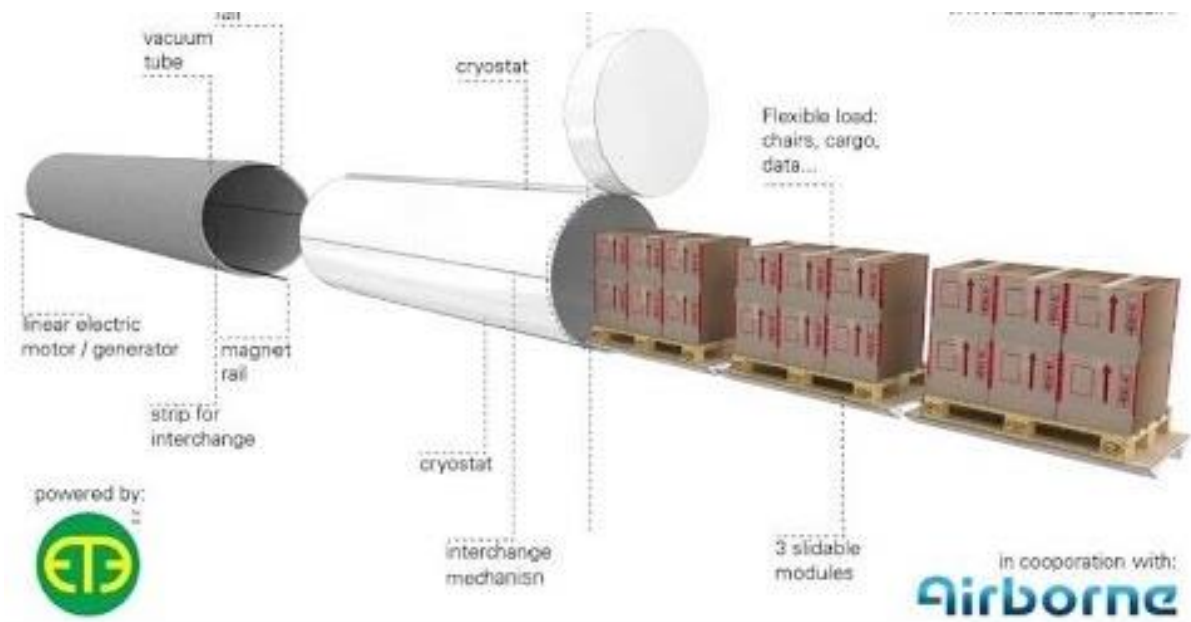
# Hyperloop



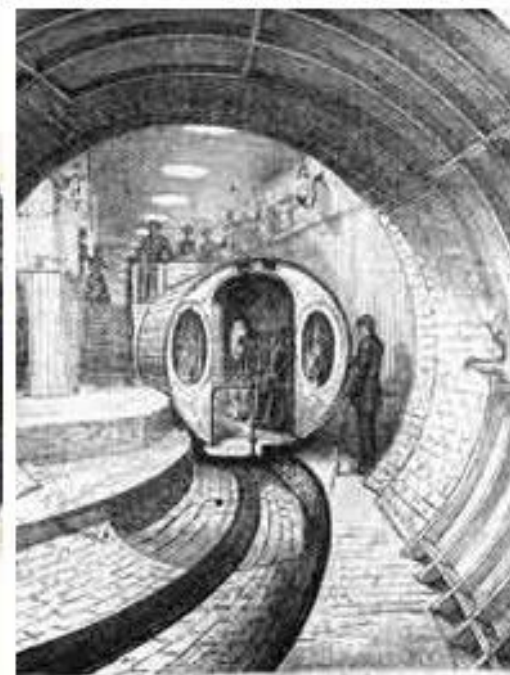
- Vacuum tube transportation
- Capsule carrying people or cargo travels within the tube below the speed of sound (up to 1200kmh)
- The capsule is levitating on maglev and being accelerated by linear electric motors
- Low air resistance, no contact/rolling resistance equates to minimal energy use
- Large proportion of trip is done with low to no energy input
- Possibility of 100% renewable energy powered.
- Theoretically it has the potential to be the fastest, safest, most energy efficient system on the planet








- silent
- invisible
- energy-efficient
- every 6 minutes





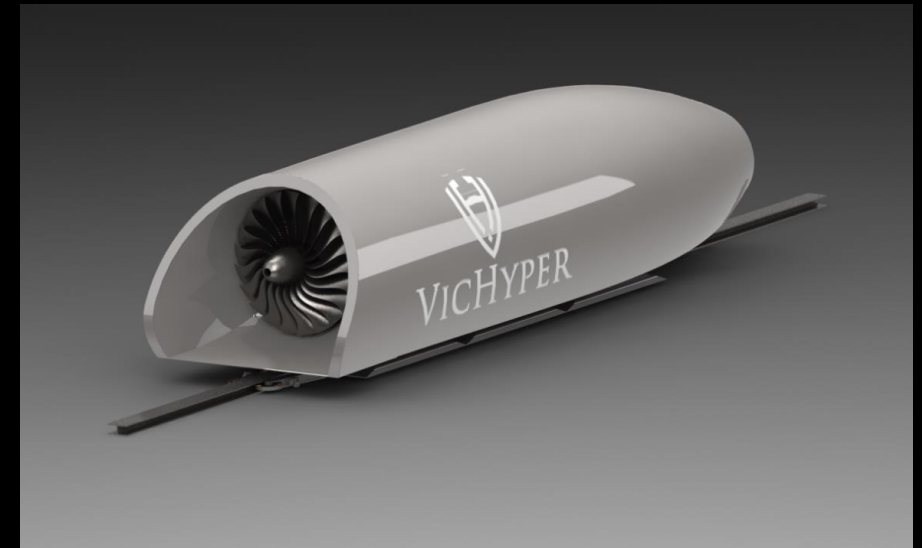
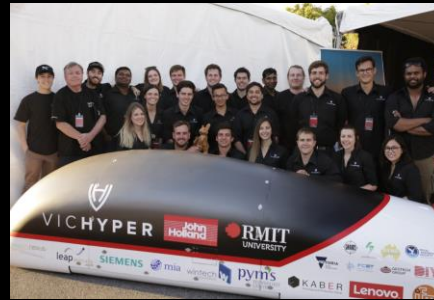
The background of the slide features a bright blue sky with scattered white clouds. In the foreground, a green field is visible with a white fence. The text 'SPACE X' is written in a large, white, sans-serif font across the top, with a stylized rocket ship icon integrated into the letter 'X'. Below it, the words 'HYPERLOOP POD COMPETITION' are written in a similar white font. A large, semi-transparent white circle is overlaid on the left side of the image, containing the title and a list of bullet points.

## VicHyper involvement in Hyperloop

- Elon Musk's SpaceX created a competition based around revolutionising transport, mainly Hyperloop.
- Co-founded VicHyper with a friend and fellow country boy
- Through out the journey of the competition we realised how important something like Hyperloop would be to people of Australia.

# VicHyper history

- Founded in 2015 by Matt and Zac to compete in SpaceX competition.
- 1700 teams entered
- 130 teams made it to the semi finals from 20 countries.
- Won the award for best braking system in Texas and the team progressed to the finals
- Made prototype pod and transported it to LA for finals.



# Post SpaceX competition

- VicHyper Pty Ltd
- How do we fit into Hyperloop development
  - Development of tube, maglev, motors, pylons
- Focus on a legitimate high speed link to connect rural and urban areas

# Technology

- Main objective of Hyperloop was to try and use already developed technology
  - Fast, efficient, accurate tube construction
  - Maglev system and its manufacturing
  - Linear motor development and manufacturing



# Hyperloop in Australia

- Entered a business case prospectus to the Department regional development and infrastructure
- Melbourne to Sydney is one of the best locations on Earth for a Hyperloop system
- Possibility to cut travel time down to 55 minutes from Melbourne to Sydney
- Would connect the rural areas that are situated along the corridor.
  - One million between Sydney and Melbourne
  - 250 thousand between Sydney and Brisbane



# SWOT

## Strengths

- Reduced travel time
- Less expensive and easier to build
- Reduced friction and drag Less area compared to other transport

## Weaknesses

- Higher initial transport costs
- Land acquisitions

## Opportunities

- Decongestion of cities
- Business opportunities
- Clean transportation
- Boost in tourism sector

## Threats

- Bullet trains
- Cheaper air tickets/freight
- Sabotage

*Virgin* hyperloop one

**HYPERLOOP**  
TRANSPORTATION TECHNOLOGIES



TRANSP  D



**ARRIVO**



**THE BORING COMPANY**

# Current leaders in the Hyperloop transport system

- DP World Cargo Speed
  - Joint venture between Virgin Hyperloop One and DP World
- Identified that priority freight will be over \$500 billion dollars by 2025





# What next!

- Working with university students to create more skills in the industry
- We want to work with organisations around Australia to figure out how Hyperloop or its associated technologies could be implemented to benefit their industry.
- We are looking to do a joint coloration with universities and organisations to do a technical and visual representation of the system.

Thank you!