# Is Hyperloop helpful in relieving the environmental burden of long-distance travel?

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# Passenger transport markets from the perspective of travel modes

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| Short distance (< 30 km)<br>Active modes play a role<br>ca 25% of mileage |
| Medium distance (30-300 km)<br>Domain of the motorized road and rail modes<br>ca 35% of mileage |
| Long distance (300-3000 km)<br>The air mode is an alternative<br>ca 20% of mileage |
| Very long distance (> 3000 km)<br>The air mode is dominant<br>ca 20% of mileage |

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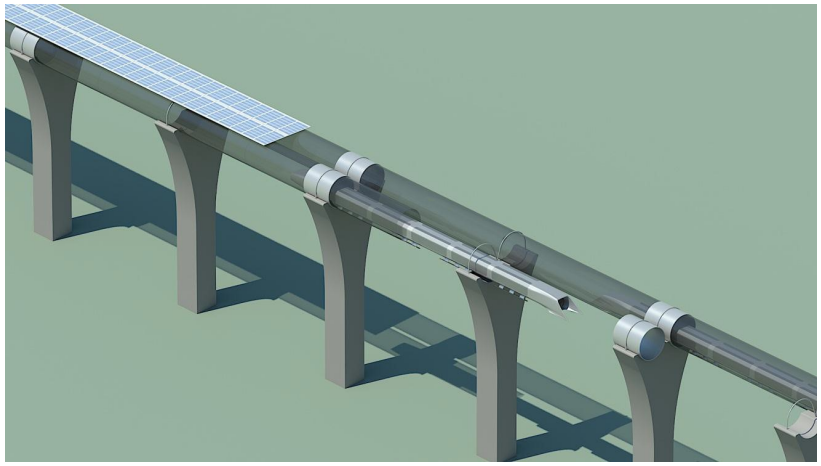
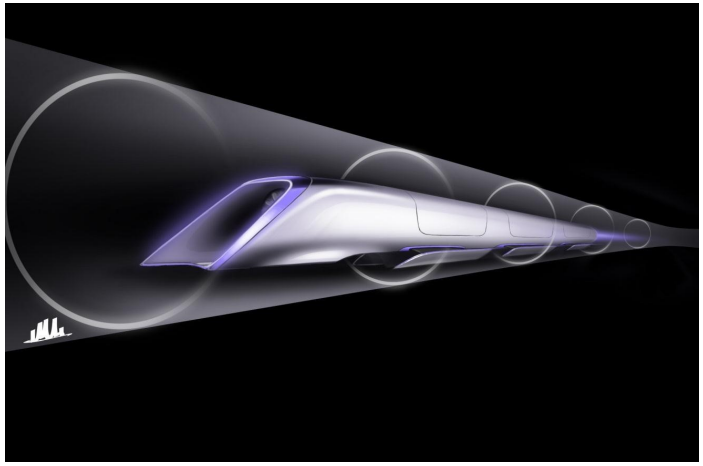
# Saving energy consumption in long-distance travel

- By far most energy is consumed for overcoming the air resistance.
- This can be reduced largely by moving through evacuated tubes (an old idea).
- Currently an evacuated tube system is elaborated and tested (Hyperloop).





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# The research question

- What is the potential of the Hyperloop transport system for reducing energy consumption and GHG emissions in long-distance travel?
- We analysed it for Europe assuming a mature Hyperloop network covering the whole continent.

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