

Iceland 
Liechtenstein
Norway grants



**Ministerstvo financí
České republiky**

TOPIC: Electromobility in Iceland

NAME: Radek Havel

**PROJECT: Comparison of energy potencial of Iceland and the
Czech Republic**

DATE: 1/ 8/2021 – 31/ 8/ 2022

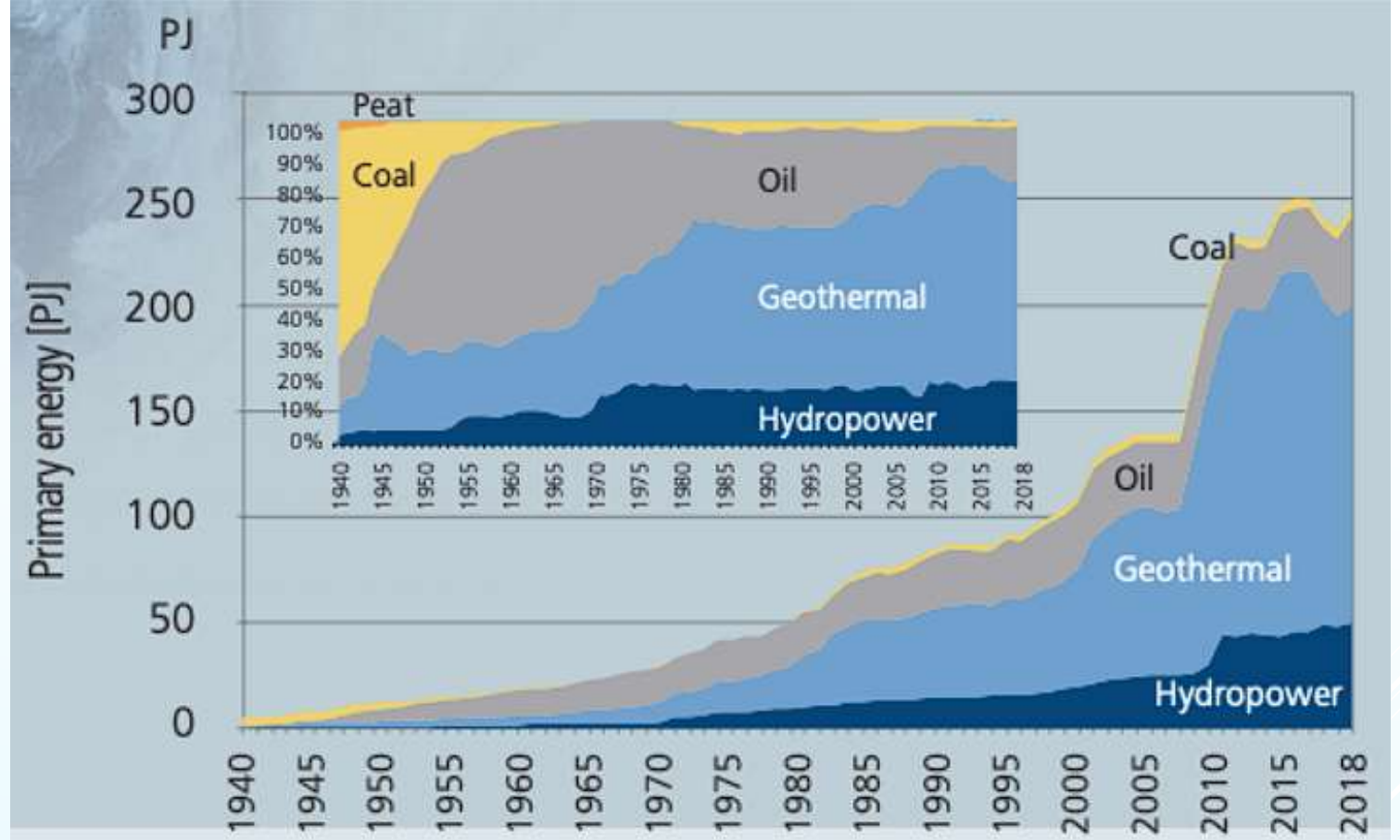
Iceland and energy

- In Iceland, geothermal and hydropower are used for energy production
- This is energy with minimal CO₂ production
- Hydropower is a renewable resource
- Energy prices in Iceland are very low (2.66 CZK / kWh) compared to the Czech Republic (8 CZK / kWh)
- This makes Iceland very advantageous for electromobility

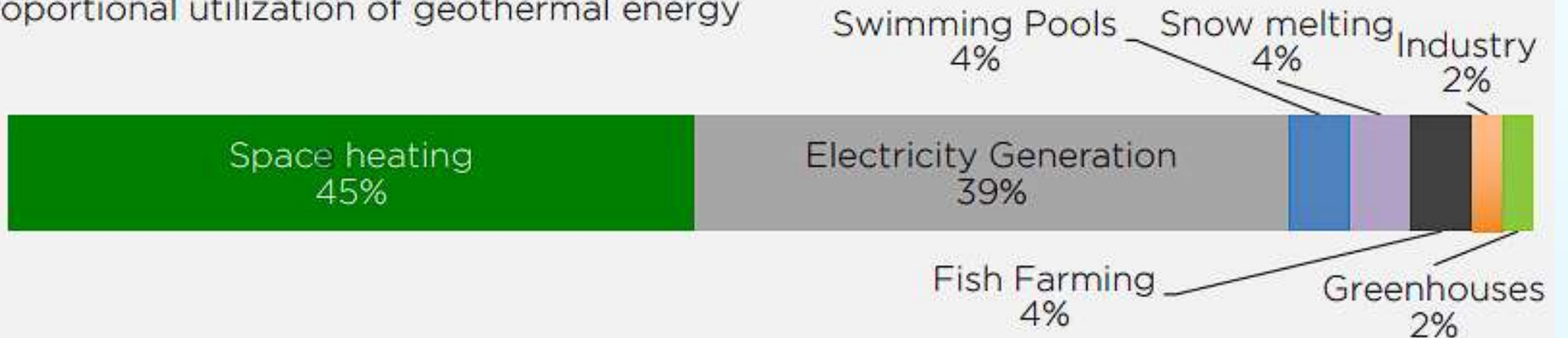


Iceland and energy

- Almost 70% of energy comes from hydroelectric power plants
- Geothermal power plants supply 30% of electricity, including a large amount of thermal energy



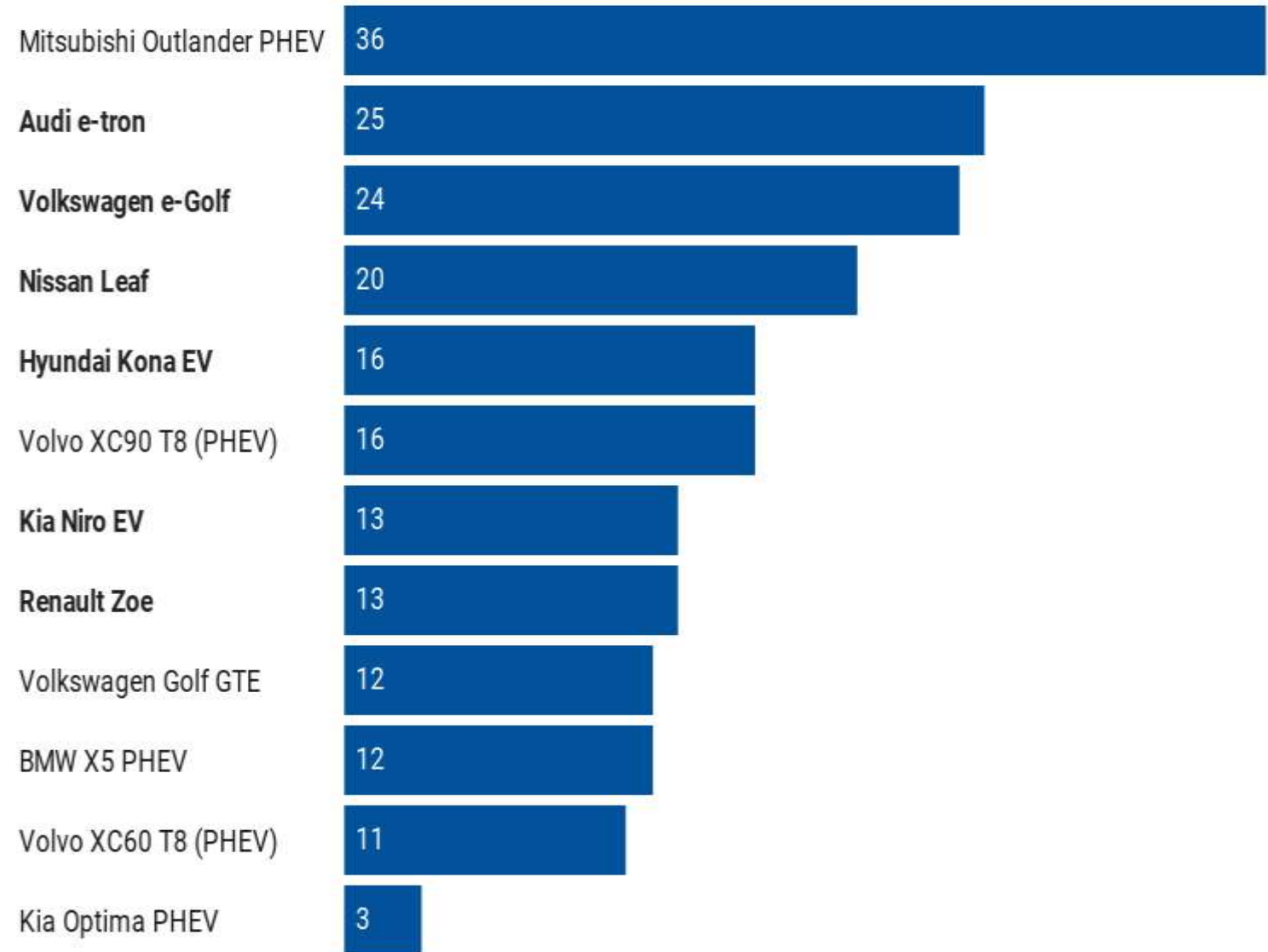
Proportional utilization of geothermal energy



Electric cars

- Already 63% of newly sold cars are plug-in cars
- 45% of them are electric cars, the rest are hybrid cars
- The table shows the best-selling cars and their percentage
- The share of newly sold cars is increasing every year

Top 12 Electric Vehicles In Iceland (February 2020)

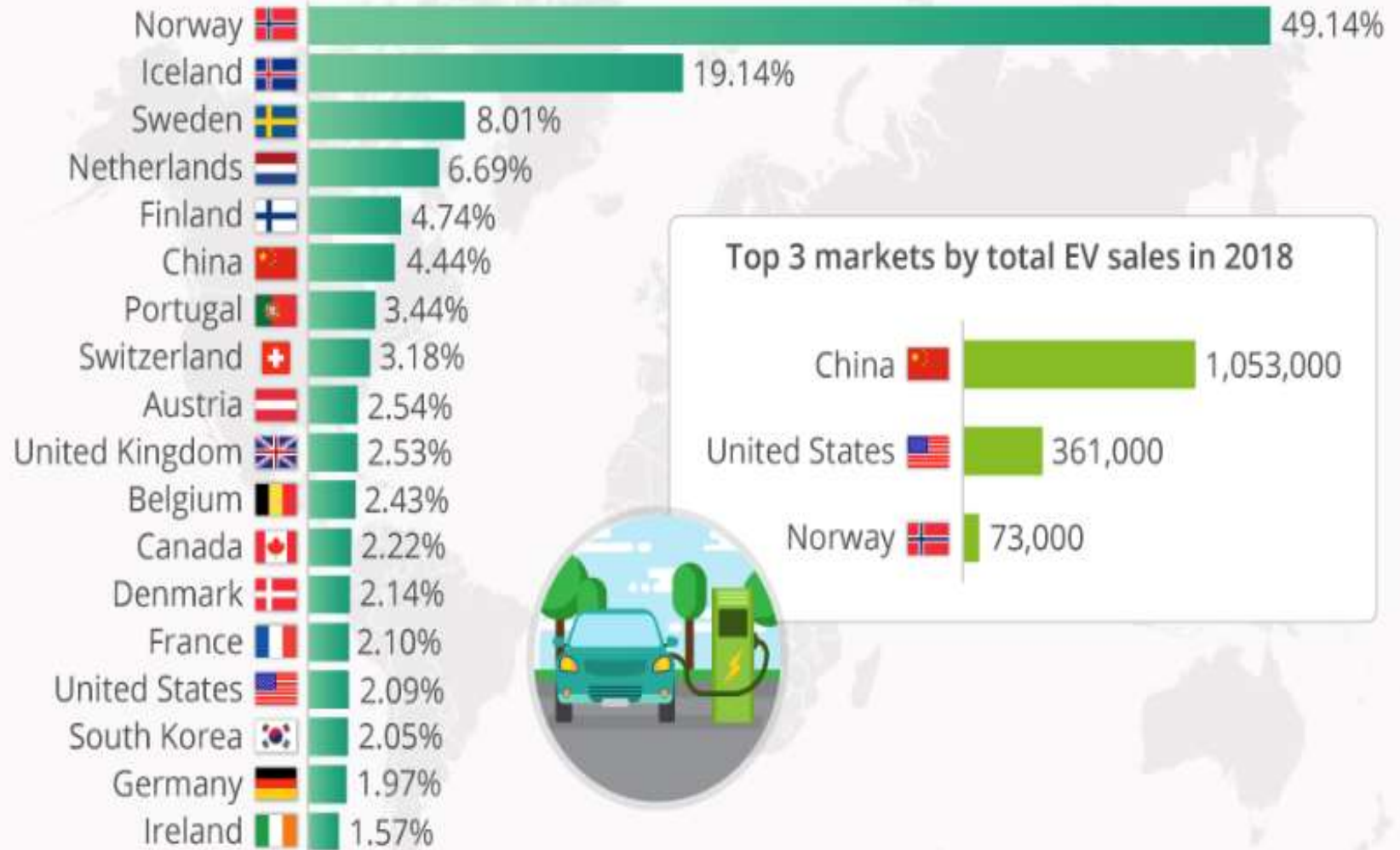


Iceland as a leader

- According to the Statista website, Iceland is in second place worldwide with a share of electric vehicles of 19.1%.
- The country has the perfect mix for introducing electromobility - low energy prices, low-emission resources and high GDP (\$ 21.71 billion)

Electric Mobility: Norway Races Ahead

Countries with the highest share of plug-in electric vehicles in new passenger car sales in 2018*



@StatistaCharts

* including plug-in hybrids and light vehicles, excluding commercial vehicles

Sources: ACEA, CAAM, InsideEVs, KAIDA

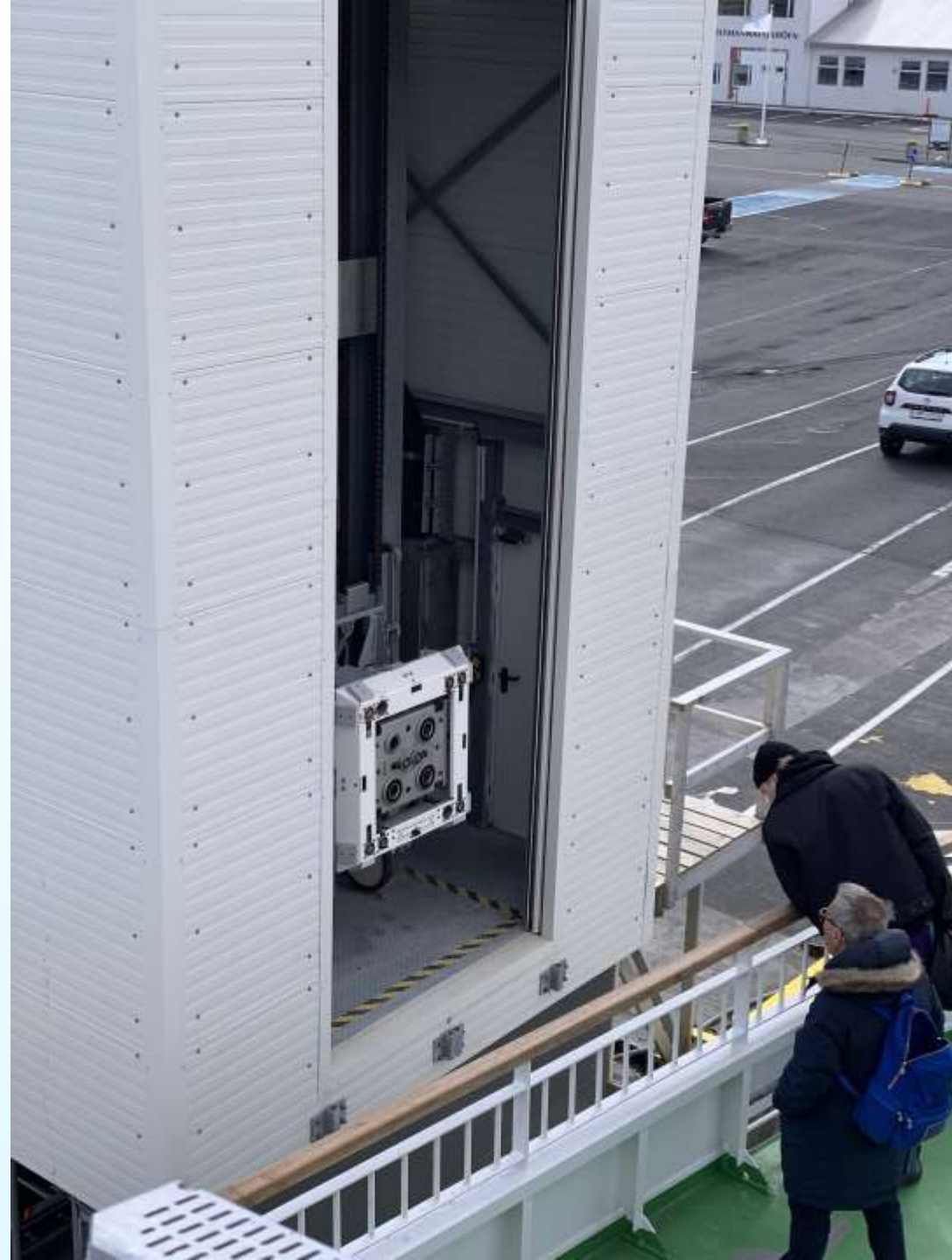
New areas of application

- The country's progressiveness can also be demonstrated in other areas
- A ferry powered by traction engines transports people and cars between the country and the Westman Islands
- The capacity of the ferry is 550 people and 75 cars



New areas of application

- The ship has a battery with a capacity of 3000 kWh (about 50 electric cars)
- Charging takes place in both ports
- The charging system is fully automatic and requires no operator
- Charging power is 2500 kW



Shared electromobility

- Shared electromobility is widespread in Iceland
- There are three main operators (Hopp, OSS and ZOLO)
- Hopp has the most widespread network, offering both scooters and cars



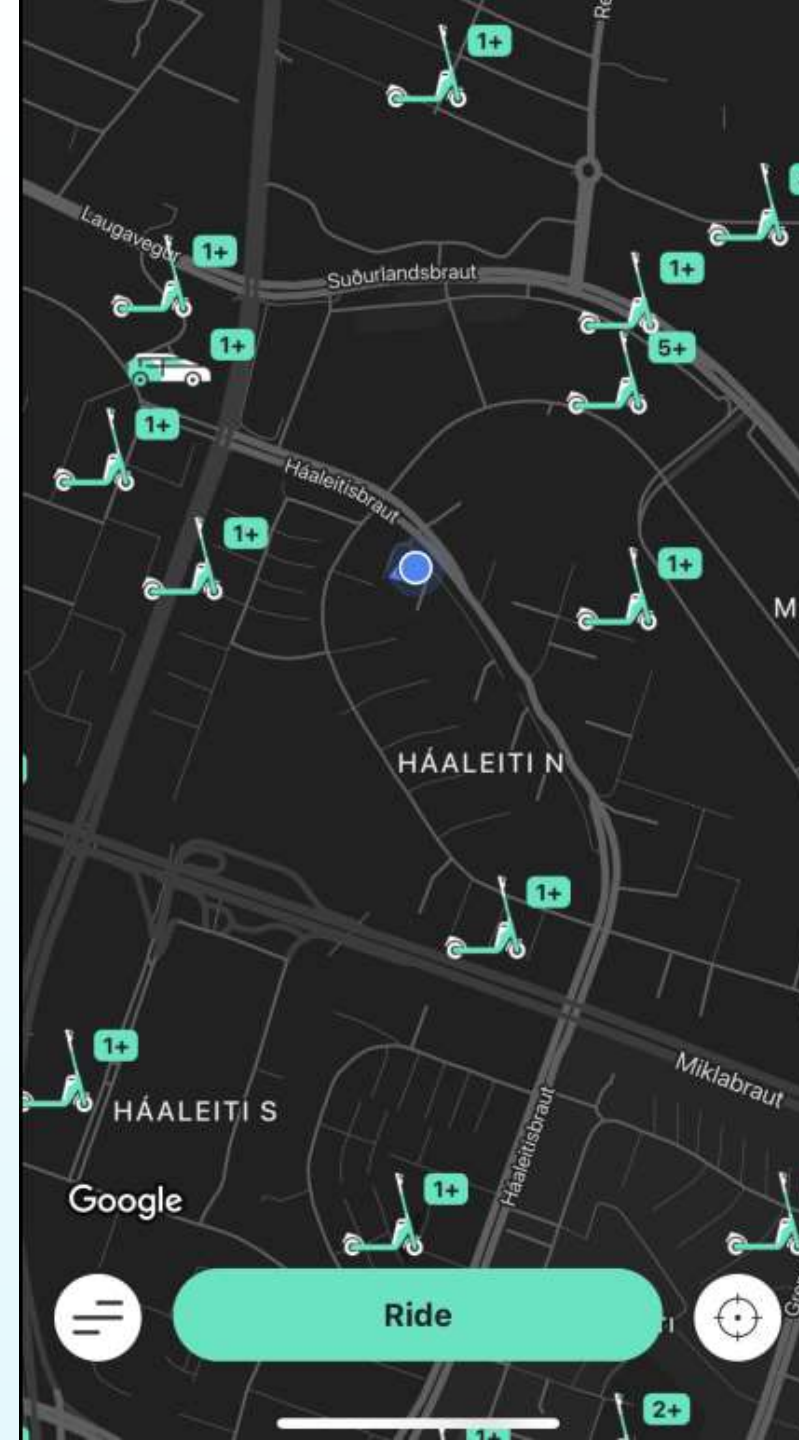
Shared electromobility

- Hopp offers scooter rental with a starting price of ISK 100 and then ISK 30 per minute. There are almost 1100 scooters for rent
- Zolo has higher prices, boarding costs ISK 150 and a minute of operation 40 ISK
- OSS offers the same prices as Hopp, but the on-site coverage is not very good
- All major cities are covered



Shared electromobility

- There is a simple application
- You can use it to find the scooter and use the QR code to unlock it for the ride
- The application calculates the total price and deducts the amount from the payment card after the end of the ride
- It is practical to be able to search for nearby scooters



Shared electromobility

- The possibility of renting a car is very practical
- The company offers several models
- The basic is the Kia Niro with a starting price of ISK 300 and a price of ISK 45 per minute
- The car was always clean and fully functional in use
- The price seems reasonable given the utility value



Kia Niro

- Specifications
- It drives a synchronous motor with permanent magnets
- 150 kW
- Li-Ion battery with a capacity of 64 kWh
- Charging 7.2 kW at home, 100 kW on a fast charger
- Sales price CZK 1 million



Conclusion

- Iceland has every chance to remain a leader in electromobility
- Cheap energy, high GDP and mindset
- It is already the second country in the world to penetrate electric cars
- The advantage is also relatively cheap services for sharing electric cars and electric scooters



This project was implemented with the financial support of EEA Funds.

The author is solely responsible for the content of the message. The communication does not represent opinions of EEA funds. At the same time, EEA Funds are not responsible for the use of information that is its content.