Our lives in the city of the future will become cleaner, healthier, and more efficient due to hydrogen-powered digital technologies.
EXHIBIT 2

Autonomous taxis are becoming a reality

Autonomous taxis and shuttles\(^1\), million units

~USD 15-20 bn
investments in the past 5 years

16+ m test kilometers
in level 4 autonomous cars

10+ OEMs
planning for level 5 autonomous cars by 2025

SOURCE: Bloomberg; expert interviews; GM; IHS Automotive; press reports; Uber; Waymo

\(^1\) Shuttles = shared robotaxis with pooled demand
Hydrogen as energy vector for autonomous taxis enables zero emission operation without long stops for battery charging

Example: airport shuttle

Recharging time required for BEV
60 to 90 minutes per day

Refueling time required for FCEV
~5 minutes per day

7:15 PM - 8 PM
Battery fast charging
(with risk of battery lifetime reduction)

1 PM - 7:15 PM
Taxi operation

6 AM - 12:15 PM
Taxi operation

12:15 PM - 1 PM
Battery fast charging
(with risk of battery lifetime reduction)

8 PM - 12 AM
Taxi operation

12 AM - 6 AM
Taxi operation

9 PM - 9:05 PM
Pause for the refueling

9:05 PM - 12 AM
Taxi operation

12 AM - 6 AM
Taxi operation

6 AM - 9 PM
Taxi operation

1 Depending on availability of fast charging infrastructure
Hydrogen as an energy vector for autonomous taxis and shuttles requires less space for refueling infrastructure

Example: New York City cabs

Charging stations for all NYC cabs would take up space equal to …

Battery

<table>
<thead>
<tr>
<th>Number</th>
<th>NBA courts</th>
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<tbody>
<tr>
<td>180</td>
<td>180</td>
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Hydrogen

<table>
<thead>
<tr>
<th>Number</th>
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<tbody>
<tr>
<td>12</td>
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</tbody>
</table>

1 Number of taxis and cabs: ~74,000; annual mileage per taxi 70,000 miles; refueling times FCEVs 0.02 minutes/mile, BEVs 0.26 minutes/mile; area for one fueling station 30 m²; size of NBA court (436 m²; 28.7 x 15.2 m)

SOURCE: EPA; Curbed New York; NBA; New York City Taxi and Limousine Commission; Tesla
Quickly growing home deliveries require energy that is zero-carbon and emission-free

Growing e-commerce and clean cities

- Booming e-commerce and growing demand for delivery speed
- Cities take action against local emissions
- Freight operations along the entire value chain need to be green
Hydrogen can efficiently move goods from the warehouse to the door

Hydrogen technology status

- **Long-haul truck delivery**: Hydrogen forklifts already in use
- **Short-haul van delivery**: Hydrogen pilots being tested
- **Autonomous ships**: Hydrogen as future technology
- **Last-mile parcel drones**: Hydrogen pilots being tested
EXHIBIT 7

Hydrogen as an energy vector for long-haul trucks requires less weight for the powertrain

Powertrain weight comparison, in tons (18-ton tractor unit of a semitruck)

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Battery</td>
<td>4.5-5.5</td>
<td></td>
</tr>
<tr>
<td>Diesel</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>Hydrogen</td>
<td>1.8-2.1</td>
<td></td>
</tr>
</tbody>
</table>

Hydrogen tanks have 10 times the energy density (by weight) than batteries\(^1\)

1 0.2 kWh/kilogram for rechargeable batteries used in battery electric vehicles (BEV) compared to 2.2 kWh/kilogram for onboard hydrogen storage for light-duty fuel cell vehicles (FCEV); Source: U.S. DOE Office of Energy Efficiency and Renewable Energy, MCFM

SOURCE: DOE; Nikola Motors; Bloomberg; Manager Magazin; Sustainable Transportation Lab
Hydrogen as an energy vector for long-haul trucks enables storage of large amounts of energy at lower costs than batteries.

System costs of battery vs. hydrogen, USD thousands

~100 kilometers: the threshold range for hydrogen trucks to become cheaper than battery trucks

SOURCE: DOE; Hydrogen – scaling up
Hydrogen as an energy vector for VTOLs allows for longer routes without recharging:

A >120-kilometers hydrogen range

A ~50-kilometers battery range

San Francisco
Data centers, as the backbone of all digital trends, require large amounts of green energy.

Energy demand, TWh

- 2020: 510 (Renewables: >700; Conventional energy: 25)
- 2030: >1,000 (Renewables: >1,000; Conventional energy: 25)

- Annual growth of data center storage from 2016 to 2021: 35%
- 30-50% of data center costs are attributed to energy, mostly for cooling.

SOURCE: Bloomberg; Cisco; Digital Realty; Enerdata; expert interviews; Forbes; Gartner; IEA; Intellect UK; zdnet
For the four selected use cases, hydrogen demand could grow to 5-7 m tons by 2030

In 2030, hydrogen could power...

- ~1.0-1.5 m autonomous taxis
- ~3.0-4.0 m delivery trucks and vans
- ~300-700k autonomous shuttles
- 130-260k drones for express parcel delivery
- ~4-8k vertical take-off and landing taxis (VTOL)
- ~1 TWh of backup power in data centers

Hydrogen demand of the four selected use cases, million tons

![Graph showing hydrogen demand from 2020 to 2035]
Hydrogen as an energy vector for autonomous taxis and shuttles allows for high uptime (long ranges and fast refueling)

Example: airport shuttle

Uptime for 18 hours

Battery

80-90%

Fast charging with risk of battery lifetime reduction

Hydrogen

>99%

SOURCE: EPA; Hyundai; New York City Taxi and Limousine Commission; Tesla; McKinsey Powertrain model; Tesla