

# Opportunities in AV and EV development in the wake of Covid-19

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VALEO RESERVED

## Rethinking transport

27–30 April 2020



TRA 2020 Strategic Session Webinar, Tuesday 23 June, 11:00 – 12:30  
Urban transport innovation in the aftermath of COVID-19. Have the disruptors been disrupted?



SMART TECHNOLOGY  
FOR SMARTER MOBILITY



## COVID-19



### RISK FACTOR

Public transport is  
considered a risk  
factor



### TRAVEL RESTRICTIONS

Facing uncertainty,  
border closures, risk  
of taking planes,  
holidays will be by car



### EV SALES ARE NOT AFFECTED

EV sales are the only  
car sales  
withstanding current  
automotive downturn



# **electric vehicles sales withstand the covid-19 crisis**

In 2019, EV sales rose 6% to 2.1 million units worldwide, while the automotive market fell by more than 4%. The IEA forecasts constant sales of EVs in a global automotive market that is down 15% in 2020



## COVID-19

**The car will be the preferred mode of transportation this summer.** According to a study by the Oliver Wyman consulting firm, 23% of the interviewed intend to use their cars more because they feel better protected from Covid-19 than in public transport. This is a noticeable trend since the beginning of June.

**We expect:**



### EV UPTAKE

Long term trend that withstands crises



### E-HAILING UPTAKE

Perceived as safer and convenient

## URBAN MOBILITY

We think the Covid-19 crisis will accelerate already existing trends.

This will reinforce the shift to a sustainable urban mobility ecosystem.

4 main expectations in the mid-term:

1

### **STRONG EV UPTAKE**

An unstoppable market trend reinforced by legislation

2

### **E-HAILING EXPANSION**

As a necessary step leading to shared and autonomous mobility (robotaxis / roboshuttles)

3

### **RESILIENT TRANSPORT**

The development of more resilient transport systems

4

### **ACTIVE TRANSPORT**

Growing demand for active transport and micromobility

## OUR VISION

Covid-19 was a severe hit for the automotive sector, but is also reinforcing opportunities for the development of EV and AV technology in many domains.

# OPPORTUNITIES



CARGO DROIDS

**TO SUPPORT  
THOSE FIGHTING  
THE VIRUS ON  
THE FRONTLINE**



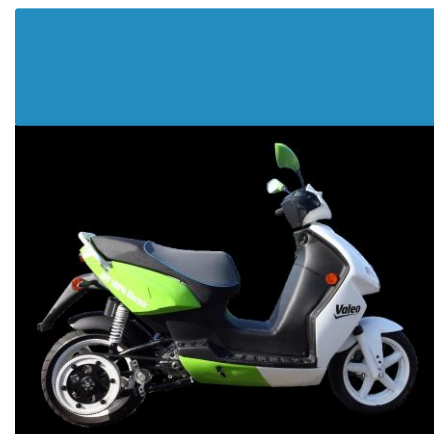
AUTONOMOUS VEHICLES

**SHARED AVs FOR  
LESS CONGESTED  
CITIES and SAFER  
ROADS**



ELECTRIC VEHICLES

**ELECTRIFICATION  
TO COMBAT AIR  
AND NOISE  
POLLUTION**



SMART E-MOBILITY

**LIGHT ELECTRIC  
MODES AVOID  
CROWDED  
SPACES**

## THE CARGO DROID



Assisting nurses  
and hospital  
personnel

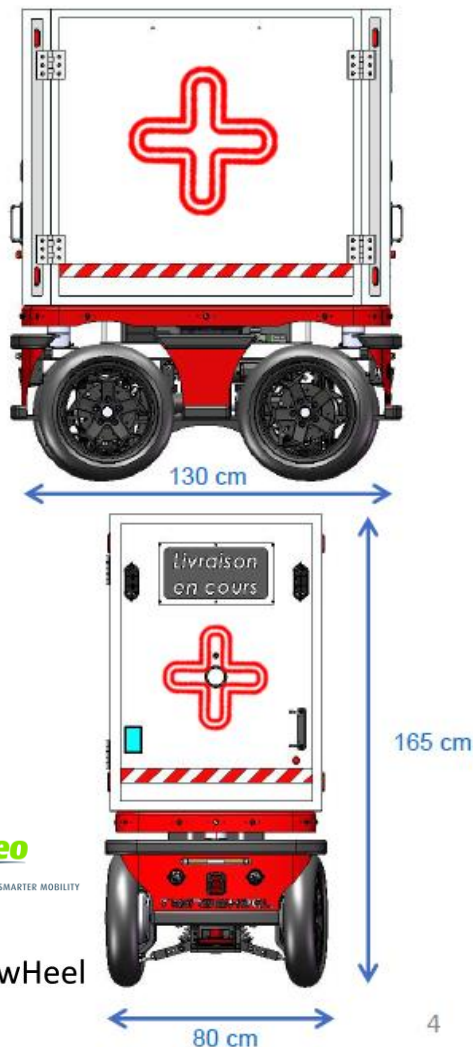


Assisting social  
services  
personnel



## THE CARGO DROID

- ➔ Autonomous and electric support droid that transports necessary materials (up to 200kg)
- ➔ The droid is very agile and features an intuitive user interface (touch screen, speakers, camera)
- ➔ « Follow me » mode, follows personnel thanks to visual tracking and perceives obstacles with lidar
- ➔ « Autonomous » mode, follows defined routes in the city, delivering goods or other necessities



## THE CARGO DROID



### REDUCES FATIGUE

By transporting heavy materials, letting the personnel focus on their patients



### DELIVERS GOODS

By transporting samples to the central lab or medicines from / to the pharmacy



### ACTIVELY SUPPORTS

Social services workers by transporting all necessities through the city

# THE CARGO DROID

## REDUCES FATIGUE



## DELIVERS GOODS




## ACTIVELY SUPPORTS



SMART TECHNOLOGY FOR SMARTER MOBILITY





**The disrupters with good  
innovation strategies and  
solid business models will  
have their chances**

