

ELECTRIC VEHICLE

RENAULT, DRIVING THE ELECTRIC REVOLUTION

GILLES NORMAND

SENIOR VICE PRESIDENT,
ELECTRIC VEHICLE



ENERGETIC & ENVIRONMENTAL STAKES



Energy

Reduce oil dependency



Health

“Airpocalypse”

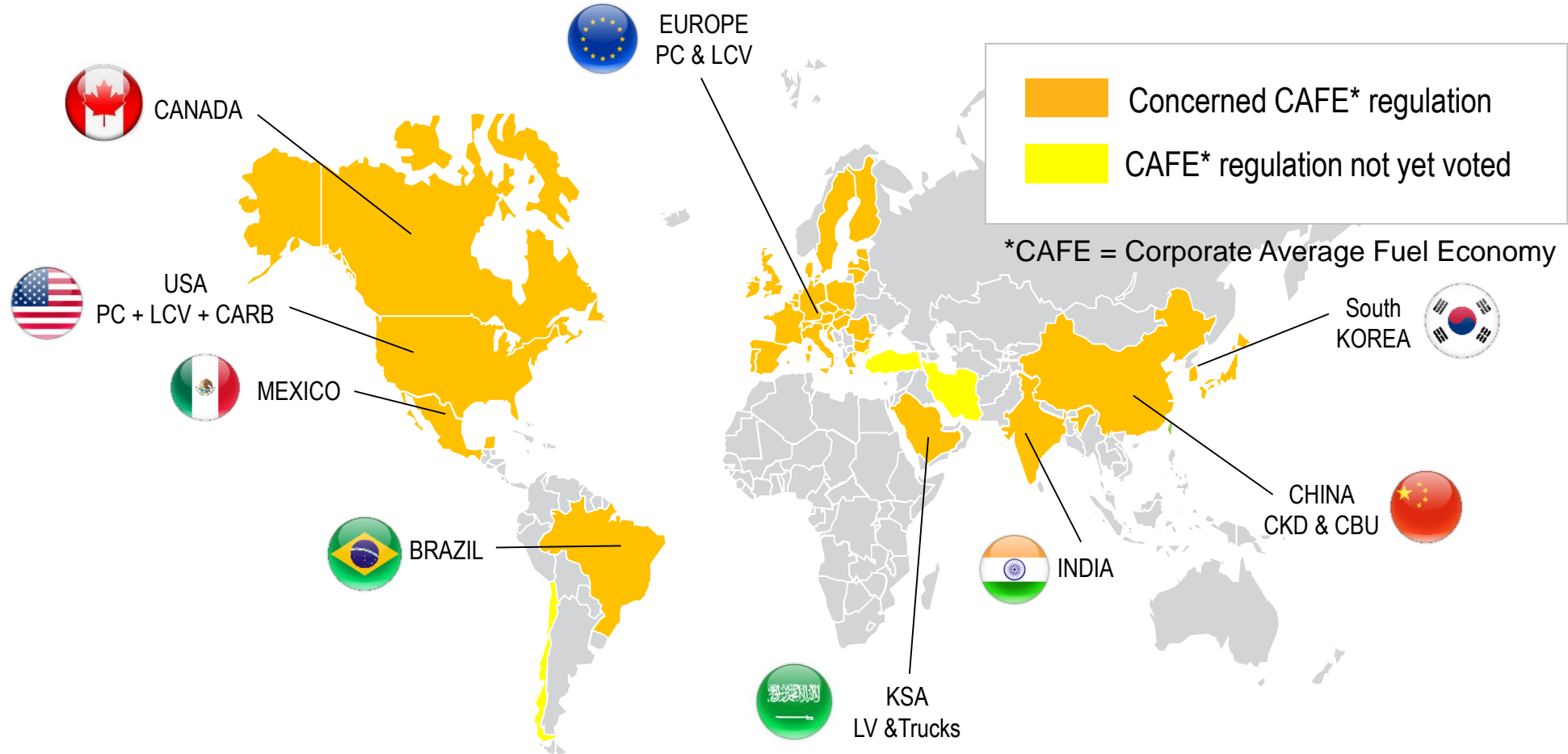


Climat

Limiting warming < 2°C

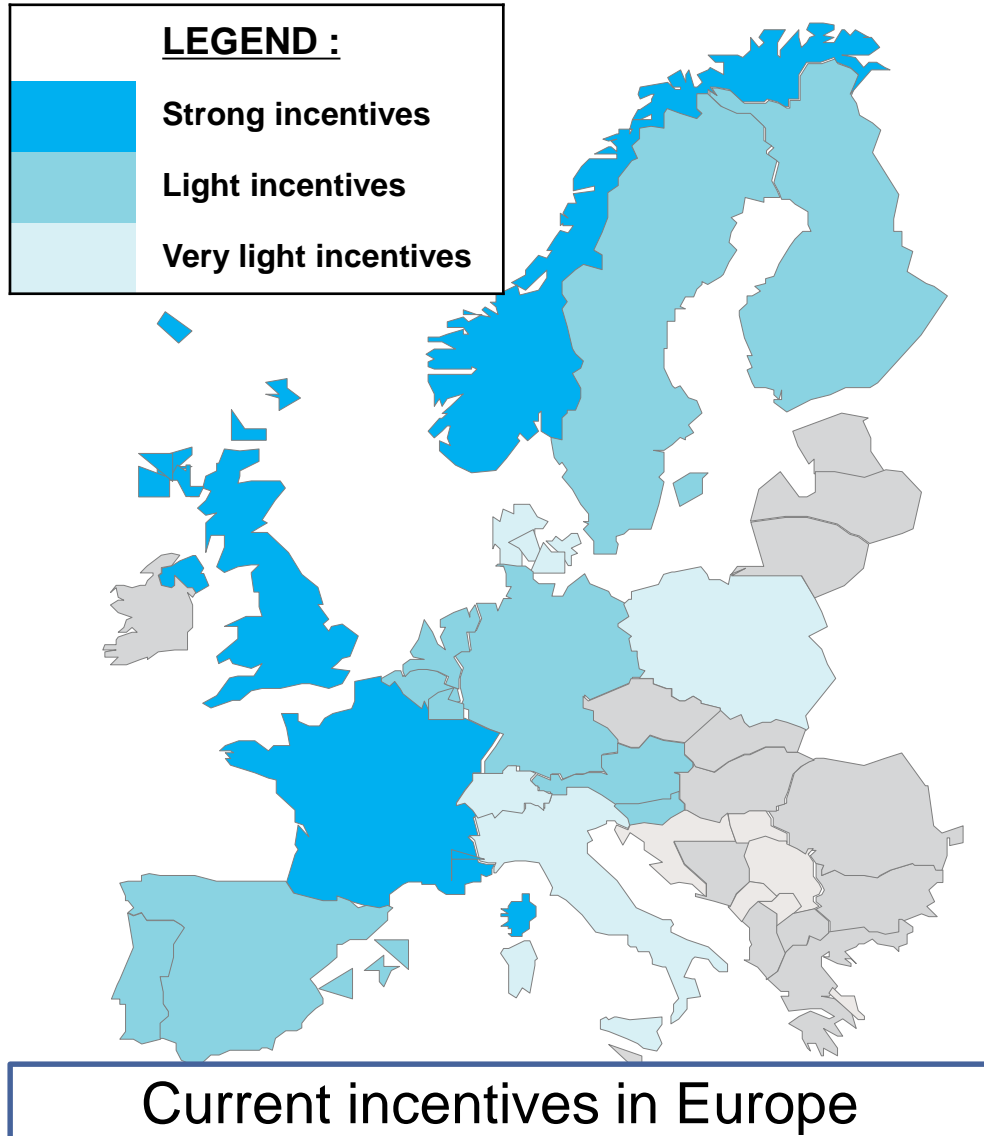


LEGISLATION



Countries under CAFE regulation = 83% PC TIV in 2016
With Iran, Turkey and Chile = 86 % PC TIV

INCENTIVES AND PUBLIC POLICIES



	GERMANY	Ban on sales of ICE vehicles under investigation → ICE car taxation
	NORWAY	Political consensus to impose non polluting vehicles by 2025
	UK	Sales of ICE vehicles banned by 2040
	FRANCE	Sales of ICE vehicles banned by 2040
	AUSTRIA	Envir. & Trans. Minister: budget of 72 M€ for 2017 & 2018 to promote electromobility



INDIA



Government announcement:
100% electric vehicles by 2030
Massive investments annouced



CHINA

Timetable for banning ICE vehicles under discussion « for a new future »
Substantial national & local **subsidies**

8 YEARS OF EXPERIENCE TO BUILD A COMPETITIVE ADVANTAGE

FIRST MOVER WITH 4 MODELS



TECHNICAL EXCELLENCE

- 3 Formula-E championships



2014 - 2015
2015 - 2016
2016 - 2017

30,000
PEOPLE TRAINED



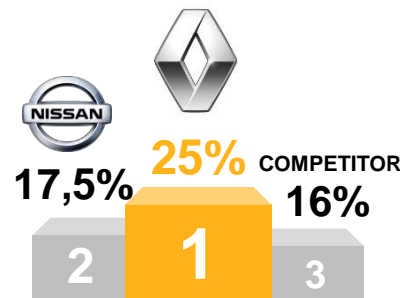
100%
TRAINED DEALERS

CUSTOMER SATISFACTION

- NEW ZOE: **400 km** NEDC autonomy
- **>90%** customer recommendations
- **>140K** customers



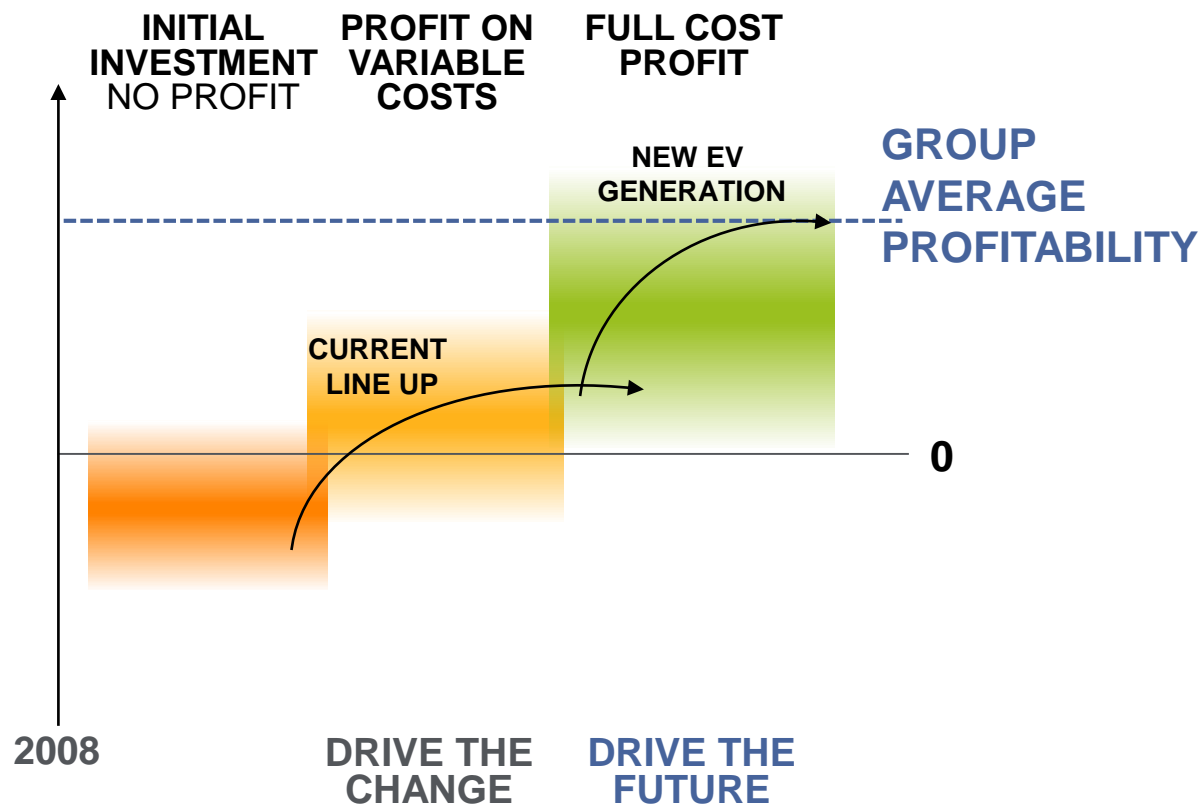
LEADER IN EUROPE



Ytd end sept.

A ROBUST & PROFITABLE CORE BUSINESS BY 2022

THE OBJECTIVE



THE PLAN



EXPAND
OUR REACH



ACCELERATE
COST REDUCTION



LEADER
IN AFFORDABLE ELECTRIC MOBILITY



PROVIDE
EASY ELECTRIC LIFE



GENERATE VALUE
FROM ENERGY & MOBILITY SECTORS

EXPANDING OUR REACH



2016

4 Models
1 Best seller



1 Key market

2022

8 Models
2 Pillar models



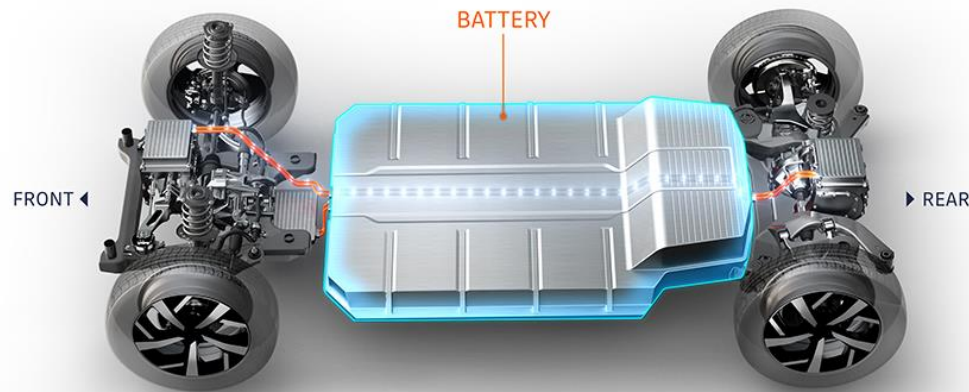
2 Key markets



Develop next
key markets

ACCELERATE COST REDUCTION

3D SCALABLE ALLIANCE PLATFORM



80% of volume based on Alliance platform

- **-40%** R&D entry ticket
- **-30%** production cost

COST BREAKTHROUGH

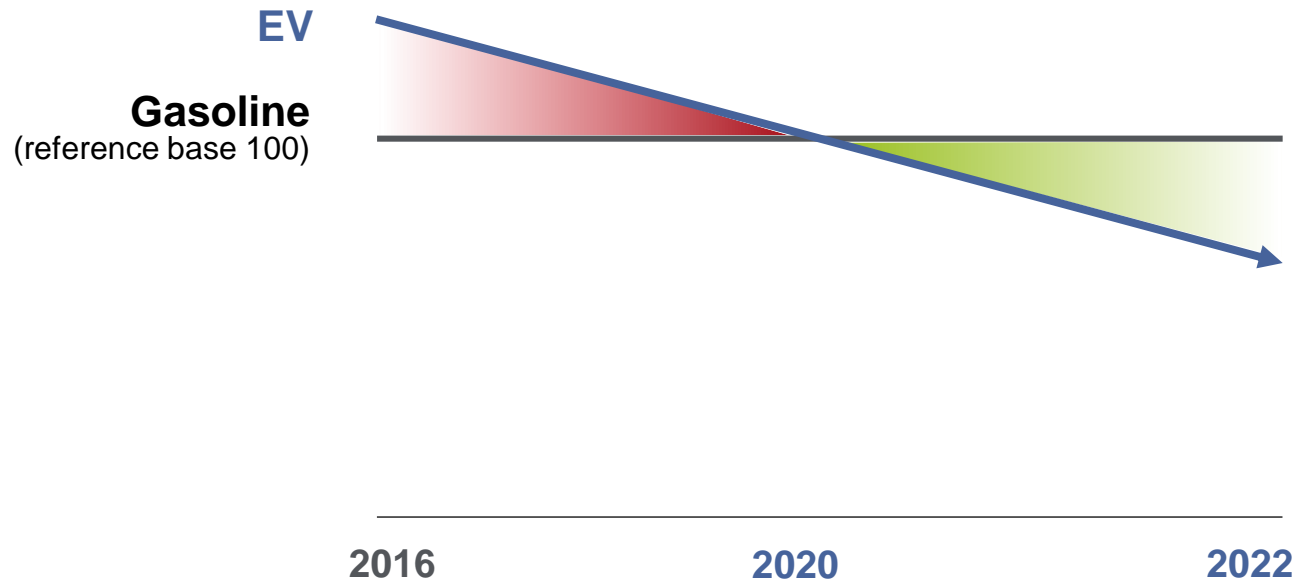


- Battery pack cost (€/kWh) **-30%**
- New E-motor generation **-20%**

LEADER IN AFFORDABLE ELECTRIC MOBILITY

TOTAL COST OF OWNERSHIP EV vs ICE

B-segment – 3 years – 12,000km/y
Including reduction of incentives



AFFORDABLE AUTONOMY

	 Autonomy (NEDC)	€ Price* (w/o incentive)
	400 km	€33,200 #1
	280 km	€32,750
	300 km	€35,900
	300 km	€36,800

* MSRP Germany Q1 2017

PROVIDE EASY ELECTRIC LIFE

IMPROVED FEATURES



- One class above in **roominess**
- **Flat floor** lay-out (CMF-EV)
- **FOTA**
- **Autonomous Drive**, progressive introduction

NO MORE RANGE ANXIETY



- **Above 600 km NEDC**
- **≈ 400 km** real motorway range
- Recovery **>230 km NEDC in 15 min**

GENERATE VALUE FROM ENERGY & MOBILITY SECTORS (1)

BATTERY SECOND LIFE



Connect clean energy
to grid and buildings
*Ex: High power charging station
with Connected Energy in Europe*

CARSHARING



Engage in main cities
car-sharing projects
*Ex: 500 ZOE with
Ferrovial in Madrid*

GENERATE VALUE FROM ENERGY & MOBILITY SECTORS (2)

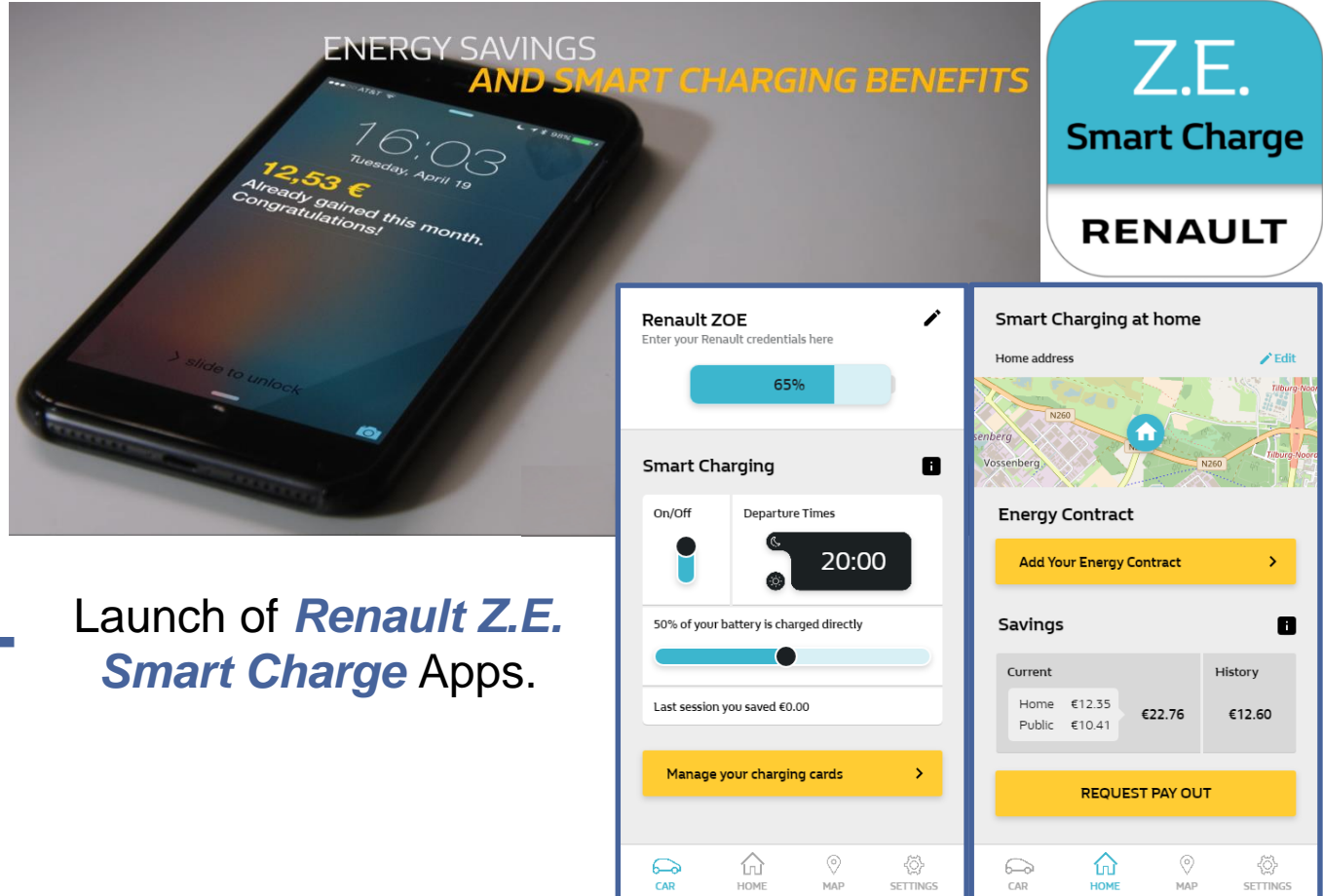
SMART CHARGING



Pilot home charging to match
electricity operators needs
25% stake in JEDLIX

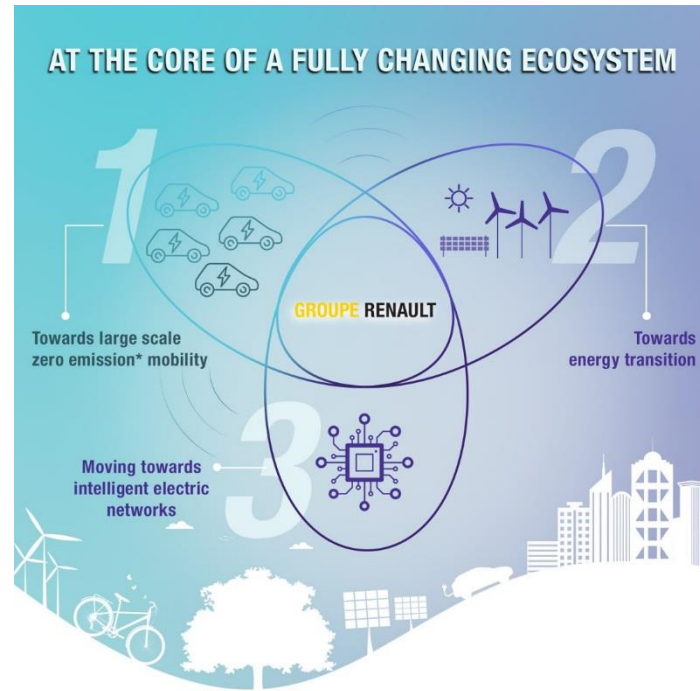


Launch of **Renault Z.E. Smart Charge** Apps.



GENERATE VALUE FROM ENERGY & MOBILITY SECTORS (3)

GROUPE RENAULT'S NEW SUBSIDIARY **RENAULT** ENERGY SERVICES



Favour the expansion of electric mobility
Invest in the field of smart grids



THANK YOU