

ELECTRIC VEHICLE MASS MARKET : A REALISTIC BREAKTHROUGH

Automotive Summit 2010



Z.E. ZERO EMISSION VEHICLES

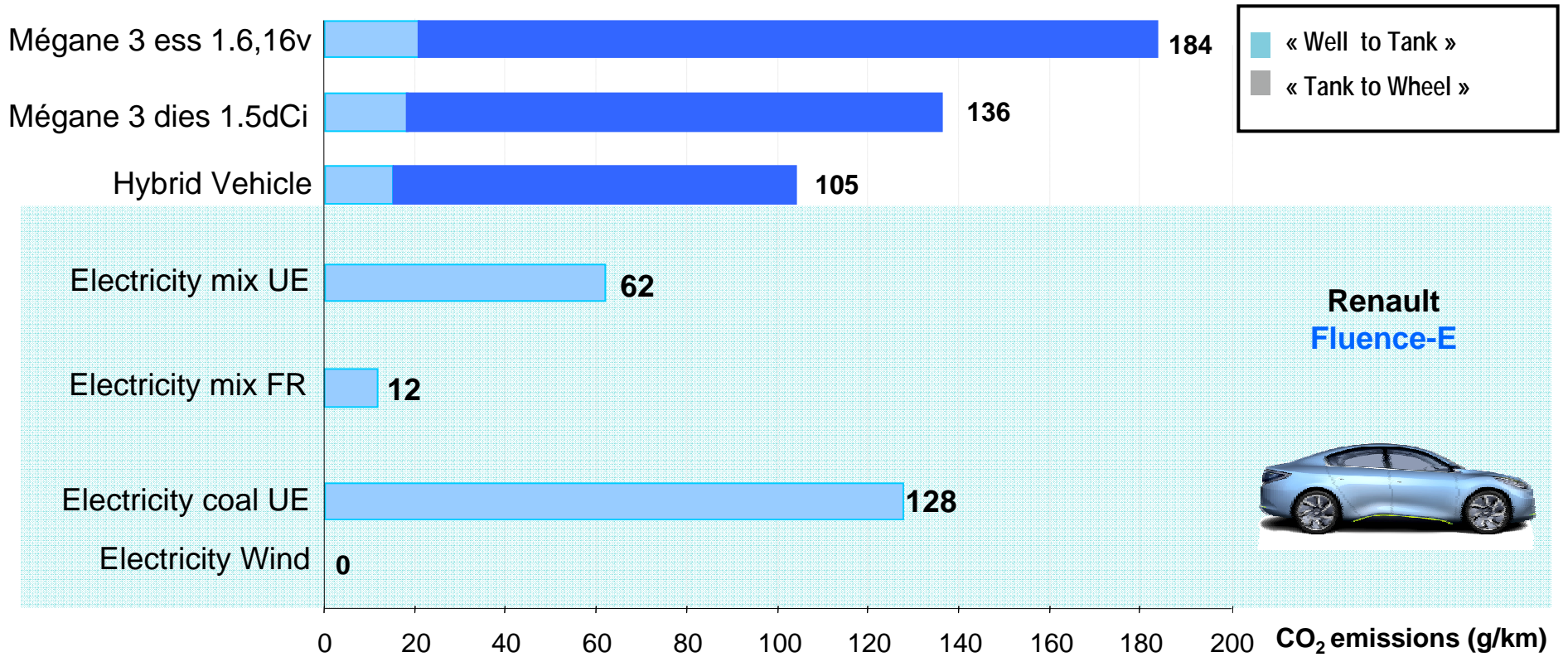
01 THE RIGHT TIME FOR EV

ECOLOGY, RANGE, AFFORDABILITY

Z.E. ZERO EMISSION VEHICLES

EV, AN ECOLOGICAL ANSWER

■ A positive CO₂ output



■ No local pollution



No emission



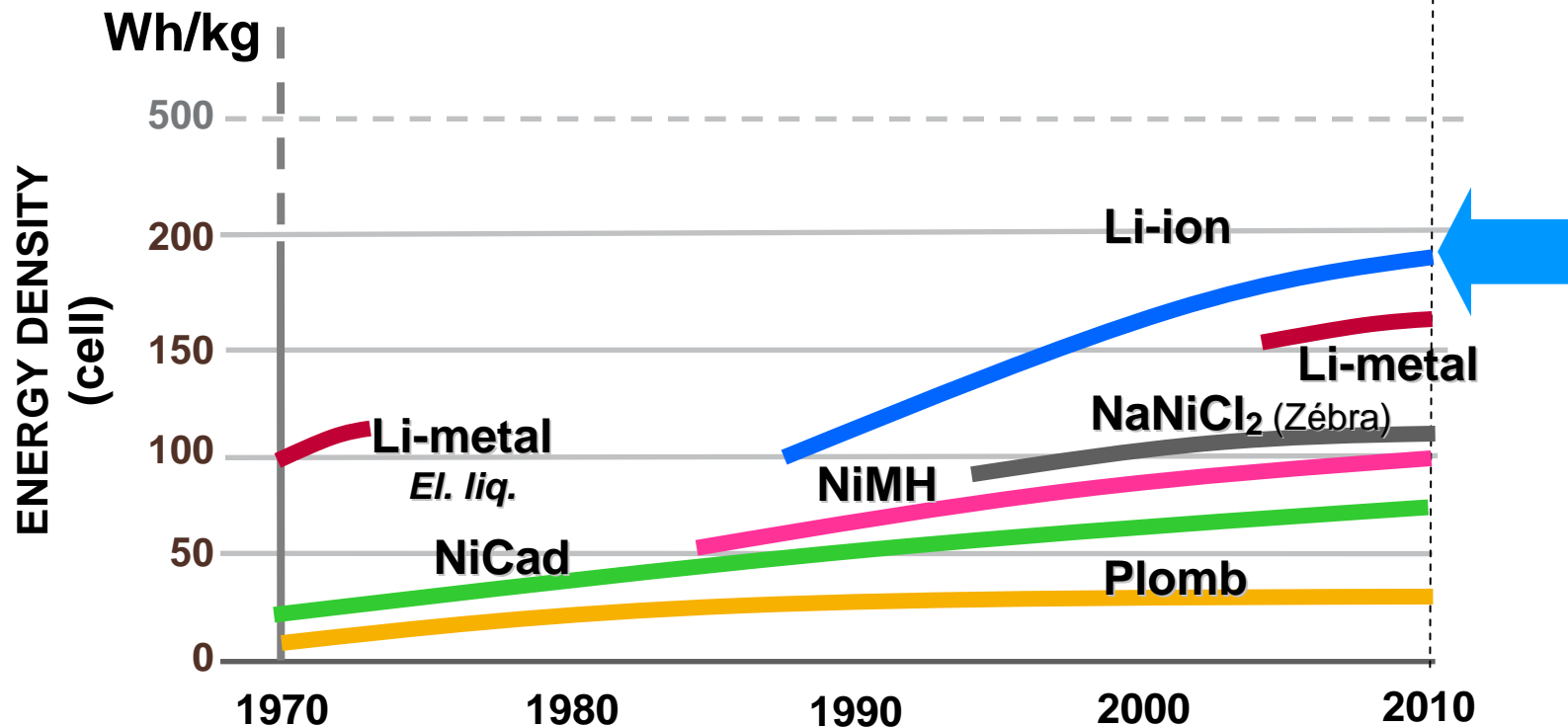
No noise

ELECTRIC VEHICLES
PROGRAMME



NEW LITHIUM ION BATTERIES ARE THE REAL BREAKTHROUGH

- Range : 160 km with a 250 kg battery
- Charging possible at any time
- Recycling

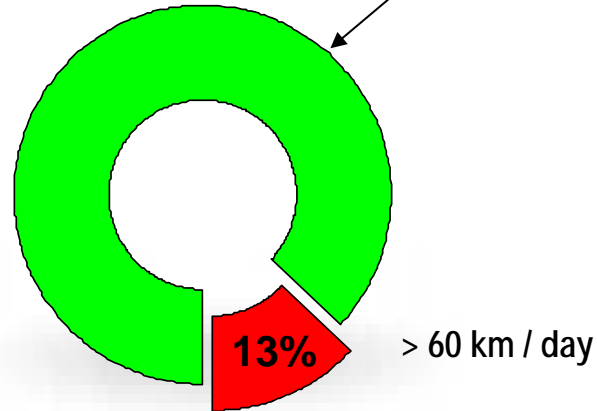


160 KM IS COMPATIBLE WITH DAILY USAGES

In Europe

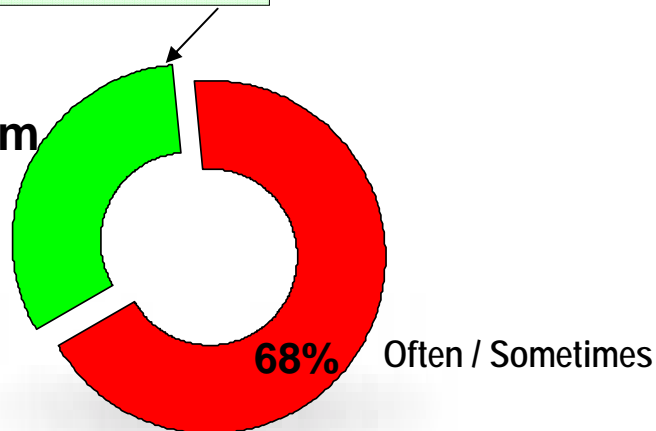
87% of daily trips

**Are less than
60 km / day**

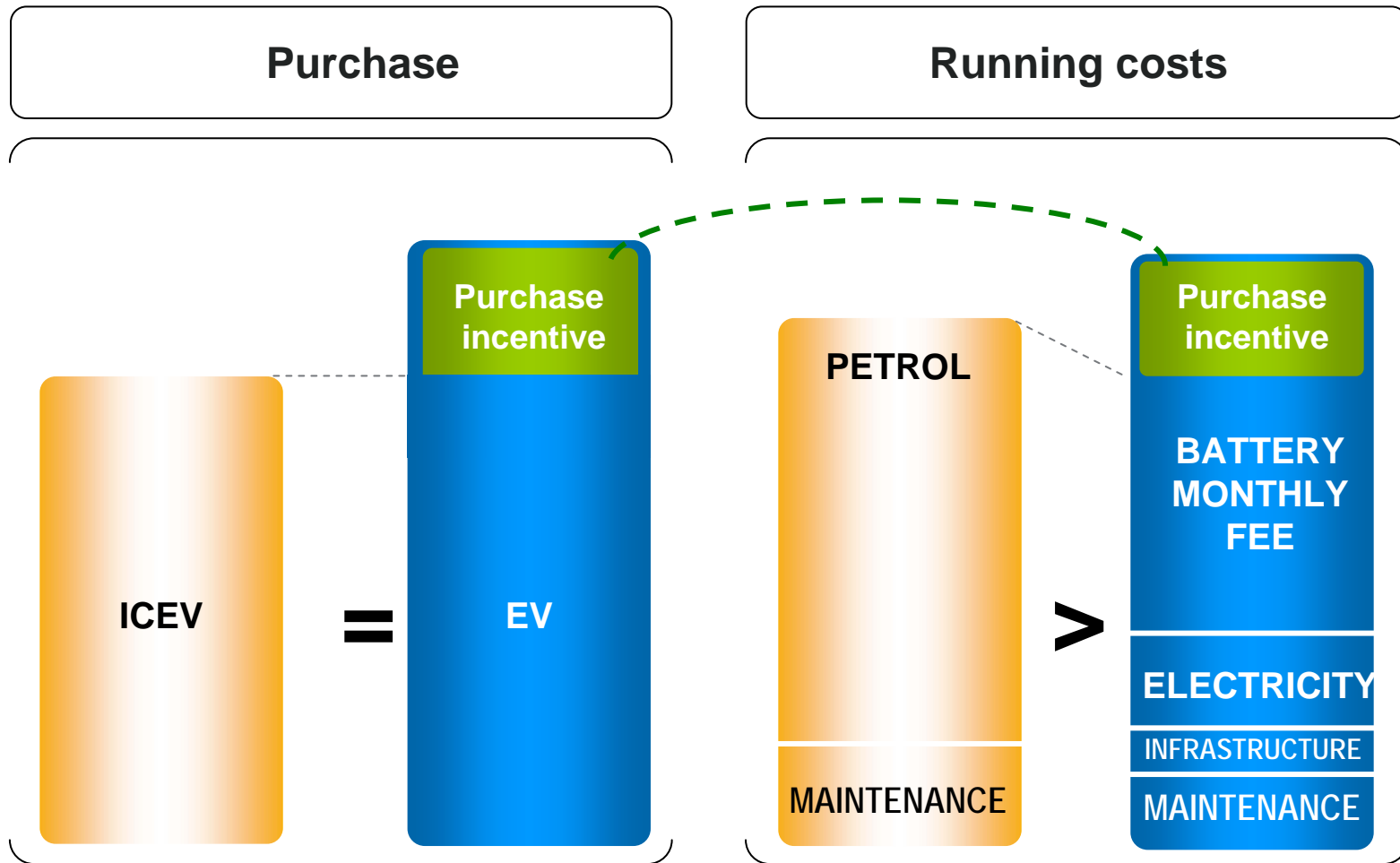


32% of B-segment cars

**NEVER make
more than 150 km**



EV IS ECONOMICAL FOR CUSTOMERS



02 – THE RENAULT PLANS

Z.E. ZERO EMISSION VEHICLES

RENAULT/NISSAN ALLIANCE STRATEGY

- **To mass market, together with Nissan, a line up of affordable and practical Electric Vehicles and take the lead of zero emission mobility in the world**

4 MODELS FROM MID 2011



Fluence ZE



Kangoo ZE



Twizy



ZOE

2011

2012

■ FLUENCE ZE : SEPT 2011

Production Vehicle



**ELECTRIC VEHICLES
PROGRAMME**

Thierry KOSKAS
10 Nov 2010

CONFIDENTIAL
RENAULT PROPERTY

B



■ KANGOO ZE : SEPT 2011

Production Vehicle



**ELECTRIC VEHICLES
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10 Nov 2010

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■ TWIZY : 2ND SEMESTER 2011

Production Vehicle



**ELECTRIC VEHICLES
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10 Nov 2010

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■ ZOE : MID 2012

90% Production Vehicle



**ELECTRIC VEHICLES
PROGRAMME**

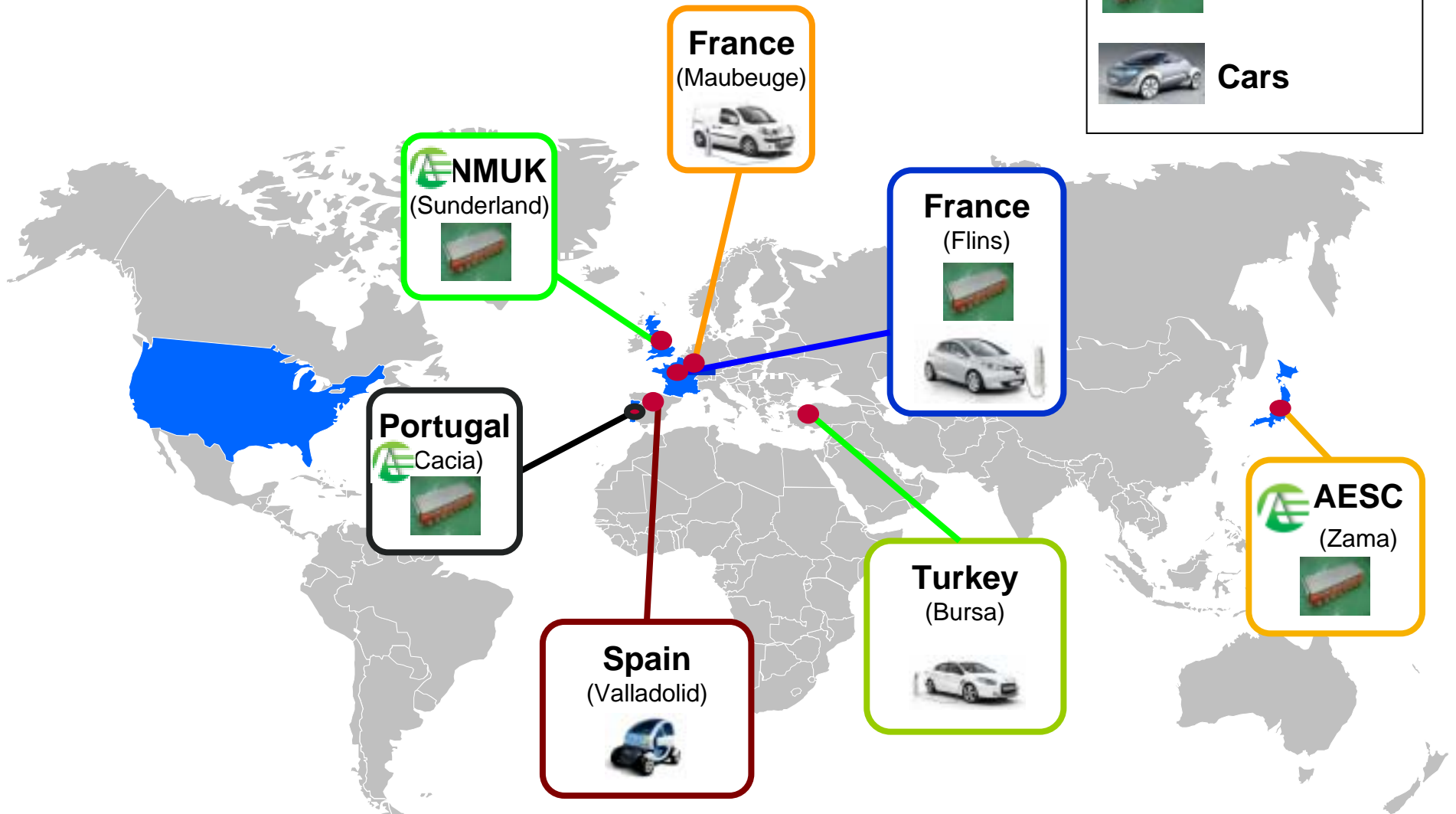
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RENAULT PROPERTY

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INDUSTRIAL STRATEGY



REFERENCE BUSINESS MODEL

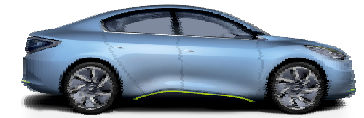
OPERATOR

RENAULT

- PLANS CHARGING INFRASTRUCTURE
- OFFERS SOLUTIONS AT HOME
- OFFERS ELECTRICITY AND PACKAGES
- INVOICING



BATTERY LEASE



SALE OR LEASE

POSSIBLE PACKAGING BY RENAULT



CUSTOMER

ATTRACTIVE PRICES, THANKS TO BATTERY LEASE BUSINESS MODEL



France
21 300 € inc VAT
(with incentives)



BATT FEE
79 €
inc VAT
(10,000 km)

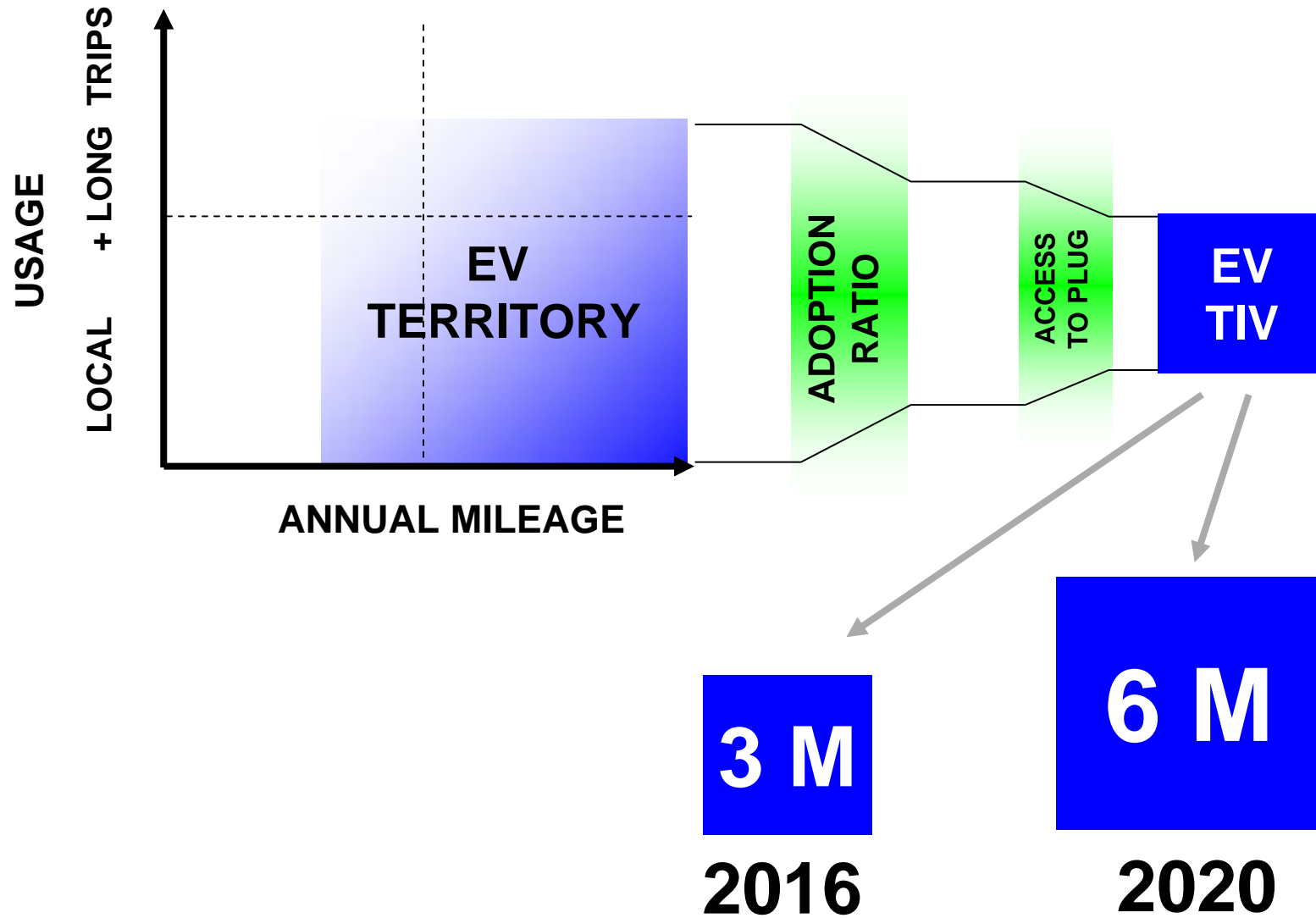


France
15 000 € excl. VAT
(with incentives)



BATT FEE
72 €
excl. VAT
(15,000 km)

MARKET POTENTIAL



03 – CONDITIONS OF SUCCESS

Z.E. ZERO EMISSION VEHICLES

CONDITIONS OF SUCCESS

- 1. External factors (e.g. Oil price, Environmental policies)**
- 2. Public support**
- 3. Partnerships**

PUBLIC SUPPORT

- 1. Purchase incentives (temporarily to enable market to grow and economies of scale to be reached)**
- 2. Support to R&D**
- 3. Experiments and pilot projects**
- 4. Local transport policy**
- 5. Infrastructure roll out**
- 6. Standardization**
- 7. Public fleet**

PARTNERSHIPS

1. Utilities and operators: e.g.



better place



2. Infrastructure manufacturers: e.g.



3. R&D centres: e.g.



4. Infrastructure « owners » (shopping centres, car parks, hotels etc) : e. g.



unibail·rodamco

MORE THAN 100 AGREEMENTS ACHIEVED BY THE ALLIANCE

UK (3)

FRANCE (8)

IRELAND (1)

NETHERLANDS (5)

DENMARK (1)

GERMANY (2)

CANADA (5)

SWITZERLAND (3)

USA (22)

JAPAN (13)

MEXICO (1)

CHINA (6)

PORTUGAL (2)

SINGAPORE (1)

SPAIN (6)

ITALY (2)

AUSTRALIA (3)

BRAZIL (1)

ARGENTINA (1)

NEW ZEALAND (3)

CHILI (1)

JORDAN (1)

ISRAEL (1)

TURKEY (2)

SOUTH AFRICA (1)

ELECTRIC VEHICLES
PROGRAMME

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Thank you

