

# ELECTRIC VEHICLE STRATEGY

November 2010

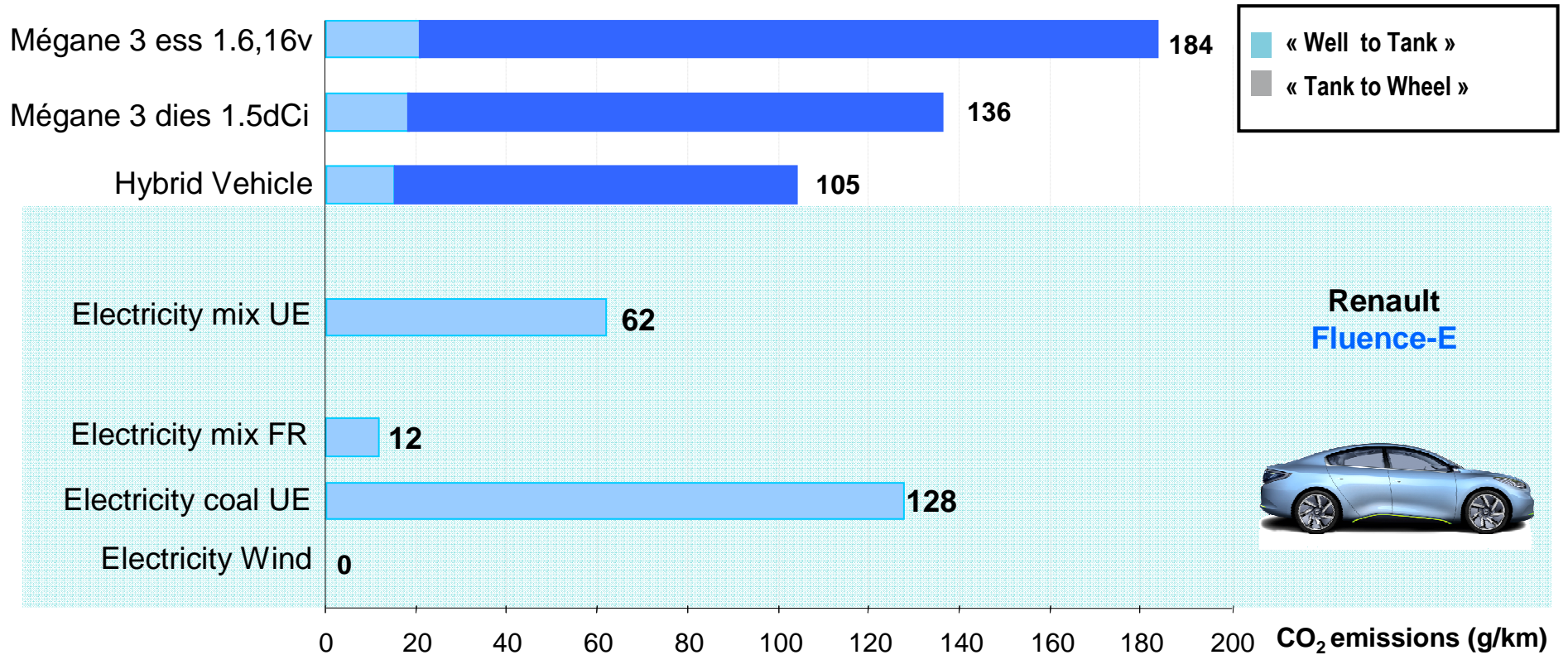
**Z.E.** ZERO EMISSION VEHICLES

# REMINDER: WHY EV TODAY ?

**Z.E.** ZERO EMISSION VEHICLES

# EV, AN ECOLOGICAL ANSWER

## ■ A positive CO<sub>2</sub> output



## ■ No local pollution



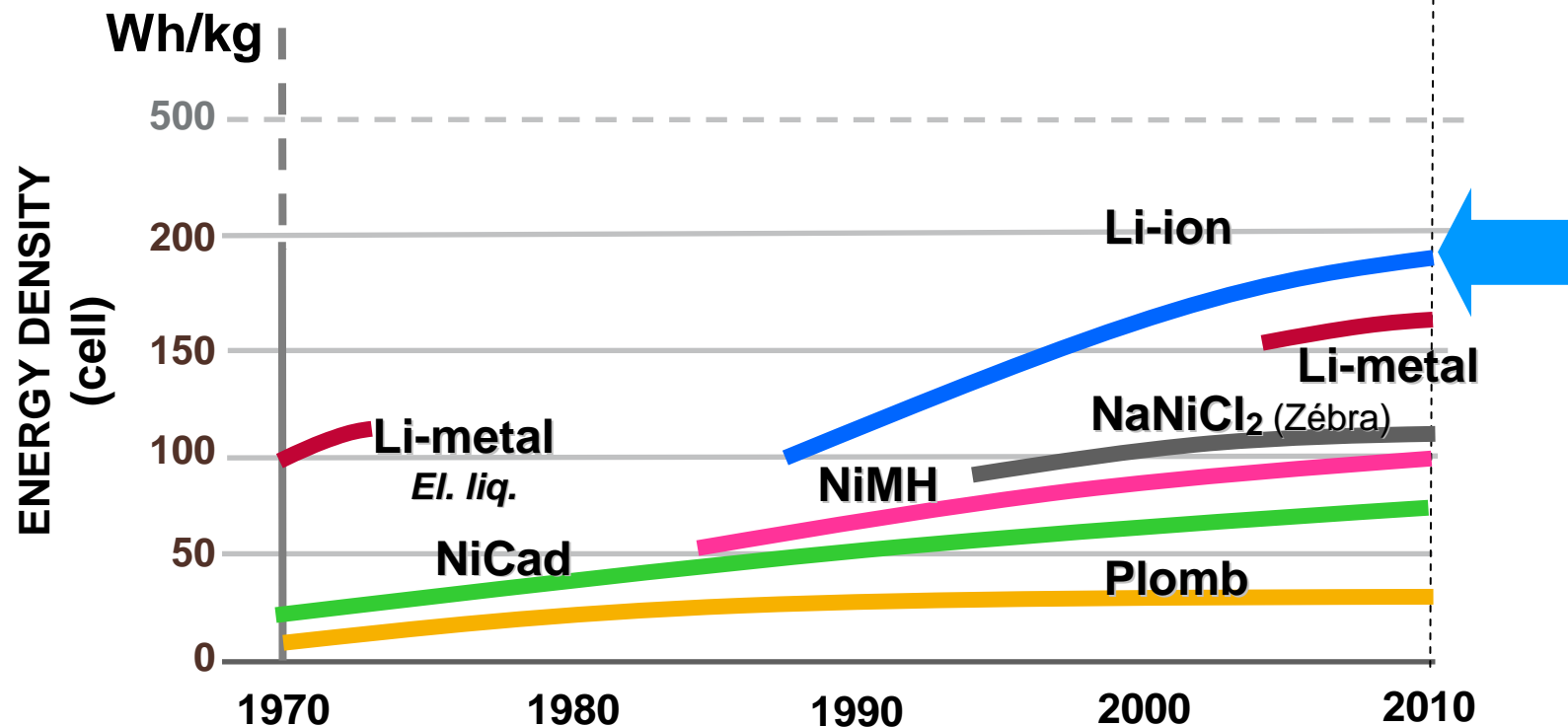
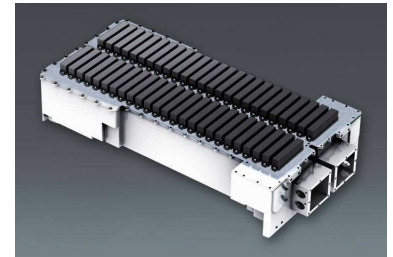
No emission



No noise

# NEW LITHIUM ION BATTERIES ARE THE REAL BREAKTHROUGH

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

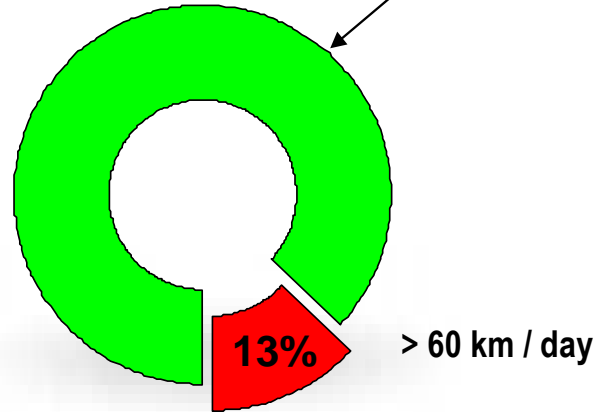


# 160 KM IS COMPATIBLE WITH DAILY USAGES

*In Europe*

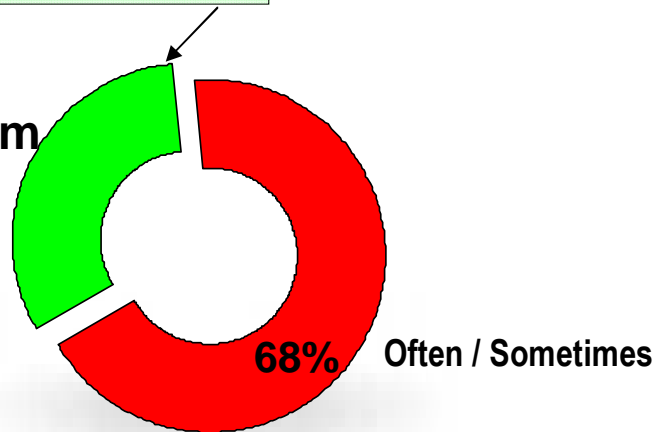
**87% of daily trips**

**Are less than  
60 km / day**

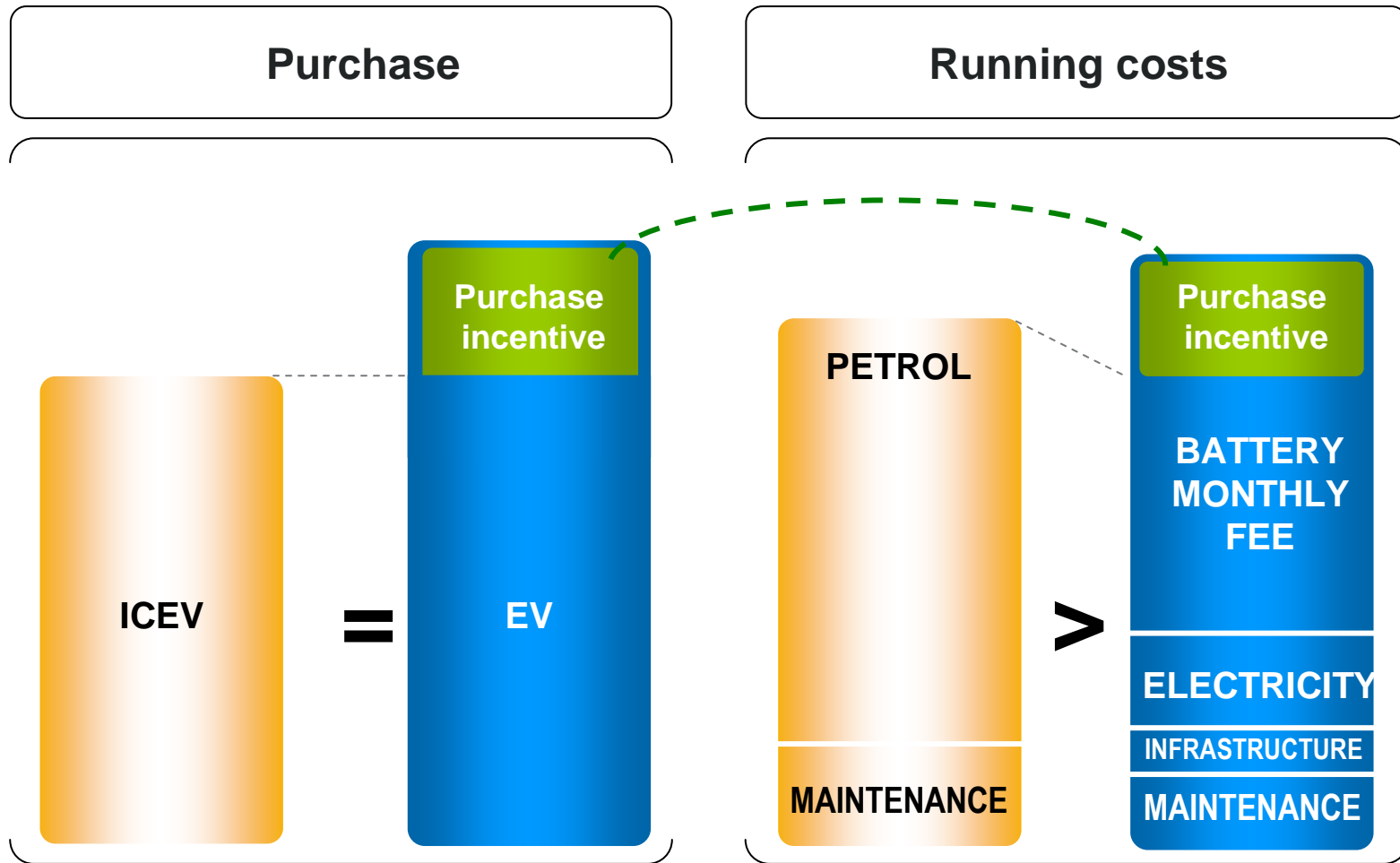


**32% of B-segment cars**

**NEVER make  
more than 150 km**



# EV IS ECONOMICAL FOR CUSTOMERS



- **ZOE is more economical to run than an ICE car from ~50 km per day**

# THE RENAULT EV PROGRAMME

**Z.E.** ZERO EMISSION VEHICLES



# 4 MODELS FROM MID 2011



Fluence ZE



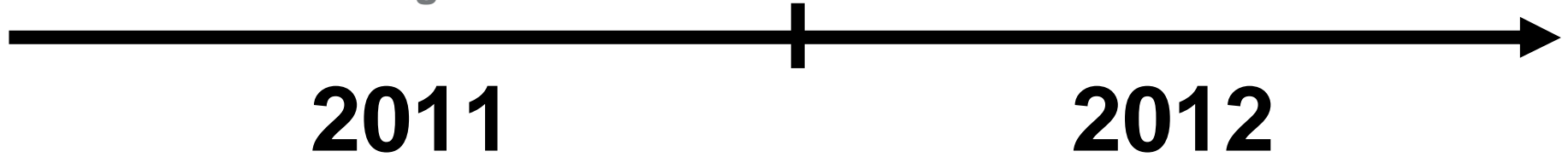
Kangoo ZE



Twizy



ZOE



# KANGOO EXPRESS ZE

- **Contract passed in**                      **June 2009**
  
- **SOS**    **Sept. 2011**
  
- **Target customers :**  
**Big fleet – Administration & financial services**
  
- **Main countries**  
**France, Europe**



# FLUENCE ZE

- **Contract passed in**                      **July 2009**
- **SOS**    **Sept. 2011**
- **Target customers :**  
**Status company car (Europe), Mainstream family car (Israel)**
- **Main countries**  
**Israel, Denmark, France**



# TWIZY

- **Contract passed in**                      **June 2010**
- **SOS**    **H2 2011**
- **Target customers :**  
**Young Statutory, Joker car for family**
- **Main countries**  
**Europe**



# ZOE

- **Contract passed in**                      **July 2010**
- **SOS**    **Mid. 2012**
- **Target customers :**  
Average commuter (mainstream),  
Green Techno Hedonist (early adopter)
- **Main countries**  
Europe, Israel



# INDUSTRIAL STRATEGY



# CURRENT DEVELOPMENT STATUS

**Z.E.** ZERO EMISSION VEHICLES

## CURRENT DEVELOPMENT STATUS

- **Schedule on track**
- **660 pre production cars will be tested in 10 pilot tests (Israel, Western Paris, Italy, Germany,...)**
- **Some severe tests carried out in Summer in Israel and southern Spain**

# CURRENT TEST GIVES CONFIDENCE IN REAL LIFE AUTONOMY



# SALES AND MARKETING STRATEGY

**Z.E.** ZERO EMISSION VEHICLES

# SALES AND MARKETING STRATEGY

- **EVs will be sold in the whole network**
  - Some specific technical operations in specialized dealer
- **Battery to be leased**
  - Leasing carried out by RCI with Technical support from Renault
  - A profitable business in line with customers' expectations
    - This enables to propose **affordable purchase price** and running costs in line with diesel cars
    - Most acclaimed business model during clinic tests
  - *Batteries enter in RCI balance sheet at discounted price after « subsidy » built into the car margin*

# BATTERY UPDATE

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# A WORLDWIDE BATTLE

U.S.

EU

ASIA



# AESC UPDATE

- **AESC battery development completed**
- **Renault reserved 36k capacity in Zama**
- **Further volumes to be sourced from Europe (UK, Portugal, Flins)**

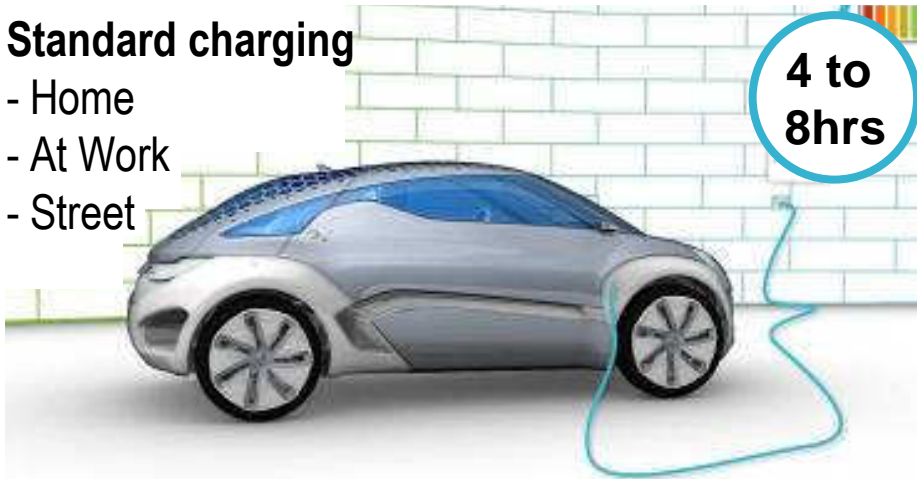
# PARTNERSHIPS AND EV POLICIES

**Z.E.** ZERO EMISSION VEHICLES

# CHARGING INFRASTRUCTURE (REMINDER)

## Standard charging

- Home
- At Work
- Street



## Quick charging

- 30mn



## Quick Drop Station

- A new battery ≈ 3mn

3mn



## Smart navigation



# PARTNERSHIPS AND EV POLICIES

- **Over 60 partnerships secured by the Alliance**
  
- **Infrastructures**
  - **France**
    - Borloo plan roll out ongoing
    - «livre vert » for cities about to be published. Consistent approach (Renault, PSA, EDF)
    - Partnerships with private co. (Leclerc, Unibail)
  - **Standardization**
    - Discussions ongoing
    - Possibly 2 different plugs in Europe
  
- **Incentives**
  - Current programmes confirmed (France, Spain, UK, etc)
  - No long term visibility but the Alliance is ahead of competitors on the cost side : strong capacity to face lower incentives

# MORE THAN 60 AGREEMENTS ACHIEVED BY THE ALLIANCE

UK (3)

FRANCE (3)

IRELAND (1)

NETHERLANDS (1)

CANADA (1)

DENMARK (1)

USA (13)

SWITZERLAND (3)

MEXICO (1)

JAPAN (6)

PORTUGAL (1)

CHINA (5)

SPAIN (2)

SINGAPORE (1)

ITALY (1)

AUSTRALIA(2)

NEW ZELAND (1)

ISRAEL (1)

# PARTNERSHIP WITH BETTER PLACE

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# ZOOM ON BETTER PLACE PARTNERSHIP IN ISRAEL

- A global partner : better place
- A commitment for 115,000 cars (including Denmark)
- partnership with GE
- Development (Quick Drop, Navigation software) on schedule
- SOS planned by BPLC : Oct 1st, 2011
- 70 battery switch stations
- Visitor Center



