

DEMOBASE Periodic Review 2 (M19 – M38) online, December 10th , 2020

WELCOME AND OVERVIEW DEMOBASE

Philippe Desprez, SAFT



Welcome

DEsign and MOdelling for improved BAattery Safety and Efficiency

- DEMOBASE -

Responding to the call:

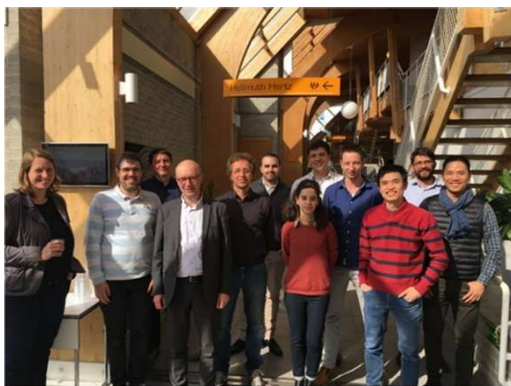
EU HORIZON 2020-GV-2017, Green Vehicles

“Multi-level modelling and testing of electric vehicles and their components”

Overall EU Funding:	7,451,520.00 EUR
Project Start:	01.10.2017
Duration:	3 Years
Project Consortium:	11 Partners from Industry and Science, 3 SME
Project Coordinator:	SAFT SAS



Project Partners



Lund, April 2018 :
Clustering event with
HIFI-ELEMENTS /
OBELIX Projects



Munich, nov. 19



Torino, March 19



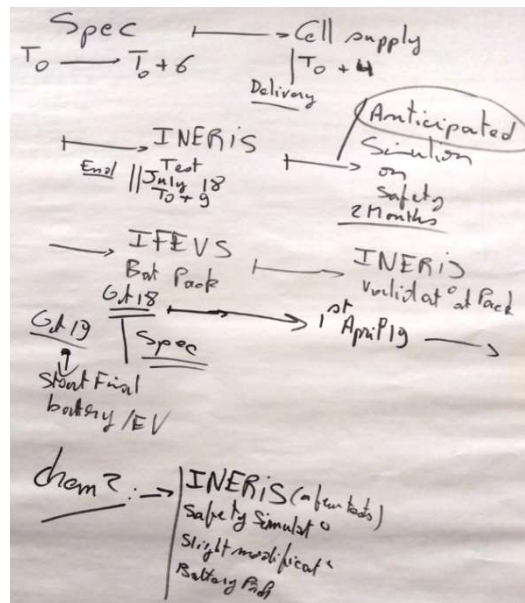
Partners Commitment

Close collaboration between partners, discussing deep in details on key points

Paper board, KPI definition.

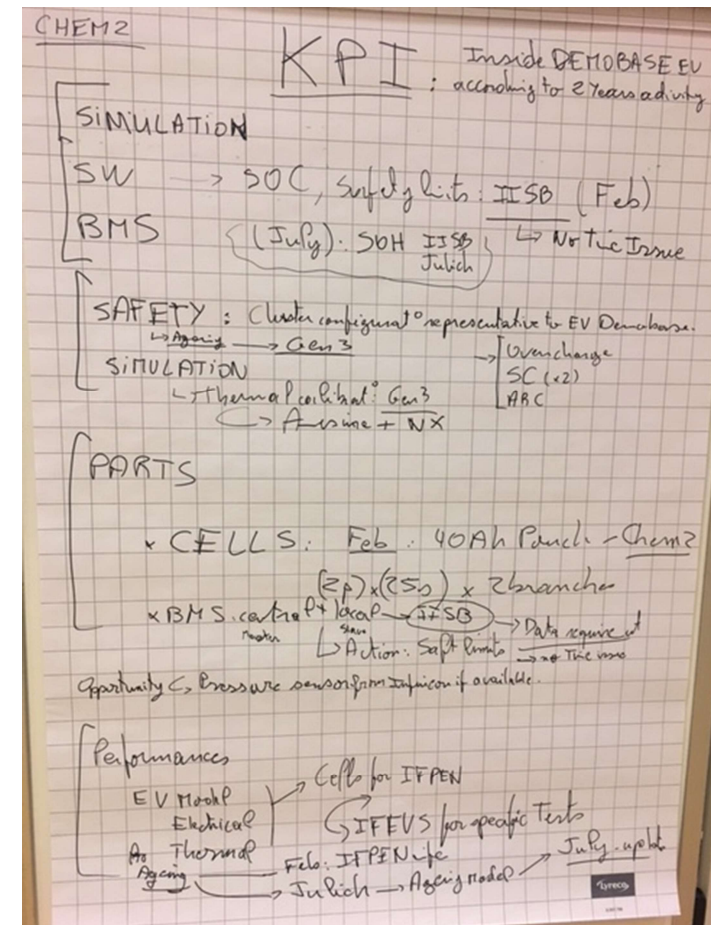
Paris, Oct 2017.

Paper board during kick-off meeting on cell supply



H2020 EC DEMOBASE 2017-2020	
WP2 T2.3/T4.4 Card 2.3.b/4.4	
INPUT from Partners: <ul style="list-style-type: none"> • INERIS: Abuse tests results Gen3 Jul. 18 • INERIS: Abuse tests results SiOx Apr. 19 	
START: To+10 (August 2018)	
OWNER: ACC	
ACTION: Vehicle model including recycling RESSOURCES: ACC (22+16 PM)	
DELIVERABLE: <ul style="list-style-type: none"> • D2.3.k Report on DEMOBASE model and simulation approaches: recycling Apr. 19 • D2.4.k Report on DEMOBASE model and simulation implementation: recycling Jul. 20 • D4.5 Report on EV recycling Oct. 19 	
CHECKER: SAFT	
END: To+33 (July 2020)	
OUTPUT to Partners: <ul style="list-style-type: none"> • None 	

**Activity
implementation by
Action Cards**



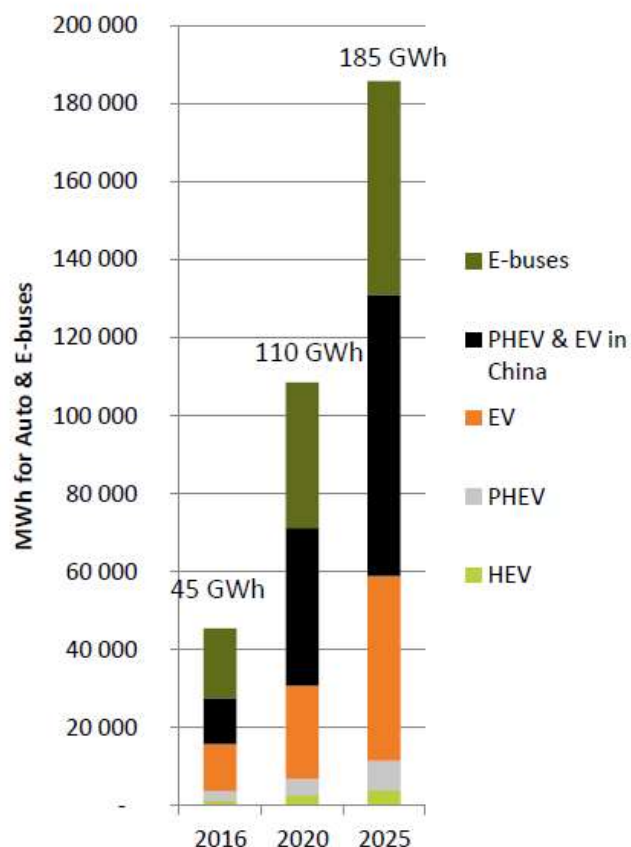


Context for DEMOBASE

Latest news**, sept. 2017



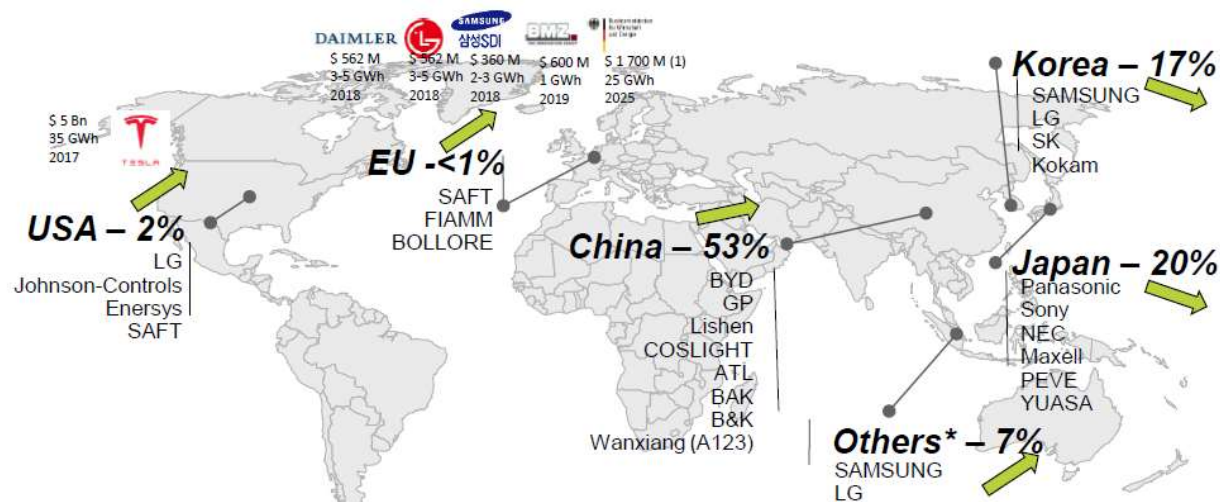
CAGR 2016-2025: + 17%



LITHIUM ION CELL PRODUCTION

Korean companies start to move in Malaysia

New production capacity in Europe and US



Source: AVICENNE 2017

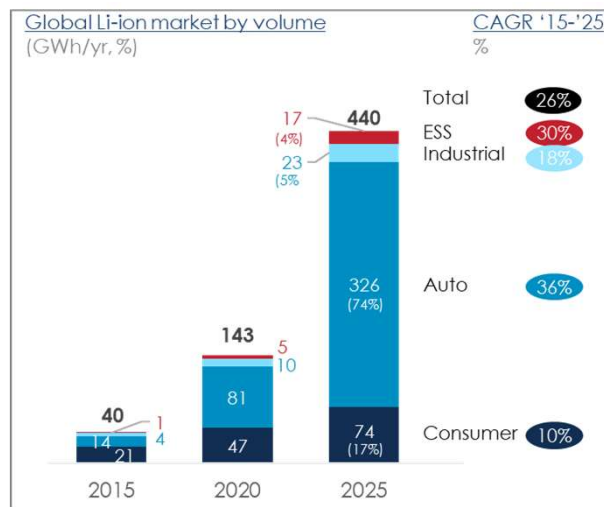
* OTHERS: Malaysia mostly
(1) Government subsidies only



17

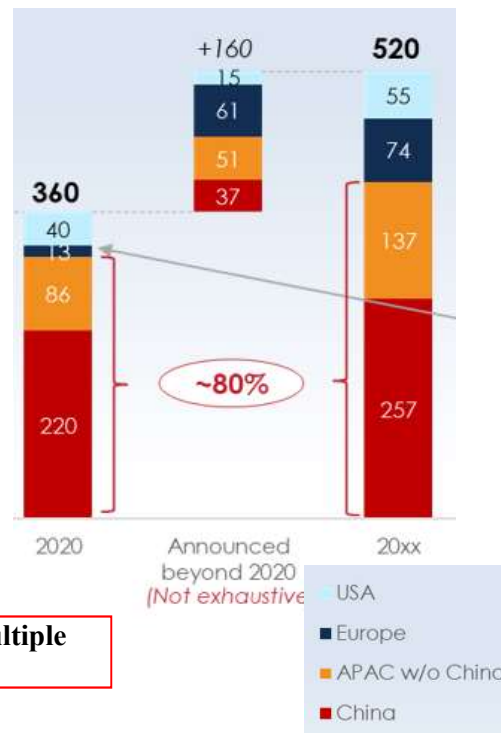
Context for DEMOBASE

Strong Li-ion market growth (in volume) from 2015 to 2025, driven by automotive



SOURCE: Saft internal analysis, based upon multiple interviews & market studies (2018)

Worldwide Li-ion manufacturing capacities by geography (GWh/yr)



**Sept.
2020**

Press release :
Groupe PSA and Total create "Automotive Cells Company", a joint venture dedicated to the manufacture of batteries in Europe
Paris, September 3, 2020



- Develop production capacity, essential to accompany the growth demand for electric vehicles in a European market estimated at **400 GWh by 2030**, i.e. 15 times the current market.
- Ensure industrial independence in Europe for the conception and manufacture of batteries, with an initial capacity of 8 GWh, reaching a cumulative capacity of 48 GWh on both sites by 2030. It will represent 1 million electric vehicles produced per year, i.e. more than 10% of the European market.

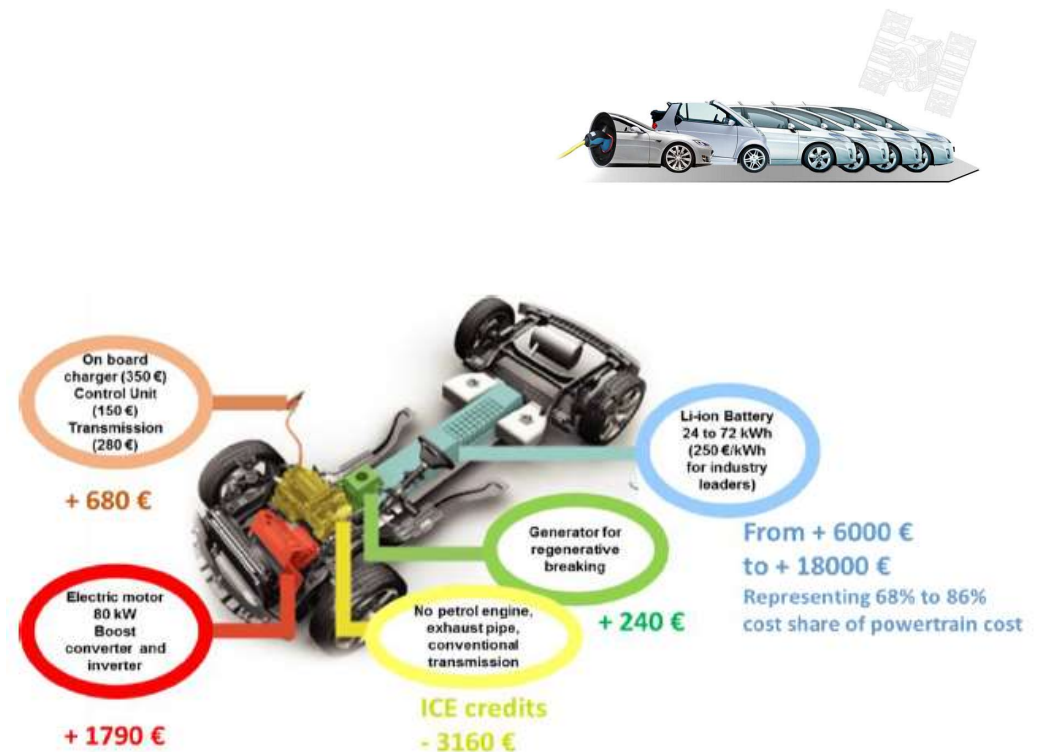
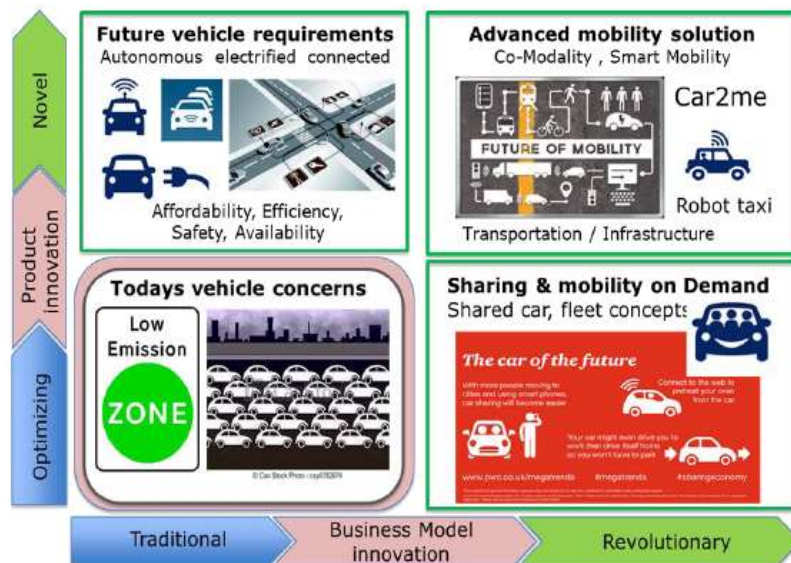
Fast EU BEV growing market and Lithium-ion based cell production, faster than predicted:

185 GWh 2025 WW => 440 GWh 2025WW => 400 GWh 2030 Europe



Motivation for DEMOBASE

Development of electric mobility is driven by **drastic cost reductions, higher performances and improved availability to support new business models** (autonomous driving; new vehicle fleets...)



Results will follow...