

Automotive Battery Committee

Market Outlook – update June 2017

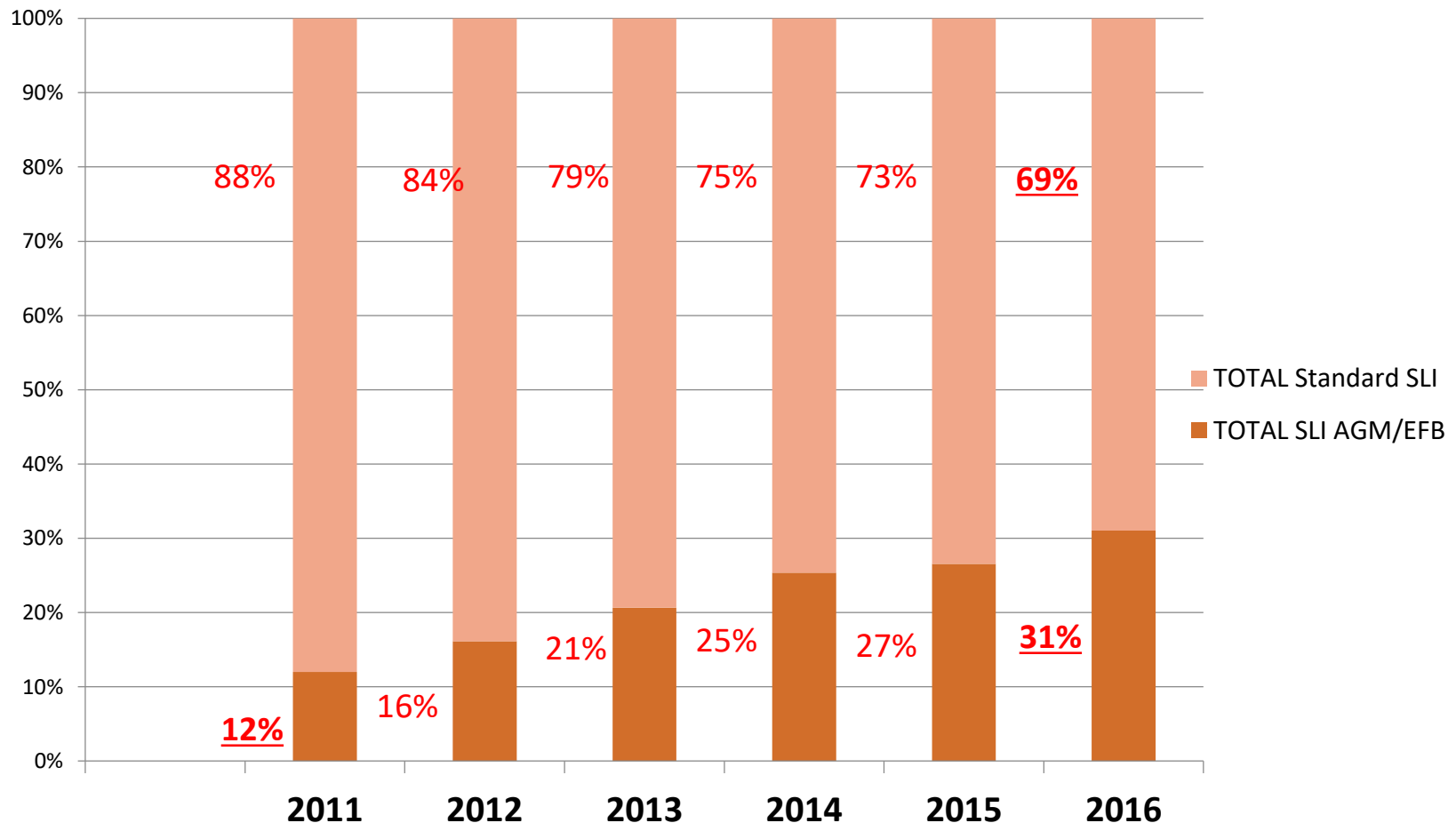


EUROBAT AGM Brussels, 8 June 2017

SLI battery market - OEM+OES+IAM

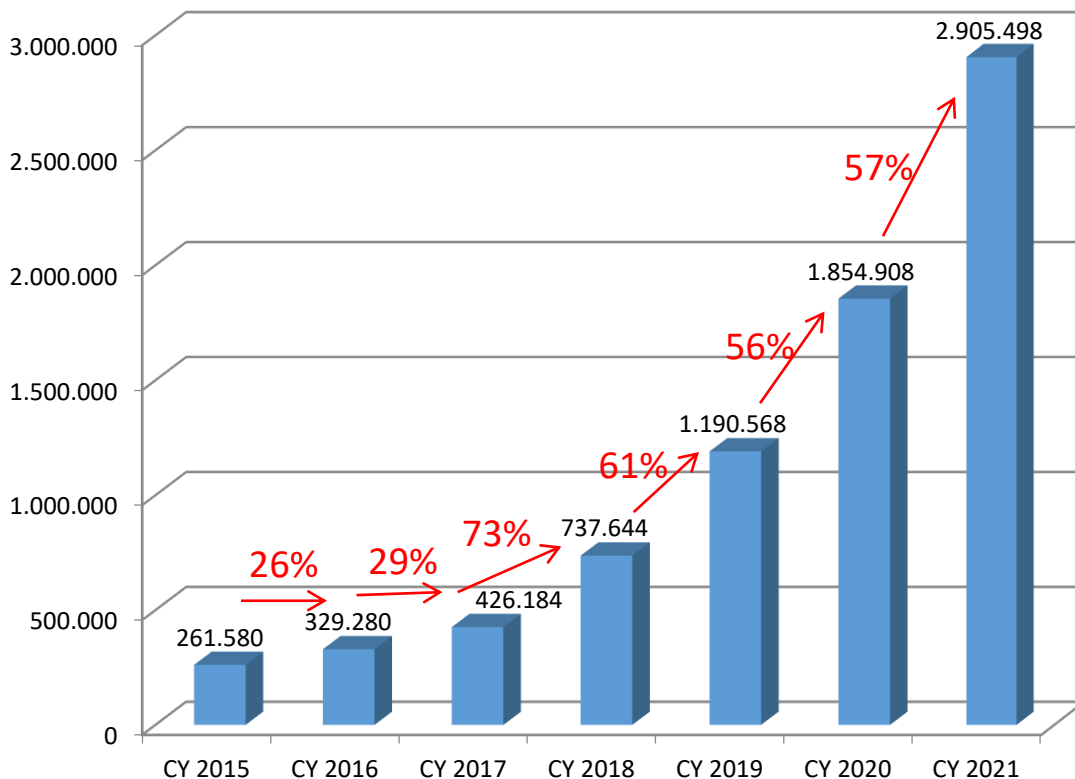
Results EUROBAT SLI AGM/EFB Surveys (in M units)

- Continuation of the replacement trend standard SLI / Advanced lead (AGM/EFB): confirmed also in 2016
- Shift standard SLI : Advanced lead already a fact in the OEM (based on IHS Car production data 1Q2017)



Mild, full and pHEV OEM battery market potentials (in units – based on IHS car production data)

Battery Capacities: from 0,4 Ah (ex Honda Civic) to 17,3 Ah (ex. VW Bentley)
Variety of voltage: 48V (mild hybrids) to 650V (full hybrids)



EU Countries (17): Austria, Belgium, Czech Rep., Finland, France, Germany, Hungary, Italy, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, UK

OEM Manufacturers (23):

VW, BMW, Daimler, Ford, Jaguar, Magna-Steyr, PSA, Renault/Nissan, Toyota, Geely-Volvo, Hyundai, GM, Ford, BAIC, Suzuki, Honda, FCA, Ferrari, Tata, Proton, Austin Martin, McLaren,

Top 5 – contributing with +85%:

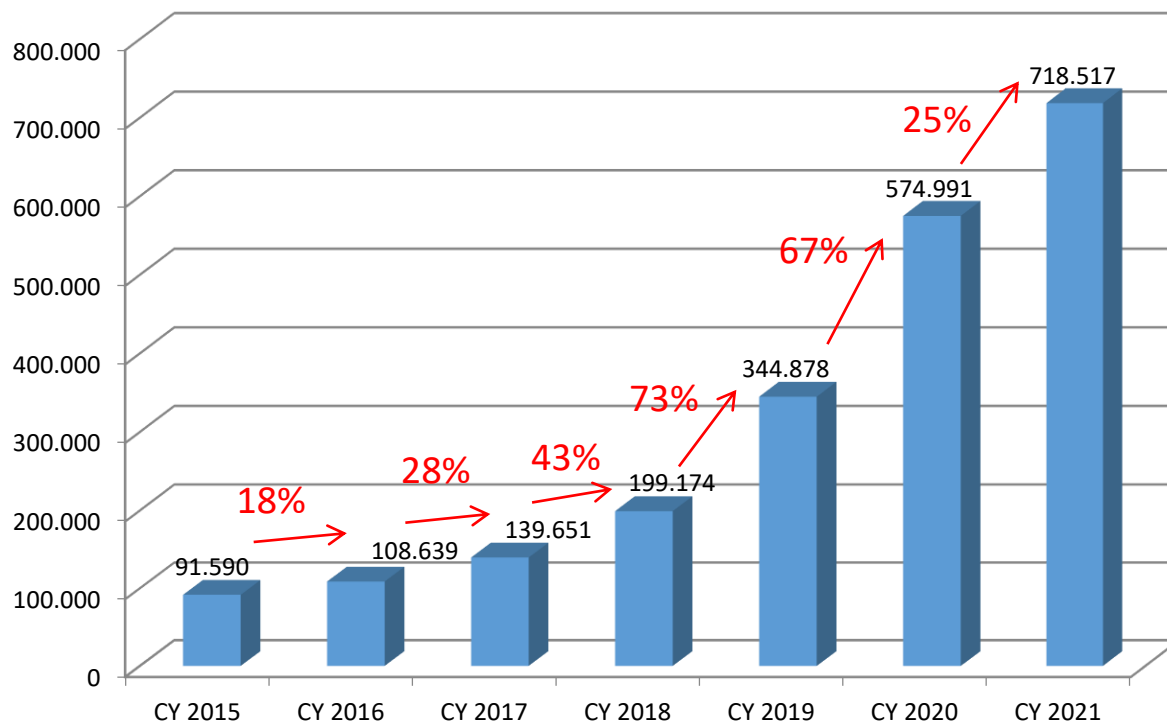
1. Germany (1,369,000*)
2. United Kingdom (439,000*)
3. France (324,000*)
4. Spain (221,000*)
5. Hungary (110,000*)

EV OEM battery market potentials (in units – based on IHS car production data)

OEM EV Battery market

Capacity 16 kWh (Smart) - 100 kWh (ex. Porsche)

Voltage: 288V – 440V



EU Countries (11): Austria, Belgium, Czech Rep., France, Germany, Italy, Poland, Slovakia, Spain, Sweden, UK

Manufacturers (10):

VW, BMW, Daimler, Ford, Jaguar, Magna-Steyr, PSA, Renault/Nissan, Toyota, Geely-Volvo

Top 5 – contributing with +80%:

1. Germany (267,000*)
2. France (98,000*)
3. United Kingdom (73,000*)
4. Spain (70,000*)
5. Belgium (60,000*)