EUROBAT
Annual Forum
16-17 June 2016
Berlin, Germany

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“Contribution of SLI batteries to the develop of low-carbon technologies”

Berlin, 17 June 2016

Challenges and opportunities at EU level

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EU Commission working on several initiatives in the transport sector

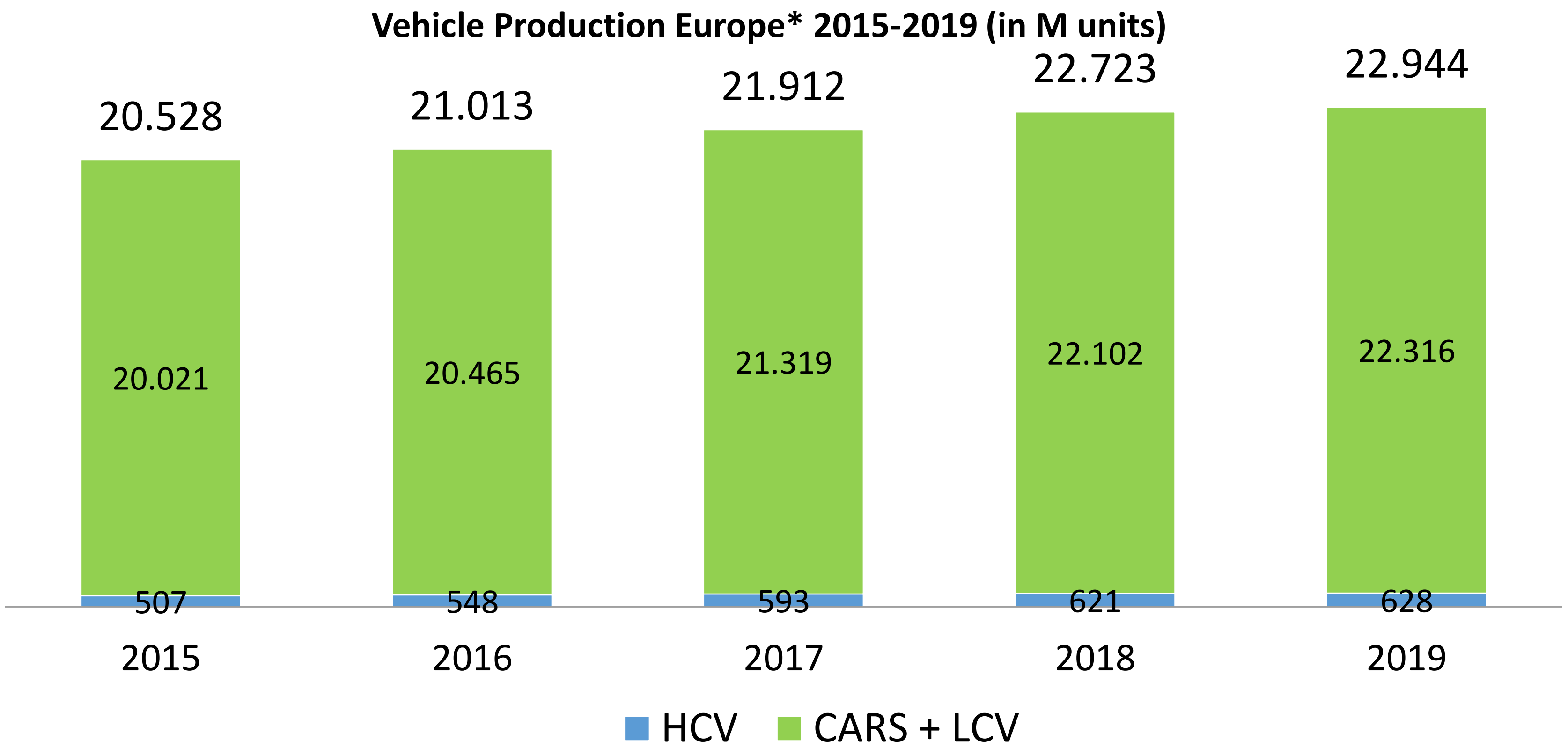
- GEAR 2030 initiative on the Competitiveness and Sustainable Growth of the Automotive Industry in the European Union
  - Discussions on value chain, zero-emission vehicles, human capital
- Communication on decarbonisation of transports
  - To be published in July
- SET Plan
  - Focus on develop of low-carbon technologies for transport
- REACH, ELV, Batteries Directive

European Commission

Also SLI and start-stop batteries have a key role for the decarbonisation of transportation <u>and</u> for the competitiveness of the EU Industry!

Automotive SLI Battery Market Volumes 2015 – 2019

OEM directly based on vehicle production in EU

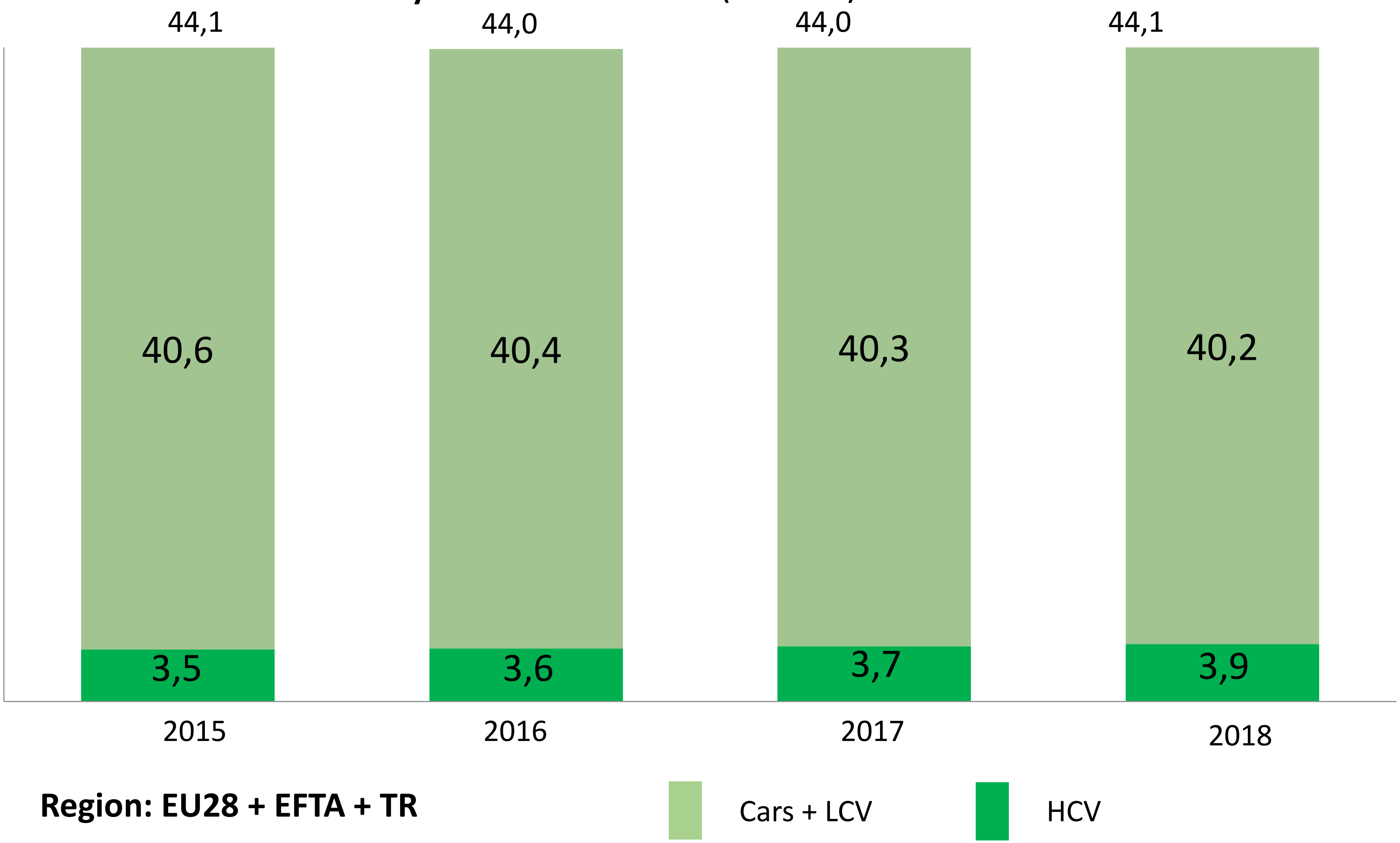


Region: EU + TR (without RU)

Automotive SLI Battery Market Volumes 2015 – 2018

AM – based on the EU car park registration

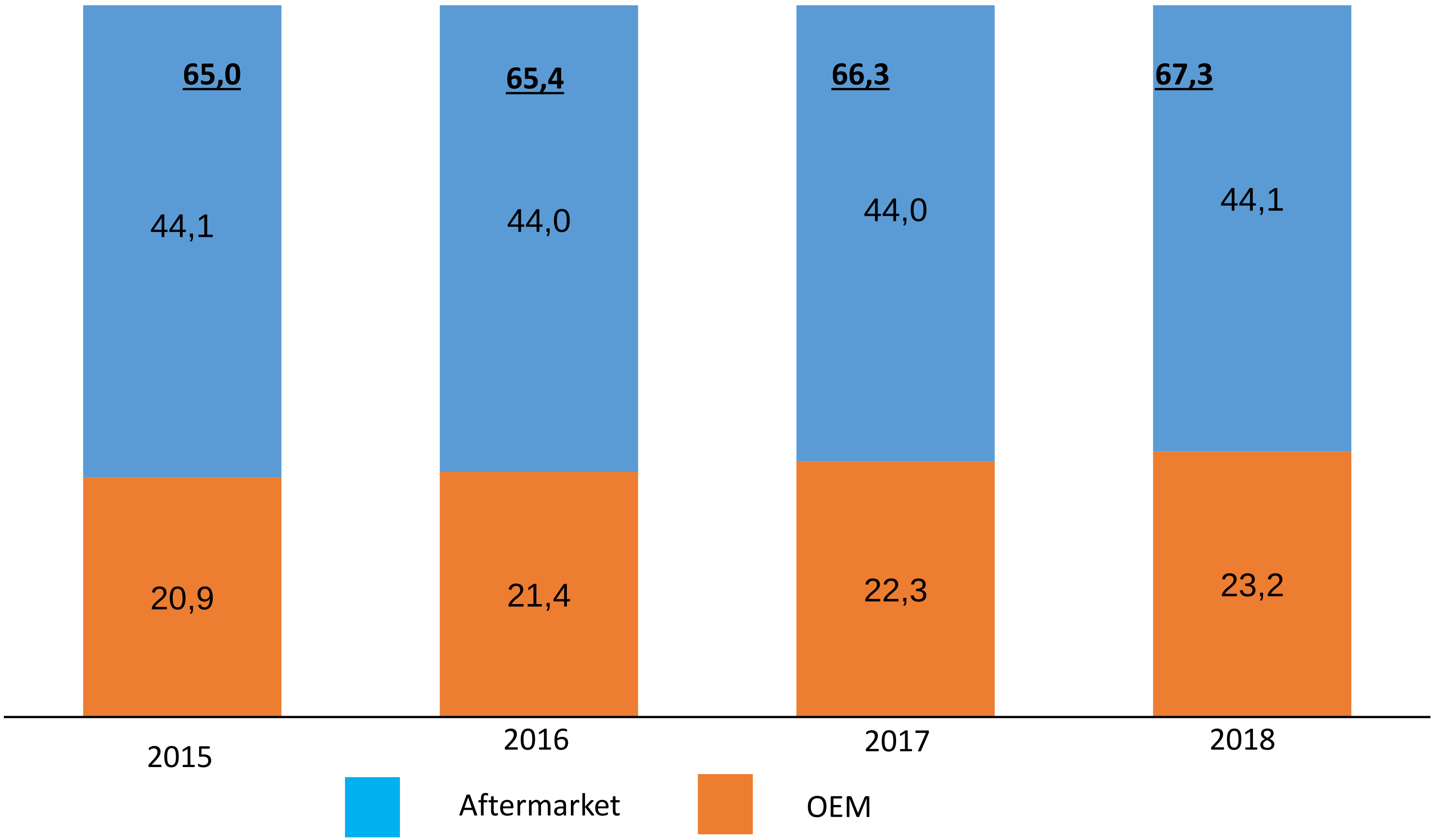
Aftermarket battery volume* 2015-2018 (in M Units)



Region: EU28 + EFTA + TR

Automotive SLI Battery Market Volumes
2015 – 2018
AM + OEM

Total battery market volume* 2015-2018 (in M Units)



EUROBAT Member data - SLI Survey 2015

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European sales (in units)	1H2015	2H2015	Total 2015
TOTAL Market AGM/EFB SLI Batteries (units)	8.454.702	8.166.000	**16.620.702**
TOTAL market Standard SLI Batteries(units)	19.681.757	26.205.901	**45.887.658**
TOTAL (Units)	**28.136.459**	**34.371.901**	**62.508.360**
Turnover (€)	**1.208.568.098**	**1.372.571.749**	**2.581.139.847**

Region: Europe= EU28 + Norway + Switzerland, excluding TR and RU/CIS

Conclusions:

- Strong leadership of EU Battery manufacturers
  - Dominating the EU internal market, both in Standard SLI as Start-Stop
  - EU leading worldwide
- SLI Battery market split:
  - Start & stop (AGM/EFB) Batteries: 27%
  - Standard SLI batteries: 73%

Historical data EUROBAT ABC Internal Survey

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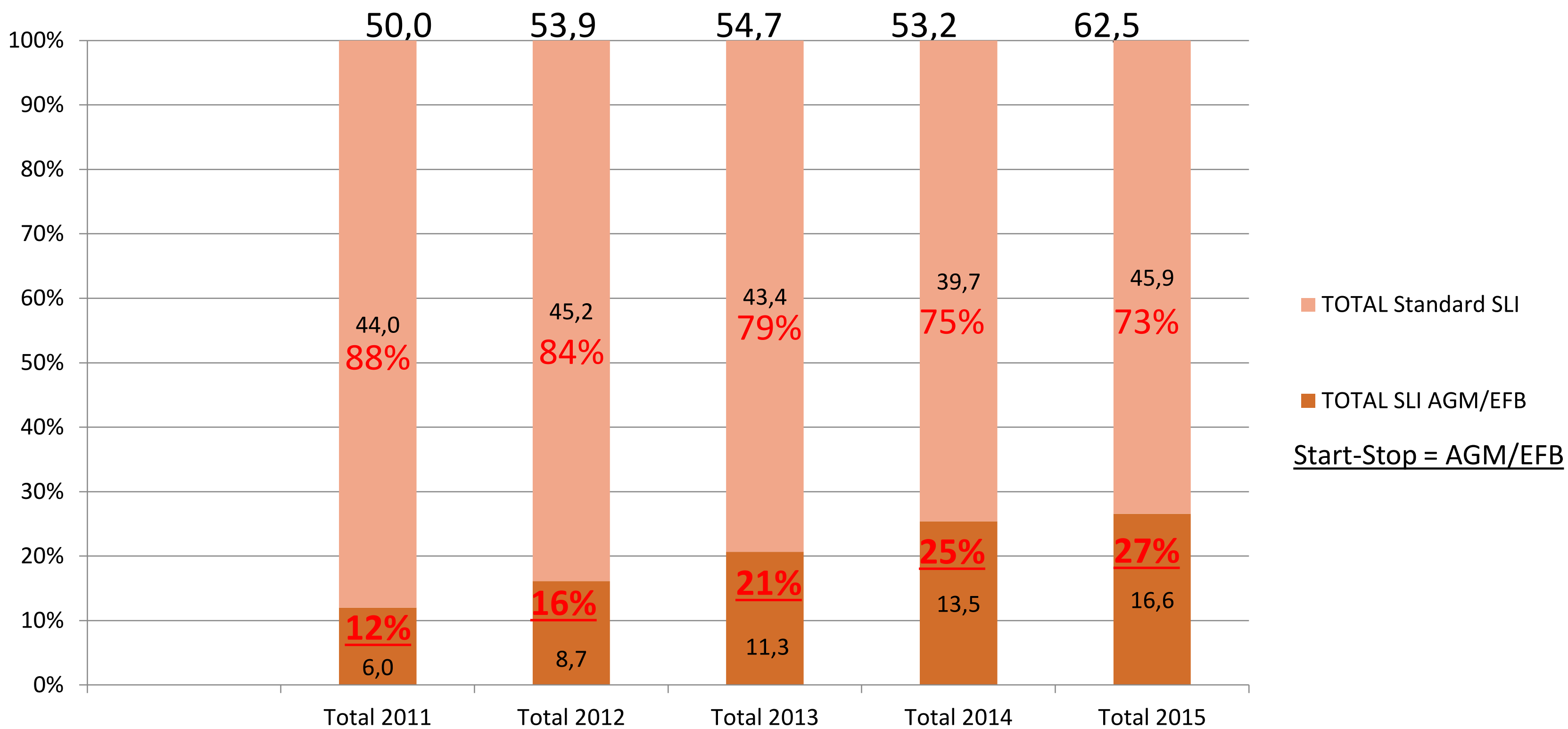
Evolution market share AGM/EFB versus Standard SLI Batteries (M units)



Region = EU28 + NO + S, excluding TR and RU/CIS - Scope: PC + LCV, excluding HCV

Conclusions: -Increased share Start-Stop versus SLI standard batteries
-Still improvement possible in S-S technology

Conclusions (1):

- HEVs represents 1,6% , EVs represents 0,4% of the total EU car park in 2014 (Autofacts - Pwc)

- Car park registration data 2014 = 357 M Vehicles (IHS/POLK)

- ICE with Start-stop represents 27% of the total EU battery market 2015 (EUROBAT internal data)

→ Savings by ICE vehicles equiped with Start-Stop has biggest impact today

SLI and start-stop batteries have a key role for the decarbonisation of transportation and for the competitiveness of the EU Industry!

Conclusions (2):

- Increase market share Start-Stop versus Standard SLI to be continued
  Start-Stop battery Trend in EU is based on EU legislation
  Start-Stop After Market will follow the fast OEM trend in the next 5 years

- Start-Stop batteries contribute today to EU fuel savings and reducing carbon emissions - more then today's current pHeV/EVs car park

- Enhanced Start-Stop: There is still potential for further improvement (chemicals, components, cell design, thermal management, system integration level)

- Strong Battery Industry value chain already installed in Europe

- EU leading in Europe and worldwide

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- Thank You -

For more information

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