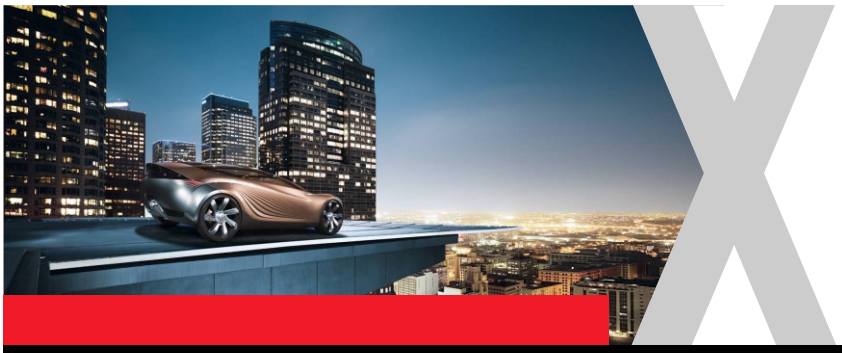


LANXESS Capital Markets Day 2012

High Performance Materials – A global player for lightweight solutions

Michael Zobel
Head of Business Unit High Performance Materials

New York, September 20, 2012

LANXESS
Energizing Chemistry

Safe harbor statement

The information included in this presentation is being provided for informational purposes only and does not constitute an offer to sell, or a solicitation of an offer to purchase, securities of LANXESS AG. No public market exists for the securities of LANXESS AG in the United States.

This presentation contains certain forward-looking statements, including assumptions, opinions and views of the company or cited from third party sources. Various known and unknown risks, uncertainties and other factors could cause the actual results, financial position, development or performance of LANXESS AG to differ materially from the estimations expressed or implied herein. LANXESS AG does not guarantee that the assumptions underlying such forward-looking statements are free from errors nor does it accept any responsibility for the future accuracy of the opinions expressed in this presentation or the actual occurrence of the forecast developments. No representation or warranty (expressed or implied) is made as to, and no reliance should be placed on, any information, estimates, targets and opinions, contained herein, and no liability whatsoever is accepted as to any errors, omissions or misstatements contained herein, and accordingly, no representative of LANXESS AG or any of its affiliated companies or any of such person's officers, directors or employees accept any liability whatsoever arising directly or indirectly from the use of this document.

LANXESS

Agenda

- **HPM overview – Strong global business setup**
- Growth driven by innovative lightweight solutions
- Innovation secures future growth
- Summary

LANXESS

“Green Mobility” energized by LANXESS

Chemistry is the key to “Green Mobility”

Performance Polymers: ~60% of group sales; ~60% of segment earnings

Butyl Rubber	Performance Butadiene Rubbers	Technical Rubber Products	**High Performance Materials**

LANXESS

High Performance Materials – Business overview

HPM overview

Key figures

- Sales: >€500 m
- Capacity: ~260kt/a[1]
- Employees: ~1,500
- Customers: >600

Product groups

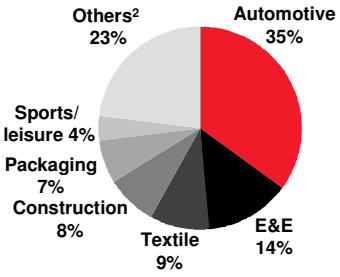
- Intermediates
- High-tech plastics
  - Durethan® based on PA
  - Pocan® based on PBT

Services

- HiAnt® service package

Sales by end use

[BU sales]



Market

- Size: >€7.5 bn
- Position: Top 3 globally[3]
- Main competitors:
  - BASF
  - DuPont
  - DSM
  - Solvay

PA: Polyamide; PBT: Polybutylenterephthalate; [1] Compounding capacities, incl. Gastonia, USA;
[2] For applications like durable household articles, machinery parts, etc. and intermediates; [3] Compounds market share

LANXESS

Competitive advantage based on strong value chain combined with high-end engineering know-how

LANXESS' value chain

Raw materials	HPM intermediates			High-tech plastics	Engineering know-how
▪ Cyclohexane ▪ Sulfur ▪ Ammonia	▪ Cyclohexanone ▪ KA-Oil ▪ Oleum ▪ Sulfur dioxide ▪ Hydroxylamin	▪ Caprolactam ▪ Glass fibers	Polymerization Compounding	Durethan® Pocan®	HiAnt®
Sourcing of raw materials on the global market	Only captive use for caprolactam production	Captive use and external sales of caprolactam and glass fibers		**External sales focus**	Expertise for all stages of advanced component development

Customers benefit from consistent upstream-integration

LANXESS

New polymerization plant strengthens value chain and creates a leading world-scale “Verbund”

View on LANXESS production site in Antwerp, Belgium

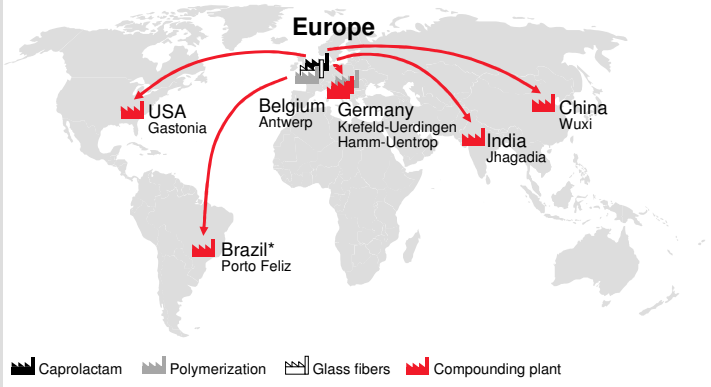
World-scale “Verbund”

- New world-scale PA6 polymerization train in Antwerp to serve captive demand for high-tech plastics production in growth regions
  - Investment: €75 m
  - Capacity: 90kt
  - Start-up: Q1 2014
- New caprolactam / PA6 “Verbund” as combined asset on one site further improves economies of scale

LANXESS

Strong intermediates base serves global compounding network

Strong setup to serve global markets



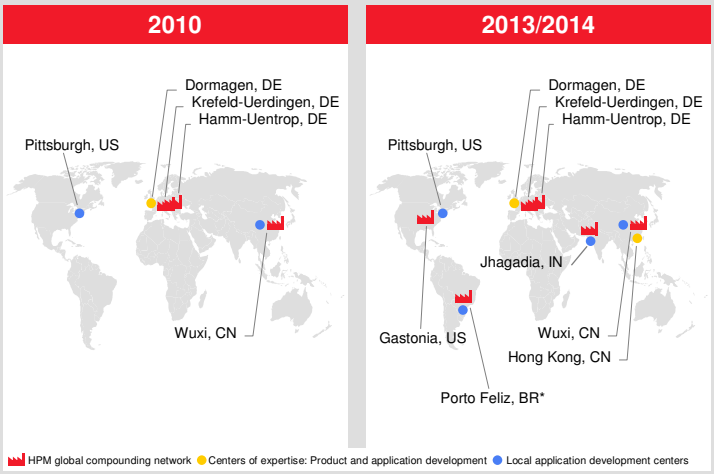
Europe as the key base

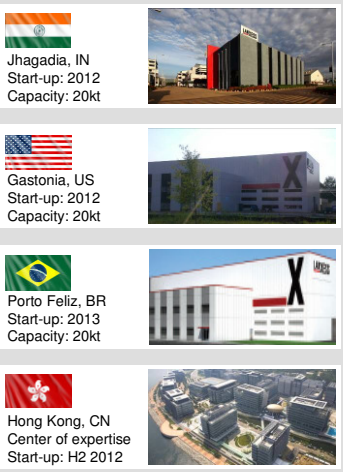
- Key intermediates for HPM high-tech plastics are bundled in Europe
- Antwerp, Belgium as HPM base for intermediates to serve global compounding plants
- Strong logistic position of Antwerp site with direct access for deep sea barges

* Under construction

LANXESS

Global setup with local development centers ensures proximity to customers

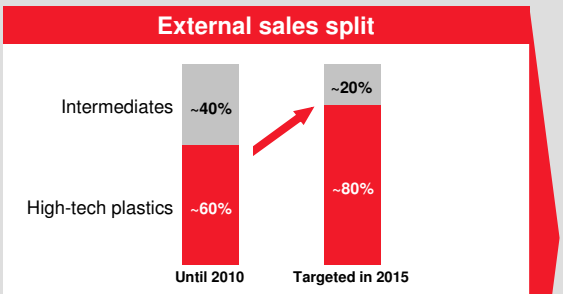




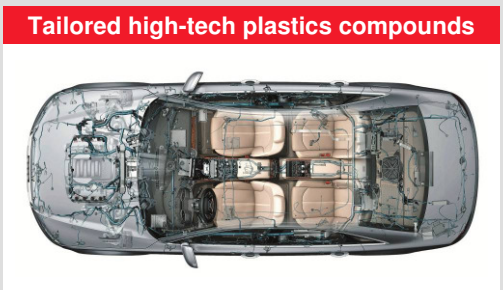
* Under construction

LANXESS

Growing captive use of key intermediates supports strategy of increasing focus on high-tech plastics



- Focus on high-tech plastics: Additional compounding plants foster improved sales mix towards high-tech plastics



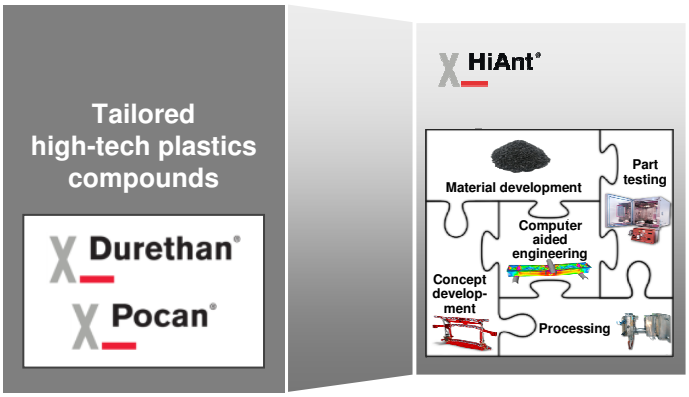
- A knowledge leader in high-tech plastics compounds
- Technology competence based on continuous product and application development

Source: LANXESS estimates

LANXESS

HPM's value proposition combines materials and high-end engineering know-how at its best

Expertise for all stages of advanced component development



- **Material development:** Tailored material solutions
- **Concept development:** Leading in lightweight technology developments
- **Computer aided engineering:** Top-notch simulation methods
- **Part testing:** State-of-the-art testing facilities
- **Processing:** Development of material process combinations for new applications

LANXESS

Agenda

- HPM overview – Strong global business setup
- **Growth driven by innovative lightweight solutions**
- Innovation secures future growth
- Summary

LANXESS

Growth for lightweight solutions is driven by global climate challenges

Initiatives for CO_2 reduction

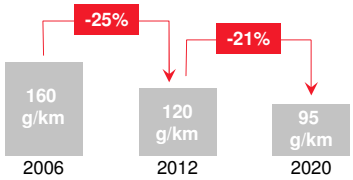
EU Energy Efficiency Plan

- Increasing energy efficiency to boost sustainable growth and competitiveness
- EU strategy focused on
  - enforcement of existing legislation
  - development of innovative solutions

Key objectives for 2020 (compared to 1990)

- Cutting energy consumption by 20%
- Reducing annual greenhouse gas emissions by 740 m tons
- Cutting energy costs by €100 bn per year

EU objective to lower CO_2 emissions for new vehicles



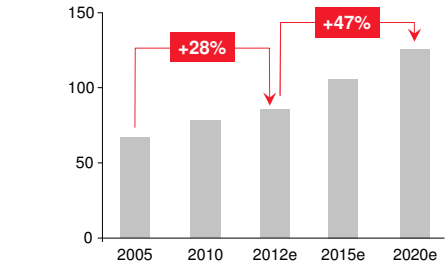
Source: EU Energy Efficiency Plan 2011, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0109:FIN:EN:PDF;
Directive of the European Parliament and of the Council on energy efficiency, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0370:FIN:EN:PDF

LANXESS

Lightweight solutions support reduction of road-traffic-related CO_2 emissions

Global production of vehicles*

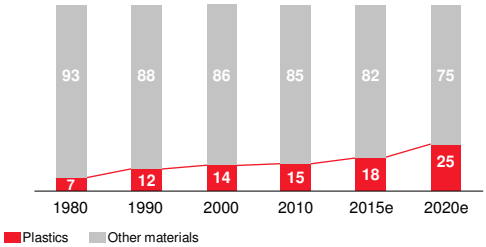
[m units]



Strong increase in vehicle production especially driven by BRICS countries

Composition of materials in car production

[% weight]



Increasing share of plastics in automotives is driven by goals to reduce weight and CO_2 emissions

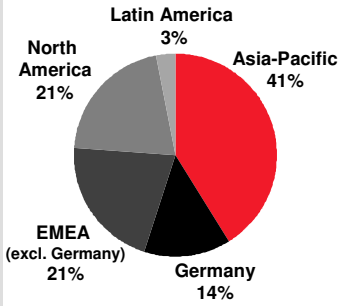
Source: JD Power 2012; Polymotive; PlasticsEurope; LANXESS estimates; * Vehicles: passenger cars and light duty trucks

LANXESS

High-tech plastics growth driven by “Green Mobility” trend and Asian market

Regional demand split 2012e*

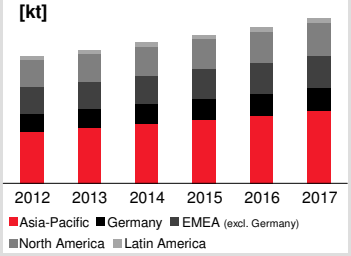
[kt units]



Market development

- CAGR (2012-2017)** ~5%
  - Asia-Pacific ~7%
  - Germany ~5%
  - EMEA (excl. Germany) ~4%
  - North America ~4%
  - Latin America ~3%

[kt]



Main growth drivers

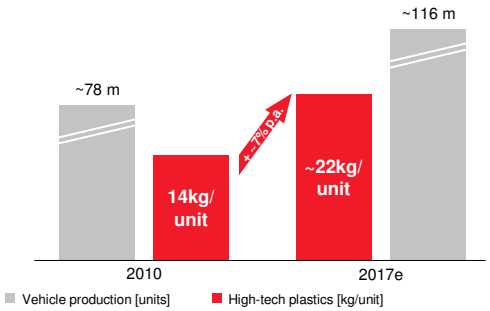
- Vehicle weight reduction for lower fuel consumption, CO_2 emission (“Green Mobility”) and higher safety
- Growing car demand, especially in BRICS and other developing areas
- Growth of electrics & electronics industry driven by innovation and availability to more people

* LANXESS estimates: High-tech plastics; ** PCI Nylon 2012 and LANXESS estimates; estimated growth rates for PA6, PA66 and PBT

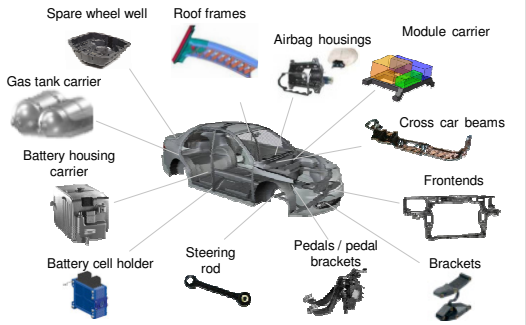
LANXESS

HPM high-tech plastics enable lightweight solutions for “Green Mobility”

High-tech plastics growth in cars*



High-tech plastics solutions in cars

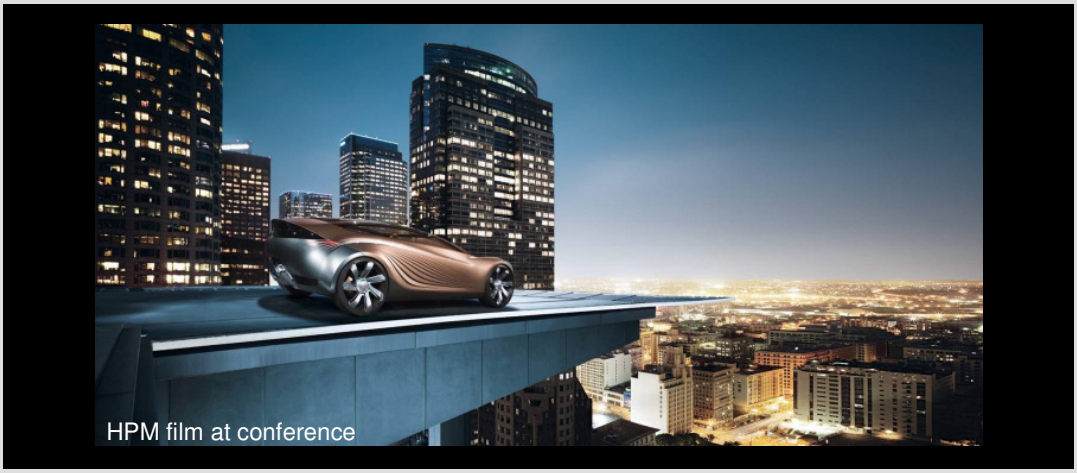


100kg weight reduction cuts down CO_2 emissions by up to 10g CO_2/km, which is 40% of the gap to close until 2020

* LANXESS estimates

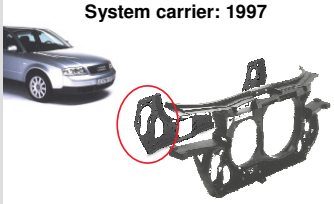
LANXESS

HPM – Enabler of high-tech plastics solutions



LANXESS

HPM's high-tech plastics developments contribute to weight reduction in cars

Frontend 1st generation	Frontend 2nd generation	Frontend 3rd generation
System carrier: 1997	In-mold assembly: 2005	High-modulus materials: Since 2012 in serial production
		
▪ Steel sheet: 1.5mm thickness ▪ Single steel sheet supported and functionalized by overmolded high-tech plastics ▪ Glass fiber content in plastics: 30%*	▪ Aluminium / steel sheet: 1.2 / 0.8mm thickness ▪ Several smaller sheets are mounted with overmolded high-tech plastics ▪ Glass fiber content in plastics: 30%*	▪ Aluminium / steel sheet: 1.0 / 0.7mm thickness ▪ Sheets are overmolded with less but extremely stiff high-tech plastics ▪ Glass fiber content in plastics: 60%*
Weight reduction vs. steel: ~30%	**Weight reduction vs. 1st generation: ~15%**	**Weight reduction vs. 2nd generation: ~15%**

* Weight percentage

LANXESS

HPM creates first frontend with composite sheets for series application

New Audi A8 frontend with HiAnt® solution

Audi A8 frontend material combination:

- Upper part: Aluminium sheet / high-tech plastic Durethan®
- Lower beam: Composite sheet (1mm thickness)
  - Composite sheet consists of 60% continuous glass fiber woven fabric embedded in high-tech plastic Durethan®
  - Composite sheet / Durethan® with excellent mechanical properties, e.g. high strength and stiffness

Audi A8 frontend weight reduction:

- Lower beam with 20% weight reduction compared to Aluminium

LANXESS

Acquisition of Bond-Laminates strengthens HPM market position for lightweight solutions

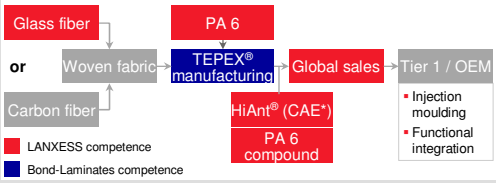
Bond-Laminates overview

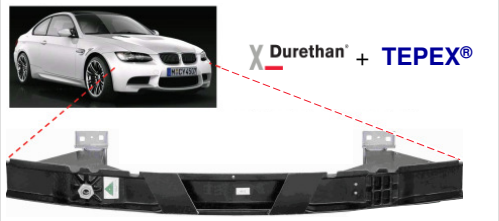
- A leading provider of continuous fiber-based composite sheets (trade name: TEPEX®)
- Applications: Automotives, sports, electronics
- Production site in Germany (Brilon)
- Own laboratory for material and prototype development
- Successful projects with LANXESS for the automotive industry since 2006

Acquisition rationale

- Serving lightweight trend with innovative composite sheet technology
- Forward-integration of high-tech plastics value chain
- Diversifying customer base
- Expanding composite sheet technology into growth markets

Value chain





* CAE: Computer Aided Engineering

LANXESS

High Performance Materials – The high-tech plastics solution provider

- Innovator of lightweight solutions
- Premium applications for “Green Mobility”
- Leading-edge engineering know-how
- Strong customer relations and proximity

LANXESS

Agenda

- HPM overview – Strong global business setup
- Growth driven by innovative lightweight solutions
- **Innovation secures future growth**
- Summary

LANXESS

“Green Mobility” as underlying trend for new application fields

Megatrends

Mobility

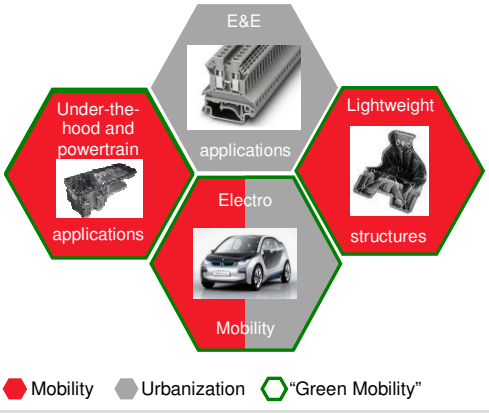
Agriculture

Urbanization

Water

“Green Mobility” – Underlying growth trend

GREEN MOBILITY™ ENERGIZED BY LANXESS



LANXESS

Innovation – First brake pedal with composite sheet for series production

Development project: Brake pedal

- Co-operation with ZF Friedrichshafen, a leading automobile supplier for drive technology and chassis
- New brake pedal with ~50% weight reduction compared to standard steel pedal
- Additional benefits include: Function integration, reduction of process steps, no corrosion protection needed, easy recycling
- Start of series production: End of 2013 (in premium cars)

Evolution of brake pedals

Steel: 794g | Plastic metal hybrid: 526g | **Composite sheet: 355g**

Mounted pedal block

LANXESS

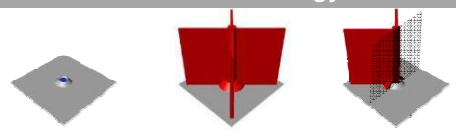
Innovation – New bond technology for plastic metal hybrid components

Research project: Adhesive bond technology

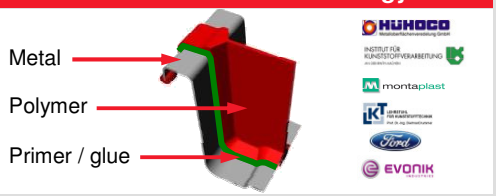
- Joint research project funded by the German government (Federal Ministry of Education and Research)
- New bonding technology targets higher performance level to gain further weight reduction
- Project objective: ~30% weight reduction compared to standard hybrid components
- Application areas: Crash relevant components, e.g. crash boxes

Federal Ministry of Education and Research

Current technology



New adhesive bond technology

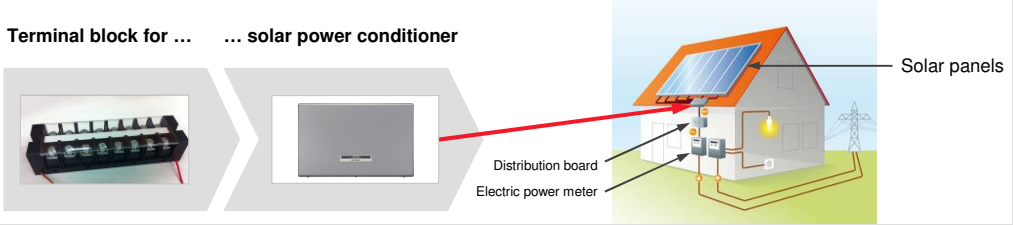


LANXESS

Innovation – New flame retardant high-tech plastic generation for solar power systems

Terminal block for solar power conditioner

- Co-operation with Osada, Japan
- Power conditioners convert electric power of solar panels (direct current (DC) to alternating current (AC))
- Requirements of terminal blocks: excellent flame retardancy and long-term UV resistance
- LANXESS' latest "green" (non-halogenated) flame retardant Pocan® generation

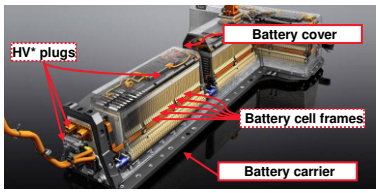


Source of solar power conditioner picture: http://sharp-world.com/corporate/news/090303.html

LANXESS

HPM with trend-setting solutions for e-mobility

E-mobility: Lightweight solutions and electrics & electronics applications



Lightweight solutions
Electrics & electronics applications

Lightweight solutions
- Functionally integrated lightweight construction
- Multi-material design
- Composite technology

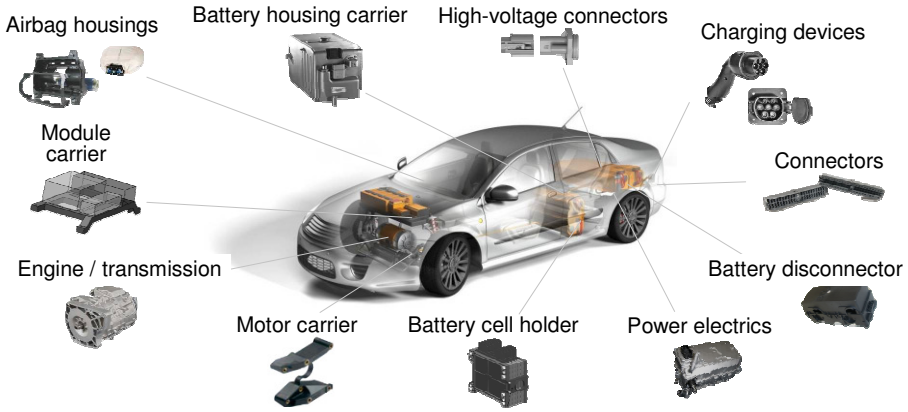
Electrics & electronics applications
- Flame retardancy
- Electric resistivity / insulation
- Mechanical performance
- Easy processability

Source: www.motortrend.com (http://www.motortrend.com/features/auto_news/2011/1203_sorting_out_the_chevy_volt_fire_fiasco/photo_02.html)
* HV=High Voltage

LANXESS

HPM with strong knowledge base to support future e-mobility applications

E-mobility solutions



LANXESS

Agenda

- HPM overview – Strong global business setup
- Growth driven by innovative lightweight solutions
- Innovation secures future growth
- **Summary**

LANXESS

High Performance Materials – A global player for lightweight solutions

Global reach	▪ Strong global market position ▪ Further globalization of production network	
Strong growth setup	▪ Expanding setup in key growth markets ▪ Strong value chain and broad product portfolio ▪ Acknowledged value provider	
Innovation leader	▪ Know-how and concept competence ▪ Excellent customer relationships ▪ Fast and flexible innovation provider	

LANXESS


LANXESS
Energizing Chemistry