

# What does sustainability mean to BASF Mobile Emissions Catalysts?

For us, sustainable development means the combination of long-term oriented economic success with environmental protection and social responsibility.

- ➤ We invest heavily to develop innovative emissions catalysts to enable clean air for a sustainable future.
- We also use resources efficiently to produce our products.
- ➤ We provide training, employment and development for over 3000 people and support the communities where we operate.
- ► BASF has been recognized as a global leader for sustainability.
- Our Supplier Code of Conduct requires suppliers to comply with environmental, social and governance expectations.



# We invest to develop emissions catalysts to enable clean air.

- Twice as many emissions catalysts patent applications over the last 6 years as our nearest competitor
- We support the automotive and commercial vehicle industry for development of fuel efficient engines
- Our products reduce CO, HC, NOx and particulate matter to meet the toughest emissions regulations
- It takes 100 cars with catalytic converters today to equal the emissions from just 1 pre-1974 car

# We provide training, employment and development for over 3000 people.

- Manufacturing sites in US, Brazil, Germany, Poland, South Africa, China, India, Thailand, plus Japan and Korea through joint ventures
- R&D Sites in the US, Germany, China, plus Japan and Korea through joint ventures
- BASF plays an active role in the communities in which we operate, through our corporate charitable contributions and community relations efforts.

# We also use resources efficiently to produce our products.

- Reduced greenhouse gases<sup>1,2,</sup> contributing to an overall BASF 32% reduction since 2002
- Cut use of drinking water for production<sup>2</sup>, contributing to 23% BASF improvement since 2010
- Boosted energy efficiency in production processes<sup>2</sup>, helping BASF make 19% improvement since 2002
- Improved occupational safety<sup>3</sup>, helping BASF achieve 48% improvement since 2002
- Holistic life cycle thinking since 1996

## BASF has been recognized as a global leader for sustainability.

- Global 100 Most Sustainable Corporations
- Dow Jones Sustainability Index
- Carbon Performance Leadership Index
- Individual customer awards

<sup>&</sup>lt;sup>1</sup> per metric ton of sales product (excluding oil & gas)

<sup>&</sup>lt;sup>2</sup> Figures are based on the scope of consolidation of BASF Group valid on December 31, 2012.

<sup>&</sup>lt;sup>3</sup> lost time injury rate per million working hours



## Greenhouse gases<sup>1,2</sup>

# 32% REDUCTION FOR BASE OVERALL

Invested in more efficient equipment for production

- New ovens cut 1838 tons CO<sub>2</sub>/year
- New dryers saved 490 tons CO<sub>2</sub>/year





# Drinking Water<sup>2</sup> LESS USED IN PRODUCTION

Continuously improving processes to reduce water use

 New process at one plant saves over 3 million gallons of water per year



<sup>1</sup> per metric ton of sales product (excluding oil & gas)

<sup>&</sup>lt;sup>2</sup> Figures are based on the scope of consolidation of BASF Group valid on December 31, 2012







# nergy Efficiency<sup>2</sup>

# 19% PRODUCTION PROCESS IMPROVEMENT SINCE 2002

Invested in more energy efficient equipment

 Upgraded lighting in production plant resulting in 540,000 kWh saved per year





## Occupational Safety<sup>3</sup>

# 48% IMPROVEMENT SINCE 2002

We never compromise on safety

- This is a commitment enshrined in our strategy
- It is part of our Culture of Excellence



<sup>2</sup> Figures are based on the scope of consolidation of BASF Group valid on December 31, 2012

3 Lost time injury rate per million working hor



#### Waste Reduction

Holistic Life Cycle Thinking

- Integrated production utilizes by-products and waste whenever possible; trash is burned for steam production and we recycle paper, plastic, cardboard, metal, and wood
- 100% recycling of manufacturing waste streams with precious metal content
- Over 28% of precious metal in our raw material sourcing is from recycled sources



## Sustainability in Procurement

In BASF's value chain, our suppliers play a critical role as we create chemistry for a sustainable future. BASF Procurement clearly describes and communicates our expectations to our suppliers. We focus on more than price, quality and time. Our suppliers must comply with environmental, social and governance expectations.

Inspired by the United Nations Global Compact initiative and the chemical industry's Responsible Care program, our Supplier Code of Conduct makes our expectations clear. For more information, please visit: www.basf.com/group/corporate/en/products-and-industries/procurement/Compliance/Index





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To learn more, scan the QR code or visit www.catalysts.basf.com/mobilesources

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