



We create chemistry

30 Years in Malaysia

Sabah International Biomass Forum 2019 Malaysia's Move Towards Zero Single Use Plastics: Biomass as Key Feedstock

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BASF – We create chemistry

- Our chemistry is used in almost all industries
- We combine economic success, social responsibility and environmental protection
- Sales 2018: €62.7 billion
- EBIT before special items 2018: €6.4 billion
- Employees (as of December 31, 2018): 122,404
- 6 Verbund sites and 355 other production sites
- Over 90,000 customers from various sectors in almost every country in the world



Chemicals

Petrochemicals
Intermediates



Materials

Performance Materials
Monomers



Industrial Solutions

Dispersions & Pigments
Performance Chemicals



Surface Technologies

Catalysts
Coatings
Construction Chemicals*



Nutrition & Care

Nutrition & Health
Care Chemicals



Agricultural Solutions

BASF's bio-based portfolio

- BASF's dedicated bio-based portfolio offers solutions for multiple applications such as superabsorbents, dispersions, plastics and intermediates.
- Offer customers a differentiation opportunity such as a quantifiably improved CO2 footprint and savings of fossil resources.
- Examples:



Nippon Paint's Infinite Air



ecovio[®] - certified compostable



Palm-based specialties for cosmetics

Fossil resources



Use of renewable feedstock in the very first steps of chemical production



BASF's Production Verbund – Utilization of existing integrated production for all steps



Mix of fossil and renewable resources and allocation of renewable share to selected products based on individual calculations



BASF's customers to produce products with raw materials derived from renewable resources

High quality products that help conserve fossil resources and reduce greenhouse gas emission

For more information:

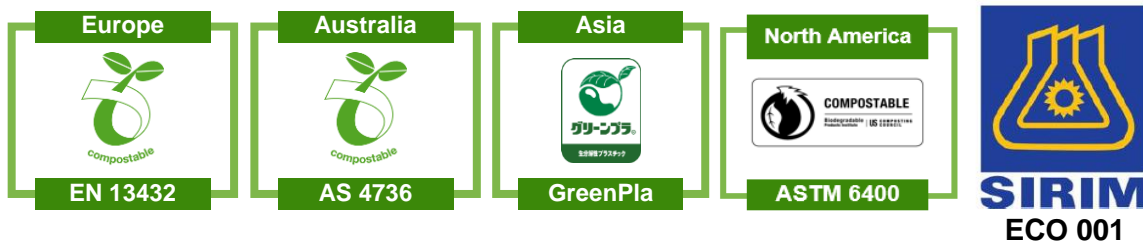






BASF's Biomass Balance Approach

A groundbreaking way of using renewable resources in production

Biodegradable vs Compostable

- Nearly every material will biodegrade, given enough time.
- A **biodegradable material is not** necessarily compostable. A **compostable material is always** biodegradable. (waronplastic.ie)
- Composting happens at right temperature, humidity and O2 conditions e.g. industrial compost plant
- Biodegradable and Compostable Standards



Biodegradable	Compostable
 <p>Breaks down into smaller sized pieces</p>	 <p>Breaks down into non-toxic components</p>
Requires heat, water, oxygen and micro organisms but may never fully break down	Requires heat, water, oxygen and micro organisms to fully break down
 <p>May take decades to disappear</p>	 <p>Breaks down completely and does not harm plant growth</p>
Plastics biodegrade into smaller pieces of plastic over a longer period of time	Bio based materials break down faster as long as the right conditions are met

source: thedosomethingproject.com



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