



## Position Statement Bio based Raw Materials

Bio-based raw materials form an essential part of our sustainability approach as they can contribute to a reduction of our environmental footprint and our reliance on oil.

Like many other positive potential contributors, bio-based raw materials have a potential downside, they have been associated with raising food prices, reducing bio-diversity and contributing to deforestation.. At the same time however, we see that bio-based raw materials are an essential part of the road towards a lower environmental footprint.

Some of the advantages of biobased materials are:

- Reduction of CO2 footprint.
- Reduction of reliance on oil.
- Potential cost reduction in times of high oil demand.
- Improved supply chain security
- Re-use and the reduction of waste.
- Biodegradability of materials at end-of-life.
- Stimulate wealth and development in poor rural areas
- Contribution of novel functionality to products.

## **Challenges and Dilemmas**

AkzoNobel does not support raw materials that compete with food, reduce bio-diversity or cause deforestation. Therefore, we participate in, and actively stimulate the development of a binding certification system for agriculturally produced raw materials that ensures that the products are grown in a responsible and sustainable manner. Herewith we want to look further than CO2 footprint and also have to take into account the usage of land, water and fertilizer, as well as the social and commercials aspects associated.

AkzoNobel is a member of the Round Table on Responsible Soy (RTRS) and an affiliate member of the Roundtable on Sustainable Palm Oil (RSPO). AkzoNobel is also a member of the Forest Stewardship Council (FSC) and is committed to being a top three company in the Dow Jones Sustainability Index, (DJSI).

AkzoNobel uses bio-based raw materials in the production of paints as well as in the production of chemicals. Wherever possible, we prefer to use plant materials that are not suitable for use in the food chain such as agricultural residues, stems and leaves or nonedible plants that can be grown on marginal land. Allied to this, bio-based materials manufactured from waste cellulose streams are also actively supported. We believe that in addition to improving first generation industrial processes, second generation development should be accelerated and alternatives sources such as algae should be embraced. AkzoNobel actively stimulates research in this field by participating in the BE Basic Consortium. In addition, where possible, we are actively replacing raw materials based on fossil feed stocks by raw materials based on renewable feed stocks for example in coatings formulations in order to be able to meet future customer needs for "more natural" raw materials as well as to prepare for potentially excessive crude oil prices that would make existing products uncompetitive.