Feedstock & Friends – Vital Ingredients for Success
(or how to put Open Innovation in practice)

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This presentation contains statements which address such key issues as AkzoNobel’s growth strategy, future financial results, market positions, product development, products in the pipeline, and product approvals. Such statements should be carefully considered, and it should be understood that many factors could cause forecasted and actual results to differ from these statements. These factors include, but are not limited to, price fluctuations, currency fluctuations, developments in raw material and personnel costs, pensions, physical and environmental risks, legal issues, and legislative, fiscal, and other regulatory measures. Stated competitive positions are based on management estimates supported by information provided by specialized external agencies. For a more comprehensive discussion of the risk factors affecting our business please see our latest Annual Report, a copy of which can be found on the company’s corporate website www.akzonobel.com.
AkzoNobel today

- Revenue €14.5 billion
- 47,210 employees
- 44% of revenue from high growth markets
- Major producer of Paints, Coatings and Specialty Chemicals
- Leadership positions in many markets

**Revenue by Business Area**
- Decorative Paints: 34%
- Specialty Chemicals: 39%
- Other: 27%

**Operating income by Business Area**
- Decorative Paints: 39%
- Specialty Chemicals: 42%
- Other: 19%

**Invested Capital by Business Area**
- Performance Coatings: 25%
- Decorative Paints: 35%
- Specialty Chemicals: 29%
- Other: 11%

12.3% Return on sales (operating income/revenue)
11.7% Return on investment (Operating income/average 12 months invested capital)
Our current partnerships reflect the different types of relationships that one might encounter in the biobased space.

- **Raw Materials**
  - Existing
    - Alternative solvents (Augeo®)
    - Epichlorohydrin (Epicerol®)
  - New
    - Novel fatty acids
    - Methanol
    - Acetic acid

- **Partners**
  - Existing
  - New
The idea with Enerkem is simple: realizing the circular economy ...

- Enerkem
- AkzoNobel

Resource → Basic chemicals → Products

Recycling carbon as a technical nutrient
You need Feedstock … cheaply and abundantly

Singing the praise of waste

- No competition with food chain
  - No equivalent of food versus fuel concerns

- Widely available and Collection & Collation system already in place
  - Avoids need to source and ship biomass

- A “strategic” feedstock
  - Waste is owned by cities and provinces who can direct it to benefit their citizens

- Attracts a gate fee
  - You get paid to resolve

- Upgrading fits with (supra)national strategies to move to circular economy
  - And particularly not to landfill … !
… but to make a happy customer you need Friends … a lot of them
Could we make methanol sustainably then?
Yes we think so

Hypothetical numbers

Costs

Tipping fee

Increasing scale

EUR/mt

Europe contract price

Increasing scale
A complex partnership project; Why do we see pull, now?

- It is complex but it fits with what our partners want
  - The partners we talk to all have relevant objectives in their strategies, aligned with ours

- AkzoNobel can take the role of value chain facilitator & “architect”
  - The partnerships we have announced in the past 2 years, and our role and position in the Netherlands’ economic landscape, make us a credible partner

- Open Innovation really is **Networked Innovation**
  - We are showing how Open Innovation works in practice; not a fancy consulting term but purposefully and respectfully developing business jointly with others

*The key to success is to coordinate the development of multi-party win-win partnerships where we share benefits and investments (of many kinds) fairly and equitably*
Thank you for your attention
And a selection of brands in our portfolio
Thank you for your attention
On this basis we can start to see a path to over time to “green” significant parts of our supply chain.
In 2012 we announced our biobased strategy, and we invited (and approached) partners to explore opportunities together.

**Strategy and Guiding Principles**

A proactive effort to lead the deployment of selected, relevant bio-based chemicals in our core markets and applications

1. **Leverage market innovation and focus on development of channel and applications for biobased chemicals** rather than the in-house development of biobased raw materials and technologies.

2. **Focus on cost competitive, high impact** areas guided by supply issues, sustainability and customer insight.

3. **Work across the supply chain** to integrate biobased raw materials.

4. **Take 1st generation opportunities as stepping stone, but insist suppliers work towards 2nd generation.**

Starting from a strong base: already 13% of our organic RM spend is biobased.