

### TOSCA

Towards sustainable supply chains through a common approach for company strategic work and daily operations





**CHALMERS** 



### About the project



- Funded by the EU LIFE+ Programme
- Runs 2009-2011
- Co-operation between AkzoNobel, SCA and Chalmers University of Technology
- Visit <u>www.tosca-life.info</u>







#### AkzoNobel



- Worlds largest paints and coatings company and a major producer of specialty chemicals
- Based in Amsterdam and operates in 80 countries
- 59.000 employees and €15.4 billion in revenue

































#### SCA



- SCA is a global hygiene and paper company that develops and produces personal-care products, tissue, packaging solutions, publication papers and solidwood products.
- Sales are conducted in more than 100 countries.
- 50.000 employees and €10.5 billion in sales (2009)























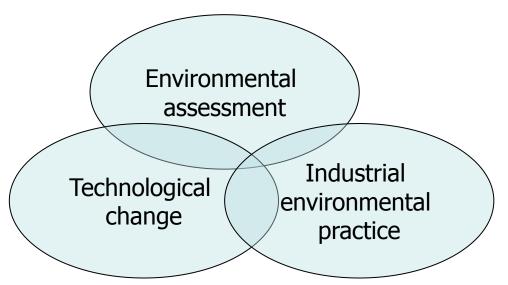




# Environmental Systems Analysis (tosca



 Division within the Department of Energy and Environment at Chalmers University of Technology, Gothenburg, Sweden











### Background



- EU Life funded project DANTES (2002-2005), <u>www.dantes.info</u>
  that provides tools for different company functions
- The tools need to be used in a context of sustainable development goals, strategies, indicators and targets
- In order to make a difference and avoid suboptimizations, the whole life cycle of the products must be considered. Thus, suppliers and customers must be involved
- AkzoNobel and SCA have been applying LCM (Life Cycle Management) for many years and are now expanding this work to incorporate suppliers and customers







### **Objectives**



- Develop a framework of examples, working procedures, guidelines, strategies and tools to show companies how they can work towards sustainable development, within the company and in its supply chain
- Reduce the environmental load of companies using the framework, with a special focus on decreasing the use of resources (energy and material) as well as the carbon intensity along the supply chains of the participating companies.
- Provide guidance for facilitating the work with sustainability in a business environment
- Introduce the framework within the participating companies, and to a selection of suppliers, customers and carriers within the supply chains of the respective companies.
- Present examples of successful sustainability work
- Present the project, the framework and experiences at a website







### Approach



- Bottom up: facilitate the integration and communication of sustainability aspects and knowledge in daily operations
  - What can I do?
  - How do I do it?
- <u>Top down:</u> facilitate development, communication and implementation of sustainability strategies
  - What does sustainable development mean to our organization?
  - Establishing strategies to pursue sustainable development
  - Organizational structure to work with and communicate SD
- In the value chain: communicate and cooperate on pursuing sustainable development







#### Work done



- Inventories and interviews within AkzoNobel and SCA and literature studies have been performed concerning:
  - Tools and data:
    - Which tools are used, and how are they used within the companies?
    - Which data is needed for these tools and how is the data managed?
  - Communication:
    - What are the communication paths within the companies?
    - How is communication and dialogue with the supply chain performed, e.g. with suppliers and customers?
  - Sustainable development strategies
    - How is the sustainability work organized?
- Based on the experiences from the work performed, development of an online knowledge portal for working with sustainability in supply chains: The TOSCA sustainability framework
- Implementation of the framework within AkzoNobel and SCA has started







## TOSCA sustainability framework



- Online knowledge portal for how to work with sustainability in supply chains
- Information divided into:
  - Activities for working with sustainability in different parts of the supply chain. Includes examples from SCA & AkzoNobel as well as state-of-the art descriptions and further reading
  - General information about Sustainable development
  - Business case for working with sustainability
  - Getting started guides for central tools in the work, e.g. Life cycle assessment (LCA)
- Available at: www.tosca-life.info







#### Supply chain activities

Working with sustainability in different parts of the supply chain



Develop strategy and organization for sustainability work

Identify and map your supply chain

Identify supply chain

Strategy and organize work

Develop sustainable products

Upstream supply chain End of life Own Customers and manufacturing consumers

Working with your further upstream

Working with preparing for end of life of product

How to work with

development of

sustainable products

Working with other stakeholders, e.g. NGO, authorities, etc.

suppliers and

in supply chain

Working with your own manufacturing

Other stakeholders

Working with customers and consumers, i.e. the users of the product









#### Next steps



- Implement the framework in the participating companies and introduce it to suppliers and customers
- Disseminate information about the framework and website to:
  - the participating companies
  - relevant networks
  - public authorities at regional and local level
  - students at universities





