

AHLSTROM

# Ahlstrom Capital Markets Day 2012

High performance  
fiber-based materials company

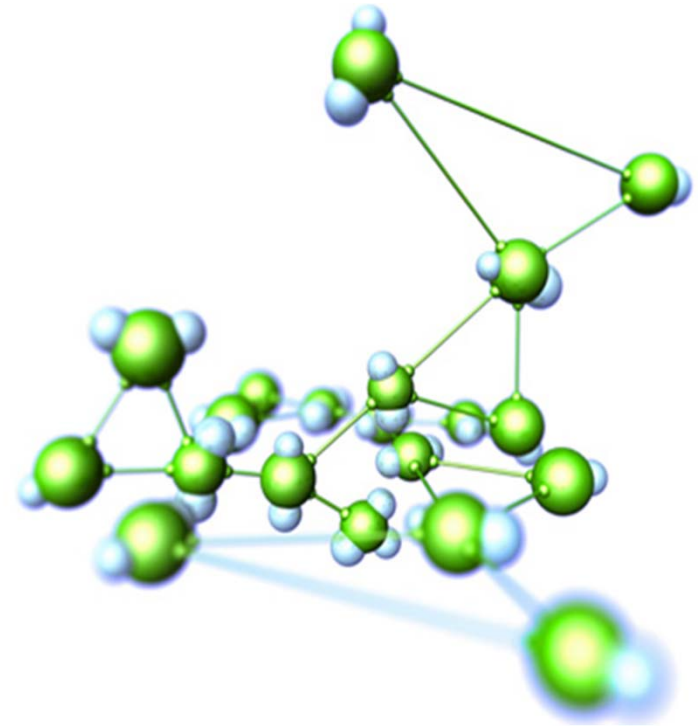
December 4, 2012

Paul Stenson  
EVP, Product & Technology  
Development



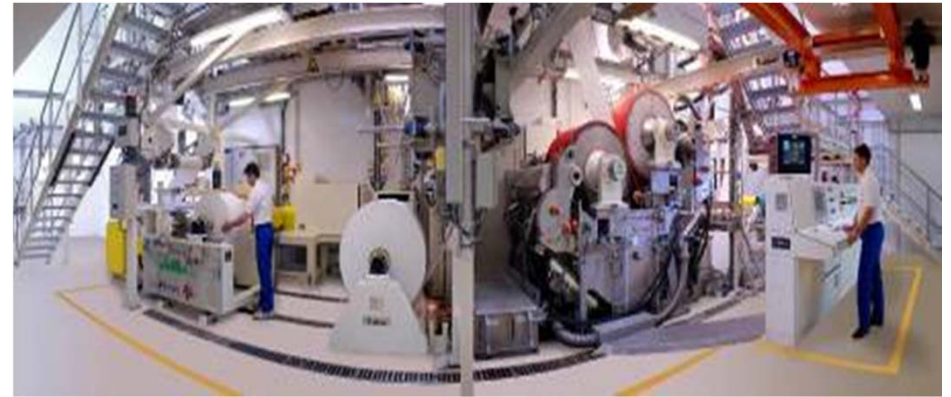
# Ahlstrom Product & Technology Development

- People
  - 145 employees on four continents, with Group Product & Technology Development Center in France.
- Key Performance Indicators
  - Sales from new products developed in last three years: target 15%
  - Unique patents filed: target 10 patent families
  - New products on time: target 90%
- Investments
  - Group & Technology Development Center
  - Synergy Customer Ideation Center
  - Project Management, Outcome Driven Innovation® & Idea Generation
  - Expert Networks, Leadership Training & New Technology Expertise

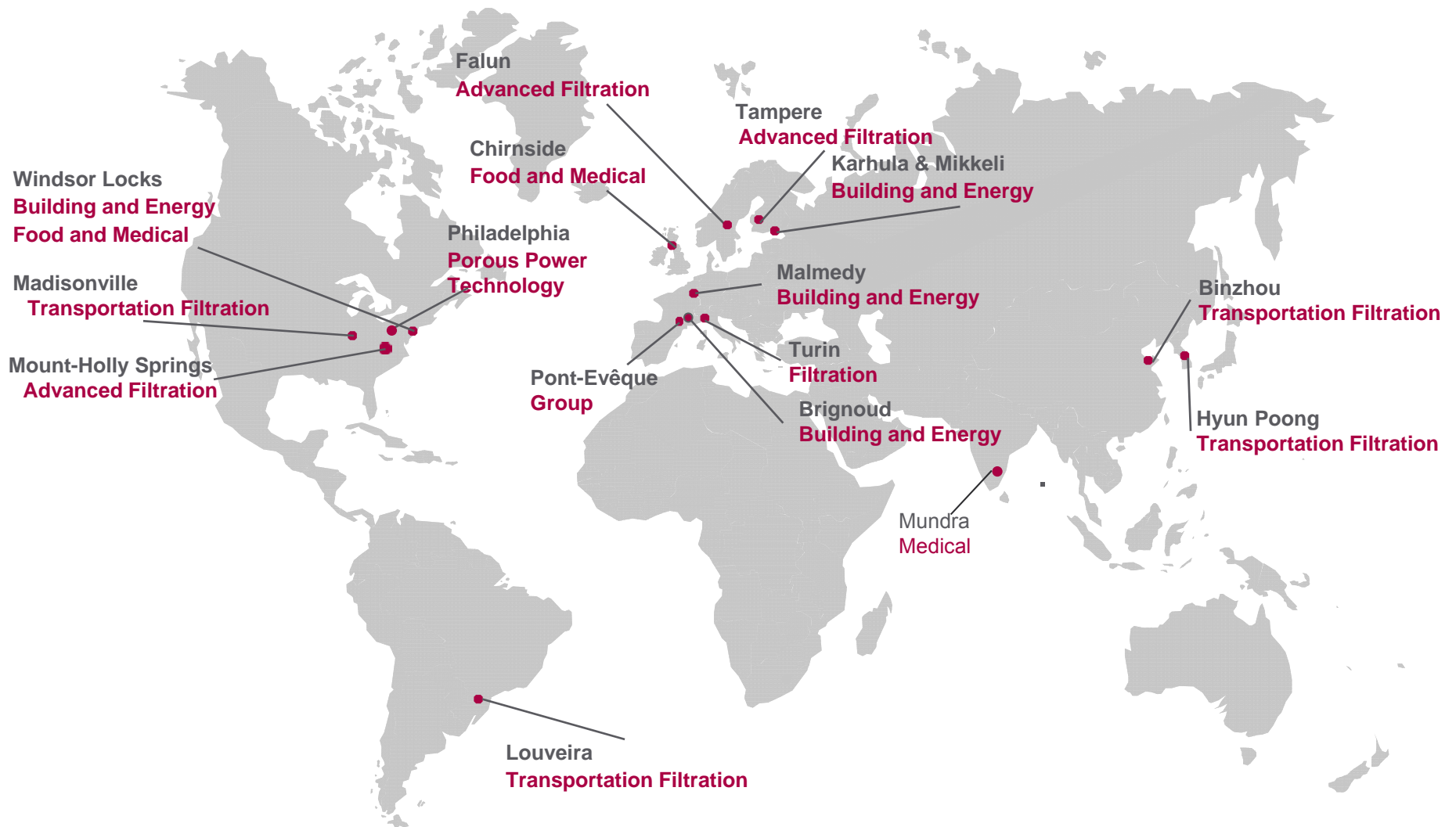


# Group Product & Technology Development Centre

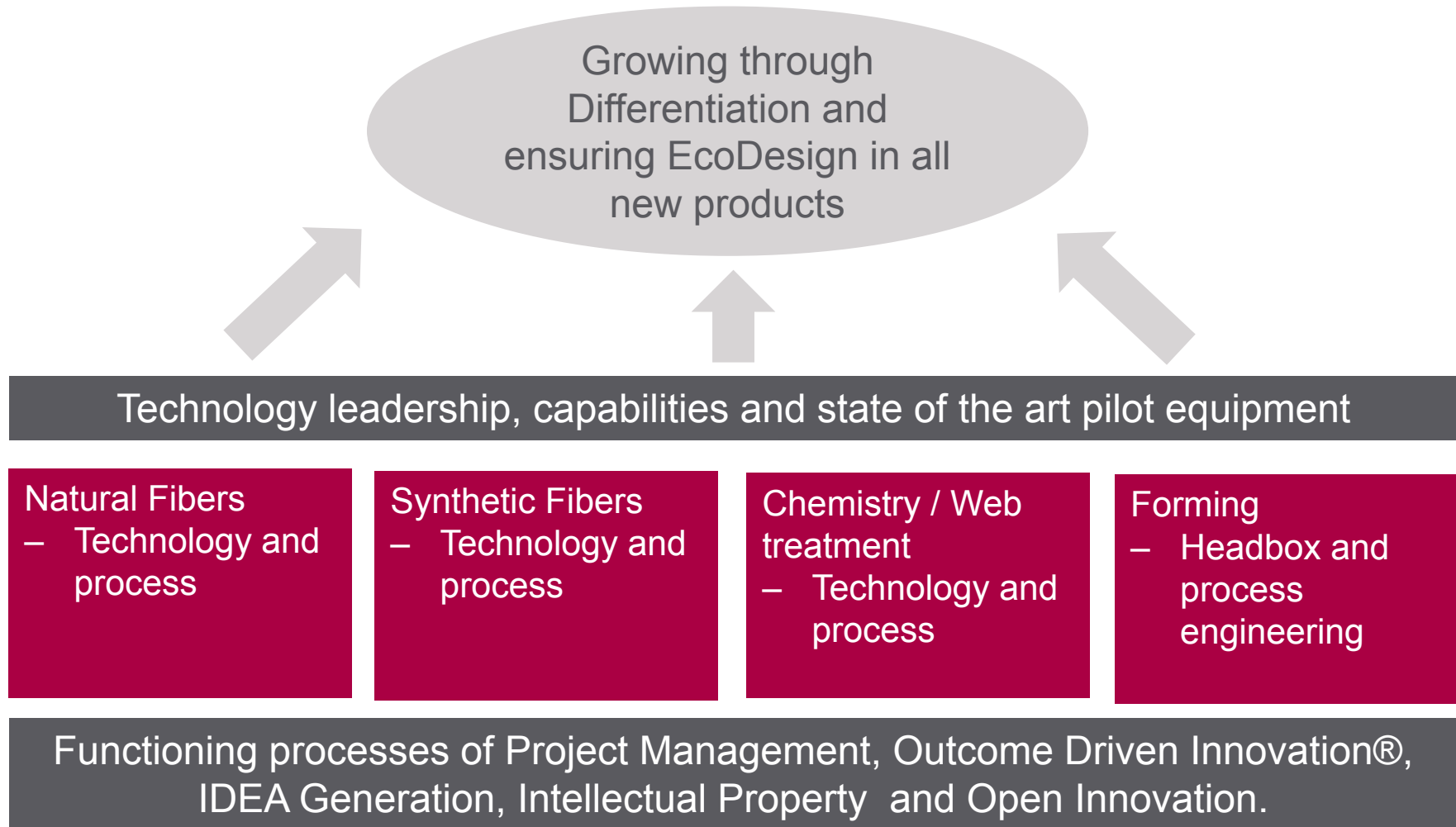
- Pont-Evêque (located near Lyon, France)
- 40 employees
- Pilot lines, laboratories, testing equipment and analysis
- Synergy Customer Ideation Center
- Product Development is carried out at the Group level (25%) and also integrated into the operations of the BA's (75%)



# Product & Technology Development locations



# Strategic Direction



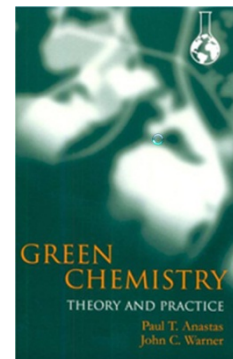
# EcoDesign at Ahlstrom

EcoDesign approach is a continuous improvement process

Incorporation of the **Green chemistry principles** (removal of hazardous materials, waste prevention, energy efficiency, etc) to our product development projects

Key priorities:

- Elimination of formaldehyde
- Elimination of fluorochemicals



**Life-Cycle Assessment** expertise at Ahlstrom

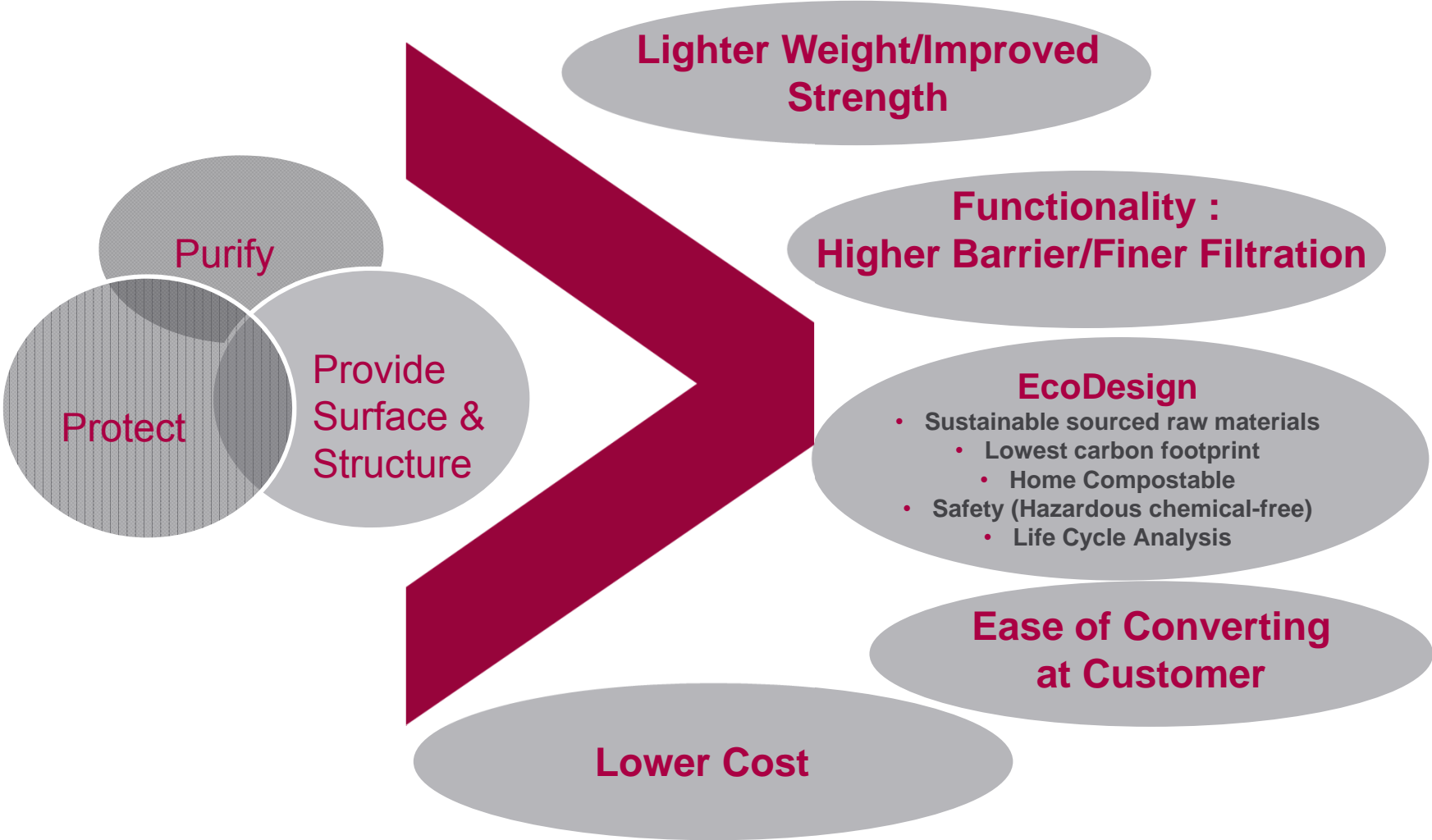


SimaPro

Implementation of an easy-to-use software **e-DEA** for **non-LCA experts** allowing all product development scientists to perform quick environmental assessments

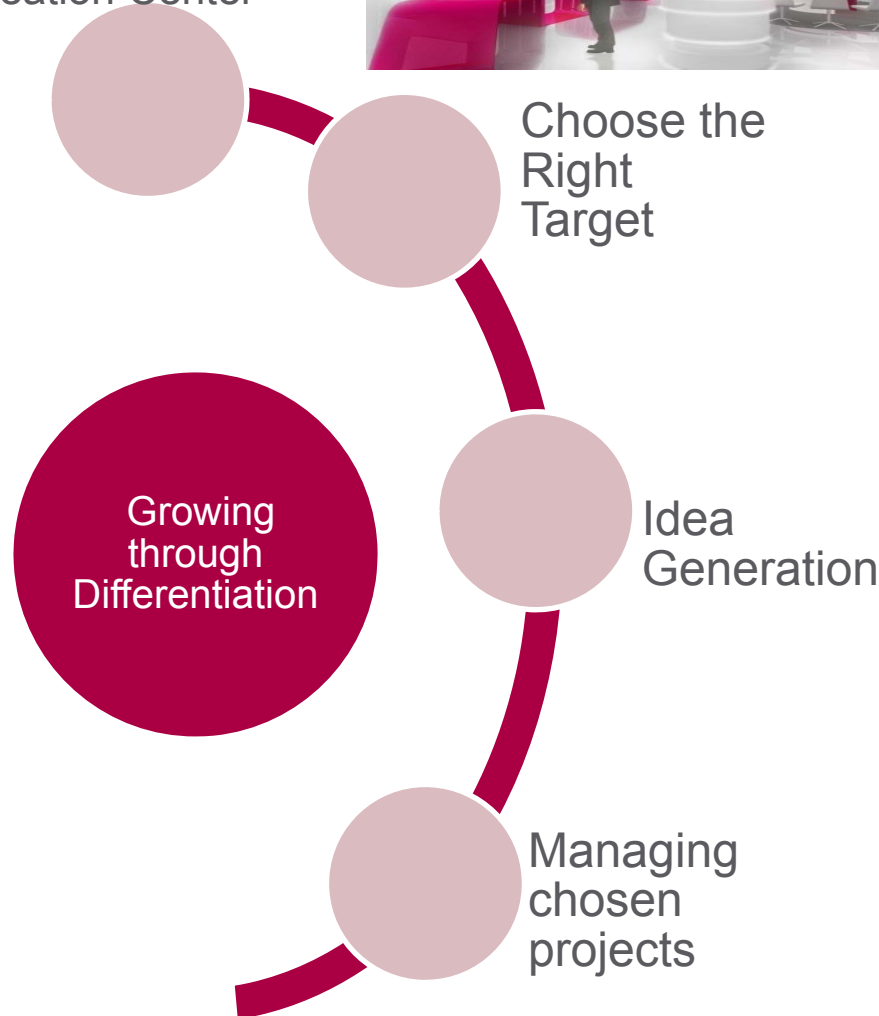
**e>DEA** EVERYBODY CAN DESIGN WITH ENVIRONMENTAL AWARENESS

# Market demands - Product features and properties



# Ahlstrom product development processes

Synergy Customer  
Ideation Center



## Outcome-Driven Innovation® (ODI)

Our process with Product Family Strategies to identify market opportunities and unmet customer needs



## New Ideas

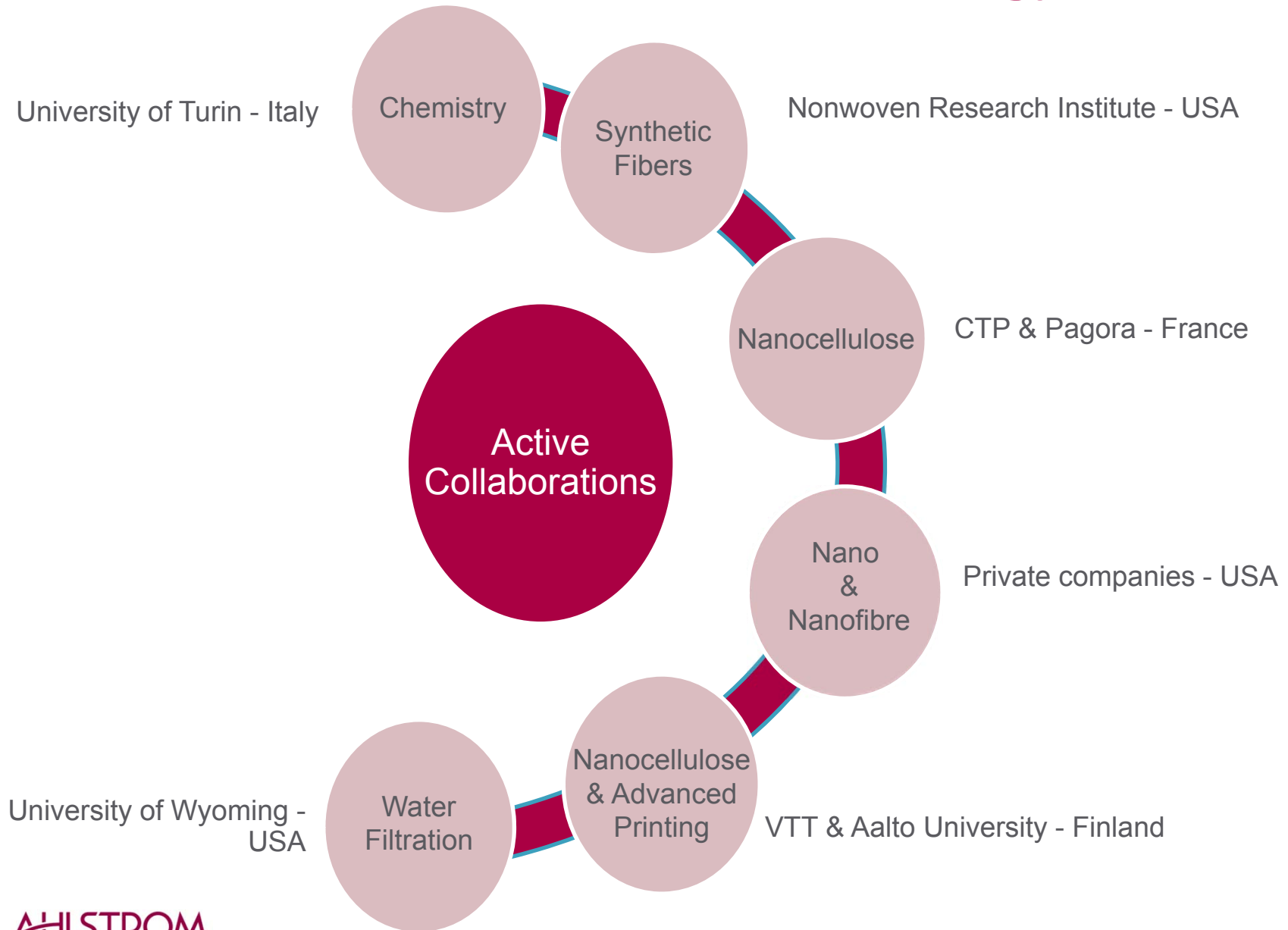
New **web-based tool** to capture ideas, build on them and move best into projects

## Project & Portfolio Management

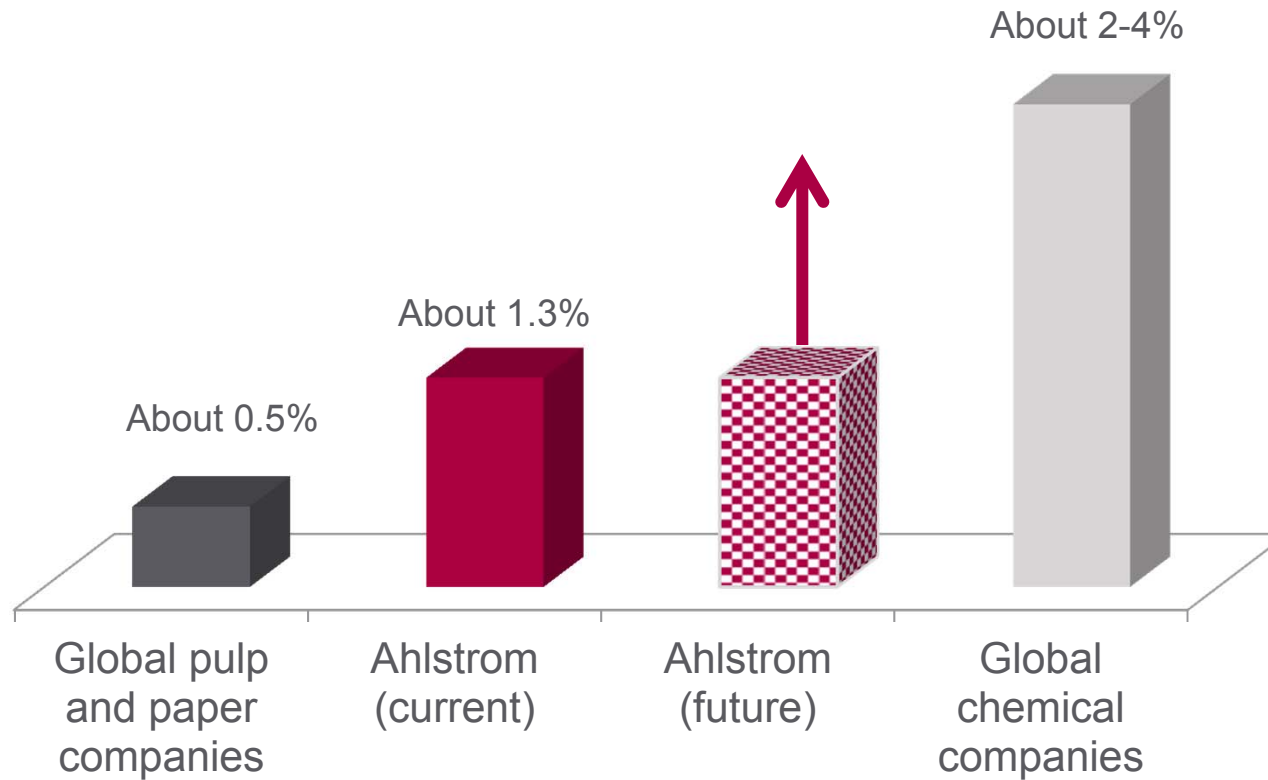
Stage Gate Project & Portfolio Management



# Open Innovation - External technology partners

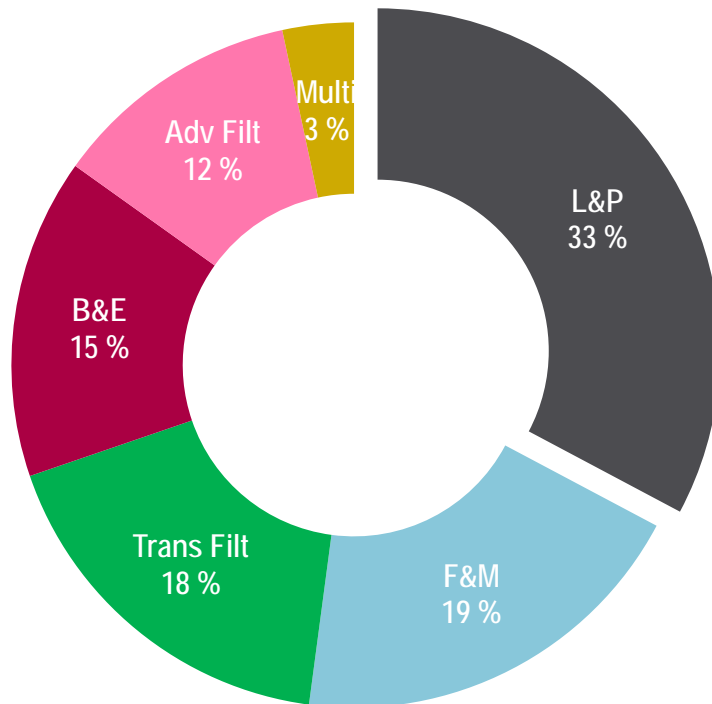


# R&D expenditure (% of net sales)

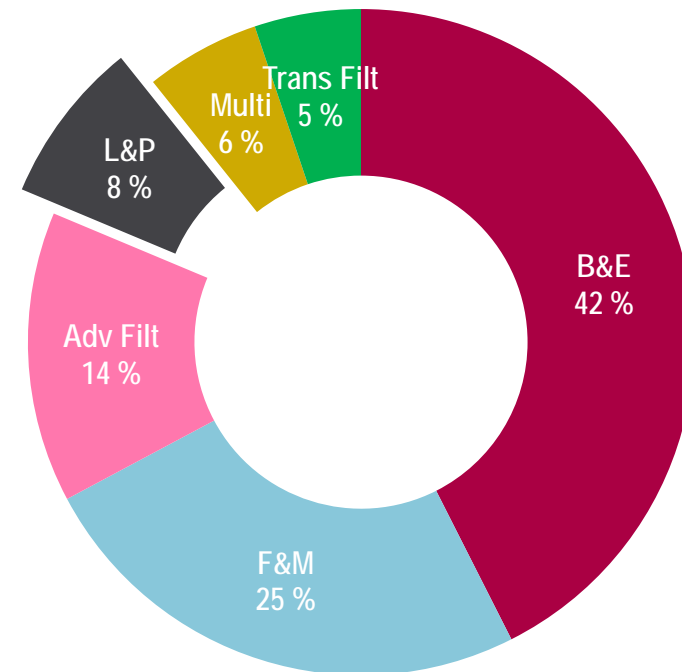


# Ahlstrom's patent portfolio - 2012

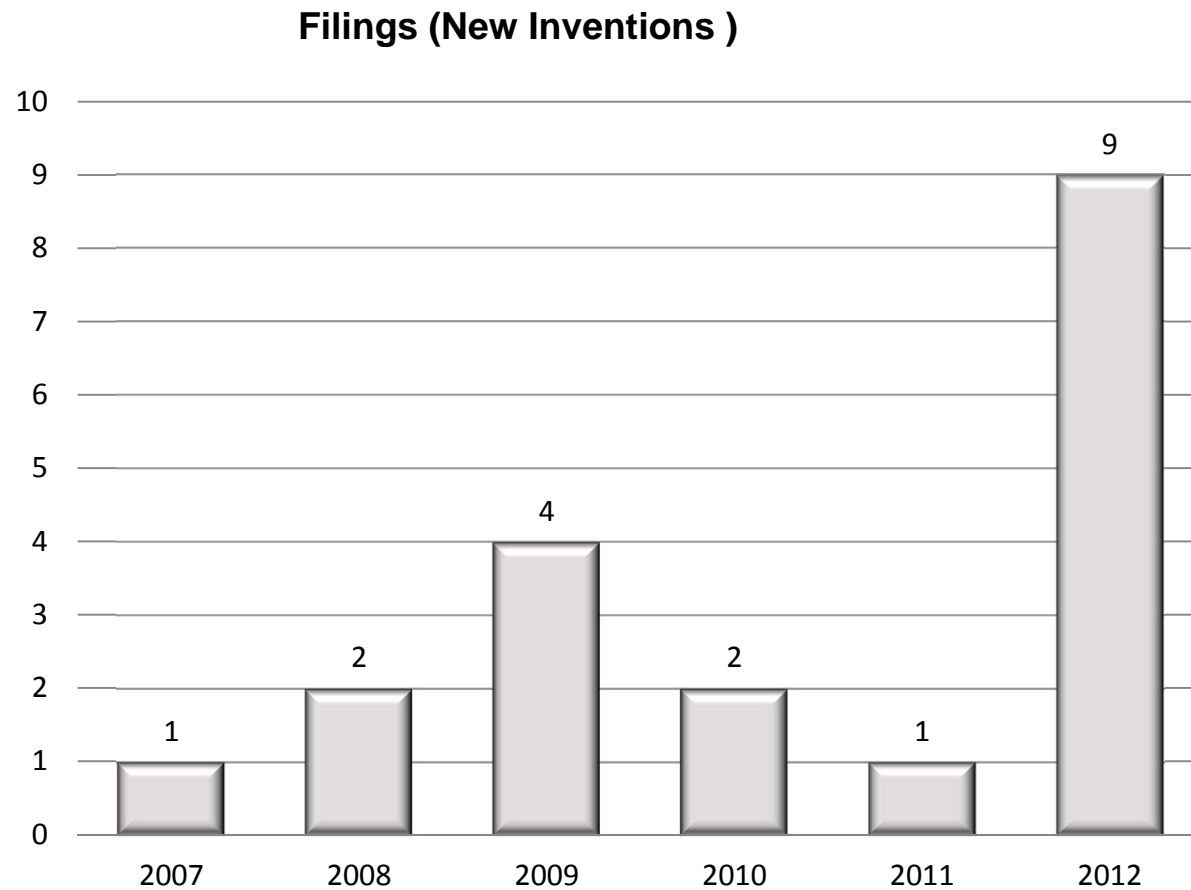
Pending Patent Applications by BA  
(Total 119)



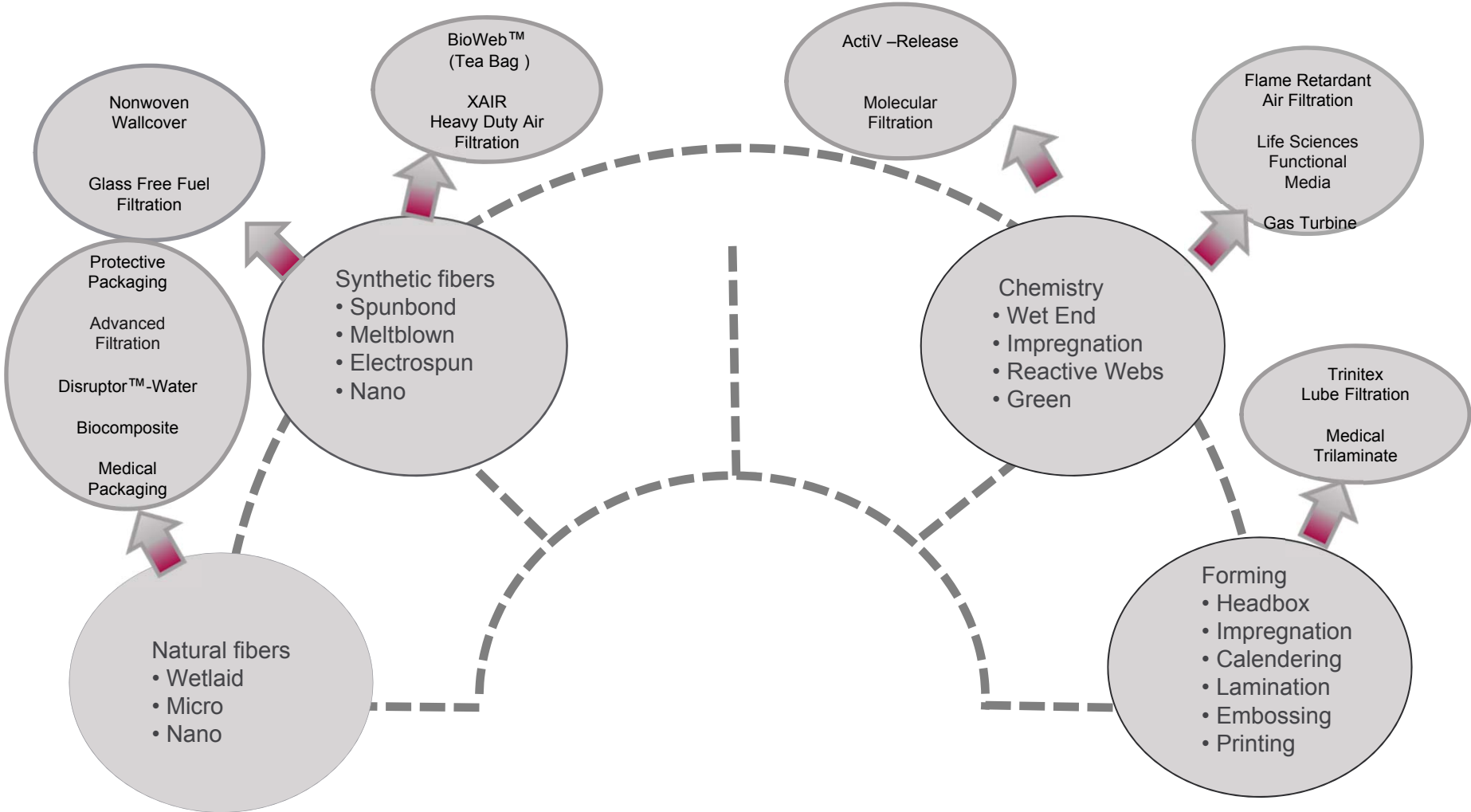
Granted Patents by BA  
(Total 503)



# Invention / Patents 2007- 2012(YTD)



# Supporting our strategic technology direction



# Examples of idea generation - Building and Energy

## Wallcoverings

- Printing of nonwoven wallcover



## Protective packaging



## Laundry care

- Domestic laundry



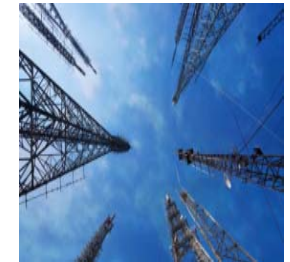
## Composites

- Laminated fiber reinforced composites for marine, renewable energy, transportation and automotive



## Selective surface shielding

- Shielding electromagnetic waves



# Examples of idea generation - Food and Medical & Filtration

## Medical pouch

- Converting medical pouch containing medical devices



## Masking tape

- Saturation and coating of masking tape



## Coffee

- Coffee encapsulation



## Cabin air

- Converting of cabin-air filters



## Gas turbine

- Industrial turbines in energy industry



Stay ahead™

**Thank you**

**Ahlstrom Corporation**

P.O. Box 329, Salmisaarenaukio 1  
FI-00101 Helsinki, Finland  
T: +358 (0)10 888 0  
F: +358 (0)10 888 4709  
info@ahlstrom.com  
www.ahlstrom.com