



# >> PERSPECTIVES\_2012

THE FUTURE OF CHEMICAL AND PHARMACEUTICAL  
PRODUCTION IN GERMANY

# >> MANAGING INNOVATION.

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SUSTAINABLE SUCCESS IN THE CHEMICAL INDUSTRY – CLARIANT INNOVATION EXCELLENCE

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Clariant  
ACHEMA PERSPECTIVES 2012



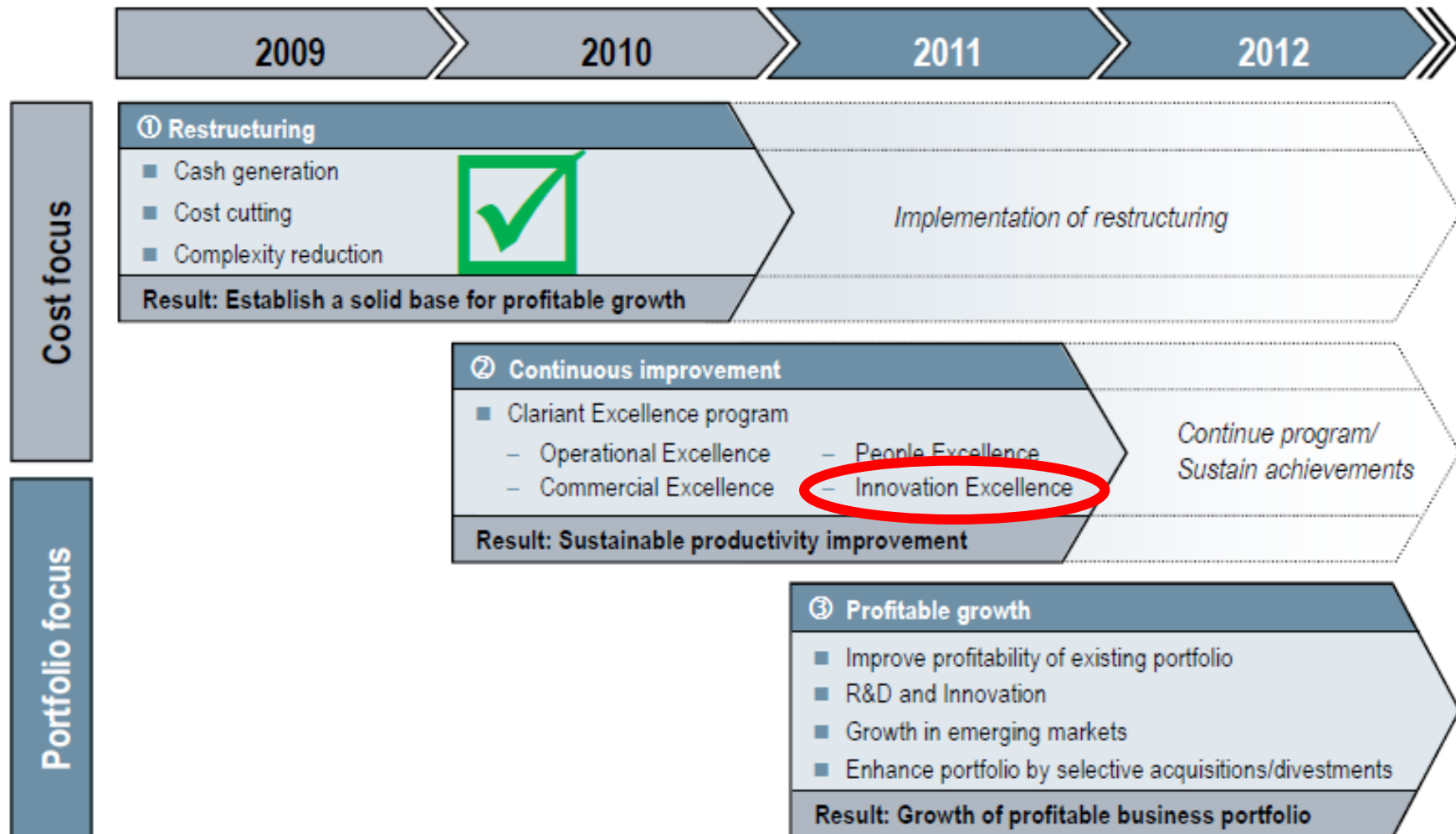
Exactly your chemistry.

*Sustainable Success in the Chemical Industry*  
**Innovation Excellence @ Clariant**

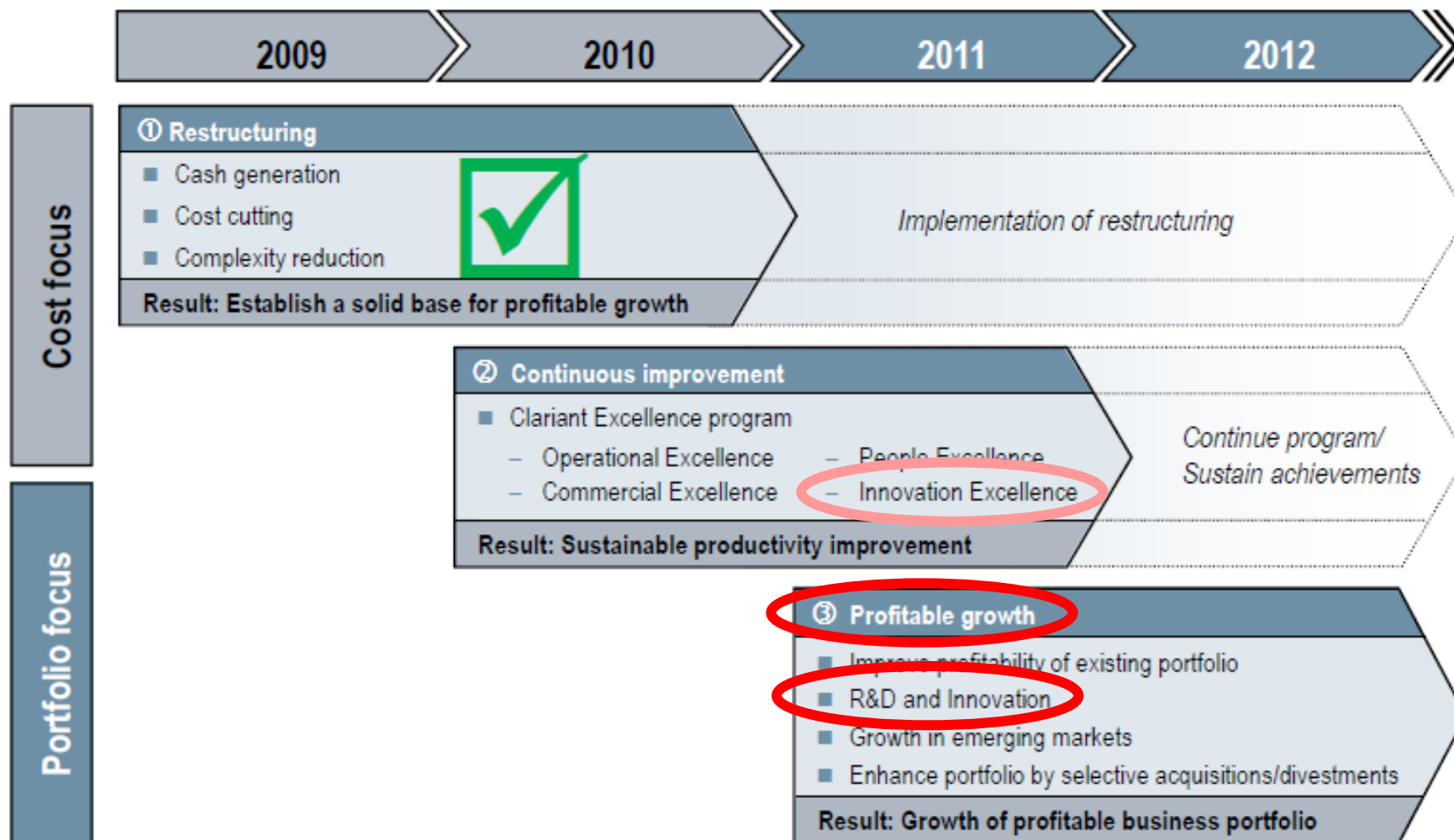


- *Clariant is a world leader in colors, surface effects and performance chemicals*
- *Annual sales of CHF 7.4 billion in 2011*
- *Headquartered in Muttenz near Basel, Switzerland*
- *World-wide operations, with more than 100 group companies*
- *Approximately 22,100 employees*
- *Products and services of 11 Business Units are based on innovative specialty chemicals*

# Innovation Excellence – one of our four initiatives for sustainable performance and continuous improvement



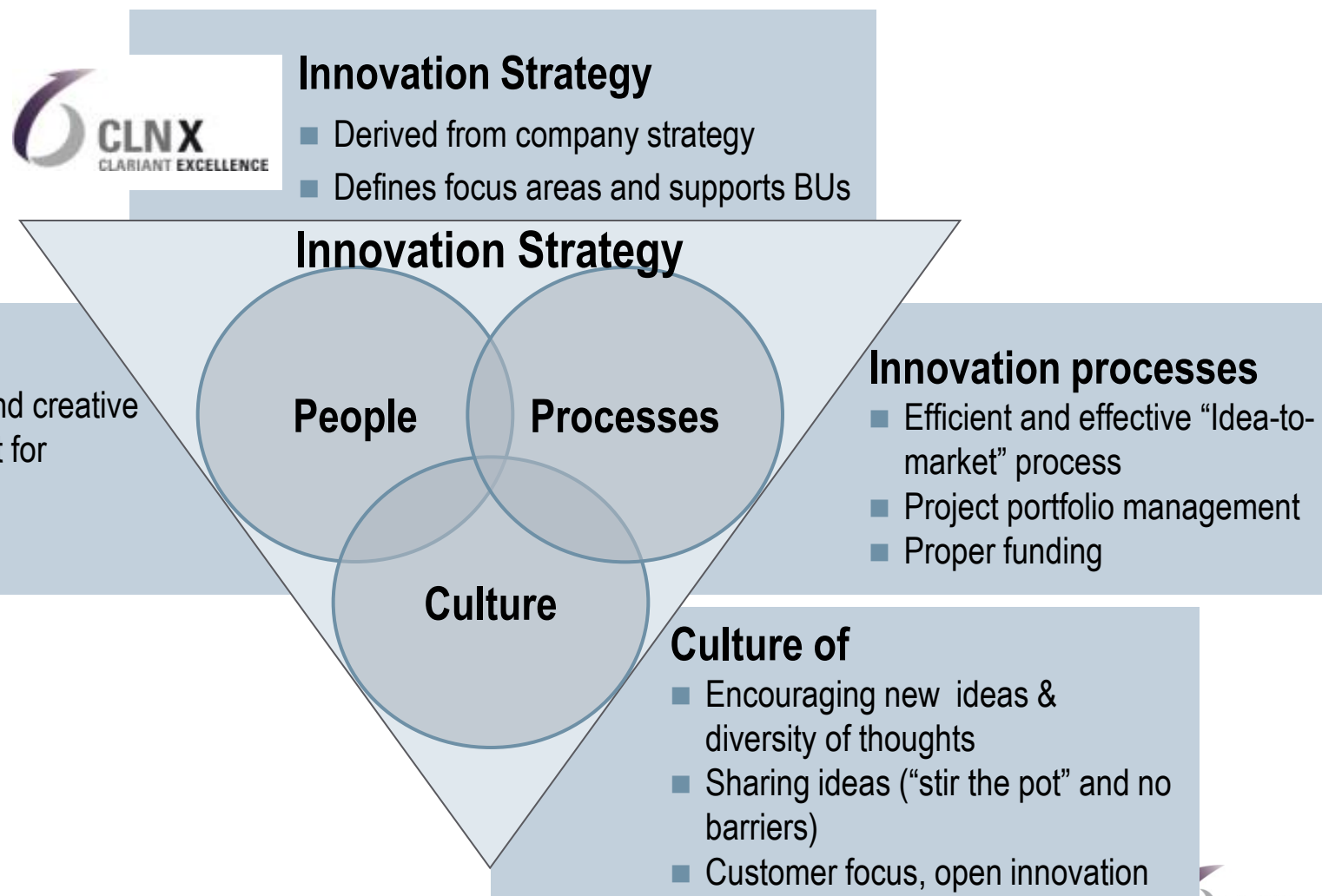
# Innovation – one of the company's top priorities for achieving profitable growth



# *Innovation – one of the company's top priorities for achieving profitable growth*

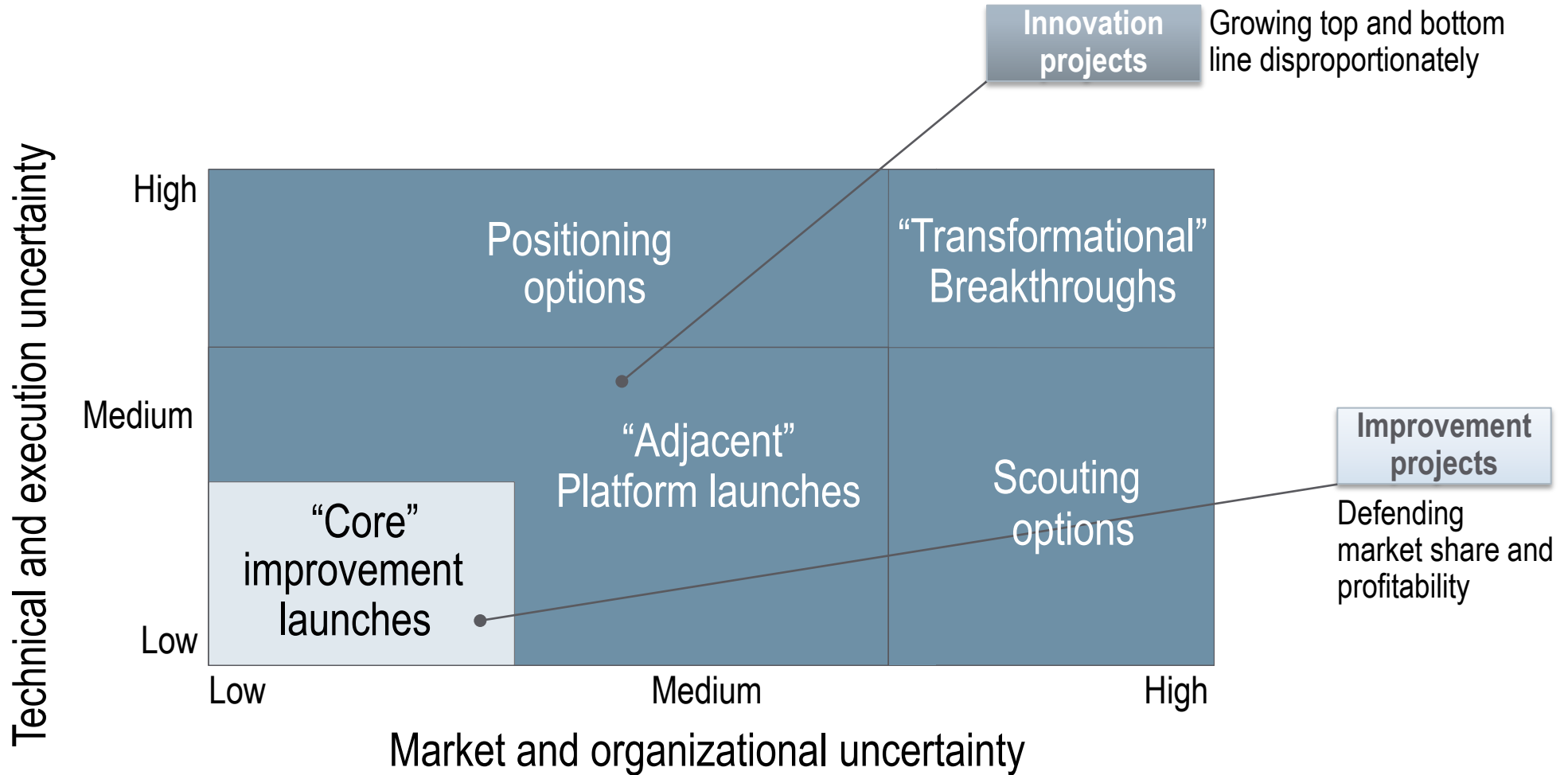
- *Clear ambition to sustainably contribute to profitable growth*
- *The right mindset and structure to successfully manage innovation*
- *Clear focus in order to manage the exploration / exploitation challenge*

# Innovation – Drive for Innovation Excellence





# Strategy – clear ambition to sustainably support profitable growth



# Strategy – six megatrend clusters will drive the chemical industry



## **Society**

*Urbanization & demography*  
*New patterns of mobility*  
*Social media & networks*



## **Technology**

*Convergence of technologies*  
*Learning from nature*



## **Consumers**

*New consumption patterns*  
*Thriving health sector*



## **Globalized World**

*Urbanization*  
*Increasing security threats*



## **Business**

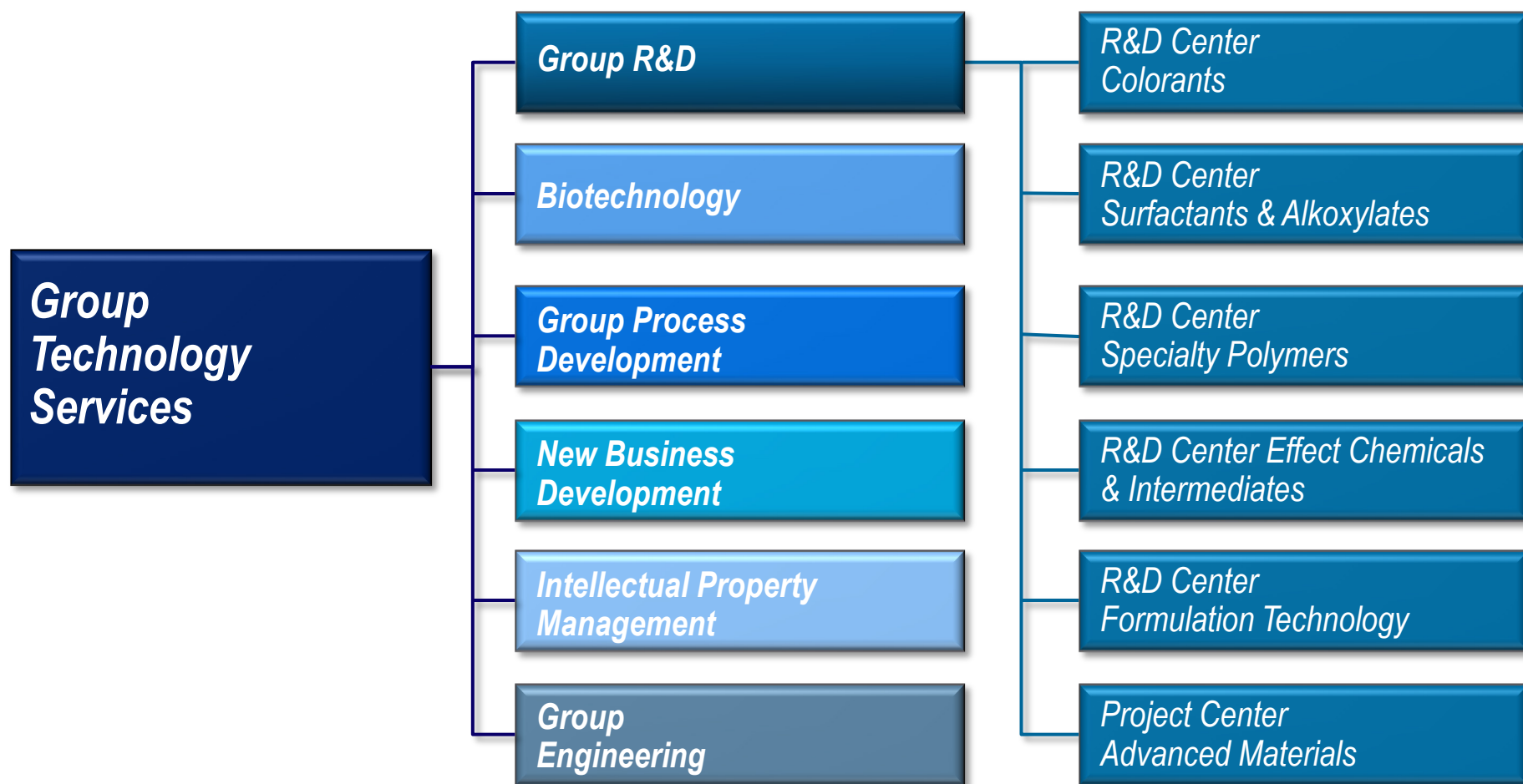
*Knowledge-based economy*  
*Change of the world of work*



## **Environment**

*Energy and resource reversal*  
*Clean Technologies (CleanTech)*  
*Renewable raw materials*

# Structure and Processes – Clariant Group Technology Services



# Structure and Processes – “idea-to-market” at Clariant



Scout

Scope

Execute

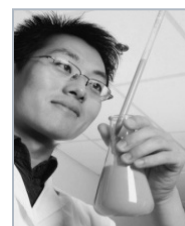
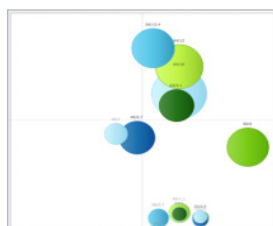
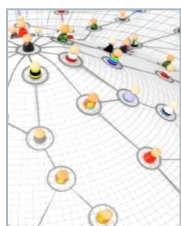
Commercialize

Ideation  
Scouting

Evaluation  
Deep diving  
Proof of concept

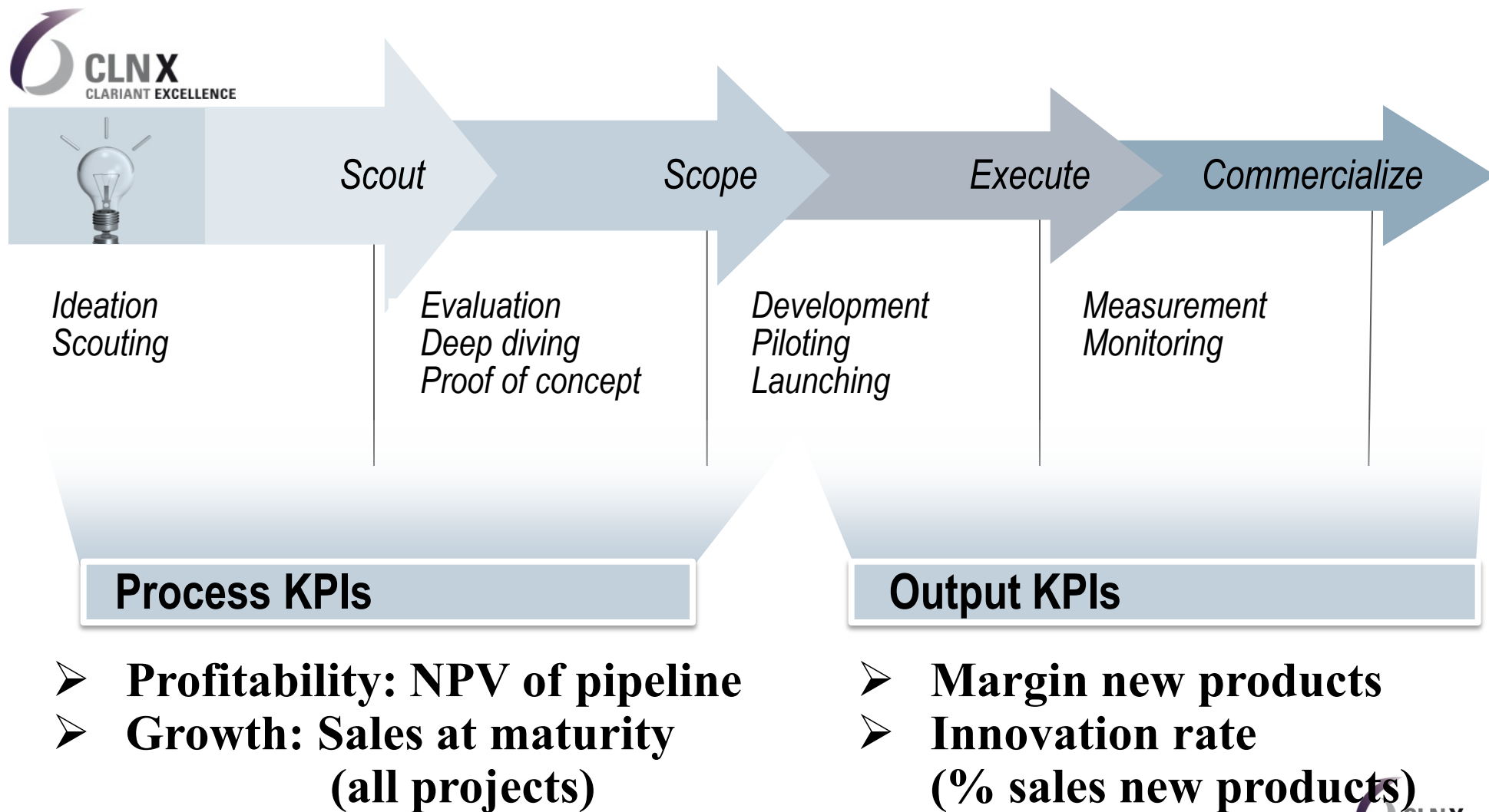
Development  
Piloting  
Launching

Measurement  
Monitoring



- **Project & Portfolio Management is key**
- **370 R&D projects across Clariant**
- **Pipeline Value (Sales@Maturity) > CHF 1 billion**

# Structure and Processes – KPI's aligned to profitable growth targets



# People and Culture – Six Corporate Values that count for all at Clariant

## Resources

- Carefully Utilized!

## Safety

- Uncompromised!

## Compliance

- Live our Code of Conduct!

## Honesty

- Respectfully Expressed!

## Straightforwardness

- No beating about the Bush!

## Trust

- Let the others join!

## Opportunities

- Take Risks and Decide!

## Lead

- Accelerate Execution!

## Best People

- Select, Develop, Deploy!



## Competitors

- Outperform!

## Customers

- Focus!

## Improve

- Continuously!

## Objectives

- Transparent!

## Targets

- Aspirational!

## Feedback

- Mandatory!

## Accountability

- Given!

## Ownership

- It's me!

## Execution

- As promised!

# *People and Culture – dedicated resources and clear accountability*

## CIX Roll out Team



## BU Implementation Team

### CIX Core team

- Supports development of Innovation strategy
- Trains stakeholders
- Moderates workshops for pipeline filling

### BU Innovation Champion

- BU Project Leader
- Accountable for Innovation results



### BU / R&D Team members

- Cross BU diversity
- Recombination
- Customer focus

# *People and Culture – Clariant Innovation Center for open innovation...*

*..with BUs, customers, academic and industrial partners*



**100 Mio. EUR Invest**  
**Commissioning 2013**  
**> 500 people**  
**> 30.000 m<sup>2</sup>**



# Megatrend “Environment” – one of Clariant’s focus areas



## Environment

- Energy and resource reversal
- Clean Technologies (CleanTech)
- Renewable raw materials

## Clariant’s uniqueness

### CleanTech

- Innovative materials for Li-ion batteries
- Catalysts for energy and resource efficient processes
- Catalysts for exhaust gas treatment
- Heat transfer fluids for solar energy
- Drinking water and waste water treatment

### Advanced Materials

- Lightweight construction
- Ceramic Fibers (applications up to 1.300°C)
- Carbon Fiber Composites

### BioTech/Renewables

- Replacement of petrochemical raw materials by renewables, e.g. for surfactants in detergents, cosmetics and crop protection
- 2<sup>nd</sup> Generation Bioethanol
- Biotech platform for enzyme technologies
- Biopolymers

# Megatrend “Society – Social media & network”

## A novel Clariant product for hardware



**Exolit<sup>®</sup> profile** – Exolit<sup>®</sup> OP is a non-halogenated flame retardant based on phosphinate chemistry

- *Highly effective fire protection*
  - *Meets the strictest requirements*
  - *Provides standard engineering plastics with the low flammability of expensive high-performance plastics*
- *Outstanding environmental and health profile*
  - *Exolit OP is a non-hazardous material, i.e., no classification and labeling according to REACH/CLP*
  - *In case of fire, less smoke is produced than with many other flame retardants*
- *Perfect sales potential*
  - *In line with stable market trends like the growing consumption of electrical and electronic products*

# *Three key success factors for powerful innovation*

1. Top down management commitment
  - If it is not on the agenda of the top management and reflected in top priorities – it won't work
  - Sense of importance of innovation is necessary through clear strategic focus
  
2. Make Innovation Excellence part of your overall Excellence initiative
  - Organization has the right mindset and is aware of key principles
  - Projects are clearly linked to strategic targets and get the right attention
  - Transparency, efficiency and effectiveness through dedicated organization and process
  
3. Work on more than just the process
  - Culture through values and diversity
  - Capabilities through training, creativity and recombination