

# **Nexam Chemical Holding AB (publ)**

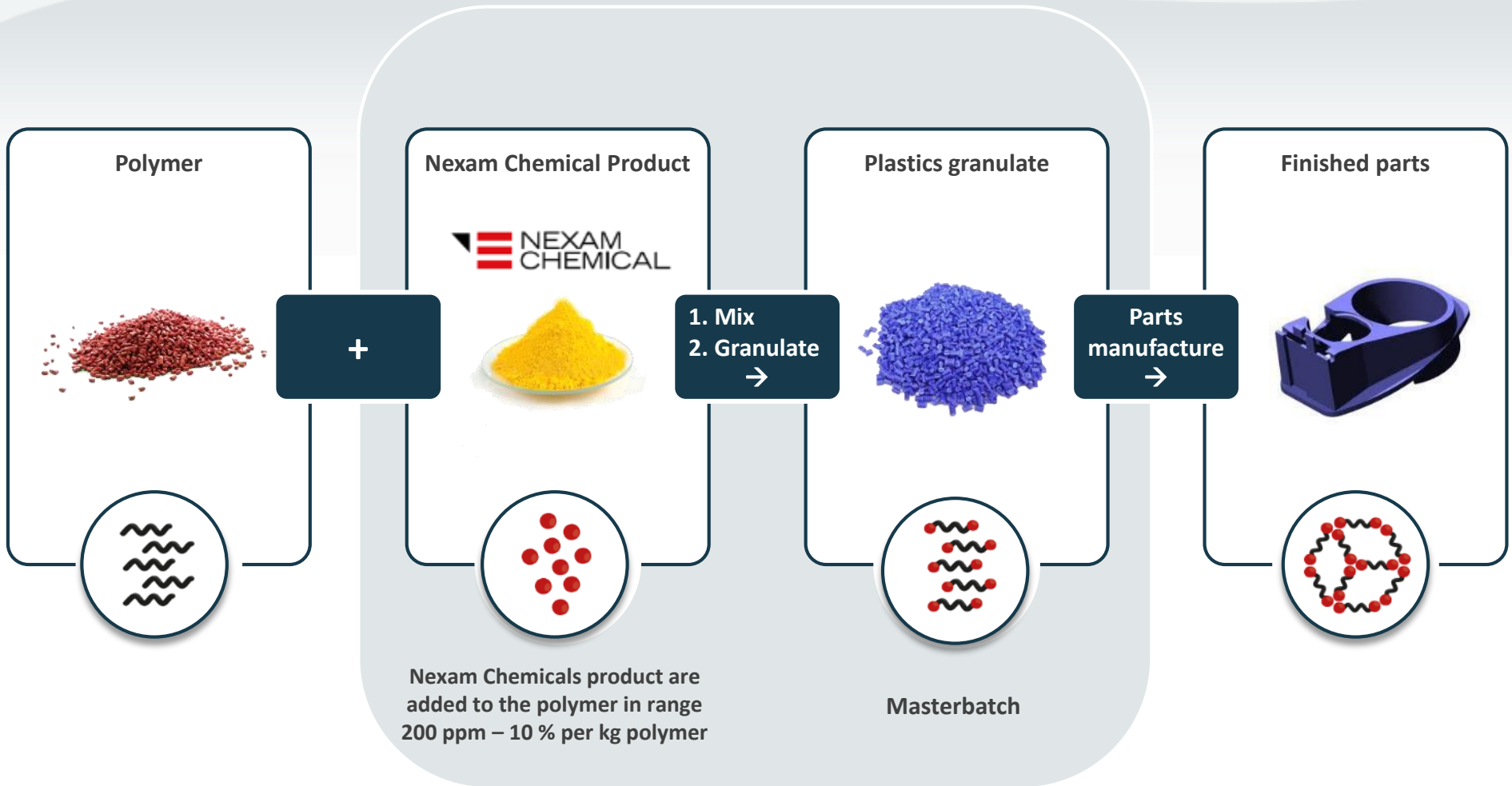
Aktiedagen Lund 31 January 2017



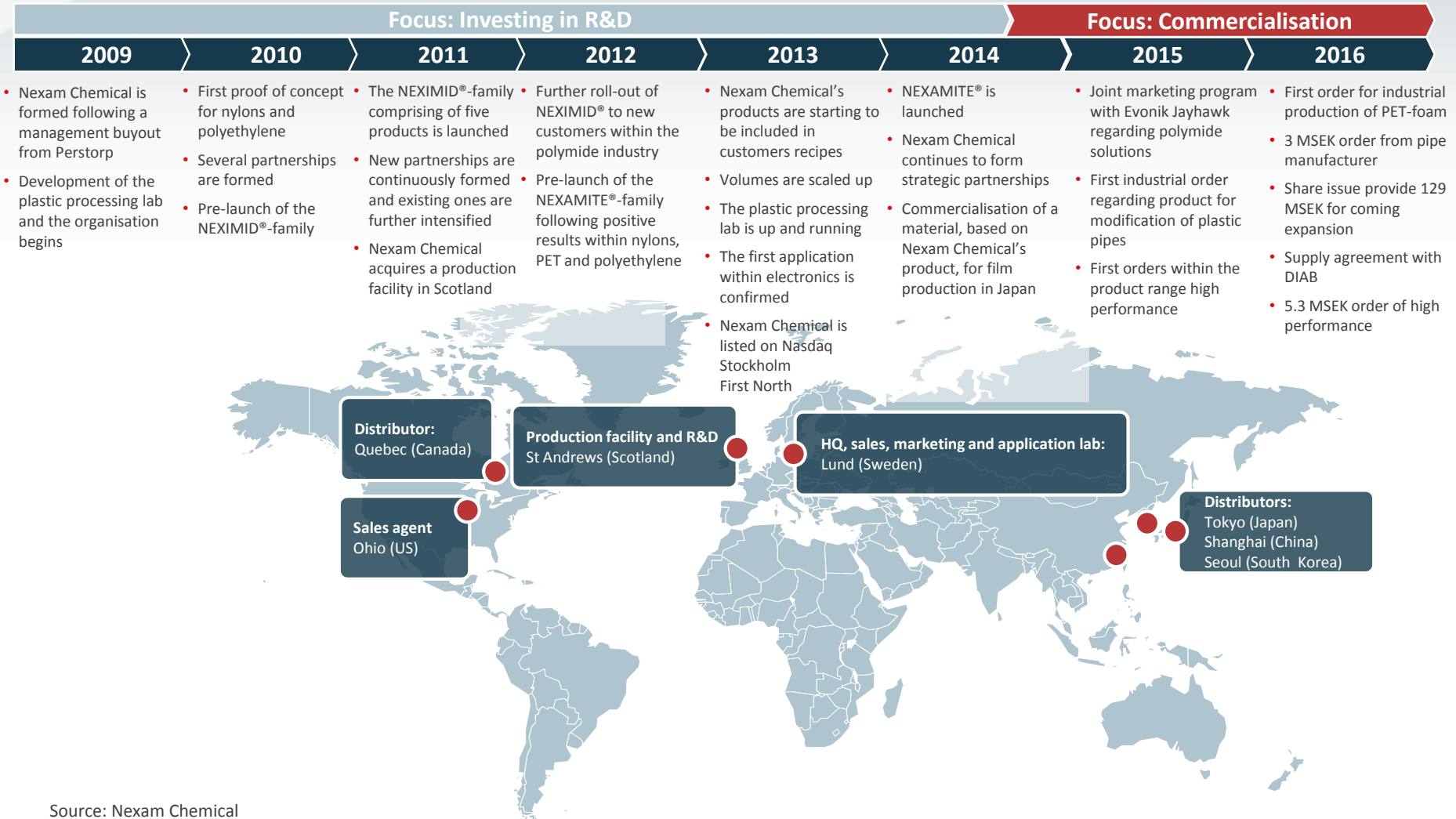
# Agenda

- Nexam Chemical
- Market overview
- Strategy - 3 focus areas
- Business model
- Strategic outlook
- Q&A

# Nexam Chemical's products in the value chain



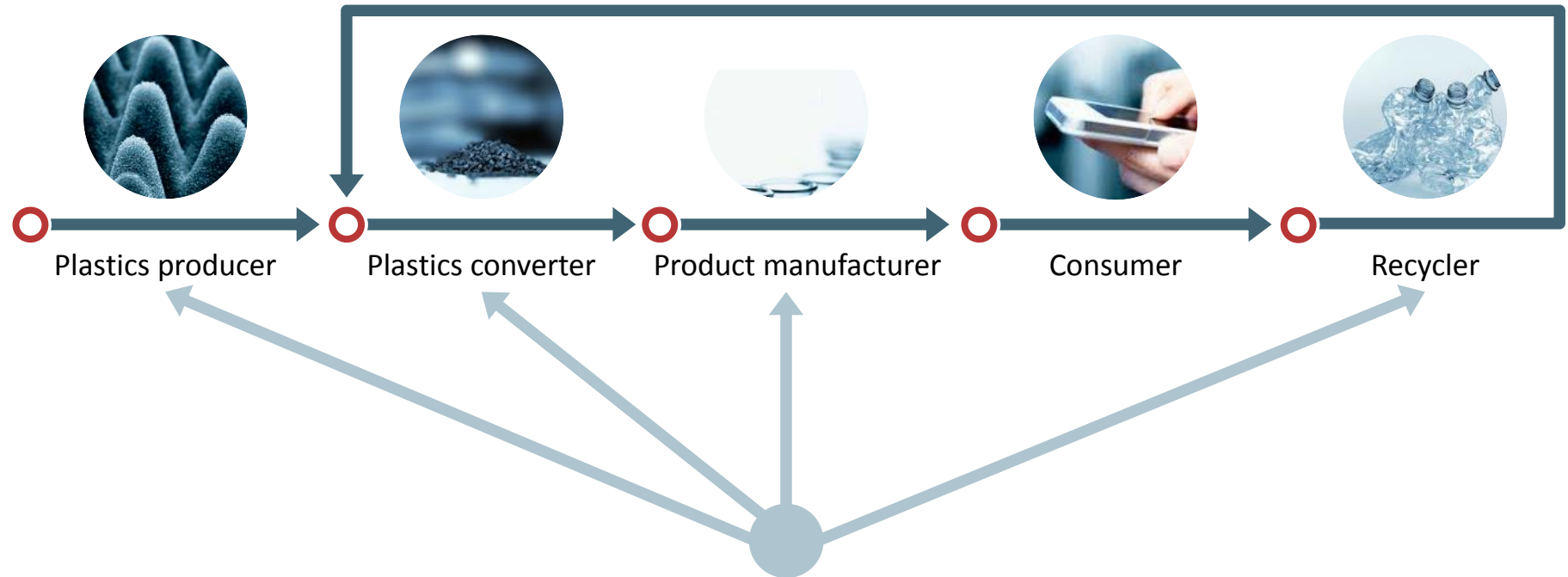
# Background



Source: Nexam Chemical



# Value chain



# Value proposition

Nexam Chemical develops technology and products that aim to **cost-efficiently**, and with **production technique intact**, significantly **enhance the properties** of polymeric materials using **conventional processing equipment**

## Enhanced properties

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- Increased mechanical properties – strength, toughness
- Improved heat resistance
- Chemical resistance

## Reduced manufacturing cost


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- Increased production efficiency
- Lower material cost – less material, cheaper material

## Lower environmental impact

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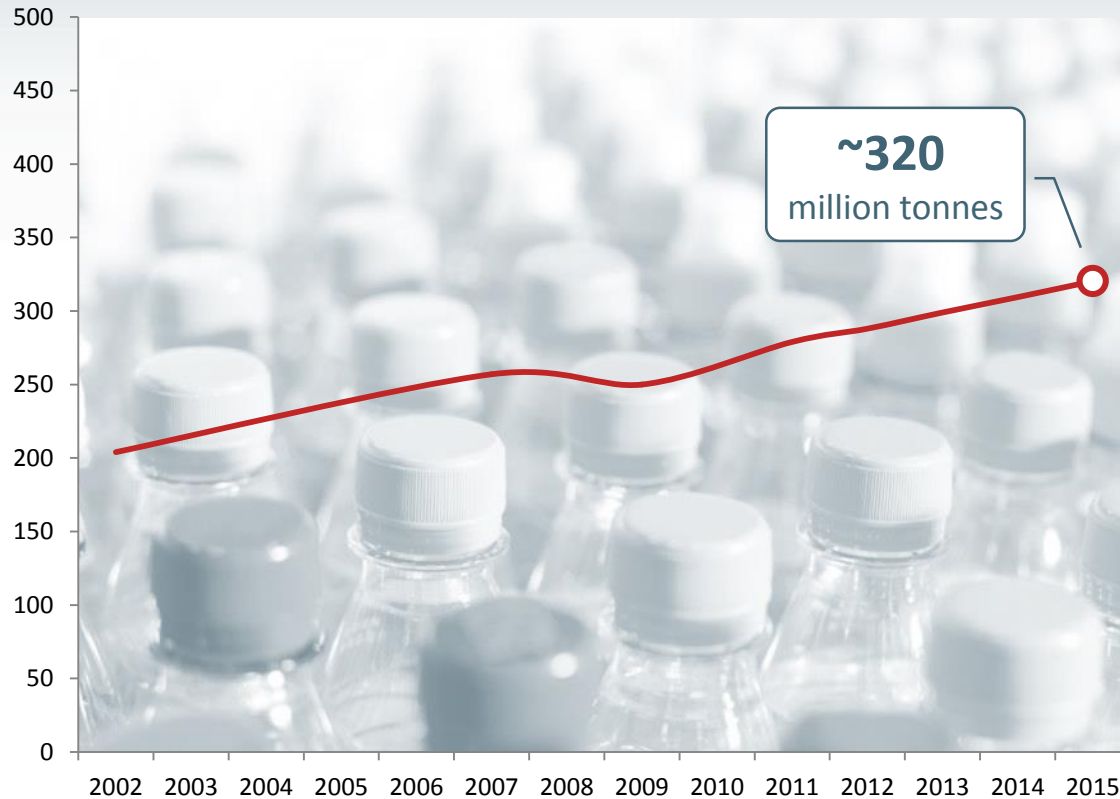
- Upgrades larger portion of recycled plastics – lower cost
- Lower weight of products

A large red arrow pointing from the left column of benefits to the right column of text.

***Using Nexam Chemical's technology does not require any additional CAPEX for customers which is unique to competitive alternatives***

# Market overview

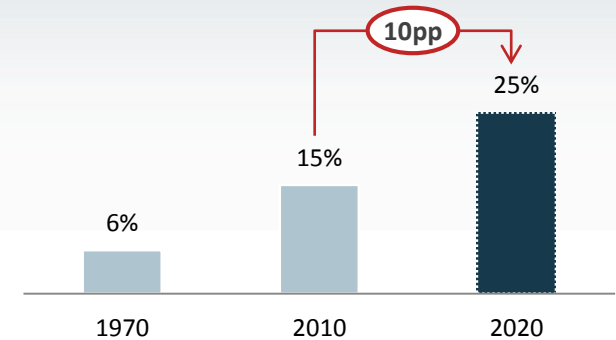
## Global plastic production (million tonnes)



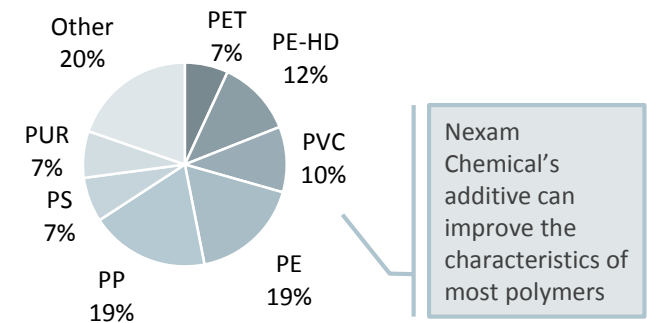
Nexam Chemical's products can add value to a large part of the global plastic market

## Plastics are replacing metals in many products

*Estimated share of plastic in a car*



## Plastic demand by type of polymer<sup>1</sup>




1) European market

Source: Nexam Chemical, PlasticsEurope

Nexam Chemical's market is mature and characterised by stable growth and demand for cost-efficient innovations

- Continuous growing use of plastics
- Increasing sustainability requirements (recycling, life cycle etc.)
- Health and safety regulations (REACH)
- Innovation need (replacement of materials i.e. metal)
- Process and material efficiency (cost)

A diagram consisting of a horizontal line with a downward-pointing arrow in the center, connecting the list of market drivers to a conclusion box below.

**Nexam Chemical's technology and products are well positioned to benefit from the drivers and the challenges facing the plastic industry**



# Nexam Chemical's strategy – three focus areas

## Polyester foam



- **Status:**
  - Commercialisation
- **Application areas:**
  - Buildings, infrastructure, windmills
- **Drivers:**
  - Stronger and lighter foam enable larger and energy efficient constructions

## High performance



- **Status:**
  - Commercialisation
- **Application areas:**
  - Cars, electric power industry, airplanes
- **Drivers:**
  - Enhanced properties, e.g. heat/chemical resistance, strength
  - Processability
  - Replaces heavier material, e.g. metal

## Polyethylene pipe



- **Status:**
  - Commercialisation
- **Application areas:**
  - Tubing, pipelines, cables
- **Drivers:**
  - Enables production of plastic tubing in larger dimensions, with improved durability and decreased environmental impact
  - Replaces metal, cement and other heavy materials

# Engineering polyester foam

## Market characteristics

**20  
kton**

annual  
market demand

**>10%**

annual  
growth rate

### Application areas:

*Light weight material  
used within wind  
energy, transportation/  
automotive and  
building sectors*

## Nexam Chemical's offer

### >>100% improvement in key mechanical properties

Allows customer to:

1. Reduce density – raw material cost savings
2. Increase performance – competitive to high performance foams
3. Choose preferred material – PET instead of PVC
4. Use recycled Plastic – save money on RM, "green" profile

## Illustrative product examples



# Polyethylene pipe

## Market characteristics

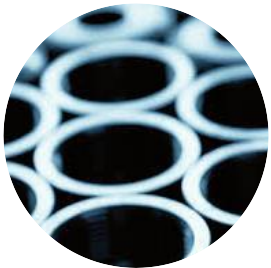
**4,000 kton** annual market demand

**>5%** annual growth rate

### Application areas:

*Gas- and water supply in industrial, rural and household applications*

## Illustrative product examples



## Nexam Chemical's offer

### Improved key parameters for processing and performance of polyethylene pipe

Allows customer to:

1. Meet higher specifications/standards even for high-end applications
2. Upgrade commodity grade to high-margin products
3. Possibility to increase use of recycled material  
- dramatic reduction in cost
4. Replace less favourable processing chemistry i.e. peroxides

## Market characteristics

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**5  
kton**

annual  
market demand

**>10%**

annual  
growth rate

### Application areas:

*Ultra advanced  
plastics applications.  
Space, aircraft and  
electronics.*

## Nexam Chemical's offer

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**Enables a new product with outstanding processing properties and performance**

Allows customer to:

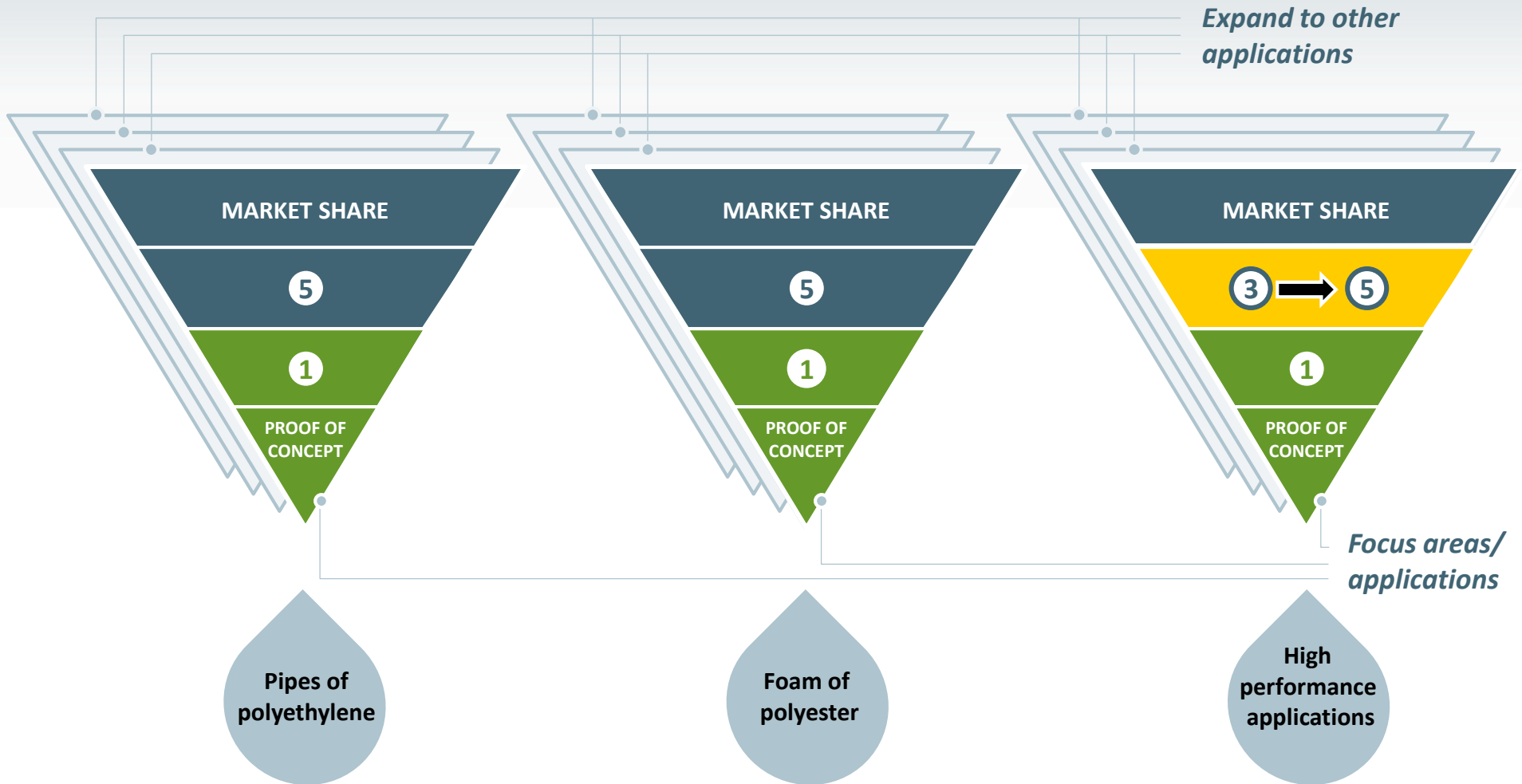
1. Meet novel requirements, which cannot be addressed by conventional technology
2. Combine excellent processability with extraordinary material properties.

## Illustrative product examples

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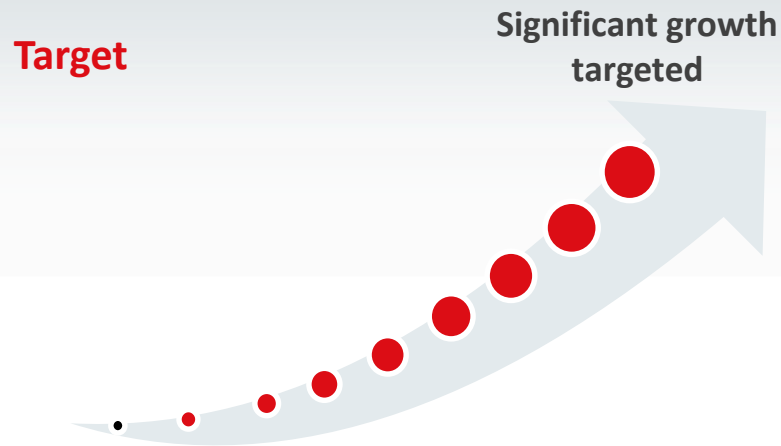


# Business Model





# Profitable growth path-Organic/Aquired



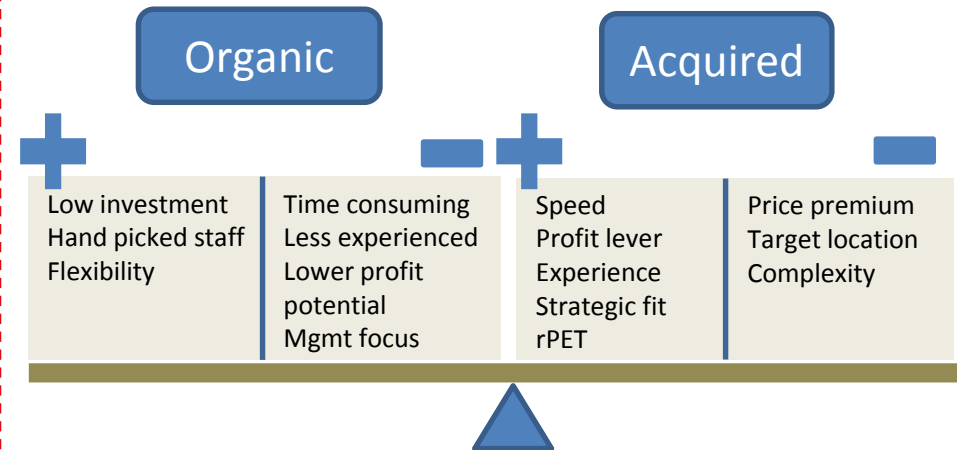
## Customer intimacy-Business development

- Customers requiring Master Batch = MB needed
- More customers = more sales resources
- More sales = more production capacity
- More sales = efficient processes and systems
- Regulatory investments needed

## Tactical implications

- Secure master batch capacity in-house or externally
- Appoint technical sales resources per geographic area
- Develop processes and supporting systems for SCM, Sales efficiency, QM.
- Profit maximization

## Growth paths



**Thank you!**



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