

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

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Aktiespararna in Gothenburg 11 March 2016

## **Today's presenters**





## Anders Spetz, CEO

- Joined Nexam Chemical in January 2015
- Previously CCO at Sanitec and CEO at Trioplast
- Experience from Akzo Nobel and Neste Chemical
- M.Sc. in Chemical Engineering



## Christian Svensson, CFO

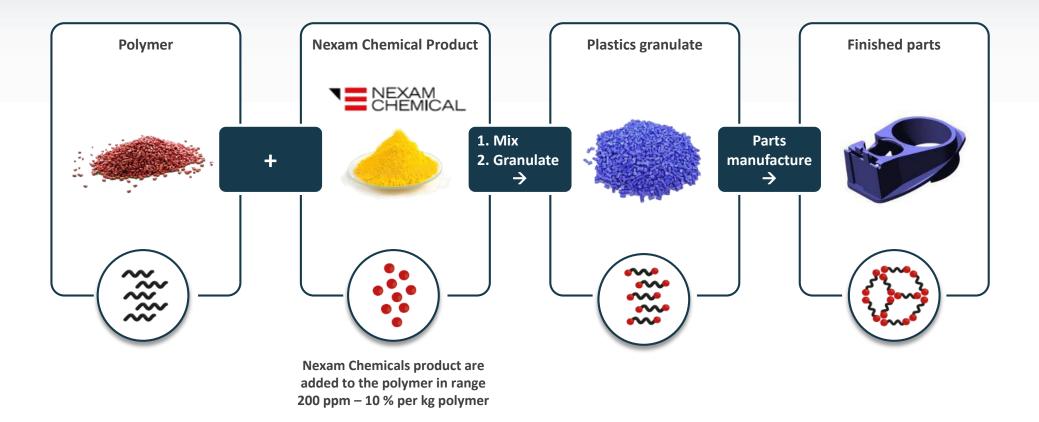
- Joined Nexam Chemical in August 2014
- Previously CFO at NeuroVive Pharmaceuticals, CFO at Capilon and several management positions at Gambro
- B.Sc. Business and Administration

## Agenda



- Nexam Chemical
- Market overview
- Strategy three focus areas
- Recent milestones
- Business Model & Strategy

## Nexam Chemical's products in the value chain TENEXAM CHEMICAL



## Background



		Focus: Invest	ing in R&D			Focus: Commer	cialisation
2009	2010	> 2011 >	2012	2013	2014	2015	> 2016
exam Chemical is rmed following a anagement buyout om Perstorp	<ul> <li>First proof of concept for nylons and polyethylene</li> <li>Several partnerships</li> </ul>	<ul> <li>The NEXIMID<sup>®</sup>-family</li> <li>comprising of five products is launched</li> <li>New partnerships are</li> </ul>	• Further roll-out of NEXIMID <sup>®</sup> to new customers within the polymide industry	<ul> <li>Nexam Chemical's products are starting to be included in customers recipes</li> </ul>	<ul> <li>NEXAMITE<sup>®</sup> is launched</li> <li>Nexam Chemical continues to form</li> </ul>	<ul> <li>Joint marketing program with Evonik Jayhawk regarding polymide solutions</li> </ul>	n
evelopment of the astic processing lab nd the organisation egins	are formed • Pre-launch of the NEXIMID <sup>®</sup> -family	continuously formed and existing ones are further intensified	<ul> <li>Pre-launch of the NEXAMITE<sup>®</sup>-family following positive results within nylons,</li> </ul>	<ul> <li>Volumes are scaled up</li> <li>The plastic processing lab is up and running</li> </ul>	<ul><li>strategic partnerships</li><li>Commercialisation of a material, based on</li></ul>	<ul> <li>First industrial order regarding product for modification of plastic pipes</li> </ul>	
-81115		<ul> <li>Nexam Chemical acquires a production facility in Scotland</li> </ul>	PET and polyethylene	• The first application within electronics is confirmed	Nexam Chemical's product, for film production in Japan	<ul> <li>First orders within the product range high performance</li> </ul>	
			Production facility and F St Andrews (Scotland)	Nexam Chemical is listed on Nasdaq Stockholm First North HQ, sales Lund (Sw	s, marketing and application	on lab:	
		Sales agent Ohio (US)					butors: (Japan) nai (China)
					1		<u>`</u>

## 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**

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

### **Reduced manufacturing cost**

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

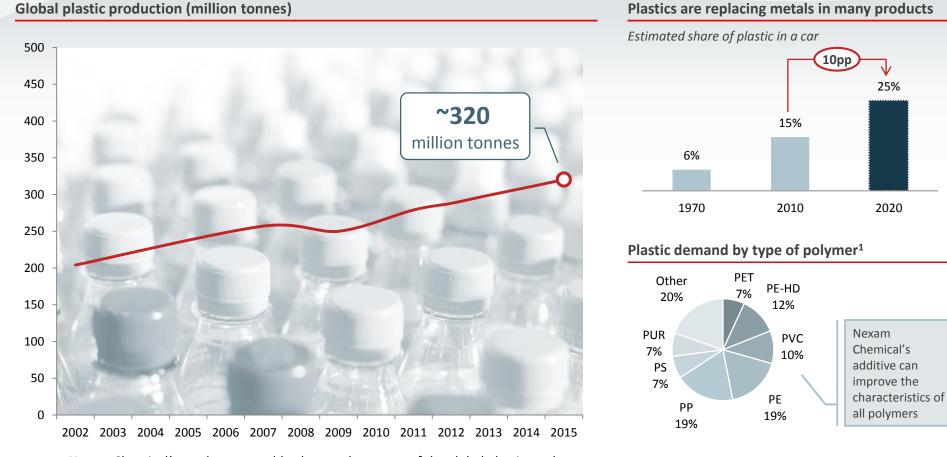
### Lower environmental impact

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

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

#### 1) European market

Source: Nexam Chemical, PlasticsEurope

## **Market drivers**



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)

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 T CHEMICAL

### **Polyester foam**



#### • Status:

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

### **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

### 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

## **Engineering polyester foam**



### **Market characteristics**

20 kton	annual market demand	<b>Application are</b> Light weight m used within wir
>10%	annual growth rate	energy, transpo automotive and building sector.

#### eas:

naterial ind ortation/ d rs

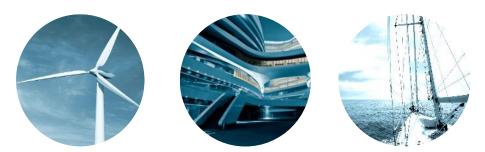
### Nexam Chemical's offer

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

Allows customer to:

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

### **Illustrative product examples**



## **Polyethylene pipe**



### Market characteristics

4,000 annual market demand		<b>Applicatio</b> Gas- and w supply in ir		
>5%	annual growth rate	rural and f applicatior		

#### on areas:

water industrial, household ns

### 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
- Upgrade commodity grade to high-margin products 2.
- Possibility to increase use of recycled material 3. - dramatic reduction in cost
- Replace less favourable processing chemistry i.e. peroxides 4.

### Illustrative product examples



## **Polyimide coatings/varnishes**



### **Market characteristics**

5 kton	annual market demand	<b>Application areas:</b> <i>Heat resistant</i> <i>insulation for wires</i>	
>10%	annual growth rate	and plates used in electric motors and batteries	

### Illustrative product examples



Source: Nexam Chemical

### Nexam Chemical's offer

## 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

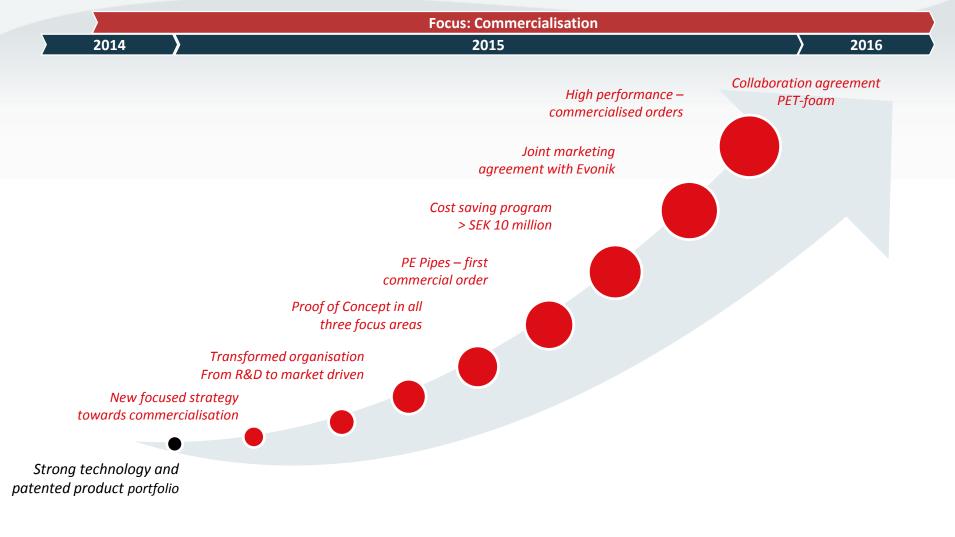
## **Significant investments completed**



R&D investments of > SEK 56 million since 2009 (~45% of total cost)	Established research lab and plastic application lab	
Investment in production facility St Andrews, Scotland	Several Eurostar-funded development projects in co- operation with partners	<ul> <li>Strong technology and patented product portfolio</li> <li>Own production capacity</li> <li>Intellectual Property</li> </ul>
<b>41</b> granted patents	<b>40</b> applications pending	Know how and skilled staff

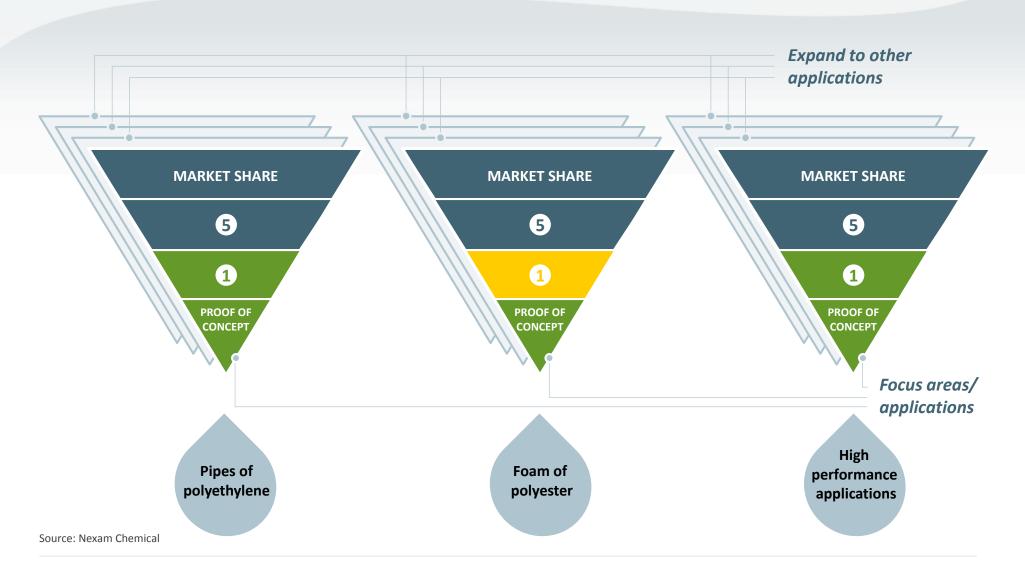
## **Recent milestones**





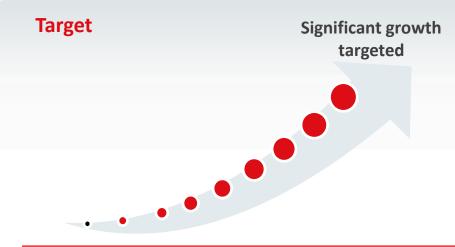
## **Business Model**





## Strategic evaluation for growth





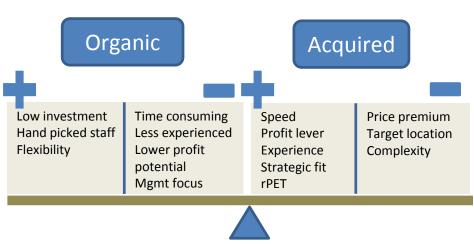
## **Tactical implications**

- 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

## **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

### Growth paths









## Thank you!





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