



**David Garza, Session Chairman**

Our next speaker will talk about compounds. Let me introduce you to Mr. Rudi Peters. He is application marketing manager for the power business in Borealis-Borouge.

He has held various positions in the compounds industry, starting as customer service manager with Union Carbide. Back in 2006 he thought it was time to finally take the job he has done his university studies on and he joined Borealis. His main interests are in value creation activities in his business time and his hobby is to play tennis. Please welcome Mr. Rudi Peters.

**Rudi Peters**

The outline of my presentation can be seen on the next slide.

## Overview

- About Borealis-Borouge (B&B)
- W&C a core business in Borealis-Borouge
- Trends and drivers
- What do cable manufacturers expect from a leading XLPE producer?
- Most Reliable solutions for high quality cables
- Impact of REACH on W&C
- Meeting challenges for the future

I would like to give you some rough overview on who we are and what we do, before we take a look at the financial performance.

A remark about our name:

When we sell in Europe and in the Americas we do it under the name of Borealis.

When we sell in Middle East and Far East we do it under the name of Borouge.

## Borealis-Borouge : Who we are

Leading provider of innovative, value creating plastics solutions

Developing a base chemicals business

More than 40 years of experience

Billion dollar investments in polyolefin's in Europe and the Middle East

More than 8000 employees globally

Customers in more than 120 countries

> Borealis serves customers in Europe and Americas

> Borouge serves customers in the Middle East, Asia and Africa



We are a leading provider of innovative, value creating solutions and a provider of some fundamental base chemicals and plastic. We are the second biggest Polyolefin producer in Europe and the seventh largest worldwide and among the five biggest industrial companies in Austria.

Our unique, state-of-the-art Borstar technology is the basis for developing a broad range of high value plastic solutions, made of polypropylene and polyethylene, which address present and future needs of our customers and end consumers.

We employ 8,000 people in around 20 countries and serve customers in more than 120 countries all over the world.

Our owners, International Petroleum Investment Company (IPIC) in Abu Dhabi (64%) and OMV in Austria (36%) offer stability and privileged access to feedstock.

Borouge is our joint-venture with the Abu Dhabi National Oil Company (ADNOC). The significant growth plans for Borouge will reinforce Borealis' presence in the Middle East and Asia, which is a core element of Borealis' strategy.

## We provide solutions in ...



Our Infrastructure Segment comprises dedicated business units focused on delivering polyolefin materials for

### Pipe

Water supply, pipeline, sewerage, plumbing and heating systems

### Wire and Cable

XLPE compounds, PE jacketing, copolymers for low-voltage cables and building wire



Our Polymers Division is split into 3 parts:

- Automotive
- Advance Packaging
- Infrastructure.

For wire & cable customers only the Infrastructure Division is relevant as it deals with pipe, wire and cable.

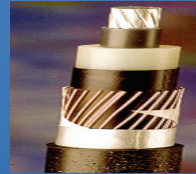
## Wire & Cable, a core business

### Unparalleled experience and quality in the Wire & Cable market

- Most experience in the most demanding areas such as EHV and HVDC
- Dedicated Development personnel specialized in W&C at our Innovation Centre
- Technical support specialists located in all major global markets
- ISO 9001 and ISO 14001 certified

### Strength through global size and scale

- Q4/2009: Stenungsund, Sweden
  - New 350 kta LDPE reactor
- Q1/2014: Borouge 3 in Ruwais, Abu Dhabi
  - 2500 kt total polyolefin expansion, including LDPE
  - Supporting local and global needs
- Commitment to expand semicon capacity to meet global demand



### Innovation

- Development portfolio designed to make Wire&Cable production more efficient

Contrary to other compound suppliers to the W&C industry, the W&C business is a core business in Borealis, as you can see outlined in the above slide.

## We believe in the growth of Wire & Cable

### Trends

- > Replacement of overhead cables by XLPE underground cables
- > More interconnections between different countries
- > More HV lines installed in developing countries
- > Increase in delocalized alternative energy generation sources

### Drivers

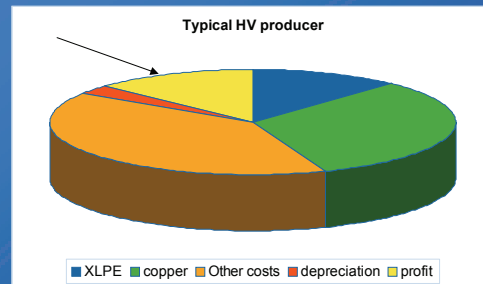
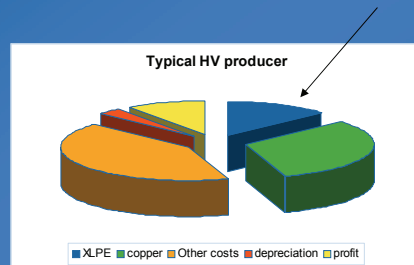
- > Pressure from General public to eliminate overhead lines in cities  
Property value / Health risks / IMF mitigation
- > Need for a more reliable, modern, upgraded networks to allow international electricity trade
- > Increased living standards lead to increased electrification
- > Political support for clean renewable energy

Despite the latest events in the financial sector which may have a negative impact on the general economy, we still believe that the underlying trends for the W&C industry remain positive, especially for the power cable market.

## What do cable manufacturers expect from Borealis-Borouge?

Although our products make up only a small part of cable costs

Our innovations can have a major impact on profitability of cable producers



What should customers expect from B&B?

Too often we mainly discuss the price of our compounds with the procurement group of our customers.

In most cases, the cost of the compounds we supply to the W&C customers is only a small portion of the total costs of a cable.

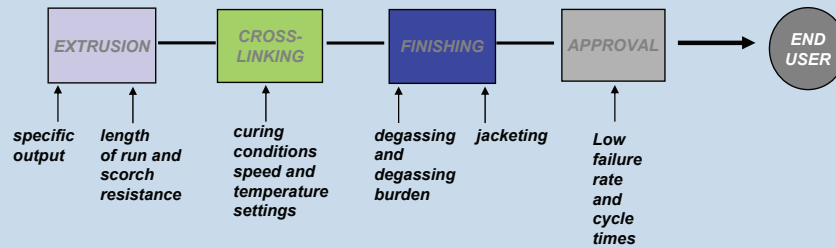
We should focus more on the advantages our compounds can bring to the W&C cable customers in productivity improvements.

We should focus first on making the total cake bigger for our customers and then discuss how we should divide the bigger cake between the supplier and the cable manufacturer.

This will be much more productive for the cable producer than to concentrate mainly on the price of the compound.

## Leading XLPE producers deliver on industry challenges

### Increased productivity HV/MV



Innovations in XLPE have significant favorable impact on cable production costs



In the production process of a cable there are several steps to be observed.

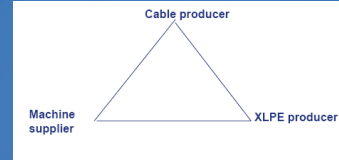
In each steps there are ways to improve the productivity.

Our innovations can have a significant favourable impact on cable production costs.



## Efficiency, Performance, and Reliability

- **Length of run and scorch resistance**  
20% lower scorch
- **Curing speed and temperature settings**  
Improved output of CV lines by as much as 30%
- **Degassing and degassing burden**  
Reduced production cycle time for HV cables by more than 25%
- **Low Failure rate and cycle times**
  - High level of cleanliness and quality consistency are a prerequisite for high stress cables
- **Superior mechanical strength**  
Compounded PE jacketing grades



Realizing full benefits  
requires close  
cooperation of value  
chain partners

Efficiency, performance and reliability are fundamentals for the cable industry.

It is important to remember that in order to realize the full benefits of the innovations, there is a need for a close cooperation of the partners in the value chain during the production process: Borealis – customer – machine supplier.

Borealis has developed products which can improve the production process in each step of the production.

## Impact of REACH on Wire and Cable



The important message to remember is, that all major W&C compound suppliers are actively working to make sure that their W&C compounds fulfill REACH legislation. REACH stands for **R**egistration, **E**valuation, **A**uthorization and **R**estriction of **C**hemicals and it is a European Community Regulation on chemicals and their safe use.

We do not expect any major problems for the W&C industry.

## Our Commitment

**Borealis and Borouge are committed to meeting the future challenges of the Wire & Cable industry**

- **We will continue to be the innovation leader in plastics for the Wire & Cable industry**

- We will deliver the next generation technologies for our customers to be more competitive

- **We will continue to invest in production assets to ensure that we meet the industry demand**

- Stenungsund, Sweden: 350kta LDPE reactor to start-up in Q4/09
- Borouge3 : to be commissioned in Abu-Dhabi by end 2014

- **We will continue to provide the highest quality materials to ensure the reliability of our customers cables**

- Specialized analytical tests such as online and traceability for Power Cable
- Wire & Cable training program for all operators

On this slide you can see our commitment and the way we like to work together with you.

To take full benefit of all the innovations all 3 partners in the value chain B&B – customer – machine supplier have to work hand in hand to make sure that you as a customer get the full benefit of our innovations.

Thank you for your attention!