



# JT International Investor Field Trip

## Trier Factory

Luxembourg / Trier

September 19-20, 2011

quality commitment innovation synergy



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  - JTI Trier Strategy & Performance
  - Concluding Remarks

- Introduction -



# Cigarette manufacturing process overview

## Primary

Tobacco leaf:

- > Virginia
- > Burley
- > Oriental



- > CRES<sup>(1)</sup>
- > DIET<sup>(2)</sup>
- > RTS<sup>(3)</sup>



Tobacco blend



- > Casing
- > Flavoring



## Making

NTM<sup>(4)</sup>:

- > Cigarette paper
- > Filter
- > Tipping paper



## Packing

NTM:

- > Aluminum foil
- > Tax stamp
- > Inner frame
- > Blank
- > Polypropylene
- > Tear tape



Pack

Carton/Bundle



Note:

(1) CRES: Cut Rolled Expanded Stem

(3) RTS: Reconstituted Tobacco Sheet

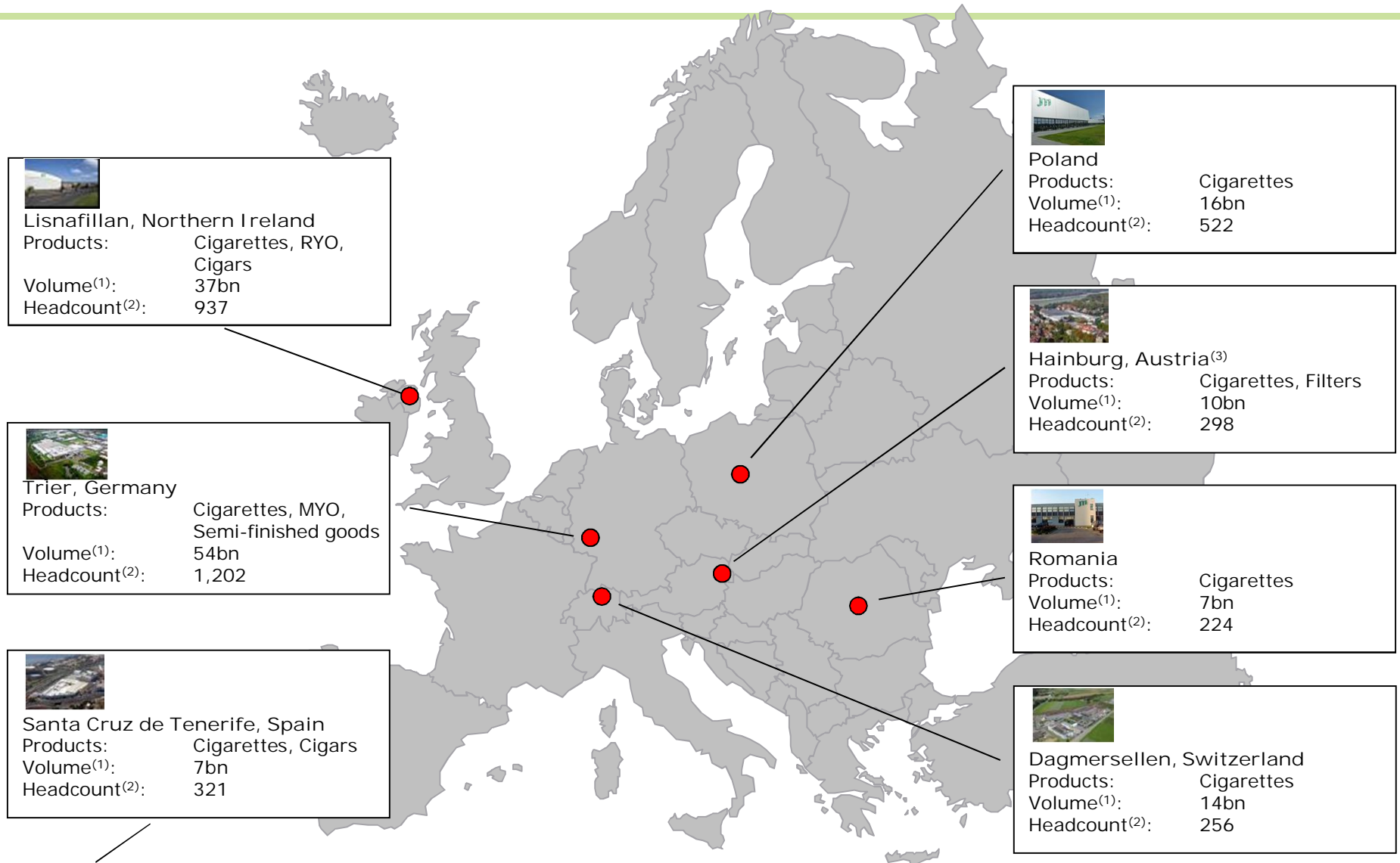
(2) DIET: Dry Ice Expanded Tobacco

(4) NTM: Non Tobacco Material

# Supply chain process overview



# We operate 7 factories in Europe, with a production volume above 145 billion units



Note:

(1) Full year 2010

(2) As of July 2011

(3) Hainburg factory (Austria) will be closed by end of 2011

- Trier Factory -





The Trier region has over 100 years of tobacco tradition, with a highly skilled and experienced workforce



1908



Start of cigarette production in Trier by *Haus Neuerburg*

1969



Factory in Trier downtown taken over by RJR in 1969

1973



Production start in the new Trier factory

## Over \$450MM have been invested in the past 10 years to achieve the highest quality and efficiency levels

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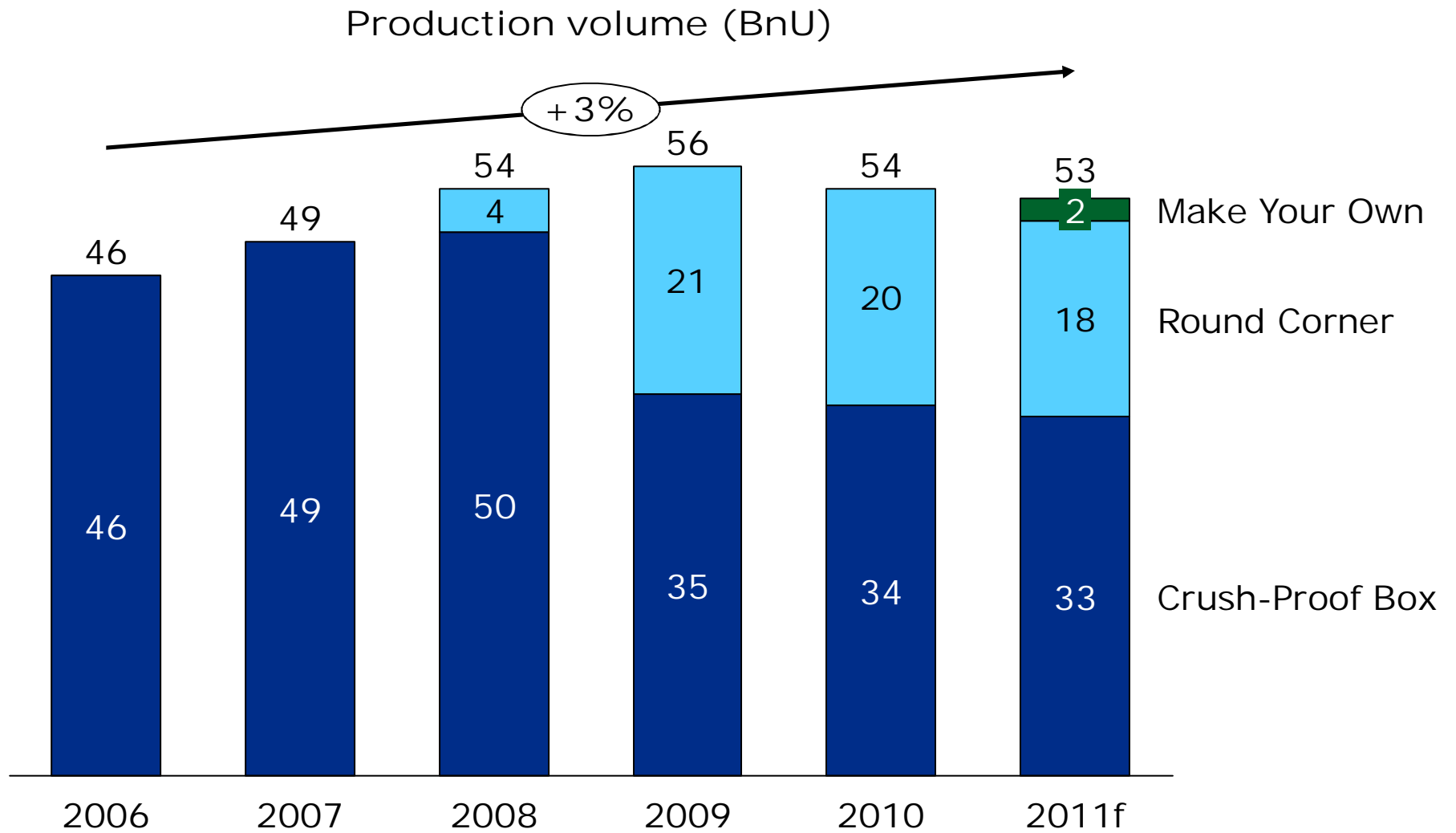


- 1995 First generation of high speed machines with 14,000 cigs./min
- 1998 First certification awards for ISO 9001 and ISO 14001
- 1999 JT takes over Reynolds International and creates enlarged JTI
- 2002 New DIET and new CRES plant
- 2003 High speed machines with 16,000 cigs./min, SAP implementation
- 2004 First certification as 5S<sup>(1)</sup> Best-in-Class factory in the German industry
- 2007 JT acquires Gallaher, enlarging JTI
- 2008 First time production volume exceeds 50 billion cigarettes
- 2009 Newest generation of ultra high speed machines with 20,000 cigs./min
- 2010 Introduction of innovative filter distribution system

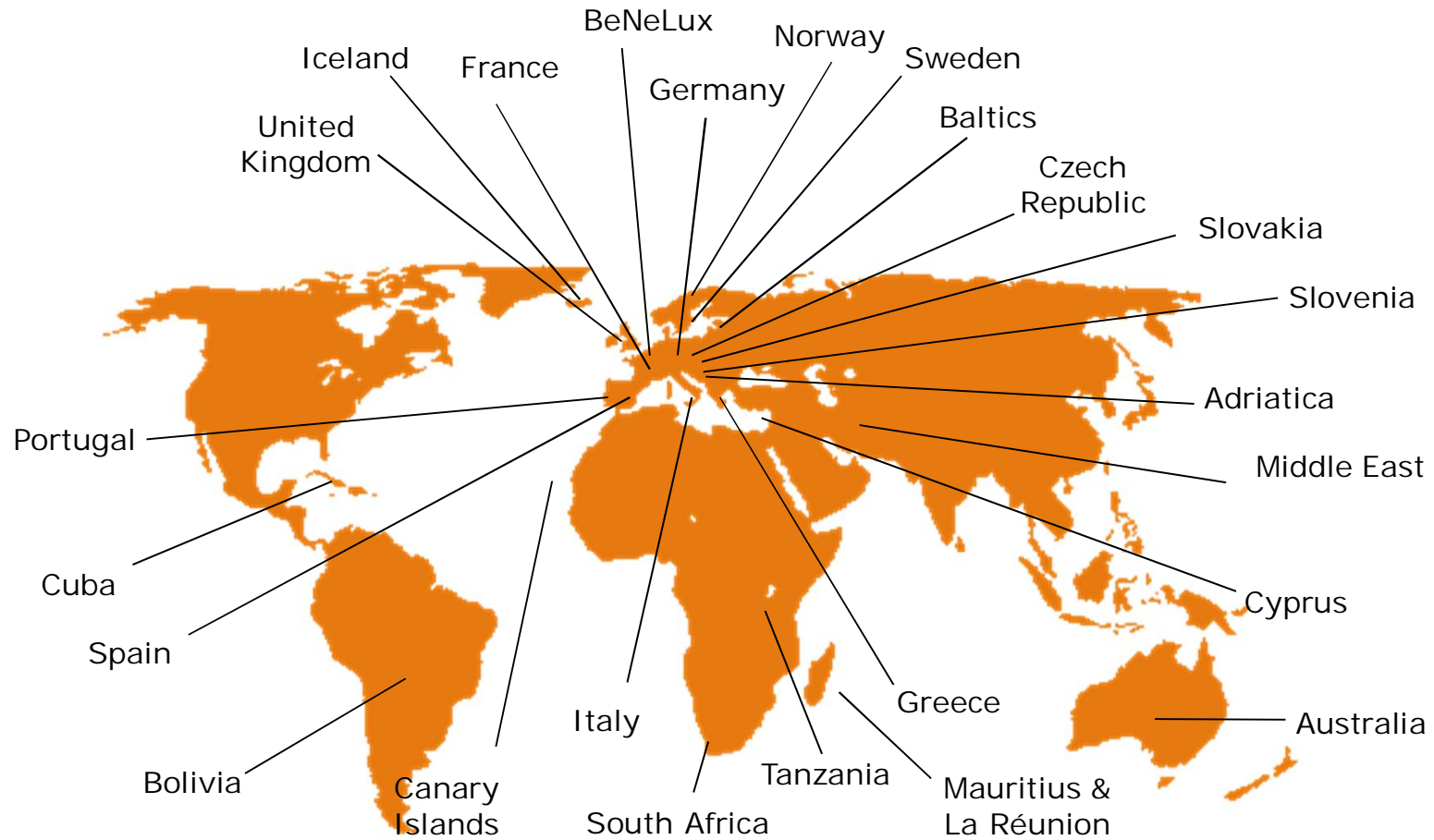
Note:

(1) SEIRI: Sort out, establish order; SEITON: Systematic arrangement; SEISO: Spruceness, cleanliness; SEIKETSU: Standardize; SHITSUKE: Self-discipline

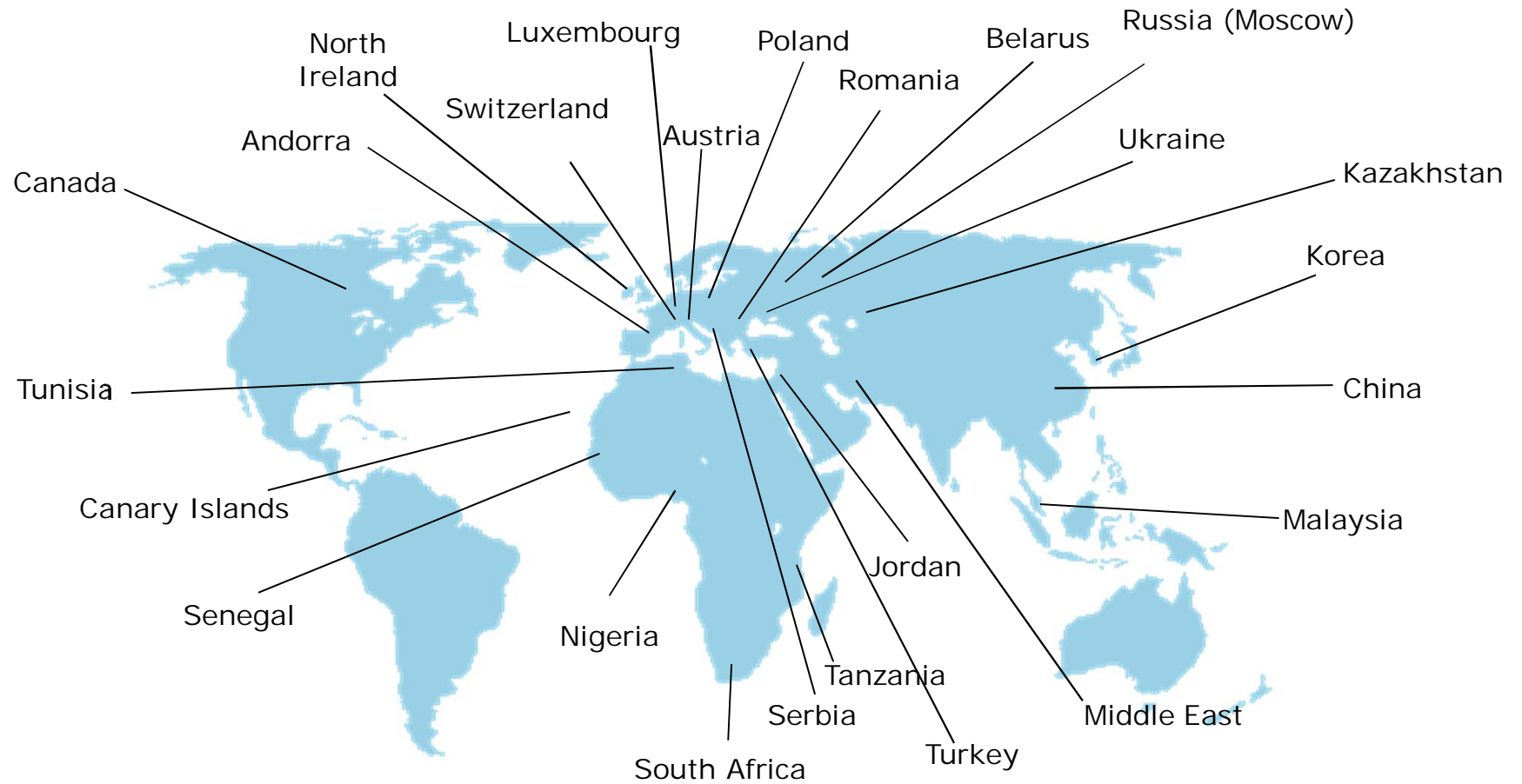
# Trier factory produces over 50bn cigarettes a year



# Trier supplies over 1,000 cigarette SKUs to 66 markets



# Trier supplies semi finished goods to 26 factories including third party manufacturing partners



- JTI Trier Strategy & Performance -



JTI has one single Global Supply Chain mission to provide   
a competitive advantage for the markets

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### Mission statement

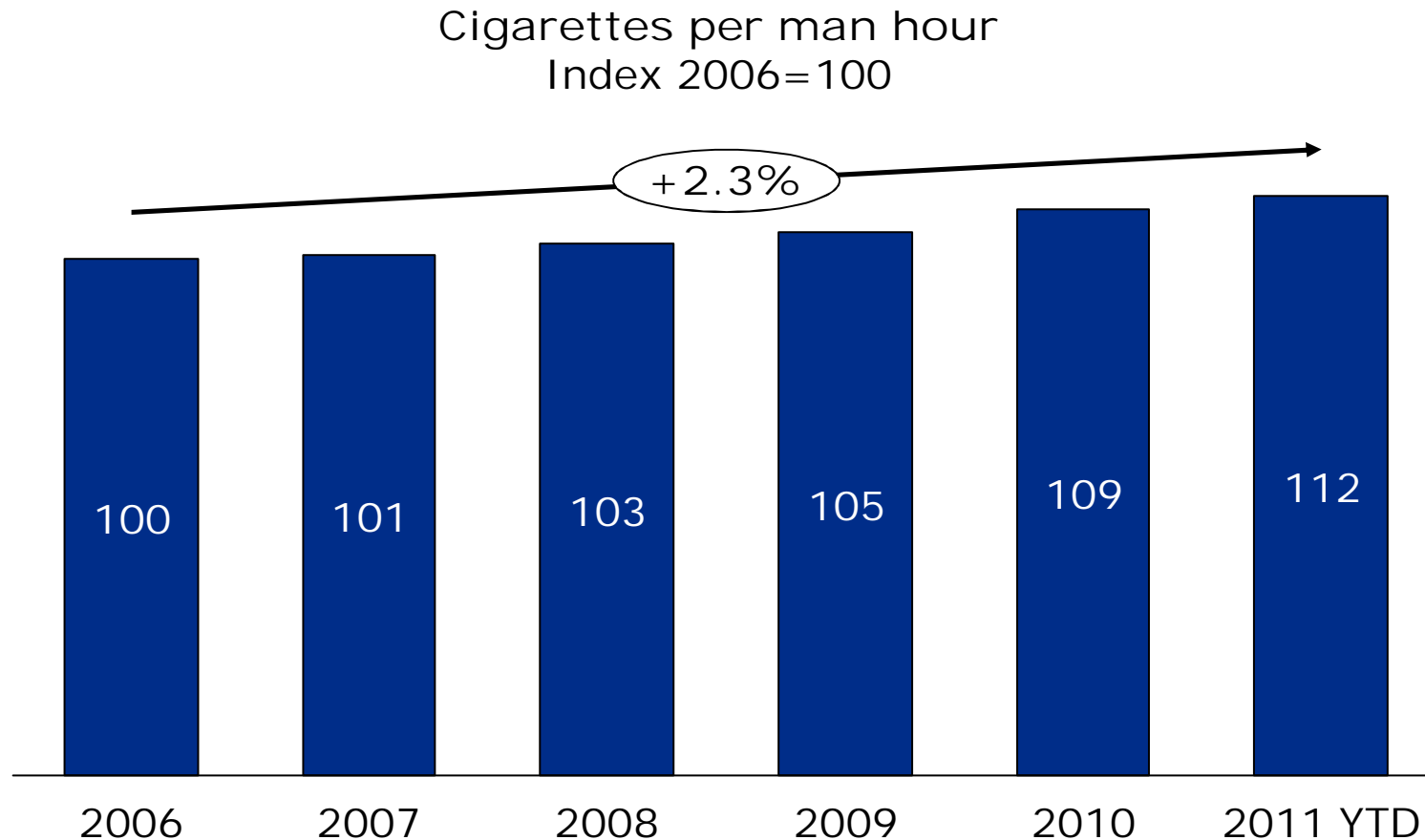
As one team be the industry best supply chain, driving continuous improvement and excellence in execution

### Strategies

We will:

- Deliver highest quality products at best cost
- Maintain shortest possible lead times
- Work as one team
- Ensure positive and transparent collaboration
- Promote innovation
- Provide a proper work environment

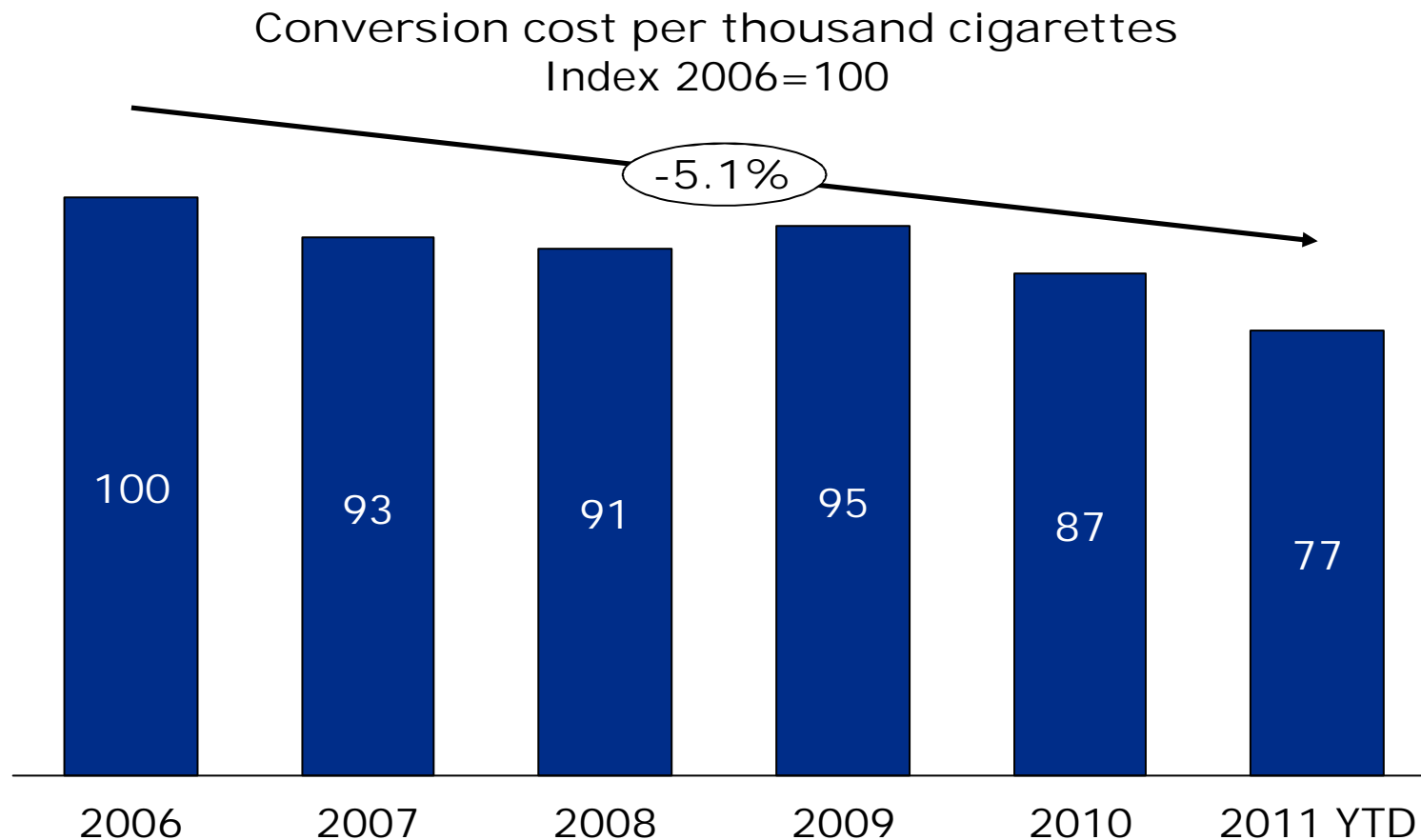
Best-in-class productivity in the industry, growing 12% over the past 5 years



- Our key focus includes investment in automation and high-end ultra-high-speed machinery



## Conversion costs reduced 23% over the past 5 years



- In addition, strong focus on working capital optimization

# Our strong focus on quality is supported by effective management tools

- ISO standardization
  - Solid and certified Process Management System in place, ensuring proper business, quality, environmental and safety processes
    - ISO 9001
    - ISO 14001
    - OHSAS 18001
  
- CIP (Continuous Improvement Process)
  - KAIZEN<sup>(1)</sup> as a factory mindset
  - 5S<sup>(2)</sup> as a company goal
    - Trier Factory received seven times in a row the “5S Best In Class Factory” award



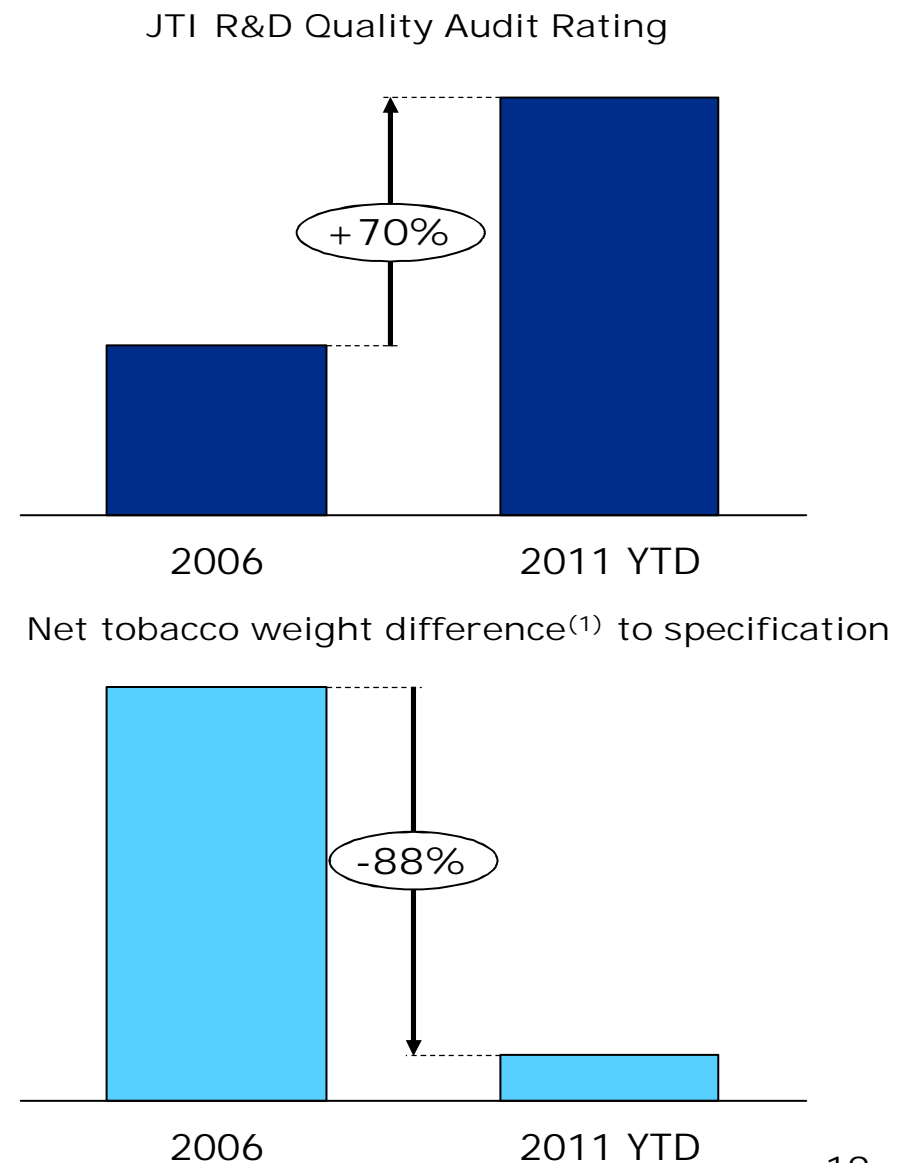
Note: (1) Japanese word for continuous improvement

(2) SEIRI: Sort out, establish order; SEITON: Systematic arrangement; SEISO: Spruceness, cleanliness; SEIKETSU: Standardize; SHITSUKE: Self-discipline

# We are continuously improving to deliver industry-leading product quality



- ISO 9001 Quality Management System certification since 1998
- Strong synergy with our Japanese factories, ensuring robust process control of Product Quality and encouraging “never satisfied” mindset
- Outstanding product taste consistency and visual quality delivered with 70% improvement over the past 5 years
- Deviations from technical specifications reduced by 88% over the past 5 years

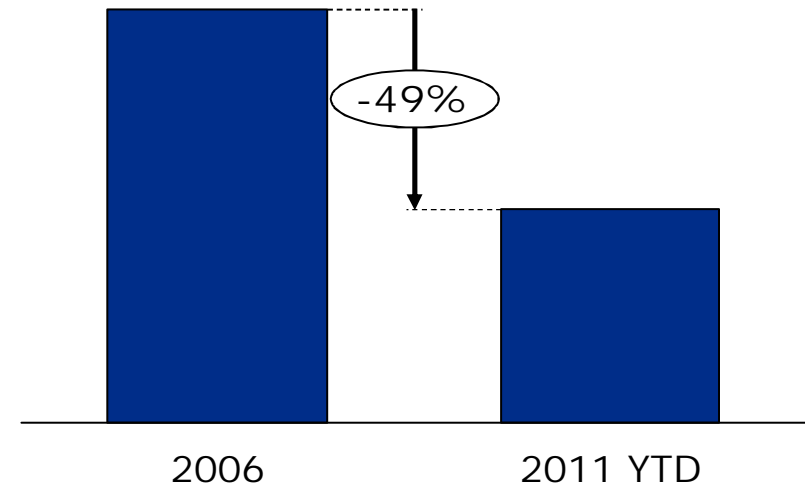


Note: (1) Weight difference to target tobacco weight included in one cigarette

# Acting on consumer feedback through continuous improvement

- An effective consumer feedback tool is in place, with an effective handling procedure
- Factory analyzes and investigates feedback for immediate improvement
- Counter measures applied, coordinated with Market and R&D functions

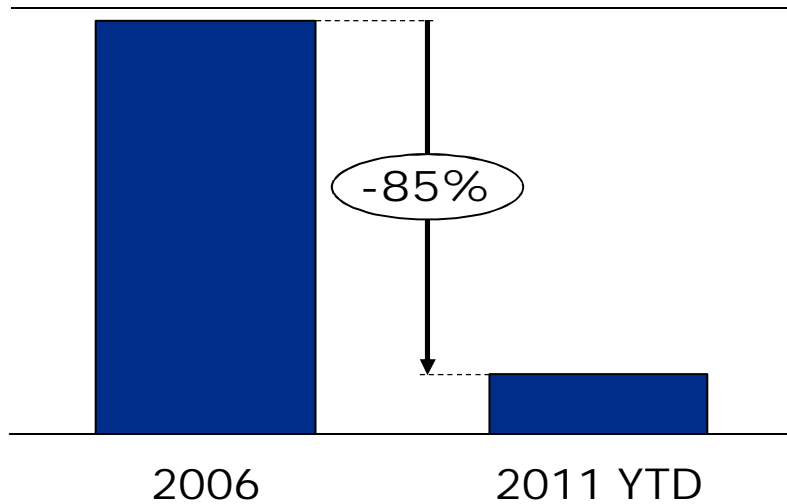
Consumer feedback per billion cigarettes



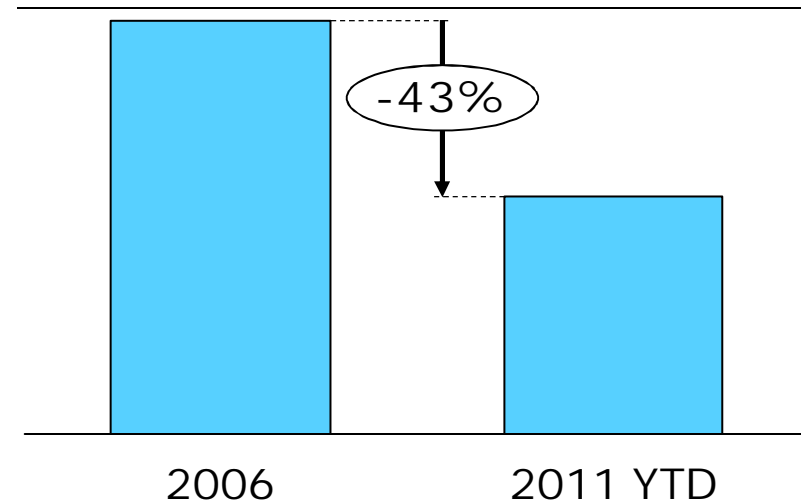
# Our Continuous Improvement approach has resulted in progress across a wide range of areas



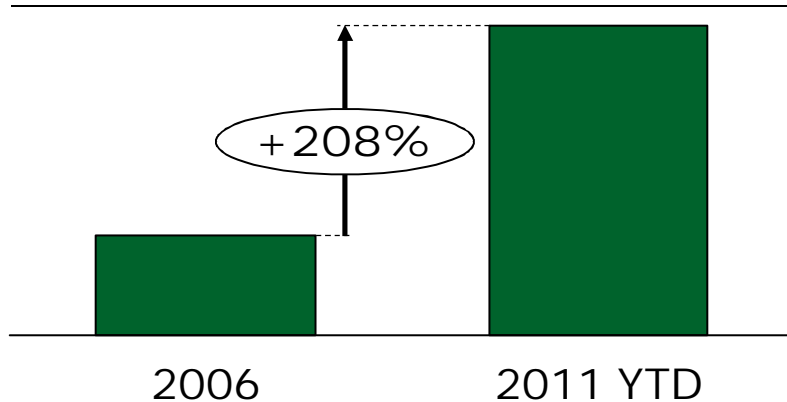
### Lost Time incident rate



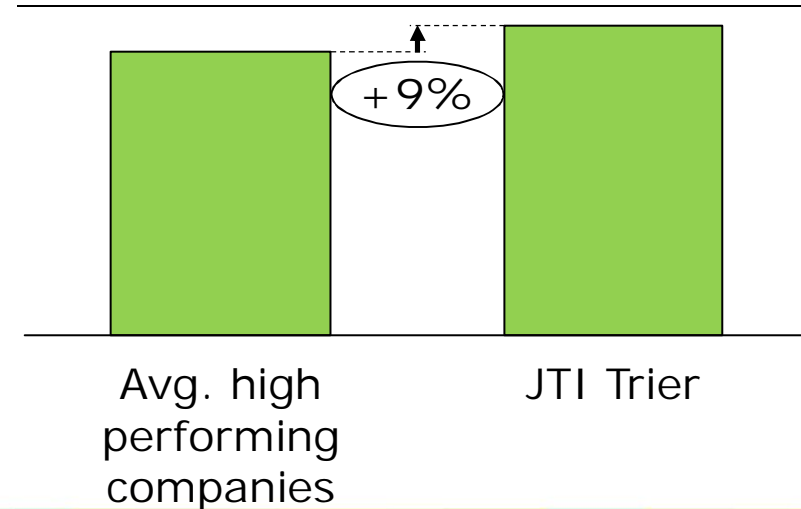
### Waste rate



### Employee Suggestions



### Employee Engagement vs. other top companies



## Co-generation reduces both costs and CO<sub>2</sub> emissions

- Steam is produced, using natural gas. As a by-product of this process electricity is generated
  - Energy cost savings of US\$1.5 Million/year
  - CO<sub>2</sub> - emission reduced by 1,600 tons/year



## Outstanding Recycling Rate of 99.4%

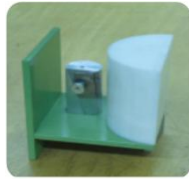
- Disciplined separation of waste in all areas
- Benchmark for all JTI Factories



# KAI ZEN: Trier invented Safety Knife substantially reducing number of cut injuries



Unsafe condition



Version 1



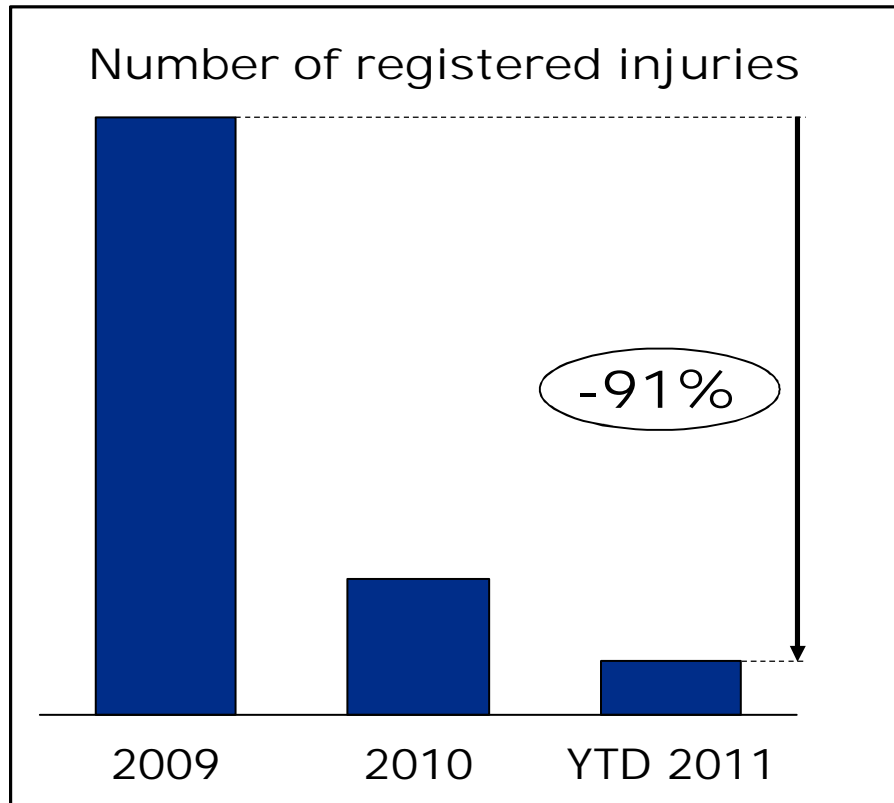
Version 2



Version 3



Version 4



Roll-out final version with hidden knife

- Concluding Remarks -





## Trier factory has among the highest quality and efficiency levels in JTI

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- Delivering a uniquely diverse portfolio of products worldwide
- Improving productivity at the highest quality level
- Investing in high-end technology
- Demonstrating high levels of employee competence and engagement
- Achieving long-term commitment to continuous improvement, focusing on quality and cost efficiencies