

**Carbone Lorraine**

**Interim Results**  
September 14, 2005

**CARBONE LORRAINE**

*Dedicated Innovation, Dedicated Partner*

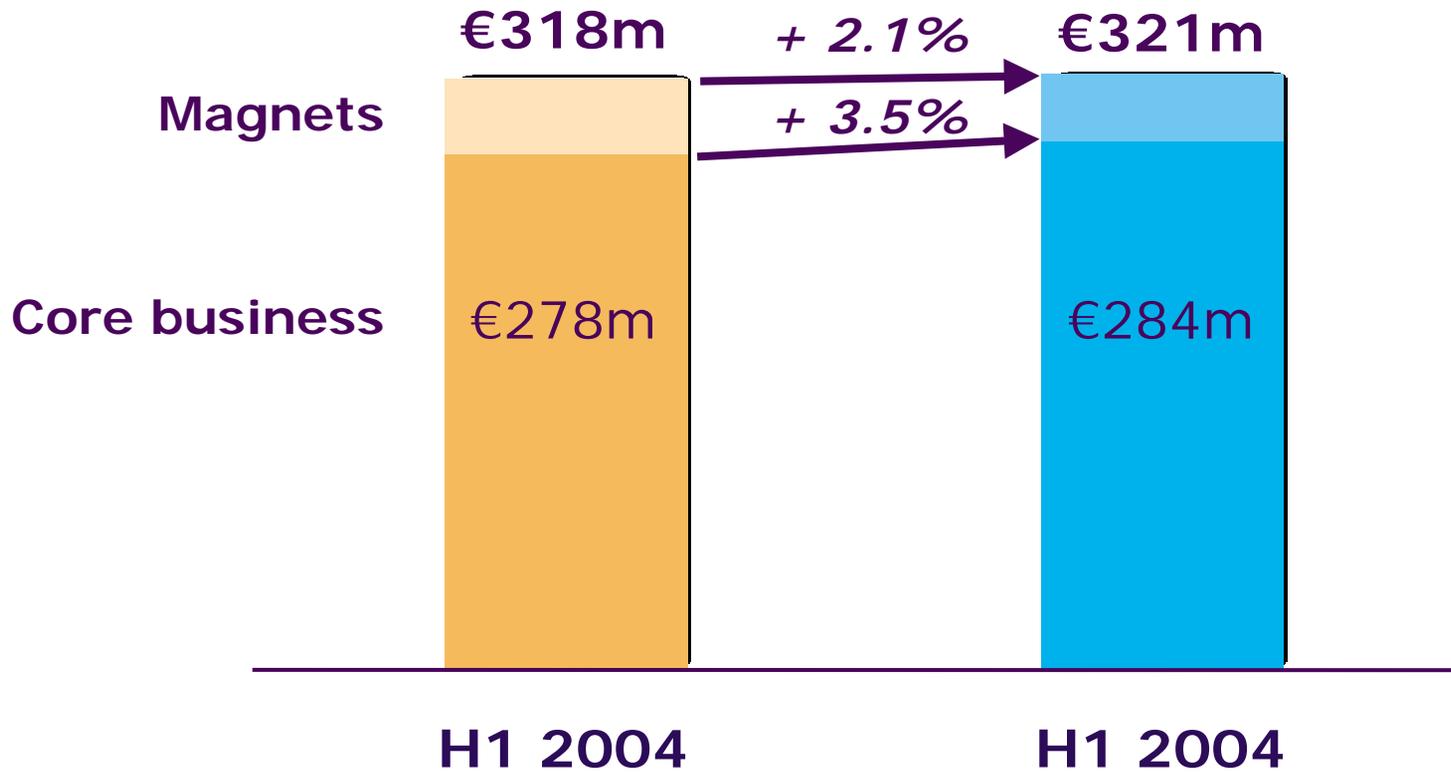




**S**trong earnings growth

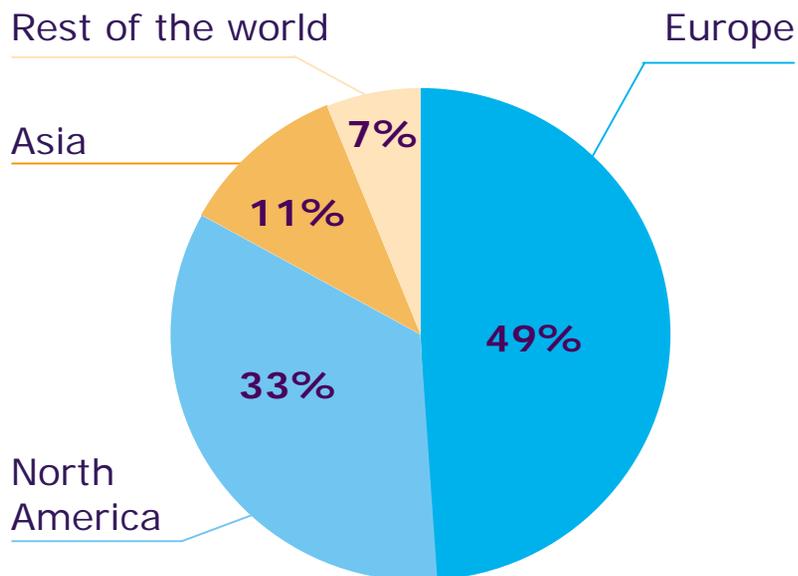
**P**romising growth prospects

# Strong growth



# Growth across all the Group's regions

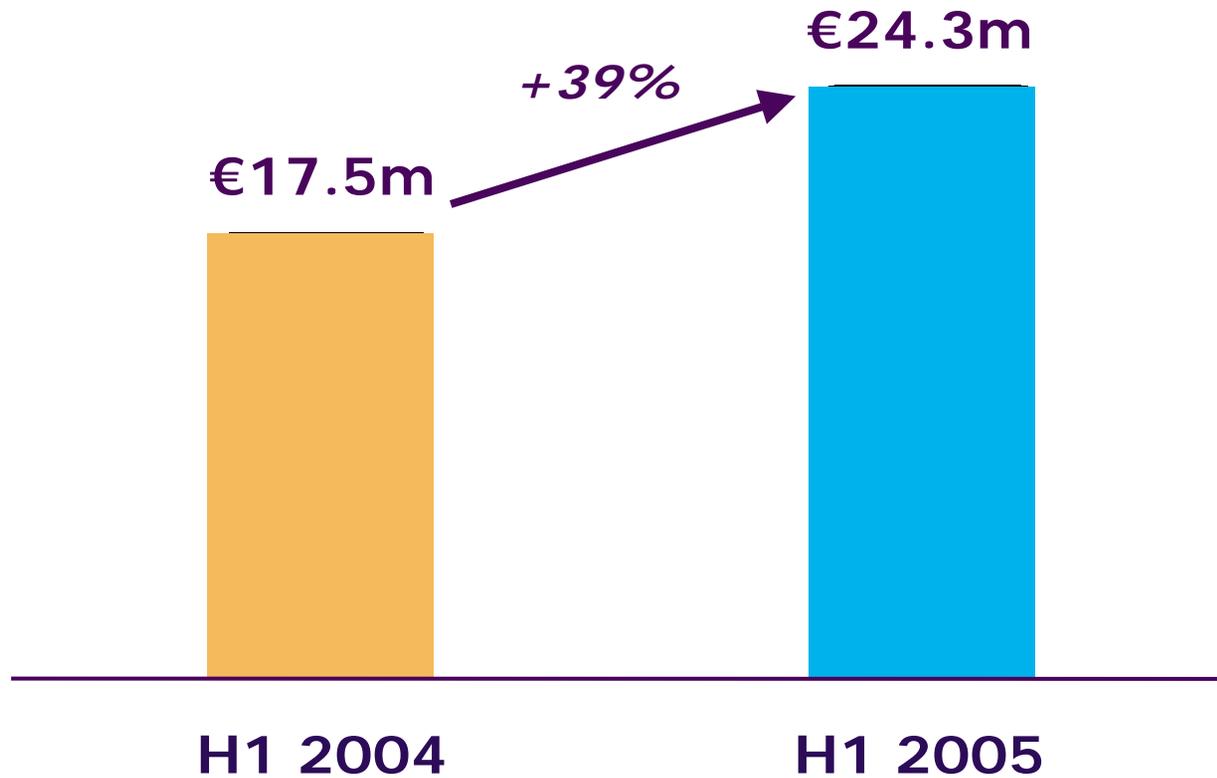
## Sales breakdown by region excl. Magnets



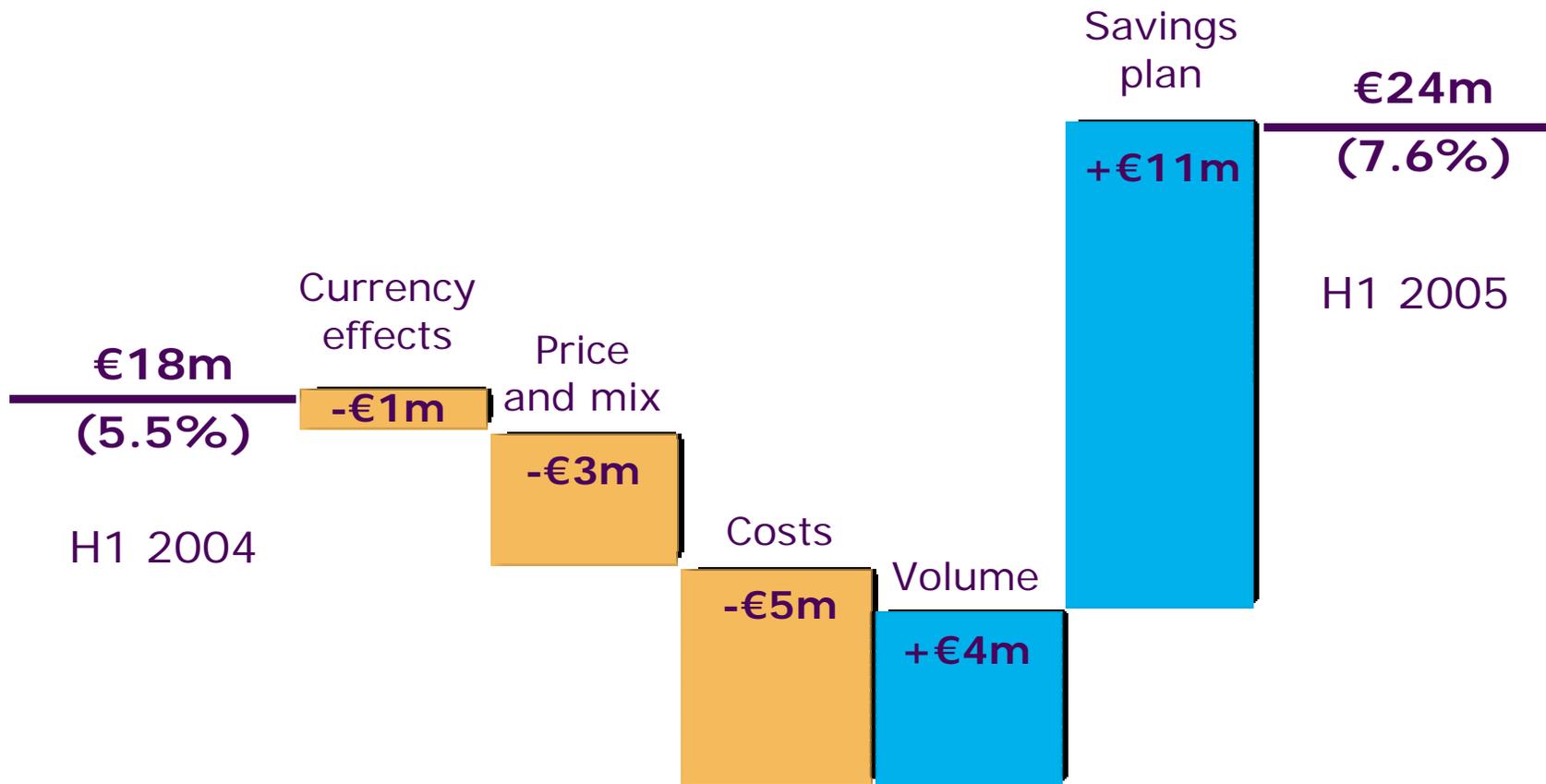
## Sales\* growth excl. Magnets H1 2004 vs H1 2005

Europe	+3%
North America	+1%
Asia	+6%
Rest of the world	+19%
<b>Group total</b>	<b>+3.5%</b>

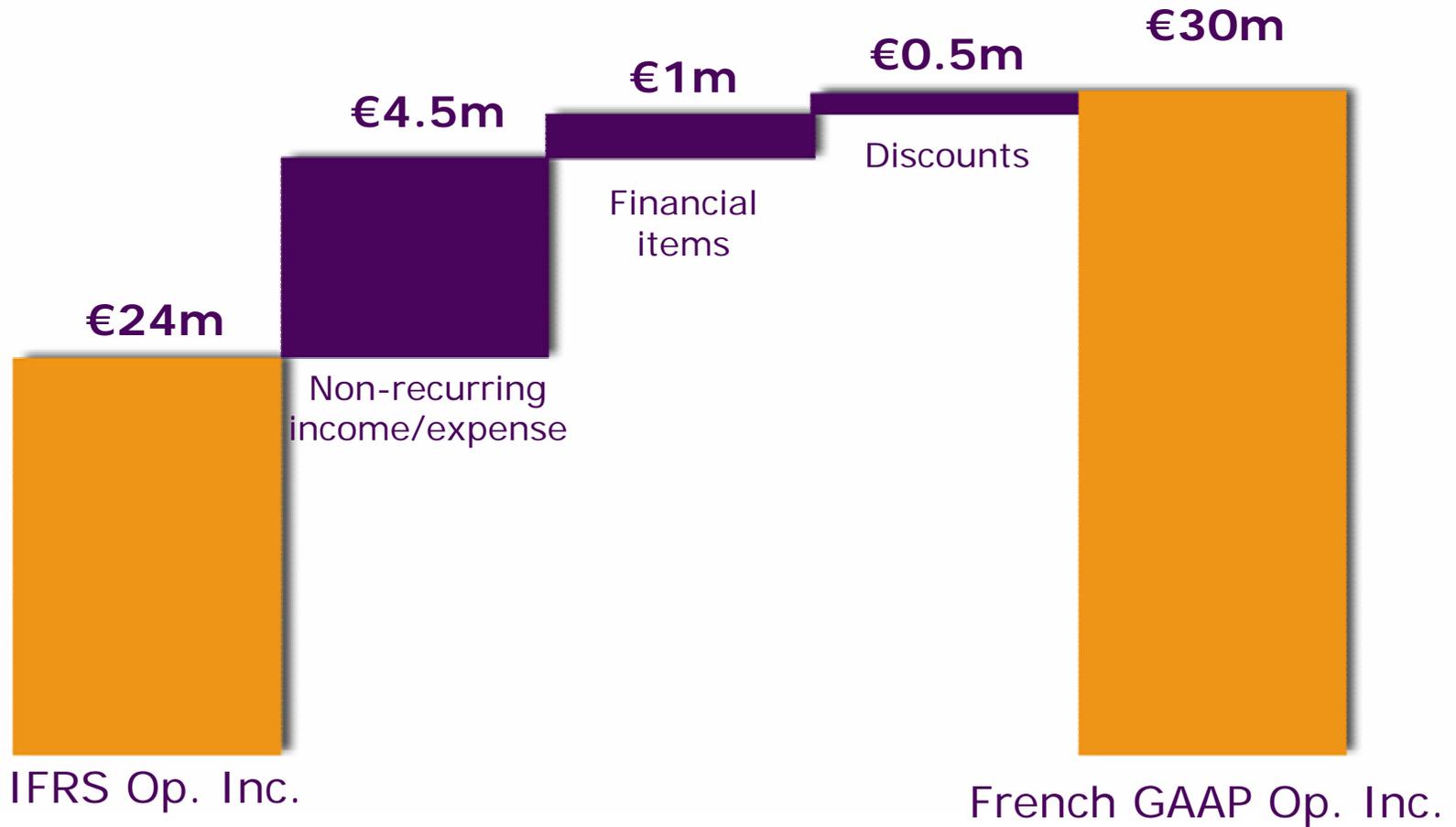
# Operating income: +39%



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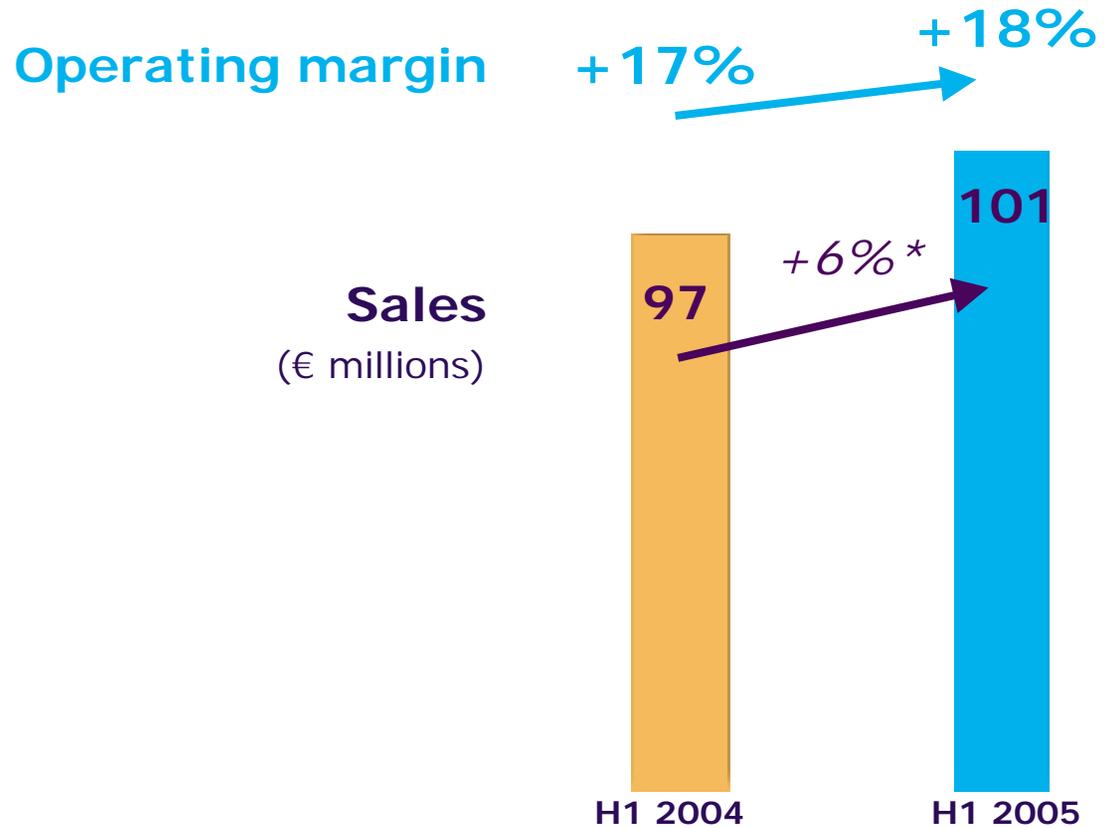


# Restatement of Operating Income



## Key strengths

- World leader
- Technical expertise
- High profitability



## Highlights

- Sales and earnings growth
- Launch Chongqing plant construction

# Electrical Components

## Electrical Applications (brushes)

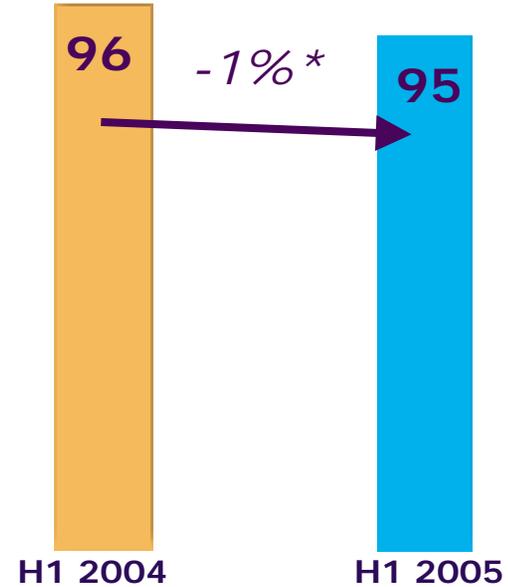
### Key strengths

- World leader
- Customer service
- Diversity of industrial outlets

### Operating margin



### Sales (€ millions)



*\*Like for like*

### Highlights

- Lower production in the US automobile industry
- Higher raw material prices

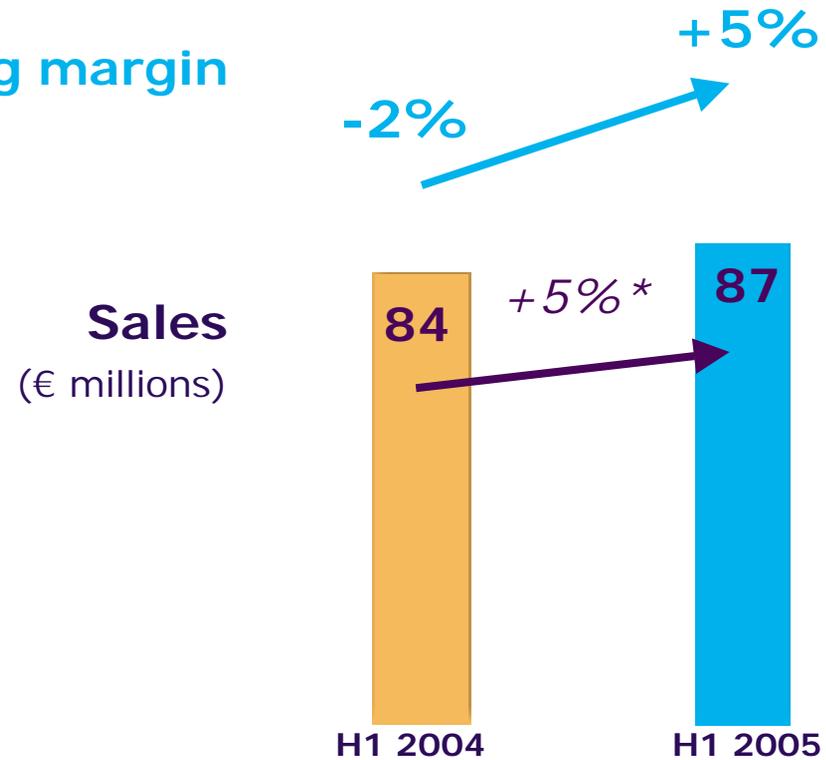
# Electrical Components

## Electrical Protection (fuses)

### Key strengths

- N°2 worldwide
- Comprehensive product range
- Technical leader

### Operating margin



\*Like for like

### Highlights

- Restructuring in Europe completed
- Strong demand in the US and Asia

## Key strengths

- N°3 worldwide
- Restructuring completed successfully

**Operating margin**

**+2%**

**+2%**



**Sales**  
(€ millions)

**40**

**-8%\***

**37**

H1 2004

H1 2005



*\*Like for like*

## Highlights

- Evreux plant closure under way

# Net income, Group share + 40%

	(€m)	H1 2005	H1 2004
<b>Sales</b>		<b>320.6</b>	<b>317.7</b>
<b>Operating income</b>		<b>24.3</b>	<b>17.5</b>
. Finance costs, net		(3.4)	(3.9)
. Current and deferred income tax		(8.1)	(4.5)
. Minority interest		(0.3)	(0.2)
<b>Net income attributable to Carbone Lorraine's shareholders</b>		<b>12.5</b>	<b>8.9</b>

# Cash flow statement

## Operating activities

(€m)

**H1 2005**
**H1 2004**

- Cash flow
- Change in the WCR
- Tax

### Net cash flow

 41.5  
 (23.9)  
 (5.2)

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**12.4**

 35.8  
 (30.3)  
 (3.0)

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**2.5**

## Investing activities

- Increase in property, plant and equipment
- Increase in financial assets
- Disposals

### Cash flow

 (9.1)  
 (24.0)  
 1.2

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**(31.9)**

 (10.5)  
 (10.6)  
 7.0

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**(14.1)**

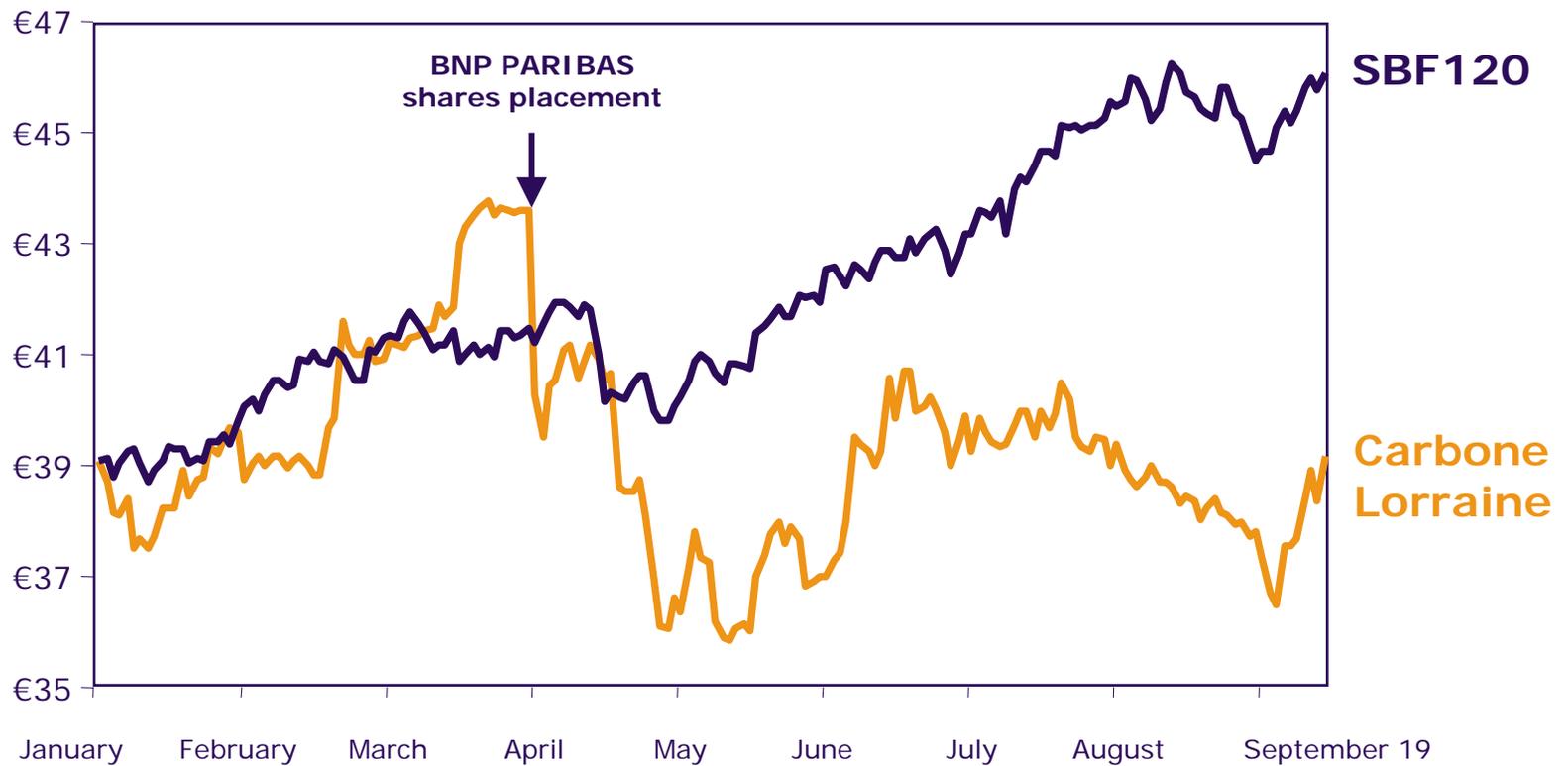
### Total cash flow

**(19.5)**
**(11.6)**

# Simplified balance sheet

	(€m)	June 30, 2005	Dec. 31, 2004
Non-current assets		372	332
Working capital requirement		161	136
Deferred tax		18	22
<b>Total assets</b>		<b>551</b>	<b>490</b>
Equity		278	255
Provisions		56	60
Employee benefits		53	50
Net debt		164	125
<b>Total equity and liabilities</b>		<b>551</b>	<b>490</b>
<b>Net debt/equity</b>		<b>0.59</b>	<b>0.49</b>

# Carbone Lorraine's 2005 share price



## Second-half trends

- Promising outlook in Advanced Materials and Technologies
- Savings plan implemented successfully
- No upswing in the North American automobile industry
- Gloomy economic conditions in Europe

**Strong growth of 2005**  
**Operating Income**



**S**trong earnings growth

**P**romising  
growth prospects

# Four organic growth drivers

**Our  
markets**

**Asia**

**Technologies**

**Our  
developments**

**Innovation**

**Customer  
service**

# Four organic growth drivers

Our  
markets

Asia



(Virtual picture)

# Electrical Components in China and in India

## Shanghai Electrical Protection



- General-purpose fuse line now in service
- Launch of a fuse line for semiconductors
- Manufacture of power-isolating switches

## Chennai Electrical Applications

- Transfer of production lines to an advanced technology unit
- First-class quality and high profitability



## Bangalore Electrical Protection

- Development of fuses for semiconductors
- Launch of a line of general-purpose fuses

# AMT in Asia China

## Kunshan

### High temp. applications

- Commissioned in April 2005
- Major order book for 2006

## Chongqing

### High temp. applications

- Equipment order placed
- First sales in 2006
- Fully operational early 2007

## Shanghai

### Anti-corrosion equipment

- Noble metals workshop commissioned in Sept. 2005
- Rapid start-up

# AMT in Asia: India & Japan

## Bangalore

### High temp. applications

- Inauguration of the workshop in March 2005
- Initial deliveries in September 2005

## Chennai

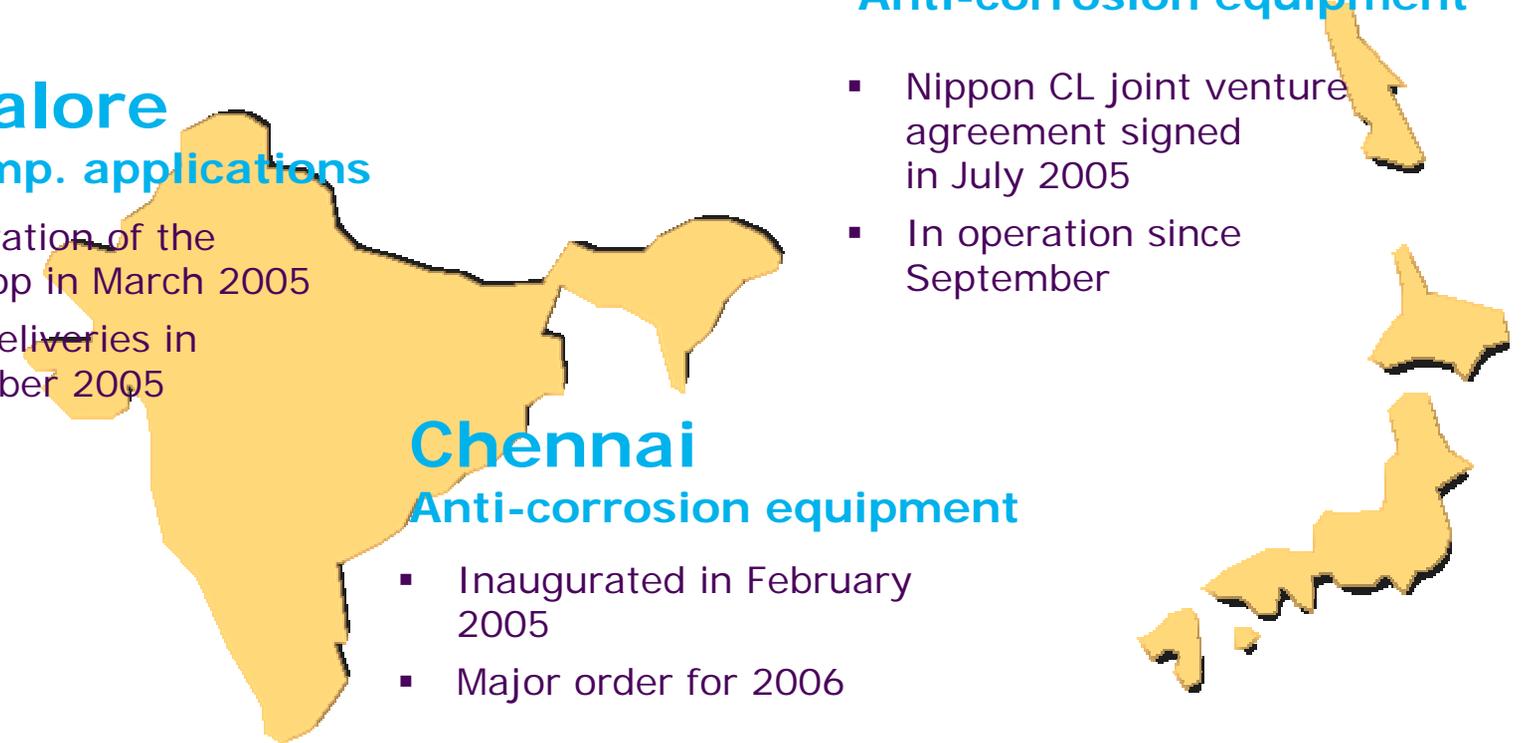
### Anti-corrosion equipment

- Inaugurated in February 2005
- Major order for 2006

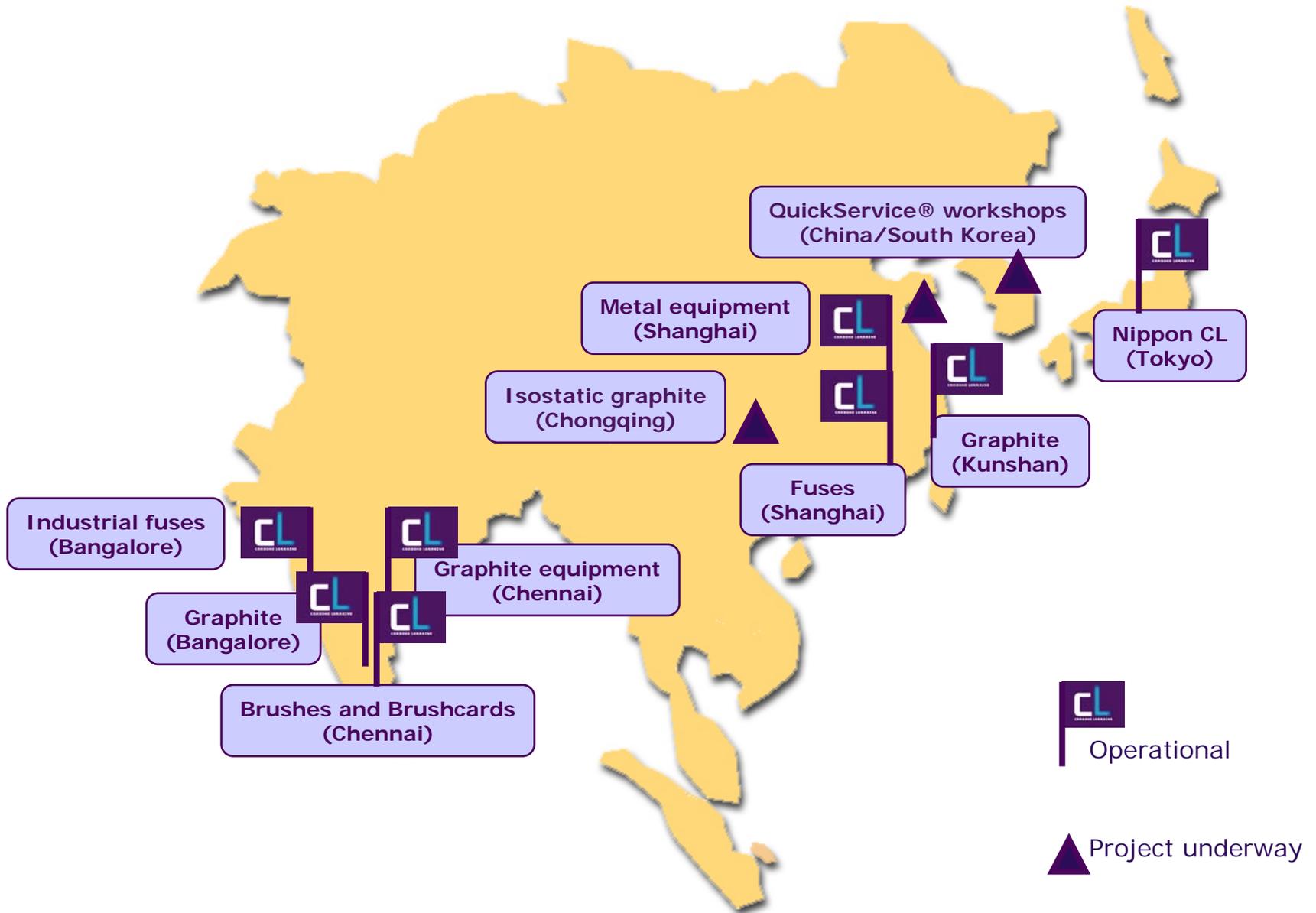
## Tokyo

### Anti-corrosion equipment

- Nippon CL joint venture agreement signed in July 2005
- In operation since September



# Asia is our priority



# Four organic growth drivers

**Our  
markets**



**Technologies**



# Expand in fast-growing technological markets

## Renewable energies



### Windmills

+ 10%

- Slip-ring assemblies and brushes
  - Fuses
  - Braking
- 



### Solar power

+ 30%

- Purified graphite
  - Fuses
-

# Expand in fast-growing technological markets

## Electronic components

### Silicon

+ 10%

■ Ultra-pure graphite

### Diodes

+ 15%

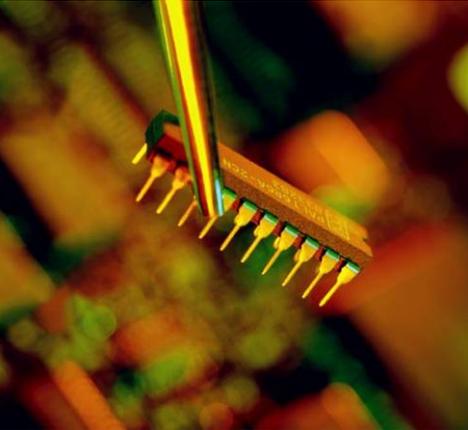
## Power electronics equipment suppliers

### Power semiconductors

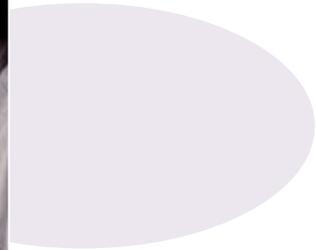
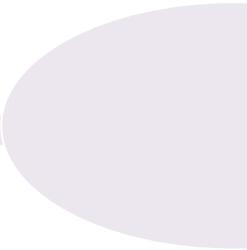
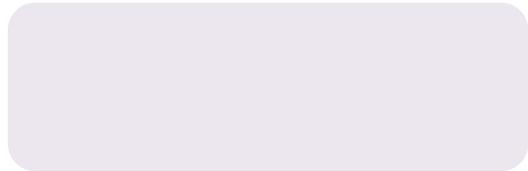
+ 5%

■ Fuses

■ Cooling devices



# Four organic growth drivers





## Anti-corrosion equipment: **CL Clad**

- Project** ■ Brazing technology making it possible to clad steel with noble metals
- Main applications in reactors for the chemicals and pharmaceuticals industries

## Timetable

Purchase of equipment  
**Completed**

Construction of the kiln  
**H1 2006**

Initial deliveries  
**H2 2006**

# Innovation



Electrical Protection:

## Fuses for railway lightning arrestors

**Project** ■ Smart fuse technology helping to identify and signal defecting lightning arrestors in railway systems

## Timetable

SNCF approval  
Obtained

Initial sales (SNCF)  
End of 2005

Other rail networks  
2007

# Four organic growth drivers



**Our  
developments**

**Customer service**

# Customer service

## Electrical Protection: Brand Labeling



**Project** ■ Outsourcing by customers of fuses and fuseholder manufacturing activities that were previously carried out in house

## Status

Equipment order  
**Completed**

Initial production  
**Underway**

Fully automated production  
**End 2006**

**GEARED**

**UP**

**FOR**

**GROWTH**

