



Continuously Improving.

Lead**Ing.** 



Frankfurt, 16<sup>th</sup> May 2011 Prof. Dr Wolfgang Reitzle

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### Agenda



- 1. Operational and Financial Performance
- 2. Strategic Focus:
  - Growth Markets
  - Energy / Environment
  - Healthcare
- 3. Outlook

### Highlights - Q1 2011



#### Continuously Improving.

Ongoing growth momentum drives group sales up 14.9% to  $\le 3,325$  m Group operating profit grows over-proportionately by 18.7% to  $\le 761$  m Strong EPS increase with reported EPS up 42.7% to  $\le 1.67$  and adjusted EPS of  $\le 1.88$  (+33.3%) Operating Cash Flow increases by 10.8% to  $\le 440$  m

#### Double-digit earnings growth driven by widespread recovery and HPO initiatives

Growth markets continue their strong momentum

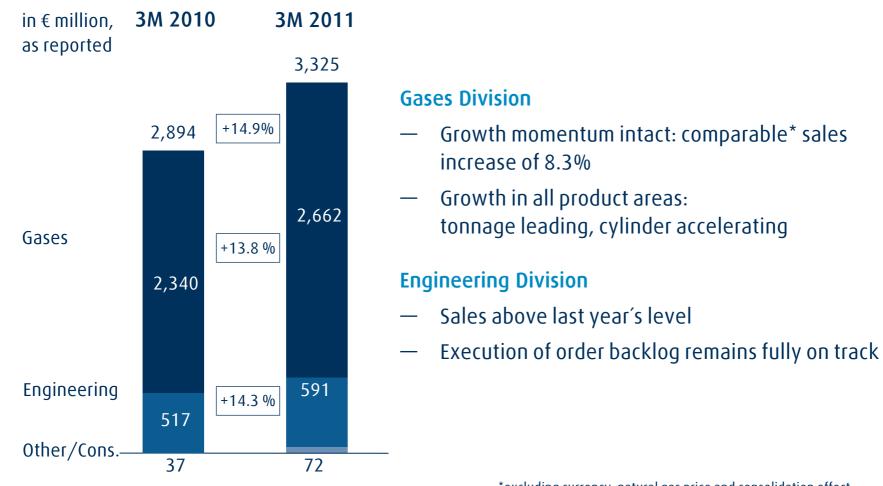
Mature regions on solid growth levels supported by further recovery in the cylinder business
Increase of the group operating margin by 80 basis points to 22.9%

#### 2011 Outlook reinforced

Growth in sales and operating profit vs. record year 2010 HPO: € 650-800 m of gross cost savings in 2009-2012

### Group, sales by Divisions Unchanged growth momentum drives group sales up 14.9%

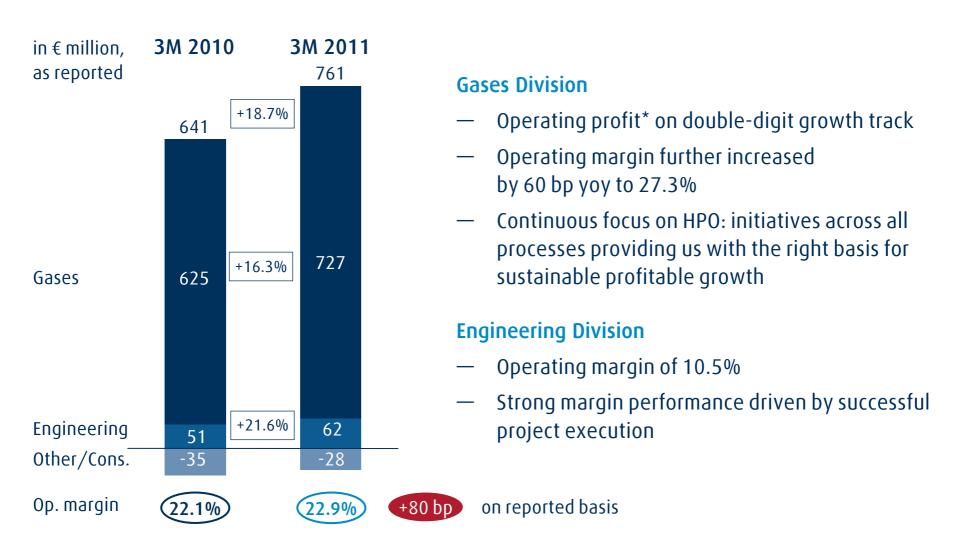




<sup>\*</sup>excluding currency, natural gas price and consolidation effect

## **Group, operating profit by Divisions**Further group margin improvement by 80bp to 22.9%

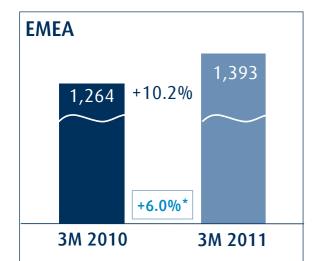




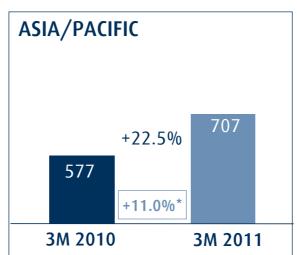
## Gases Division, sales by operating segment Growth momentum continues in all regions



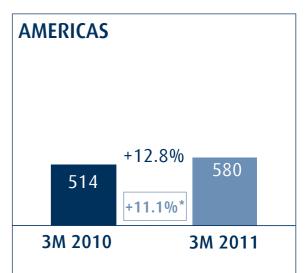
#### in € million



- Growth in Tonnage due to higher capacity utilization and start ups
- Further recovery in Cylinder in Eastern Europe



- Growth led by Greater China
- Strong growth in Tonnage in all regions also supported by ramp ups and start ups among others in China and Malaysia

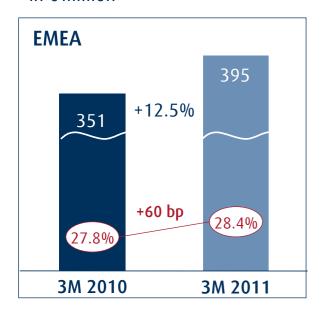


- Continuous growth momentum in both regions
- Tonnage as main driver in North America
- Double-digit growth in all product areas in South America

## **Gases Division, operating profit by operating segment**Operating margin further increased to 27.3%



#### in € million



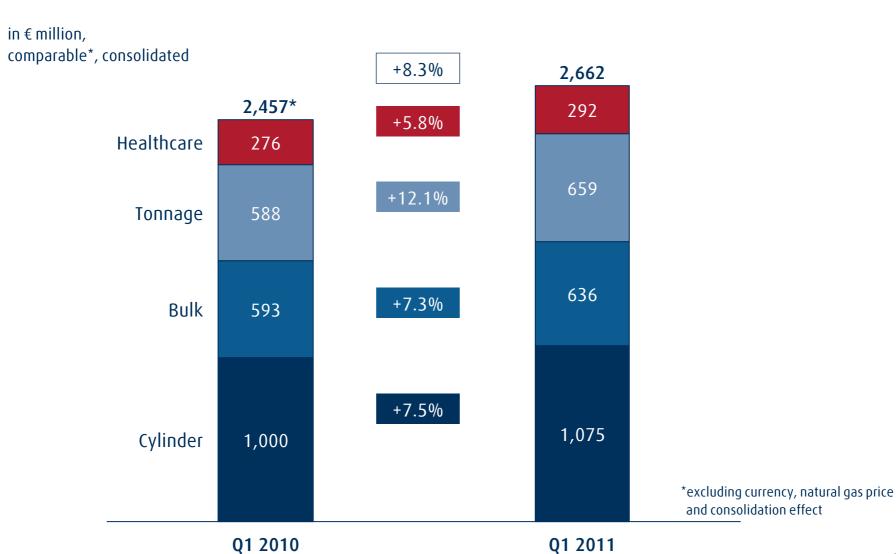




- Continuous implementation of HPO initiatives supports margin development in all regions
- EMEA and AMERICAS drive the margin improvement in the Gases Division in the first quarter
- ASIA/PACIFIC margin in the first quarter slightly affected by pre-investments in structural growth initiatives in ASIA

## Gases Division, sales by product areas Growth in all product areas

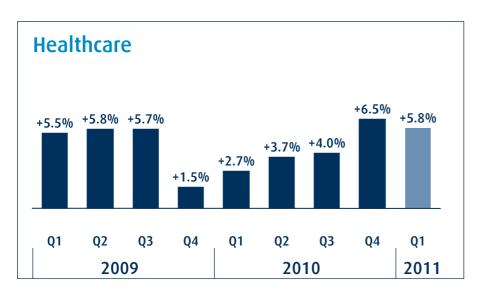


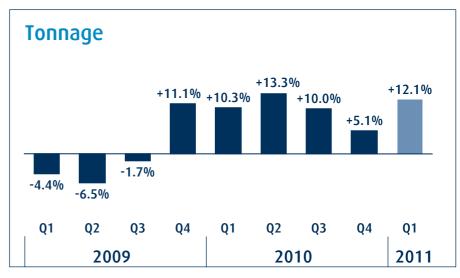


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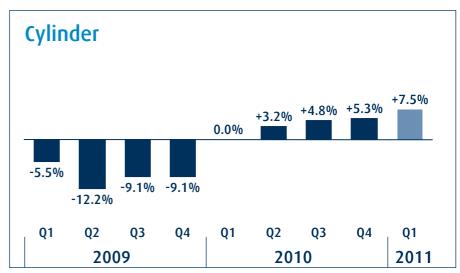
## Gases Division, product areas (comparable yoy growth) Cylinder business continues recovery











## **Engineering Division, key figures**Execution of projects fully on track



- Order intake still characterised by small and midsize projects
- More than 50% of order intake from Europe and North America show a further improvement of the investment climate in mature countries
- Order backlog stays strong at € 3.714 bn (year-end 2010: € 3.965 bn)
- Margin ahead of target margin of at least 8%

in € million	3M 10	3M 11	Δ ΥοΥ
Order intake	502	444	-11.6%
Sales	517	591	+14.3%
Operating profit*	51	62	+21.6%
Margin	9.9%	10.5%	+60 bp

<sup>\*</sup>EBITDA before non-recurring items and incl. share of net income from associates and joint ventures

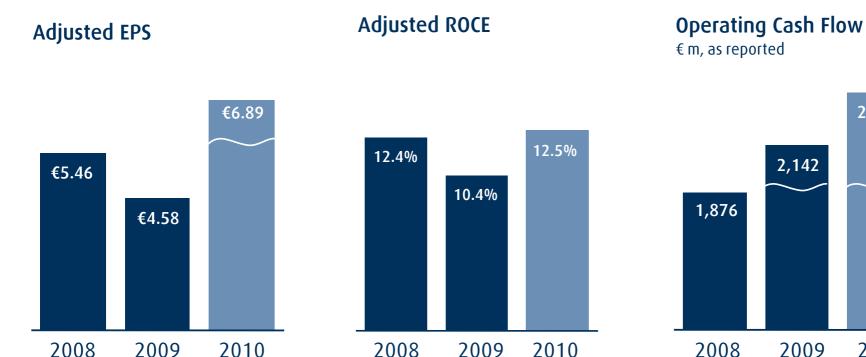
### Group

### Financial key indicators at record levels



#### Further improvement in all our three key financial indicators

- Profitable growth for our shareholders: adjusted EPS and adjusted ROCE
- Strong cash flow generation further improved: OCF up by 13.1%



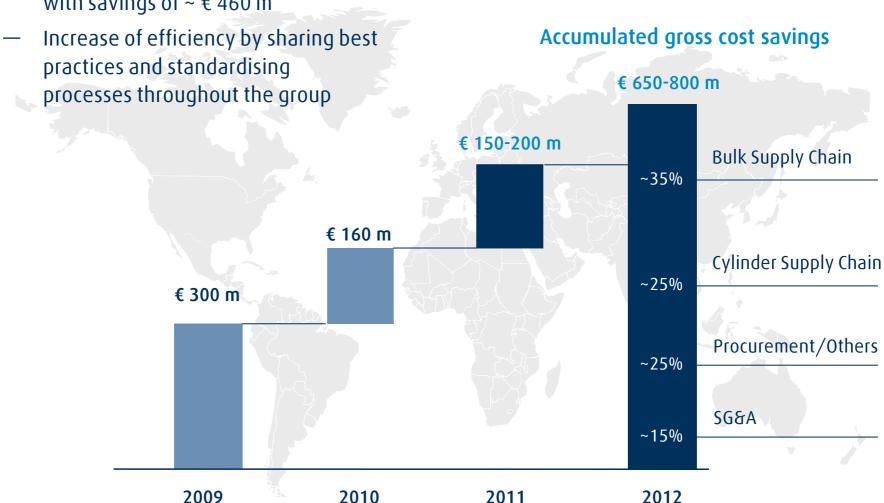
2,422

2010

## **HPO (High Performance Organisation)**Covering the full value chain in all regions



 Successful start and continuation with savings of ~ € 460 m



### Agenda



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### Mega-trends

### Leveraging growth with our Gas & Engineering set-up







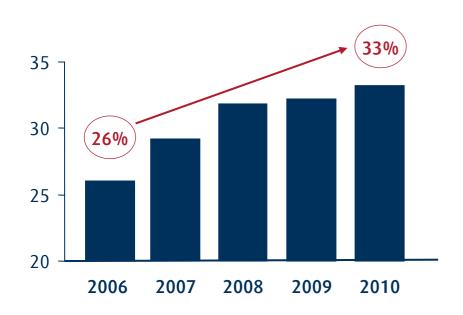
Leveraging Gases & Engineering business synergies

## Mega-trend Growth Markets Growth trend leveraged by strong investment decisions

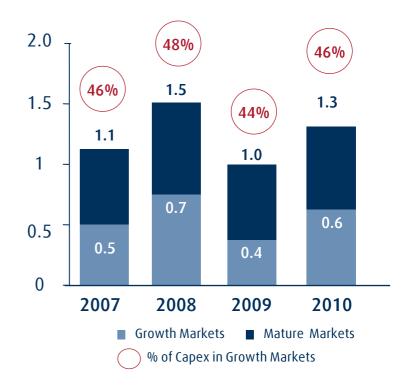


#### Growth market sales, excl. JVs

(% of total Gases sales)



#### Gases Capex 2007 – 2010 in € bn

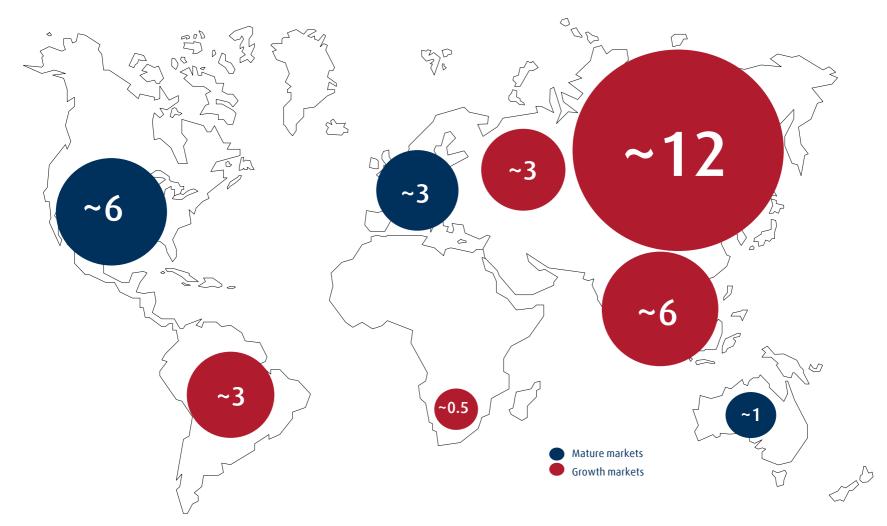


Further increasing footprint in Growth Markets

Nearly half of Capex allocated to Growth Markets

# Mega-trend Growth Markets Additional industrial gases market 2010 vs. 2020 in € bn





# Mega-trend Growth Markets Leading Gases set-up in local growth markets



#### Market leader in 4 out of 5 Growth Markets



## **Gases Division, project pipeline**Solid basis for sustainable growth



- Around € 2.8 bn investments between 2009-2012 (thereof € 0.6 bn in JVs @ share)
- Project amount 2012 further increased by € 100 m to € 650 m
- Close to 70% of total project-Capex allocated to Growth Markets
- Increasing number of project opportunities with a large portion in Growth Markets

## Project amount by on-stream date (incl. JVs)

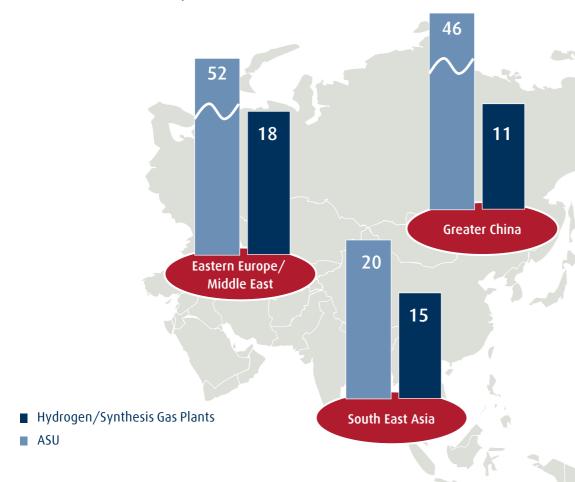


- Market opportunities for projects
   12 months forward as published
   in March 2011 around € 4 billion
- Further project wins in growth and mature markets in all customer segments

# Mega-trend Growth Markets Long-term Engineering footprint in Asia enables growth



Number of ASU and hydrogen/synthesis gas plants sold by Engineering in Middle East and Asia to external customers since the year 2000\*



#### **Greater China**

- Long-standing customer relations
- Two Engineering hubs and one manufacturing site

#### South & East Asia

- Broad customer basis
- Two Engineering hubs in India

#### Eastern Europe & Middle East

Long-term presence and customer relations in particular in the Middle East

### Linde Gases Division in Greater China Chongqing - Developing a new large chemical cluster





#### **April 2011**

- IV agreement with Chongging Chemical and Pharmaceutical Holding Company (CCPHC), 60% Linde share (fully consolidated)
- Large scale HYCO plant: ~ € 200 m capex, expected on stream date 2014
- Long-term on-site supply contracts with CCPHC and BASE

#### April 2009

- JV agreement with Sinopec Sichuan Vinylon Works (SVW), 50% Linde share
- Air Separation plant: ~ € 50 m capex, expected on stream date 2011
- Long-term on-site supply contract with SVW



### Mega-trend Growth Markets Leading player in Greater China



Oil/Petrochemicals



扬子石化-巴斯夫有限责任公司 **BASF-YPC Company Limited** 





**Chemicals** 











Metallurgy













**Electronics** 























Others















## Mega-trend Energy/Environment Potential Energy/Environment market is huge



- Competitive advantage due to LeadIng Engineering know-how and in particular also development of equipment
- Better use of fossil resources, e.g. enhanced oil & gas recovery
- Renewable energy,
   e.g. hydrogen fueling
- Clean Energy,
   e.g. Clean Coal
- Other, e.g.Photovoltaic,Coal-to-Gas

Energy/Environment annual market revenue estimates in € bn\*

Pilot projects and small volumes (Please find assumptions for estimates on page 52)

Existing growth markets Future growth markets € 80 -140 bn € 14 -19 bn € 5 -7 bn **CLEAN COAL** CO<sub>2</sub> HANDLING H<sub>2</sub> FUELING EOR (N2 / NRU / CO2) LNG Other (e.g. Photovoltaic, Coal-to-Gas) 2015 2020 2030 Annual market revenue in the respective year

<sup>\*</sup>Assuming 100% Build Own Operate and excluding sale of equipment and plants

## Mega-trend Energy/Environment Clean Energy development trends





## High market potential for merchant LNG:

- No natural gas pipeline grid on the Swedish East coast
- Swedish government focused on renewable energy with LNG as bridge technology
- LNG replaces LPG, light and heavy fuel oil
- LNG attractive as fuel for transportation to reduce sulphur and NOx emissions
- Supply provided by customer of Engineering Division in Norway



## World's largest biofuel plant producing LNG from landfill gas:

- Plant has produced > 2 m gallons LNG since start-up in 2009
- Fuel for around 300 refuse trucks
- Carbon emission reduction by 97% compared to diesel and 95% compared to pipeline natural gas
- 2010 California Governor's Environmental and Economic Leadership Award



## Reduction of CO<sub>2</sub> Emission by 170k tons per annum:

- Replacement of CO<sub>2</sub> generated by gas furnaces with CO<sub>2</sub> from a Shell refinery
- 85 km transportation pipeline with
   150 km of distribution lines
- Prevents combustion of 95 million cubic metres of natural gas

Future growth markets

Existing growth markets

## **Mega-trend Healthcare**Growth through innovation and regional expansion





← Additional medical gases market 2010 vs. 2020 in € bn

#### Linde Healthcare development approach

Mature markets

Growth markets

Source: Linde database, figures incl. gas therapies and care concepts

Core: Hospital Care

Ge ex • Linde Healthcare

**Mature Markets** 

Other geographies



**Care Concepts** 

Homecare

**Gas Therapies** 



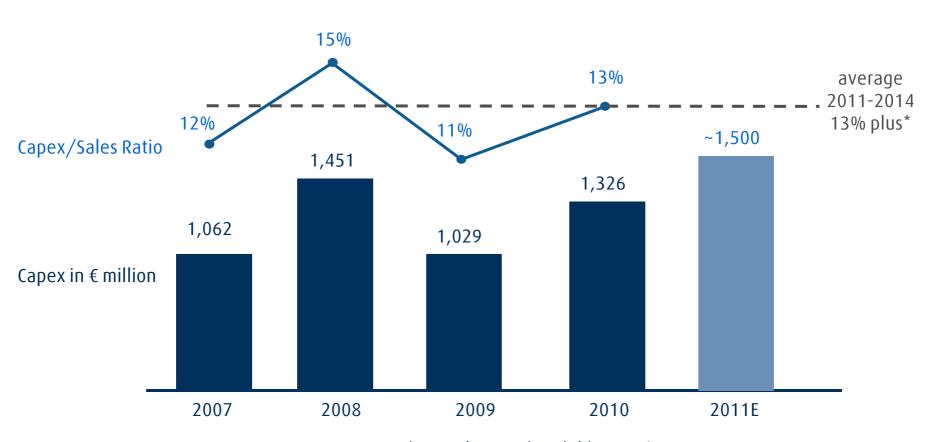
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## **Gases, Capex**Development Capex Sales Ratio 2007 - 2010





Data 2007-2010 @ actual average fx rates at the end of the respective year;

<sup>\*</sup> plus: additional potential for mega-projects

## Outlook



2011	Group	<ul> <li>— Growth in sales and operating profit vs. 2010</li> <li>— Confirmation of HPO-programme: € 650-800 m of gross cost</li> </ul>
		savings in 2009-2012
	Gases	— Sales increase vs. 2010
		— Operating profit to grow at a faster pace than sales
	Engineering	<ul> <li>Sales at the same level as in 2010</li> </ul>
	gg	— Operating margin of at least 8%
2014	Group	<ul> <li>Operating profit of at least € 4 bn</li> </ul>
		— Adjusted ROCE of 14% or above
	Gases	<ul> <li>Average capex/sales ratio 13% plus</li> </ul>
		<ul> <li>Revenue increase above market growth</li> </ul>
		— Further increase in productivity

## Agenda



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  - High Performance Organisation
  - Growth Potential Mega-trends
- 3. Outlook

**Appendix** 

# **Group Financial Highlights** 3M 2011



in € million	3M 10	3M 11	in %
Sales	2,894	3,325	+14.9
Operating profit	641	761	+18.7
Margin	22.1	22.9	+80 bp
EBIT before PPA depreciation	410	507	+23.7
PPA depreciation	59	61	-
EBIT	351	446	+27.1
Financial Result	-68	-49	-
Taxes	70	94	-
Net income	213	303	+42.3
Net income – Part of shareholders Linde AG	198	284	+43.4
EPS in €	1.17	1.67	+42.7
Adjusted EPS in €	1.41	1.88	+33.3

## **Group, FY 2010** Key P&L items



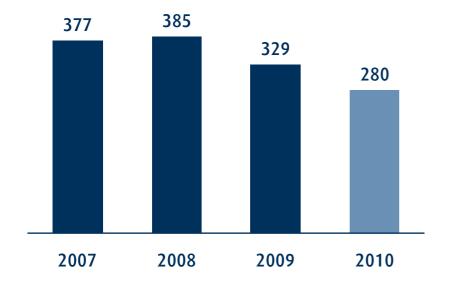
in € million	2009	2010	Δin %
Sales	11,211	12,868	14.8
Operating Profit	2,385	2,925	22.6
Margin	21.3%	22.7%	+140bps
EBIT before PPA depreciation	1,460	1,933	
PPA depreciation	-293	-254	
EBIT	1,167	1,679	
Financial Results	-329	-280	
Taxes	-185	-335	
Net income – Part of shareholders Linde AG	591	1,005	
Net income adjusted	772	1,167	51.2
EPS in €	3.51	5.94	
EPS in € adjusted	4.58	6.89	50.4

### Group

### Financial Result and Tax Rate



Financial Result (in € million)



**Tax Rate** 



# **Group, Cash Flow Statement**Operating Cash Flow up 10.8% to € 440 m



in € million	Q1 10	Q1 11
Operating profit	641	761
Change in Working Capital	-98	-180
Other changes	-146	-141
Operating Cash Flow	397	440
Investments in tangibles/intangibles	-223	-237
Acquisitions/Financial investments	-6	-13
Other	38	43
Investment Cash Flow	-191	-207
Free Cash Flow before Financing	206	233
Interests and swaps	-22	-45
Dividends and other changes	-1	-2
Net debt decrease (+)/increase (-)	+183	+186

## **Group, FY 2010**Cash flow statement



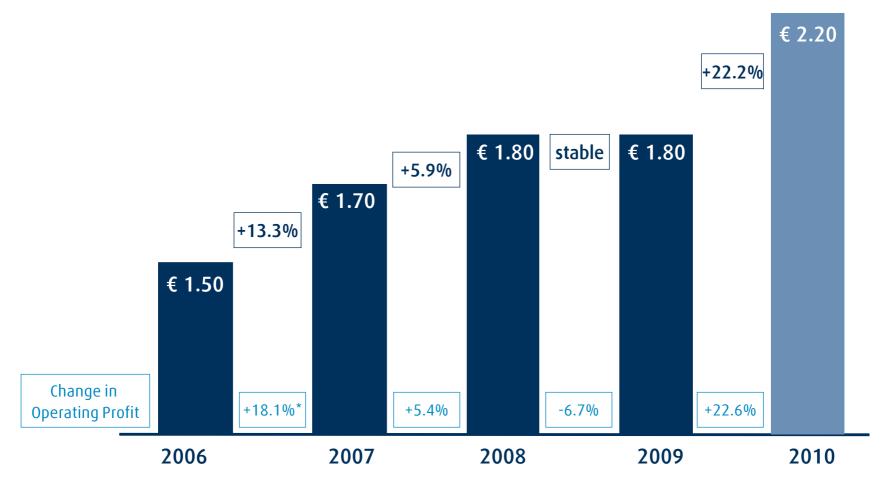
in € million	Q1/10	Q2/10	Q3/10	Q4/10	2010	2009
Operating Profit	641	755	749	780	2,925	2,385
Change in Working Capital	-98	-3	-25	210	84	160
Other changes	-146	-247	-93	-101	-587	-403
Operating Cash flow	397	505	631	889	2,422	2,142
Investments in tangibles / intangibles	-223	-280	-261	-428	-1,192	-1,104
Acquisitions / Financial investments	-6	-9	-20	-33	-68	-86
Other	38	44	54	59	195	200
Investment Cash flow	-191	-245	-227	-402	-1.065	-990
Free Cashflow before financing	206	260	404	487	1,357	1,152
Financing activities	-23	-423	-102	-30	-578	-630
Net debt increase (+) / reduction (-)	183	-163	302	457	-779	-522

### Group, dividends

### Proposed dividend increased by 22.2% to € 2.20



#### Consistent dividend policy



<sup>\*</sup> Comparable change: prior year figures including twelve months of BOC

### Group, solid financial position

### FY 2010: Stable long-term financing



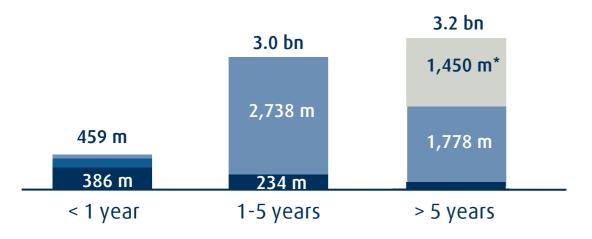
#### Well-spread and long-dated maturity profile

- Regular issues have continuously lengthened our refinancing schedule
- More than 90% of total financial debt is due beyond 2011
- Approx. 50% of total financial debt has a longer maturity than 5 years

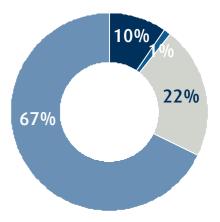
#### Balanced mix of various financing instruments

- Long-term bond financing covers approx. 90% of financial debt
- Strategic funding in EUR, GBP, USD and AUD

#### Financial debt, by maturity (in €)



## Financial debt, by instrument



- Senior Bonds
- Subordinated Bonds (\*callable in 2013/2016)
- Commercial Paper
- Bank Loans

### Group, solid financial position





#### € 2.5 bn committed revolving credit facility maturing in 2015

- Arranged in May 2010 with 25 national and international banks
- Replaced € 2 bn syn loan maturing in 2011 and € 1.6 bn forward start facility 2011/2013
- No financial covenants
- Fully undrawn

#### More than € 1 bn cash

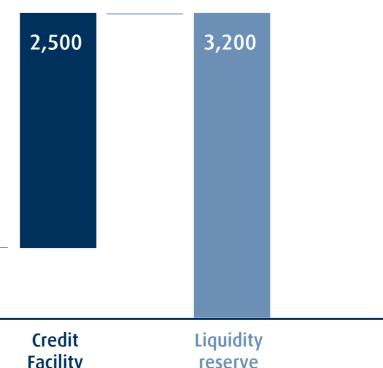








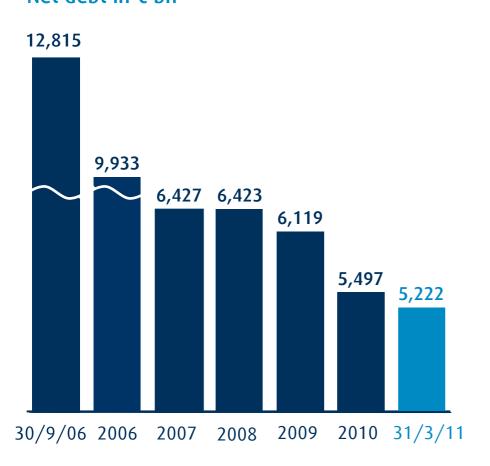




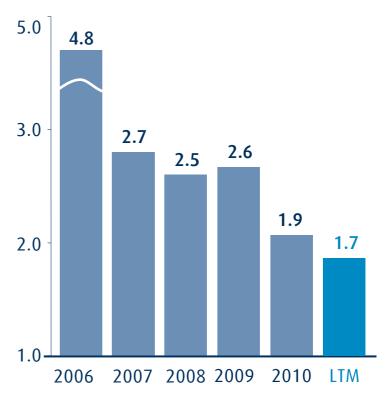
## **Group, solid financial position**Net debt/EBITDA-ratio of 1.7x



Net debt in € bn



#### Net debt/EBITDA



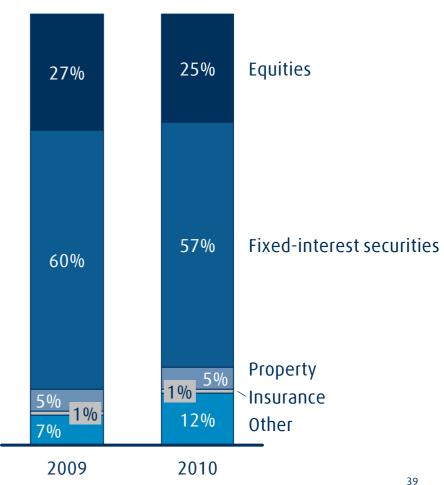
### Group, Pensions Key figures



### **Net obligation**

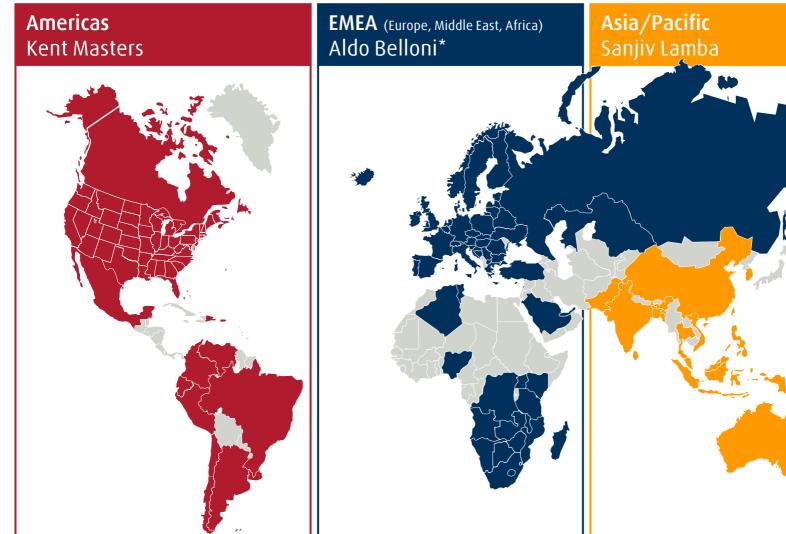
in € million	DBO	Plan asset	Net obligation
01.01.2010	4,744	3,896	848
Service costs	93		93
Net financing	265	246	19
Actuarial gains/losses	-92	141	-233
Contributions/payments	-217	-9	-208
FX	209	200	9
Other	-31	-7	-24
31.12.2010	4,971	4,467	504

#### Pension plan assets portfolio structure



### Gases Division, **New Operating Segments**







### **Gases Division, Operating Segments**Historical data 2010



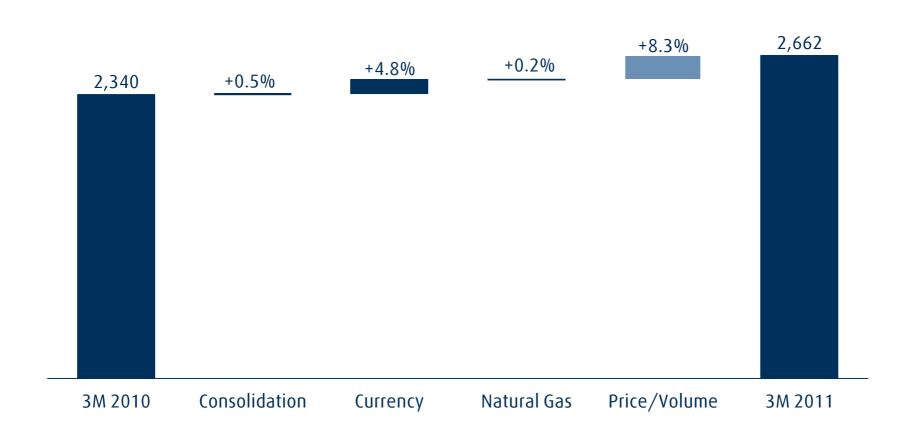
EMEA (€ m)	Q1 2010	Q2 2010	Q3 2010	Q4 2010	FY 2010
Sales	1.264	1.349	1.365	1.352	5.330
Operating profit <sup>1)</sup>	351	386	389	387	1.513
Operating margin	27,8%	28,6%	28,5%	28,6%	28,4%
Asia/Pacific (€ m)	Q1 2010	Q2 2010	Q3 2010	Q4 2010	FY 2010
Sales	577	677	711	727	2.692
Operating profit <sup>1)</sup>	162	190	200	202	754
Operating margin	28,1%	28,1%	28,1%	27,8%	28,0%
Americas (€ m)	Q1 2010	Q2 2010	Q3 2010	Q4 2010	FY 2010
Sales	514	581	605	579	2.279
Operating profit <sup>1)</sup>	112	136	129	122	499
Operating margin	21,8%	23,4%	21,3%	21,1%	21,9%

<sup>1)</sup> EBITDA before non-recurring items, including share of net income from associates and joint ventures

# **Division Gases, sales bridge**3M sales increase of 8.3% on comparable basis



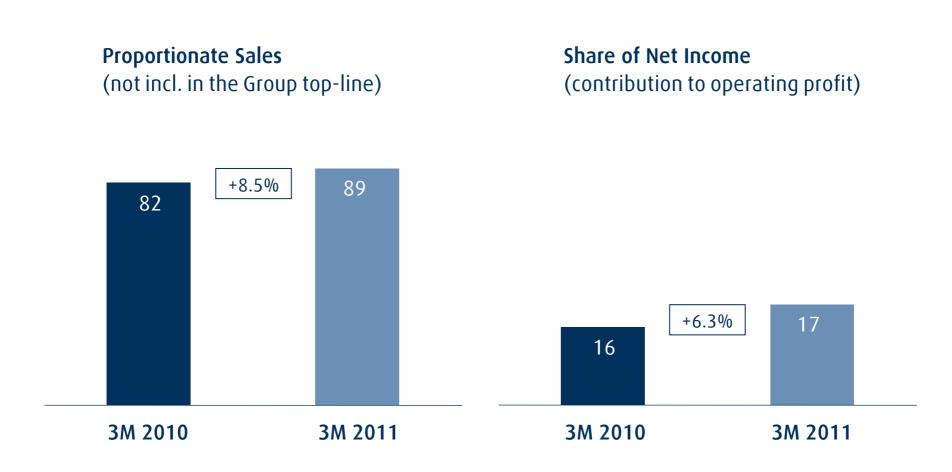
in € million



## **Gases Division, Joint Ventures**Asian projects drive growth of our JV sales



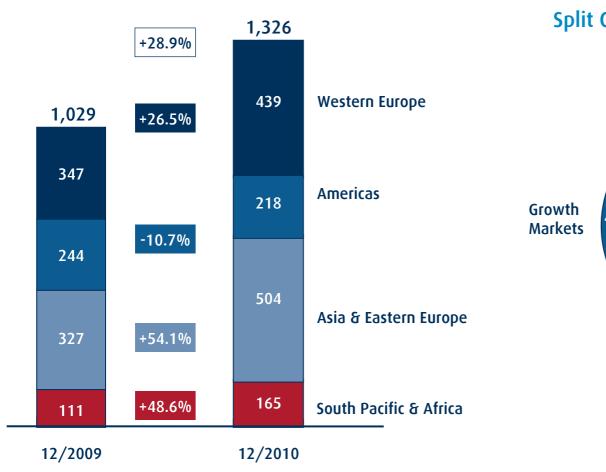
in € million



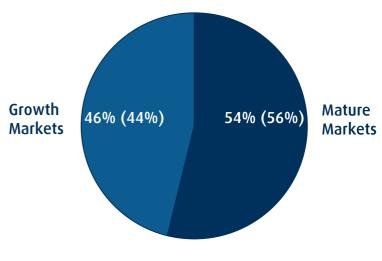
## **Gases Division**Split of Capex by operating segment



#### in € million



### Split Capex by markets 2010 (2009)



### Gases Division, product areas

### Various distribution mix served from one product source





- 15-year take-or-pay contracts (incl. base facility fees)
- Add. growth in JVs & Embedded Finance Lease projects



- Multi-year contracts
- Application-driven

### **Tonnage** Global #2

Healthcare Global #2



- > 70% of revenues from
- > 30% market share

Bulk Global #1 **Cylinder** Global #1



- Hospital care & Homecare
- Bulk & cylinder gases
- Structural growth



- High customer loyalty
- Includes specialty gases
- Cylinder rentals

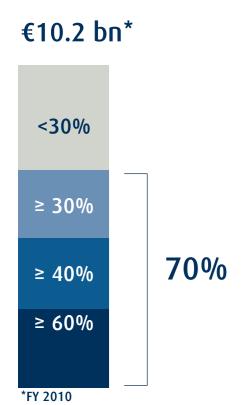
## Gases Division, local business model 70% of revenues come from a leading market position

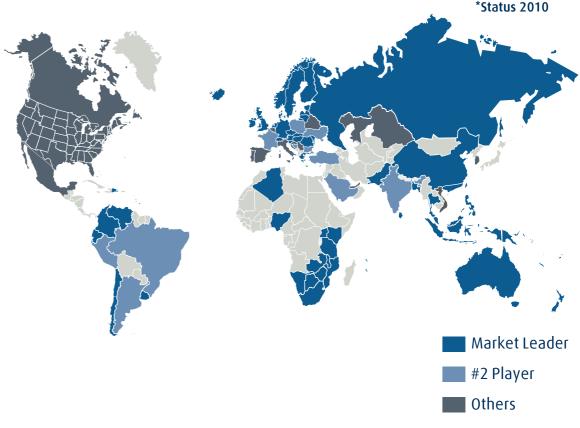


In bulk & cylinder: >70% of revenues from >30% market share positions

Sales split by market shares

Market leader in 47 of the 75 major countries, #2 Player in another 15



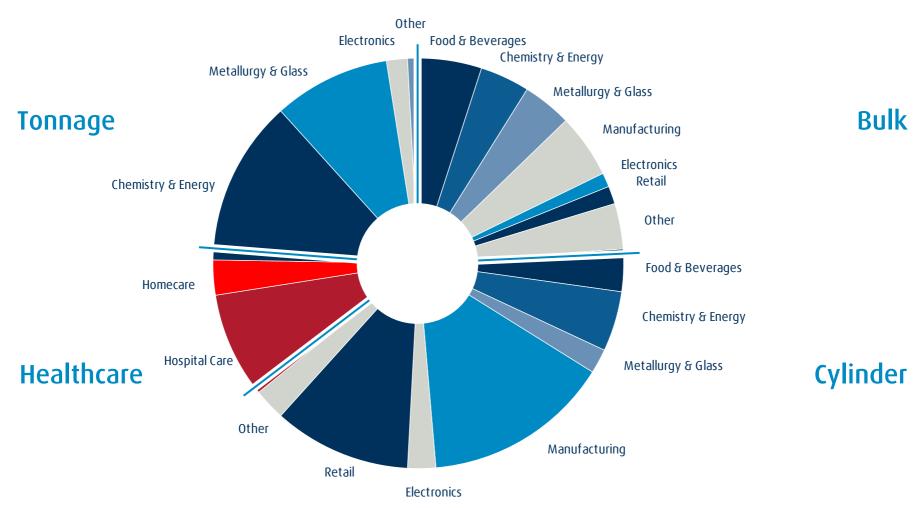


### Gases Division

### Stability driven by a broad customer base

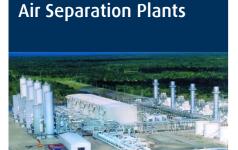


#### 2010: Split of product areas by major end-customer groups



## **Engineering Division**Global set-up with leading market position in all segments





Top1

Hydrogen/ Synthesis Gas Plants



Top2

**Olefin Plants** 



Top2

**Natural Gas Plants** 



Top3

Providing plants for the gases business and 3rd party customers

Providing chemistry and energy related solutions to 3rd party customers

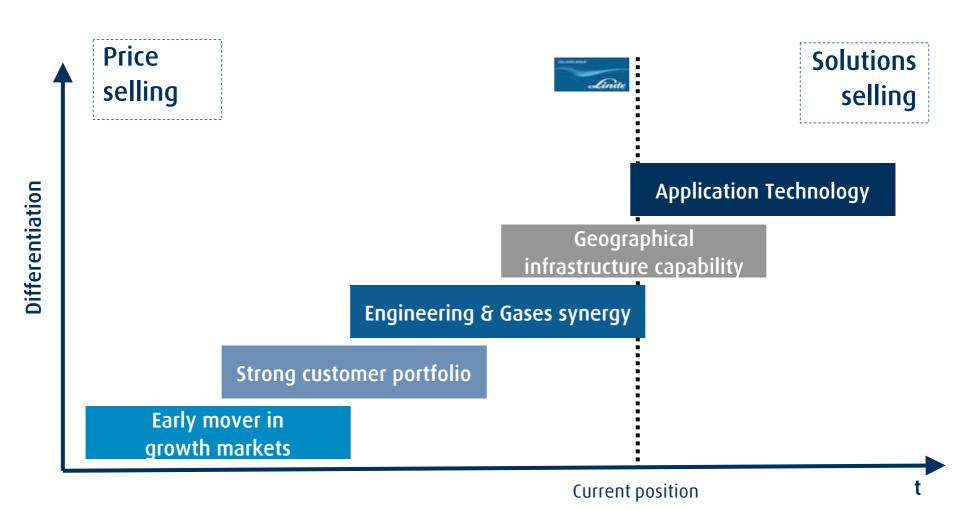


- Engineering base
- Sales office

Supporting the energy/environmental mega-trend and leveraging customer relations for gas projects

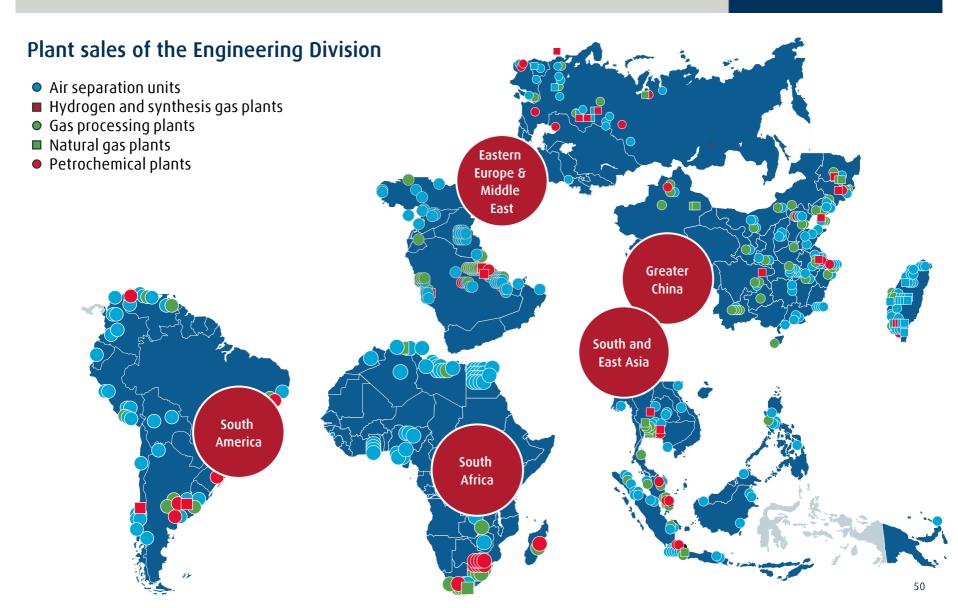
## Mega-trend Growth Markets Business approach in Growth Markets





# Mega-trend Emerging Markets Strong customer relationships in Engineering





## Number 1 with customers Integrated offer in selected industrial poles



#### **Integrated Clusters**

Example - Ningbo

Pipeline linkage (key concept)

Gases products supply to bulk and cylinder markets

Fully Integrated Cluster

Multiple customers supplied by pipeline (GAN/GOX/GHY)

3

Integrated plant operation



# Clean Energy market estimation 2020 & 2030 top down



#### General assumptions:

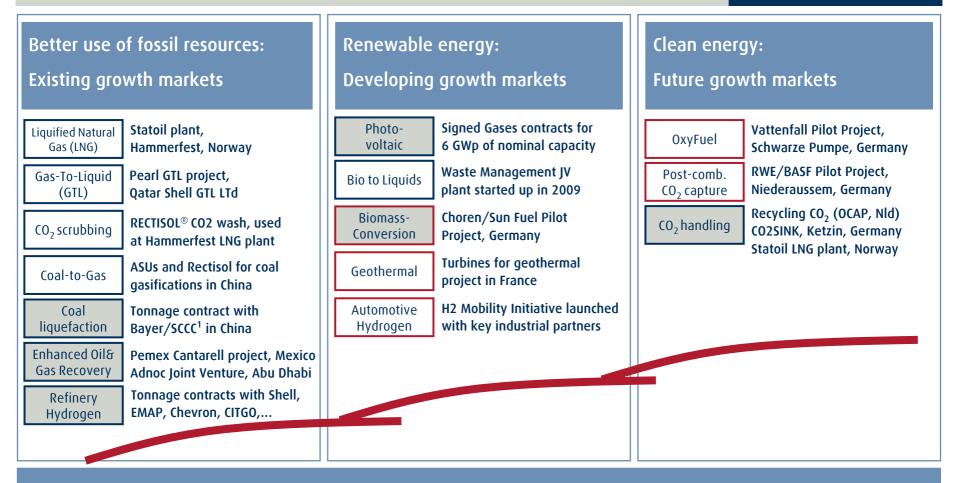
- Market numbers are directional only and w/o inflation or fx
- Oil price development at 80-100 USD/bll
- Outsourced gases market only (excl. captive market or equipment sales),

Market size in € bn				
	Assumptions for 2030	2015	2020	2030
LNG merchant/floating	<ul> <li>Based on penetration rate of LNG replacing existing fuels;</li> <li>Merchant LNG projects based on geographical set up and existing infrastructure</li> <li>Floating LNG projects</li> </ul>		6-10	11-23
Enhanced Oil Recovery Nitrogen Rejection Unit	<ul> <li>Single to double digit number of large N2 EOR/NRU projects</li> <li>Double digit number of large CO2 EOR projects including industrial CO2 capture and pipeline (overlapping w/CCS)</li> </ul>		4-5*	18-35*
Carbon Capture & Clean Coal	- Triple-digit number of 1 GW Carbon Capture (1.5 Gt/a CO2 at EUR25-40/t)			30-50
CO <sub>2</sub> networks	<ul> <li>Installation of significant pipeline network and corresponding compression (1.5 Gt/a handling fee CO2 at EUR 10-15/t)</li> </ul>		1	15-25
Hydrogen fuelling	<ul> <li>Installation of a significant fuel station infrastructure</li> <li>Corresponding annual H2 consumption of some bn tons p.a.</li> </ul>		1	10-15
Photovoltaic	- Includes all gases used for manufacturing of photovoltaic cells only		2	3
	Range	5-7	14-19	80-140

<sup>\*</sup> Assuming 100% Build Own Operate and excluding sale of equipment and plants

### Mega-trend Energy/Environment Current and future growth markets for Gases & Engineering





Higher efficiency in energy use: Sustained growth in traditional end markets REBOX® oxy-fuel (steel), WASTOX® (aluminium), Oxygen burner (glass), Water Treatment, ...

<sup>1</sup> Shanghai Cooking & Chemical Corporation

## Mega-trend Healthcare High potential for medical gases and related services



#### Linde Global Business Unit Healthcare:

- Second largest global medical gas business
- Active in more than 50 countries with approx 3,000 employees

#### Market Environment

- Increasing & ageing population
- Healthcare budget pressures & increasing regulation
- Healthcare quality issues & shortage of care providers
- Increasing wealth in Growth Markets
- Power patients

### **Healthcare Challenges & Opportunities**

- Increased use of medical gases & related devices, services
- Increase in chronic diseases
- Therapies offering quality of life & cost reductions
- Privatization of care/outsourcing of services

Linde's product offer

**Hospital Care** 

**Care Concepts** 

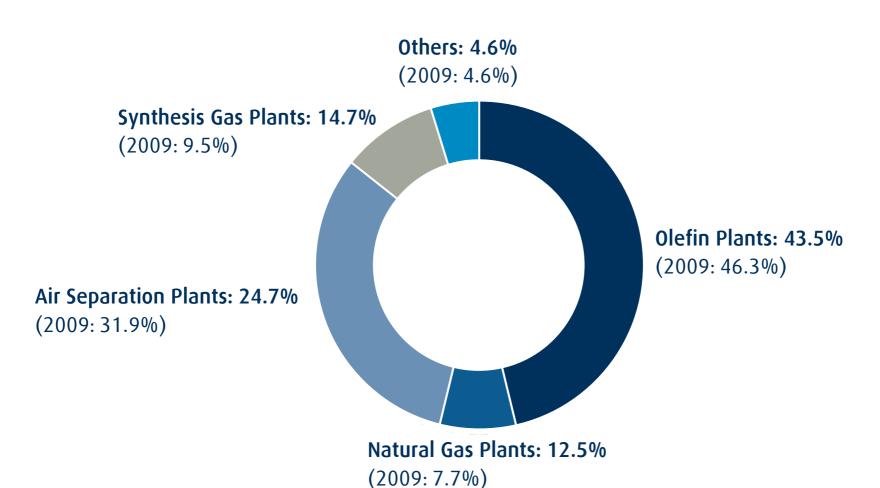
Homecare

Gas Therapies

## **Engineering Division**Order backlog diversified and of high quality

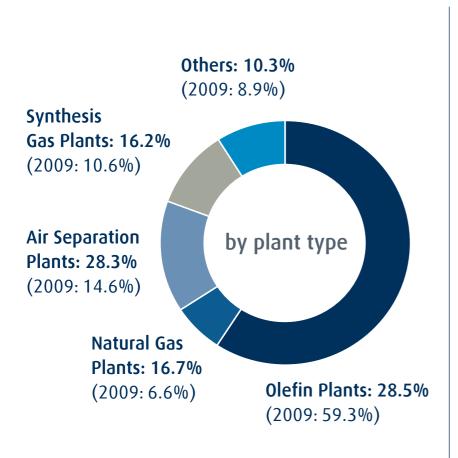


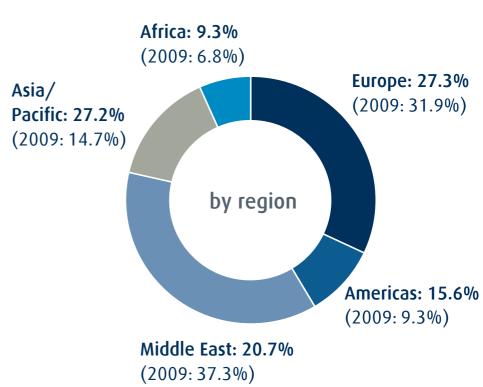
#### Order backlog by plant type (31/12/2010)



### **Engineering Division**FY 2010 order intake by plant type and region







### Group, Definition of financial key figures



Operating Profit	Return	EBITDA (incl. IFRIC 4 adjustment) excl. finance costs for pensions excl. special items incl. share of net income from associates and joint ventures
adjusted ROCE	Return	Operating profit - depreciation / amortisation excl. depreciation/amortization from purchase price allocation
	Average Capital Employed	equity (incl. minorities) + financial debt + liabilities from financial services + net pension obligations - cash and cash equivalents - receivables from financial services
adjusted EPS	Return	earnings after tax and minority interests + depreciation/amortization from purchase price allocation +/- special items
	Shares	average outstanding shares

### **Investor Relations**



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#### **Financial Calendar**

— Interim Report January to June: 29 July 2011

Interim Report January to September: 28 October 2011