



MVV Energie – Energising the Future

Fact book

1st Half of 2011/12 financial year

15 May 2012

www.mvv-investor.de

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Key financial data for the 1st half of 2011/12 financial year

Key figures of the MVV Energie Group for the 1st half of 2011/12 financial year – Adjusted

Earnings performance in Euro million

	2011/12 (1.10-31.3.)	2010/11 (1.10-31.3.)	% change
Sales excluding electricity and energy tax ¹	2,090	1,901	+10
Adjusted EBITDA ^{1, 2}	260	280	-7
Adjusted EBIT ³	180	204	-12
Adjusted EBT ^{3, 4}	148	173	-14
Adjusted net surplus for period ^{3, 4}	101	117	-14
Adjusted net surplus for period after minority interests ^{3, 4}	87	98	-11
Adjusted earnings per share ^{3, 4} in Euro	1.32	1.49	-11
Free cash flow ⁵	-237	26	–

1 previous year's figure adjusted

2 excluding non-operating IAS 39 derivative measurement items and including interest income from finance leases

3 excluding non-operating IAS 39 derivative measurement items, including interest income from finance leases and excluding restructuring expenses in previous year

4 impact of the expiry of the Kiel put option

5 cash flow from operating activities less investments in intangible assets, property, plant and equipment and investment property

Sales by reporting segments in the 1st half of 2011/12 financial year

Sales in Euro million

	2011/12 (1.10-31.3.)	2010/11 (1.10-31.3.) ¹	% change
Generation and Infrastructure	163	163	0
Trading and Portfolio Management	519	347	+50
Sales and Services	1,164	1,161	0
Strategic Investments	242	228	+6
Other Activities	2	2	0
Total	<u>2,090</u>	<u>1,901</u>	+10

¹ previous year's figure adjusted (amended presentation of building cost subsidies)

Adjusted EBIT by reporting segments in the 1st half of 2011/12 financial year

Adjusted EBIT in Euro million

	2011/12 (1.10-31.3.)	2010/11 (1.10-31.3.) ¹	% change
Generation and Infrastructure	83	82	+1
Trading and Portfolio Management	7	29	-76
Sales and Services	47	48	-2
Strategic Investments	38	41	-7
Other Activities	5	4	+25
Total	<u>180</u>	<u>204</u>	-12

¹ starting in 2011/12 financial year: overhead expenses allocated to reporting segments in line with causation on a capital employed basis (previous year's figure adjusted)

Reconciliation of EBIT (income statement) with adjusted EBIT in the 1st half of 2011/12 financial year

in Euro million

	2011/12 (1.10-31.3.)	2010/11 (1.10-31.3.)	+/- change
EBIT as reported in income statement	149	227	-78
+ Derivative measurement items under IAS 39	29	-56	+85
+ Restructuring expenses	-	31	-31
+ Interest income from finance leases	2	2	0
= Adjusted EBIT	<u>180</u>	<u>204</u>	-24

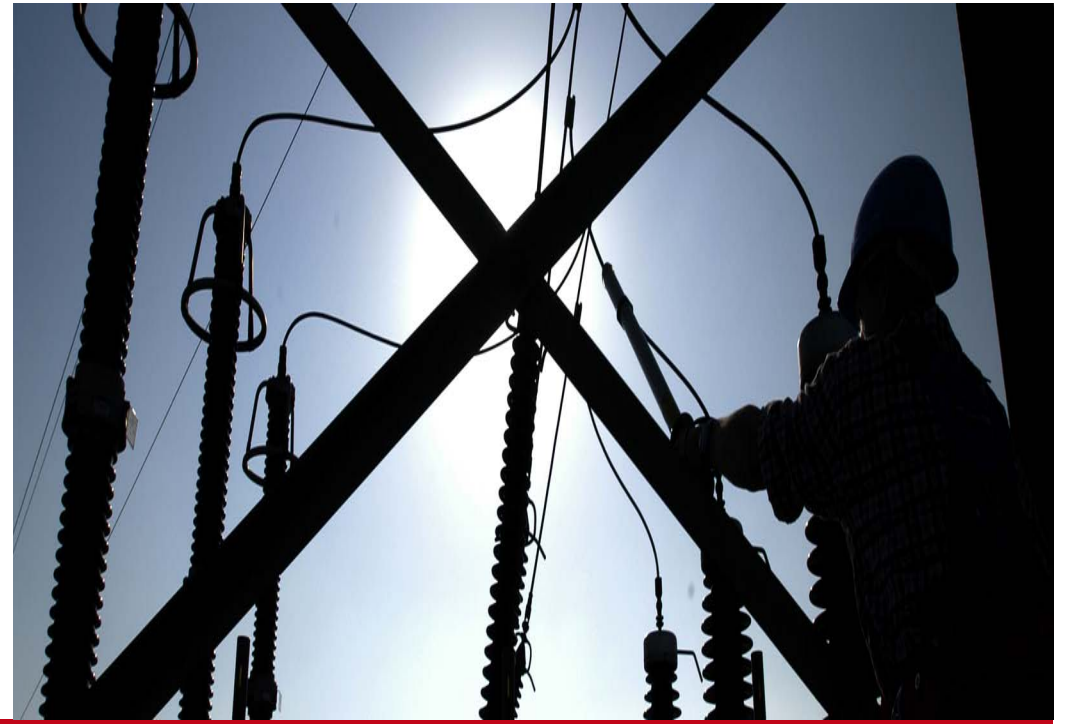
Key factors in the 1st half of 2011/12 financial year affecting year-on-year adjusted EBIT performance

Positive factors

- ▶ Improved margins in nationwide electricity and gas sales to industrial and commercial customers
- ▶ Expansion of wind power business

Negative factors

- ▶ Weather-related reduction in district heating and gas turnover
- ▶ Extended downtime at joint power plant (GKK) in Kiel due to turbine damage
- ▶ Lower clean dark spread (CDS) due to falling electricity prices on the wholesale market and lower coal prices. However, electricity prices fell more markedly than coal prices.



Key financial data for the 2010/11 financial year

We achieved all our targets in the 2010/11 financial year

▶ **Sales target (excluding electricity and natural gas taxes) for 2010/11 financial year at around previous year's level (Euro 3.4 billion in 2009/10 financial year). With actual sales of Euro 3.6 billion this target has been exceeded.**



▶ **Adjusted EBIT target at around previous year's level (Euro 243 million in 2009/10 financial year). With actual adjusted EBIT of Euro 242 million this target has been achieved.**



▶ **Payment of a constant dividend of Euro 0.90 per share for the 2010/11 financial year**



Key figures of the MVV Energie Group for the 2010/11 financial year – Adjusted

Earnings performance in Euro million

	2010/11 (1.10-30.9.)	2009/10 (1.10-30.9.)	% change
Sales excluding electricity and energy tax	3,590	3,359	+7
Adjusted EBITDA ¹	394	406	-3
Adjusted EBIT ²	242	243	0
Adjusted EBT ^{2, 3}	179	165	+8
Adjusted net surplus for period ^{2, 3}	125	105	+19
Adjusted net surplus for period after minority interests ^{2, 3}	108	95	+14
Adjusted earnings per share ^{2, 3} in Euro	1.63	1.44	+13
Free cash flow ⁴	163	154	+6

1 excluding non-operating IAS 39 derivative measurement items and including interest income from finance leases (previous year's figure adjusted)

2 excluding non-operating IAS 39 derivative measurement items and excluding restructuring expenses and including interest income from finance leases (previous year's figure adjusted)

3 impact of the expiry of the Kiel put option

4 cash flow from operating activities less investments in intangible assets, property, plant and equipment and investment property

Sales by reporting segments in the 2010/11 financial year

Sales in Euro million

	2010/11 (1.10-30.9.)	2009/10 (1.10-30.9.) ¹ pro forma
Generation and Infrastructure	320	329
Trading and Portfolio Management	800	684
Sales and Services	2,095	1,984
Strategic Investments	371	356
Other Activities	4	6
Total	<u>3,590</u>	<u>3,359</u>

¹ previous year's figures calculated as pro forma figures

Adjusted EBIT by reporting segments in the 2010/11 financial year

Adjusted EBIT in Euro million

	2010/11 (1.10-30.9.)	2009/10 (1.10-30.9.) ¹ pro forma
Generation and Infrastructure	123	122
Trading and Portfolio Management	26	40
Sales and Services	51	39
Strategic Investments	37	37
Other Activities	5	5
Total	<u>242</u>	<u>243</u>

¹ previous year's figures calculated as pro forma figures

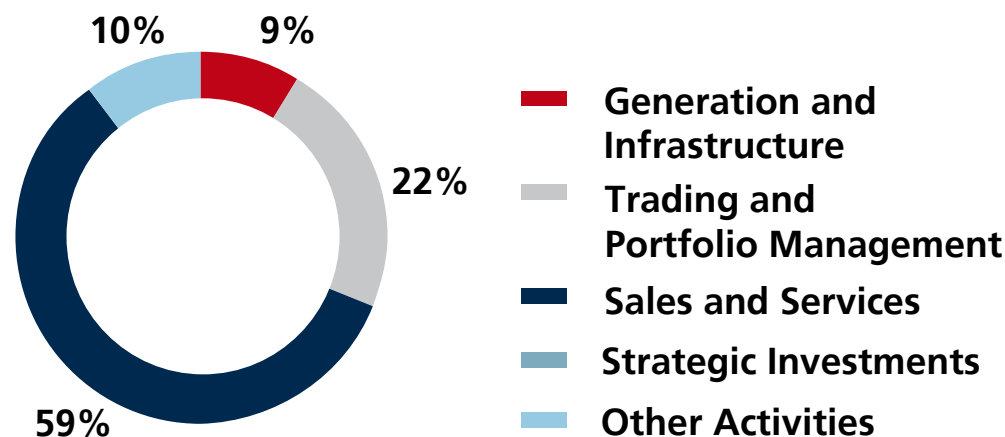
Sales volumes and combustible waste delivered in the 2010/11 financial year

Sales volumes

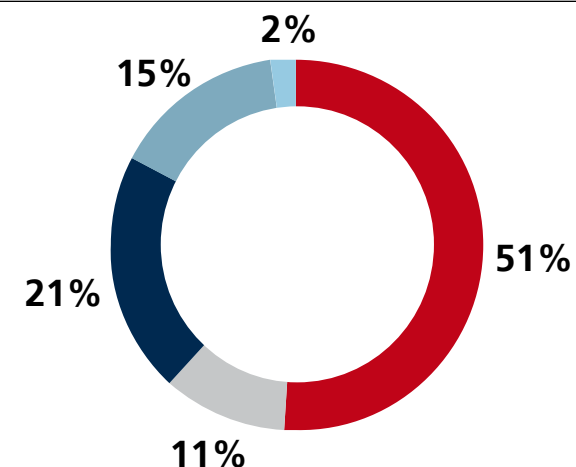
	2010/11 (1.10-30.9.)	2009/10 (1.10-30.9.)	% change
Electricity in kWh million	26,093	23,891	+9
of which Generation and Infrastructure	155	334	-54
of which Trading and Portfolio Management	12,855	10,771	+19
of which Sales and Services	11,678	11,510	+1
of which Strategic Investments	1,405	1,276	+10
District heating in kWh million	7,288	7,586	-4
Gas in kWh million	10,888	11,775	-8
of which Trading and Portfolio Management	1,700	2,313	-27
of which Sales and Services	7,759	7,356	+5
of which Strategic Investments	1,429	2,106	-32
Water in m³ million	53.7	54.2	-1
Combustible waste delivered in tonnes 000s	1,835	1,762	+4

Sales and adjusted EBIT by reporting segments – well-balanced business portfolio

Share of external sales in 2010/11 FY



Share of adjusted EBIT in 2010/11 FY



► Key figures (2010/11 FY pursuant to IFRS)

Sales ¹ :	Euro 3.590 million
Adjusted EBITDA:	Euro 394 million
Adjusted EBIT:	Euro 242 million
Adjusted annual net surplus:	Euro 125 million
Adjusted equity ratio:	39.5%
Free cash flow:	Euro 163 million
Number of employees:	5,923

¹ excluding electricity and natural gas taxes

² closing price on 14.5.2012: Euro 22.60

► Key valuation parameters

Enterprise value ² / sales:	0.7
Enterprise value ² / adjusted EBITDA:	6.5
Enterprise value ² / adjusted EBIT:	10.6
Price ² / book value ratio:	1.3
Price ² / earnings ratio:	13.9
Adjusted earnings per share:	Euro 1.63
Dividend per share:	Euro 0.90
Dividend yield:	4.0%

Reconciliation of EBIT (income statement) with adjusted EBIT in the 2010/11 financial year

in Euro million

	2010/11 (1.10-30.9.)	2009/10 (1.10-30.9.)	+/- change
EBIT as reported in income statement	253	308	-55
+ Derivative measurement items under IAS 39	-46	-69	+23
+ Restructuring expenses	31	-	+31
+ Interest income from finance leases	4	4	0
= Adjusted EBIT	<u>242</u>	<u>243</u>	-1

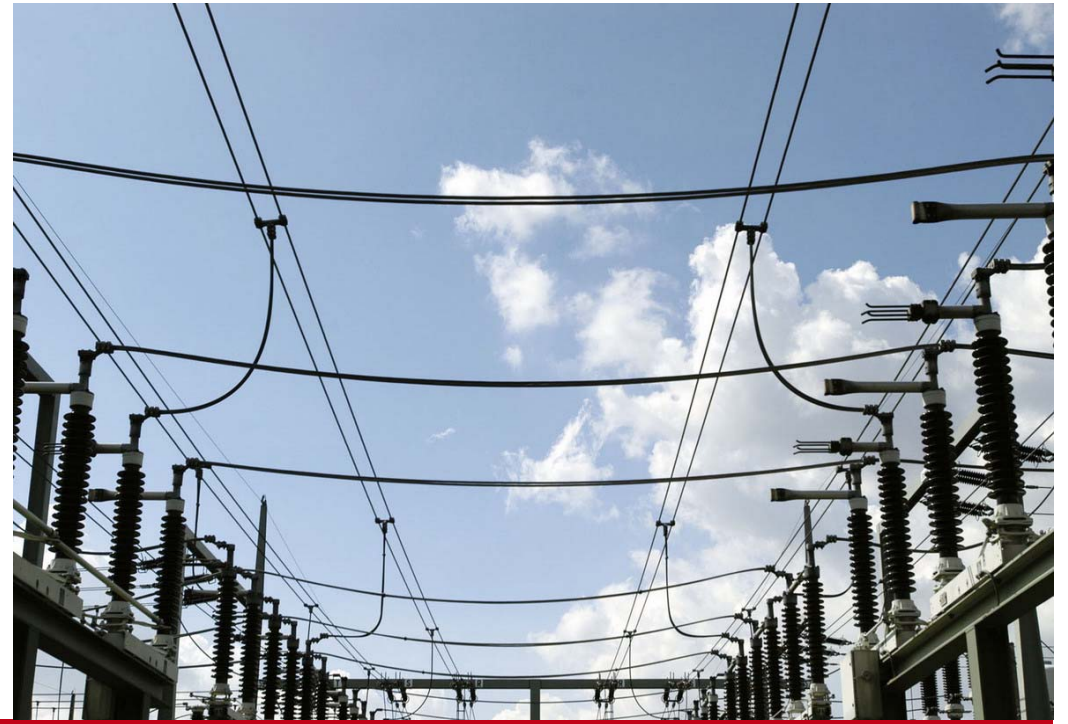
Key factors affecting year-on-year adjusted EBIT performance

Positive one-off factors

- ▶ Year-on-year comparison benefits from high write-downs in ERS business in previous year
- ▶ Improvement in generation and environmental energy
- ▶ Gas optimisation and improved trading results
- ▶ Improvements at Czech subgroup

Negative one-off factors

- ▶ Lower clean dark spreads and higher performance prices
- ▶ Weather-related reduction in district heating turnover



Transformation of the energy supply system in Germany

Long-term aims of Federal Government's Energy Concept from autumn 2010 unchanged despite nuclear energy exit

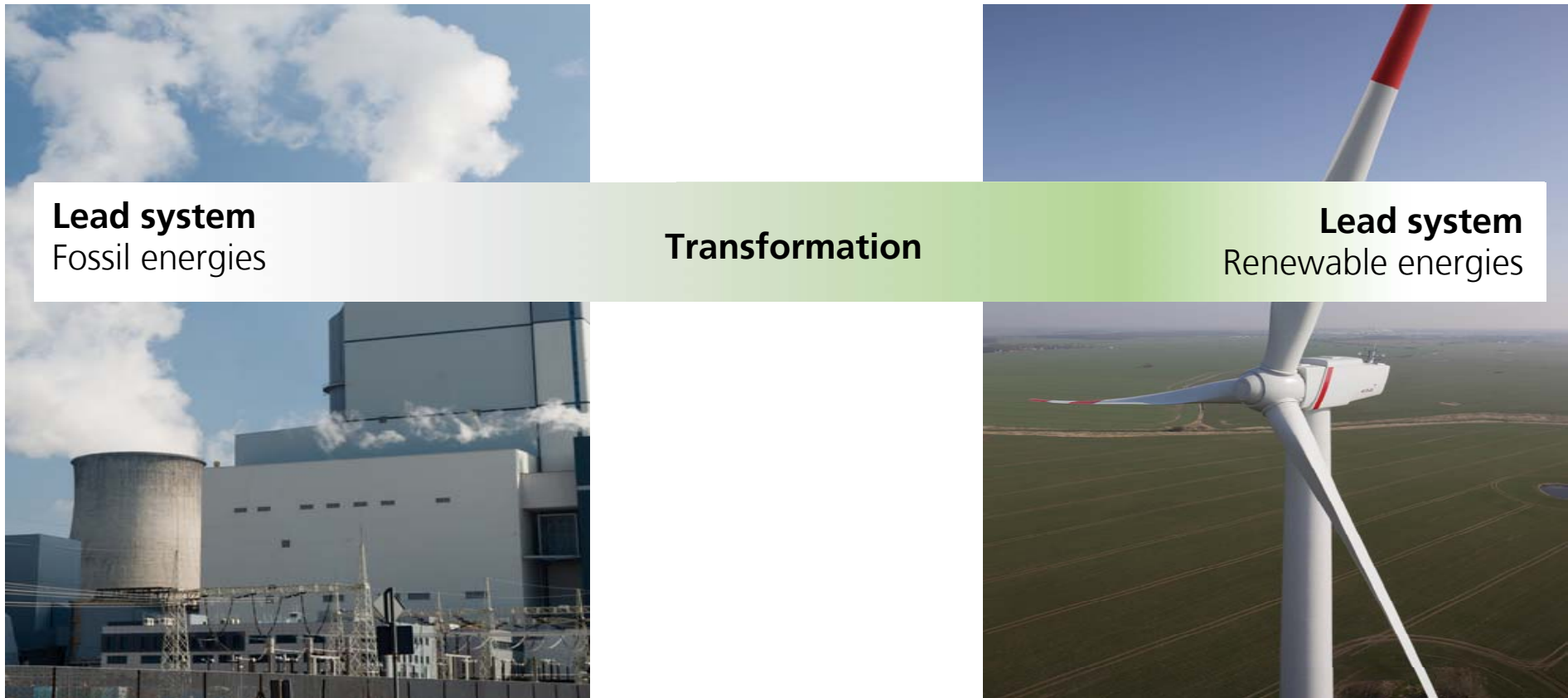
Greenhouse gas reduction: 40% (2020) / 80-95% (2050)

	2020	2050
Primary energy consumption (base: 2008)	-20%	- 50%
Building heating/primary energy consumption	-20%	- 80%
Electricity consumption (base: 2008)	-10%	-25%
% renewables in end energy consumption	18%	60%
% renewables in electricity consumption	35%	80%

Gradual nuclear energy exit by 2022

- ▶ Extensive new legislation (including amendments to Atomic Energy, Renewable Energies and Cogeneration Acts)

Fundamental transformation in entire energy supply system

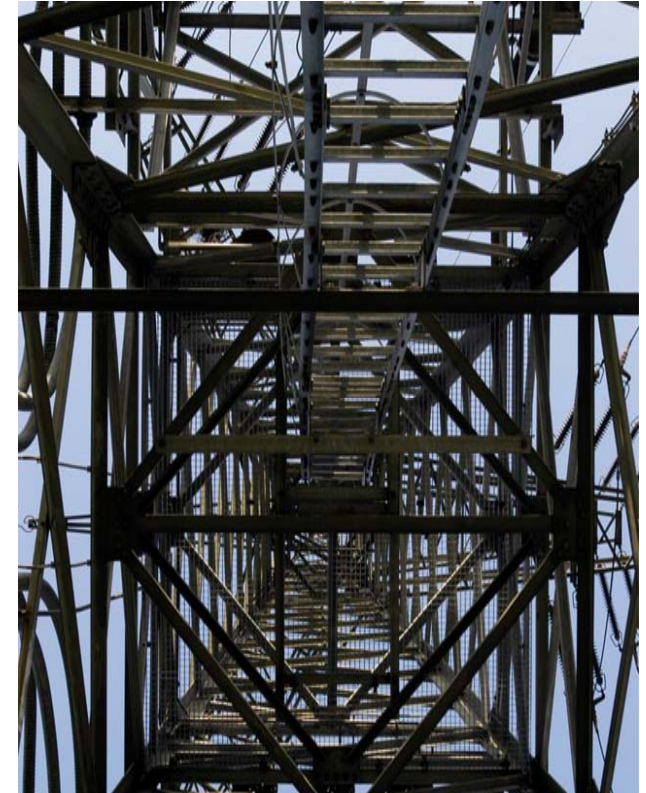


- ▶ Transformation requires new market design, new price systems, new technologies
- ▶ Transformation will require all-round "management"

Key challenges involved in the new energy supply system

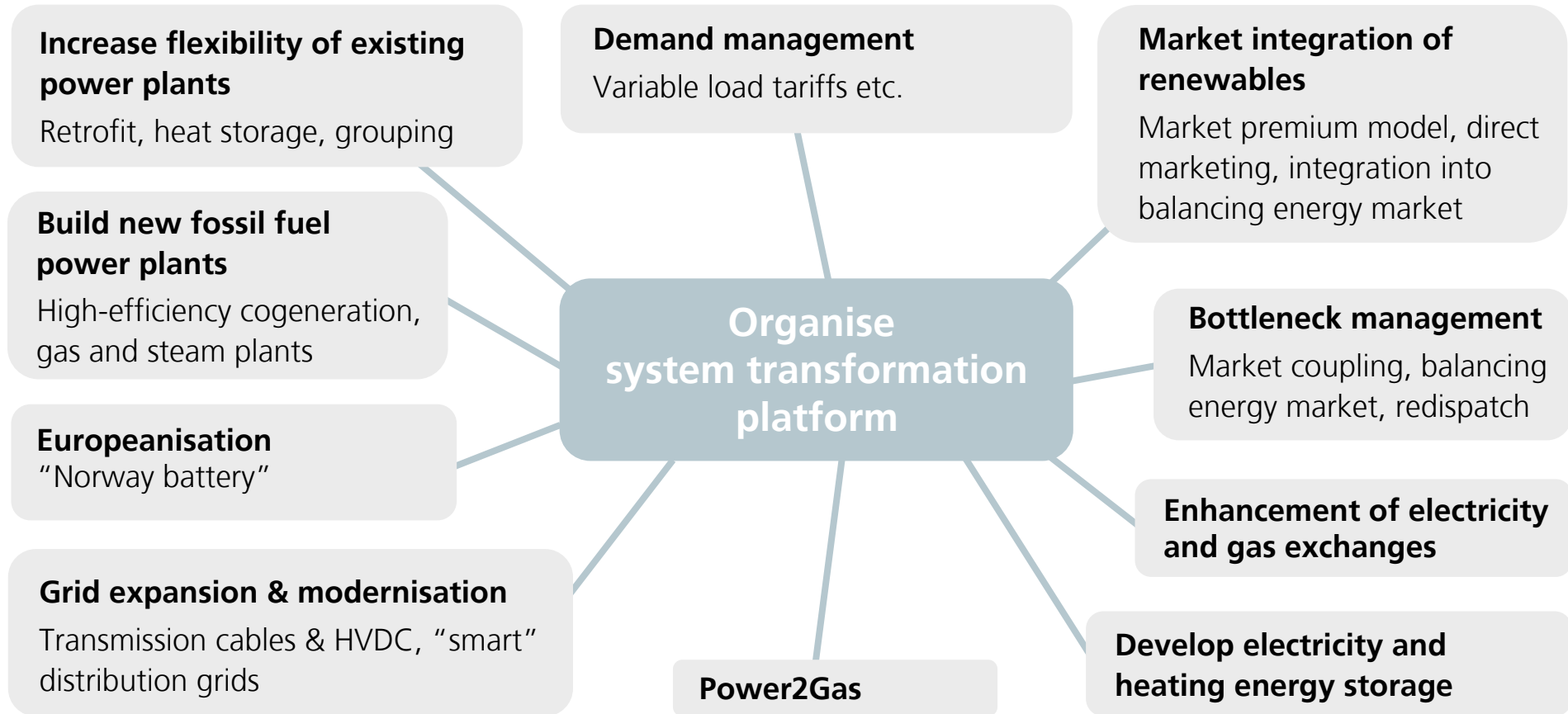


- ▶ Increased **flexibility**
- ▶ **Market integration** of renewables energies
- ▶ **Energy efficiency**
- ▶ **Grid expansion & restructuring**



- ▶ Transformation of the energy supply system involves far more than just switching off nuclear power plants
- ▶ Transformation means promoting energy efficiency and expanding renewable energies while simultaneously safeguarding system stability

Which key factors will be relevant in future?



- ▶ **Comprehensive market design as indispensable factor for successful transformation**
- ▶ **Broad-based consensus within society necessary for paradigm shift**



MVV Energie – Implementation of our strategy

We are making good progress with implementing our growth targets – Examples of projects implemented since MVV 2020



Successful entry into UK market



Development of wind power portfolio



Entry into biomethane business



Expansion in district heating Block 9 GKM



Expansion of district heating in Czech Republic



Joint district heating project in Ingolstadt



Expansion in energy efficiency and contracting

Kirchberg wind farm – Further step in high-growth wind power market



Kirchberg location in Rhineland-Palatinate

- ▶ **Launch of operations:** December 2011
- ▶ **Investment:** Euro 84 million
- ▶ Joint venture with juwi
- ▶ 23 E-82 E2 type wind turbines (Enercon)
- ▶ **Hub height:** 138 metres
- ▶ **Output:** 53 MW_e
- ▶ **Electricity output:** 125 GWh p.a.
(equivalent to consumption of 35,000 households)
- ▶ **CO₂ reduction:** 100,000 tonnes a year

We are focusing on onshore wind power plants

Launch of biomethane business at Klein Wanzleben location

Biomethane plant at Klein Wanzleben location

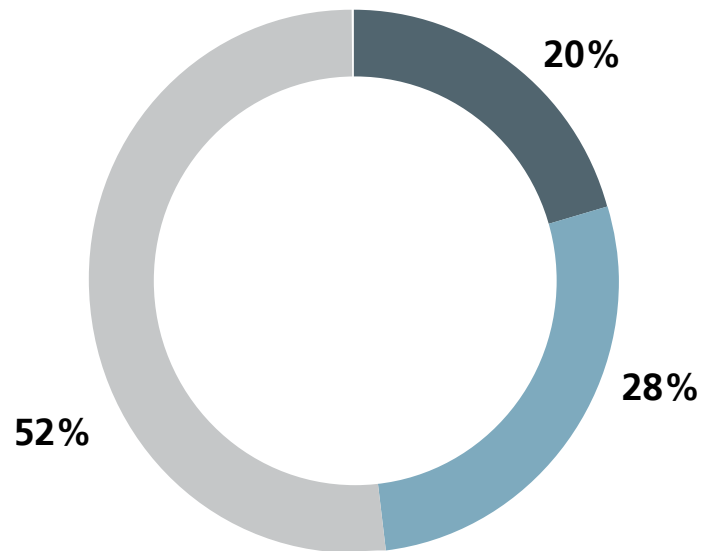
- ▶ **Launch of construction work:** end of May 2011
- ▶ **Launch of operations:** summer 2012
- ▶ **Investment:** Euro 12.6 million
(of which MVV Energie: Euro 9.4 million)
- ▶ **Biogas production:** 63 million kWh p.a.
- ▶ **Raw materials requirement:**
approx. 47,500 tonnes p.a. of maize silage,
2,500 tonnes p.a. of sugar beet plus
10,000 tonnes p.a. of sugar beet chips
for process heat production (own consumption)
- ▶ **Planned operating term:** at least 20 years



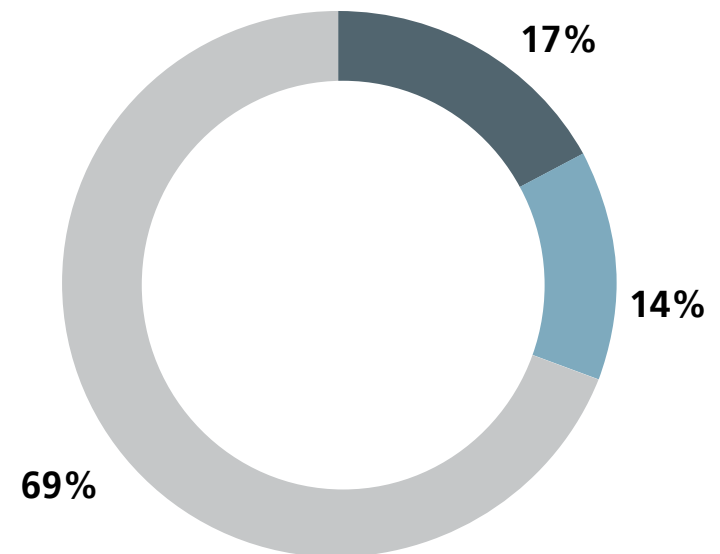
Key component in expansion of renewable energies

High priority for renewable energies at MVV Energie Group

Electricity generation of the MVV Energie Group
in Germany in FY 2010/11: 3.8 TWh



Net electricity generation
in Germany in 2010: 584 TWh



- Electricity from renewable energies, including biomass cogeneration and biogenic share of waste
- Electricity from cogeneration
- Other electricity generation

Sources: Renewable Energies Statistics Working Group (AGEE-Stat), Association of the German Energy and Water Industries (BDEW), Berliner Energieagentur GmbH/Prognos AG and own calculations (preliminary)

Implementation: Successful expansion of district heating – Ingolstadt



Ingolstadt joint district heating project

- ▶ **Launch of operations:** summer 2011
- ▶ Bavaria's largest waste heat and district heating project
- ▶ **Investment:** around Euro 23 million
- ▶ Joint project with Petroplus refinery, City of Ingolstadt and AUDI AG
- ▶ Construction of a 5.3 km district heating pipeline
- ▶ **Thermal energy output:** 300 GWh p.a.

Resource-effective use of waste industrial heat to supply heating energy

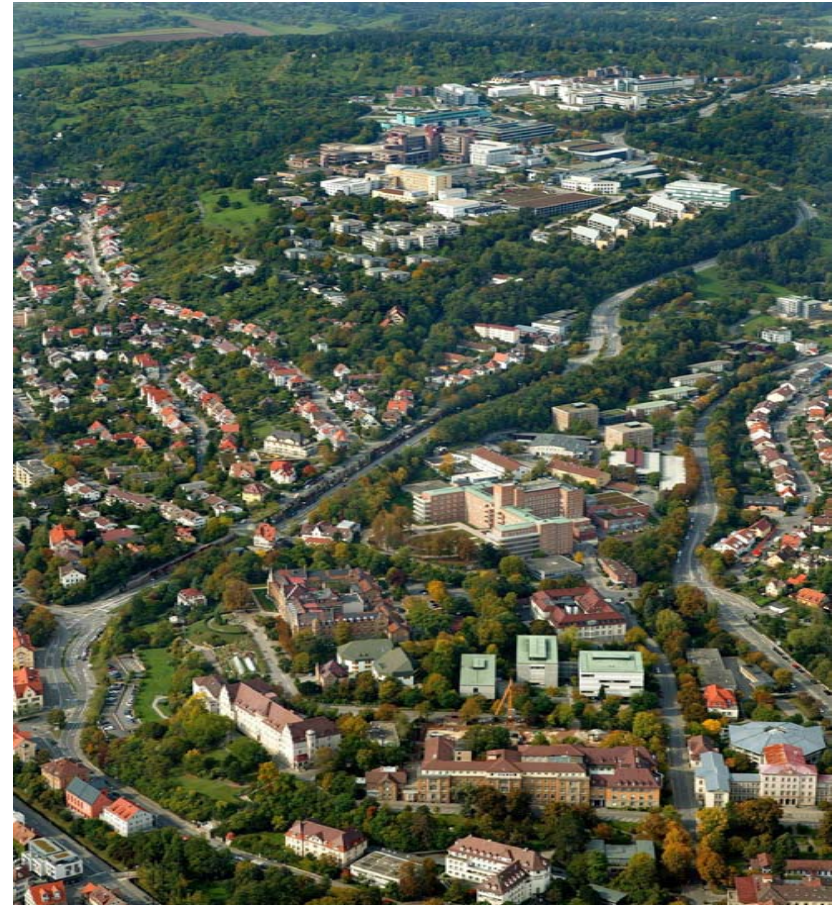
Enhanced energy efficiency and contracting – Tübingen University Hospital

Tübingen University Hospital

- ▶ **Assumption of operations:** July 2010
- ▶ Conversion of 40 year-old heat power plant from oil and gas to wood pellet operations
- ▶ **Launch of operations** with new system: end of 2012
- ▶ **Investments:** Euro 12 million
- ▶ **Contractual term:** 20 years
- ▶ **Energy cost savings:** 20% p.a.

Technical data

- ▶ 2 wood boilers: each 10 MW_{th}
- ▶ **CO₂ reduction:** 20,000 tonnes a year, or up to 98%



Environmentally-friendly heating energy generation using ecological local heating supply

TERMIZO – Heating energy from waste

TERMIZO in the Czech Republic

- ▶ TERMIZO is a waste-fired heating energy plant that meets the highest European standards
- ▶ **Purchase price:** approx. Euro 21 million
- ▶ All of the heating energy produced is supplied to Teplarna Liberec
- ▶ Single-line plant concept with modern flue gas cleaning

Technical data

- ▶ **Thermal energy output:** 38.3 MW_t
- ▶ **Electricity generation:** 4.0 MW_e
- ▶ **Waste incineration capacity:** 106,000 tonnes p.a.



Modern plant with high availability rates

Grosskraftwerk Mannheim (GKM)

Grosskraftwerk Mannheim (GKM)

- ▶ **Launch of operations** at Block 9: 2015
- ▶ **Shareholder structure** in GKM: 28% MVV Energie, 40% RWE, 32% EnBW
- ▶ **Gross electricity generation capacity** at GKM: 1,675 MW_{el}
- ▶ **Gross electricity generation capacity** at new Block 9: 911 MW_{el}
- ▶ **Efficiency ratio** of new Block 9: 70%
- ▶ District heating supply secure, as Blocks 3 and 4 to remain in operation until Block 9 is online
- ▶ Immissions protection approval to use Block 3 as **"cold reserve"** in winter months



Output from Block 9 will cover around 25% of electricity needs in Rhine/Neckar metropolitan region

Plymouth energy from waste plant project : MVV Energie wins contract to build and operate plant

South West Devon Waste Partnership



Investment and financing

- ▶ **Investment:** approx. Euro 250 million
- ▶ **Financial close:** 25 March 2011
- ▶ **Construction:** from 2012
- ▶ **Launch of operations:** from 2014

Technical data

- ▶ **Nominal capacity:** 245,000 tonnes p.a.
- ▶ **Net electricity output:** 22.5 MW_e
- ▶ **Max. thermal energy output:** 23.3 MW_t

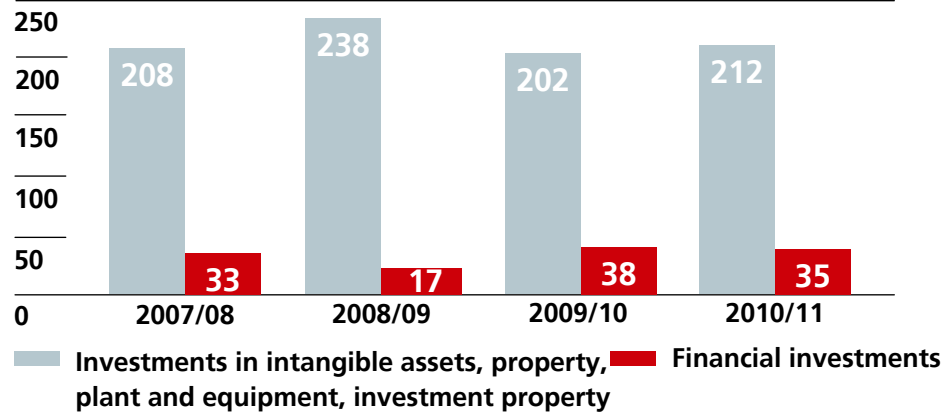
Broad revenue base

- ▶ Municipal waste contract: 25-year term, 75% bring-or-pay
- ▶ Energy supply contract with a 25-year term to supply electricity and steam to navy base
- ▶ Government support for cogeneration and generation of renewable energy from biogenic share of waste

Exporting our wealth of expertise in generating energy from waste to the UK

Investment and growth

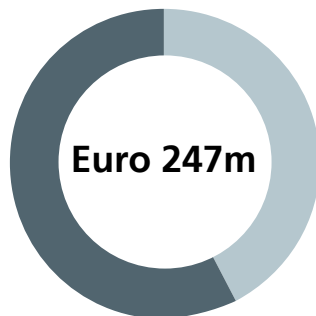
Investments in Euro million



Investments¹ in 2010/11 financial year

Growth investments

Euro 143 million



Replacement investments

Euro 104 million

¹ Investments in intangible assets, property, plant and equipment, investment property, as well as payments for the acquisition of fully and proportionately consolidated companies and other financial assets

▶ Existing business

- Optimising and preserving substance of supply facilities and distribution grids
- Concentration of locations and construction of new gas turbines in Kiel

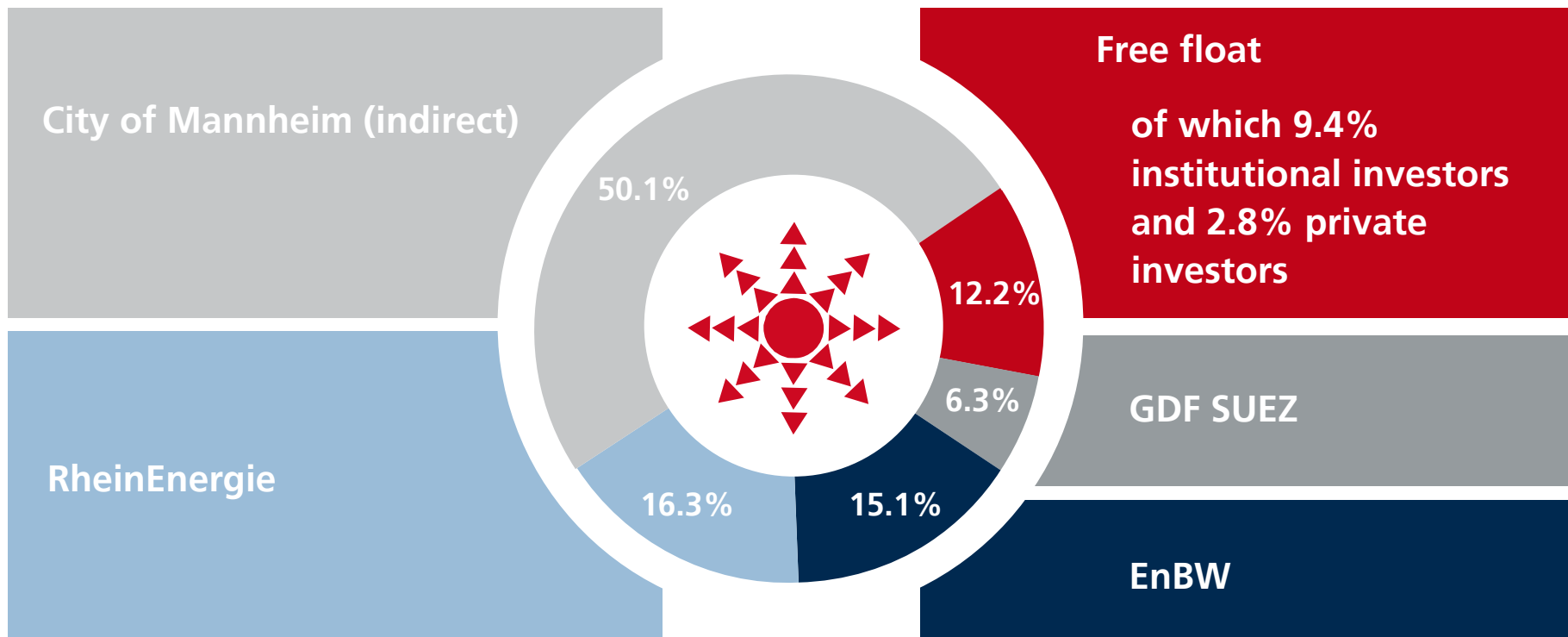
▶ Growth investments

- Extending the supply of district heating in Mannheim and construction of a district heating pipeline to Speyer
- Ingolstadt district heating association
- Construction of Klein Wanzleben biomethane plant
- Construction of Kirchberg wind farm
- Construction of Plymouth energy from waste plant
- Contracting project Tübingen University Hospital
- Construction of cogeneration plants in Czech Republic (COGEN II)
- Acquisition of cogeneration plant TERMIZO in Czech Republic



The share of MVV Energie

Current shareholder structure and key figures of MVV Energie AG



▶ **No. of shares:**

65.907 million

▶ **Average daily turnover:**

8,431 shares in 2010/11 FY

▶ **Market capitalisation:**

Euro 1,490 million

(Closing price on 14.5.2012:
Euro 22.60)

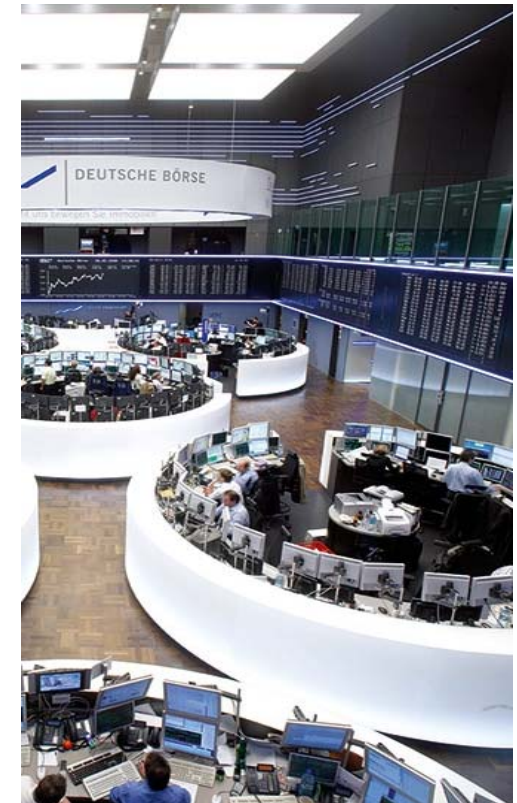
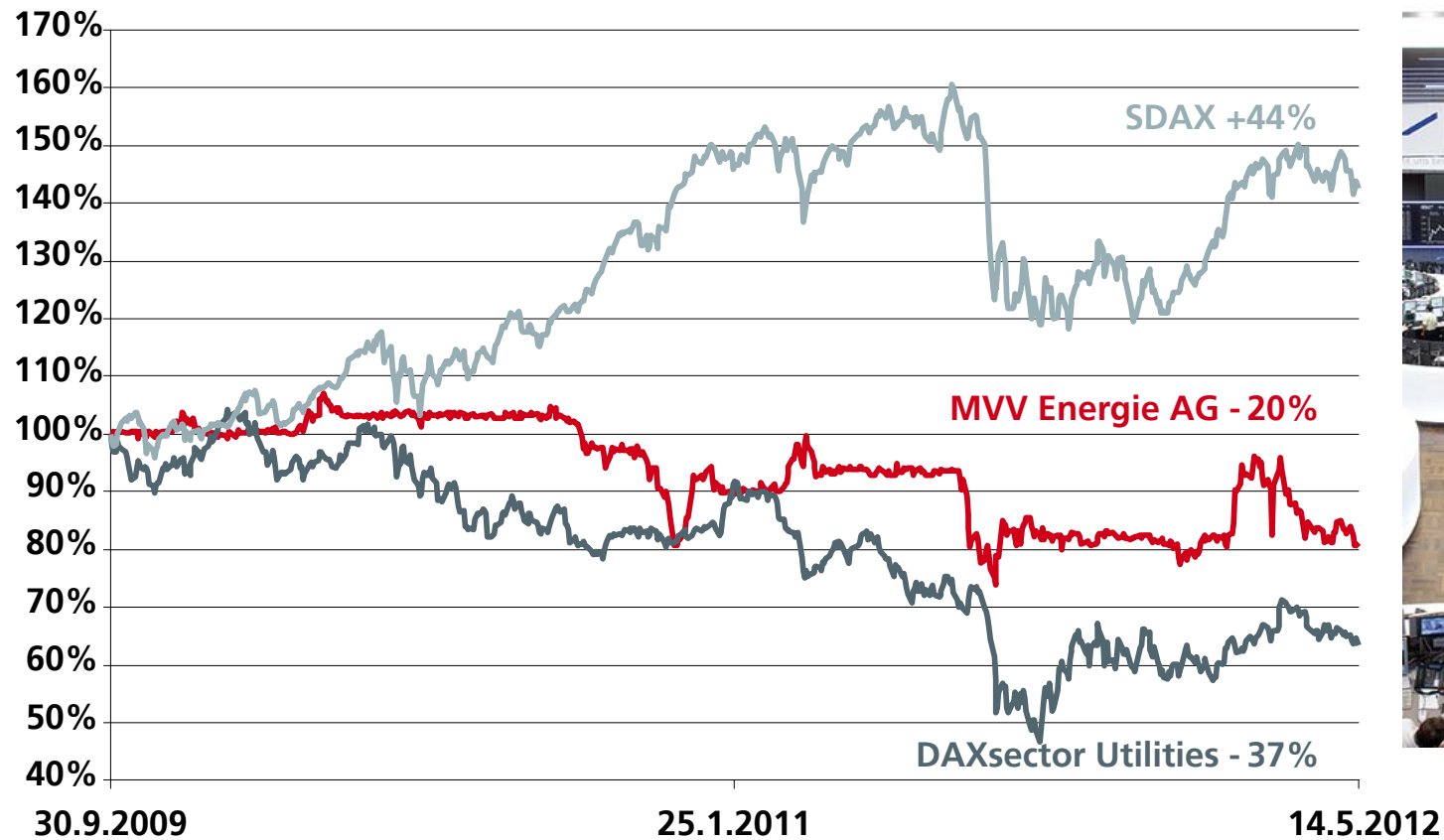
▶ **Free float:**

Euro 182 million

Performance comparison of the MVV Energie AG share

ISIN DE000A0H52F5

XETRA Trading



Share chart as performance comparison (including dividend payments in March 2010, 2011 and 2012) with SDAX and DAXsector Utilities

High dividend distribution in past eight years

Dividend

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Dividend/Share (Euro)	0.75	0.75	0.80	0.80	0.90	0.90	0.90	0.90
Total dividend ¹ (Euro million)	38.0	41.8	44.6	52.7	59.3	59.3	59.3	59.3
Closing price on 30.9. (Euro)	14.40	19.29	23.23	29.49	33.20	30.83	29.00	23.86
Dividend yield ² (%)	5.2	3.9	3.4	2.7	2.7	2.9	3.1	3.8

¹ with dividend entitlement until FY 2003/04: 50.7 million shares; FY 2004/05: 55.7 million shares; FY 2005/06: 55.8 million shares; from FY 2006/07: 65.9 million shares

² dividend yield based on respective closing price in XETRA trading on 30 September

Advantages for our shareholders

Well balanced portfolio

- ▶ Across major steps of the value added chain,
- ▶ across regions and
- ▶ across customers

Green & clean

- ▶ No nuclear exposure in own generation
- ▶ Wind onshore, biomass and biomethane
- ▶ CHP and district heating
- ▶ R&D: Smart metering and E-mobility

Ambitious capex programme until 2020

- ▶ Euro 3 billion in total of which
 - Euro 1.5 billion in growth
 - Euro 1.5 billion in replacement investments

Solid balance sheet

- ▶ Long term investment horizon matched with long term maturities
- ▶ High equity ratio of 39.5%

We are committed to shareholder value



Outlook

Outlook for 2011/12 financial year

▶ **Sales target (excluding electricity and natural gas taxes) for 2011/12 financial year slightly above previous year's level (Euro 3.59 billion in 2010/11 financial year)**



▶ **Adjusted EBIT target of around Euro 220 million (Euro 242 million including interest income from finance leases in 2010/11 financial year)**





Financial calendar of 2012/13

Financial calendar of 2012/13

- ▶ 15.5.2012 Half-Year Financial Report of 2011/12 and Analysts` Conference Call
- ▶ 15.8.2012 Financial Report 3rd Quarter of 2011/12
- ▶ 18.12.2012 2011/12 Annual Report
- ▶ 18.12.2012 Annual Results Press Conference and Analysts` Conference in Frankfurt/Main
- ▶ 15.2.2013 Financial Report 1st Quarter of 2012/13
- ▶ 8.3.2013 Annual General Meeting in Mannheim
- ▶ 11.3.2013 Payment of Dividend
- ▶ 15.5.2013 Half-Year Financial Report of 2012/13 and Analysts` Conference Call
- ▶ 15.8.2013 Financial Report 3rd Quarter of 2012/13



Back up

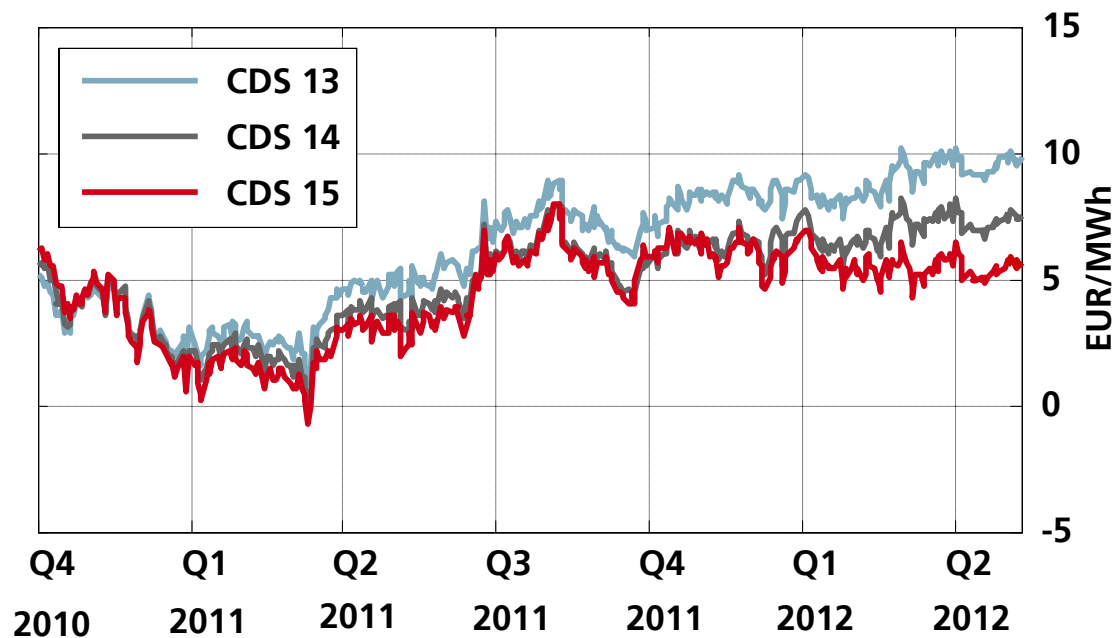
Sales and adjusted EBIT performance by quarter

Euro million

	2010/11 (1.10-30.9.)		2009/10 (1.10-30.9.)		% change
1 st Quarter	947		839		+13
2 nd Quarter	949		1,004		-5
3 rd Quarter	783		711		+10
4 th Quarter	911		805		+13
Sales in the financial year	<u>3,590</u>		<u>3,359</u>		+5

1 st Quarter	91		85		+7
2 nd Quarter	113		125		-10
3 rd Quarter	44		43		+2
4 th Quarter	-6		-10		+40
Adjusted EBIT in the financial year	<u>242</u>		<u>243</u>		0

The Clean Dark Spread (CDS) development has a significant impact on the MVV Energie Group

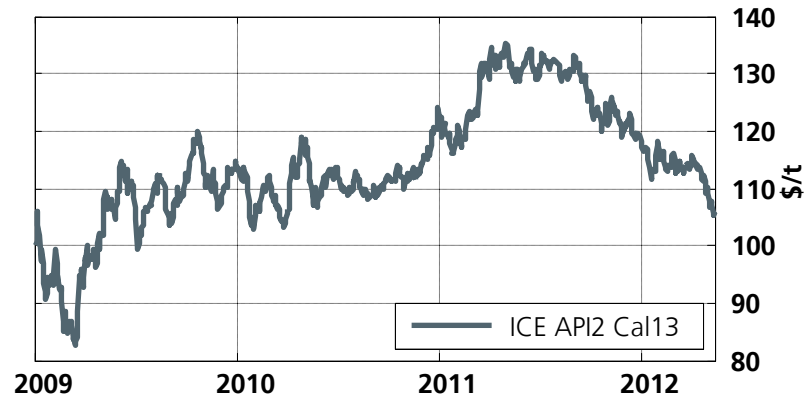


Future CDS development will be influenced by different markets and political decisions:

- ▶ German power generation
 - Nuclear exit
 - Renewable generation (wind, solar)
 - New conventional generation
- ▶ Global coal markets/FX
- ▶ Carbon price level

Energy price curves

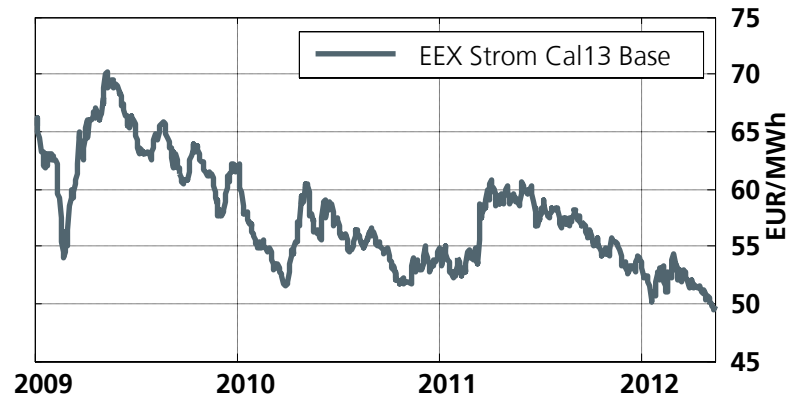
Coal



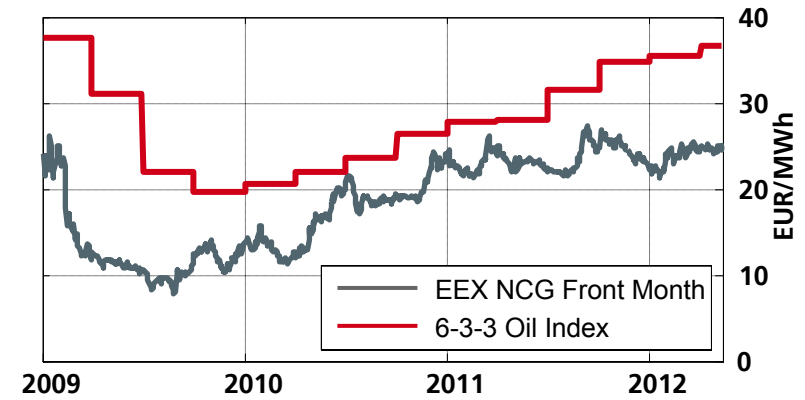
CO₂



Electricity



Gas



Municipal utility companies and major locations of the MVV Energie Group



MVV Energie CZ

- | | | | | | |
|----|---------------------------------------|----|-----------------------|----|------------|
| 1 | TERMO DĚČÍN | 2 | EH
ENERGIE Holding | 3 | CLT |
| 4 | TEPLARNA
LIBEREC | 5 | JTR | 6 | CTZ s.r.o. |
| 7 | ZÁSOBOVÁNÍ TEPELNÝM
VÝŠETÍN s.r.o. | 8 | IROMEZ | 9 | OPATHERM |
| 10 | POWGEN | 11 | G-RONN | 12 | G-LINDE |

MVV Energie Wind farms

- 1 Plauerhagen 2 Massenhausen 3 Kirchberg

MVV Energiedienstleistungen

- 1 Berlin 2 Korbach 3 Gersthofen

MVV Umwelt

- | | | | | | | | |
|---|-------------------------|---|------------|---|-----------|---|--|
| 1 | Königs-
Wusterhausen | 2 | TREA Leuna | 3 | Wicker | 4 | Plymouth
(as of 2012 under
construction) |
| 1 | Mannheim | 2 | Mannheim | 3 | Offenbach | | |

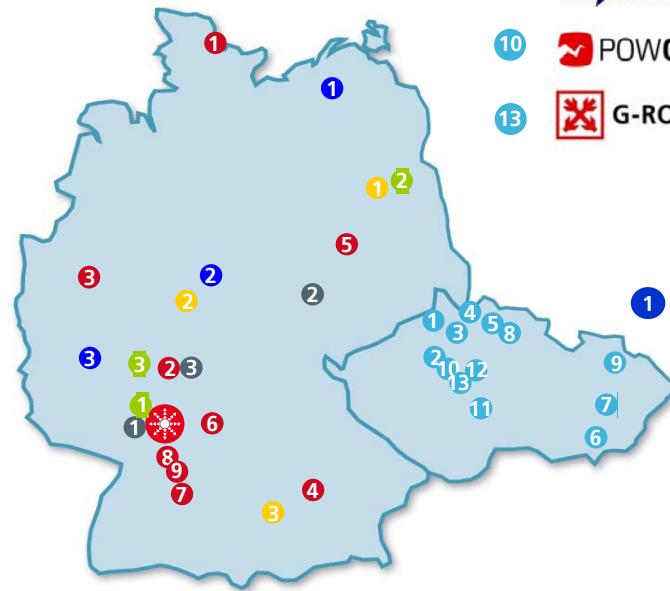
Biomass power plant

- 1 Mannheim

Waste utilisation

- 1 Mannheim

- | | | | |
|---|--------------------------|---|---|
| 1 | 24/7 STADTWERKE KIEL | 6 | STADTWERKE
BUCHEN |
| 2 | EVO | 7 | Stadtwerke
SINSHEIM |
| 3 | EWS | 8 | Stadtwerke
Schwetzingen |
| 4 | STADTWERKE
INGOLSTADT | 9 | Stadtwerke
Walldorf GmbH
Energie · Wasser · Stadtpark |
| 5 | Köthen Energie | | |



Decentralised energy supply – EVO wood pellet plant in Offenbach



Wood pellet plant in Offenbach

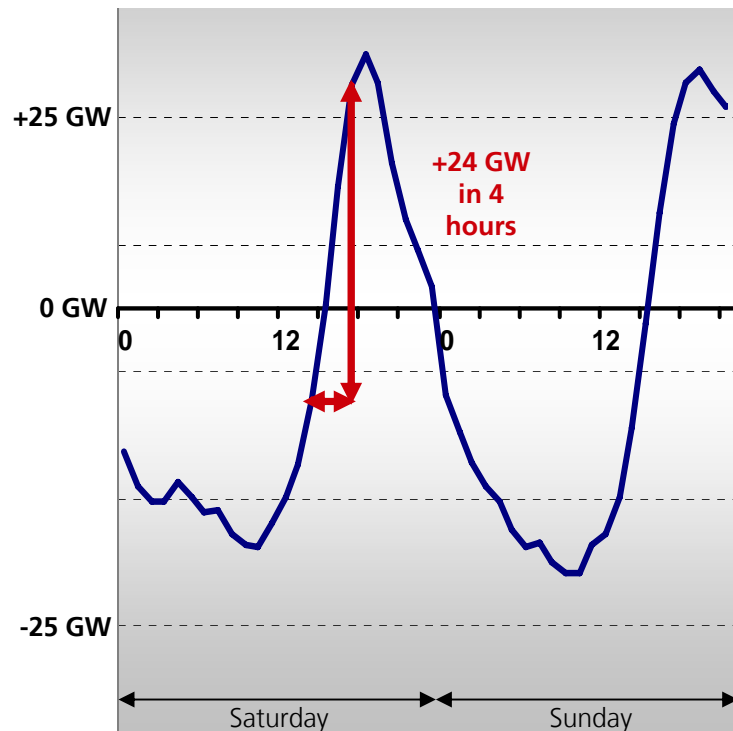
- ▶ **Launch of operations:** May 2011
- ▶ **Investment in wood pellet plant, including adjacent biomass cogeneration plant:** approx. Euro 17 million
- ▶ Wood pellet production from shavings and waste timber: initially 65,000 tonnes a year
- ▶ Possibility of doubling wood pellet production in further expansion stage
- ▶ Substitute fuel for up to 50,000 tonnes of hard coal at EVO's cogeneration plant
- ▶ **CO₂ reduction:** up to 80,000 tonnes a year

One of Germany's most modern plants – making a key contribution to climate protection

Market integration of renewable energies will require highly flexible gas power plants and cogeneration plants

Residual load 2030

(electricity demand – renewables feed-in)



Too little electricity

Too much electricity

Conventional power plants

Import of electricity

Storage/flexibilities

- ▶ Pump storage
- ▶ Heating energy storage
- ▶ Gas to power ("methanisation")
- ▶ Norway as battery
- ▶ Demand-side management

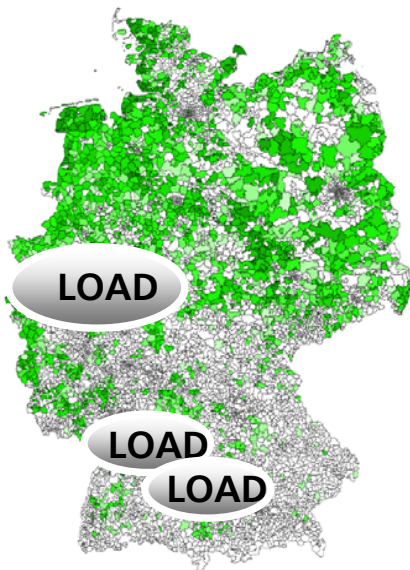
Switch off renewables plants

Export of electricity

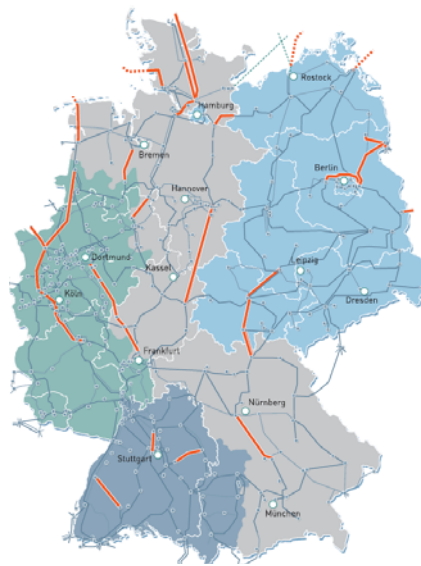
▶ Increasing need for supply-side and demand-side flexibility with high load gradients to offset fluctuating renewables feed-in volumes

Grid expansion and conversion required on transmission and distribution grid levels

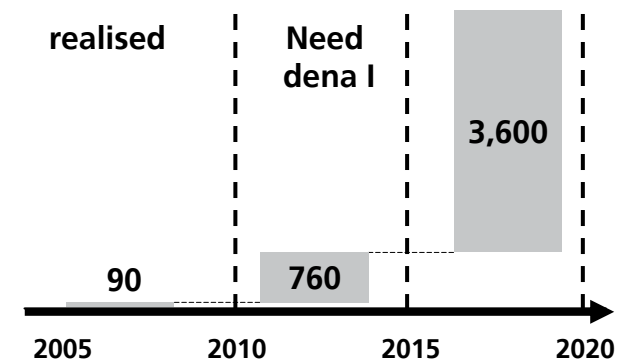
Wind output distribution



dena I grid expansion project



Grid expansion need after dena I und II [km]



- ▶ Grid expansion costs including offshore link: ~ Euro 1bn p.a.

Sources: dena grid studies I and II; Renewable Energies Agency

- ▶ Expansion of smart transmission/distribution grids – key aspect of energy turnaround
- ▶ Significant delays in transmission grid expansion (8 of 24 priority projects)