

Investor Factbook 2016 >



September 2016

Important note



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“expects”, “believes”, “assumes”, “forecasts”, “potentially” or “continued” and similar expressions.

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Agenda 1 – EnBW at a glance



1. **EnBW at a glance**..... >>
2. Regulatory Environment and Markets >>
3. Customers and Competition..... >>
4. Strategy >>
5. Segments >>
6. Key Financials >>
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Links

- > [EnBW Annual Report 2015 \(PDF\)](#)
- > [EnBW Six-Monthly Report 2016 \(PDF\)](#)
- > [EnBW Group online](#)

1.1 EnBW at a glance¹



Number 3 utility in Germany

- > 5.5 million customers
- > 13 GW generation portfolio
- > Stable shareholder structure
- > 20,000 employees
- > Strong roots in Baden-Württemberg

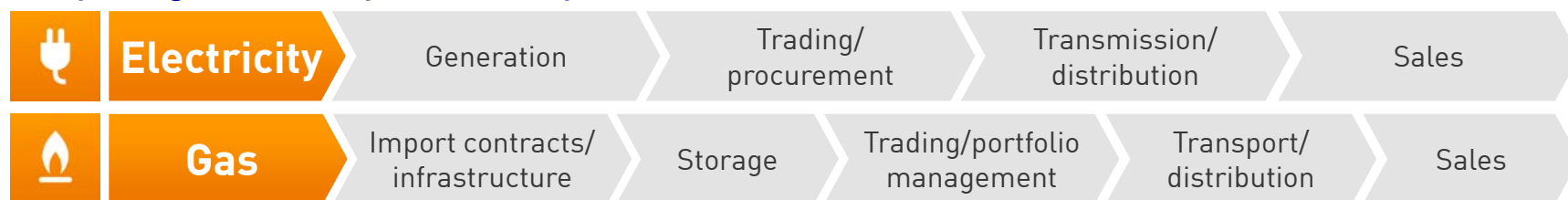
Balanced risk-return profile

- > Focus on renewables and grids
- > 50% EBITDA contribution from low-risk business
- > Ratings in A category
- > Active in selected foreign markets: 8 % of revenue

Key financial figures

- > Revenue: €21 bn
- > Adj. EBITDA: €2.1 bn
- > Adjusted group net profit: €952 m

Fully integrated utility in Germany²



4 Business Segments



¹ Figures 2015

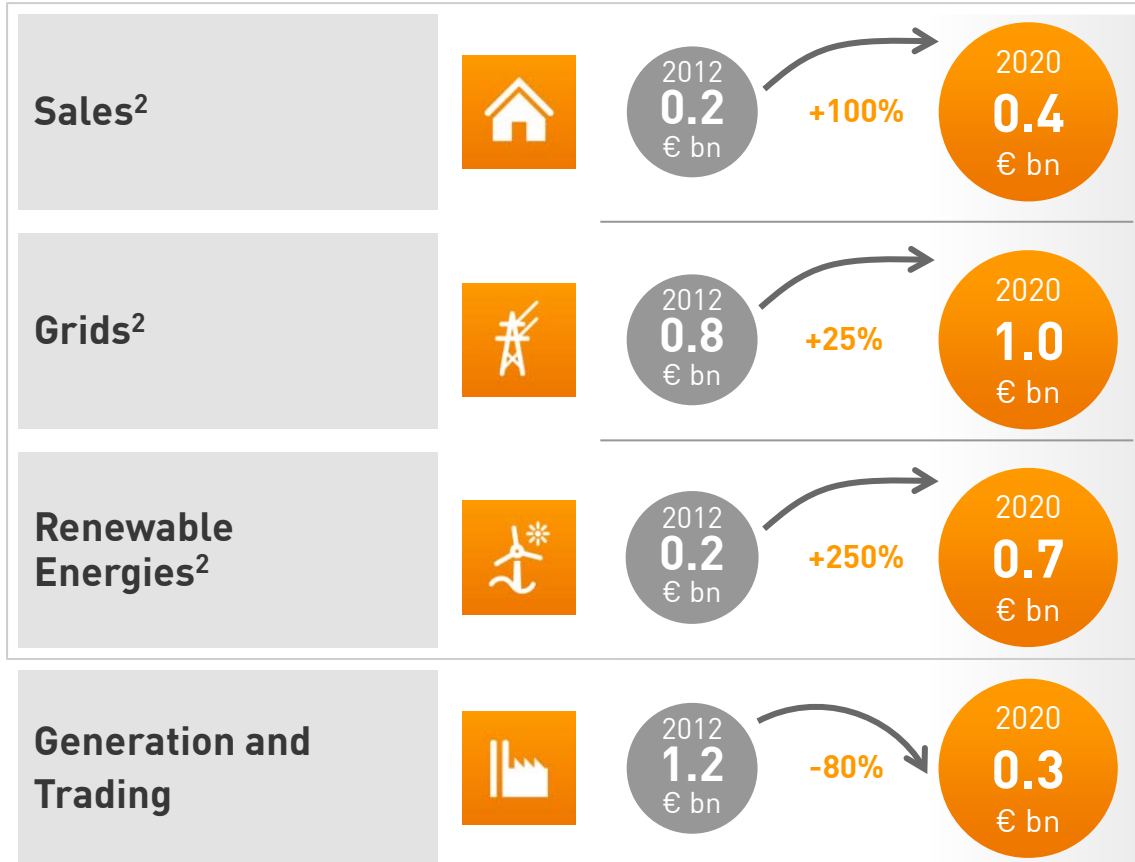
² Subject to full consolidation of VNG

1.2 Strategic objectives: EnBW 2020 strategy



Vision – Long term objectives¹

Adjusted EBITDA



¹ Figures as of 31/12/2015

² Strategic growth issues

1.3 Key figures



Key financials

KPI		2015	2020	Target
Adjusted EBITDA	€ bn	2.1	2.3-2.5	Securing profitability
Dynamic leverage ratio ¹	ratio	3.19	< 3.3	Safeguarding the good credit rating
ROCE	%	9.5	8.5 - 11	Raising the Group's value

Key non-financials

KPI		2015	2020	Target
RE share of generation capacity	%	23.6	> 40	Expand renewable energies
SAIDI (electricity)	min/year	15	< 25	Maintain supply reliability

¹ Net debt/Adjusted EBITDA

Agenda 2 – Regulatory Environment and Markets



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2.1.1 Political & regulatory environment: Overview



EU 2020-Goals

-20% GHG emissions
20% RE of final energy consumption
20% Energy savings

EU 2030-Goals

-40% GHG emissions
27% RE of final energy consumption
27% Energy savings

German Climate & Energy Policy Goals

-40% GHG emissions until 2020
-20% primary energy consumption until 2020

Nuclear Phase-out

Goal Shut-down of last NPP until end of 2022

- > Responsibility for financing of phase-out to be split between operators and government
- > State owned fund to be established by end of 2016
- > Operators partly transfer nuclear provisions and corresponding liabilities to state

Renewables

Goal 2025: 40-45% RE
2035: 55-60% RE in electricity production

Goal Reform of remuneration system towards **tenders**

- > PV: already in place
- > Wind: expected in 2017

Electricity market reform

Goal Maintain **market functioning** with high shares of RE

> **Goal** Maintain high level of **security of supply**: System of various capacity reserves to be implemented (grid-/capacity-/lignite-reserve)

Grid expansion

Goal Remove bottleneck of **energy transition** (i.e. slowing grid expansion)

- > Underground cabling is given priority over overhead powerlines
- > Regulation of grid charges to be amended in 2016 with aim to incentivize (smart) grid investments

2.1.2 Political & regulatory environment: Fundamental changes



Generation and Trading

- > Sustained trend towards **renewable energies**:
 - > 120 GW by 2020
 - > 130 GW by 2025
- > Time of profitable **operation** of conventional power plants in steady decline
- > Gas power plant operates only a few times because of low CSS until 2020
- > Increasing **volatility** of prices and volumes

Power and gas grids

- > **Volatile** electricity generation detrimental to grid stability
- > **Investments** of around €55 bn in expanding the grid through to 2025
- > Conventional power stations increasingly in **back-up** role
- > Accelerating expansion of **smart grids**

Customers

- > **Downturn demand** for electricity and gas due to energy efficiency and rising demand by electric vehicles and residential heating sector¹ in the future
- > Renewables for the most part in the hands of **non-PSCs**²
- > Consumers playing an increasingly **active role**
- > Number of **energy co-operatives** has increased: sixfold since 2008 from ~150 to 970

- > **Technological developments**: more diversity, modularity and granularity in the energy system
- > **New market participants**: more competition and fragmentation of the value chain
- > **Regulatory framework conditions**: undergoing constant change

Traditional business models of large utilities are no longer an option

¹ Depending on regulatory policies

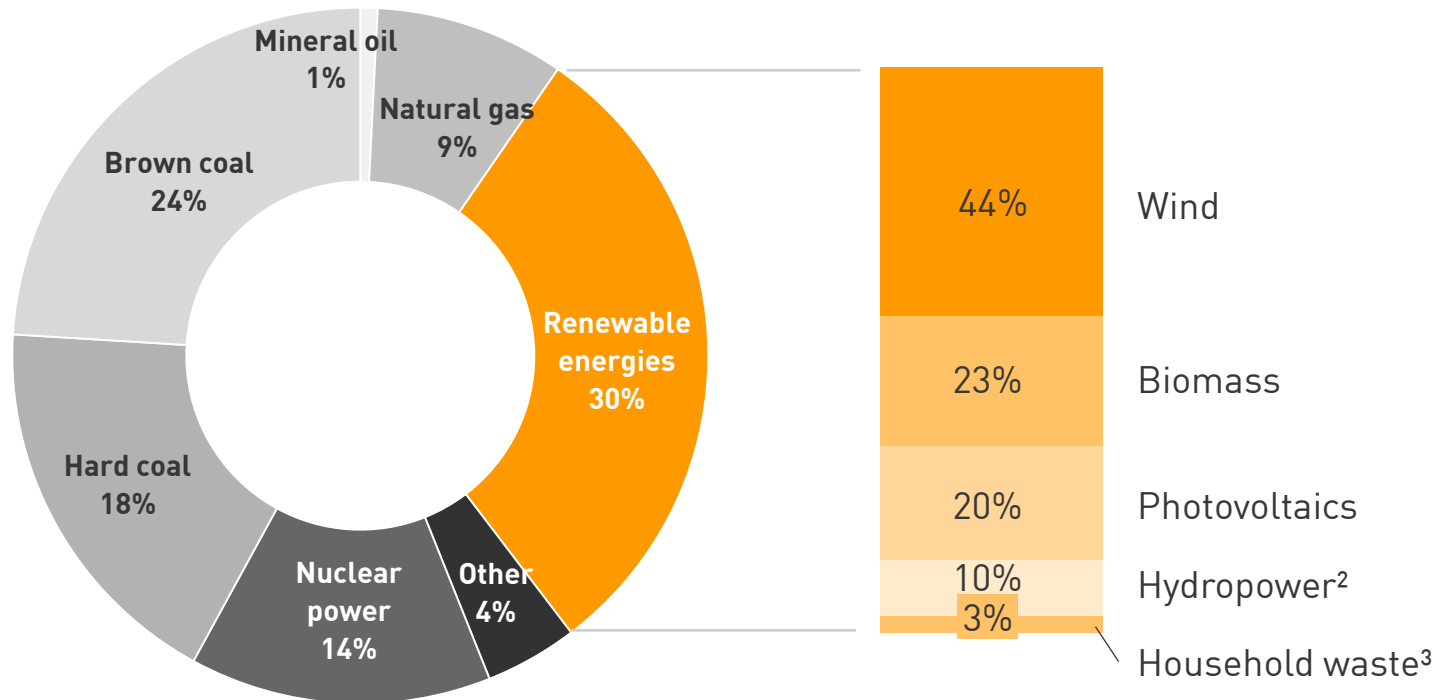
² Power supply companies

2.2.1 German electricity market: Generation capacity



Gross electricity generation according to energy source 2015¹ in Germany

in %



¹ Preliminary data, partially estimated.

² Generation in run-of-river / storage power plants, as well as generation from pumped storage power plants using the natural flow of water.

³ Only generation from the biogenic portion of household waste (approximately 50%)

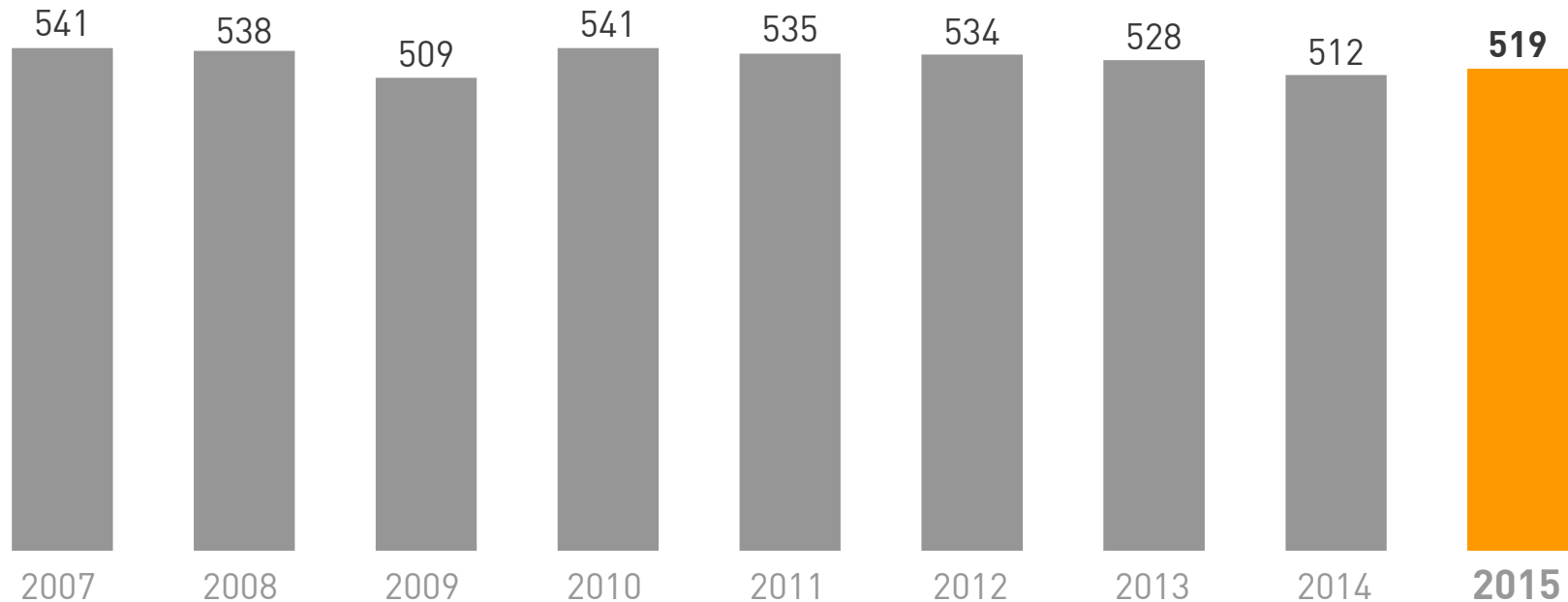
Source: AGEB as of December 2015

2.2.2 German electricity market: Electricity consumption



Electricity consumption in Germany

in TWh



Net electricity consumption higher than the prior year because of climatic conditions

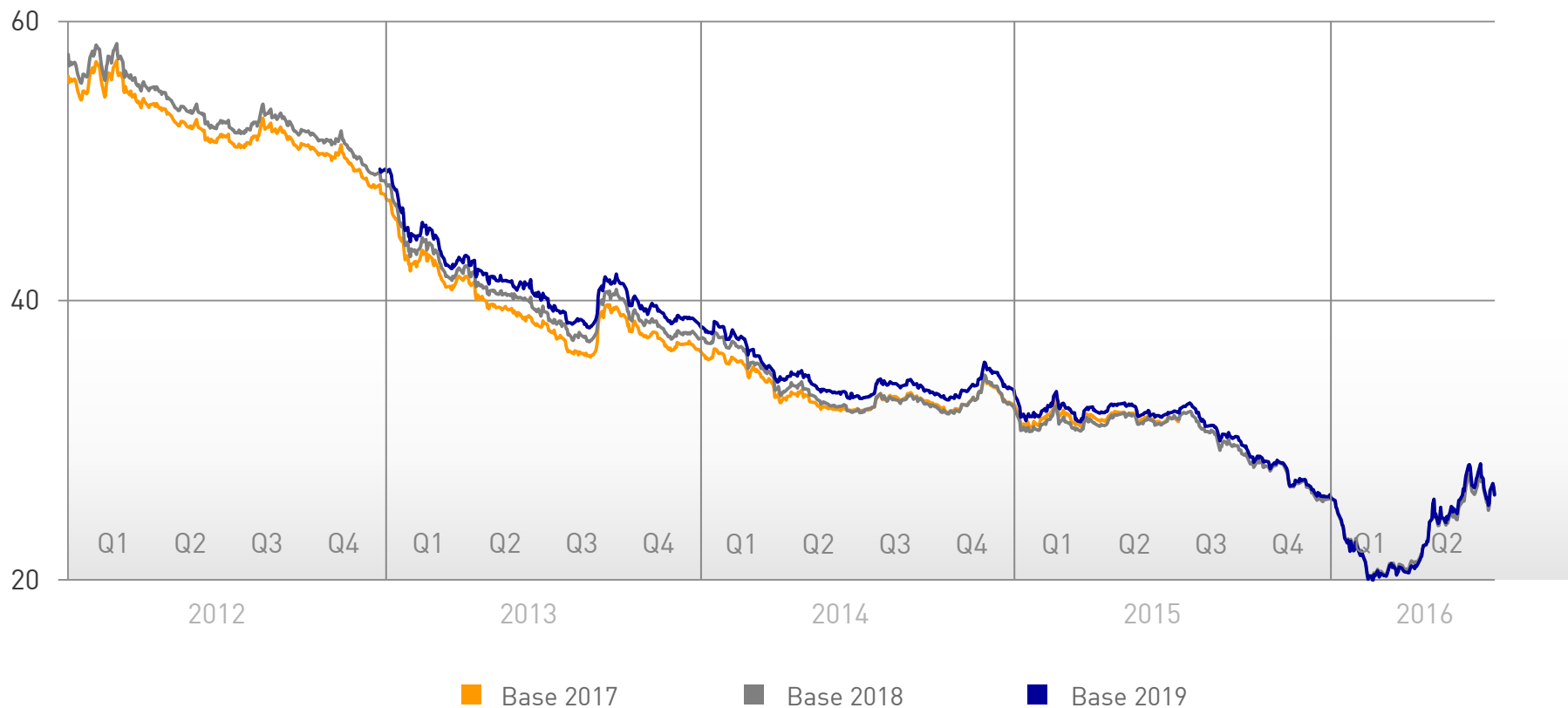
Data as of Feb 2015; Source: Statista

2.2.3 German electricity market: Wholesale forward price declined dramatically



Forward price for electricity baseload in Germany

in €/MWh



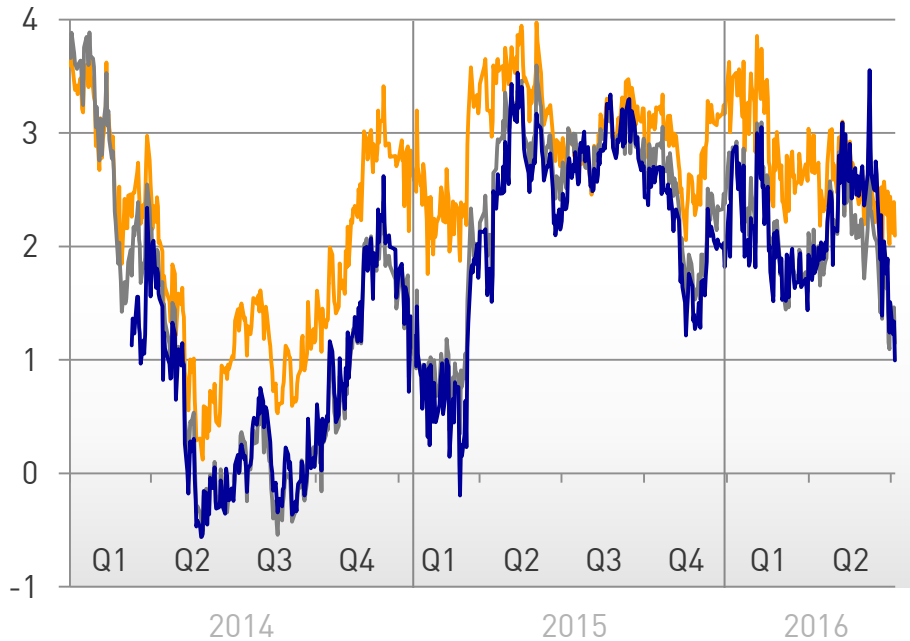
2.2.4 German electricity market: CDS at low levels and negative prices for CSS



Clean-Dark-Spread Base

in €/MWh

- > Gross margin of a coal-fired power plant (plant efficiency: 36%)



■ 2017

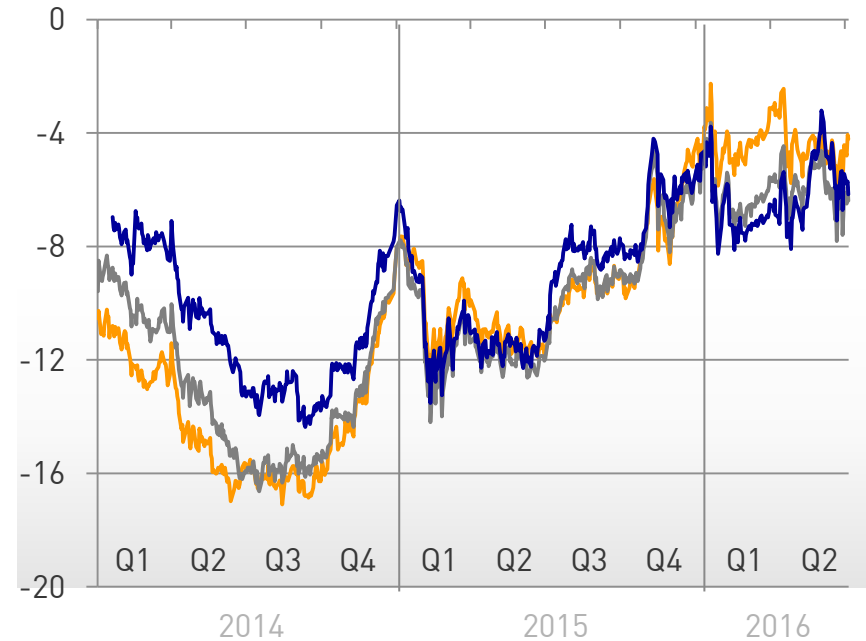
■ 2018

■ 2019

Clean-Spark-Spread Peak

in €/MWh

- > Gross margin of a gas-fired power plant (plant efficiency: 50%)

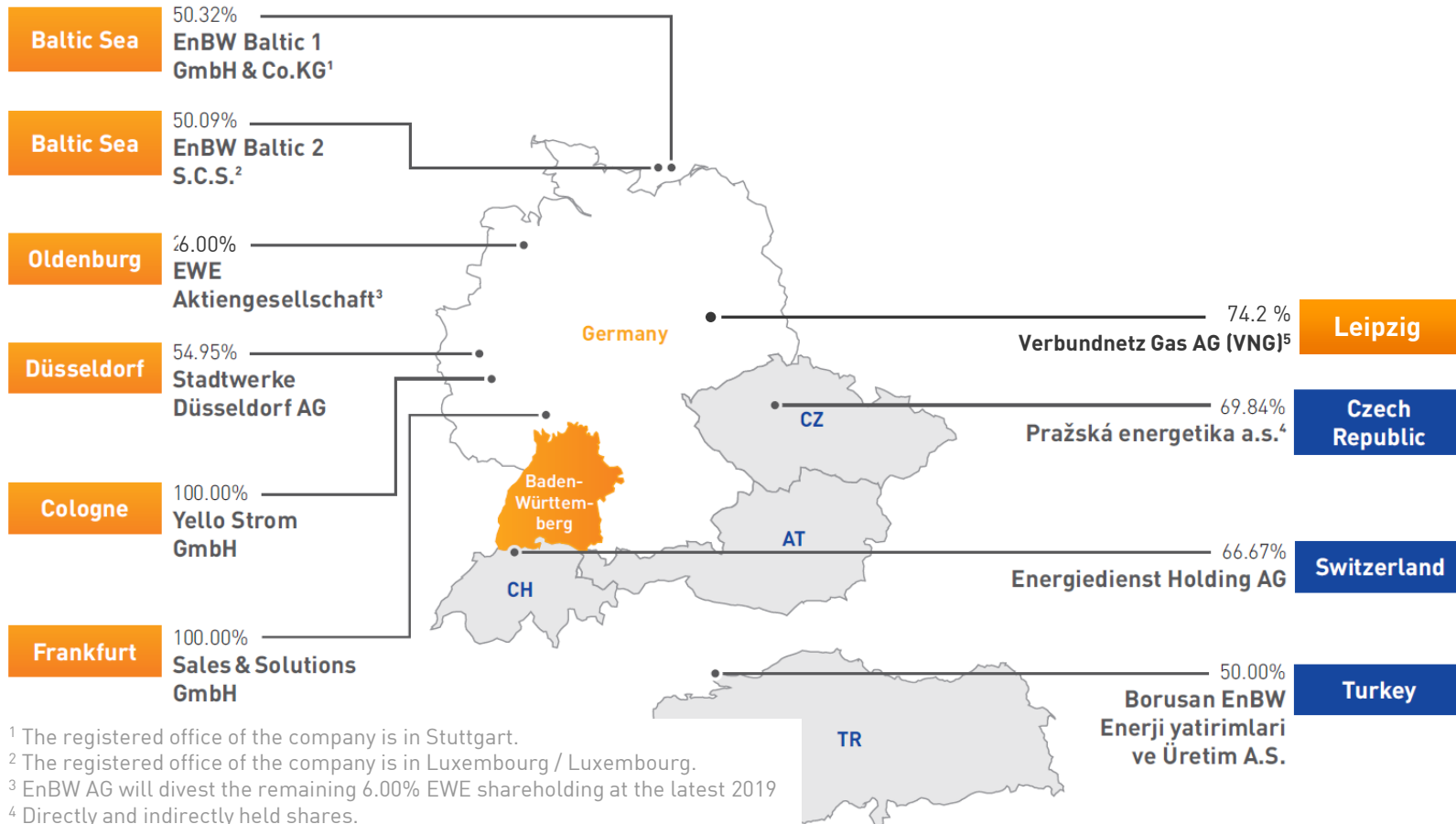


Clean-spark-spread represents the net revenue a generator makes from selling power, having bought gas and the required number of carbon allowances. Clean-dark-spread refers to an analogous indicator for coal-fired generation of electricity.

2.3 European electricity market: EnBW's market presence



Business radius and significant locations outside Baden-Württemberg



¹ The registered office of the company is in Stuttgart.

² The registered office of the company is in Luxembourg / Luxembourg.

³ EnBW AG will divest the remaining 6.00% EWE shareholding at the latest 2019

⁴ Directly and indirectly held shares.

⁵ Full consolidation 2017

2.4.1 German gas market: EnBW's market presence



EnBW's activities in Germany¹

- > **GasVersorgung Süddeutschland GmbH (GVS)** supplies natural gas to utilities, regional gas suppliers, industrial customers and power plants.
- > **Stadtwerke Düsseldorf AG (SWD)**, in which EnBW has a 54.95 % stake, has a large share of the gas market (B2C and B2B) in that region.
- > **Yello Strom GmbH** offers nationwide gas distribution to retail customers.
- > **Terranets bw GmbH** (gas transportation) & **Netze BW GmbH** (gas distribution) guarantee security of gas supply in Baden-Württemberg by their gas networks.
- > **Verbundnetz Gas AG (VNG)** offers EnBW with the majority stake of 74.2 % a one-step chance to establish a viable footprint in the German Gas market (full consolidation 2017).



EnBW runs gas operations
in its home market of **Baden-Württemberg**,
but serves also customers throughout **Germany**.

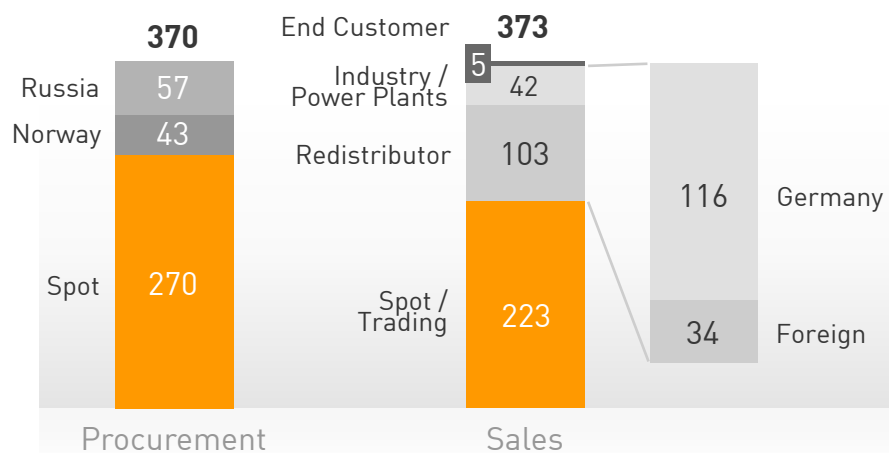
¹ Further shareholdings: Erdgas Südwest GmbH, EnBW Ostwürttemberg DonauRies AG and ZEAG Energie AG

2.4.2 VNG: gas player in Eastern Germany plus neighbouring countries



Gas procurement and sales 2015

in TWh



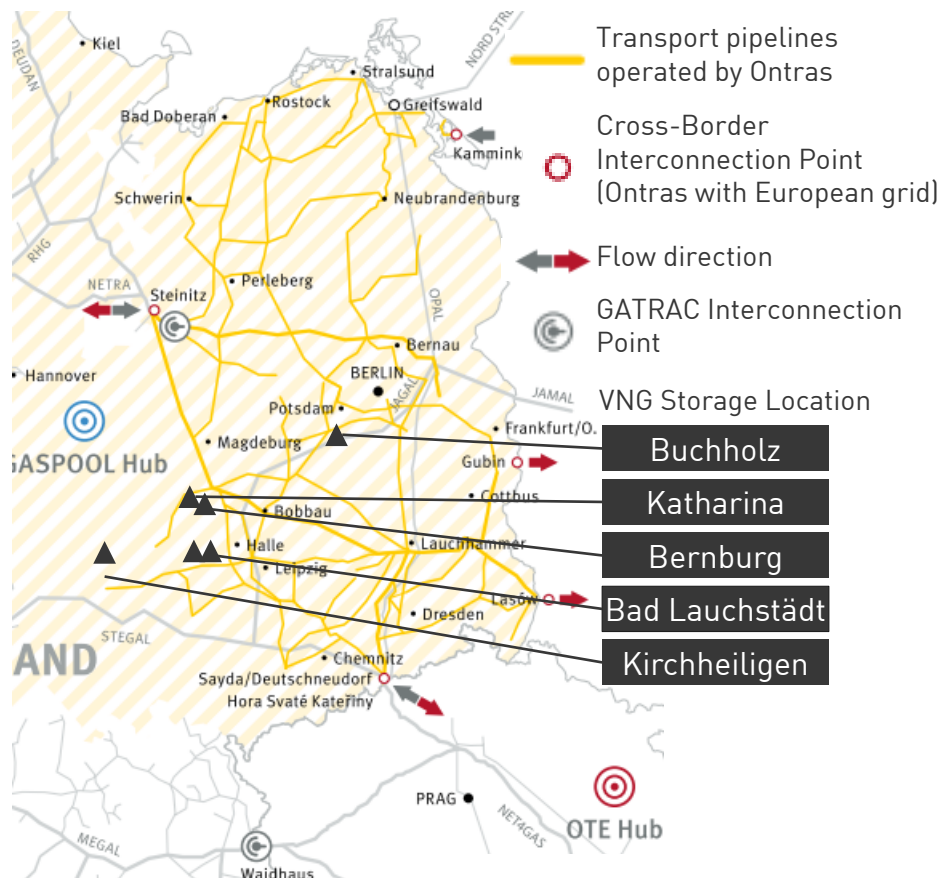
Key figures ¹

VNG Group		2013	2014	2015
Gas Sales	TWh	362	368	373
Revenues	€m	10,987	9,978	9,402
EBIT ²	€m	182	230	-54
Employees	€m	1,440	1,427	1,441

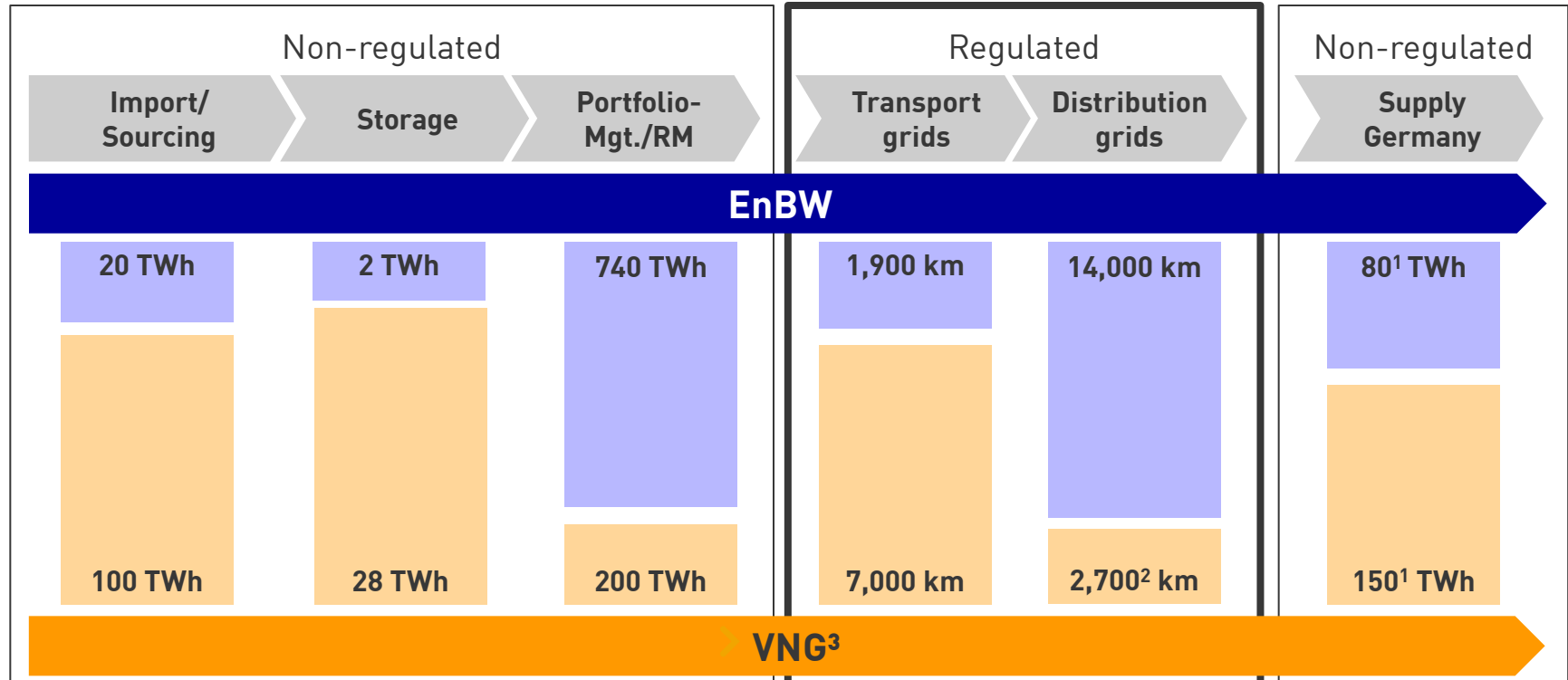
¹ Figures based on German GAAP

² EBIT: inclusive tax refund for exploration costs of VNG Norge

VNG-Ontras grid and storage locations



2.4.3 VNG: zip-like consolidation of complementary entities



A top 3 player in the German gas market
 Diversification effect
 Intelligent cooperation on equal terms

¹ Of which international: EnBW 1TWh; VNG; 34 TWh

² Poland

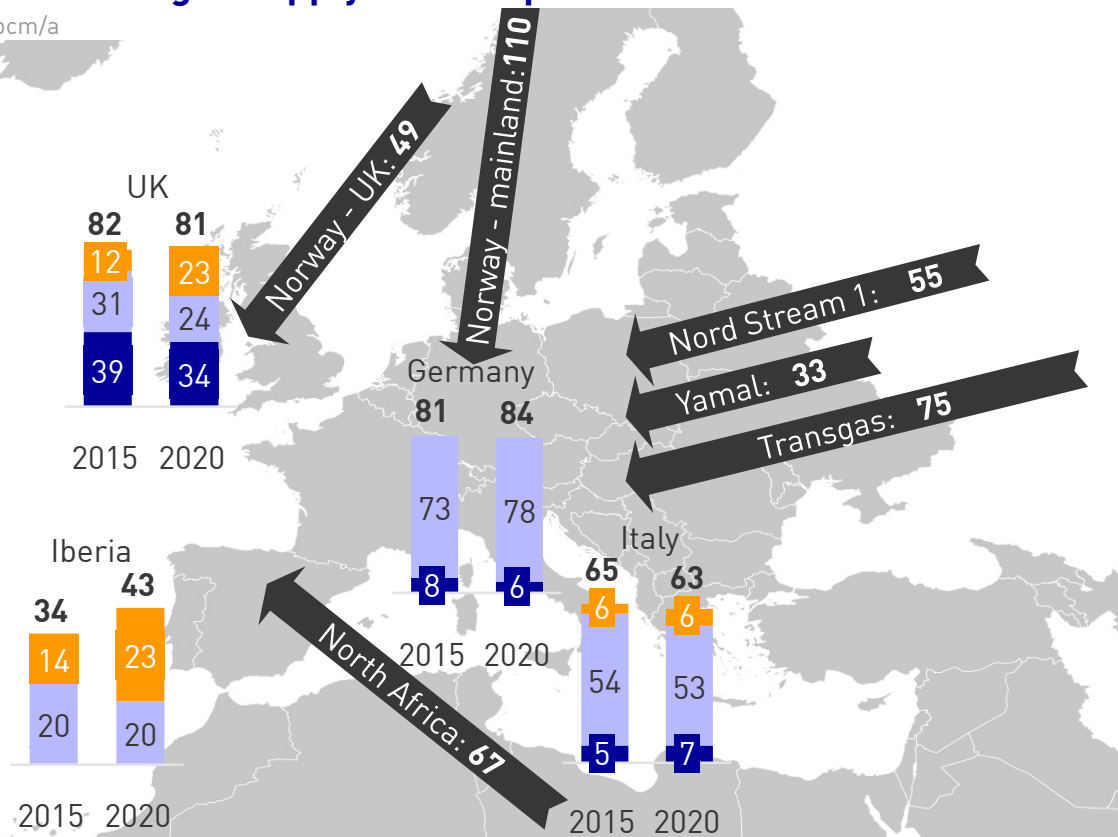
³ Numbers of 2015

2.5.1 European gas market: Procurement



Sources of gas supply for Europe¹

in bcm/a



- Domestic gas production in Europe and Germany is declining considerably until 2020
- Reduction of domestic production can be compensated by additional gas supply via pipelines or LNG
- New major pipeline projects are planned to secure gas supply for Europe (e.g. extension of Nord Stream Pipeline)
- LNG allows diversification of supply sources to reduce dependency on Russia

¹ Source: IHS Cera, Entso-G Forecast 2015

² First flows planned in 2019

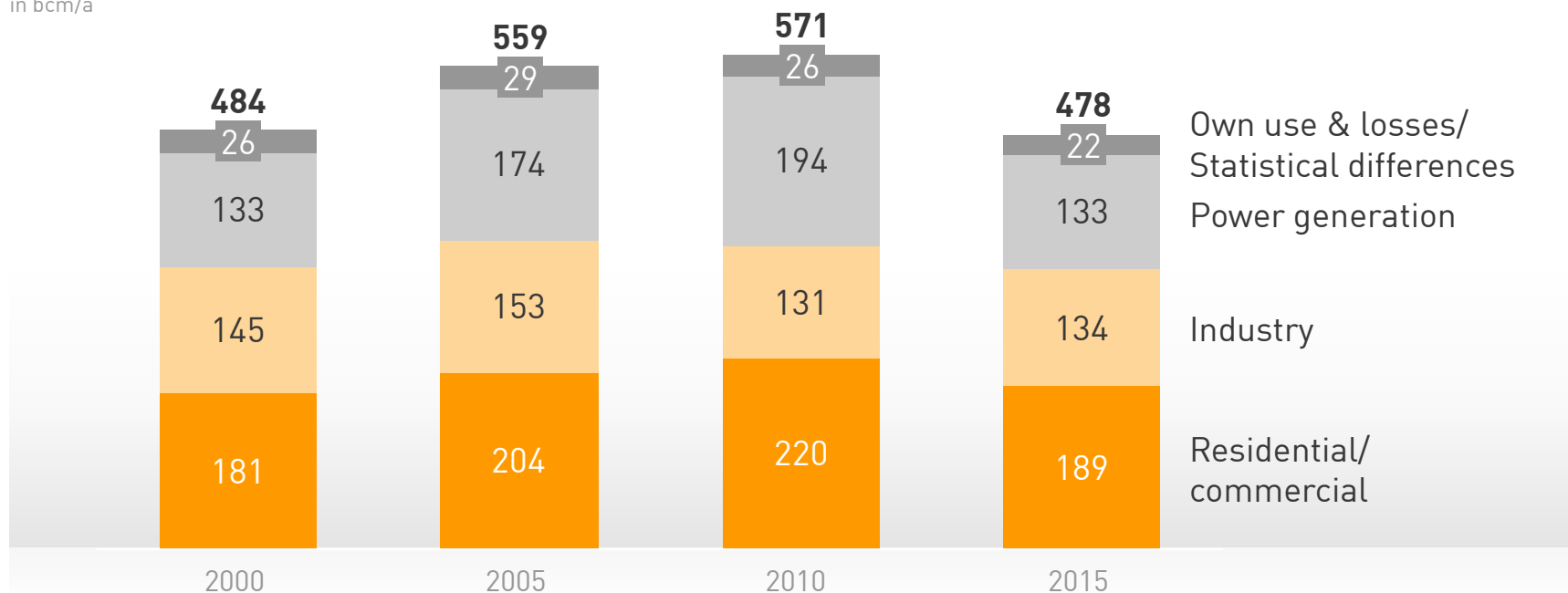
■ LNG ■ Piped ■ Domestic

2.5.2 European gas market: Development of gas demand



Development of gas demand in Europe¹

in bcm/a



- › Continuous growth in the past driven by heating gas market and electricity generation
- › Highly volatile demand for heating gas due to the influence of weather conditions
- › Current decrease in demand due to the economic crisis in Southern Europe and much lower gas demand from gas-fired power plants; furthermore small decrease because of the rising role of energy efficiency

¹ EU28 member states and Albania, Montenegro, Norway, Serbia, Switzerland and Turkey
Source: IHS Energy, 2015

Agenda 3 – Customers and Competition



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Links

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- > [EnBW Group online](#)

3.1 Four categories of competitors: global, national, local and new players



Players	Companies	Characteristics	Position of EnBW
> Global		> Broad international growth strategy , focus on market consolidation	> EnBW is positioned as an integrated energy company focusing on Germany and selected foreign markets > Three high growth areas are Renewable Energies, Grids and Sales
> National		> Strong national position and selected foreign activities, focus on market development	
> Local		> Focus on regional markets & selected growth segments (esp. decentralized and renewable generation)	
> New		> Entry of new participants into the market increases competition and fragments the value chain	

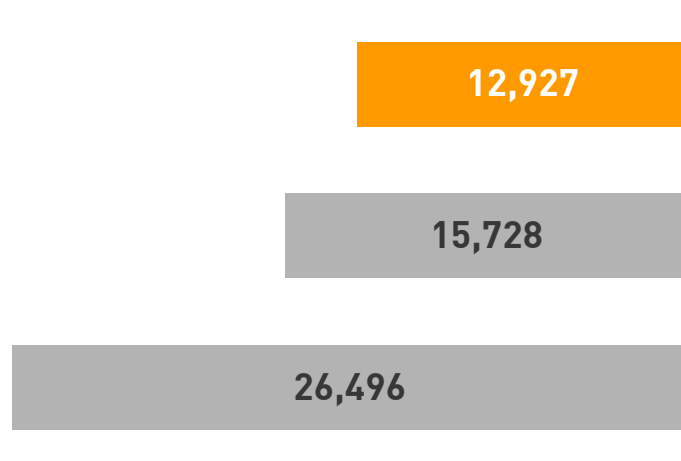
Key challenge: optimal positioning given the regulatory/competitive market environment

3.2 EnBW's market position in Germany regarding electricity generation and CO₂ intensity



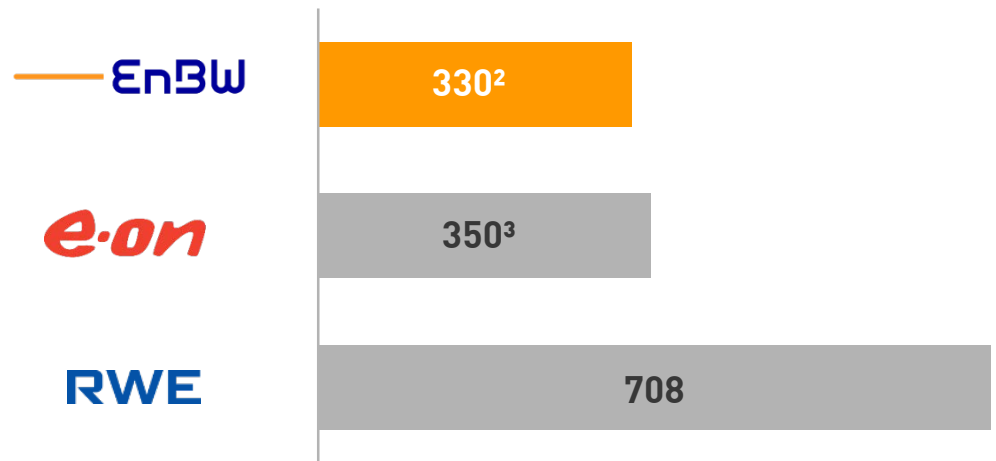
Generation portfolio¹

in MW



Specific CO₂ emissions¹

in g CO₂/kWh



EnBW has the smallest generation portfolio, but a significant lower CO₂ intensity compared to the overall German average of 508 gCO₂/kWh.

¹ Figures of the companies' Annual Reports 2015

² EnBW: Long-term procurement agreements and partly owned power plants are included in own electricity generation.

³ E.ON: Europe only

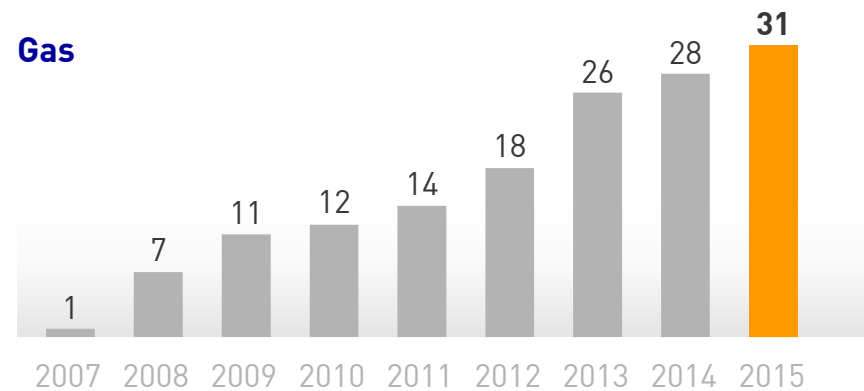
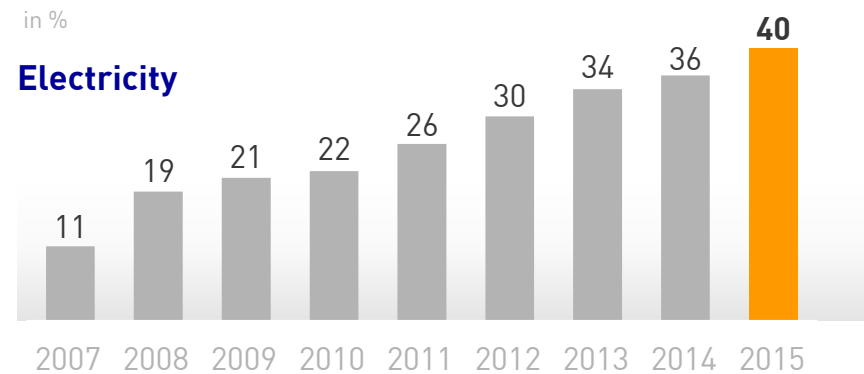
3.3 The “Energiewende“ increases competition



Retail and business customers - trends

- > Growing price sensitivity¹ and new competitors lead to fiercer competition
- > Commodity business (electricity and gas) is still significant
- > Local energy generation by customers on the rise
- > Increasing energy efficiency (supported by political measures)
- > Local energy solutions offered by utilities, together with new competitors
- > EnBW as a partner for the industry and municipalities
- > Increasing convergence on the markets due to sector coupling and the electrification of heating and transport (car manufacturers, CHP manufacturers as electricity suppliers and virtual power plant platform operators)

Strong competition: Cumulative churn rate of retail customers²



¹ ~80% change for price reasons and ~20% change to green energy or services; Source: EnBW; Data as of 30 June 2013

² Source: BDEW-Kundenfokus, BDEW-Energietrends

3.4 Development path for energy solutions



Data and Analysis

- > Metering services
- > Energy audits and management Systems
- > Status reports of energy system
- > Procurement support for energy and efficiency
- > Market integration by virtual power plant



Assets, Maintenance and Operation

Commercial & Industrial customers:

- > Supply and performance contracting
- > Energy efficient refurbishing of buildings
- > General contracting
- > Management optimization of customers energy generation assets & infrastructure

Residential Customers

- > Integrated modular energy system for residentials (PV, battery, heating, e-mobility)



E-Mobility

- > New business field in a growing market
- > Integrated solutions for different customer groups (public, commercial, industrial, residential)
- > Assets, maintenance and operation of infrastructure
- > Entry and billing Systems

3.6 High market potential for energy-related services



Operations

- > Market for energy-related services very fragmented
- > Market volume in Germany €5.5 bn
- > Growing challenges for municipal utilities through rising pressure on costs, fulfilling regulatory requirements and billing technology for the new energy concept
- > Due to high proportion of fixed costs processing is strongly influenced by economy of scale
- > Cost advantages for large providers
- > Technology shift and economies of scale offer significant growth opportunities in this market

„Utility in the box“ offering



- > Utility in the box covers the complete meter-to-cash value chain. Services can be chosen to suit the individual demand of utility companies
- > Services either as Software-as-a-Service only or full scale Business Process Outsourcing
- > EnBW with proven knowledge in liberalized utility markets
- > Successful customer go-live of one of the largest network operators in Germany

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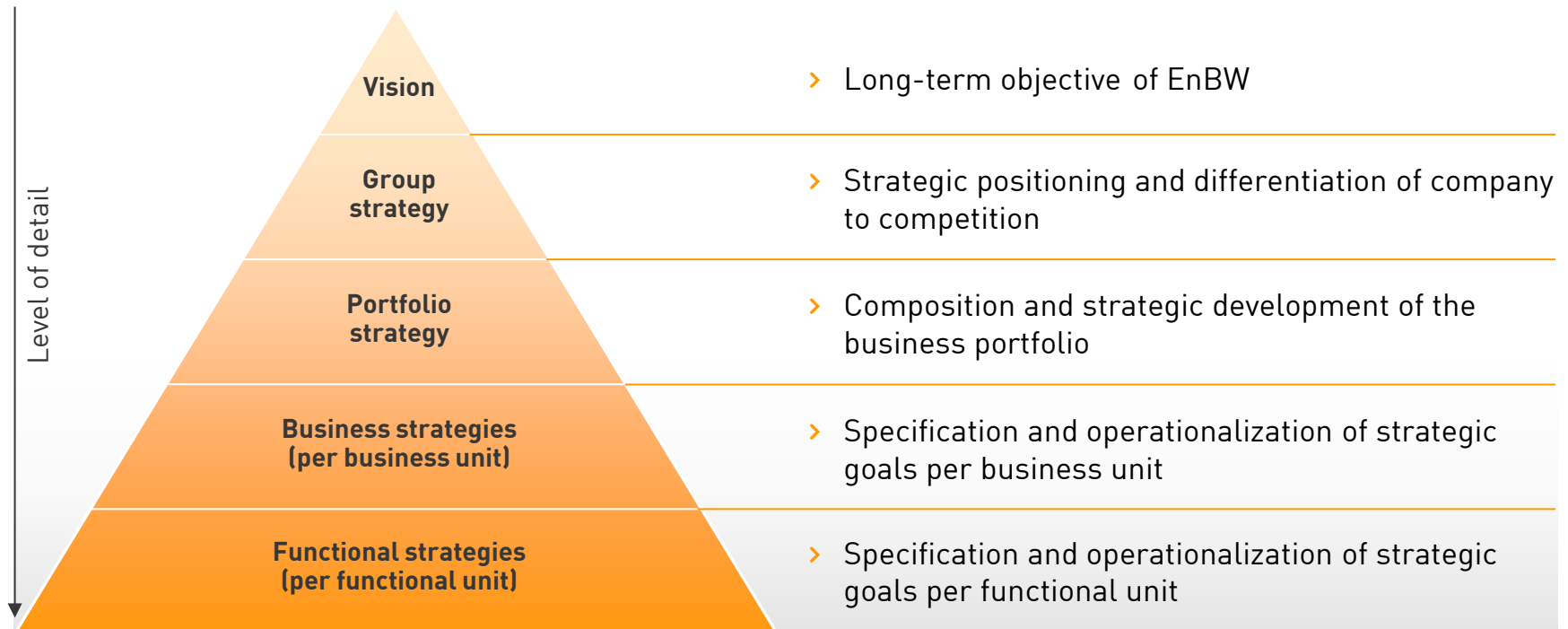
- > [Targets and strategy](#)
- > [EnBW Baltic 1 + 2 Wind Farms \(only available in German\)](#)
- > [EnBW Group online](#)

4.1 Corporate strategy follows a structured process at EnBW



Key elements of the strategy

Discussion points/topics

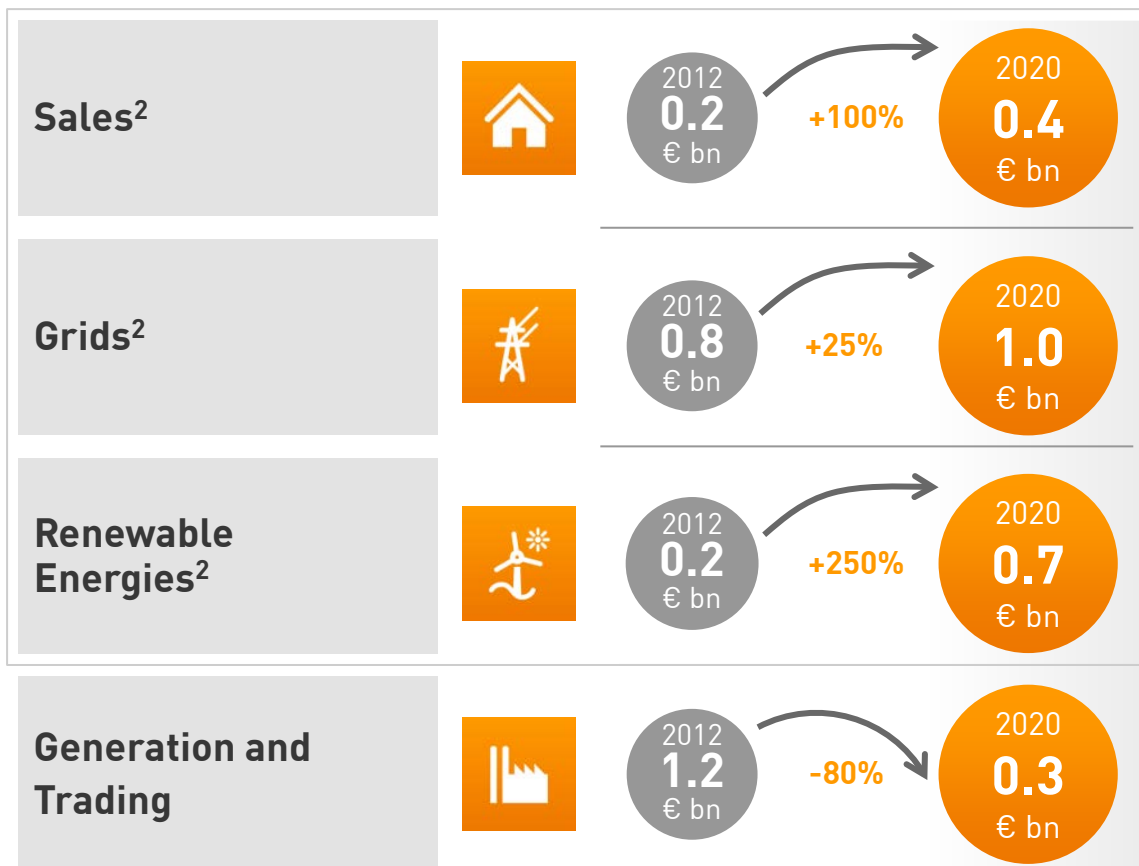


4.2.1 Strategic objectives: EnBW 2020 strategy



Vision – Long term objectives¹

Adjusted EBITDA




¹ Figures as of 31/12/2015

² Strategic growth issues

4.2.2 EnBW 2020 strategy: Based on two management models




- > Two management models, each determined by the respective mandate, working back to back on the basis of system competence and market orientation
- > Not necessarily two separate companies. Instead, specific business activities and processes can be assigned accordingly in terms of content:



Customer proximity
e.g. end customer business, energy-related services and trading

Specific features include

- > **Customer insight-based orientation:** knowing the needs of customers and anticipating developments at an early stage
- > **Innovative:** ideas can be swiftly brought to the market
- > **Entrepreneurial style:** small and dynamic teams to test new business models; deliberately decoupled from “heavy” group processes



Engine room of the Energiewende
e.g. grids, renewables, conventional power generation and operations

- > **Efficient and safe** construction and operation
- > **Simple** in terms of organisation and management of business
- > **Flexible** in terms of plants, facilities, processes and costs

4.2.3 EnBW 2020 strategy: Corporate strategy



Energiewende. Safe. Hands on.

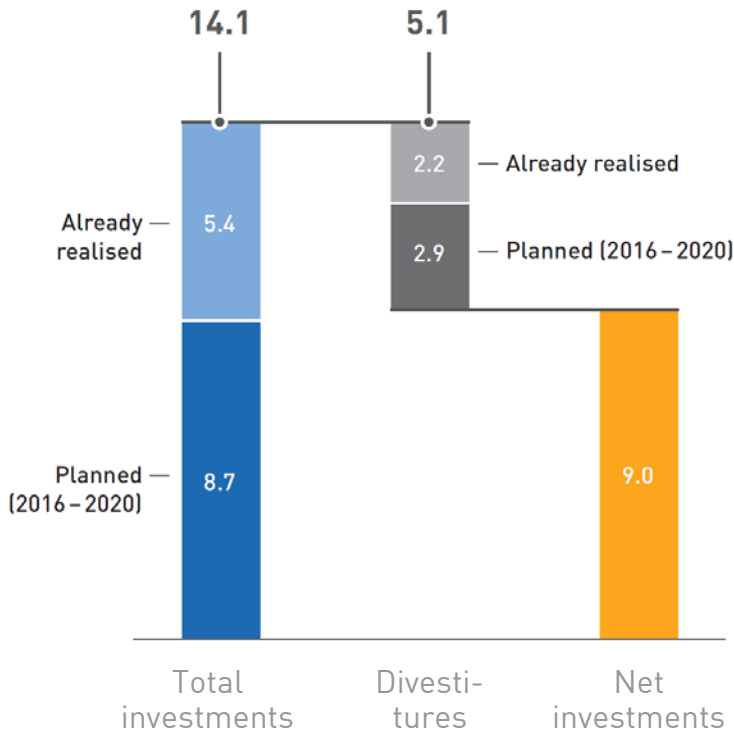
	Customer proximity		Engine room of the Energiewende
Where shall we play?	<ul style="list-style-type: none"> > End customer business in electricity and gas > Energy-related services/ energy efficiency (for B2C & B2B segments, increasing for municipal utilities and local communities) > Trading and origination 	<ul style="list-style-type: none"> > From the region of BaWü into Germany, Austria, Switzerland and Turkey 	<ul style="list-style-type: none"> > Wind onshore, offshore and hydropower > Conventional generation located mainly in BaWü > Transport and distribution grid infrastructure managed from BaWü into neighbouring regions (also as service provider)
How can we win?	<ul style="list-style-type: none"> > System competence of energy > Innovative capability and innovation management > Strong brand portfolio 	<ul style="list-style-type: none"> > Stringent performance management > Partnerships and fostering of dialogue 	<ul style="list-style-type: none"> > Operational excellence > Infrastructure in the energy industry > Regulatory management > Active opportunities for third parties to invest and participate
What should our structure be?	<ul style="list-style-type: none"> > Building up of an innovation campus > Acquisition of/ JV with energy-related companies 	<ul style="list-style-type: none"> > Simple and functional management with simple structures, flat hierarchies and lean processes 	<ul style="list-style-type: none"> > Maximum efficiency > Stringent cost orientation for defined quality level (target costing) > Simplicity and standardisation > Technological development partnerships

4.2.4 EnBW 2020 strategy: Portfolio strategy



Investments and divestitures as part of the expansion of the portfolio¹

in € bn



¹ Figures as of 31/12/2015 (base year 2012)

4 Segments



Grids

- > Expansion of the transmission and distribution grids through to smart grids



Renewable Energies

- > Expansion of renewable energies with a focus on wind power (on-/offshore) and hydropower



Sales

- > Growth markets in the area of the new "Energiewelt"
- > Slight growth – capital light business models



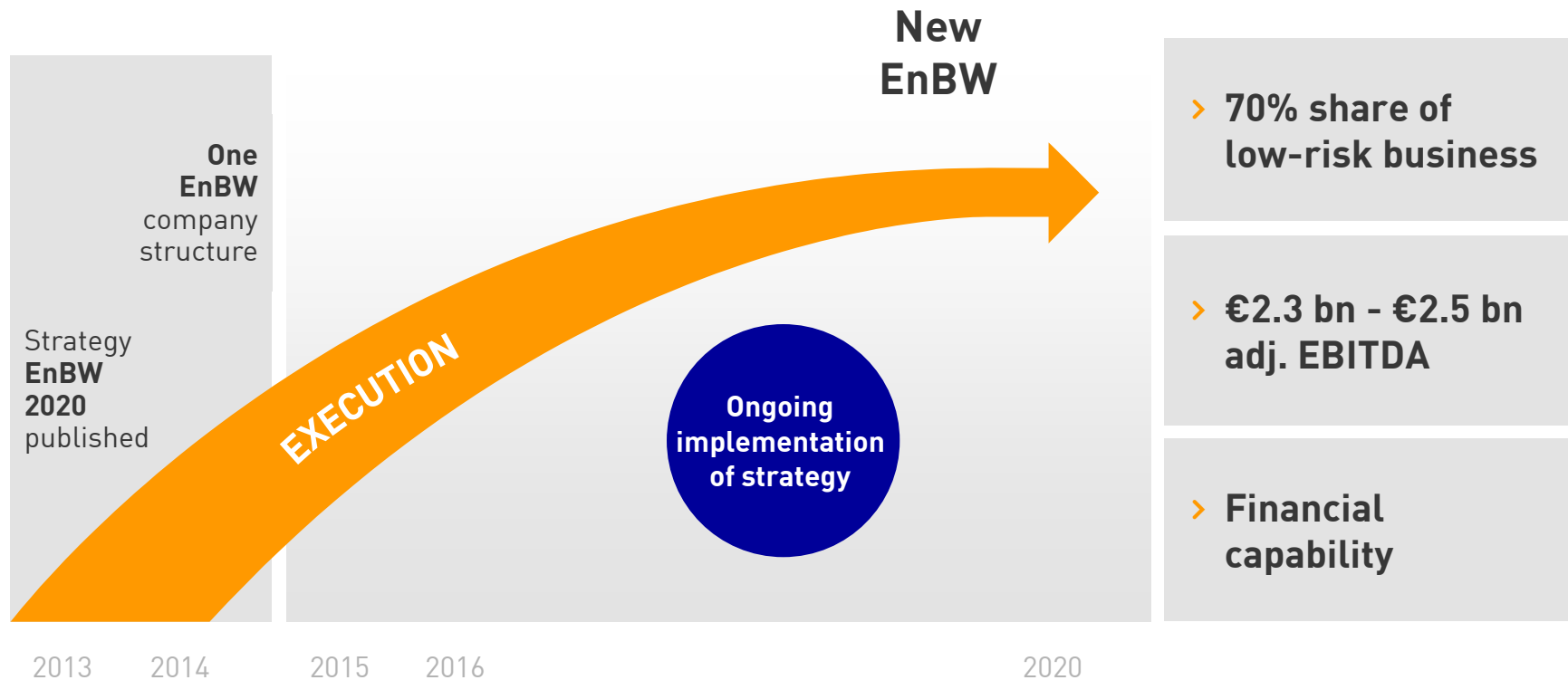
Generation and Trading

- > Moderate investment in thermal generation

4.3 Implementation of EnBW 2020 strategy: EnBW is delivering on its promises



Implementation of strategy instead of splitting the company: Strategy execution!



4.4 Additional efficiency measures of €250m until 2020¹



 **Sales**

 **Administrative functions**

 **Generation & Trading**

Implementation

Withdrawal from B2B Commodity Business

- > Unprofitable & no growth perspective
- > Ongoing customer contracts will be fulfilled
- > 400 employees affected



Considerable savings

- > Corresponding structural effects (personal savings)
- > Productivity improvements
- > Reduction in scope of services
- > Outsourcing

Conception

- > Focused customer and
- > competition-oriented approach



- > Concrete measures for each functional unit

- > Further cost reductions to be implemented

¹ Includes efficiency measures of shareholdings

4.5.1 Financial and non-financial KPIs and targets: Finance and strategy goal dimensions



	Goal	KPI	2015 ¹	Target 2020	
Finance goal dimension	Securing profitability	Adjusted EBITDA in € bn	2.1	2.3 – 2.5	The operating result is to return to the average level achieved before the Energiewende. The total regulated business (Grids and Renewable Energies segments) together contributes around 70% to this result.
	Safeguarding the good credit rating	Dynamic leverage ratio	3.19	< 3.3	In proportion to the operating result, leverage remains within narrow boundaries. The unchanged goal is to ensure good creditworthiness controlled via the dynamic leverage ratio, which at < 3.3 currently corresponds to an A rating.
	Raising the Group's value	ROCE in %	9.5	8.5 – 11	Return on capital employed (ROCE) is higher than the cost of capital. EnBW is creating value for its stakeholders.
Strategy goal dimension	Share in results of Sales	Share in adjusted EBITDA (total) in € bn / in %	0.3 / 12	0.4 / 15	The operating result for the Sales segment doubles from €0.2 bn (reference year: 2012) to €0.4 bn in 2020 and represents around 15% of the Group operating result. Innovations make this possible.
	Share in results of Grids	Share in adjusted EBITDA (total) in € bn / in %	0.7 / 35	1.0 / 40	The operating result for the Grids segment increases by 25% from €0.8 bn (reference year: 2012) to €1.0 bn in 2020 and represents around 40% of the Group operating result. The share accounted for by the stable and regulated business is expanding.
	Share in results of Renewable Energies	Share in adjusted EBITDA (total) in € bn / in %	0.3 / 14	0.7 / 30	The operating result for the Renewable Energies segment increases by 250% from €0.2 bn (reference year: 2012) to €0.7 bn in 2020 and represents around 30% of the Group operating result. EnBW is more sustainable.
	Share in results of Generation and Trading	Share in adjusted EBITDA (total) in € bn / in %	0.8 / 37	0.3 / 15	The operating result for the Generation and Trading segment falls by 80% from €1.2 bn (reference year: 2012) to €0.3 bn in 2020 due to changed framework conditions and only represents around 15% of the Group operating result.

¹ Other / Consolidation accounts for +2% of the overall adjusted EBITDA.

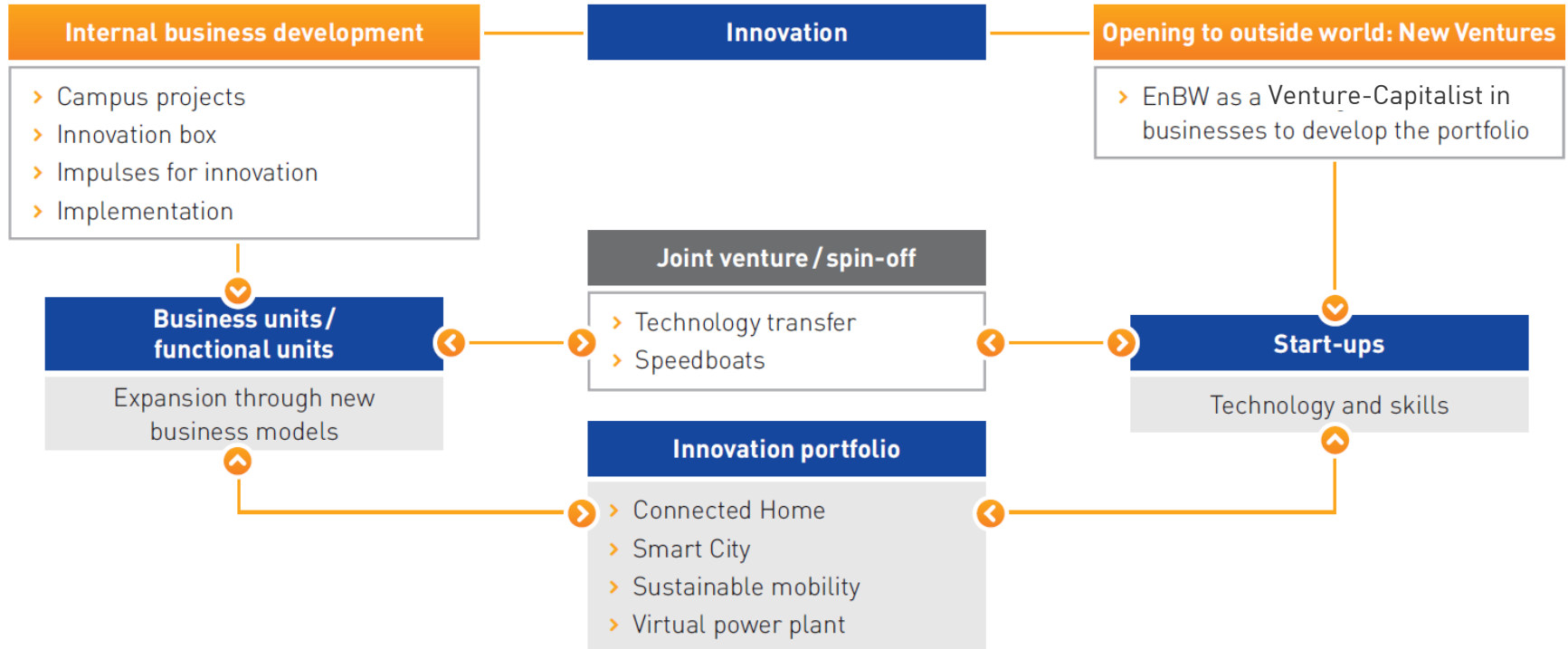
4.5.2 Financial and non-financial KPIs and targets: Other goal dimensions



	Goal	KPI	2015	Target 2020	
Customers goal dimension	Increasing brand attractiveness	Brand Attractiveness Index EnBW / Yello	43 / 35	44 / 40	EnBW and Yello are regarded as attractive brands by consumers, supporting sales and customer acquisition.
	Customer proximity	Customer Satisfaction Index EnBW / Yello	136 / 152	> 136 / > 159	EnBW and Yello customers are satisfied customers with a high level of customer loyalty. EnBW and Yello are organisations strongly oriented towards the customer and which meet the needs and wishes of their customers through tailored solutions and products.
	Supply reliability	SAIDI (electricity) in min / year	15	< 25	EnBW regards the maintenance of supply quality to its customers as its chief priority. The high degree of supply reliability in the EnBW grid area is based on comprehensive investment in grids and plants and our distinctive system competence.
Employees	Employee commitment	Employee Commitment Index (ECI) ¹	60	65	The commitment our employees feel to EnBW is very strong, and there is faith in the future viability of the company.
	Occupational health & safety	LTIF ¹	3.8	≤ prior year figure	The number of occupational accidents and resulting days of absence remains at a sustained, stable level or falls.
Environment	Expand renewable energies (RE)	Installed capacity of RE in GW and the share of the generation capacity accounted for by RE in %	3.1 / 23.6	5.0 / > 40	The share of renewable energies in EnBW's generation capacity has doubled compared with 2012. Onshore and offshore wind power and hydropower are at the forefront in this respect.

¹ Variations in the group of consolidated companies; see the definition of the key performance indicators on page 25 of the EnBW Report 2015.

4.6.1 Innovation: The innovation process of EnBW



4.6.2 Innovation: Venture Capital investments into innovative start-ups



EnBW New Ventures is the connection between start-ups and EnBW Group

- > Win-Win for both sides
- > Start-up gains access to energy market expertise, customers and suppliers of EnBW
- > EnBW participates in fast innovation cycles and growth options
- > Cooperational approach to foster business with products and services based on innovative business models

EnBW New Ventures follows an active portfolio approach

- > Evergreen with total investment amount of **€ 100 million**
- > Direct minority participations
- > Open for syndication in a traditional VC approach

Current EnBW New Ventures Portfolio

- > DZ-4 GmbH: one stop shop for PV and battery lease model
- > Lumenaza GmbH: software platform to deliver regional renewable electricity generation to local communities



4.6.3 Innovation: Creating new business models at the Innovation Campus



Managing

- Adopt the findings from research without delay and create suitable business models in a start-up environment
- Develop new cross-disciplinary business models based on state-of-the-art methodology
- Significantly improve EnBW's innovation capability and culture

Innovation capacity to bring ideas swiftly to the market

- Small entrepreneurial, dynamic teams developing and testing new business models from concept to market entry
- Inspiring environment deliberately set apart from group structure



4.6.4 Research and development: Creating know-how for new opportunities



Creating knowledge for long-term, complex or visionary business opportunities



- › Emerging technologies
- › Game-changing technologies
- › New partnerships

Learning by doing: pilots and demonstrations with particular focus on



- › Digital energy
- › Decentralized energy and storage
- › Deep geothermal energy (for heat and electricity generation) and new renewables

Explore new and convincing solutions



- › Ready to succeed for the energy future
- › Win the public opinion with attractive solutions
- › Exciting R&D projects to attract future employees

4.7.1 Corporate Sustainability: Sustainability is an integral part of the strategy



Corporate Sustainability at EnBW is integrated in:

- ✓ Corporate strategy
- ✓ Non-financial TOP KPIs
- ✓ Stakeholder Management
- ✓ Risk & opportunity analysis
- ✓ Board remuneration

„Sustainability forms a central theme of our corporate culture. Sustainability includes fulfilling our customers' requirements and working together responsibly with our business partners on the basis of values and regulations along the entire value added chain.“

Dr. Frank Mastiaux
CEO of EnBW



4.7.2 Corporate Sustainability: EnBW leading in various sustainability ratings



Sustainability rating



2015

C+

- ✓ Strong improvements in:
- ✓ Environment
- ✓ Compliance
- ✓ HR

Carbon Disclosure Project



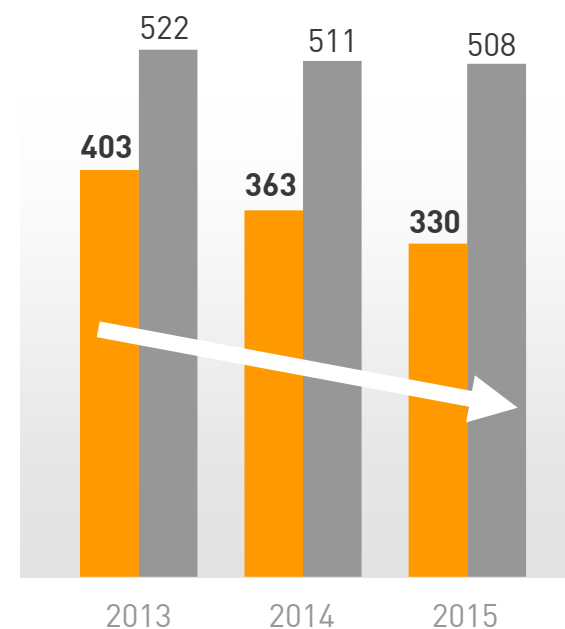
2015

99B

- ✓ EnBW is "Sector Leader Utilities "
- ✓ 99% transparency
- ✓ "B" refers to CO2-performance

CO₂-Energy intensity of own electricity generation, in steady decline

EnBW Group Germany



4.7.3 Corporate Sustainability: Non-financial KPIs are part of the performance management system



Non financial KPIs are core elements for EnBW's performance

KPI		2014	2015	Target 2020	
Customer	> Satisfaction Index	114	↗ 136	>136	> Strong customer orientation
Employees	> Commitment Index	56	↗ 60	65	> Strong employee commitment
Environment	> Generation – share of renewables	19%	↗ 24%	>40	> Frontrunner in Renewable Energies

4.7.4 Corporate Sustainability: Sustainability reporting



Highlights of the Integrated Report 2015

- > Concise description of **business model** including integrated sustainability strategy
- > Integration of **all resources** into the business model graphic
- > Explanation of **interdependencies**: development of 3 examples from fiscal year 2015
- > **Linking** the top opportunities & risks with the KPIs



TCFD

- > The **FSB** (Financial Stability Board) established the TCFD in November 2015. **Thomas Kusterer**, CFO of EnBW, has been asked by M. **Bloomberg** to join the TCFD
- > The **TCFD** is an industry-led group that **aims** to develop voluntary, consistent climate-related financial disclosures for companies that would be useful to lenders, insurers, investors and other stakeholders



4.7.5 Corporate Sustainability: Further activities



Activities

Content

Active in networks

- **UN Global Compact:** EnBW acceded to the network in 2010.
- **Econsense:** EnBW is a member of the “Forum for Sustainable Development of German Business” and contributes to several work groups.
- **Wirtschaftsinitiative Nachhaltigkeit (WIN):** EnBW is a partner of the “WIN-Charta”, an initiative of Baden-Württemberg for sustainable economic activities.



Targeted environmental protection

- The **environmental management system** at EnBW is certified according to **ISO 14001** and valid for all environmentally-relevant activities of EnBW AG.
- Due to the consistent development of the system, it ensures that negative effects on the environment are avoided as best as possible in all areas of activity.



Responsible employer

- EnBW was once again rated as one of Germany's most attractive employers in 2016. In the study “**Top Employers in Germany 2016**”, EnBW impressed due to its qualities as an employer.
- EnBW performed particularly well in the categories of human resources planning, talent strategy, training & development and careers & succession planning.



Corporate Citizenship

- We concentrate our **support for general social issues** on the core areas of popular sport, education, social issues, the environment and art and culture.
- An important event for social activities of EnBW in 2015 was the 300th birthday of the City of Karlsruhe (KA300), where the headquarters of EnBW are located.



4.8 Corporate Governance: Responsible and transparent management



German Corporate Governance Code

- > We are convinced that responsible and transparent management fosters the trust placed in the company by investors, customers, employees and the general public and leads to sustainable added value.
- > Good **corporate governance** is an important component of the corporate culture at EnBW.
- > EnBW is in compliance with the recommendations of the **German Corporate Governance Code**, as amended on 5 May 2015.

For further information

- > [Overview Board of Management](#)
- > [Overview Supervisory Board](#)



Compliance

- > The **Compliance Management System**, which has been implemented throughout the Group, serves to minimise risks and avoid liability issues and a loss of reputation. It focuses on company and sector-specific risks and priorities and encompasses all controlled companies with employees in the EnBW Group. The main focus of compliance activities is placed on the prevention, detection and sanctioning of corruption, the prevention of violations against competition and antitrust laws, the prevention of money laundering and data protection issues. The effectiveness of the corruption prevention and antitrust law areas of the system were tested in accordance with the IDW PS 980 testing standard in 2013. They are deemed appropriate for the detection of the risk that there could be a significant violation of the regulations applicable in these areas in good time and with a sufficient degree of certainty, as well as for the prevention of such violations.
- > The EnBW **Code of Conduct** forms part of EnBW's culture.
- > The **Compliance Department** emphasised the most recent compliance incidents in the German economy, particularly in light of the importance of the compliance culture at EnBW, during numerous events and will also focus on this subject in more depth in the future.

Agenda 5 – Segments



1. EnBW at a glance..... >>
2. Regulatory Environment and Markets >>
3. Customers and Competition >>
4. Strategy >>
- 5. Segments >>**
6. Key Financials >>
7. Capital Markets >>
8. Service >>

Links

- > [EnBW Group online](#)

5.1 Segment overview



Sales

- > **Adjusted EBITDA 2015:** €255 mn
- > **Employees:** 3,300
- > **Task/products:** Sale of electricity, gas and energy-related services; energy solutions, e.g. contracting; energy efficiency consultancy; cooperation with local authorities, e.g. development of the “Sustainable City” project



Grids

- > **Adjusted EBITDA 2015:** €747 mn
- > **Employees:** 8,086
- > **Task/products:** Transport and distribution of electricity and gas; provision of grid-related services; water supply; guaranteeing the security of supply and system stability



Renewable Energies

- > **Adjusted EBITDA 2015:** €287 mn
- > **Employees:** 815
- > **Task/products:** Project development and management; construction and operation of renewable energy power plants



Generation and Trading

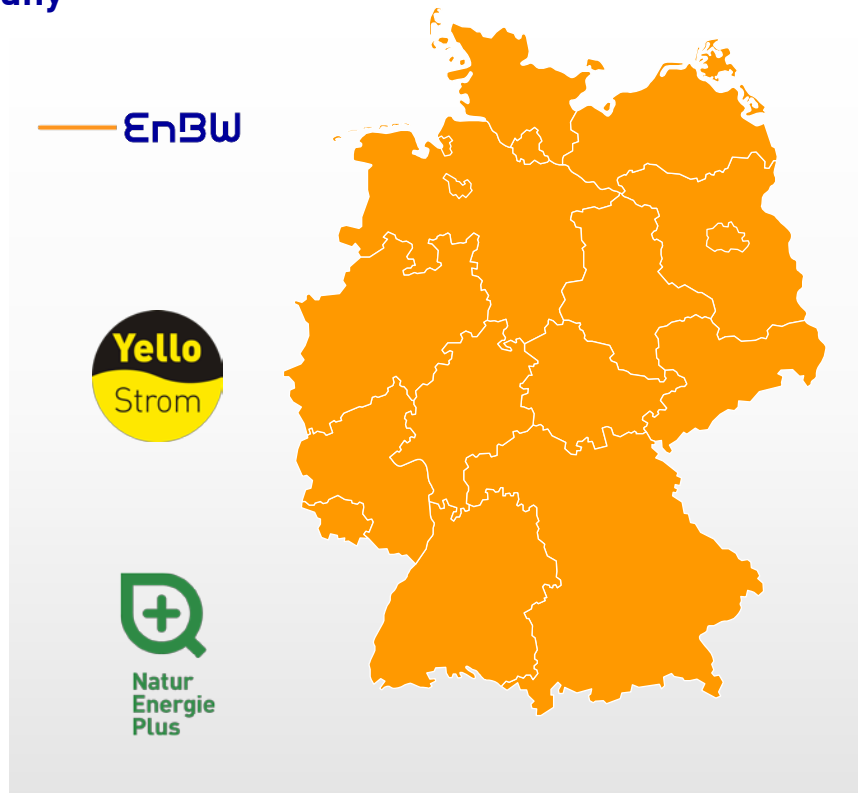
- > **Adjusted EBITDA 2015:** €777 mn
- > **Employees:** 5,167
- > **Task/products:** Advisory services, construction, operation and decommissioning/dismantling of thermal generation plants; electricity trading; risk MGT of market-related risks; development of gas midstream business, district heating; waste MGT/ environmental services; provision of system services; direct marketing of renewable energy power plants

5.2.1 Sales: Multi-brand approach



Multi-brand retail customer approach for Germany

- > **EnBW** as premium energy brand with focus on the Baden-Württemberg mass market and public authorities. In Germany for energy solutions like Contracting
- > **Yello Strom** as EnBW's single national brand for the German national mass market as a viable alternative for every customer
- > **Natur Energie Plus** is the national brand for ecologically oriented households



5.2.2 Sales: Market feedback



Brand awareness

<p>EnBW</p>	<ul style="list-style-type: none"> > The full-line service provider delivers quality and inventiveness made in BaWü: electricity, gas, water, energy/environmental services, district/local heating > Fair prices, excellent service and customer participation > Selected special products with added value > Retail/ business/ industrial customers and municipalities/municipal utilities 	<p>93% Baden-Württemberg Q2/2016</p>
<p>Yello</p>	<ul style="list-style-type: none"> > Retail customers in Germany > Attractive pricing > Focus on online sales and service > Electricity and gas for standard service > Selected special products only in cooperation 	<p>90% National Q2/2016</p>
<p>NEP</p>	<ul style="list-style-type: none"> > Nationwide sustainability brand > Ecological product with regional and ecological subsidies > Focus on people 	<p>7%¹ National Q2/2016</p>



¹ Methodical adjustment

5.2.3 Sales: Electricity and gas sales



Electricity and gas sales of the EnBW Group

in bn kWh

	2015	2014	Variance %
Electricity sales	115.6	126.1	-8.3
Retail and commercial customers (B2C)	15.5	15.8	-1.9
Business and industrial customers (B2B)	31.5	31.2	1.0
Trade	68.6	79.1	-13.3

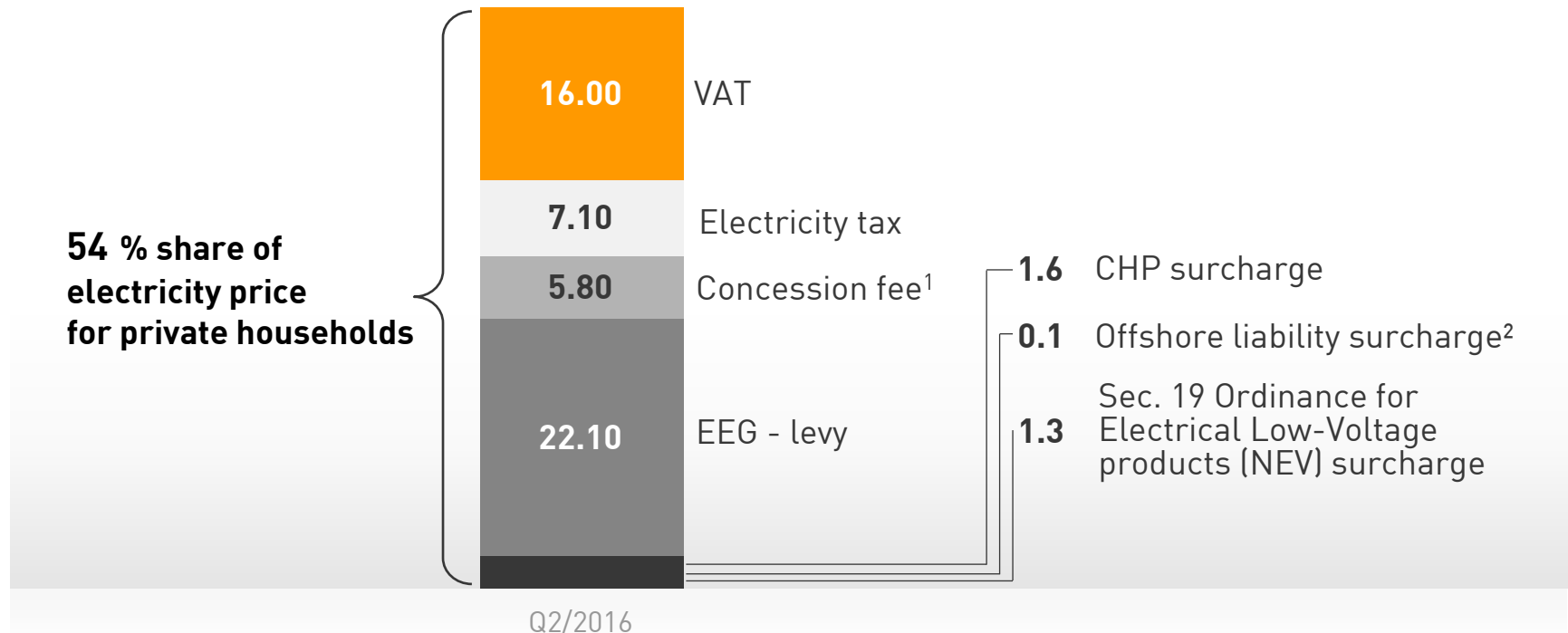
	2015	2014	Variance %
Gas sales	135.2	116.5	16.1
Retail and commercial customers (B2C)	10.5	8.7	20.7
Business and industrial customers (B2B)	69.9	62.4	12.0
Trade	54.8	45.4	20.7

5.2.4 Sales: Retail customer electricity price is mainly regulated/tax-driven



Electricity price

in %



Source: German Federal Association of Energy and Water Management (BDEW), May 2016

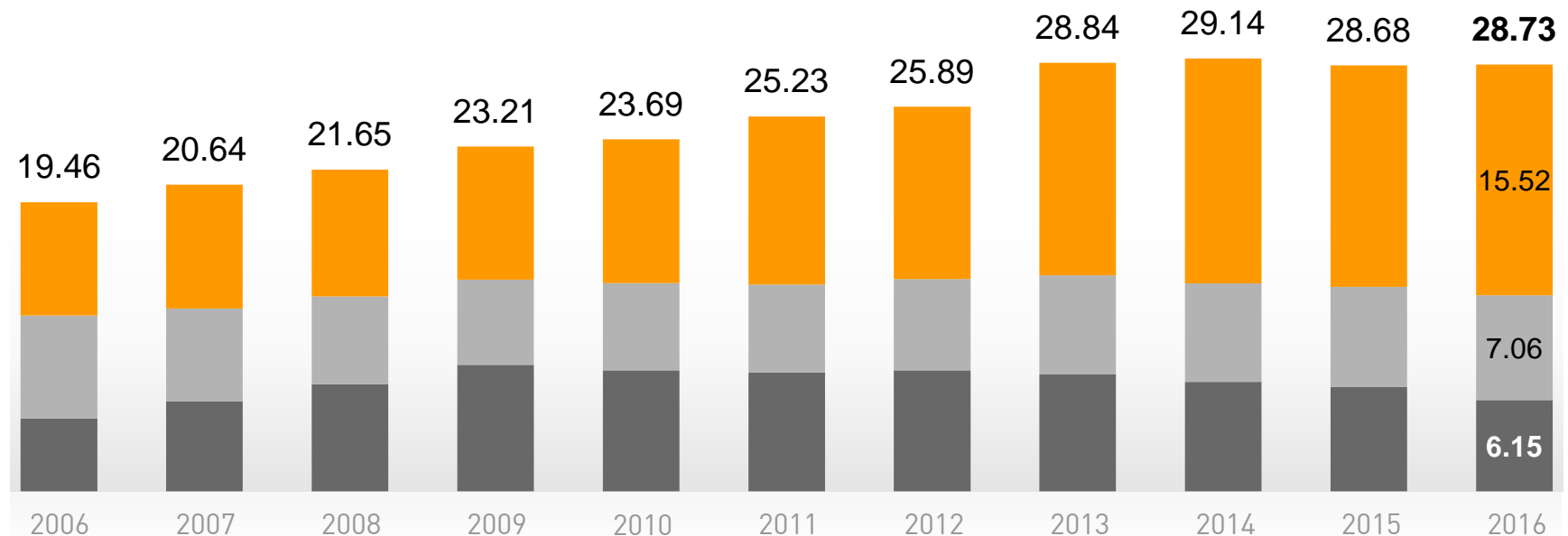
¹ Average concession fee; varies according to size of community

5.2.5 Sales: Development of retail electricity price



Average electricity price for a 3-person household (Annual consumption of 3,500 kWh)

In Cent/kWh



- Taxes, fees and cost allocation
- Network user charges, including metering, billing and metering station operation
- Procurement and sales

Source: BDEW, May 2016

5.3.1 Grids: Electricity and gas grids constitute EnBW's core business



EnBW grid regions



EnBW has a thorough grasp of the grid business

- > EnBW and its predecessor companies have been in the grid business for more than 100 years
- > Security of supply is our highest priority – which is why we employ modern and tested technologies and maintain an extensive network of service centres
- > Efficiency benchmark from most recent regulatory period certifies generally best results for EnBW grids
- > High regulatory competence/market competence

Grid business has stabilising effect on portfolio

- > Electricity and gas grids are subject to regulation
- > Stabilising risk/return mix, with stable cash flows

Excl. shareholdings: Energiedienst Holding AG, Erdgas Südwest GmbH, EnBW Ostwürttemberg DonauRies AG and ZEAG Energie AG

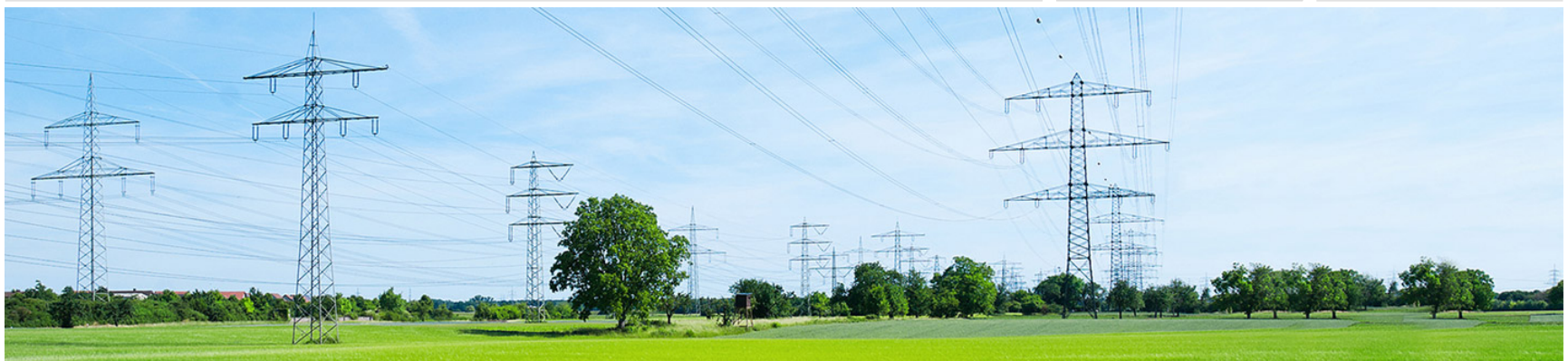
5.3.2 Grids: Electricity grids



Network grid lengths of the EnBW Group

in km

	2015	2014
Transmission grid		
Extra-high voltage 380 kV	2,100	2,100
Extra-high voltage 220 kV	1,100	1,400
Distribution grid¹		
High voltage 110 kV	8,200	8,600
Medium voltage 30/20/10 kV	44,900	45,000
Low voltage 0.4 kV	95,300	96,300
Overall length	151,600	153,400



¹ The slight decrease in the length of the distribution grid is mainly attributable to concession agreements not being renewed with all municipalities

5.3.3 Grids: General and regulatory environment



Challenges of grids in Europe

3 main challenges for the grids:

- Electricity generation is becoming increasingly uneven – fluctuations have an impact on grid stability
- Many **decentralised** electricity generation plants connected to the grid – load flow reversals partly possible
- Germany as a transit country – large proportion of cross-border trading

EnBW's approaches to solutions:

- **TSO**: New transmission lines can bridge the distance between focal point of production and consumption centres, use of HVDC transmission lines
- **DSOs**: Expansion of the grids to integrate renewables, smart expansion of distribution grids, efficient and swift expansion of the distribution grids by municipal partners



Regulatory environment

- Electricity transmission and distribution grids remain regulated, also in the long term, as a natural monopoly
- Regulatory risks manageable through increasing stability of the regulatory framework
- Revenue cap regulation enables grid revenues to remain independent of consumption fluctuations
- Pressure to be as efficient as possible ongoing due to regulation
- Improved investment conditions for transmission grids on account of changes in the regulatory framework
- Partly improvements in regulatory framework conditions for investments in distribution grids as of the third electricity regulation period (from 2019) due to the reform of the Incentive Regulation Ordinance of mid-2016
- Amendment of Incentive Regulation generally leads to no substantial changes in the regulatory framework for the transmission and distribution grid operators

5.3.4 Grids: Comparison of electricity transmission and distribution grids



Comparison electricity

	 Transmission grids 380 kV, 220 kV	 Distribution grids ≤ 110 kV
Organisation	<ul style="list-style-type: none"> > 4 operators: 50Hertz, Amprion, TenneT, TransnetBW > Grid length: ~35,000 km > Grids owned by operators 	<ul style="list-style-type: none"> > 880 operators > Grid length: ~1,772,000 km > Franchises issued by municipalities > Competition for franchises
Tasks	<ul style="list-style-type: none"> > Ensuring balance between generation and consumption > Using balancing power 	<ul style="list-style-type: none"> > Connecting consumers and local providers > Recording incidents and troubleshooting
Challenge of Energiewende	<ul style="list-style-type: none"> > Transport of electricity from wind power from northern to southern Germany > Building new HVDC transmission lines > Connecting offshore wind farms 	<ul style="list-style-type: none"> > Connection of decentralized renewables (e.g. PV, wind) > Use of smart grid tech and digitalisation of metering operation (e.g. smart meter)
Unbundling regulations	<ul style="list-style-type: none"> > Ownership unbundling, independent transmission operator (ITO) 	<ul style="list-style-type: none"> > Functional & financial unbundling of the grid business and obligation to non-discriminatory use of grid information

Source: BNetzA/BKartA Monitoring Report November 2015

5.3.5 Grids: Electricity grids are the backbone of the “Energiewende”



Electricity grids

General

- > The electricity grid business has become a growth business due to the new energy concept
- > Changes in legislation have simplified reimbursement for costs of investments in grids: e.g. amendments of the Incentive Regulation Ordinance (ARegV)

Transmission grid

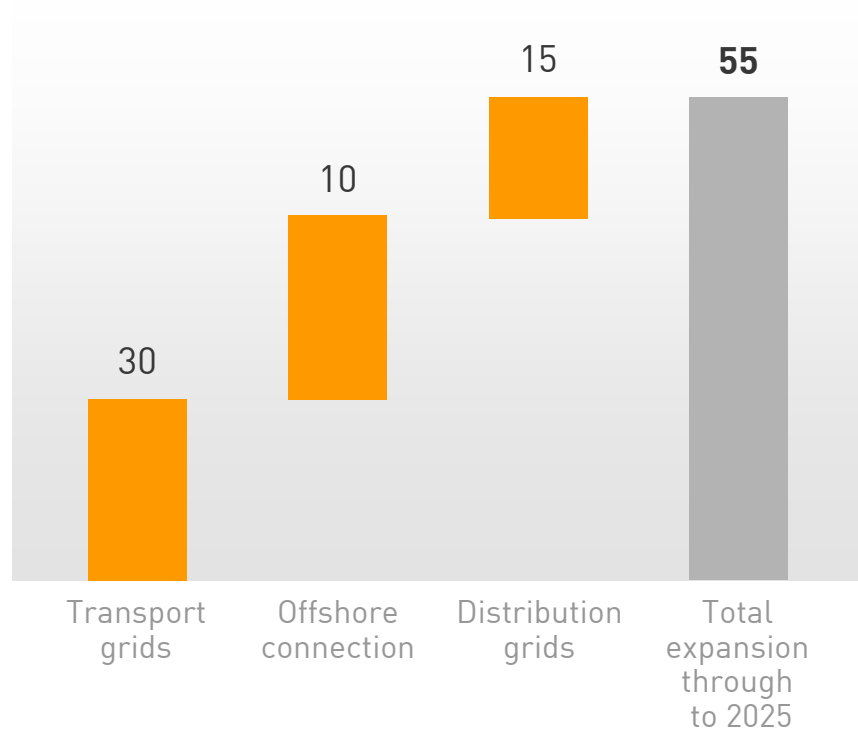
- > Growing geographical imbalance between generation and consumption
- > Slow expansion of transmission grid - esp. connection of offshore wind farms

Distribution grid

- > Feed-in growing due to local generation
- > Still strong tendencies towards moving back to municipal ownership (however, large part of concession already extended)

Capex for expanding the German electricity grid through to 2025

in € bn



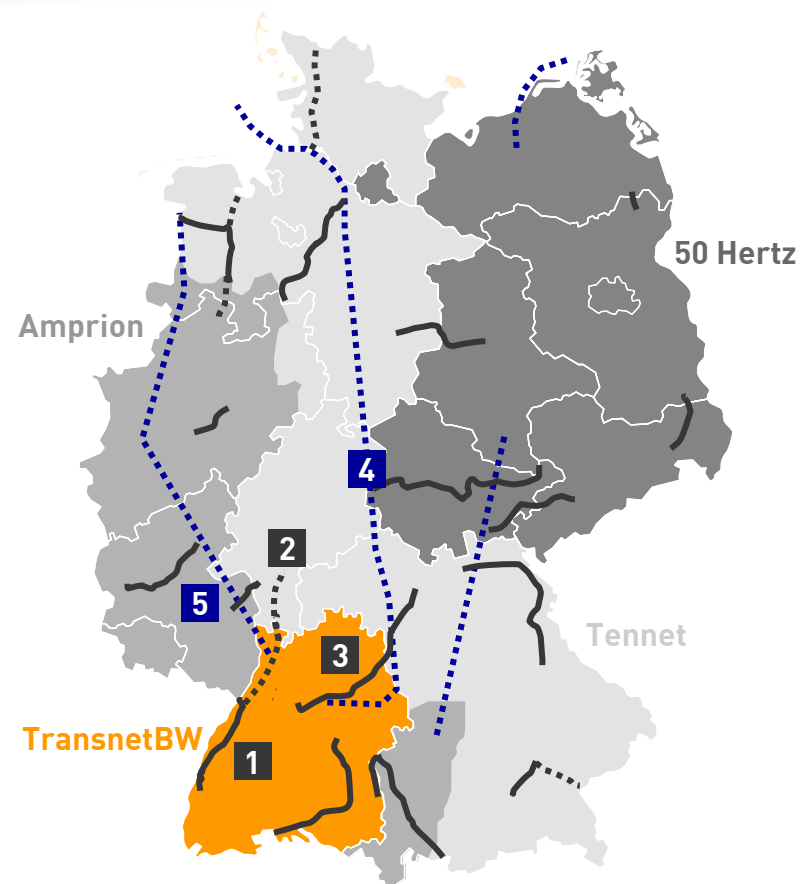
Source: Federal Requirements Plan, draft network development plan 2025, draft of offshore network development plan 2025; BMWi Distribution Grid Study 2014

5.3.6 Grids: Expansion of transmission grid to ensure security of supply



Expansion of the EnBW transmission grid

	Grid section	Scheduled completion
AC grid reinforcement		
1 for Rhein river area in Baden	121 km	2022
2 for north Ba-Wü	144 km	2022
3 for north east Ba-Wü	160 km	2022
DC expansion		
4 in corridor C "Suedlink" 4 GW	770 km ¹	2025
5 in corridor A "Ultranet" 2 GW EnBW contribution: converter, power lines Ba-Wü	40 km	2021



- New construction (DC)
- New construction (AC)
- Grid reinforcement (AC)

Investment up to 2022: around €2.7 bn

Source: BNetzA, EnBW, draft NEP 2025

¹ In cooperation with TenneT

5.3.7 Grids: Investing in distribution grid to integrate renewables and to secure high quality supply



Challenges and activities

Challenges of the distribution grid in Ba-Wü ...

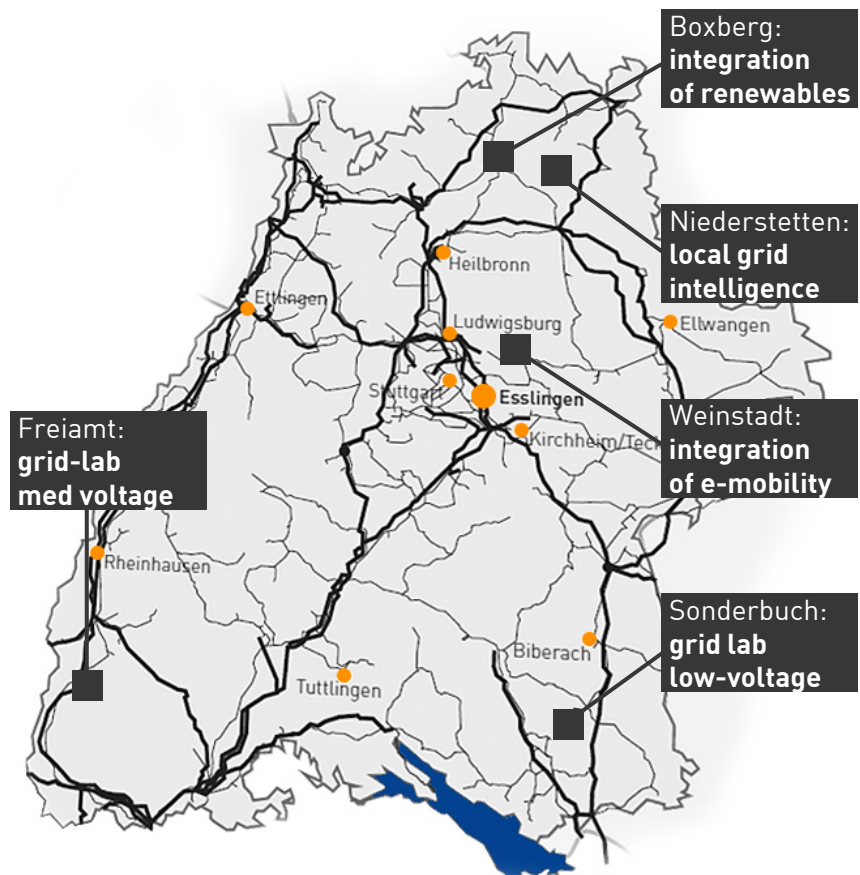
- > Wide use of PV in the grid area (ca. 5,300 MWp)
- > High expansion targets for wind power (ca. 1,200 wind turbines through to 2020)
- > In some parts of the grid, already large volumes of power fed back into the upstream grid

... necessitate grid expansion using intelligent technologies (e.g. controllable local grid station, current peaks storage, etc.)

In addition to expansion of the distribution grids together with partners, EnBW is investigating smart distribution grids in several "grid laboratories" in order to ...

- > limit cost-intensive grid expansion in future by using ICT
- > enhance the transparency of the grid status in order to be able to analyse and rectify failures more swiftly and effectively
- > be flexible in respect of user requirements and changes anticipated

EnBW distribution grid and grid laboratories



Through to 2020, investments of ~€1.5 bn necessary to develop the distribution grid infrastructure in Ba-Wü

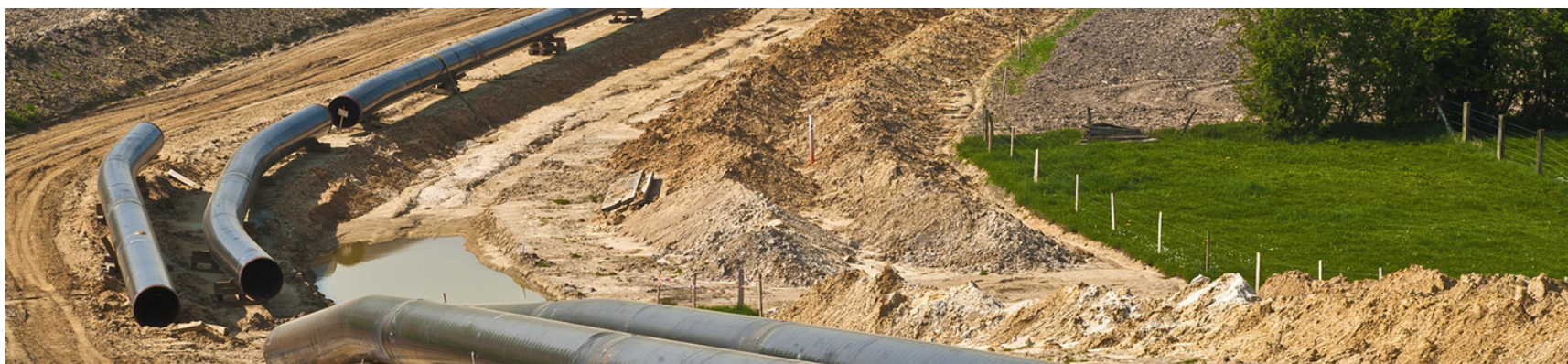
5.3.8 Grids: Gas grids



EnBW Group's gas grids¹

in km

	2015	2014
Long-distance transmission grid		
High pressure	1,900	1,900
Distribution grid		
High pressure	2,200	2,200
Medium pressure	7,600	7,600
Low pressure	4,500	5,000
Overall length	16,200	16,700





¹ Including service lines and unused lines; without VNG (Ontras)

5.3.9 Grids: Comparison of gas transmission and distribution grids



Comparison gas

	 Transmission grids	 Distribution grids
Organisation	<ul style="list-style-type: none"> > 17 grid operators > Grid length: ~38,000 km > Grids owned by operators > 2 market areas (NetConnect Germany and Gaspool) 	<ul style="list-style-type: none"> > 714 grid operators > Grid length: ~480,000 km > Franchises issued by municipalities > Competition for franchises
Tasks	<ul style="list-style-type: none"> > Transport gas from import to export points (transit) and vice versa (DSOs and industry or other market areas) 	<ul style="list-style-type: none"> > Connecting consumers and local providers > Recording incidents and troubleshooting
Challenge of Energiewende	<ul style="list-style-type: none"> > Long term: potential use of natural gas grid as storage medium for electricity generated from renewables 	<ul style="list-style-type: none"> > Integration of bio natural gas (number of biogas plants increased 145% since 2010)
Unbundling regulations	<ul style="list-style-type: none"> > Ownership unbundling, independent transmission operator (ITO) 	<ul style="list-style-type: none"> > Functional & financial unbundling of the grid business and obligation to non-discriminatory use of grid information

Source: BNetzA/BKartA Monitoring Report November 2015

5.3.10 Grids: Gas grids are a major element of the “Energiewende”



Gas grids

General

- > Long-term increase in demand for H-gas capacities in Germany: approx. 12 % up to 2020; approx. +18 % up to 2025

Transmission grid

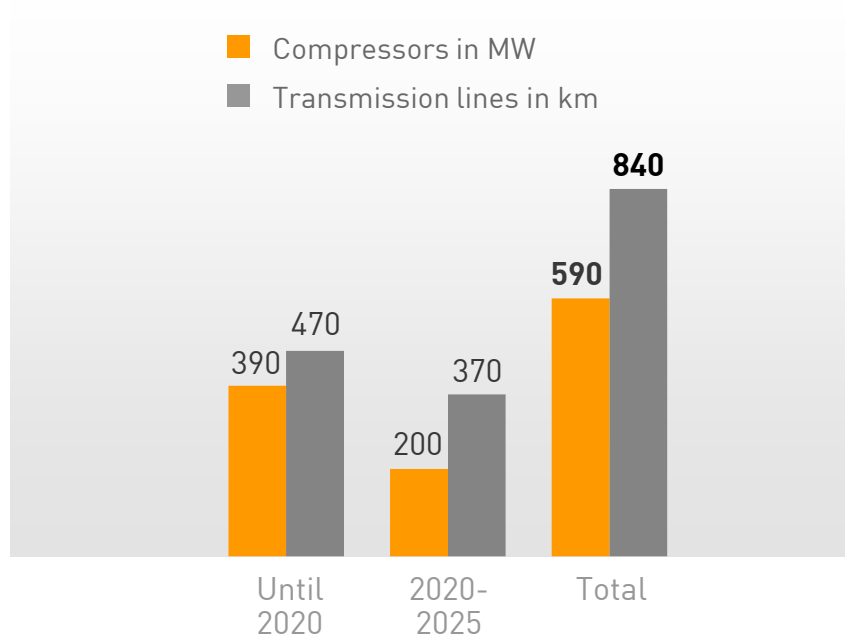
- > Increasing capacity requirements from changes in regulatory environment: Switch on the market from L-gas to H-gas (replacement of approx. half of the L-gas from NL up to 2025 by H-gas from Russia/Norway)

Distribution grid

- > Minor dimension of expansion compared to electricity due to less pronounced effects of “Energiewende”
- > Growth potential due to the connection of new communities to the natural gas grid
- > Still strong tendencies towards moving back to municipal ownership

Expansion of the gas transmission grid in Germany through to 2025

in € bn



Investments of ~ €4.3 bn, of which ~€2.4 bn until 2020

Source: EnBW, draft gas network development plan 2016

5.4.1 Generation and portfolio of the EnBW Group in 2015

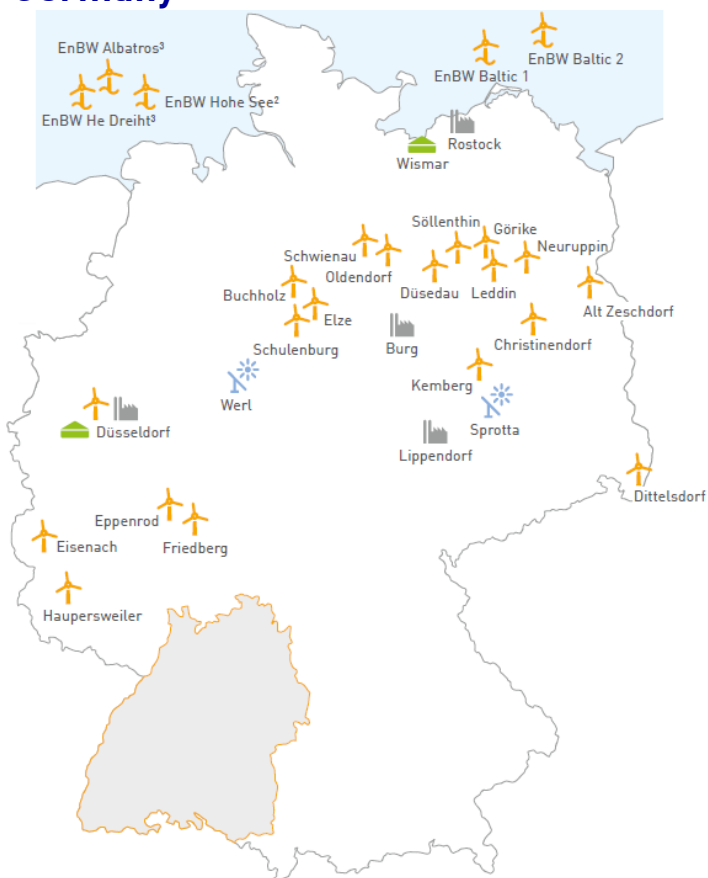


	Generation portfolio in MW		Own generation in GWh	
	2015	share	2015	share
Renewable Energies	3,055	24%	7,725	14%
Run-of-river	1,036	8%	5,270	9%
Storage/pumped storage (using natural flow of water)	1,322	10%	994	2%
Wind onshore	247	2%	385	1%
Wind offshore	336	3%	760	1%
Other	114	1%	316	1%
Thermal power plants	9,872	76%	48,248	86%
Brown coal	875	7%	5,734	10%
Hard coal	3,956	31%	14,330	26%
Gas	1,180	9%	817	1%
Other	383	3%	285	1%
Pumped storage (not using natural flow of water)	545	4%	1,799	3%
Nuclear	2,933	23%	25,283	45%
Total	12,927		55,973	

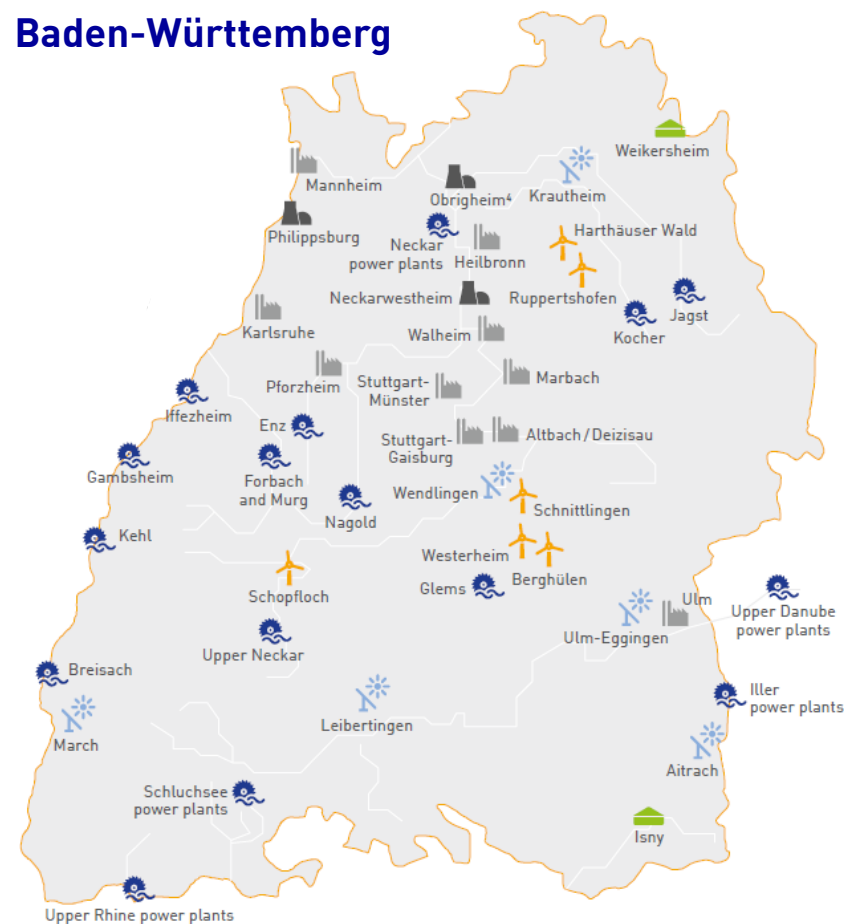
5.4.2 Power plants including equity investments and supply contracts



Germany



Baden-Württemberg



¹ Long-term procurement agreements & partly owned power plants are included in own electricity production; ² At the project planning / planning stage; ³ At the development stage; ⁴ Currently being decommissioned

5.4.3 Thermal power plants in 2015¹



Conventional

(in MW)

Karlsruhe	1,704
Düsseldorf	1,246
Altbach/Deizisau	1,022
Lippendorf	875
Heilbronn	778
Mannheim	546
Rostock	259
Walsum	250
Stuttgart	211
Walheim	136



Nuclear

Philippsburg	1,402
Neckarwestheim	1,096
Fessenheim, Cattenom (France)	



+ Grid reserve power plants²

(in MW)

Marbach	426
Heilbronn	250
Walheim	244



¹ Major power plants, incl. major changes in 2016

² Decommissioning of HLB 5/6, MAR DT III, MAR GT II and WAL 1/2 has been announced; continued temporary operation due to system relevance

5.4.4 Hydropower plants and wind farms in 2015



Run-of-River

(in MW)

Rhine power plants	560
Neckar, Donau, Murg, Nagold, Enz, Glatt, Jagst, Kocher, Argen	155
Iller power plants	51
EnAlpin	270



Pumped storage

(in MW)

Schluchsee power plants	870
Vorarlberger Illwerke	863
Glems	90
Rudolf-Fettweis-Werk Forbach	43



Wind onshore

(in MW)

Neuruppin, Görike, Kemberg, Hannover-Buchholz, Haupersweiler, Eisenach, etc.	187
Harthäuser Wald, Ilshofen-Ruppertshofen	48
SW Düsseldorf	12



Wind offshore

(in MW)

Baltic 1, Baltic 2	336
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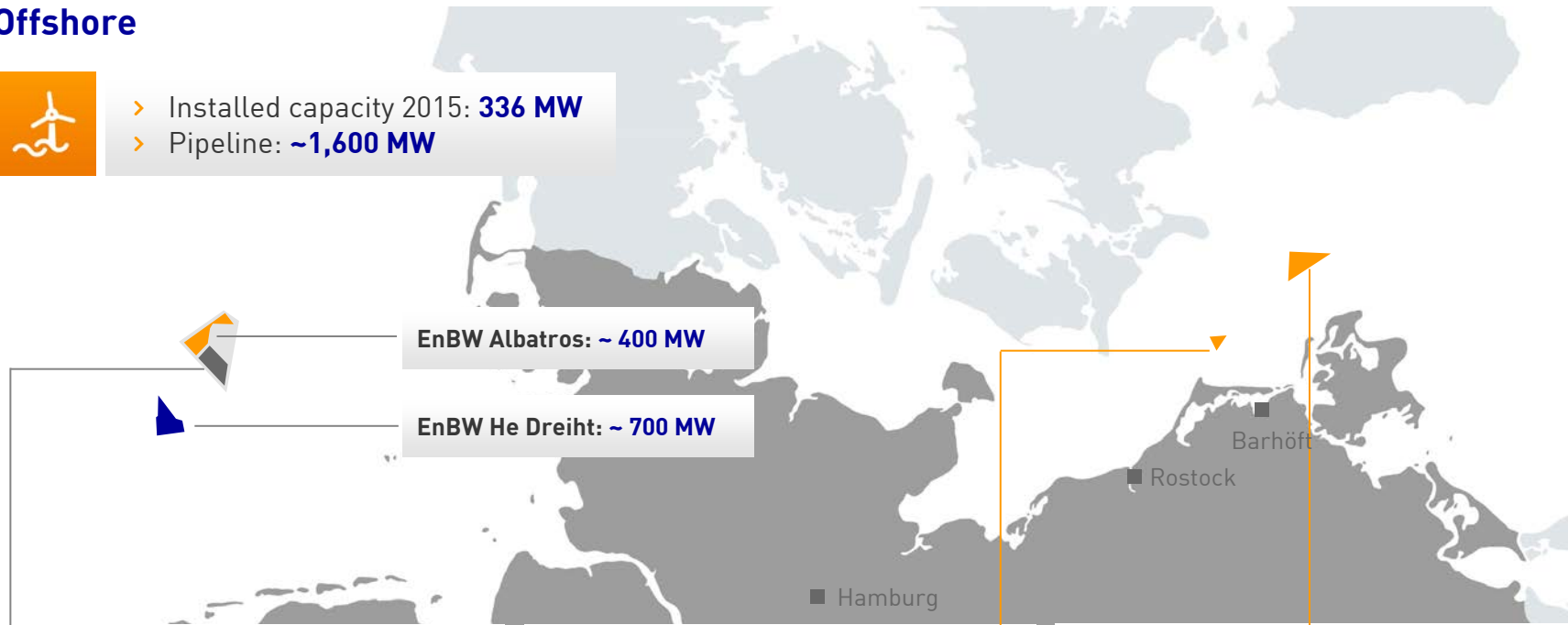
5.4.5 Wind portfolio: Offshore



Offshore



- > Installed capacity 2015: **336 MW**
- > Pipeline: **~1,600 MW**



EnBW Albatros: ~ 400 MW

EnBW He Dreiht: ~ 700 MW

EnBW Hohe See: 497 MW

- > 71 x Siemens SWT 7.0-154 on monopile foundations
- > EPCI contractor for turbines & foundations: SIEMENS AG
- > Commissioning planned for 2019

EnBW Baltic 1: 48,3 MW

- > 21 x Siemens SWT 2.3-93
- > Commissioned in 2011
- > Shareholders: ~50.1% EnBW & ~49.9% 19 municipal utilities

EnBW Baltic 2: 288 MW

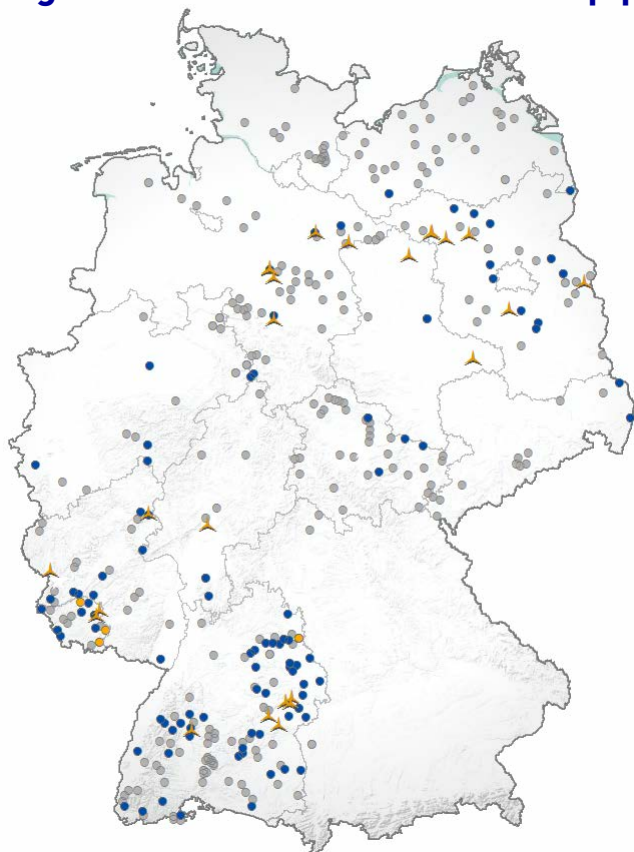
- > 80 x Siemens SWT 3.6-120
- > Commissioned in 2015
- > Shareholders: ~50.1% EnBW & ~49.9% Macquarie, PGGM & ÄvWL

■ Design stage ■ Development stage ■ In operation

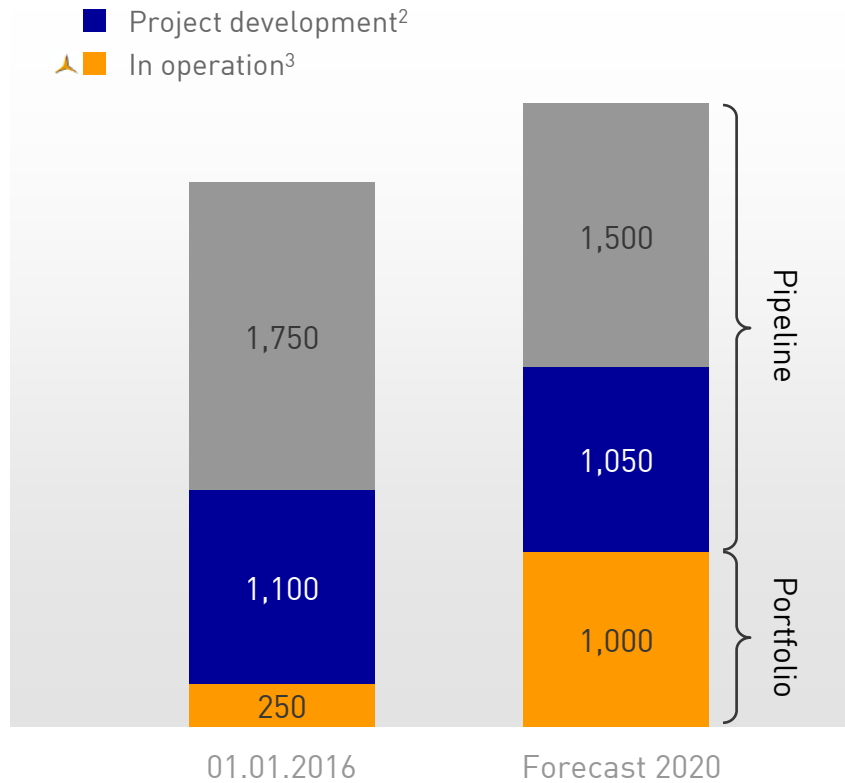
5.4.6 Wind portfolio: Onshore project pipeline 2016 in line with plans for growth up to 2020



Regional distribution of the 2016 pipeline and portfolio



- Project initiation phase¹
- Project development²
- ▲ In operation³

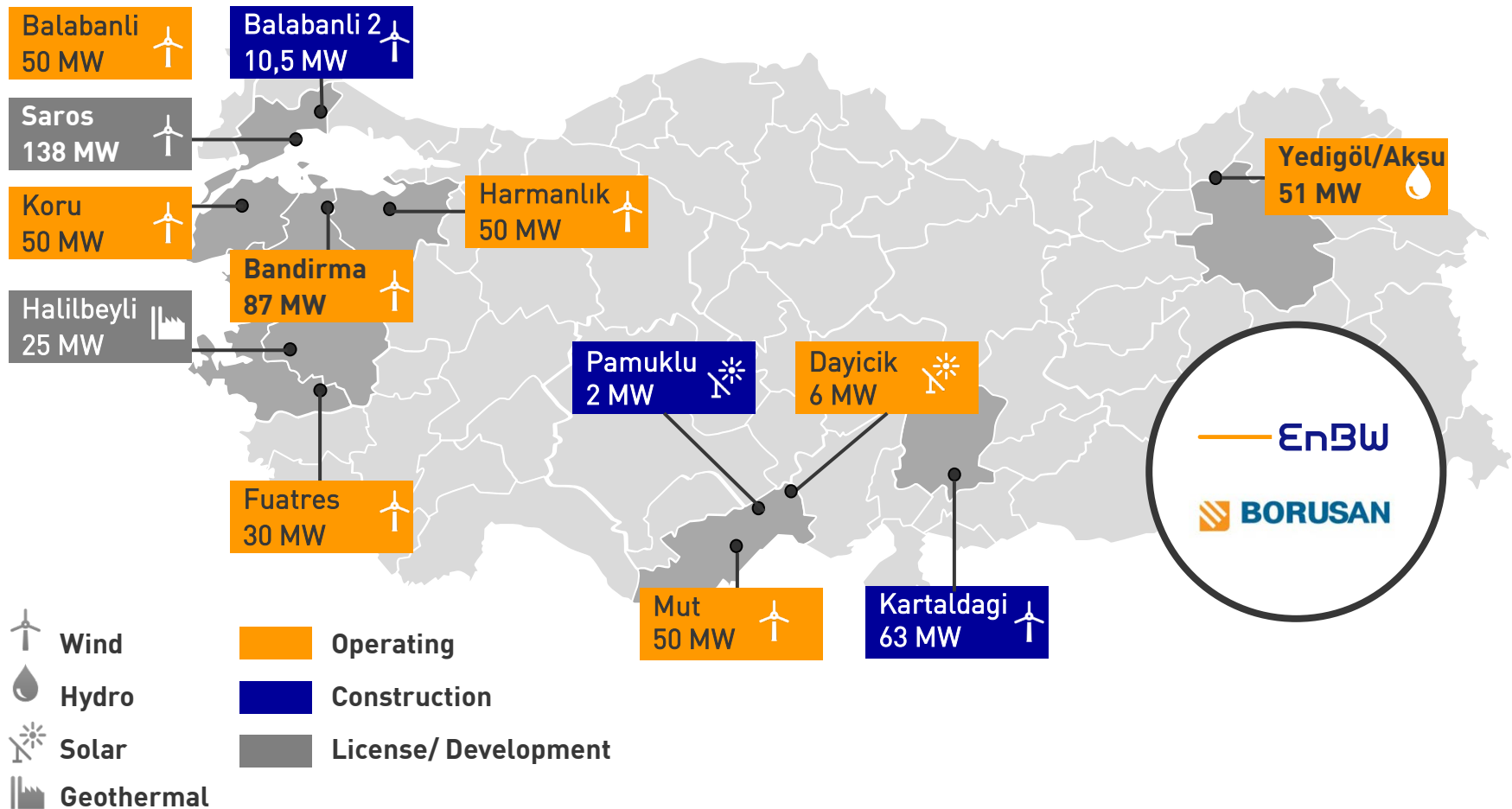


¹ Negotiations for land contracts (low proportion make it to project development)

² At least land contracts concluded (large proportion are realised)

³ Wind parks in operation with EnBW majority shareholding

5.4.7 Turkish activities¹: Borusan EnBW Energy portfolio projects



¹ Figures not consolidated

5.5 EnBW's trading activities: central access to wholesale markets to manage price and volume risks



EnBW's trading activities

- > Central interface to wholesale commodity markets for customers and EnBW Group: power, gas, emissions, coal, fuels
- > Direct marketing renewables 3,000 MW+ portfolio 2016
- > 320,000 trades per year
- > Annual trading volumes, 2015:
 - > 360 TWh power
 - > 590 TWh natural gas
 - > 80 mn t coal
 - > 260 mn t emission certificates
 - > 37 mn bbl oil
- > 230 employees

Market access for electricity:

- > Energiewende products:
 - > direct marketing of renewables, virtual power plants with flexibility close-to-delivery, ramp-up/down products in 15min-periods, GOOs, green power
 - > 24/7 service
 - > Physical portfolio management and forecast services
 - > Commercial asset optimization for gas midstream activities incl. GVS-portfolio
 - > Support of customers of EnBW sales units

OTC market access:

- > Power: NL, FR, CH, AT, CZ
- > Gas: TTF, Gaspool, NCG, Austrian VTP

Exchange market access:

- > ICE, CME, EEX, Powernext, EPEX, EXAA, Nordpool Spot

Agenda 6 – Key Financials



1. EnBW at a glance..... >>
2. Regulatory Environment and Markets >>
3. Customers and Competition >>
4. Strategy >>
5. Segments >>
- 6. Key Financials >>**
7. Capital Markets >>
8. Service >>

Links

- > [EnBW Annual Report 2015 \(PDF\)](#)
- > [EnBW Six-Monthly Report 2016 \(PDF\)](#)
- > [EnBW Group online](#)

6.1 Five-year summary



EnBW Group ¹		2015	2014	2013	2012	2011
Earnings						
Revenue	€ mn	21,167	21,003	20,545	19,324	18,756
EBITDA	€ mn	1,918	2,137	2,000	2,307	1,810
Group net profit ²	€ mn	125	-466	51	484	-842
Balance sheet						
Equity ratio	%	13.3	11.9	17.0	17.3	17.2
Adjusted net debt ³	€ mn	6,736	7,983	7,271	8,419	8,554
Cash flow						
Operating cash flow	€ mn	1,918	1,776	1,919	856	1,747
Free cash flow	€ mn	726	330	1,168	206	827
Profitability						
ROCE	%	9.5	10.0	9.7	11.1	11.6
Value added	€ mn	354	376	180	364	448
Capital market						
Dividend per share	€	0.55	0.69	0.69	0.85	0.85
Energy sales						
Electricity	bn kWh	116	126	128	136	155
Gas	bn kWh	135	117	100	73	57
Sales segment						
Electricity	bn kWh	48	48	52	59	- ⁵
Gas	bn kWh	82	72	69	58	- ⁵
Revenue	€ mn	9,067	9,067	9,568	9,278	- ⁵
Adjusted EBITDA	€ mn	255	231	227	241	- ⁵
Grids segment						
Electricity sales	bn kWh	- ⁴	- ⁴	13	17	- ⁵
Revenue	€ mn	6,351	6,231	5,708	5,340	- ⁵
Adjusted EBITDA	€ mn	747	886	962	773	- ⁵
Renewable Energies segment						
Electricity sales ⁴	bn kWh	3	4	4	3	- ⁵
Revenue	€ mn	447	407	372	353	- ⁵
Adjusted EBITDA	€ mn	287	191	220	239	- ⁵
Generation & Trading segment						
Electricity sales	bn kWh	65	75	60	57	- ⁵
Gas sales	bn kWh	53	45	31	15	- ⁵
Revenue	€ mn	5,300	5,290	4,888	4,346	- ⁵
Adjusted EBITDA	€ mn	777	900	839	1,125	- ⁵

¹ The figures for 2014 have been restated;

² In relation to the profit/loss attributable to the shareholders of EnBW AG;

³ Includes investments held as financial assets;

⁴ Since the beginning of 2015, electricity sales from the Grids segment will no longer be disclosed because the Independent Transmission Operators (ITO) no longer report their data. The figures for the 2014 financial year have been restated

⁵ No figures for the comparative period 2010 – 2011 available for new segment structure

6.2.1 Fiscal year 2015



Key performance figures

		2015	2014	Variance in %
Cash flow from operating activities	€ mn	1,918.3	1,775.7	8.0
Free cash flow	€ mn	725.8	330.2	119.8
Equity ratio	%	13.3	11.9	-
Adjusted net debt ¹	€ mn	6,735.5	7,982.6	-15.6
Dynamic leverage ratio in years		3.19	3.68	-13.3
Value added ²	€ mn	354.1	375.9	-5.8
ROCE	%	9.5	10	-
Adjusted Group net profit ^{2,3}	€ mn	951.7	464.2	105.0
Earnings per share from adj. Group net profit ^{2,3}	€	3.51	1.71	105.0
Payout ratio	%	34.7	39.0	-
Dividend per share	€	0.55	0.69	-20.3
Total distribution	€ mn	149.0	186.9	-20.3

¹ Includes equity investments held as financial assets

² The figures for the previous year have been restated

³ In relation to shares in profit/loss attributable to the shareholders of EnBW AG

6.2.2 Fiscal year 2015: ROCE and value added



Group level

- > Decreasing value added at €354.1 mn (2014: €375.9 mn)
- > ROCE at 9.5% compared to 10.0% in the prior year
- > Increase in average capital employed
- > Value drivers: Grids and Generation & Trading

Value added 2015 by segment ¹	Sales		Grids		Renewable Energies		Generation & Trading		Other / Consolidation		Total	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
Adj. EBIT incl. investment result (€ mn)	199.2	169.5	451.3	571.4	161.1	127.9	409.5	529.9	77.2	-51.2	1,298.3	1,347.5
Average capital employed (€ mn)	800.5	856.1	4,669.0	4,868.7	2,820.7	2,261.8	2,377.2	3,350.3	2,953.0	2,086.7	13,620.4	13,423.6
ROCE (%)	24.9	19.8	9.7	11.7	5.7	5.7	17.2	15.8	-	-	9.5	10.0
WACC (%)	8.2	8.5	5.9	6.2	7.5	7.9	8.4	8.7	-	-	6.9	7.2
Value added (€ mn)	133.7	96.7	177.4	267.8	-50.8	-49.8	209.2	237.9	-	-	354.1	375.9

¹ prior-year figures restated

6.2.3 Fiscal year 2015



Segment reporting

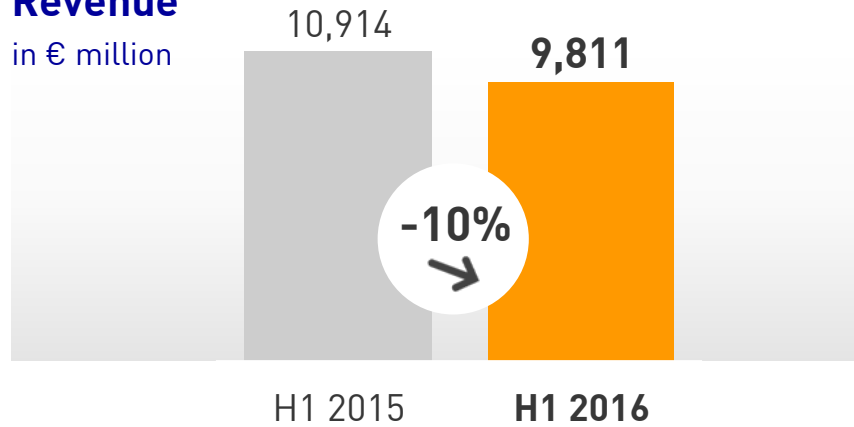
in € mn¹

	Sales		Grids		Renewable Energies		Generation & Trading		Other / Consolidation		Total	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
Revenue												
External revenue	9,061.2	9,066.8	6,350.6	6,230.5	447.0	407.4	5,300.4	5,290.1	7.3	7.7	21,166.5	21,002.5
Internal revenue	319.1	357.3	2,592.0	2,593.0	318.3	374.2	2,705.4	2,875.5	-5,934.8	-6,200.0	0.0	0.0
Total revenue	9,380.3	9,424.1	8,942.6	8,823.5	765.3	781.6	8,005.8	8,165.6	-5,927.5	-6,192.3	21,166.5	20,002.5
Earnings indicators												
Adjusted EBITDA	255.3	230.6	747.4	886.3	287.4	191.4	777.3	899.5	42.4	-40.4	2,109.6	2,167.4
EBITDA	329.5	240.4	818.9	975.7	274.3	186.1	579.9	812.7	-84.4	-77.6	1,918.2	2,137.3
Scheduled amortisation and depreciation	-56.1	-61.2	-345.0	-347.8	-110.9	-58.5	-384.6	-379.2	-31.1	-30.2	-927.7	-876.9
Impairment losses	-6.7	-1.8	-4.2	-16.8	-13.1	-30.6	-677.0	-1,211.1	-12.5	0.0	-713.5	-1,260.3
Adj. net profit/loss from entities accounted for using the equity method	0.0	0.0	22.2	17.5	-12.6	-6.6	5.7	2.7	46.4	12.6	61.7	26.2
Net profit/loss from entities accounted for using the equity method	0.0	0.0	22.2	20.7	-16.2	-42.8	5.7	2.7	14.6	3.7	26.3	-15.7
Significant non-cash items	-60.4	-30.5	9.8	30.3	3.7	2.4	-40.6	-52.7	-18.0	-10.4	-105.5	-60.9
Assets and liabilities												
Capital employed	578.7	663.3	4,936.9	4,709.1	2,960.3	2,596.6	2,055.9	2,704.5	2,369.9	2,929.4	12,901.7	13,602.9
of which carrying amount of entities accounted for using the equity method	(0.0)	(0.0)	(304.4)	(314.9)	(193.2)	(231.9)	(56.3)	(54.1)	(272.2)	(1,340.1)	(826.1)	(1,941.0)
Capital expenditure on intangible assets and property, plant and equipment	67.9	76.4	710.8	521.6	439.4	610.8	170.5	476.5	27.8	19.1	1,416.4	1,704.4

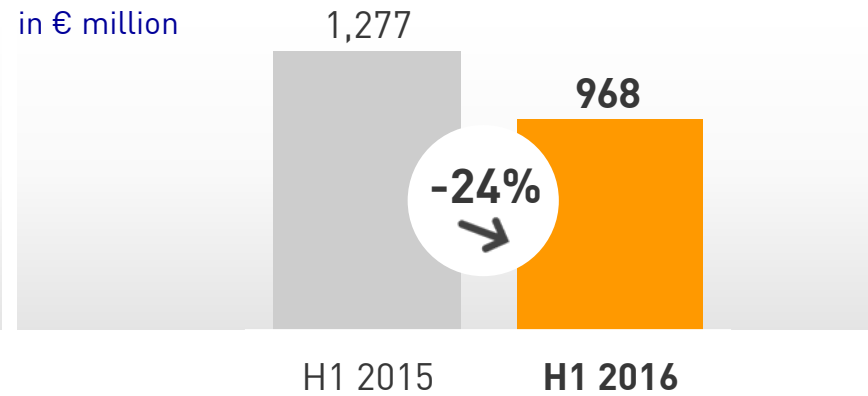
6.3.1 H1 2016: Operating performance affected by one-off temporary effects



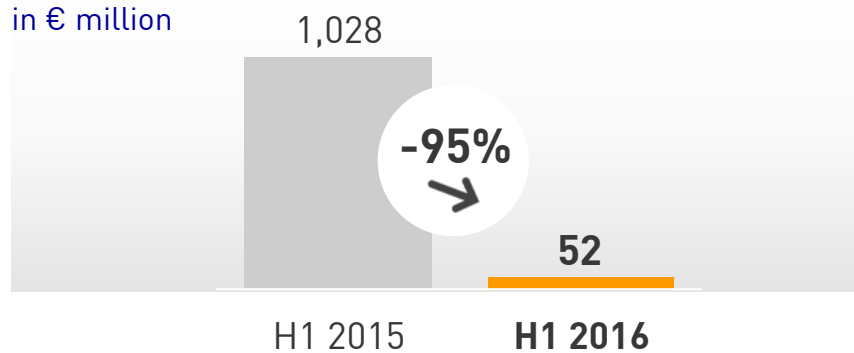
Revenue
in € million



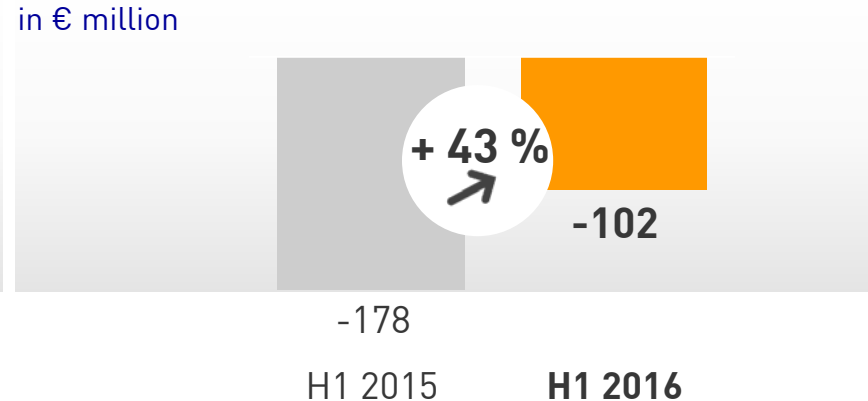
Adjusted EBITDA
in € million



Adjusted Group net profit¹
in € million



Non-operating EBIT
in € million



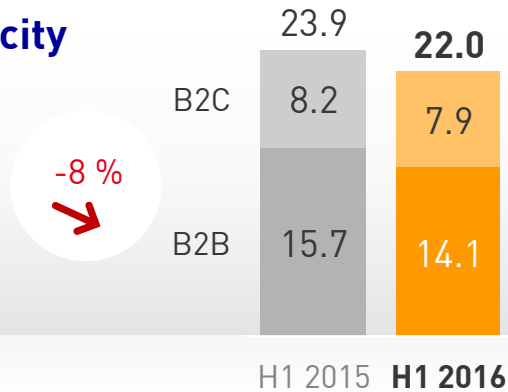
¹ Of which profit/loss shares attributable to the shareholders of EnBW AG

6.3.2 Sales H1 2016: Decrease in profitability in line with expectations

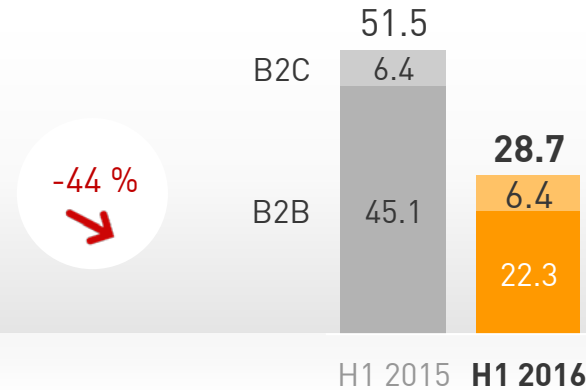


Sales volume in TWh

Electricity

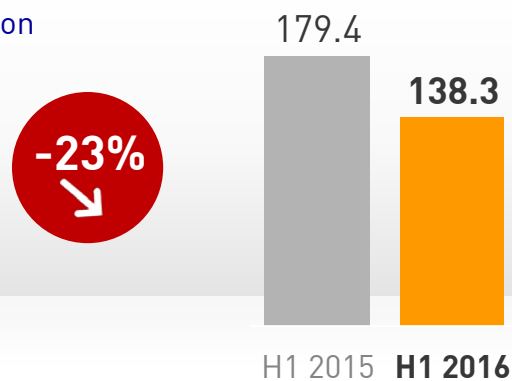


Gas



Adjusted EBITDA

in € million



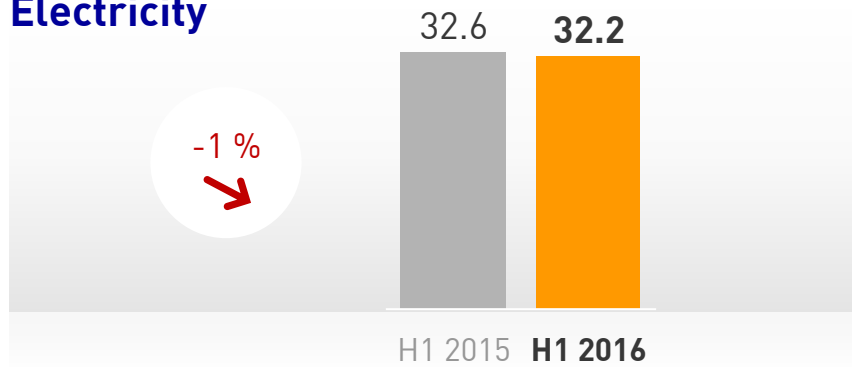
○ Sale of EnBW Propower GmbH with the Eisenhüttenstadt CHP plant as of 31.12.2015

6.3.3 Grids Segment H1 2016: Increase in earnings and higher segment's share of adjusted EBITDA

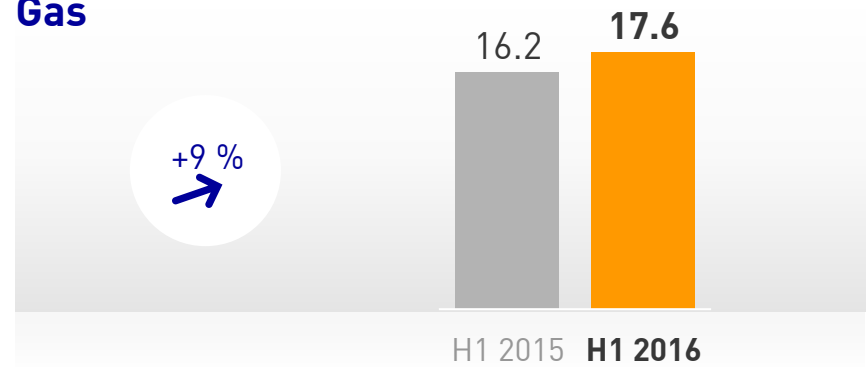


Transmission volume in TWh¹

Electricity

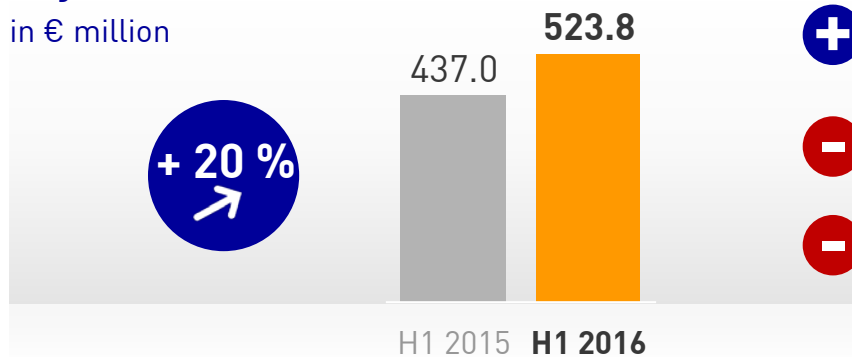


Gas



Adjusted EBITDA

in € million



- + Increased revenue for electricity and gas grids primarily due to higher pension provisions
- Higher costs for network reserve
- Planned staff increase in the light of grid expansion

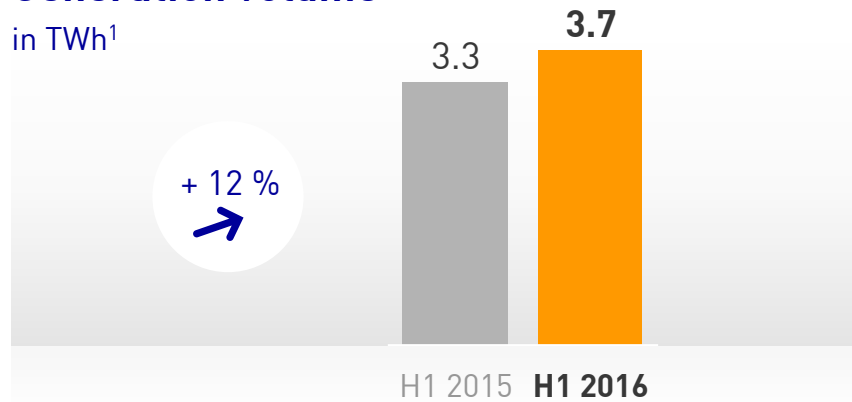
¹ Distribution only

6.3.4 Renewable Energies Segment H1 2016: Baltic 2 as the profit driver



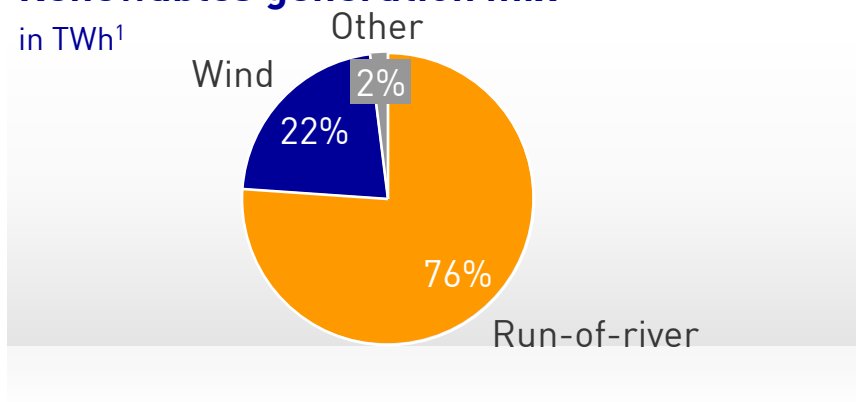
Generation volume

in TWh¹



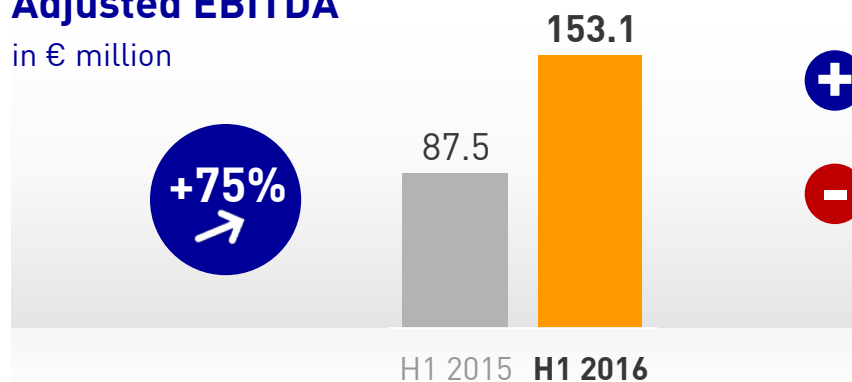
Renewables generation mix

in TWh¹



Adjusted EBITDA

in € million



- + Full commissioning of Baltic 2
- Decreased margins for run-of-river power plants due to the declined electricity prices

¹ Includes long-term procurement agreements and generation from partly owned power stations; the figures indicated are taken from the segments; segment excludes generation from pump storage plants that is associated in the generation and trading segment

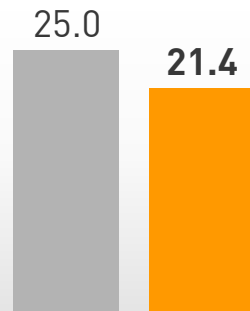
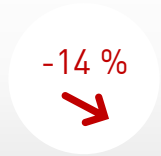
6.3.5 Generation & Trading segment

H1 2016: High temporary negative effects



Thermal generation volume

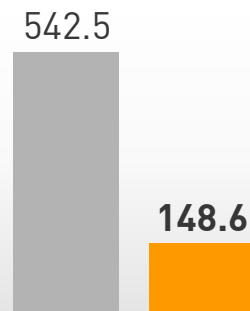
in TWh^{1,2}



H1 2015 H1 2016

Adjusted EBITDA

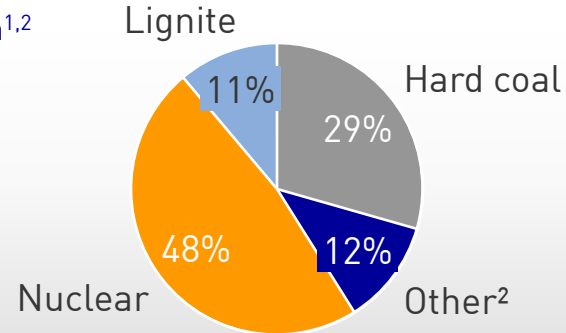
in € million



H1 2015 H1 2016

Thermal generation mix

in TWh^{1,2}

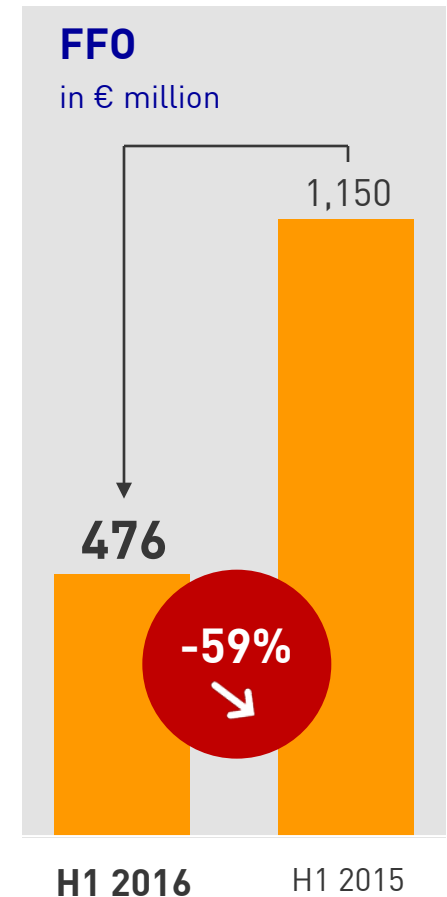
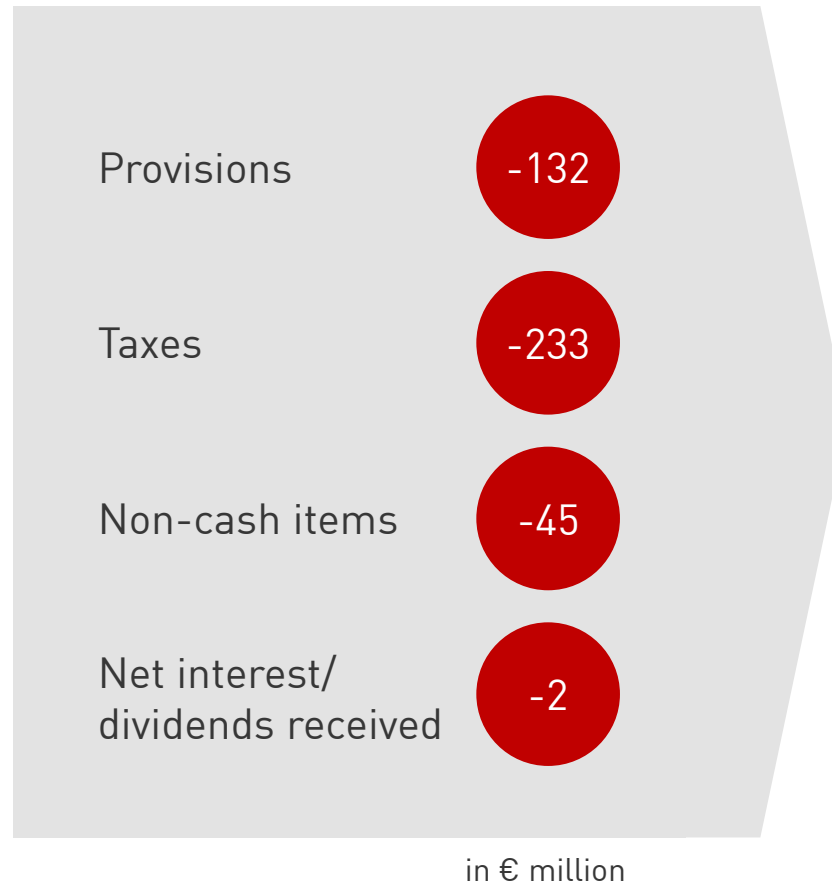
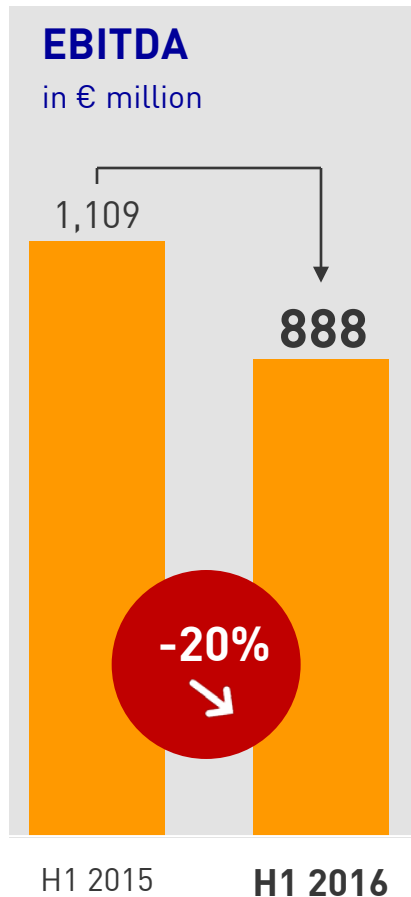


- Revision of nuclear power station KKP2 in H1 instead of H2
 - > Temporary lower electricity production
 - > Temporary higher expenses
 - > Nuclear fuel rod tax
- Falling electricity prices and spreads in earlier periods in which we agreed on fixed sales prices for supply in 2016
- Valuation effects relating to derivatives

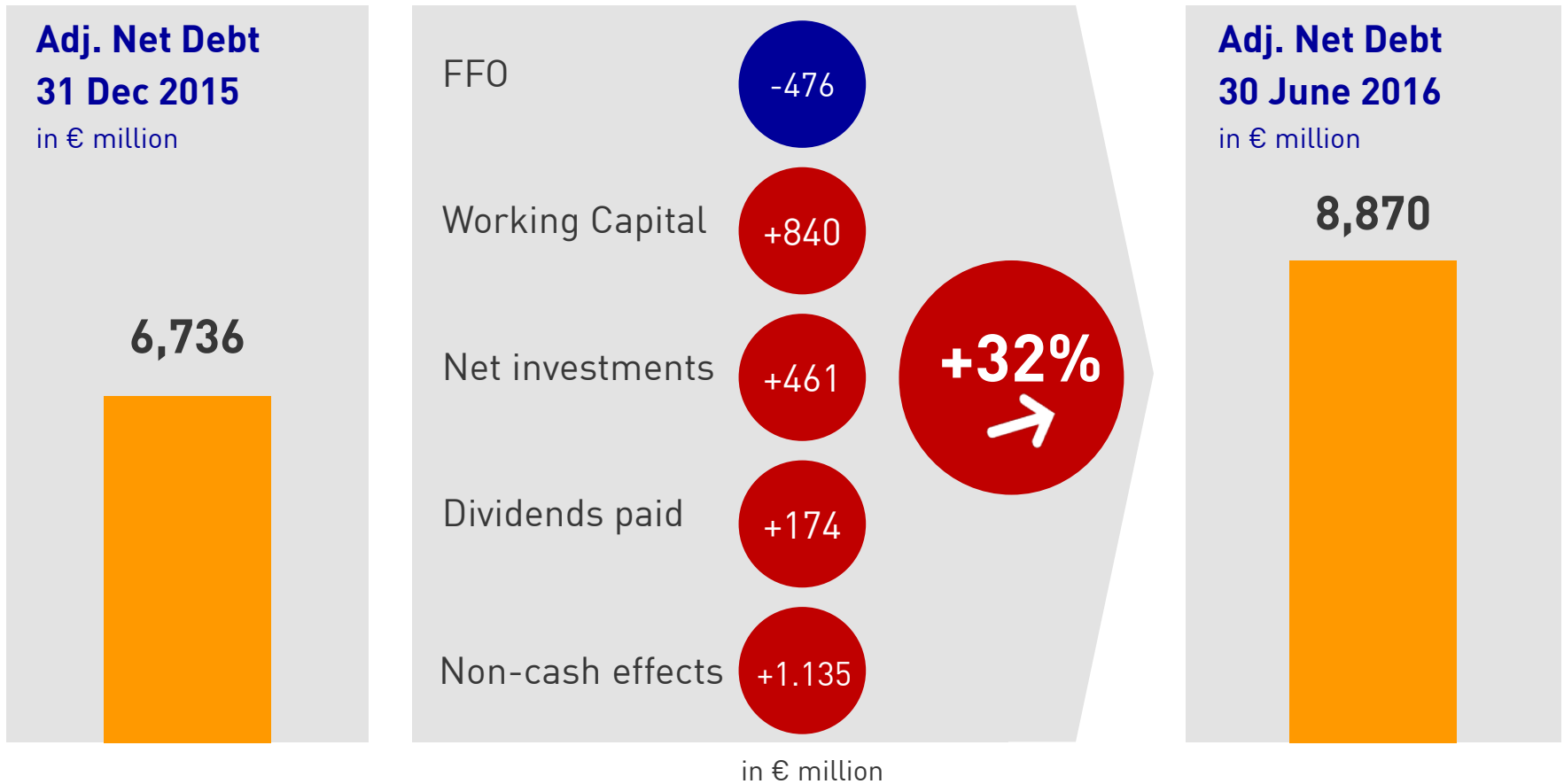
¹ Includes long-term procurement agreements and generation from partly owned power stations; the figures indicated are taken from the segments

² Segment includes pump storage plants

6.4 Decrease in FFO H1 2016 mainly attributable to additional tax payments



6.5 Increase of Adjusted Net Debt in H1 2016 mainly due to decrease in discount rates for provisions and increase of working capital

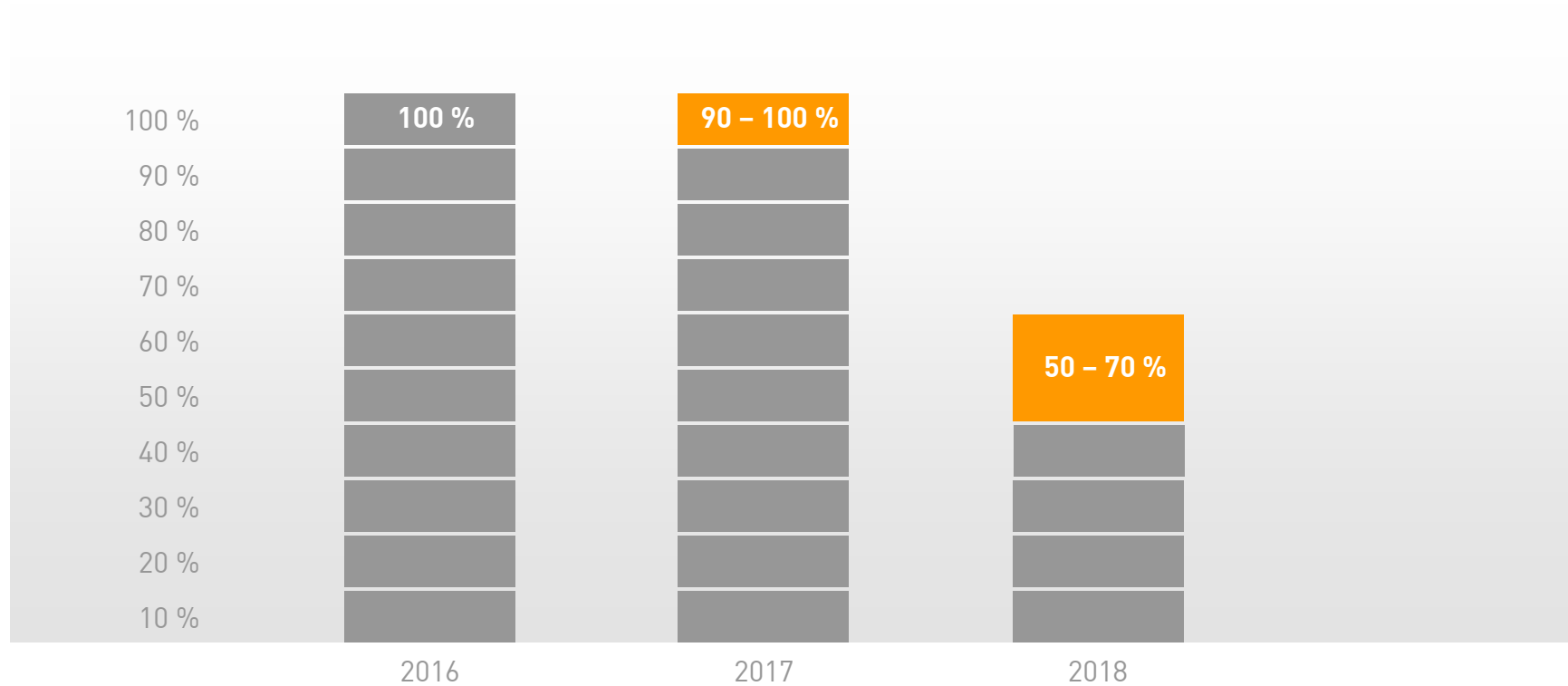


6.6 Hedge levels as of 30 June 2016



Hedge levels¹





in %



¹ As of 30 June 2016

6.7 Adj EBITDA Outlook 2016 reconfirmed; dynamic leverage ratio will increase



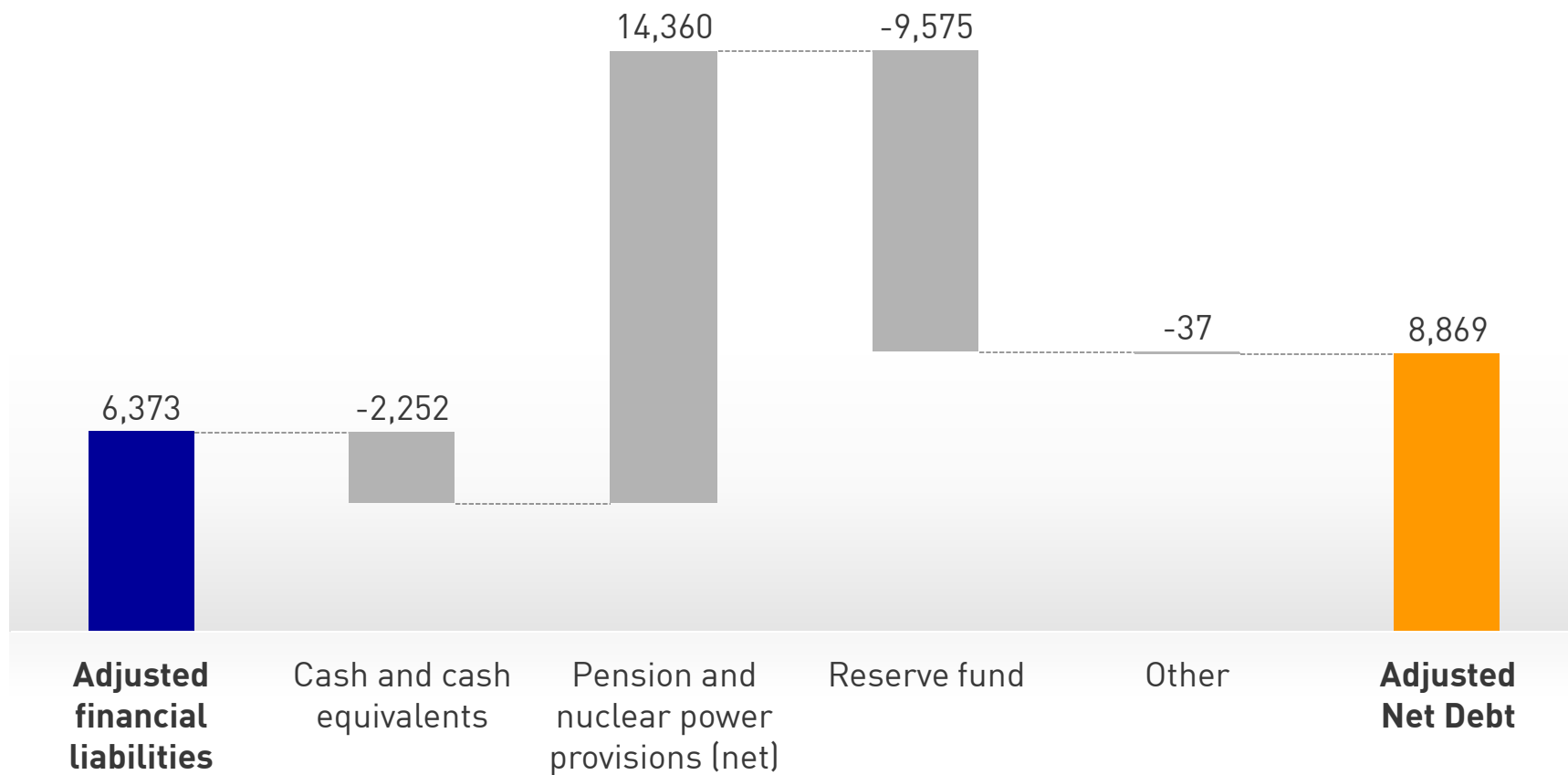
	Group	 Sales	 Grids	 Renewable Energies	 Generation & Trading	Dynamic leverage ratio
Adj. EBITDA 2015	€ 2.1 bn	€255 m	€747 m	€287 m	€777 m	3.19
Outlook 2016	-5 to -10%	< -20%	> +20%	+10 to +20%	< -20%	3.7 to 4.2

6.8 Calculation of adjusted net debt H1 2016



Adjusted Net Debt

in € million

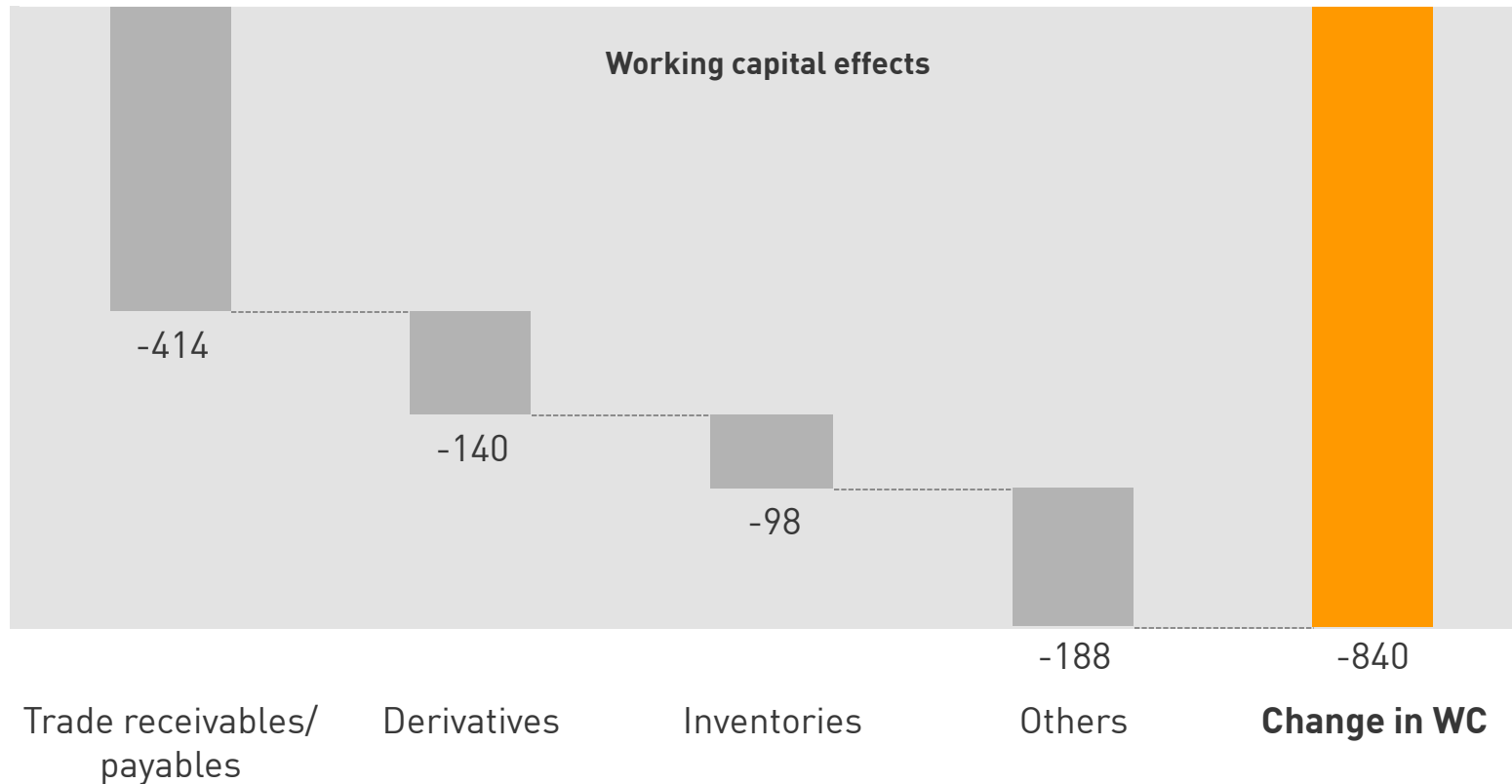


6.9 Change in working capital in H1 2016 mainly due to higher trade receivables/payables



Adjusted Net Debt

in € million



Agenda 7 – Capital Markets



1. EnBW at a glance..... >>
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Links

- > [Current rating](#)
- > [Corporate Governance](#)
- > [Dividend history](#)
- > [Overview Board of Management](#)
- > [Current share price](#)
- > [Overview Supervisory Board](#)

7.1 Service-focused Investor Relations



Ingo Peter Voigt



 **Head of Finance, M&A and Investor Relations**

- EnBW views investor relations as a service provided for one of its most important stakeholders.
- Investor Relations strives to meet the information requirements of investors, analysts, rating agencies and banks in a timely fashion. Active communication facilitates ongoing dialogue with the target groups and enables us to underscore EnBW's potential for generating value added.
- As only a small proportion of our shares are in free float, our investor relations activities concentrate on fixed-income investors and credit analysts on the buy and sell side to ensure access to the capital markets at all times.
- EnBW is aware of the importance of investor relations. The interest of our investors is always of relevance when taking strategic decisions.

7.2.1 EnBW's finance strategy is geared to maintaining a strong credit standing



EnBW's strategy



Objectives of EnBW's finance strategy and financial management

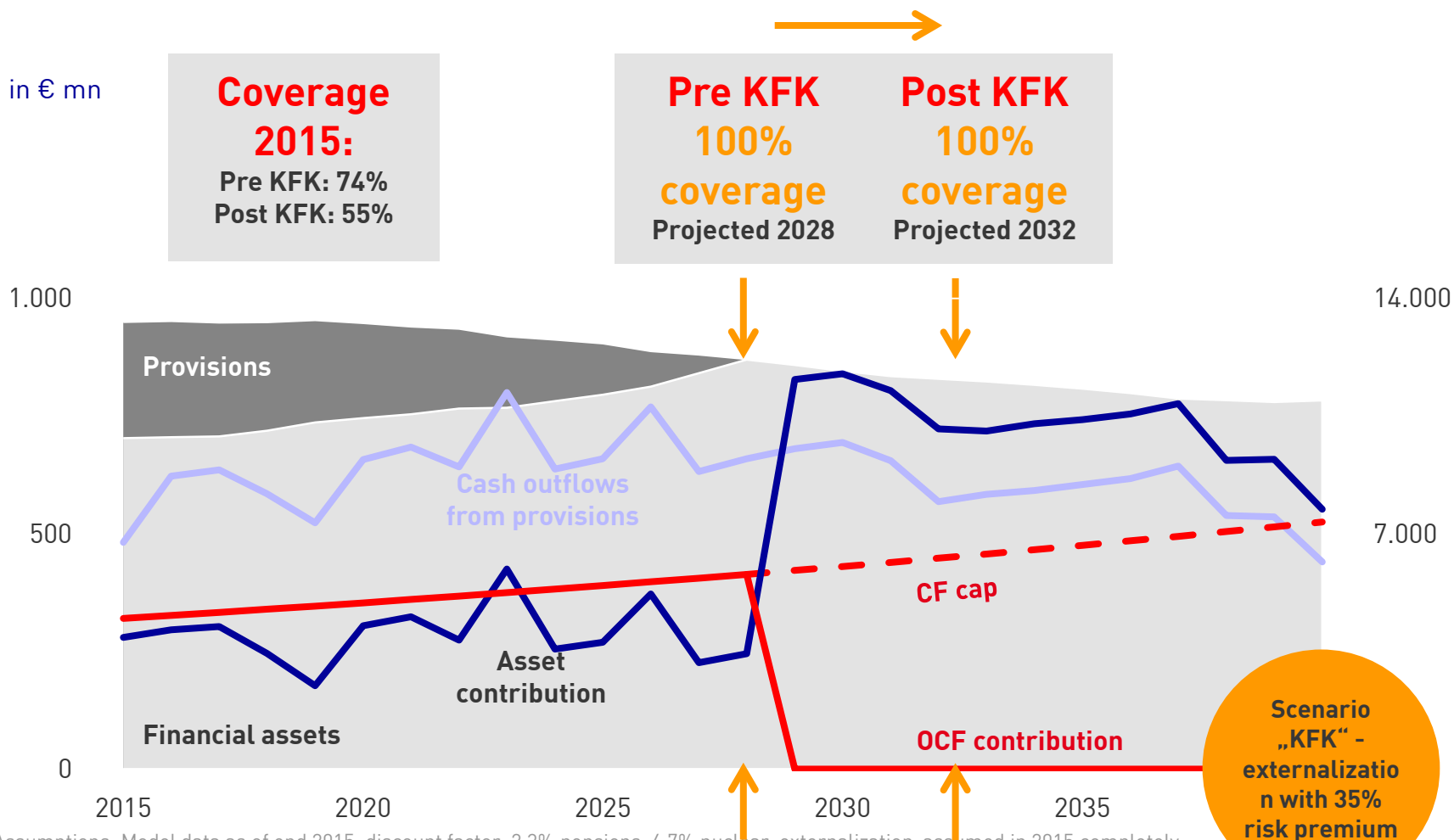
EnBW's finance strategy

- › Optimising the cost of capital for financing the EnBW 2020 Strategy
- › Ensuring sufficient liquidity for operations at all times
- › Limiting the interest rate risk for the Group
- › Maintaining a strong credit standing

EnBW's financial management

- › Multi-pillar strategy offering maximum flexibility in financing
- › Diversified market approach
- › Widely spread maturity profile; preference for long-term financing for the purpose of risk mitigation
- › Hybrid capital to support senior debt holders and debt holder-protecting dividend policy
- › Investments only in line with financial strength, and divestment success to keep strong credit profile
- › Sophisticated Asset Liability Management to meet future pension and nuclear liabilities

7.3 Asset Liability Management Model impedes KFK proposal to impact operating cash flow



Assumptions: Model data as of end 2015, discount factor: 2.3% pensions, 4.7% nuclear, externalization assumed in 2015 completely from dedicated assets
 OCF is adjusted for inflation
 Investor Factbook September 2016

7.4 EnBW's flexible access to financing sources supports its strong liquidity position



Debt Issuance Programme



- > € 3.5 bn utilised as of 30 June 2016

Hybrid bonds



Commercial Paper Programme



- > undrawn as of 30 June 2016

Syndicated credit line



- > undrawn as of 30 June 2016 with maturity date in 2020
- > one year prolongation until 2021 as of 21 July 2016: € 1.38 billion

Bilateral short-term credit line



- > undrawn as of 30 June 2016

Project financing & low-interest loans from the EIB

7.5.1 Fixed income: EnBW's public bonds



Issuer: EnBW Finance B.V.

CCY	Increments	Volume (mn)	Term (years)	Issue date	Maturity	Coupon (%)	Interest date	Security No. (WKN)	ISIN No.	Stock Ex.
€	50,000	500	10	19/10/2006	19/10/2016	4.25	19 Oct	A0G Z4C	XS0271757832	L
CHF	5,000	100	5	12/7/2013	12/7/2018	1.25	12 July	A1HM5M	CH0217677605	S
€	50,000	750	10	20/11/2008	20/11/2018	6.875	20 Nov	A0T3US	XS0399861086	L
CHF	5,000	100	10	12/7/2013	12/7/2023	2.25	12 July	A1HM5N	CH0217677654	S
€	1,000	500	20	9/12/2004	16/1/2025	4.875	16 Jan	A0DG9U	XS0207320242	L
€	1,000	500	12	4/6/2014	4/6/2026	2.500	4 June	A1ZJ9E	XS1074208270	L
€	1,000	600	30	7/7/2009	7/7/2039	6.125	7 July	A1AJTV	XS0438844093	L

Issuer: EnBW Energie Baden-Württemberg AG

CCY	Increments	Volume (mn)	Term (years)	Issue date	Maturity	Coupon (%)	Interest date	Security No. (WKN)	ISIN No.	Stock Ex.
€	1,000	750*	60.4	28/10/2011	2/4/2072	7.375**	2 April	A1M BBB	XS0674277933	L
€	1000	250*	60	2/4/2012	2/4/2072	7.375**	2 April	A1M BBB	XS0674277933	L
€	1,000	1,000*	62	18/3/2014	2/4/2076	3.625**	2 April	A11P78	XS1044811591	F, L

L = Luxembourg, S = Switzerland, F = Frankfurt

* Hybrid bond

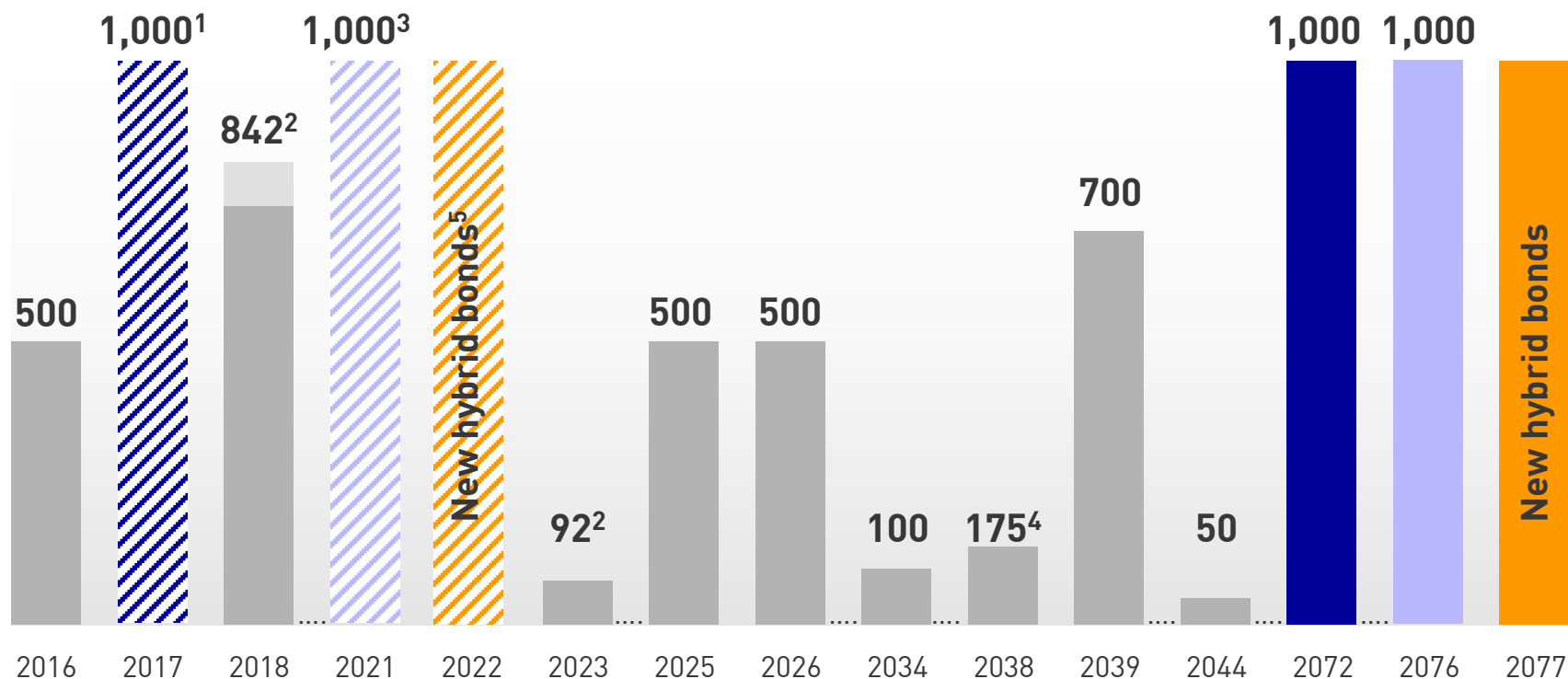
** Initially

7.5.2 Fixed Income: Favourable maturity profile and proactive funding puts EnBW in a comfortable financing situation



Maturities of EnBW's bonds

€ million



¹ First call date of hybrid maturing in 2072

² Including CHF 100m converted as of the reporting date 30/6/2016

³ First call date of hybrid maturing in 2076

⁴ Nominal with conversion as of the reporting date 30/6/2016

⁵ First call date of hybrid maturing in 2077

7.5.3 Fixed income



Rating: a sound financial policy has allowed EnBW to maintain a rating in the “A”-category against the negative sector trend



A3/negative

13 Feb 2016

- > Strong financial profile
- > Expectation that the company will maintain sufficient flexibility to accommodate weaker generation earnings as a result of low power prices
- > Leadership position as a vertically integrated utility within Baden-Wuerttemberg
- > Stable and predictable cash flows from low risk regulated networks and contracted generation such as renewables



A-/negative

13 June 2016

- > Liquidity position is sufficiently strong to sustain the impact of the new nuclear funding obligation
- > Strong business risk profile is unchanged, supported by the sizable share of regulated business
- > Strong regional position and the increasing contribution of renewables remunerated under the feed-in tariff scheme
- > Due to nuclear and hydro capacity still relatively high exposure to volatile, commodity driven and low power prices



A-/stable

25 Jan 2016

- > VNG to increase diversification, transaction risks mitigated by regulated earnings
- > Strategy execution risk and political risk remain
- > Adequate liquidity, access to capital markets, well-funded position and financial flexibility
- > Nuclear provisions are better funded than its German peers'

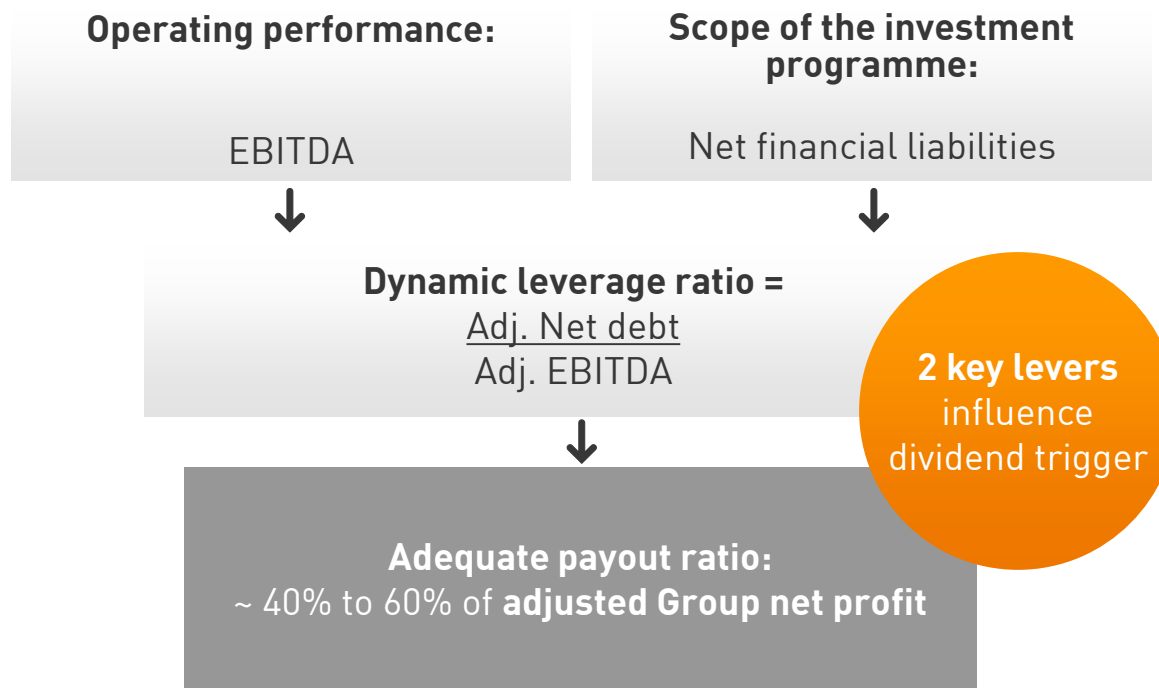
Since 2011

unchanged A3/A- Ratings
from Moody's, S&P and Fitch

7.6.1 Equity capital market



Dividend policy: EnBW's dividend policy gives sufficient flexibility to support financial strength



7.6.1 Equity capital market

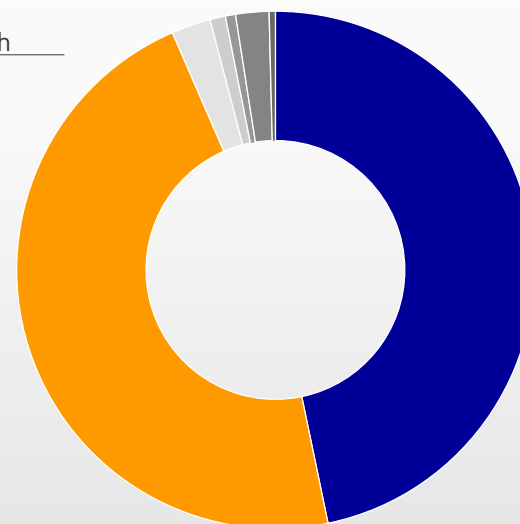


Stock exchange information

ISIN/security ident. no.	DE0005220008/ 522000
Stock exchange abbreviation	Bloomberg EBK GY/reutersEBK/EBKG.DE
Transparency level	General Standard
Indices	General All Share, DAXsector All Utilities, CDAX
Number of shares	276,604,704
Class of share	Ordinary no-par value bearer shares
Stock markets	Regulated market: Frankfurt and Stuttgart Over-the-counter trading: Berlin and Munich

Shareholder structure¹

■ OEW Energie-Beteiligungs GmbH	46.75 %
■ NECKARPRI-Beteiligungsgesellschaft mbH²	46.75 %
■ Badische Energieaktionärs-Vereinigung	2.45 %
■ Gemeindeelektrizitätsverband Schwarzwald-Donau	0.97 %
■ Neckar-Elektrizitätsverband	0.63 %
■ EnBW	2.08 %
■ Other shareholders	0.39 %



¹ Divergence from 100 percent possible due to rounding effects ;

² 100% subsidiary of NECKARPRI GmbH which is a 100% subsidiary of the federal state of Baden-Württemberg

7.6.3 Equity capital market: Important figures



EnBW share in figures¹

		2015	2014	2013	2012	2011
Annual high	€	27.00	28.39	30.89	38.32	43.00
Annual low	€	20.21	24.50	25.00	30.00	31.90
Closing price	€	20.62	25.60	26.85	30.15	39.00
Number of shares outstanding ² as of 31 December	mn	270,855	270,855	270,855	270,855	244,257
Market capitalisation ³ as of 31 December	€ bn	5.6	6.9	7.3	8.2	9.5
Stock exchange trade (total)	Number of shares	125,440	157,809	95,634	95,154	510,393
Stock exchange trade (daily average)	Number of shares	568	711	439	433	1,986
Operating cash flow per share	€	1.92	1.77	7.05	3.33	7.15
Distribution ³	€ mn	149.0 ⁶	186.9	186.9	230.2	207.6
Dividend per share	€	0.55	0.69	0.69	0.85	0.85

¹ Share value based on closing price trading the EnBW share in XETRA

² Total number of shares 2012 to 2015: 276.605 mn shares (2010 to 2011: 250.006 mn shares).

³ Distribution in terms of shares entitled as of year-end.

1. EnBW at a glance..... >>
2. Regulatory Environment and Markets >>
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6. Key Financials >>
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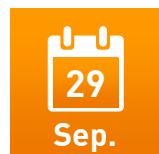
Links

- > [Financial Calendar](#)
- > [IR contact at EnBW](#)

Financial calendar 2016 and 2017



2016



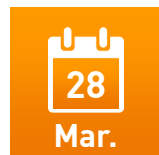
> **Capital Market Day in Frankfurt**



> **Report: January–September 2016**

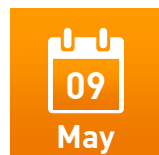
Conference time: 01:00 pm

2017



> **Integrated Annual Report:**

January-December 2016



> **Annual General Meeting 2017**



EnBW's IR team



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