

Business Area Distribution

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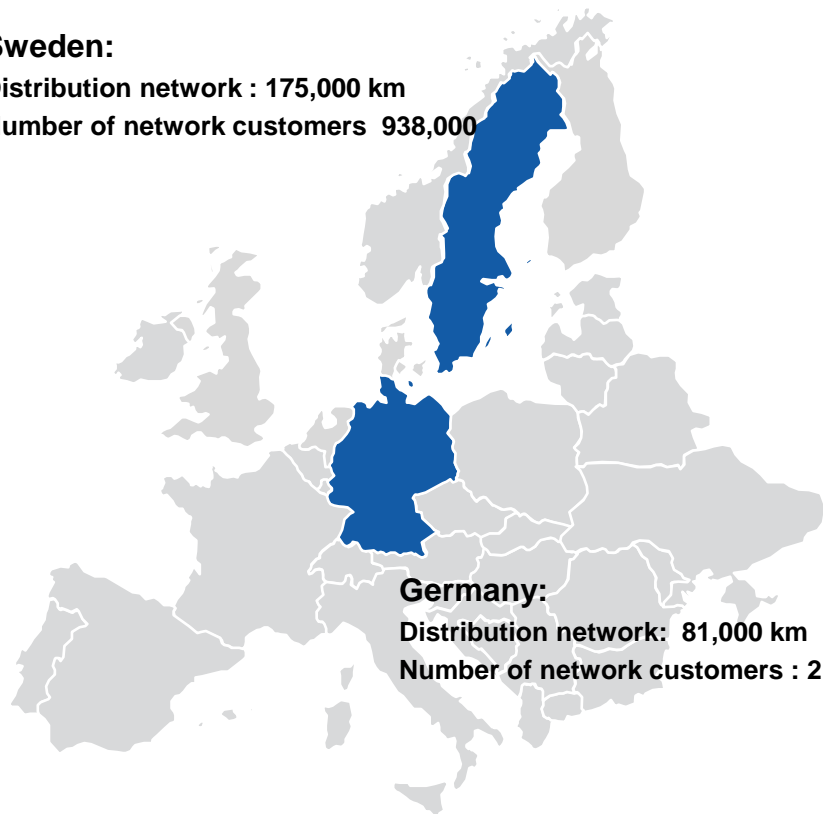
Facts and figures – Business Area Distribution

Vattenfall's total length of electricity distribution network: 256,000 km

Sweden:

Distribution network : 175,000 km

Number of network customers 938,000



Germany:

Distribution network: 81,000 km

Number of network customers : 2,293,000

	2014
External net sales (MSEK)	14,173
Underlying operating profit (MSEK) ¹	4,436
Number of employees (FTE)	~2,600
Investments (MSEK)	5,150
Transited volume (TWh)	82.9
Distribution network (km)	256,000
Number of network customers	3,231,000

1) Underlying operating profit, excluding items affecting comparability
As reported in Vattenfall's 2014 Annual Report

Distribution Sweden, 1 (2)



- Mainly rural networks with high percentage of weather exposed overhead power lines
- Efficiency improvements by more than 20% from 2007 to 2013.
- Continuous benchmarking through:
 - Swedish regulator (Vattenfall in top 10%)
 - Independent international benchmark confirms Vattenfall among top performers globally
- Long-term perspective on assets and investments leading to lower capex and opex. e.g:
 - Weather robust networks
 - Smart networks enabling remote surveillance, remote trouble shooting, automatic fault management

Key facts 2014	Sweden
External net sales (MSEK)	9,024
Underlying operating profit (MSEK) ¹	3,075
Transited volume (TWh)	69.6
Distribution network (km, equivalent)	175,000
Number of network customers	938,000
Investments (MSEK)	3,953
SAIDI ² (minutes/customer)	177
SAIFI ³ (number/customer)	2.4

1) Underlying operating profit, excluding items affecting comparability

2) SAIDI = System Average Interruption Duration Index

3) SAIFI = System Average Interruption Frequency Index

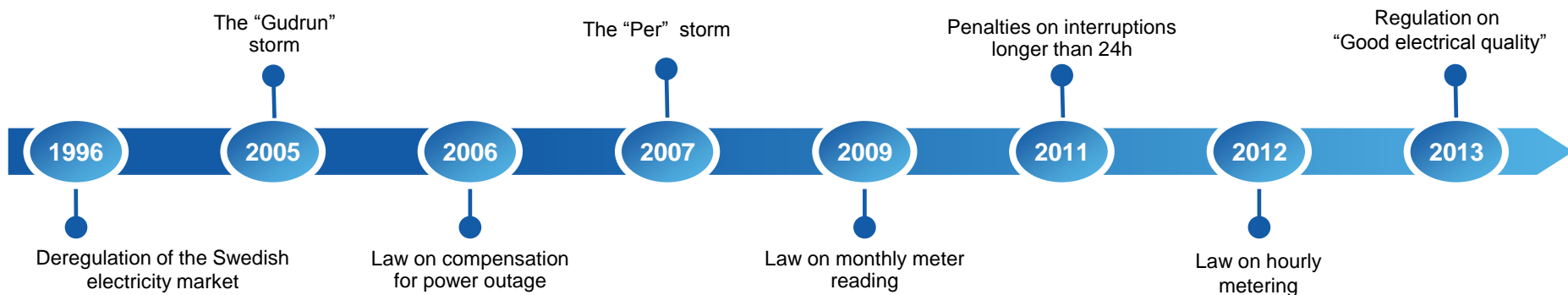
Distribution Sweden, 2 (2)

- **Increasing customer demands and changing behaviours**

- Increasing expectations from customers on quality of supply, availability, smarter billing, as well as knowledge on own consumption and trends through digital channels (web, app)
- Customers increasingly acting as “prosumers”, i.e. both producer and consumer of electricity. This drives the development of smart grid solutions and smart meters
- Demand to connect more renewable power puts pressure on current grid functionality

- **Regulatory changes**

- Regulation, storms and benchmarking drives DSO's to constantly improve quality and enable smart grid solutions. Examples of regulation: functional demand (quality of supply), hourly metering, good electricity quality
- Regulation regarding capital cost has been changed several times during the last years
 - Tariff regulation has changed four times since 2000
 - The regulatory WACC has been set by court for the regulatory period 2012–2015 (6,5%, real terms, pre tax). Still open for the next regulatory period (2016-2019)
 - For the next regulatory period (2016–2019) compensation for cost of capital will be based more on asset age than quality



Distribution Germany, 1(2)



- Mainly urban network with low dependency of weather
- Efficiency improvements by approx. 15% since 2006 thanks to lower maintenance/operationable costs
- Regular benchmarks carried out for all distribution units (DSO, Network Service, Metering)
- Regulatory efficiency of 100%, set by BNetzA (the German regulator) based on costs 2011
- Tariffs for household customers almost stable in last years. Decrease by 9% since 2006 if transmission grid costs are excluded
- SAIDI improvement by approx. 20% since 2006
- Further increase in investments in the coming years: smart grid/smart meter activities and replacements

Key facts 2014	Germany
External net sales (MSEK)	5,149
Underlying operating profit (MSEK) ¹	1,361
Transited volume (TWh)	13.3
Distribution network (km, equivalent)	81,000
Number of network customers	2,286,000
Investments (MSEK)	1,200
SAIDI ² (minutes/customer)	15
SAIFI ³ (number/customer)	0.20

1) Underlying operating profit, excluding items affecting comparability

2) SAIDI = System Average Interruption Duration Index

3) SAIFI = System Average Interruption Frequency Index

Distribution Germany, 2 (2)

- **German regulatory model**

- Introduction of cost-plus regulation in 2006. From 2009 incentive regulation (revenue cap)
- Additional profit is allowed if actual costs are below audited costs
- New rules for revenues effective from 2019 expected in 2015
- New regulatory WACC valid from 2019 will be announced in 2017
- Rollout of smart meters will probably start in 2017, most likely with price cap

- **Divestment of Hamburg distribution business**

- Agreement in Q1 2014 to sell Hamburg distribution companies to the City of Hamburg (Stromnetz Hamburg GmbH, and the companies operating network services, metering, and traffic lighting)
Aggregated sales price: EUR 625 million (for 100%).
- The sale of Stromnetz Hamburg GmbH was closed in Q1 2014 while the closing and handover of Network Service and Metering Hamburg is planned for the beginning of 2016

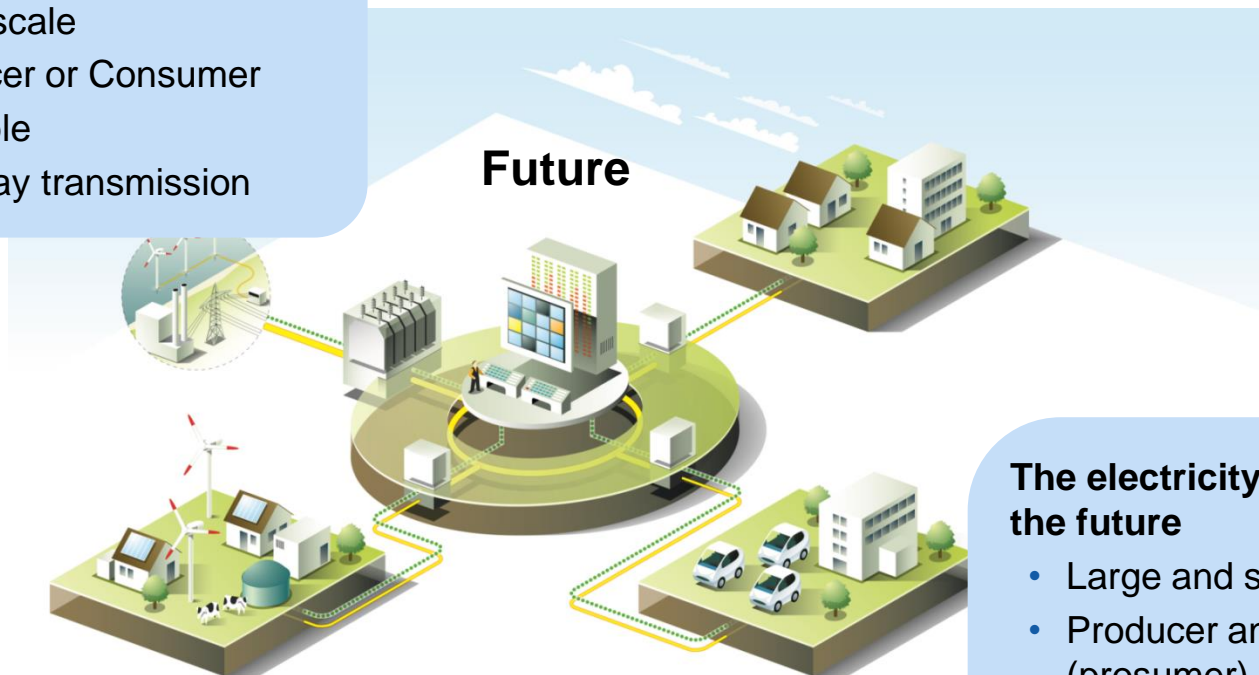
- **Concession process in Berlin**

- Concession agreements for electricity and gas networks in Germany have to be tendered at least every 20 years
- The tender process for the electricity network in Berlin started at the end of 2011 but is currently on hold due to legal issues. It is currently unclear when and how the tender will continue. Vattenfall (Stromnetz Berlin GmbH) continues to operate the electricity network

Smart Grids – The electricity network of the future

Yesterday's network

- Large scale
- Producer or Consumer
- Inflexible
- One way transmission



The electricity network of the future

- Large and small scale
- Producer and consumer (prosumer)
- Flexible
- Two-way communication
- Real time monitoring
- Self-healing grid



Focus areas

...an operator of high quality networks with superior service to enable a sustainable energy society

Challenges/Opportunities	Focus areas
<ul style="list-style-type: none">• Meet today's and tomorrow's regulatory demands on quality of service, with a growing level of intermittent generation and an ageing asset base• Drive the possible enabler "role of DSO's" in the future energy system• Strengthen internal efficiency and effectiveness• Secure long-term competence supply	<ul style="list-style-type: none">• Optimize regulatory return and future value• Deliver quality improvements (e.g. SAIDI and SAIFI)• Be a strategic partner to accommodate intermittent power and facilitate demand response• Secure high customer satisfaction

” *BA Distribution’s long-term vision is to be recognized as the leading distribution operator on the markets where we are active* ”



Customer, society and authority

From a customer, society and authority perspective, we are seen as a reliable and service-minded DSO who is an innovative and enabling partner in the transformation of the future energy system



Employee

From an employee perspective, we are seen as a leading employer in the sector that offers attractive work conditions with clear opportunities for development and growth



Owner and Group

From an owner and Group perspective, we are seen as a highly regulatory optimised and efficient operation that delivers sustainable returns in line with shareholder expectations

Markets in Sweden and Germany

