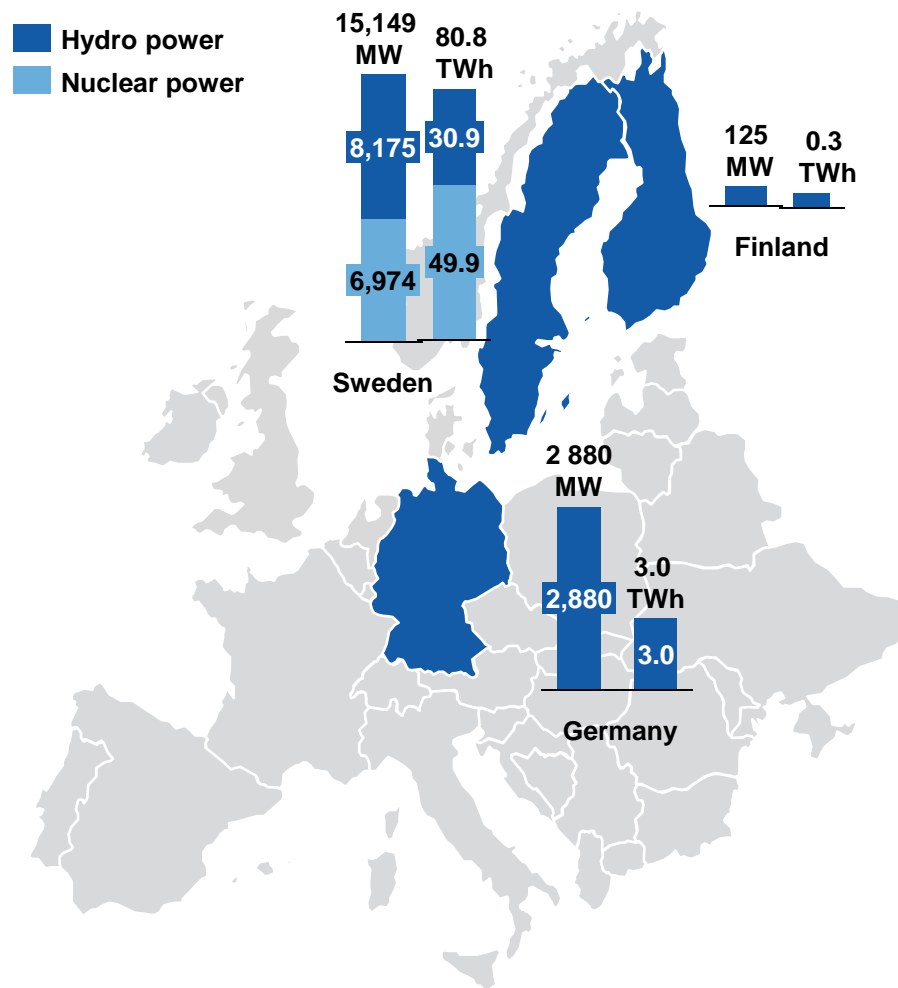


Business Area Generation

Torbjörn Wahlborg
Head of Business Area Generation

Vattenfall Capital Markets Day, Solna, 27 May 2015

Facts and figures – Business Area Generation



- BA Generation include all Vattenfall hydro and nuclear operations. BA Generation is also responsible for Services Nordic
- Number of employees (FTE): ~7,400

2014	Hydro power	Nuclear power	Total
Installed capacity electricity, net (MW) ¹	11,180	6,974	18,154
Installed capacity electricity, net (MW), pro rata ²	10,973	5,049	16,022
Total electricity generation 2014 (TWh) ¹	34.3	49.9	84.2

1) Consolidated figures

2) Corresponding to Vattenfall's ownership in respective plant

BA Generation

Hydro power	Sweden	Finland	Germany
Installed capacity (MW) ¹	8,175	125	2,880 ²
Electricity generation 2014 (TWh) ¹	30.9	0.3	3.0
Number of power plants (>10 MW)	54	1	11

¹) Consolidated figures

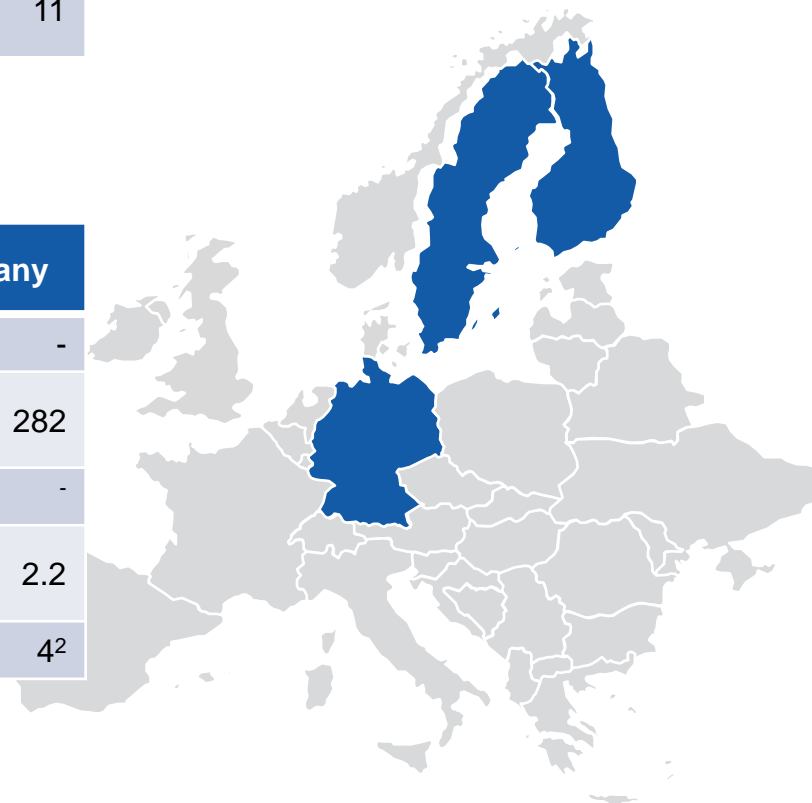
²) Pumped storage

Nuclear power	Sweden	Germany
Installed capacity (MW) ¹	6,974	-
Installed capacity (MW) (Pro rata)	4,767	282
Electricity generation 2014 (TWh)	49.9	-
Electricity generation 2014 (TWh) (Pro rata)	34.0	2.2
Number of nuclear reactors	7	4 ²

¹) Consolidated figures

²) Brunsbüttel 67%, Krümmel 50%, Brokdorf 20%, and Stade 33% (under decommissioning)

Services Nordic	
Number of locations	~90
Number of employees (FTE)	1,550



Hydro power

Vattenfall's 10 largest hydro power plants

Country	Hydro power plant	Ownership (%)	Installed capacity (MW)	Commissioned (year)
Germany	Goldisthal ¹	100	1,060	2003
Germany	Markersbach ¹	100	1,046	1979
Sweden	Harsprånget	100	977	1951
Sweden	Stornorrfors	75	590	1958
Sweden	Porjus	100	465	1975
Sweden	Letsi	100	456	1967
Sweden	Messaure	100	442	1963
Sweden	Ligga	100	324	1954
Sweden	Ritsem	100	320	1927
Sweden	Vietas	100	320	1971

1) Pumped storage power plant

Ongoing investment projects

Country	Hydro power plant	Installed capacity (MW)	Completion (year)	Total investment (MSEK)
Sweden	Akkats	150 (replacement)	2016	~1,200

Nuclear power

Vattenfall's nuclear power plants

Country	Nuclear power reactor	Ownership (%)	Installed capacity (MW)	Commissioned (year)
Sweden	Ringhals 1	70.4	881	1976
Sweden	Ringhals 2	70.4	865	1975
Sweden	Ringhals 3	70.4	1,047	1981
Sweden	Ringhals 4	70.4	940	1983
Sweden	Forsmark 1	66.0	987	1980
Sweden	Forsmark 2	66.0	1,000	1981
Sweden	Forsmark 3	66.0	1,170	1985
Germany	Krümmel	50.0	— ¹	1984
Germany	Brunsbüttel	66.7	— ¹	1977
Germany	Brokdorf	20.0	1,370	1986

1) Nuclear power plants Krümmel and Brunsbüttel are non-operational. Nuclear plant Stade is under decommissioning.

- Total installed capacity pro rata 2014: 5,049 MW in 2014

Focus areas

...a significant operator of safe and efficient large-scale low CO₂ emitting production

Challenges/Opportunities	Focus areas
<ul style="list-style-type: none">• Low electricity prices in the foreseeable future• A number of nuclear power reactors to be decommissioned• Increased amount of intermittent power production• Increased regulatory requirements	<ul style="list-style-type: none">• Safe, reliable, efficient nuclear and hydro power• Secure back-end of nuclear cycle• Increase flexibility• Growth in services