



# Nuclear New Build Project in Poland

International Framework for Nuclear Energy Cooperation – Finance Workshop  
London, 9<sup>th</sup>-10<sup>th</sup> April 2012

PGE Energia Jądrowa SA



## Poland – Key statistics

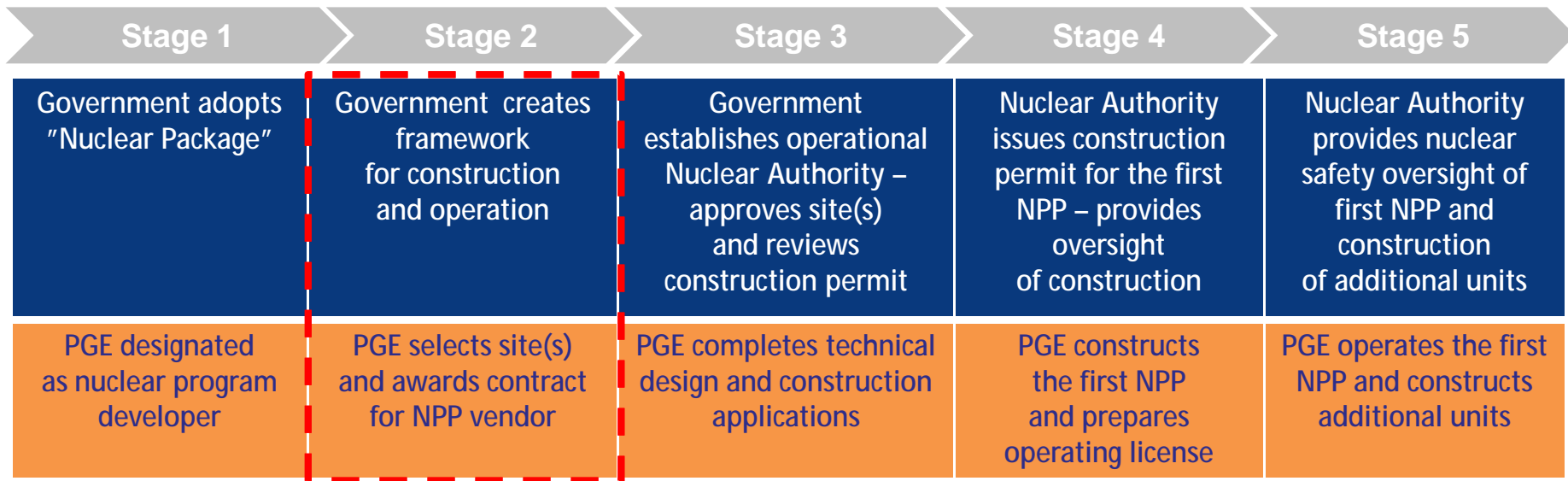
- Area: **312 685 sq. km**
- Population: **38 million people**
- GDP: **330 bn EUR**
- Financial reserves: **70 bn EUR**
- Installed capacity: **36 000 MWe**
- Production: **157 000 GWh**
- Key source generation: **Coal (90%)**





# The Polish Government is committed to develop nuclear power in Poland and designated PGE to lead the nuclear program

## Stages of the Polish Nuclear Power Program Development



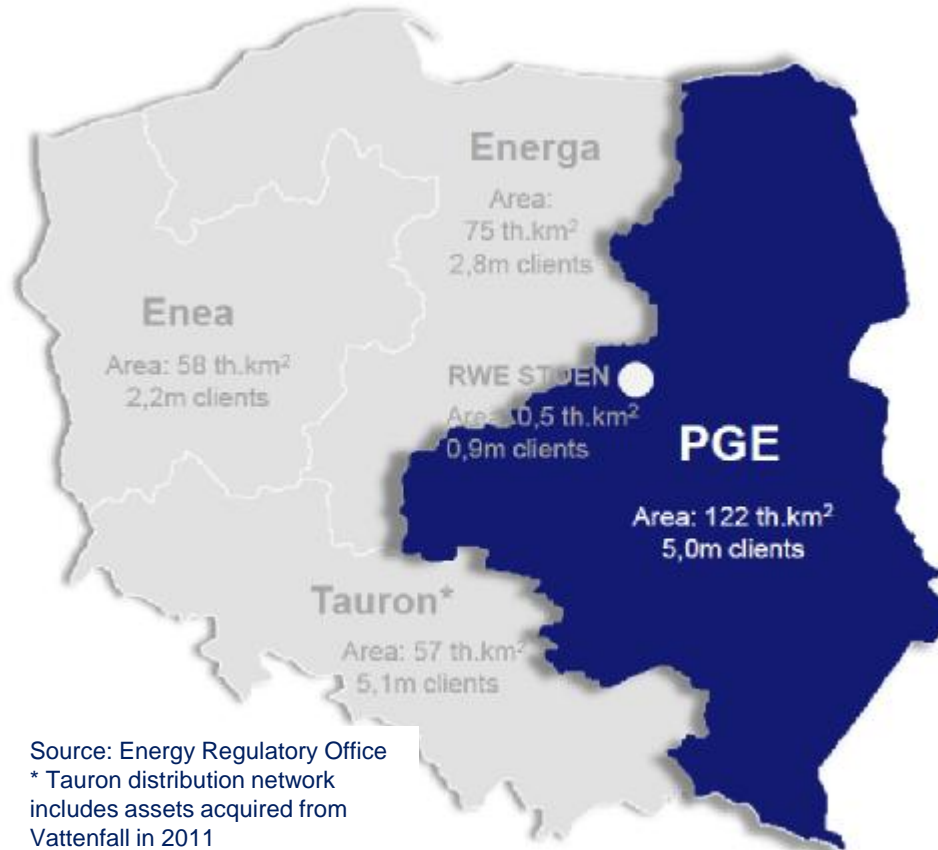
**Soon after Fukushima and German decision to withdraw from nuclear power, the Polish Government has clearly re-confirmed its engagement in the development of nuclear energy in Poland**

- Stage 1 – completed in June 2011 (unanimous vote in Parliament)
- Stage 2 – activities commenced
- PGE continues with execution of Investor`s activities with full Government support



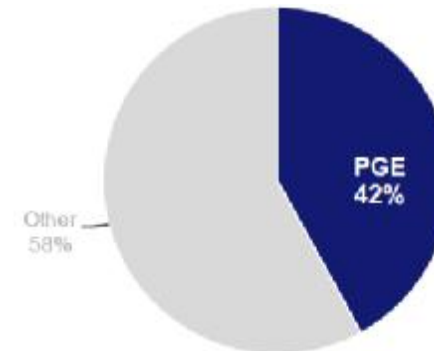
# PGE is a leading utility company in the Polish energy market in terms of production, distribution and sales (1/2)

## Distribution

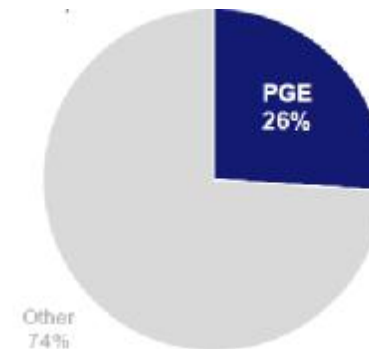


Source: Energy Regulatory Office  
\* Tauron distribution network includes assets acquired from Vattenfall in 2011

## Generation by volume generated



## Sales by volume sold



Source: PGE



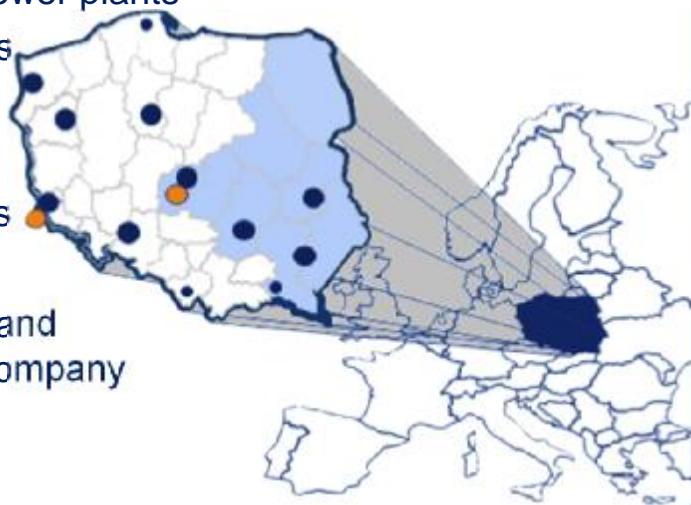


# PGE is a leading utility company in the Polish energy market in terms of production, distribution and sales (2/2)

## Key Assets - Locations

- 2 lignite power plants
- 36 hydroelectric power plants
- 2 hard coal power plants
- 10 CHP plants
- 1 wind farm
- 2 lignite mines
- 1 distribution and 1 retail sale company

- Power plants and CHPs
- Lignite mines
- Distribution network



Source: PGE

## Key Operating Data

	<b>2011</b>
Installed capacity	13.1 GW
Net electricity production	56.5 TWh
Lignite production	48.9 Mt
Distribution lines	ca. 270,000 km
Customers	ca. 5.1 m
Employees	ca. 44,500 persons

Source: PGE



Świadomie o atomie  
energia jądrowa w Polsce

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## PGE has strong financial position and high creditworthiness



\*\* Note: Ex-LTC (FY figures) = excluding one-off items, LTC – Long Term Contract

Source: PGE

Leverage ratio	2008	2009	2010	2011
Debt/Equity	0.25	0.13	0.07	0.05
Debt/Assets	0.16	0.09	0.05	0.03
Debt/EBITDA	1.84	0.63	0.41	0.26
Net debt/EBITDA	1.13	-0.34	-0.01	-0.26

Source: Bloomberg

- Despite an unstable conditions of global economy, PGE's financial performance confirms strong financial standing of the company.
- The company has a high creditworthiness affirmed by good credit ratings assigned by two leading international rating agencies: Fitch (BBB+) and Moody's (A3).

## Planned capacity of NPP

- PGE strategic plans assume NPP's of ca. 6000 MW to be constructed by 2030
- Construction of the **first** Nuclear Power Plant (one site) of **ca. 3,000 MW** (2-3 units) by end of 2025, with first unit by end of 2023
- Total Overnight CAPEX assumed at ca. 10–13 bn EUR (depending on technology) for the first NPP

## Technology

- Considering safe, modern, licensable nuclear reactor technologies (**gen III/III+**)
- Strong emphasis on the highest safety and quality standards

## Location

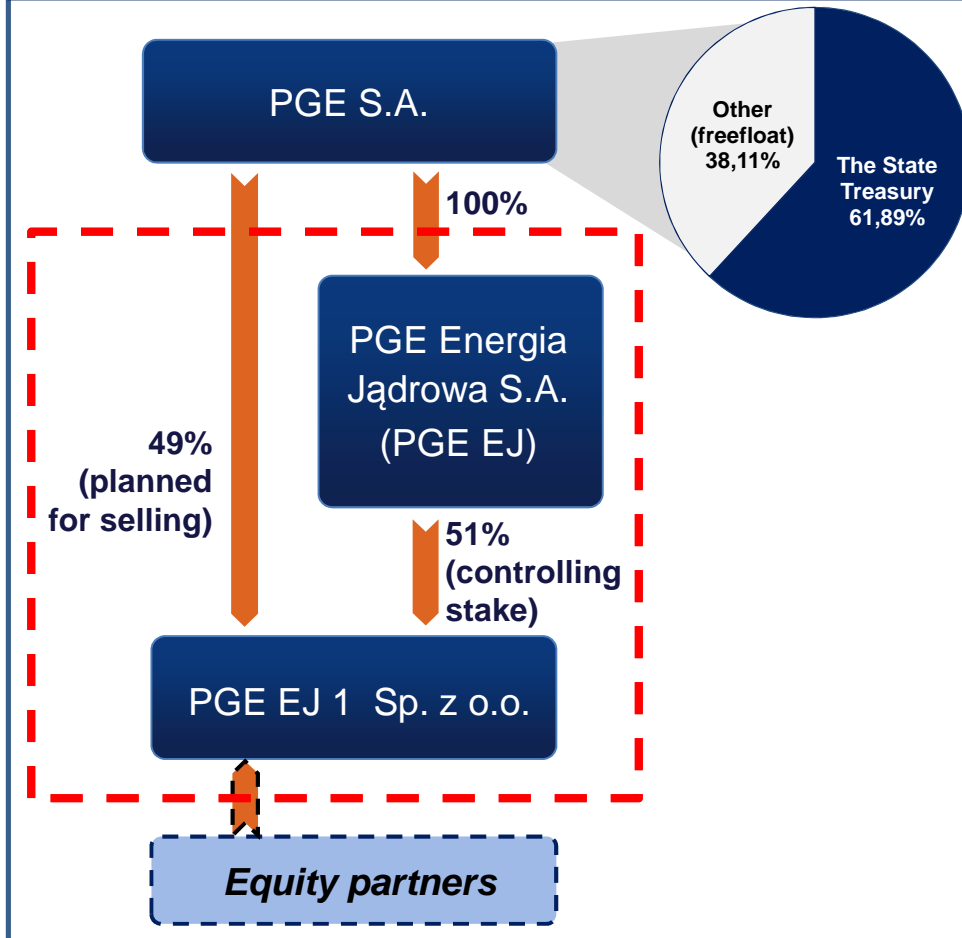
- In 2011 three potential sites in northern Poland have been shortlisted for further site characterization



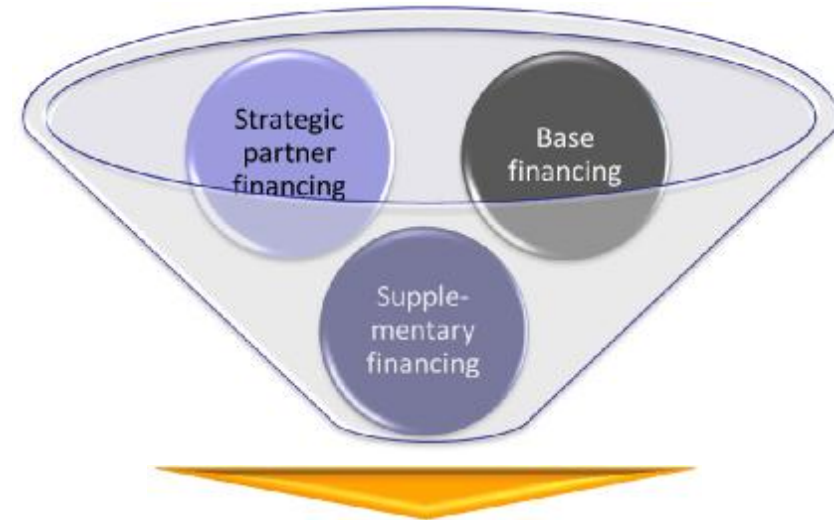


# NPP project development activities on PGE side – financing stream

## Project structure within the PGE Group



## Financing structure under development



Base financing	Strategic partners financing	Supplementary financing
<ul style="list-style-type: none"> <li>Equity (PGE minimum 51%)</li> <li>ECAs</li> <li>Commercial Lending</li> </ul>	<b>Nuclear Utility Partner</b>	<b>Industrial Offtakers</b>  <b>Other Options Under Consideration</b>

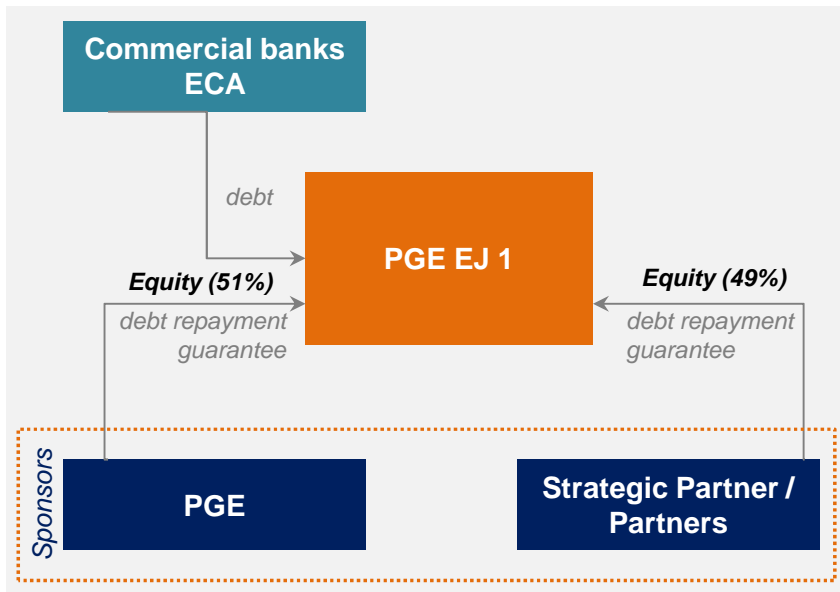




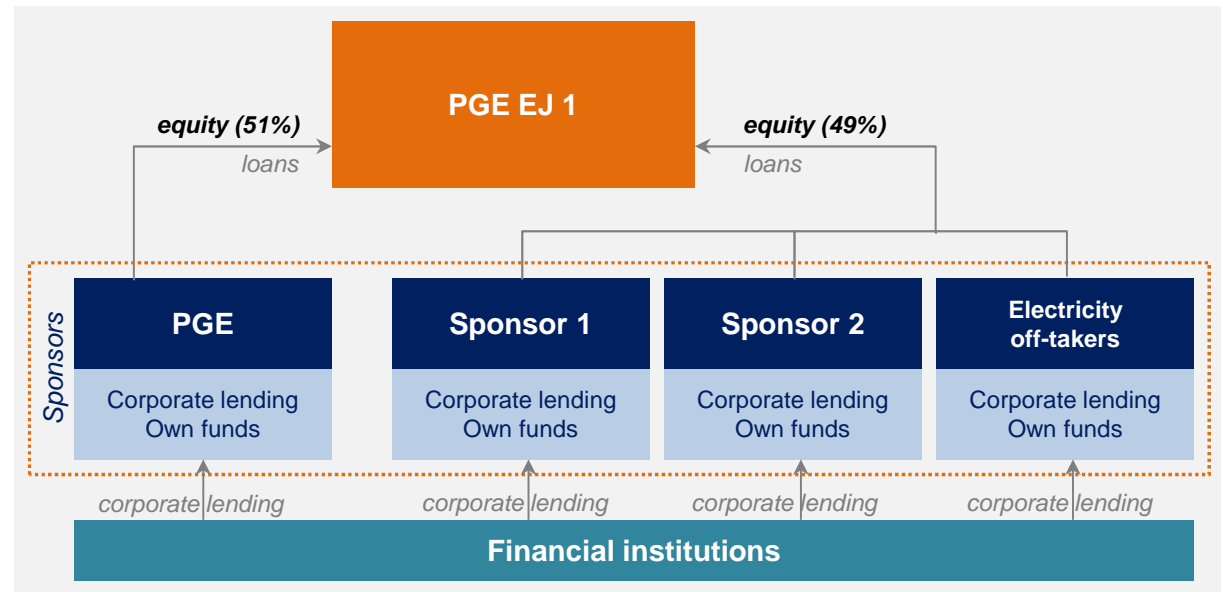


# Preliminary financing concepts

## Option 1 – Financing raised by SPV



## Option 2 – Corporate lending on Sponsors' balance sheets



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**THANK YOU**

**PGE Energia Jądrowa SA**