



**POLSKIE
ELEKTROWNIE
JĄDROWE**

All for Power Conference 2023

Development of Polish nuclear power

Polskie Elektrownie Jądrowe

Michał Wierzchowski

Business Development Director

20th November 2023, Prague



POLSKIE ELEKTROWNIE JĄDROWE (PEJ)

The company is fully and directly owned by the Polish state



Polskie Elektrownie Jądrowe sp. z o.o. is a company responsible, among other things, for preparing the investment process for the construction of the first Polish nuclear power plant with a capacity of up to 3,750 MWe.



The **Plenipotentiary for Strategic Energy Infrastructure** exercises supervision over energy entities and key investments in energy security on behalf of the State Treasury.



The development of nuclear power is **one of the pillars of Poland's energy transition**, which involves construction of safe and modern Generation III(+) PWR nuclear reactors.

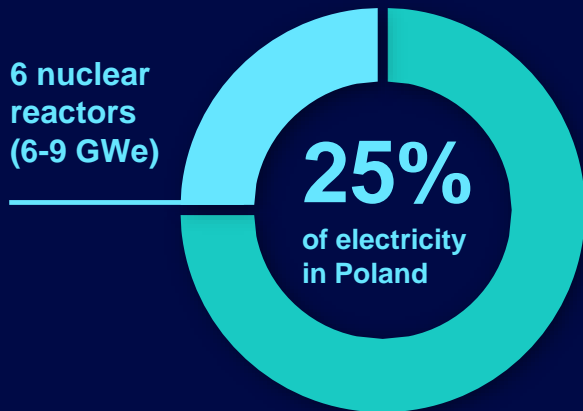


By 2043, Poland's nuclear power plants will produce **around 25% of its electricity**, guaranteeing a stable supply of clean energy to millions of homes across the country.

OUR GOALS

Our main goal

- ▶ **Construction of 6 nuclear reactors** (6-9 GWe) securing 25% of the electricity needed in Poland by 2043



Sub-goals

- ▶ Construction of the 1st nuclear power plant in Poland **by 2033** (3,75 Gwe)
- ▶ Implementation of **Nuclear Culture** in the organization
- ▶ Contribution to develop **nuclear value chain and expertise** in Poland

SPECIFICS OF NUCLEAR PROJECTS



Industry-specific
legislation



Carrying out
appropriate
consultations



Obtaining
financing



Operating license
for a nuclear power plant
issued by the President of
National Atomic Energy
Agency (PAA)



Obtaining nuclear
specific
licenses and permits



Time-consuming
nature and complexity of
site investigation



Long delivery
time of key
components



Developing the
accompanying
infrastructure – cooperation
with external entities



Preparation and
execution
of tender procedures

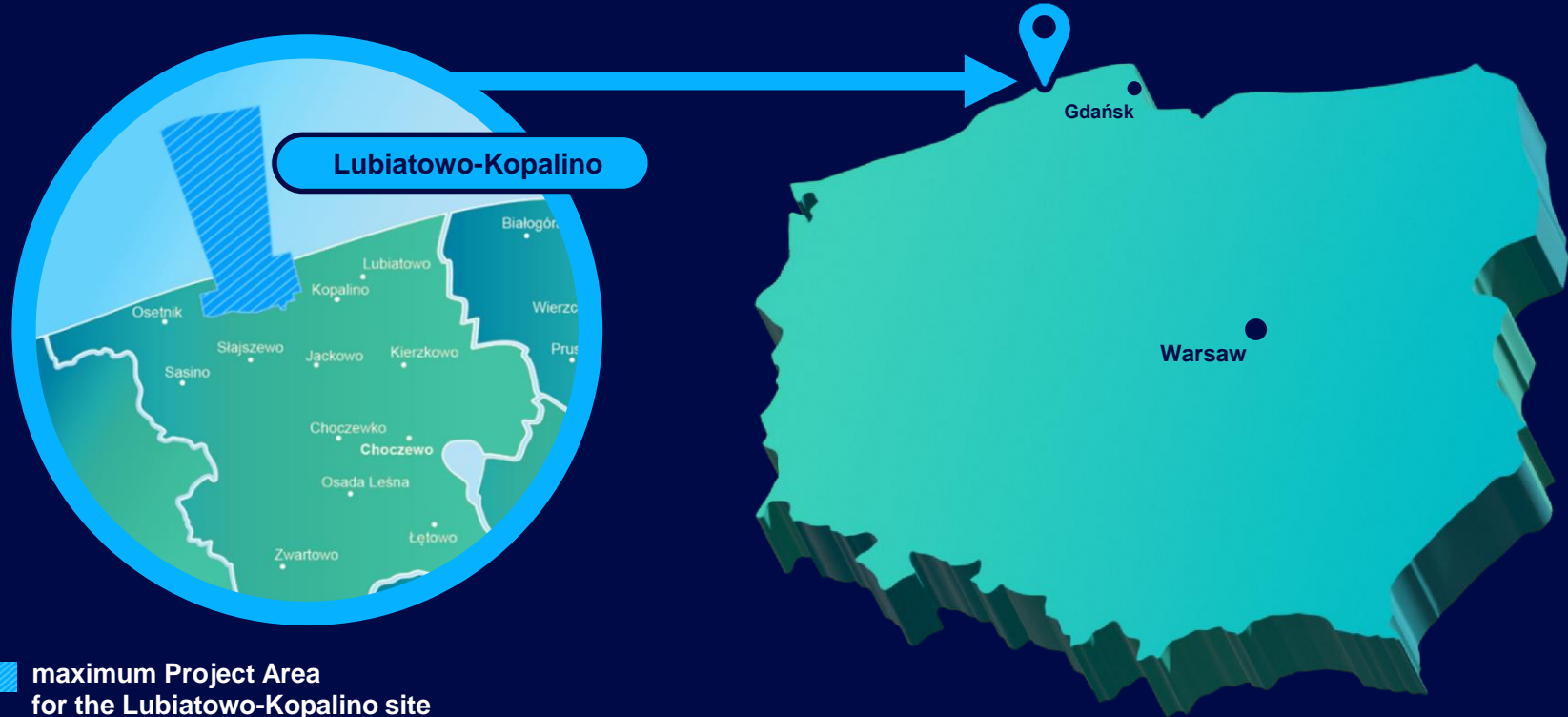


Implementing
Nuclear
Culture

THE FIRST PHASE – 2033

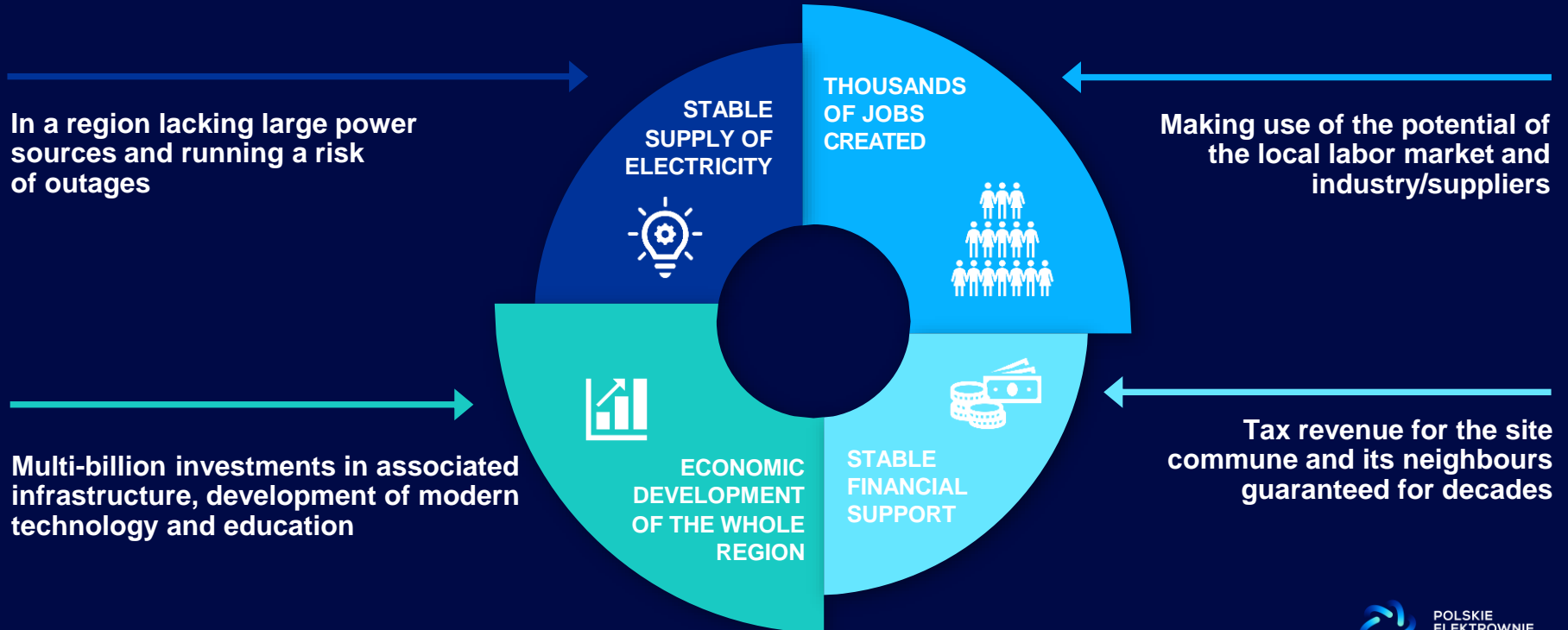


SITE FOR 1ST POLISH NPP

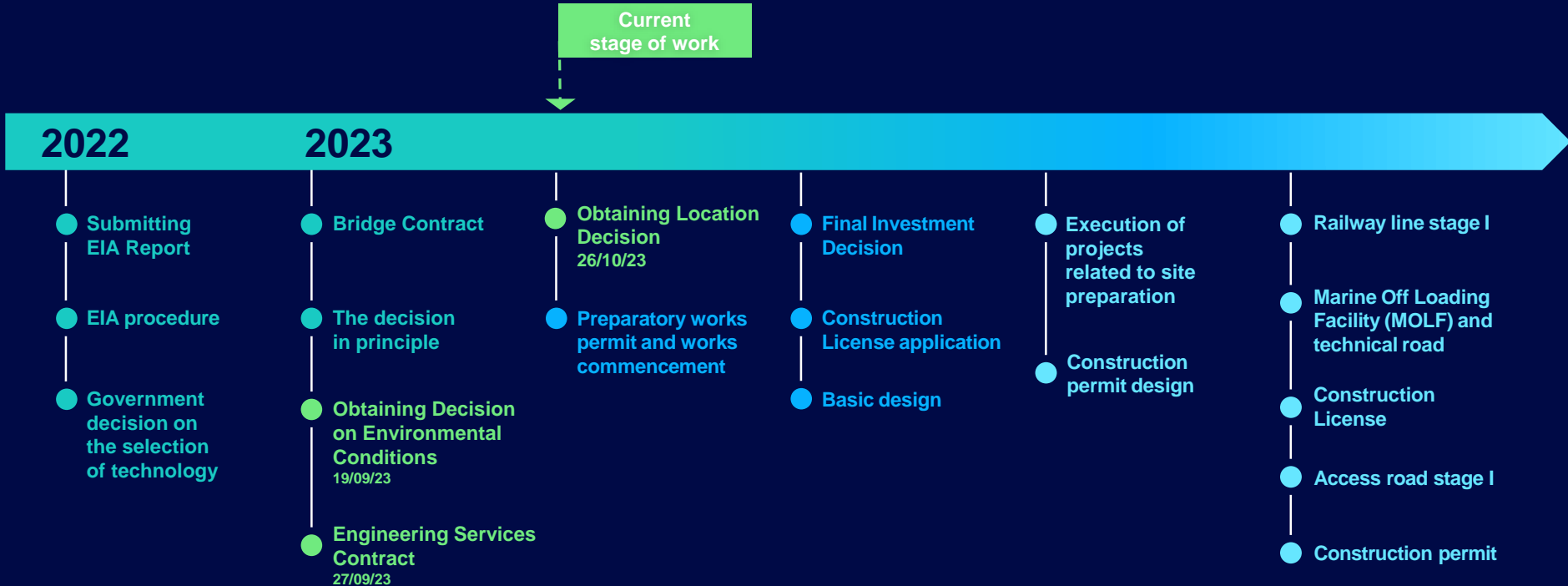


POLISH NUCLEAR POWER PLANT WILL HAVE A SIGNIFICANT BENEFITS FOR THE REGION

Benefits from construction of a nuclear power plant for Pomerania



FRAMEWORK SCHEDULE



KEY RECENT MILESTONES - SEPT 20, 2023

Signing the **Consortium Agreement** between Westinghouse and Bechtel



KEY RECENT MILESTONES - SEPT 27, 2023

Signing the **Engineering Services Contract** with the Westinghouse and Bechtel consortium

Subject

Design of the main components of the nuclear power plant:



nuclear island



turbine island

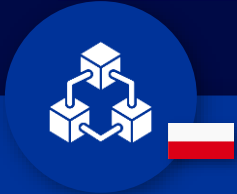


balance-of-plant



CONTRACT EXECUTION

Design works in cooperation with Technology Vendor and General Contractor



SUPPLY CHAIN DEVELOPMENT
(local content)



SUPPORT OF THE INVESTMENT PROCESS
and adjusting it to the existing regulatory requirements



**DEVELOPING NEW COMPETENCES AND
NUCLEAR CULTURE IN POLAND**
mixed team



PREPARING DOCUMENTATION
for the construction permit

6 months
contract negotiations

18 months
contract duration

400 products
result of engineering works





2 million
man-hours

DURING THE ESC EXECUTION, THE EFFORTS WILL BE MADE TO INCORPORATE AND DEVELOP LOCAL ABILITIES

- ▶ ESC aims to provide detailed plans of **acquiring the necessary equipment, components and services** – this will be developed by both Consortium and PEJ
- ▶ In the processes carried out during the ESC, there will be effort made to **allow for the participation of the local companies in areas of design, permitting, physical works, services and mock-ups**
- ▶ Key is providing the **opportunity to Polish suppliers** to participate in procurement processes run by the Consortium
- ▶ There is also a large scope in the Owner's Responsibility and PEJ will be **running procurement processes to engage the suppliers**



ASSOCIATED INFRASTRUCTURE: EXTERNAL PARTNERS DEVELOPING KEY PROJECTS

Project name	Responsibility
The main access road to the NPP	
Railway line	 PKP POLSKIE LINIE KOLEJOWE S.A.
Marine Off Loading Facility (MOLF) with a technical road	
Transmission lines to evacuate power from the NPP to the National Power System	 Polskie Sieci Elektroenergetyczne

20th June 2023 – financing from the state budget was secured for the NPP1 associated infrastructure carried out by:

- ▶ **GDDKiA** – access road
- ▶ **PKP PLK** – railway line
- ▶ **UMG** (Maritime Office in Gdynia) – MOLF

by the resolution adopted by the Council of Ministers on the establishment of a multiannual program.

19th July 2023 – PEJ signed a cooperation agreement with UMG (Maritime Office in Gdynia) for the MOLF construction.



Many of these projects will also be accessible to locals and tourists, and some of them are expected to be operating before construction of the nuclear power plant begins (2026).

RESULTS OF POLLS ON SUPPORT FOR THE CONSTRUCTION OF NPP THE LUBIATOWO-KOPALINO VICINITY

Opinion survey results for site communes and neighboring communes in 2022

A poll conducted between November and December 2022 shows **75% residents of local communes in favour of the construction of nuclear power plants** in their direct neighborhood.



To date, 12 waves of opinion polls were conducted on a local level, which each time confirmed a high support for the construction of a nuclear power plan in the neighborhood. Results of an opinion poll ordered by Polskie Elektrownie Jądrowe and conducted by PBS Sp. z o.o.

PEJ NEXT STEPS IN 2023

Year 2023 is crucial for the **development** of first Polish nuclear power plant



Progressing with permitting process including **location decision and obtaining required technical conditions from TSO**



Building internal capabilities to become an **intelligent customer** and ultimately operator



Start executing ESC with Consortium to develop the **Concept Design** and prepare for next phases/project execution



Close cooperation with regulators **PAA and UDT**



Continue dialogue with EU regarding Financing and **State Aid mechanism**

Thank you for your attention!



PEJ