Development of the in-country engineering resources for the Kozloduy New Build Project

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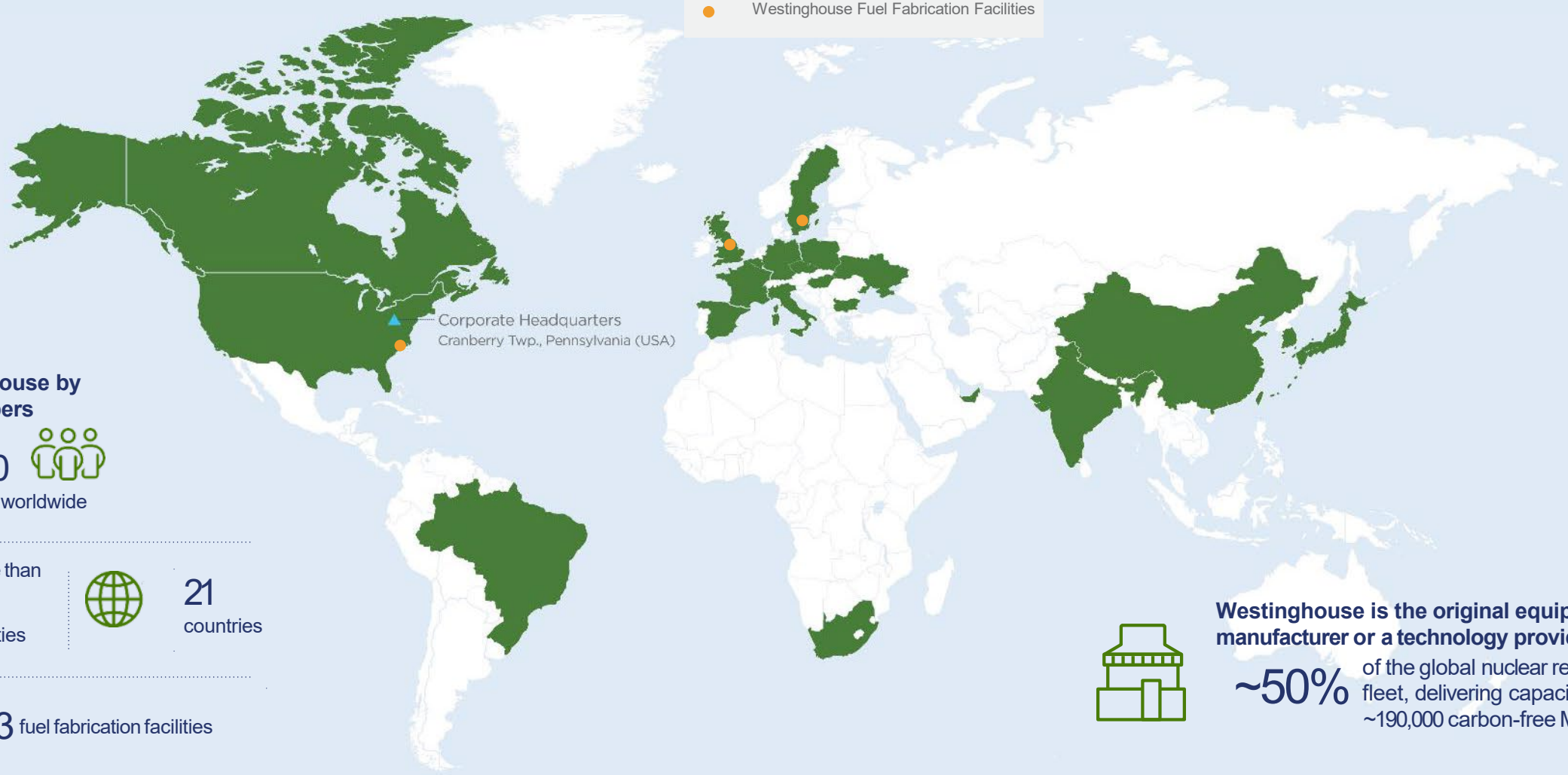
Westinghouse

Global Presence



Westinghouse by the Numbers

11,000 employees worldwide

more than 90 facilities

21 countries

3 fuel fabrication facilities

Westinghouse is the original equipment manufacturer or a technology provider to:

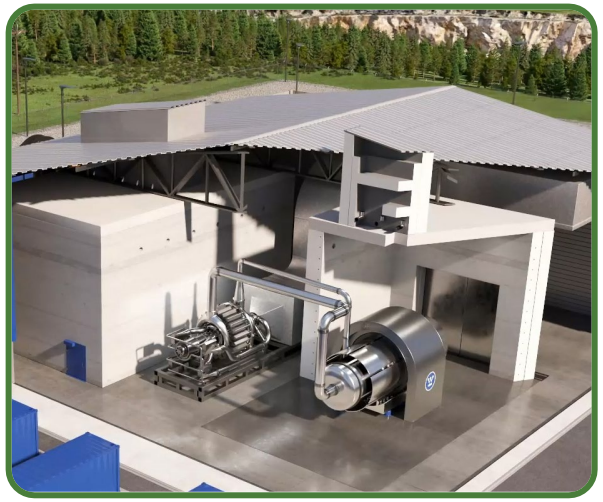
~50% of the global nuclear reactor fleet, delivering capacity of ~190,000 carbon-free MWe

Westinghouse

Technology & Services Portfolio

AP1000 PWR
1,200 MWe

AP300 SMR
330 MWe



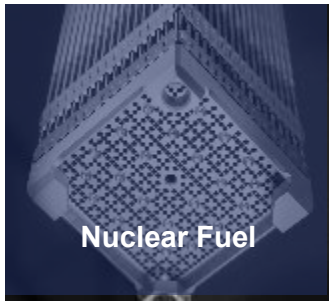
eVinci Microreactor
5 MWe

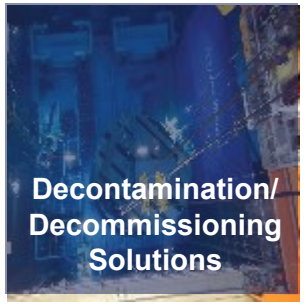
Long Duration Energy Storage

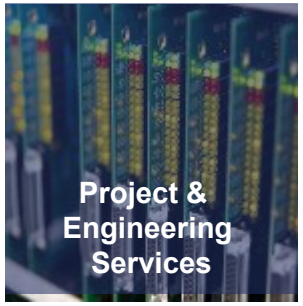
Nuclear Fuel

Long Term Operations

Outage & Maintenance







Westinghouse New Plant Technology Selections

AP1000 PWR

China has **4 AP1000** reactors **in operation** & **14 units under construction**

Poland contracts for **3 AP1000 reactors**

Bulgaria contracts for **2 AP1000 reactors**

2 operating AP1000s, 1st new in USA in 30 yrs

Ukraine contracts for **9 AP1000 reactors**

India selects **6 AP1000 reactors**

AP300 SMR

Community Nuclear Power selection of **4 AP300 SMRs**

Data4 data center developer MOU to explore **AP300 SMRs across Europe**

eVinci Microreactor

SRC selection - **eVinci microreactor** demonstration plant

Penn State University – letter of intent to NRC for **eVinci research reactor**

Energy Storage

US DOE selection – Alaska grid-scale **LDES** project - **50 MW & 1.2 GWh**

Westinghouse Engineering Services delivery model - High level principles

Business Units (BUs)

- Responsible for customer needs identification and customer value delivery
- Applying Global Westinghouse assets (resources, methods, competencies, etc.) to deliver customer solutions
- Responsible for project development, contracting, delivery and support

Project managers, project control specialists, schedulers, etc.

Global Operations Services

- Develops first in class technical resources in order to provide the BUs engineering methods, platforms, processes, solutions and skills; while continuously improving the cost per unit labor
- Global Operating Model, focus on technical and operational excellence
- Westinghouse Engineering structured in four areas: Nuclear Fuel Engineering, Instrumentation and Controls, Plant Engineering & Design, and Component Engineering & Manufacturing

Technical specialists and engineers in **all disciplines**

Digital & Innovation

- Drives innovation from “the ground up” to align with Westinghouse business goals and customer pain points
- Manages Westinghouse R&D Facilities: researchers at our facilities conduct a range of heat transfer, fluid flow and Computational Fluid Dynamics analysis, non-destructive evaluation and testing, and full-scale seismic vibrating testing
- Global organization

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Why do we build or add to the existing in-country engineering workforce for a new build project?

- Presence of in-country engineering workforce supplements the technical superiority of the AP1000 plant to **maximize our value proposition** to a customer and country for their new nuclear build program
- **Native language workforce**: making it easier to organize significant technical exchanges with the customer & offering future trainings in native language; also increasing cognizance of the national regulatory and industrial environment within the Westinghouse team
- Onboarding of the new resources also provide **numerous mentoring opportunities** for Westinghouse global resources
- Increased engineering international workforce development skills and knowledge, which will **support Westinghouse growth**

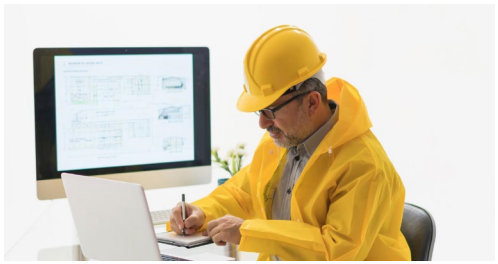
What are the local Engineering needs for a new build project?

The development of, or addition to, an engineering local workforce supports Westinghouse short- and medium-term needs

Close to 100 Westinghouse engineers required locally during the construction phase of an AP1000 project, with access to Westinghouse experts around the globe

A robust engineering local presence will support the delivery of services during operations

The local trained workforce will also support the development and training of engineering resources in other countries with new build projects



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How do we build the in-country engineering workforce?

1. Define the hiring plan

- Considering existing local Westinghouse presence and nuclear experience in-country

2. Identify and hire local talent

- University engagement program and internship program key for early career talent identification

3. Nurture and develop talent ahead of start of nuclear construction

- Leverage Westinghouse global resources
- Leverage Westinghouse global tools, including Westinghouse competency model
- Leverage Westinghouse global projects to ensure training opportunities and full utilization

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Conclusions

- An increased Westinghouse engineering workforce in Bulgaria is key to Westinghouse success in the short-term (for Kozloduy Unit 7 and 8 project) and long-term
- Westinghouse has started our local hiring in the frame of the new build project
- Additionally, Westinghouse has many job opportunities in other organizations present in Bulgaria (I&C, Business Units, etc.)