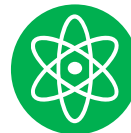




KHNP in the Global Nuclear Market

The 51st JAIF Annual Conference



April 10, 2018

 **KHNP** KOREA HYDRO & NUCLEAR POWER CO., LTD

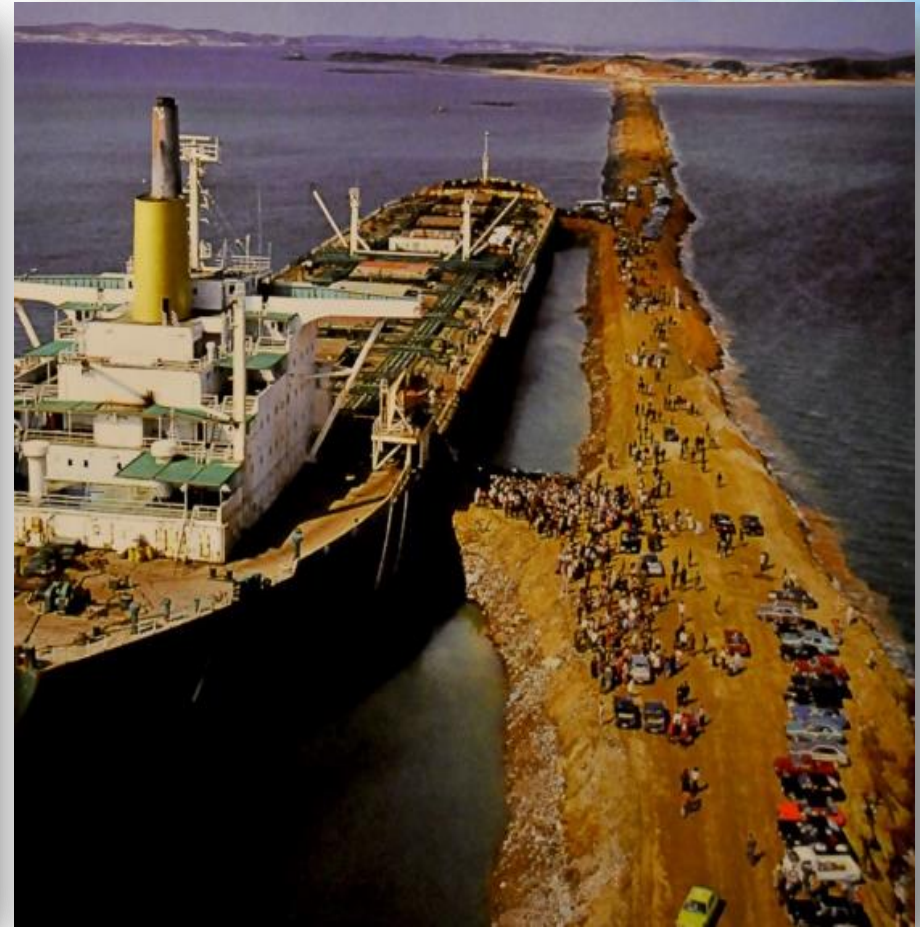
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Korean Nuclear Reactors

1970s



Introduction of Nuclear Power

- Turnkey Approach
- Led by foreign suppliers

1980s



Promotion of Localization

- Non-Turnkey Approach
- Joint implementation
- Localization plan

1990s



Technology Self-Reliance

- OPR1000
- Led by local suppliers

2000s



Technology Advancement

- APR1400
- Export to UAE

2010s



Technology Renovation

- Development of APR+, EU-APR, APR1000
- Design Certification in US and Europe

Korean Nuclear Reactors

US-APR



- NRC Design Certification in process

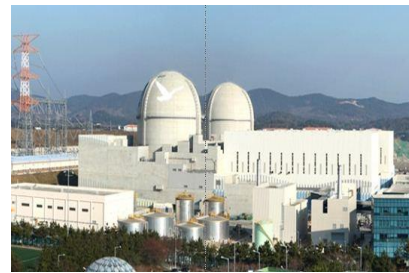
EU-APR



Type	PWR
Life	60 Years
Output	1,500 MWe
Seismic	SSE 0.3g

- EUR Certification

APR1400



Type	PWR
Life	60 Years
Output	1,400 MWe
Seismic	SSE 0.3g

OPR1000



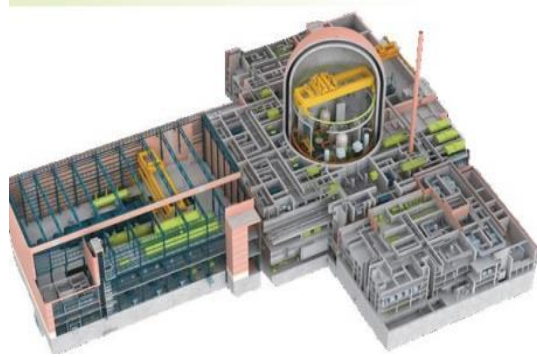
Type	PWR
Life	40 Years
Output	1,000 MWe
Seismic	SSE 0.2g

APR1000



Type	PWR
Life	60 Years
Output	1,050 MWe
Seismic	SSE 0.3g

Korean Nuclear Reactors



EU-APR



US-APR



EUR Certification



**US NRC
Design Certification**



UAE Barakah Project



Contract Date

Dec. 27, 2009

Scope

APR1400 x 4 Unit (5,600MW)
Nuclear Fuel (3 Cycles)
Operating Support Service

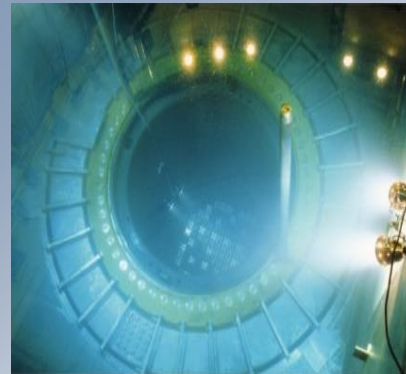
Ref. Plant

Shin-Kori 3&4 in Korea

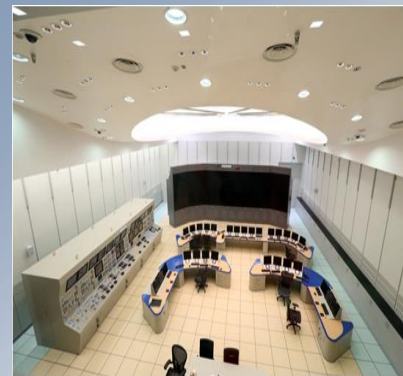
UAE Nuclear Power Plant



4 Units of APR1400



Fuel Supply

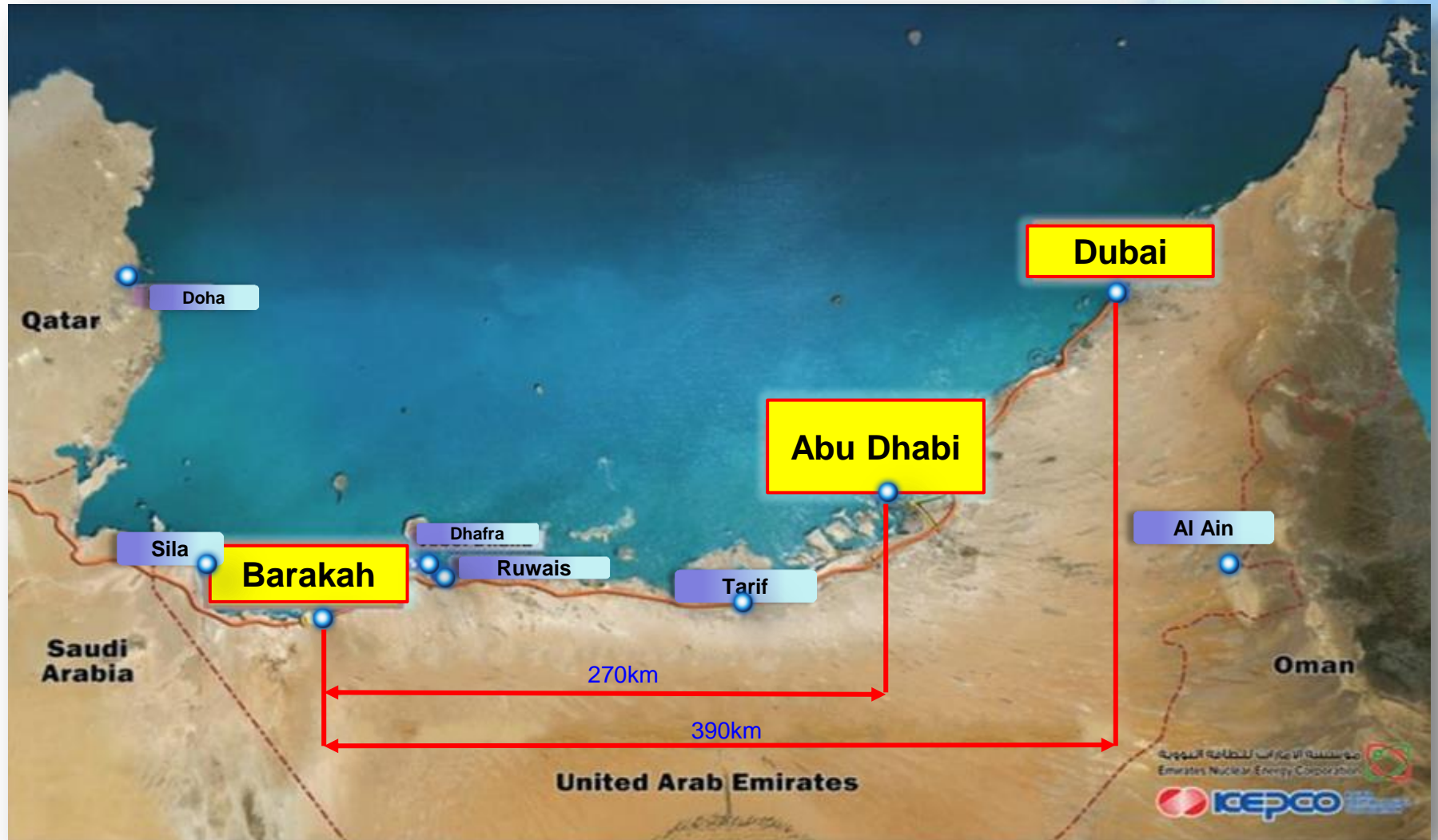


Simulator



OSS

UAE Barakah Project



UAE Barakah Project



UAE Barakah Project



UAE Barakah Project



محمد بن زايد
@MohamedBinZayed

Follow

My dear friend Moon Jae-in, President of Korea, and I today viewed completion of 1st power plant in Barakah Nuclear Energy Plant project. All thanks are due to President, our Korean friends & to joint efforts that have resulted in 1st stage of this giant project being completed.



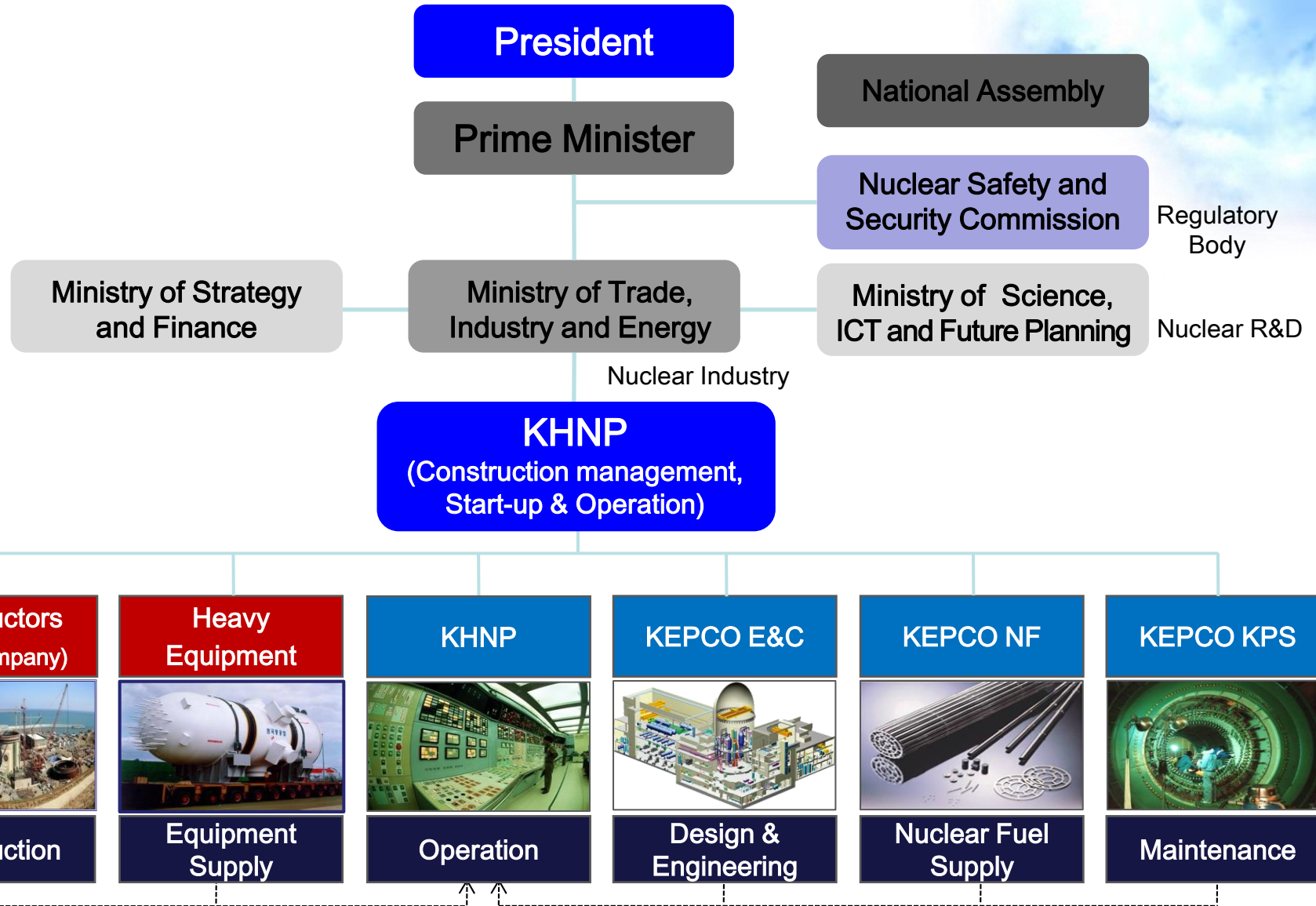


حظر العمل وقت الظهيرة
Mid Day Break



UAE Barakah Project





Establishment

April 2, 2001, spin-off from KEPCO

Business

Nuclear, Hydro, Pumped Storage, Renewables

Staff

12,306 Persons

Assets

47 Billion USD



Nuclear

Op. unit : 24

Capacity
21.7 GW

Hydro

Op. unit : 35

Capacity
0.607 GW

**Pumped
Storage**

Op. unit : 16

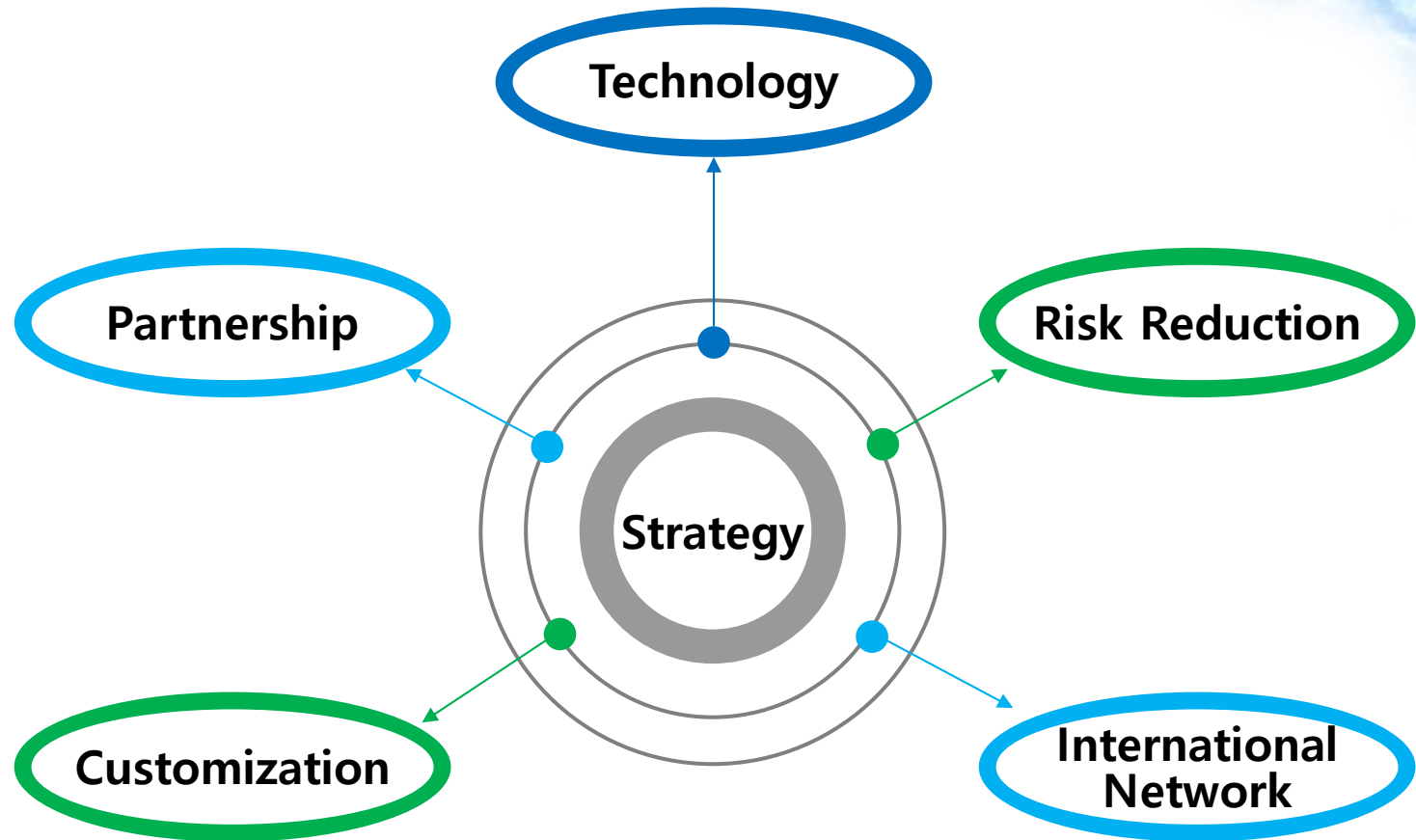
Capacity
4.7 GW

Renewable

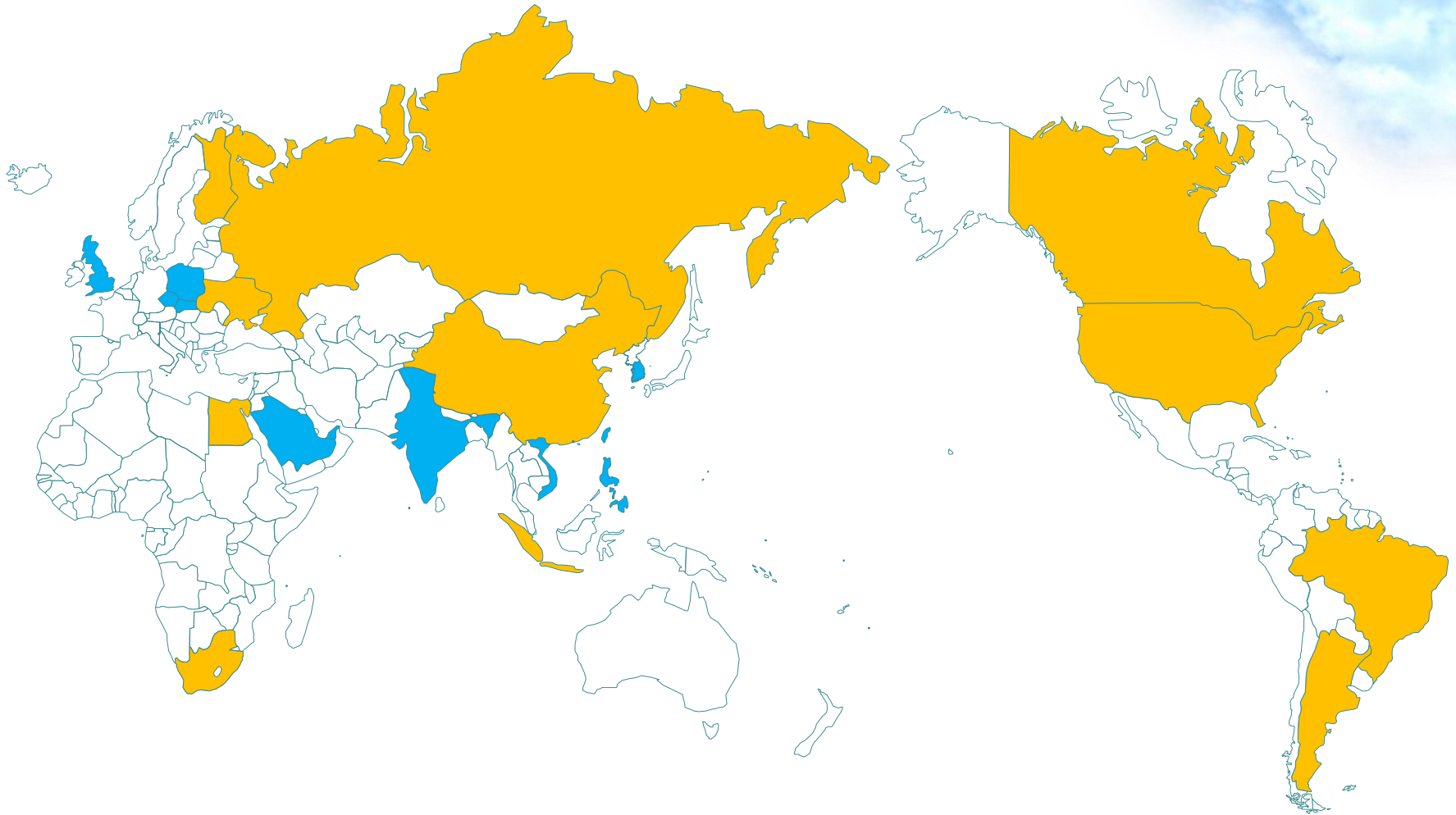
Op. unit : 7

Capacity
0.115 GW

NPP Export Strategy – Principal Directions



KHNP's Presence



**Thank you for
your attention!**

