

Korean Mo-99 Project and New Research Reactor Progress



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¹ Kijang Research Reactor Design and Construction Project

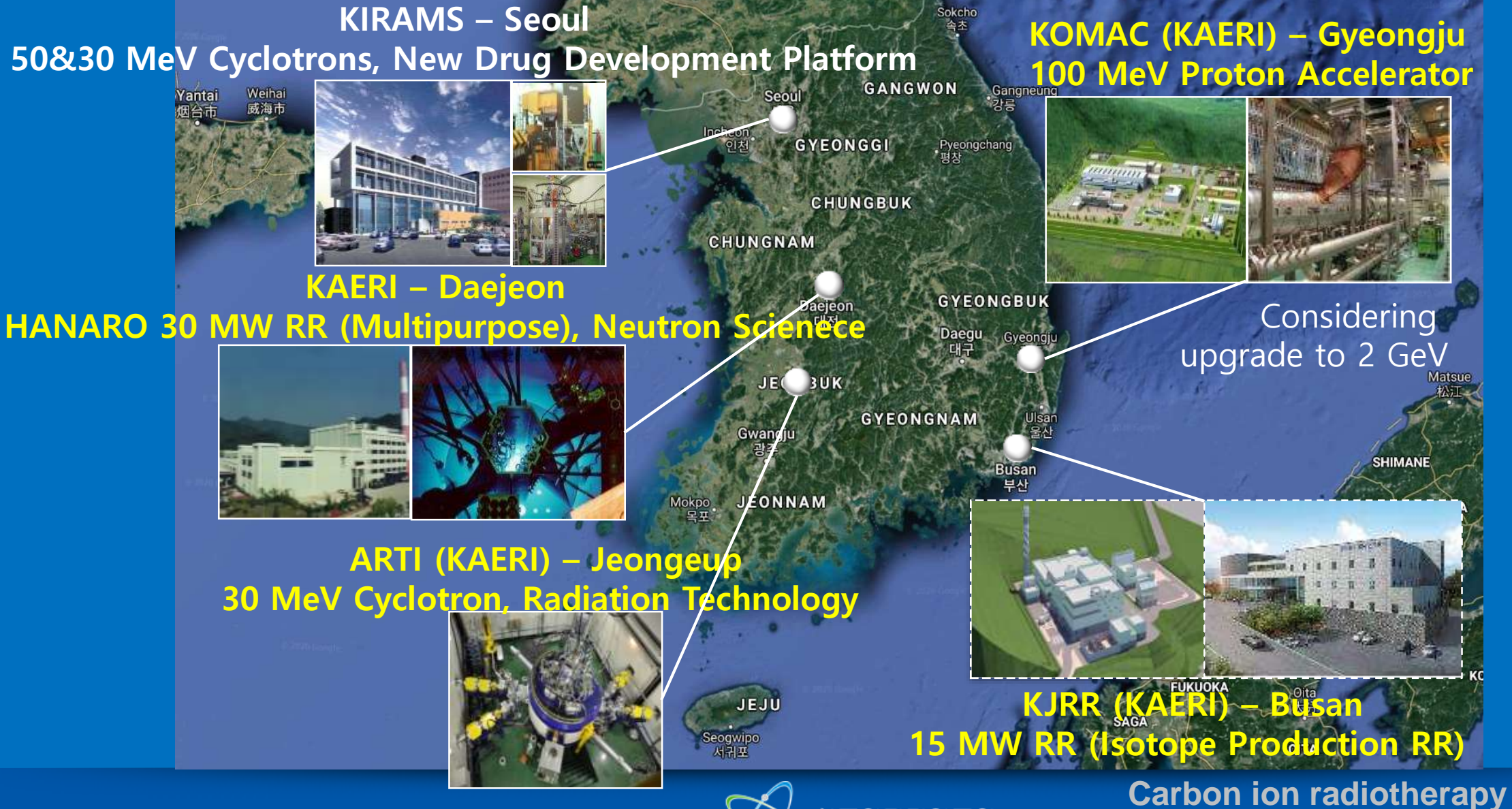
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Korea Atomic Energy Research Institute

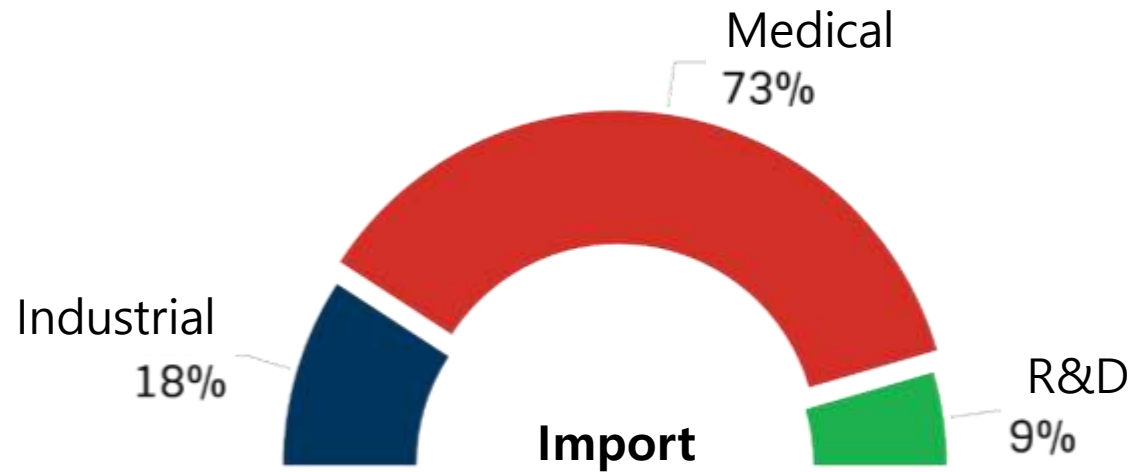
RI Production Infrastructures in Korea



Radioisotope Market

01 RI Supply in Korea

- Korean reactor RIs depend on foreign supply (especially, since 2014 HANARO shutdown)
- Cyclotron isotopes are supplied by KAERI-ARTI, KIRAMS and Hospitals (F-18, Tl-201, I-123, Ge-68 etc.)



02 Mo-99/Tc-99m Supply in Korea

- Korean Mo-99 supply is 100% foreign origin
- There are few local Tc-99m manufacturers

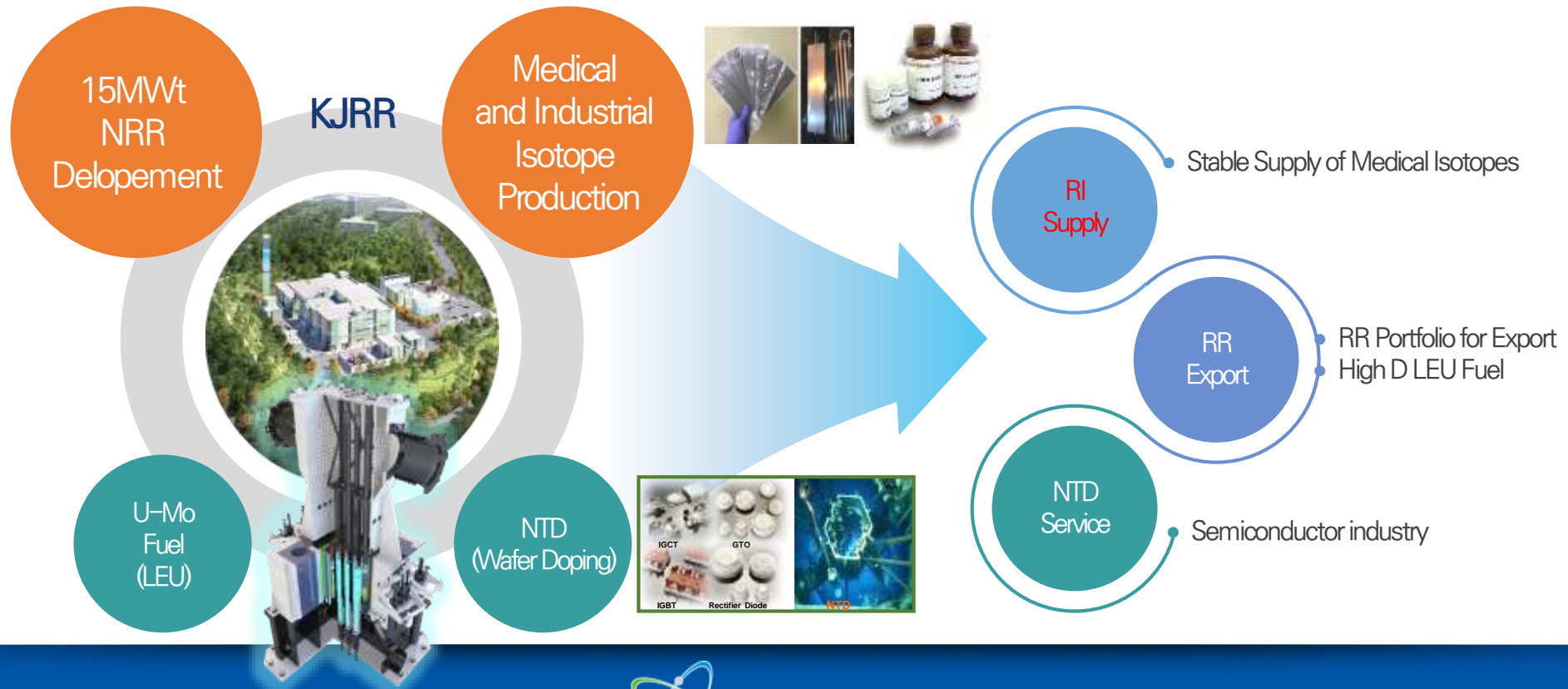


KJRR Introduction

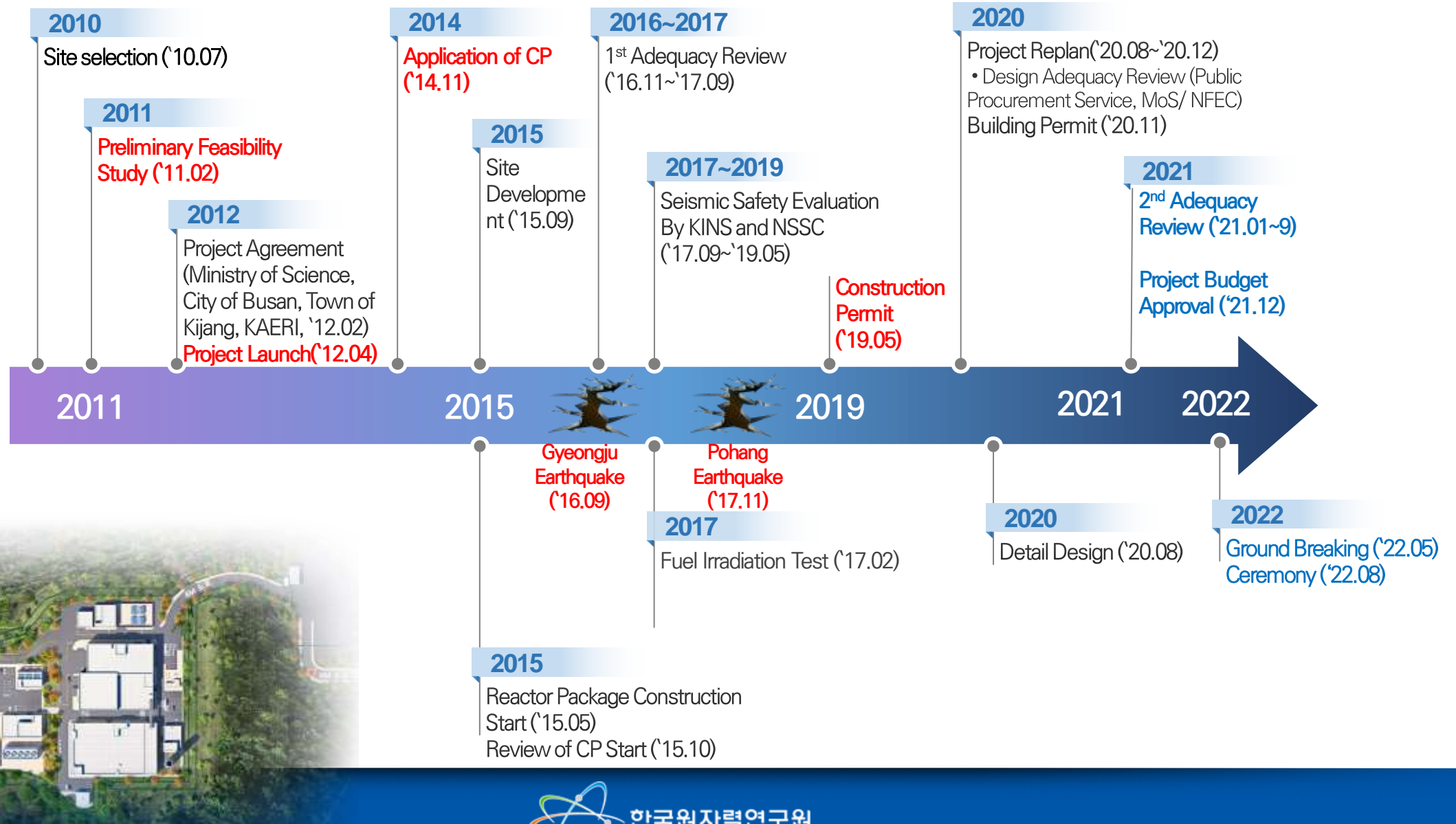


GOAL

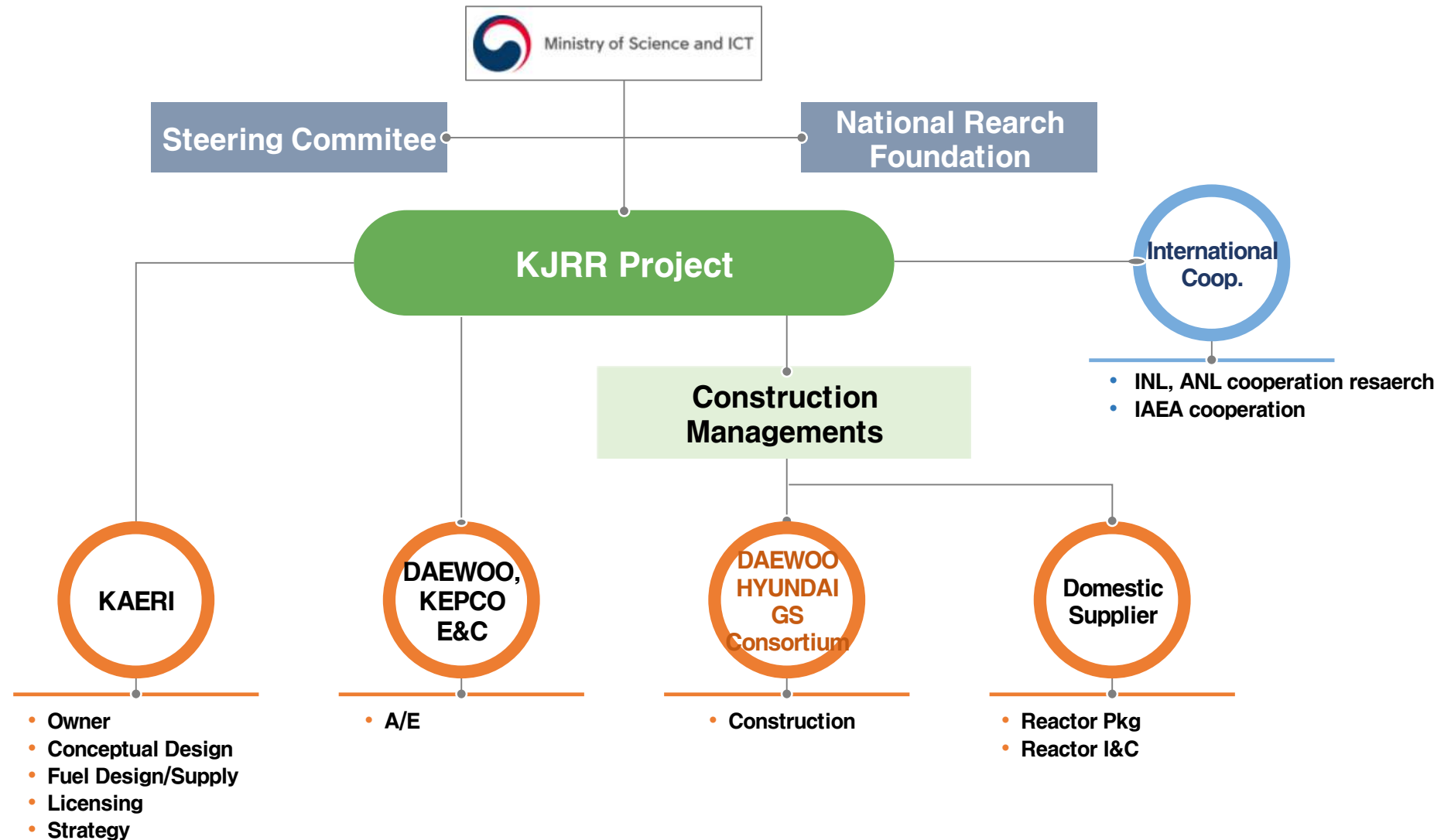
- ▶ **Stable supply of Mo-99 & RIs at home (Korea) and abroad**
- ▶ **Development of high performance of the LEU fuel**
 - High density U-Mo fuel and fission moly target
- ▶ **Development of the tech. and components for the next-G RR**
 - Different design characteristics from HANARO



KJRR Progress



Proejct Organization



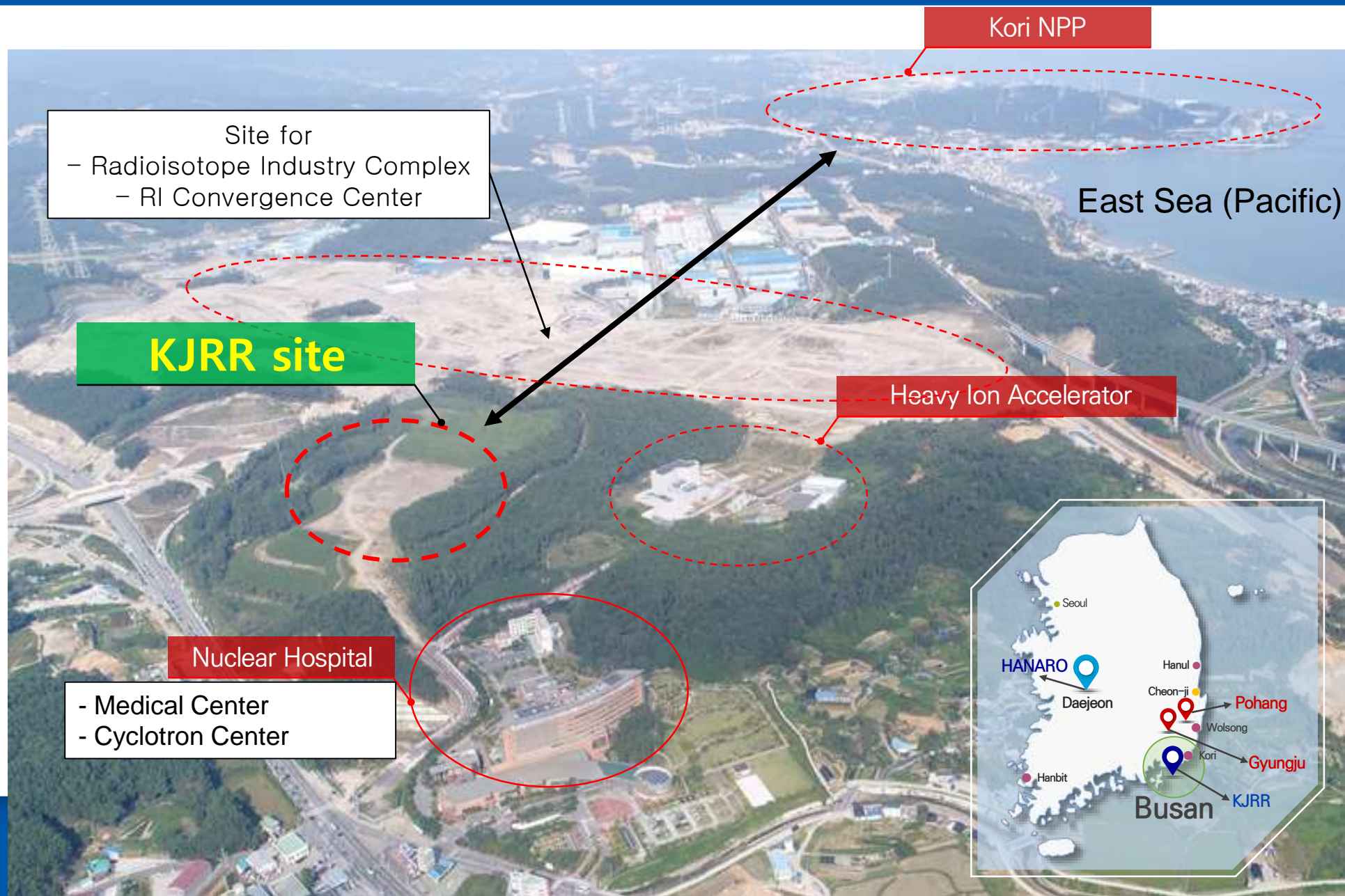
Site Overview 1



Site Overview 2



KJRR Site: Bird's Eye View



Main Building Ground Breaking (May 2022)



Ground Breaking & MOA Ceremony ('22.8)

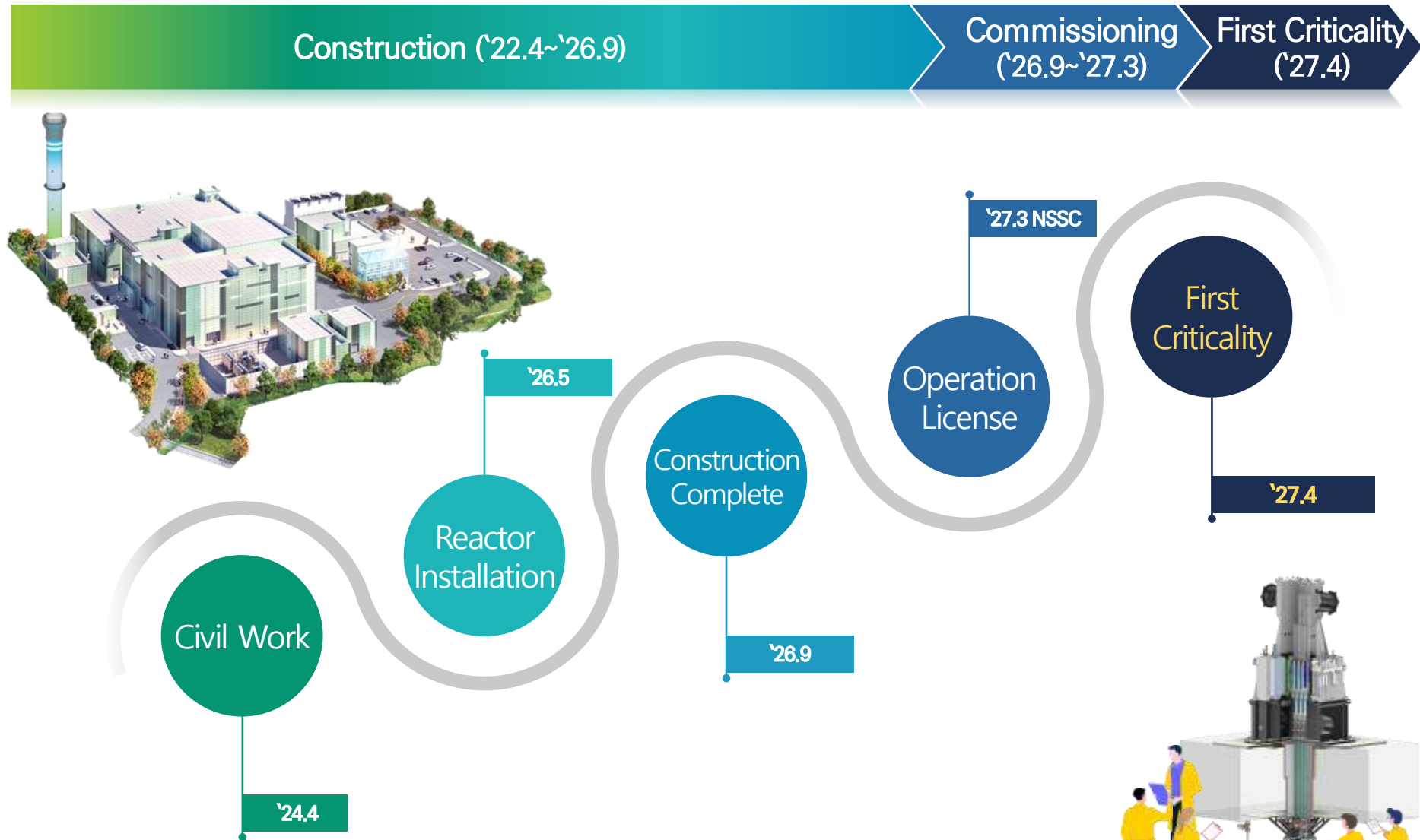


MOA Ceremony
(Ministry of Science – City of Busan –Gijang County –
Jangan Town – KAERI)



Ground Breaking Ceremony

KJRR Construction Plan



Summary



KJRR (April 2027)

RI Application Research Center (Mid 2024)



Thank You for Your Attention !!!



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