



Contribution ID: 281

Type: Oral

## The Status of Supply Chain for Small Modular Reactors deployment in China

SMRs have the characteristics of small size, light weight, strong application flexibility, and low initial investment. They can be widely used in various scenarios such as power generation, heating, and seawater desalination, and are one of the important choices for achieving zero carbon energy.

China began the technological research and development of SMRs in the early 1980s, targeting the application needs of heating in cold regions, power supply in remote areas, and seawater desalination in coastal areas. Various types, power levels, and technical characteristics of SMRs were developed. Among them, the 200MWe high-temperature gas cooled SMR has been put into operation in 2021, and the 125MWe “Linglong 1” integrated multi-purpose water cooled SMR is under construction, and is planned to be completed for power generation in 2026, and several SMRs are in different research and development stages at current stage. China has established a complete supply chain system through more than 30 years of research and development, construction, and application practice in the field of SMRs, which can provide strong support for the deployment of SMRs.

This article will introduce the status of SMRs supply chains in China from various aspects such as basic research and development, equipment manufacturing, construction and project management, operation and maintenance, and technical support. It will be helpful for the potential SMR users to understand China’s capabilities in SMR deployment, and promote the large-scale application of SMRs.

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### Confirm that the work is original and has not been published anywhere else

Yes

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**Track Classification:** Topical Group A: SMR Design, Technology and Fuel Cycle: Track 3: Engineering, Codes & Standards, Supply Chain, Operation and Maintenance of SMRs