## CHINA STEPS UP NUCLEAR ENERGY PLANS

WU Dan

EAI Background Brief No. 961

Date of Publication: 16 October 2014

## **Executive Summary**

- 1. China's nuclear energy industry is poised for rapid growth. As stipulated in China's medium and long-term energy plans, installed nuclear power capacity is targeted to reach 40GW by 2015 and 58GW in 2020, a big jump from 14.8GW in 2013.
- 2. Developing nuclear energy helps China enhance its energy security and energy self-sufficiency. It also contributes to climate change mitigation and boosts economic growth.
- 3. Currently, 20 commercial nuclear reactors are in operation and 28 are under construction in China's eastern coastal regions.
- 4. China's nuclear energy industry is governed by government agencies under the State Council. Three government bodies, i.e. the National Energy Bureau, the China Atomic Energy Authority and the National Nuclear Safety Administration, are responsible respectively for nuclear energy policy, technology innovation and nuclear safety.
- China's nuclear plants are owned and operated by three authorised state-owned enterprises under the supervision of the State-owned Assets Supervision and Administration Commission.
- 6. China plans to localise third generation nuclear technology when it embarks on building the world's first four units of AP 1000 reactors. Various second generation reactor models are also being deployed.
- 7. Following the Fukushima accident in Japan in March 2011, China has temporarily halted new nuclear projects and conducted comprehensive safety checks on its running reactors.

- 8. Since 2011, stricter safety standards have been adopted and planned inland nuclear power projects have been frozen.
- 9. Public survey reflects that the Chinese public generally holds the most favourable views on nuclear energy among countries with nuclear power.
- 10. Nonetheless, public concerns over nuclear safety have increased. Demonstrations in Jiangmen of Guangdong province in July 2013 had resulted in the cancellation of a planned uranium-processing plant.