中国国家原子能机构
China Atomic Energy Authority

THE CHINA’S COUNTRY REPORT

ON THE 22ND FNCA MINISTERIAL LEVEL MEETING

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The 2030 carbon peak goal and the 2060 carbon neutrality vision announced by President Xi Jinping

The policy of “active and orderly development of nuclear power on the basis of ensuring safety“ formulated by Chinese Government

As of Nov. 2021 in Chinese mainland

51 Units
commercial nuclear power

53.27 GW
total installed capacity

RANKING **THIRD**
IN THE WORLD

18 Units
under construction

18.94 GW
total installed capacity

CONTINUING TO RANK **FIRST**
IN THE WORLD

The first **"Hualong One"** reactors in domestic and abroad have been put into operation

The demonstration project of **"Guohe One"** is progressing steadily as planned

Shidao Bay HTGR demonstration project completed the fuel loading

The demonstration projects **of nuclear powered heating** are operating well

The demonstration **fast reactor**, **small-medium modular reactor** etc. are progressing smoothly

The life of Qinshan NPP is successfully extended becoming the first NPP in chinese mainland to gain a life extension permit

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3 has built **4** approved under construction

LOW- AND MEDIUM-LEVEL RADIOACTIVE WASTE DISPOSAL FACILITIES

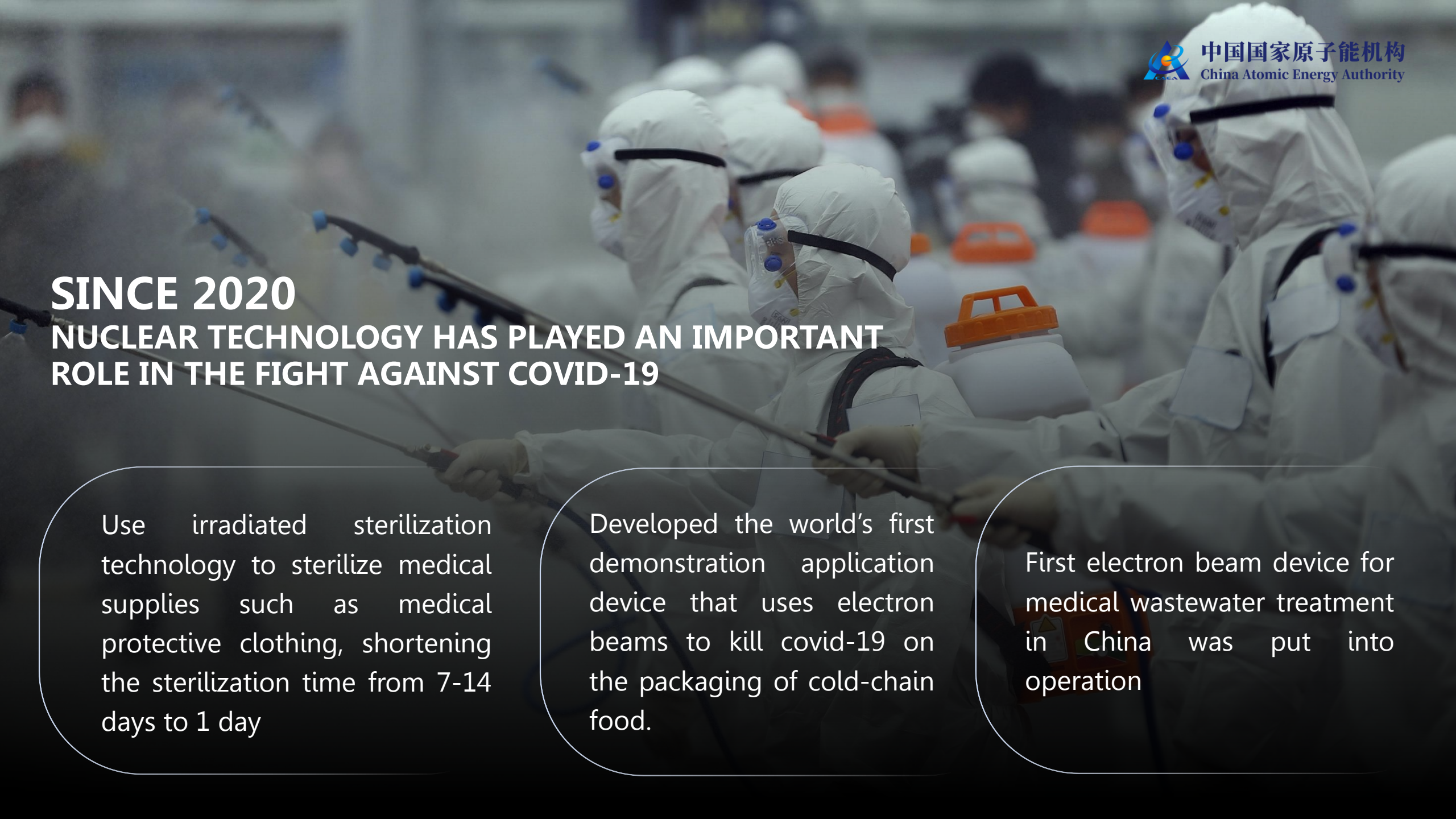
1 put into operation

HIGH-LEVEL WASTE LIQUID VITRIFICATION FACILITY

1 under construction

UNDERGROUND RESEARCH LABORATORY for HIGH LEVEL RADIOACTIVE WASTE

DESIGNATED AS IAEA COLLABORATING CENTER



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SINCE 2020

NUCLEAR TECHNOLOGY HAS PLAYED AN IMPORTANT ROLE IN THE FIGHT AGAINST COVID-19

Use irradiated sterilization technology to sterilize medical supplies such as medical protective clothing, shortening the sterilization time from 7-14 days to 1 day

Developed the world's first demonstration application device that uses electron beams to kill covid-19 on the packaging of cold-chain food.

First electron beam device for medical wastewater treatment in China was put into operation

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There are more than **7,000** particle accelerators in China, which are widely used in various fields

Medical and health care: radiotherapy, medical isotope production and sterilization

Agriculture: Irradiation for breeding, pest infertility and agricultural products

Industry: irradiation processing and polymer modification, non-destructive inspection

Public safety: inspection of large-scale container, killing anthrax bacteria

Environmental protection: electron beams used for industrial and medical wastewater treatment

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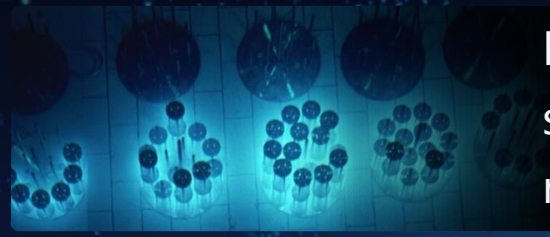
CHINA HAS ACTIVELY PROMOTED THE DEVELOPMENT OF RESEARCH REACTOR TECHNOLOGY AND CONSTRUCTION.

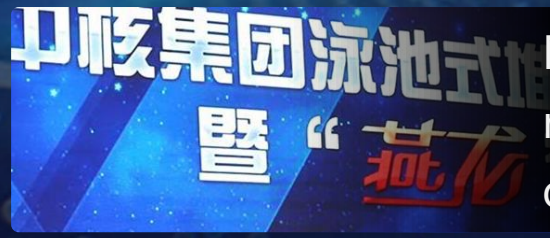
Over **20** research and experimental reactors have been built

Applications: shielding effect, material modification, fuel and material testing, and neutron activation analysis etc.



Production of isotopes and their products, such as medical radioisotopes, industrial radioactive sources and tracers

The world's first radiotherapy device for boron neutron capture therapy



Nuclear powered heating: the "Yanlong" reactor was launched with a heating area of up to 20 million square meters.

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China is ready to work together with member states

Thanks for your attention!