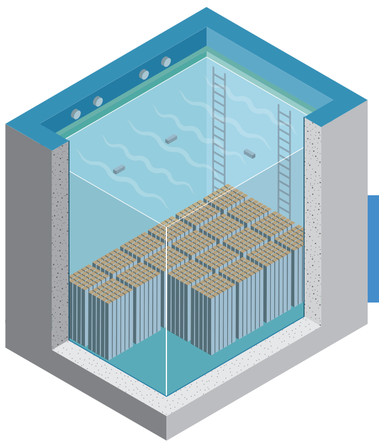
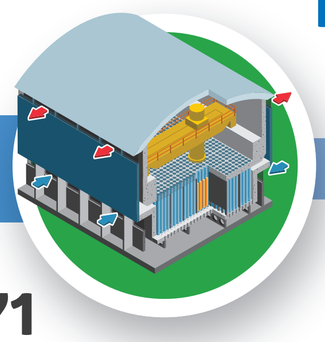
DRY STORAGE TECHNOLOGIES
THE TIMELINE

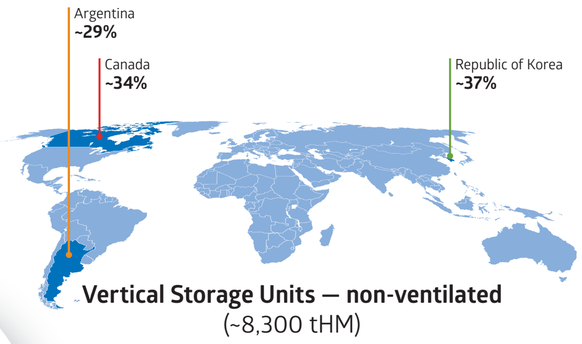


Since the inception of nuclear power in the 1950s spent fuel has been stored wet.

WET STORAGE POOLS



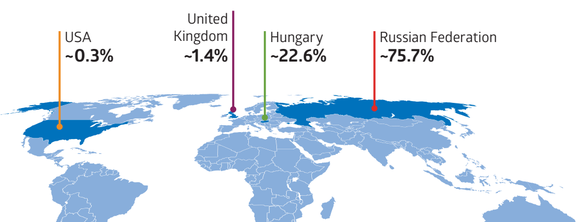
Over the past 50 years, dry storage has been increasingly used to provide additional storage capacity according to each facility's needs.



Vertical Storage Units — non-ventilated
(~8,300 tHM)

1977
VERTICAL UNITS

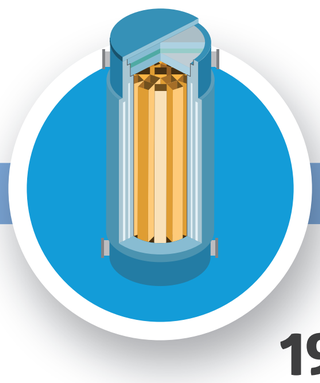
NON-VENTILATED
Vertical unit Whiteshell, Canada

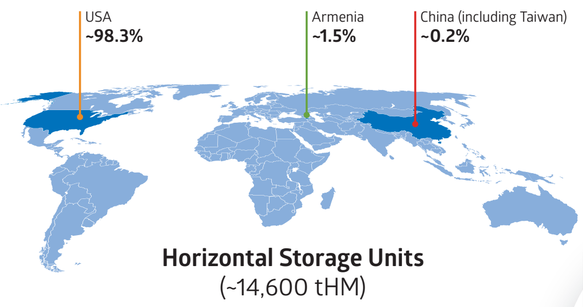


Storage Buildings
(~5,200 tHM)

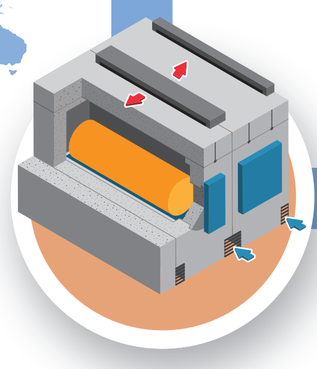
1971
STORAGE BUILDINGS

Storage building Wylfa, UK





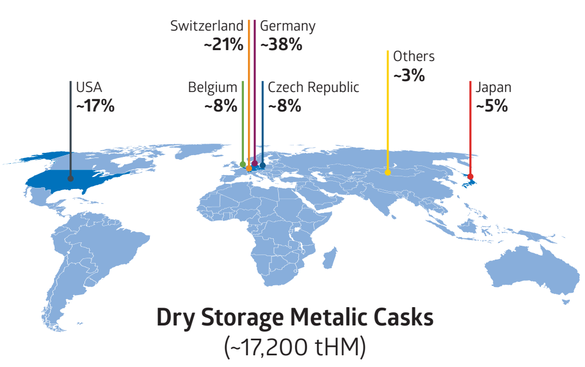
Horizontal Storage Units
(~14,600 tHM)



Ongoing research and development ensures continuous evolution in dry storage system technology.

1986
METALLIC CASKS

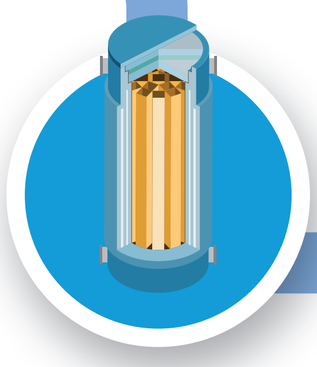
STORAGE-ONLY
Metallic cask Surry, USA

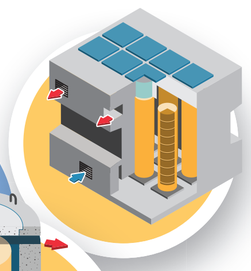


Dry Storage Metalic Casks
(~17,200 tHM)

1989
HORIZONTAL UNITS

Horizontal unit H. B. Robinson, USA

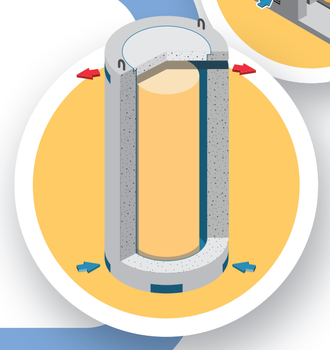




* Including MACSTOR systems used in Canada, Romania, Republic of Korea since 1995

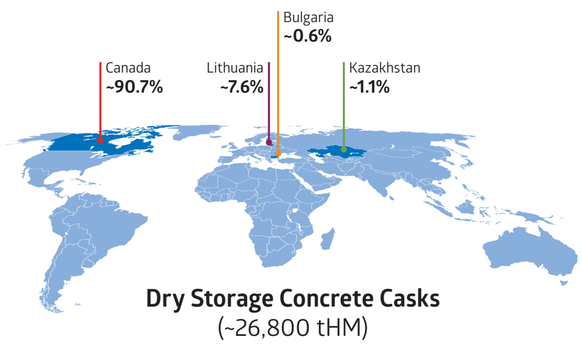
1990
METALLIC CASKS

TRANSPORT AND STORAGE
Metallic cask transportable Surry, USA



1993
VERTICAL UNITS*

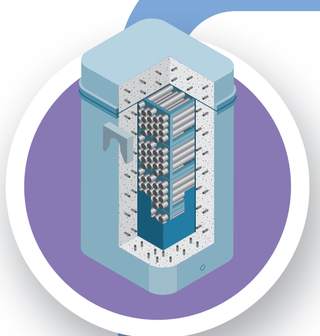
VENTILATED
Vertical unit Palisades, USA



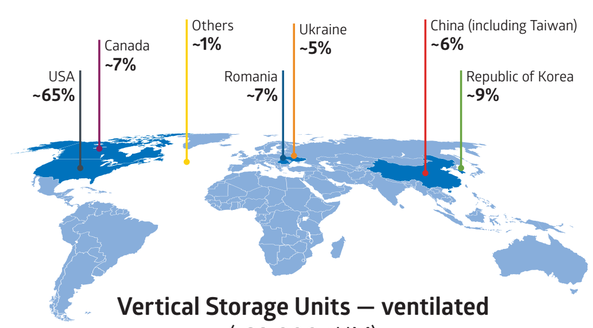
Dry Storage Concrete Casks
(~26,800 tHM)

1996
CONCRETE CASKS

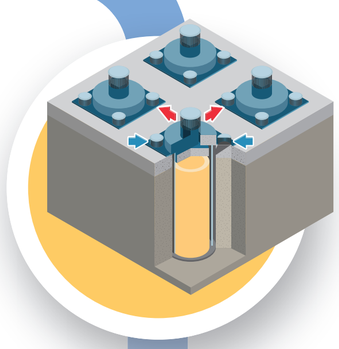
TRANSPORT AND STORAGE
Concrete cask Pickering, Canada



Displayed values have been rounded and are based on the 2019 reports of the contracting parties for the Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Waste Management as well as other publicly available sources.



Vertical Storage Units — ventilated
(~33,800 tHM)

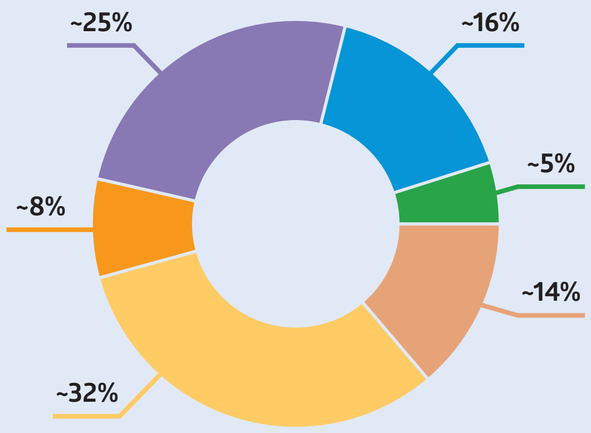


2015
VERTICAL UNITS BELOW GROUND

VENTILATED
Vertical unit Callaway, USA

Global Inventory Distribution in Dry Storage Systems
(~105,900 tHM)

- Storage Buildings
- Metallic Casks
- Concrete Casks
- Vertical Storage Units, non-ventilated
- Vertical Storage Units, ventilated
- Horizontal Storage Units



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IAEA
International Atomic Energy Agency

NEFW
Nuclear Fuel Cycle and Materials Section