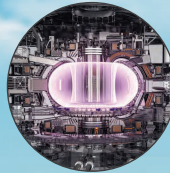


ITER WORKSITE MAIN BUILDINGS

The home of the biggest fusion experiment in history

Tokamak Building

The home of the ITER machine—a building of seven floors that sits 13 m below the level of the platform and 60 m above



Cryoplant

The massive refrigerator of the ITER machine. It houses the compressors, cold boxes, cryogenic tanks and auxiliary systems that will produce cold Nitrogen, and cool liquid Helium

Poloidal Field coils building

The factory where Europe manufactured four of its large superconducting magnets, measuring 17-24 m in diameter and weighing 200-400 tonnes

High voltage

ITER is connected to France's national grid. Thanks to the ITER transformers the 400kV received will be converted to 22 kV and 66 kV for the needs of the ITER site and components.

Assembly Hall

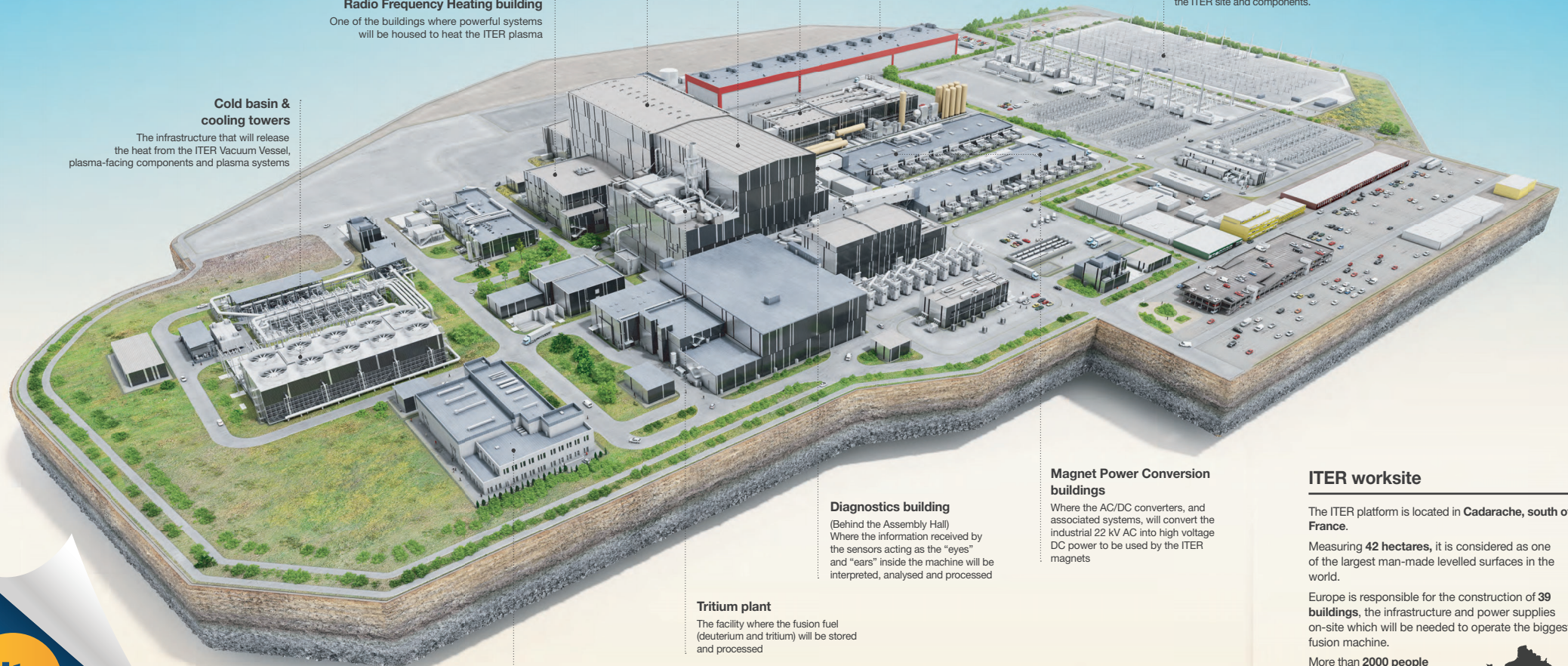
The massive workshop where major ITER components are being assembled

Radio Frequency Heating building

One of the buildings where powerful systems will be housed to heat the ITER plasma

Cold basin & cooling towers

The infrastructure that will release the heat from the ITER Vacuum Vessel, plasma-facing components and plasma systems



Diagnostics building

(Behind the Assembly Hall)
Where the information received by the sensors acting as the "eyes" and "ears" inside the machine will be interpreted, analysed and processed

Tritium plant

The facility where the fusion fuel (deuterium and tritium) will be stored and processed

Control building

The facility from where the ITER machine will be operated

Magnet Power Conversion buildings

Where the AC/DC converters, and associated systems, will convert the industrial 22 kV AC into high voltage DC power to be used by the ITER magnets

What is ITER?

ITER is the next major milestone on the path to fusion energy. It will allow scientists to study a "burning plasma" that releases more energy than used to produce it, and will rely on an impressive range of technologies that will be essential to deliver fusion power in the future.

ITER is a global scientific partnership of unprecedented scale bringing together half of the world's population: China, Europe, Japan, India, the Republic of Korea, the Russian Federation and the United States, which together represent 80% of the global GDP.

Fusion for Energy (F4E) manages Europe's contribution to ITER which amounts to roughly half of the project.

ITER worksite

The ITER platform is located in Cadarache, south of France.

Measuring 42 hectares, it is considered as one of the largest man-made levelled surfaces in the world.

Europe is responsible for the construction of 39 buildings, the infrastructure and power supplies on-site which will be needed to operate the biggest fusion machine.

More than 2000 people have been involved in ITER's construction works.



china eu india japan korea russia usa



www.f4e.europa.eu

