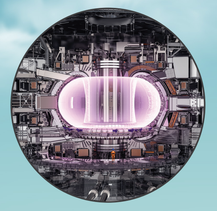
ITER WORKSITE
MAIN BUILDINGS

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, coldboxes, cryogenic tanks and auxiliary systems that will produce cold Nitrogen, and cool liquid Helium

Assembly Hall
The immense workshop where various ITER components will be assembled

Poloidal Field coils building
The factory where Europe is manufacturing four of its PF coils measuring between 17 and 25 m in diameter and weighing between 200 and 400 t

Radio Frequency Heating building
Where the radio frequence necessary to heat the plasma will be generated

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.

Cold basin & cooling towers
Will remove the heat from the ITER Vacuum Vessel, its plasma-facing components and plasma systems

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

Magnet Power Convertion 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

Tritium plant
The facility where the fusion fuel (deuterium and tritium) will be stored and handled

Control building
The facility from where the ITER machine will be operated

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** are contributing to ITER's building works.

iter
china eu india japan korea russia usa

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