

Nuclear fission

Nuclear Fusion

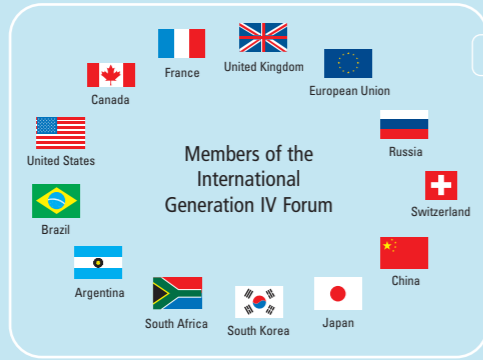
New Energy Technologies

Vegetal Biology and Microbiology

Safety Security

Impact on the environment

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For more information:
www.capenergies.fr

A branch of the National Institute of Nuclear Sciences and Techniques (INSTN)

The INSTN offers both long-term teaching programmes with State-approved degrees and shorter training sessions focused on certifications and the development of specific capacities.

Multiple French and international scientific collaboration

- With universities and establishments of higher learning: joint research, facilities and equipment offered, a welcome bureau for trainees and PHD students
- In different European and international research programmes.

850 temporary scientific collaborators on an average each year at the CEA Cadarache Research Centre

Since its inception, Capenergies has expanded considerably and now covers the entire Provence-Riviera region, Corsica, Monaco and the islands of La Réunion and Guadeloupe

Created in November 2005 at the request of the CEA and the EDF and approved by the government as a focal point of attraction in the Solidarity for Economic Development and Innovation in March 2007, Capenergies' prime objective is to master energy consumption and to define non-Greenhouse effect energies. To achieve this mission, Capenergies promotes all types of renewable energy (wind, solar, hydraulic, biomass, geothermal and marine energies) as well as nuclear energy.

Capenergies, a point of competitiveness with more than 300 firms, research laboratories and training centers to aid in the development of tomorrow's energy mix.

Partners working on the site of Cadarache

- The AREVA Group has 3 establishments operating on the Centre:
 - AREVA NC handles waste resulting from the fabrication of MOX fuels (mixed uranium and plutonium oxides)
 - AREVA TA is in charge of the technical and operational use of facilities devoted to naval nuclear propulsion
 - AREVA NP Intercontrôle carries out non-destructive tests on components taken from nuclear plants.

Approximately 700 employees present on the site

- The Institute of Nuclear Safety and Radioprotection (IRSN)

The IRSN is the expert for the French Public Authorities in the fields of radioprotection and nuclear safety

Approximately 300 employees present on the site



CADARACHE



CEA Cadarache • 13108 Saint-Paul-lès-Durance
http://www-cad.cea.fr • +33 (0)4 42 25 70 00



Nuclear fusion and fission energy

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2005 Constitutive Assembly of 'Capenergies' Specialisation in non-Greenhouse effect energies
2007 Launching of the Jules Horowitz Reactor construction site
Behaviour of nuclear fuels and materials; production of radioelements for medicine.
2005 Cadarache is chosen to be the site of the ITER fusion reactor by all the partners concerned

1972 The first plant culture chambers Automatic plant cultures developed in an artificial atmosphere
1988 Start-up of TORE SUPRA Tokamak with superconducting magnets
1967 Commissioning of the Rapsodie reactor
The first French fast reactor

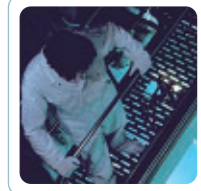
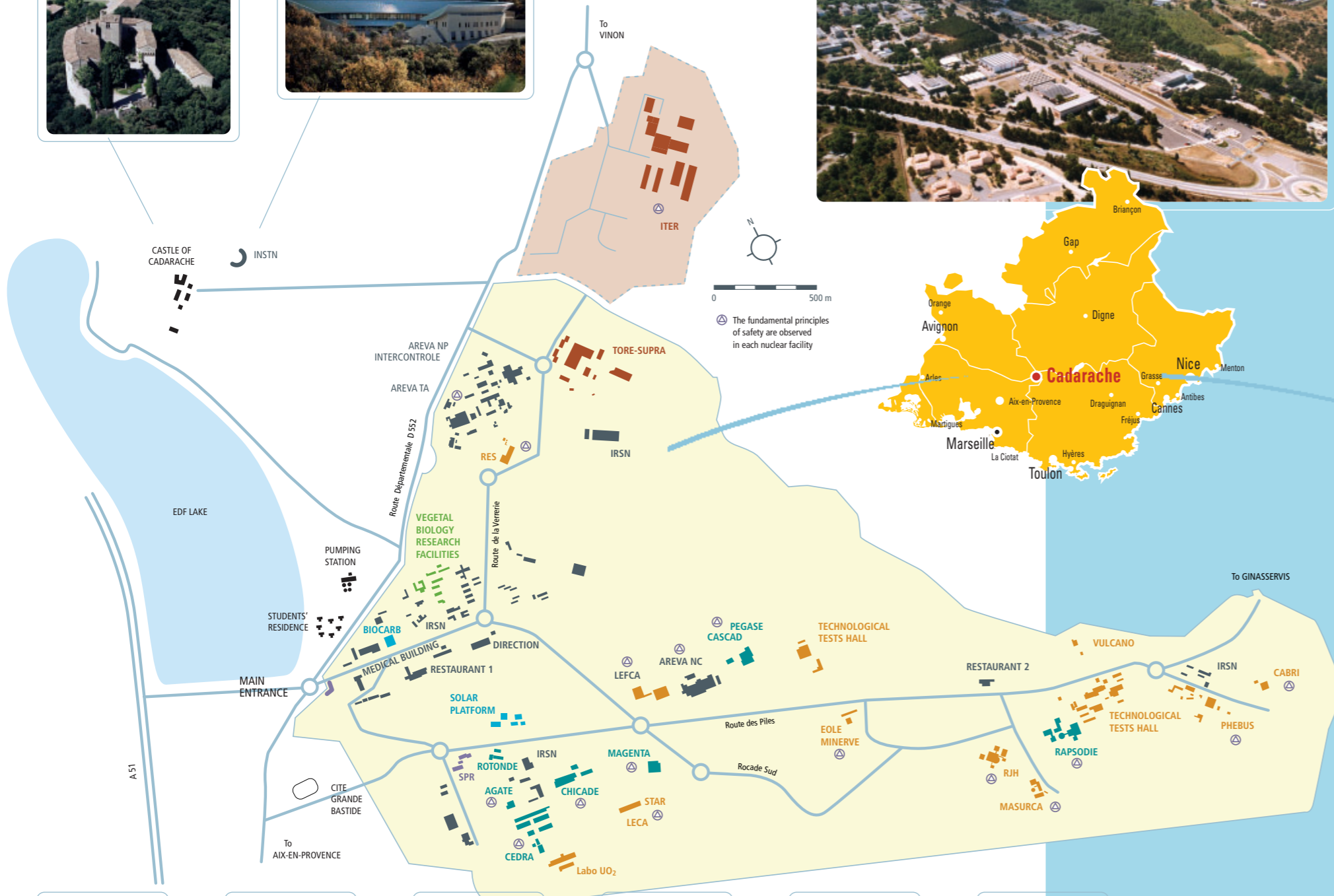
1959 Creation of the Cadarache Research Centre
1963 Commissioning of the Pégase reactor
Validation of French natural uranium nuclear fuels
1967 Commissioning of the Rapsodie reactor
The first French fast reactor

Cadarache is one of the most important technological research and development centres for energy in Europe

Its activities, distributed throughout various research platforms, focus on nuclear fission, nuclear fusion, new energy technologies (hydrogen, solar, biomass) and fundamental research in the field of vegetal biology.

Acting as backup to the centre, there is also a whole range of services organised to ensure safety on the site, the management of nuclear waste and both environmental and health monitoring.

Cadarache is one of the nine research centres of the French Atomic Energy Commission (CEA). Half of the basic nuclear facilities existing within the CEA infrastructure are located on the Cadarache site.



The site (ITER excluded)

- 1600 ha with 900 enclosed
- 480 buildings 19 of which are Basic Nuclear Facilities

Nearly 5500 employees (ITER excluded)

- 2150 CEA
- 1000 The AREVA Group and the IRSN Institute
- 850 temporary collaborators including scientific PHD students, both French and foreign; apprentices and trainees
- 1500 subcontractors. Their number varies according to the scale of the projects currently underway.

