SOGIN evolution and expansion

- **1999**: Sogin is created as a state-owned company, ENEL spin-off, with the mission of decommissioning the Italian NPP’s Trino, Caorso, Latina and Garigliano.
  
  The Company became also responsible for the decommissioning of Enea’s fuel cycle plants (Saluggia, Trisaia and Casaccia) and of the FN fuel manufacturing plant of Bosco Marengo.

- **2003**: Sogin owns 60% of the shares of Nucleco SpA, a leading company in the field of waste management, decontamination techniques, and site remediation.

- **2004**: Sogin becomes responsible for the siting, design, construction and operation of the Nuclear Technology Park where also the national repository for radioactive wastes will be located.
Decommissioning sites

- TRINO NPP
  PWR – 270 MW(e)
- CAORSO NPP
  BWR – 860 MW(e)
- SALUGGIA - EUREX
  Pilot reprocessing plant
- Bosco Marengo - FN
  Fuel fabrication plant
- TRISAIA - ITREC
  U-Th fuel reprocessing and fabrication plant
- CASACCIA
  MOX fuel fabr. Pilot plant
- LATINA NPP
  Gas-Graphite – 210 MW(e)
- GARIGLIANO NPP
  BWR – 160 MW(e)

SOGIN activities

- Decommissioning of Italian nuclear installations
- Technology Park
- National Waste Repository
- Nuclear services for the national and international market:
  - decommissioning activities
  - waste management (also through 60% owned Nucleco)
  - Others

Using the experience gained in the institutional tasks, SOGIN Group offers its know-how to the nuclear service market
Current scenario

- Italy currently has no final repository for LILW and HLW
- Generally wastes are stored temporarily on-site; medical and industrial LLW are stored in a few centers
- Waste Acceptance Criteria have been agreed with the Authorities in order to condition the wastes and to further improve their safety
- Spent fuel is being reprocessed either in UK and in France (with the exception of some "exotic fuel")

The restart of the siting process

- ENEA initiated efforts for siting and design a national repository since the ‘90ties and created a Task Force, that produced a large number of studies
- In 2003, in a wider efforts to solve nuclear criticalities, Italian Government started a siting process, but the initiative cannot reach the objective
- The urgent need for Italy for a disposal site, at least for LILW, and the possible nuclear renaissance led current Government to restart the process
- The 2 most important legislative acts are:
  - Law 99/09
  - Legislative Decree 31/2010
Law 99/09

- Law n. 99/2009 has been approved in July 2009. Relevant articles are:
  - The Government is delegated to legislate directly on siting and licensing process of NPP's, nuclear fuel fabrication facilities, radioactive waste management, solutions for waste disposal and incentives to the areas where such sites will be located.
  - A new Nuclear Safety Agency is created, which will have the following main characteristics
    - It will have responsibilities only on all aspects in the nuclear and radioprotection field
    - It is appointed by the Prime Minister, by the Ministry of Industry and the Minister of Environment, but it is an independent body
  - The Government shall, moreover, newly define the SOGIN role and mandate, which is entrusted to an appointed Commissioner.

Legislative Decree 31/2010

- Legislative Decree entered into force in March 2010, and its main articles are:
  - A new licensing process for the construction, operation and decommissioning of the nuclear installations, including waste storage sites
  - Decommissioning funding
  - Stakeholders compensatory measures for all nuclear installations
  - Specifically the siting of the national repository as part of a Technology Park
  - A public communication program
In the new legal framework SOGIN:
- Is confirmed as the only subject in charge of decommissioning in Italy also for future NPP’s
- Identifies a site, build and manages a “Technology Park”, i.e. an advanced R&D compound devoted to research activities in the field of waste management, nuclear fuel fabrication, radioprotection and associated fields. Also high level training facilities will be included to foster the nuclear field workforce.
- As part of the Technology Park, designs, builds and operates the national repository for LILW and, on the same site, the interim storage for HLW
- Promotes and implements extended and detailed communication campaigns
- The licensing process for operating the storage and disposal facility may allow its start of operation between 2018 and 2020

SOGIN’s contribution to the Technology Park will include:
- Experience and know-how gathered by the Caorso Safety and radioprotection Training Centre
- Skills and innovations of the environmental monitoring laboratories
- Innovations and in field testing capabilities of new D&D processes
In association with national and international partners, the technology fields to be explored may even include:

- Research in nuclear partitioning in support of the transmutation research programs with the objective of practically eliminating HLW from reprocessing;
- Studies related to the feasibility of a subcritical reactor also as a waste burner;
- Development of new and improved safety and environmental monitoring instruments and environmental remediation processes