Enusa in the nuclear fuel market





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- 10. Alliances





State owned company







State owned company

Enusa is a state owned company that was incorporated in 1972 to serve the ambitious Nuclear Power Plant plans.

60 %



40%



Business areas:

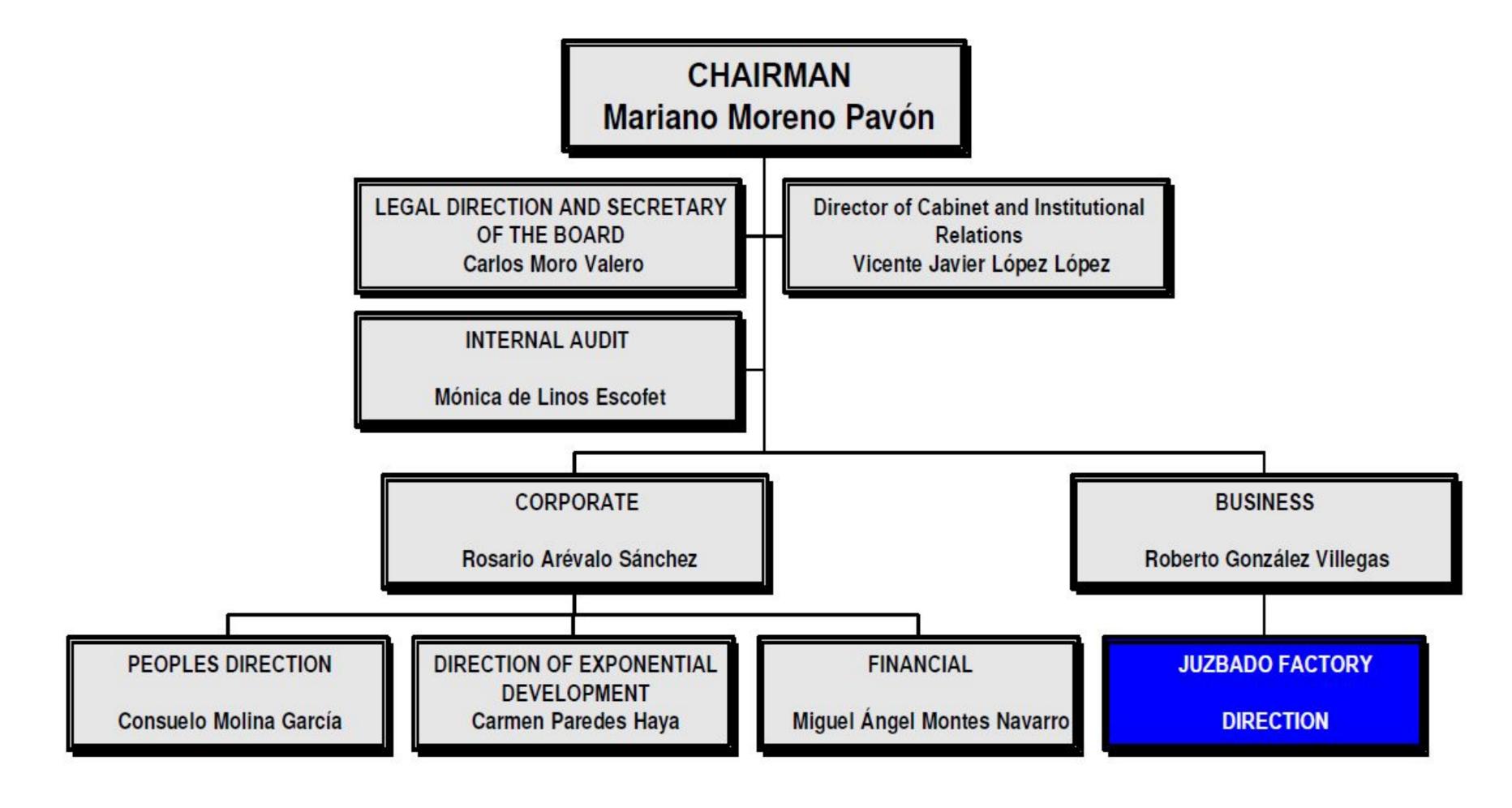
- Nuclear business
- Environmental business







Board of Directors





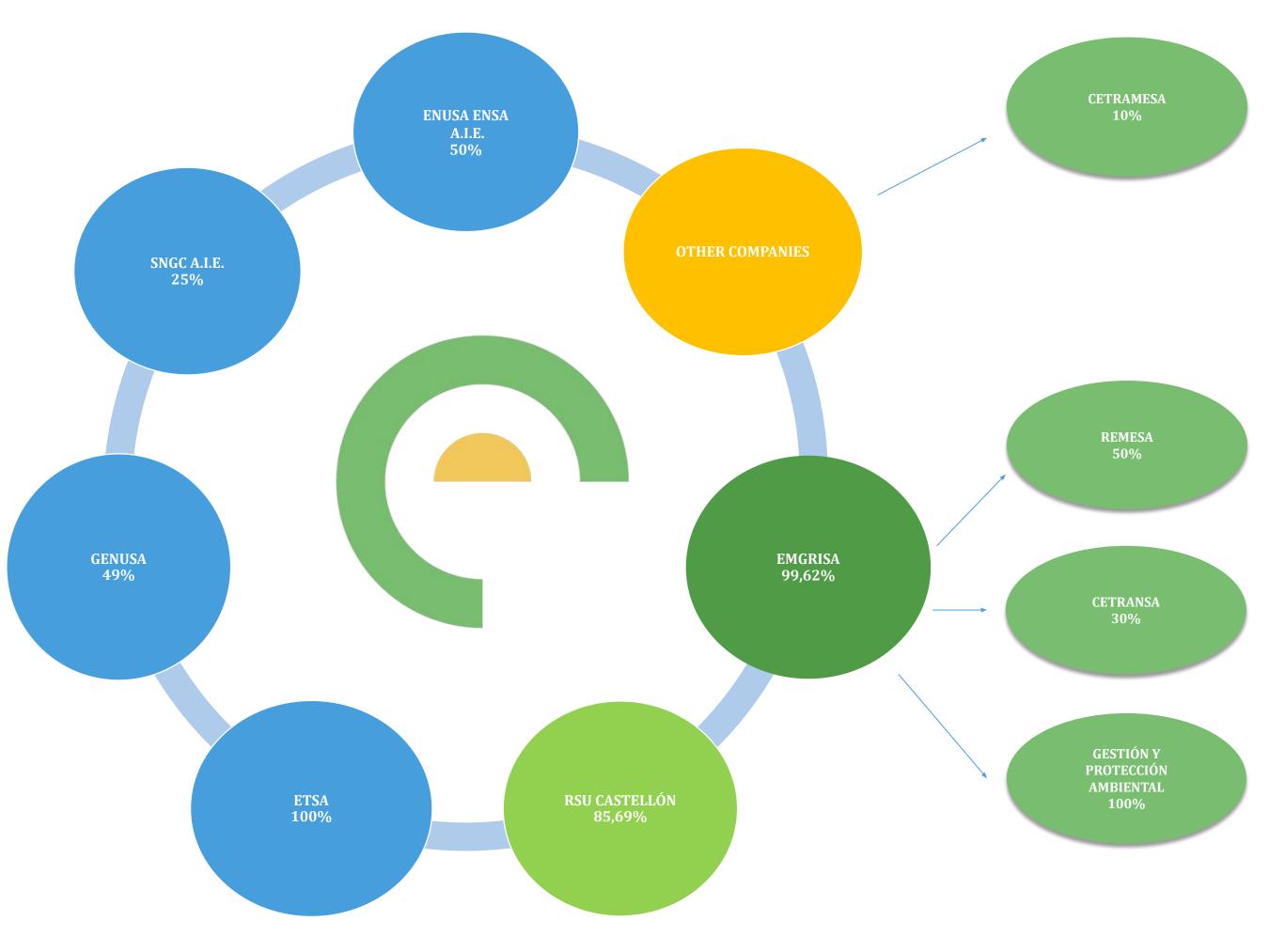
Structure of Enusa Group







Enusa Group











2022 nuclear fuel main figures

Enusa has been able to keep a steady figure of sales and profits during the last years.

Sales 267,27M€

Profit after tax
3M€

Workers 661 people





2022 nuclear fuel main figures

Juzbado facility

Serving the Spanish NPPs since 1985, and in the European Market from the 90s.

Leibstadt was the first NPP in Europe to receive nuclear fuel manufactured at Juzbado.

Licensed capacity 500 tU/year

Authorized enrichment <5w/o u-235

2022 production 1028 assemblies 448 PWR 580 BWR

More info

282 tons of uranium equivalent (tU) produced 63% of the production was exported to nuclear power plants in France, Sweden, Finland and Belgium.

Accumulative production tU 9.069 tU 27,015 assemblies 15,081 PWR 11,934 BWR

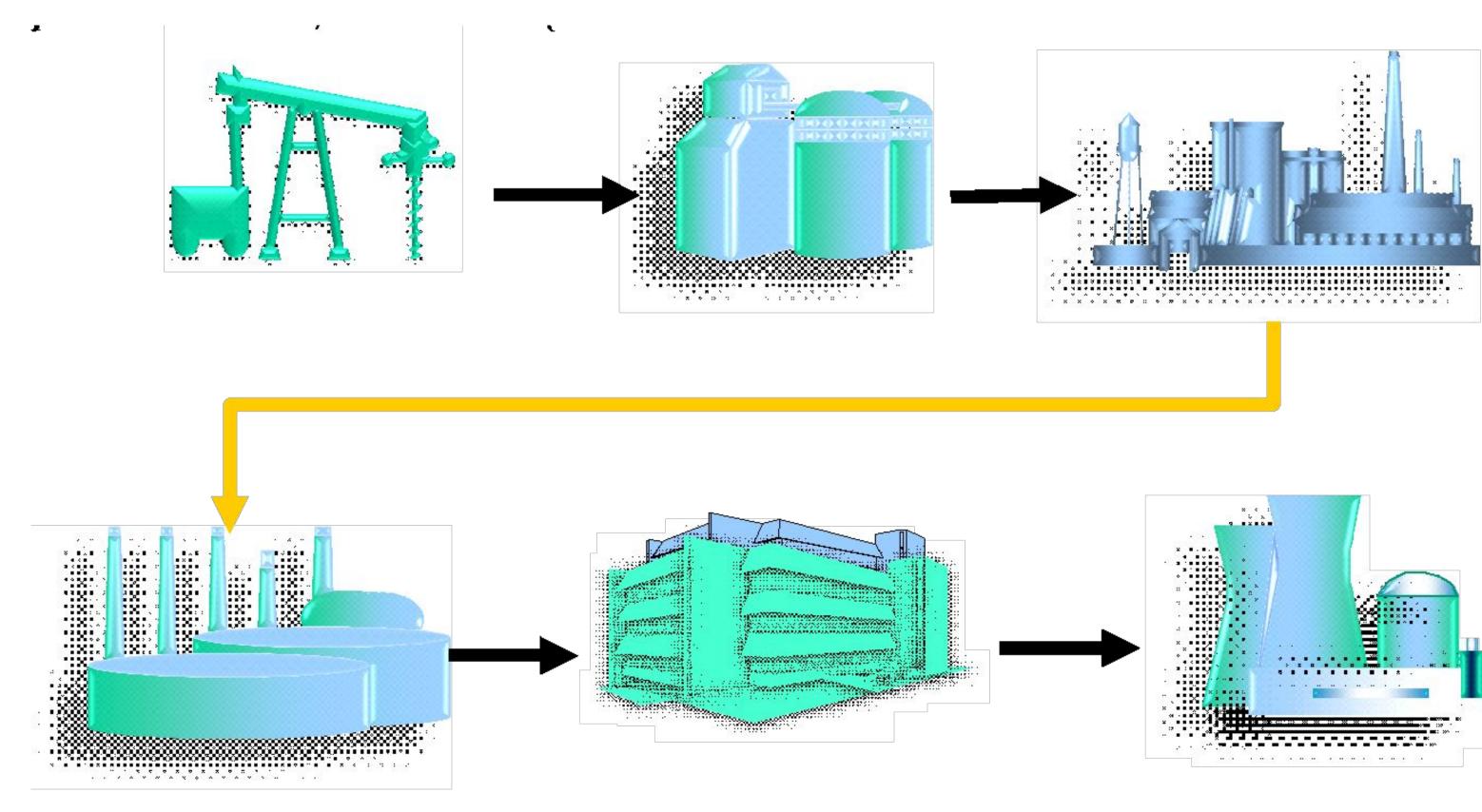




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First part of the nuclear fuel cycle





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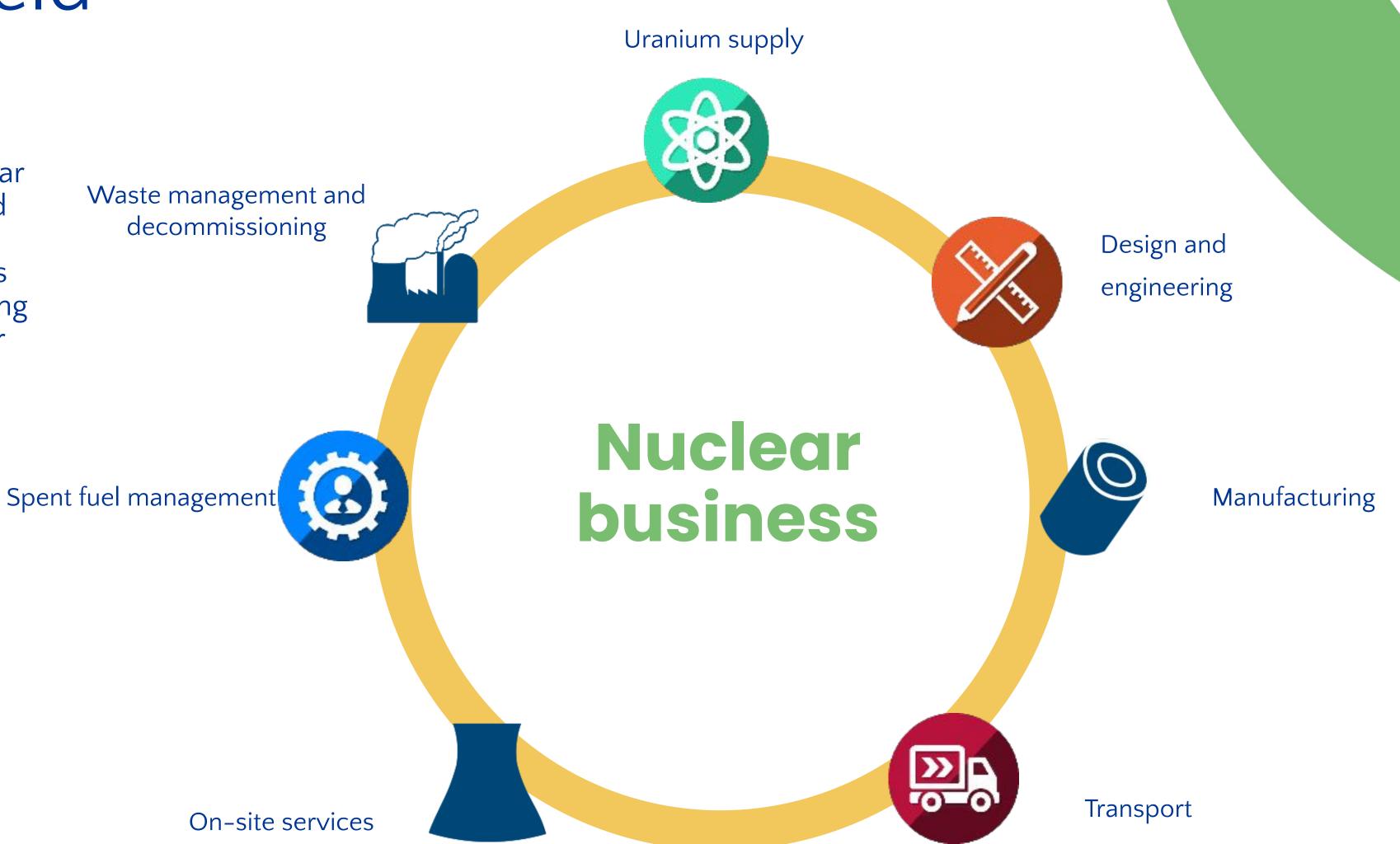
Nuclear field activities





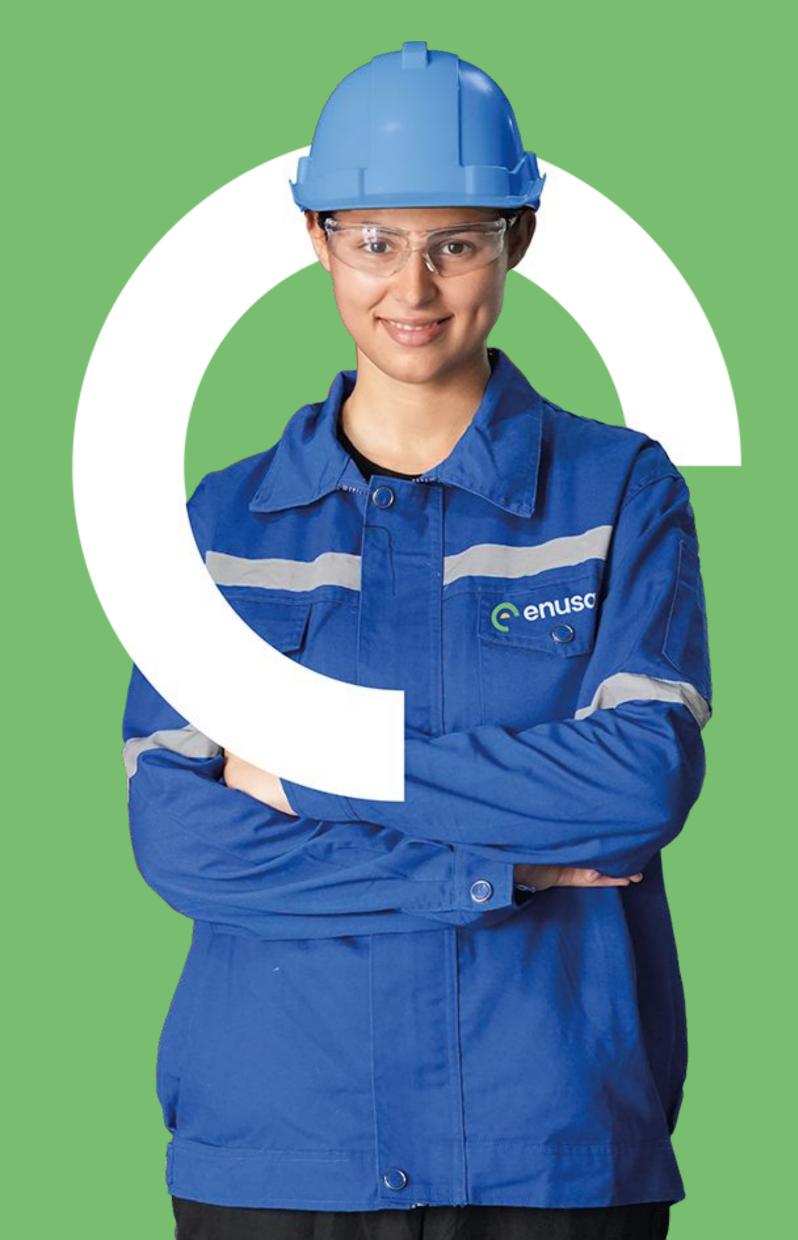
Nuclear field activities

The activities in the nuclear field go from the Enriched UF6 procurement and supply to nuclear facilities decommissioning, covering all activities in the nuclear fuel cycle.





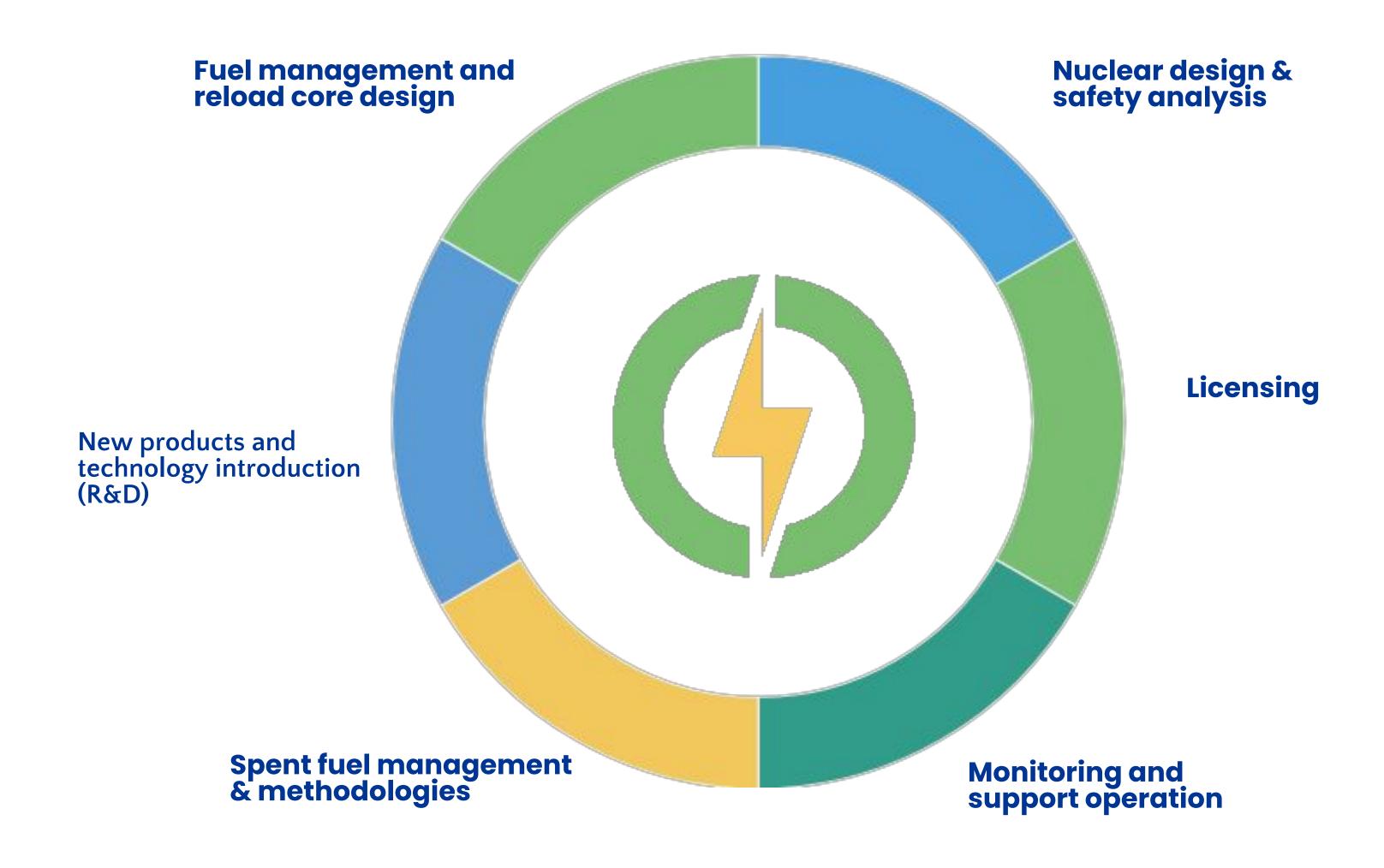
Engineering



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Engineering services

Very wide experience in providing engineering services to European NPPs, covering new fuel introduction, fuel design and licensing, nuclear design, core Monitoring and spent fuel management.





On-site fuel services





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On-site fuel services

ENUSA provides high added value on - site services.

ENUSA has developed and owns several characterization and inspection equipments to provide these services to NPPs.

- Fresh fuel handling
- Irradiated fuel and core components handling
- Leaking fuel inspection
- Fuel repair and reconstruction
- Fuel inspection and characterization
- High efficiency ultrasonic fuel cleaning
- Fuel assembly burnup characterization









Waste management and decommisioning

1. Radiological characterization



1.1. Drone and detector system for lands and walls characterization



1.2. Drone and detector system for radiological surveillance.



1.3. SISCAREN-RBBA

Improved
classification or
declassification

process.





Waste management and decommisioning

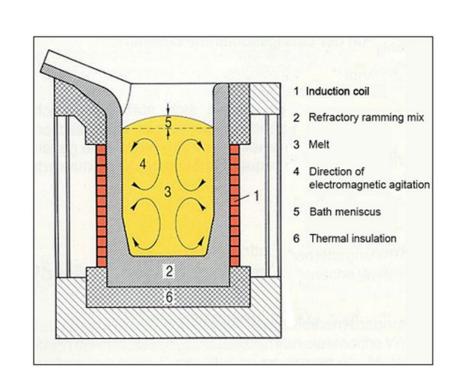
2. Waste management



2.1. Laser decontamination



2.2. IPRE Portable facility for waste management



2.3. Melting furnace Portable facility for metallic waste





Waste management and decommisioning

3. Centre of Technology and Equipment Maintenance (CTME)



3.1. CTME

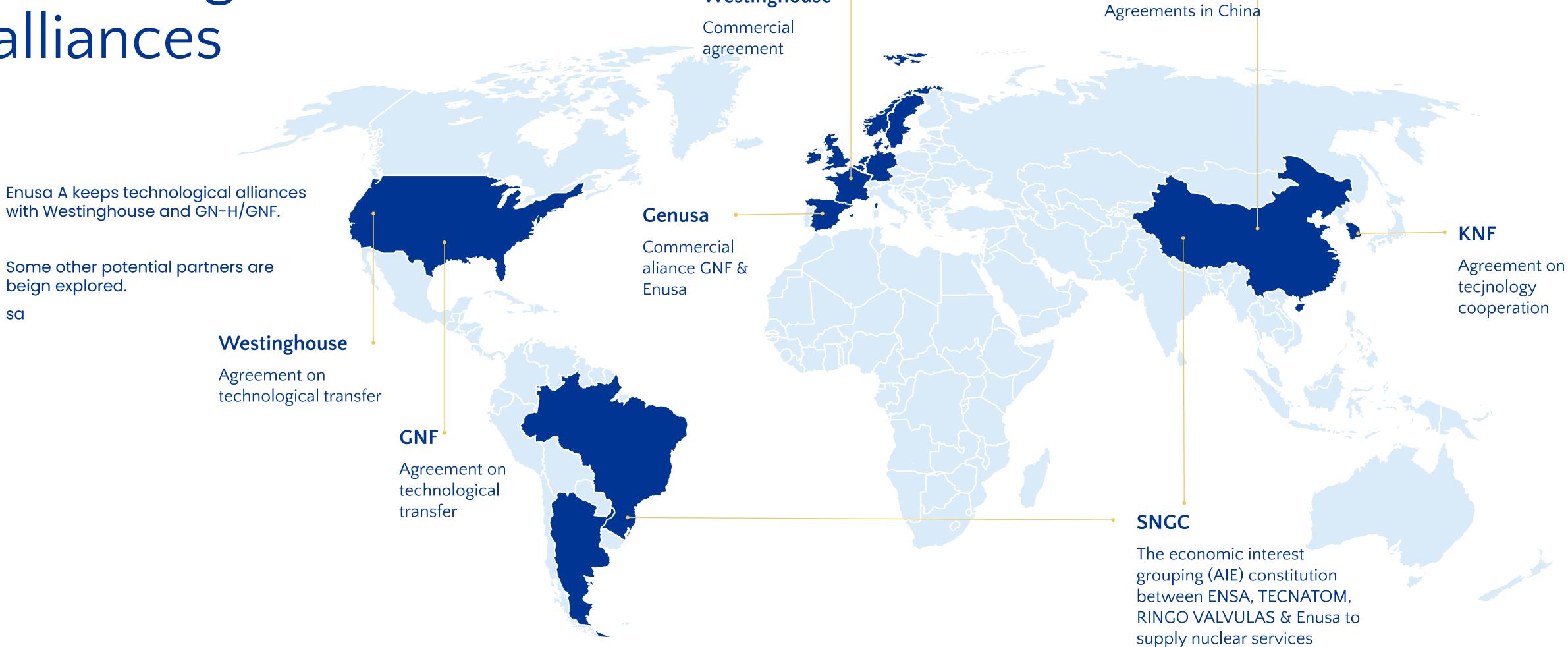


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Technological & strategic alliances



Westinghouse

CNNC & CGN





European nuclear fuel customers

Electrabel

Belgium

Doel 4 Tihange

EDF

France

Blayais, Chinon, Gravelines, Saint Laurent, Cruas, Belleville, Paluel, Cattenom, Nogent, Golfech, Penly, Flamanville



Finland

Olkilouto

Sweden

OKG

Oskarshamn

AXPO

Switzerland

Leibstdat

ENDESA
IBERDROLA
NATURGY

Spain

Almaraz I & II, Ascó I & II, Vandellós II, Cofrentes, Trillo*

