



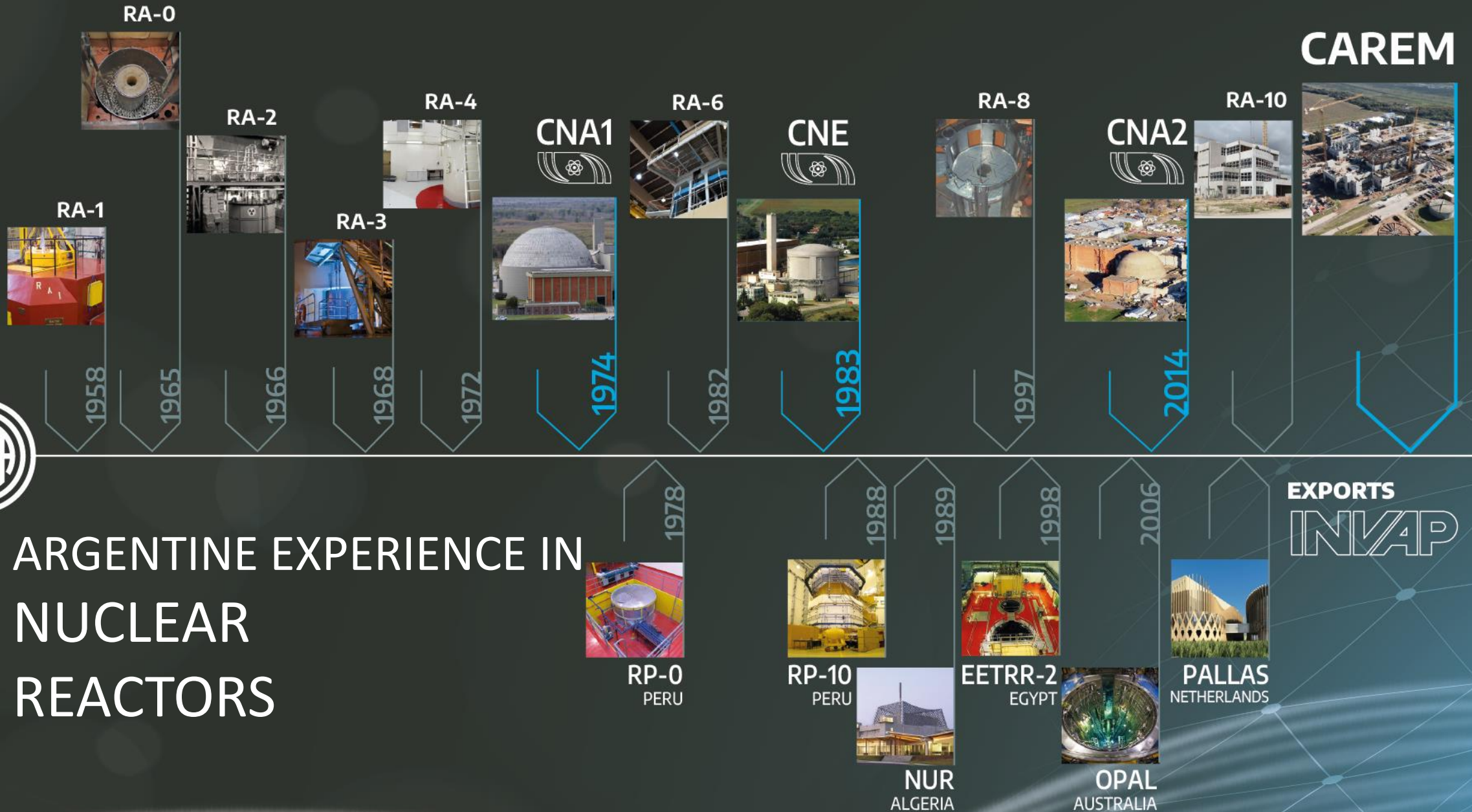
CAREM

THE ARGENTINEAN SMR

Date - place



ARGENTINE EXPERIENCE IN NUCLEAR REACTORS



NPPs



RESEARCH REACTORES

DESIGN LIFE

40 years



STATUS

Under construction



DESIGN CHARACTERISTICS

Integrated primary cooling system

Self-pressurized

Core cooling by natural circulation

In-vessel control rod drive mechanisms

Passive safety systems



REACTOR TYPE

Small Modular Reactor (SMR)

Integral Pressurized Water Reactor (PWR)



LOCATION

Lima, Buenos Aires



INSTALLED CAPACITY

100MW (th) – 32MW (e)

^U₉₂ FUEL TYPE

UO₂ pellet – hexagonal

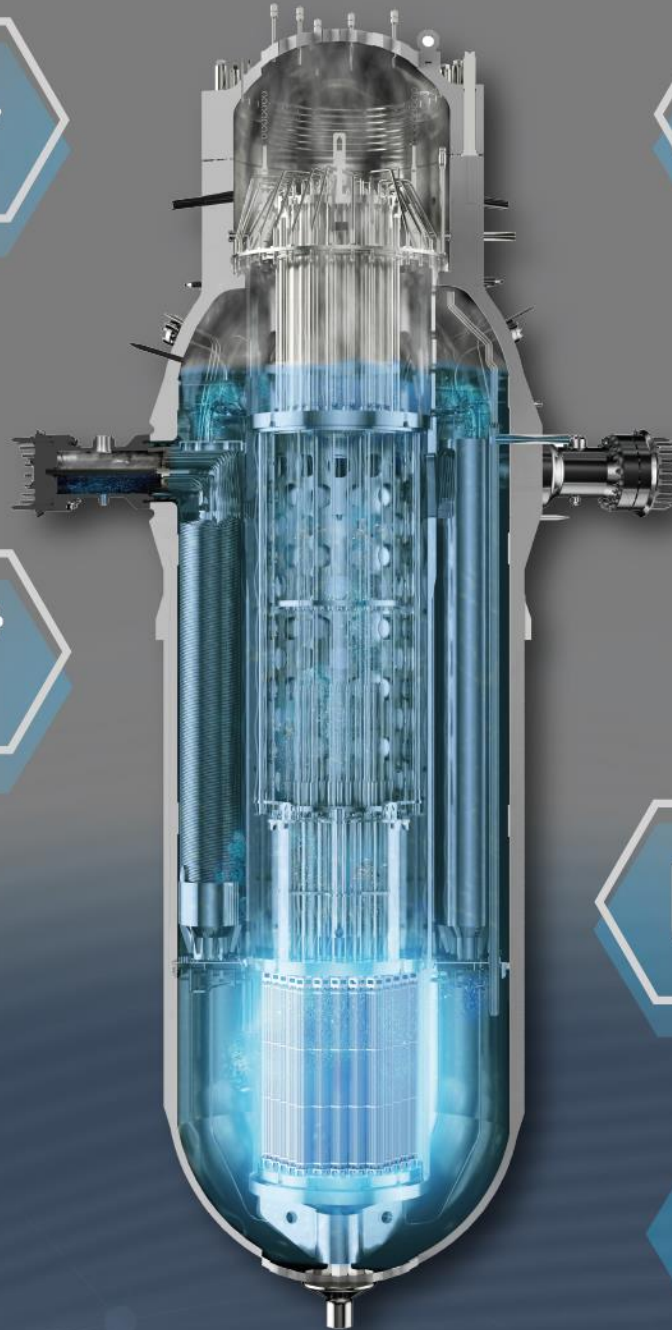
Enriched UO₂ fuel (3,1% and 1,8%)

61 fuel assemblies in the core



COOLANT AND MODERATOR

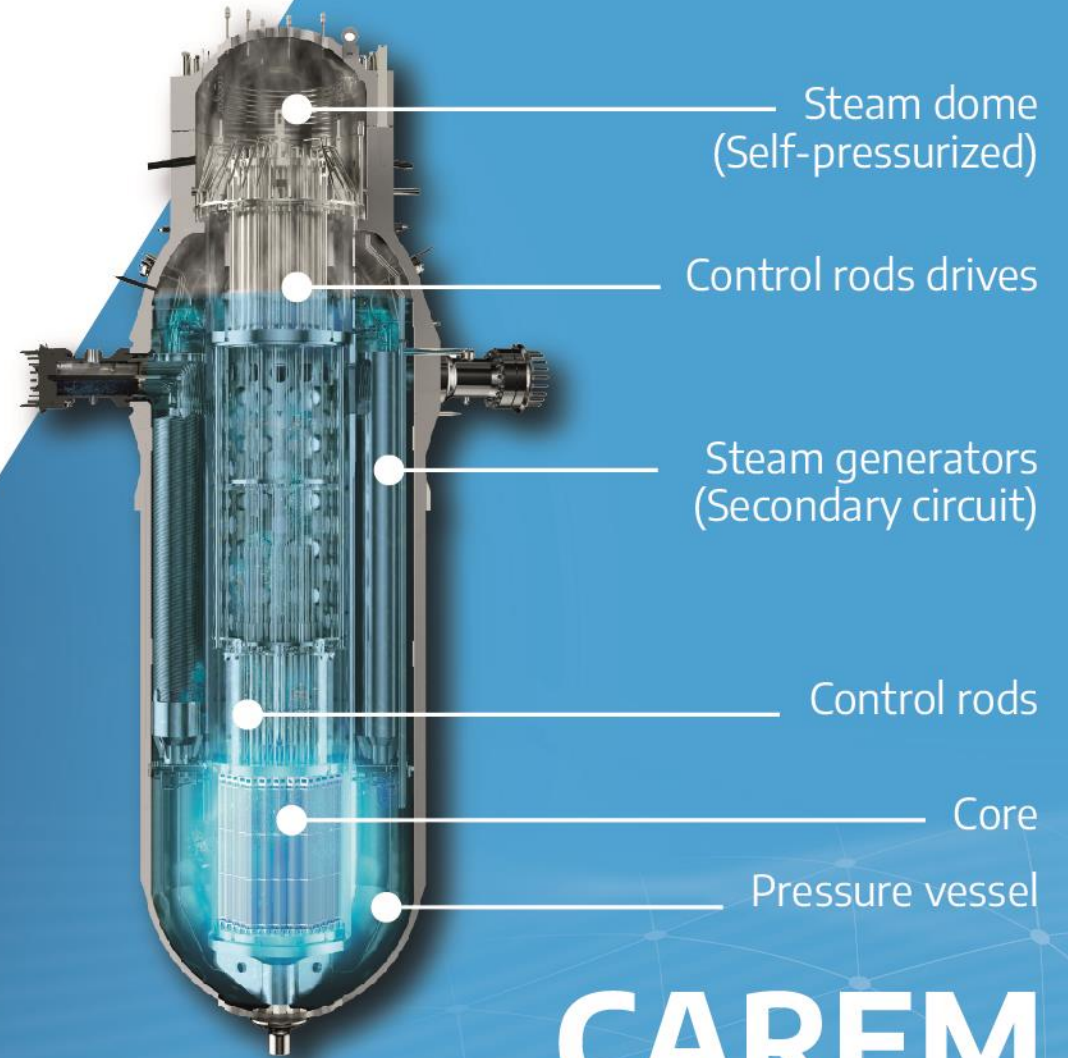
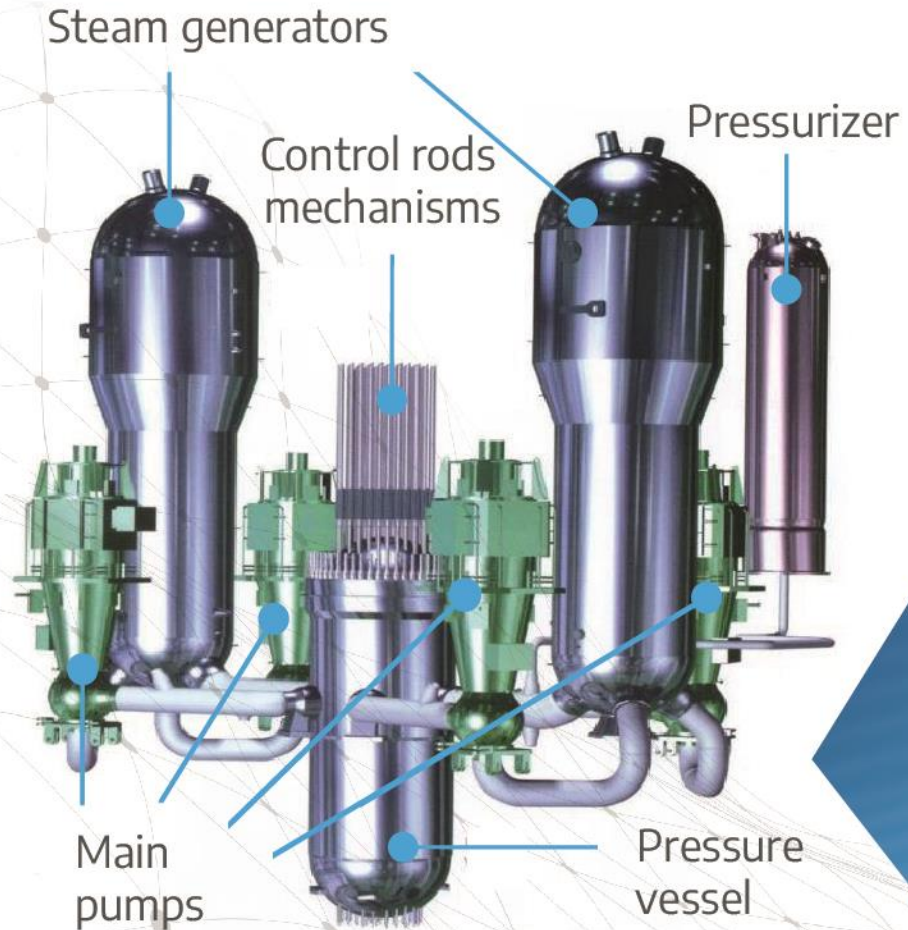
Light water



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DEMONSTRATION PLANT

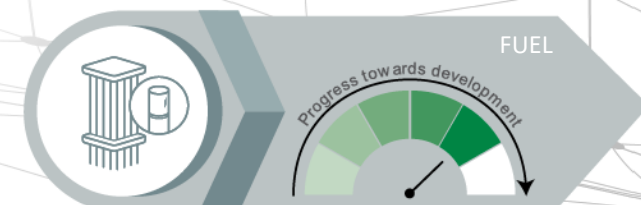
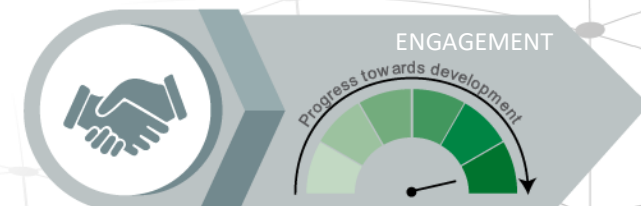
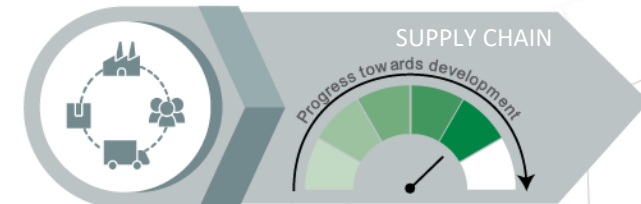
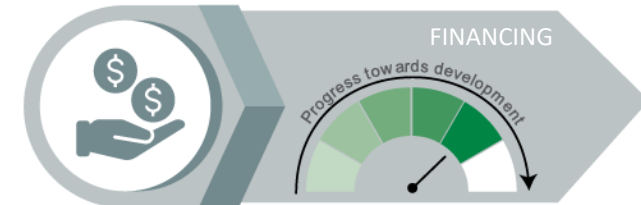
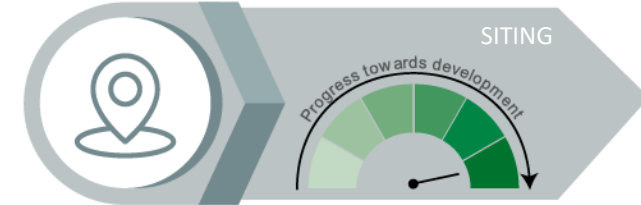
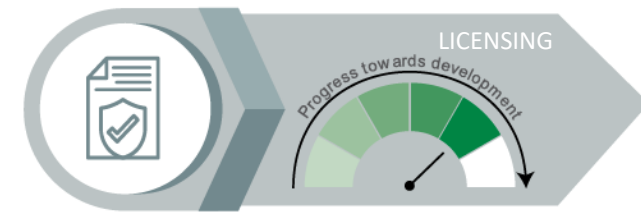
CLASSIC DESIGN



CAREM INTEGRATED DESIGN

NEA SMR DASHBOARD

The compilation includes analysis of 56 SMR designs and the progress towards their deployment and commercialization.

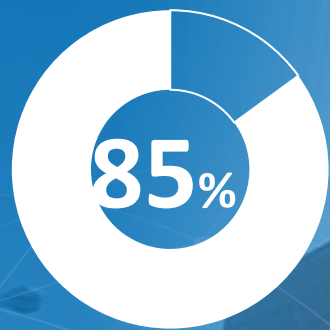




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PROGRESS

REACTOR BUILDING

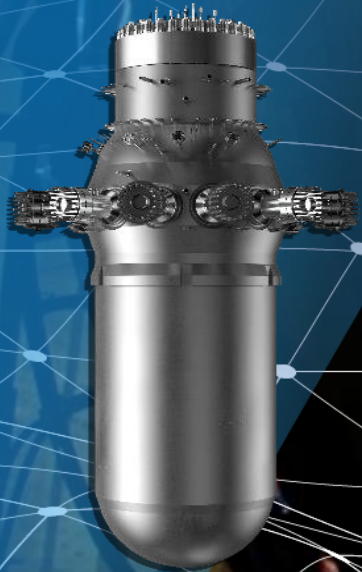
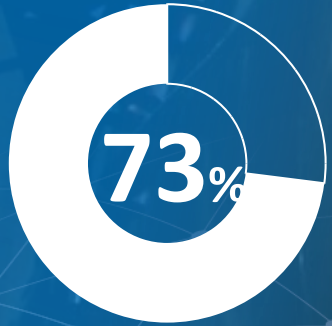


CONTAINMENT AND LINER

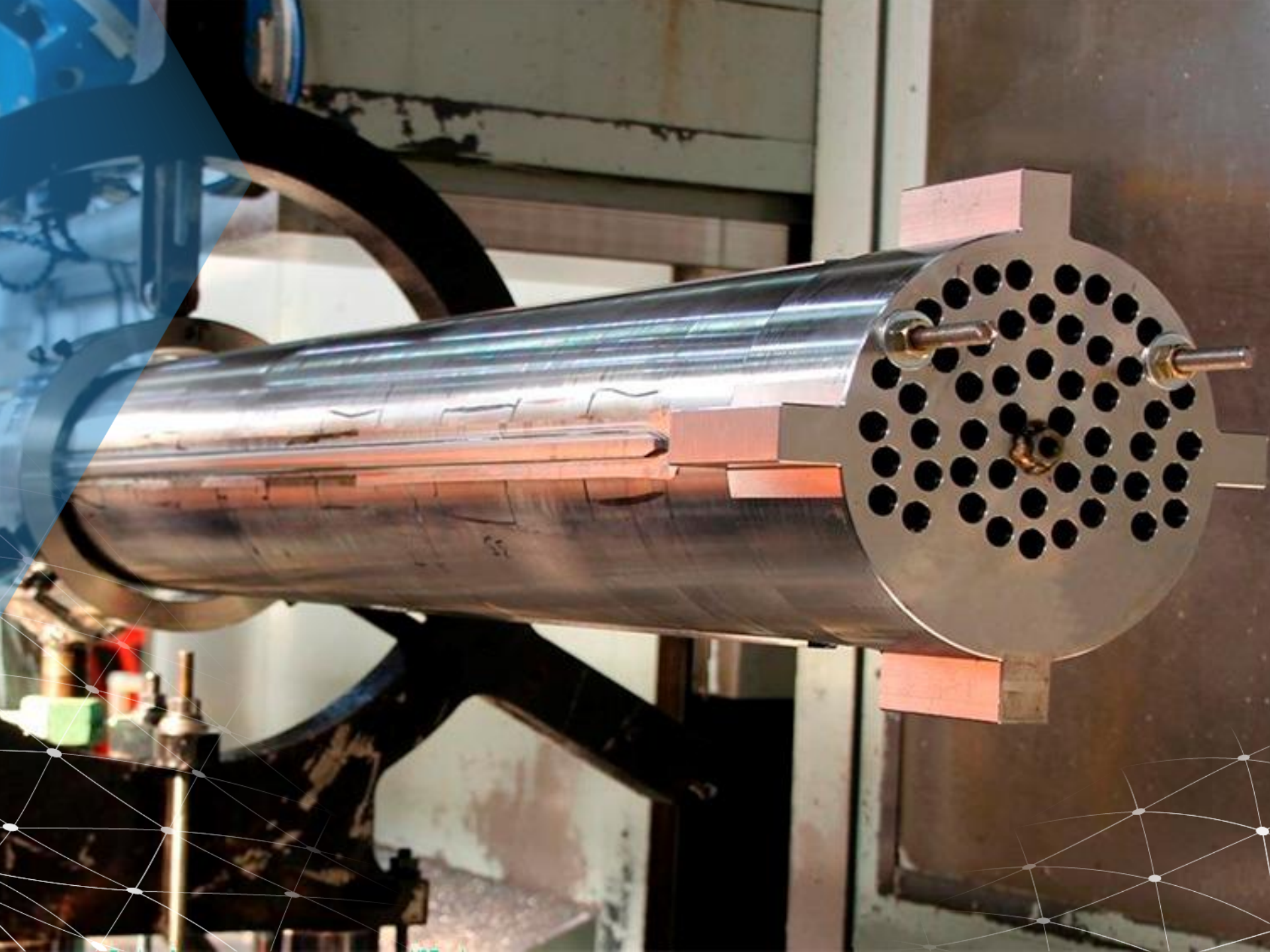
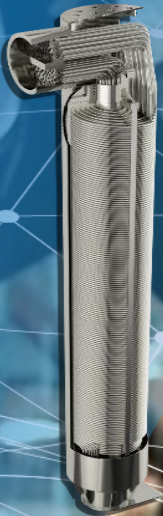
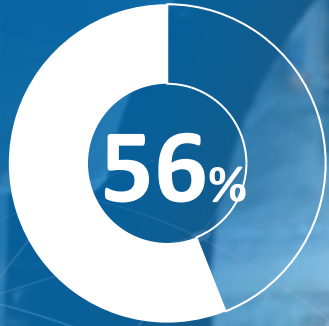
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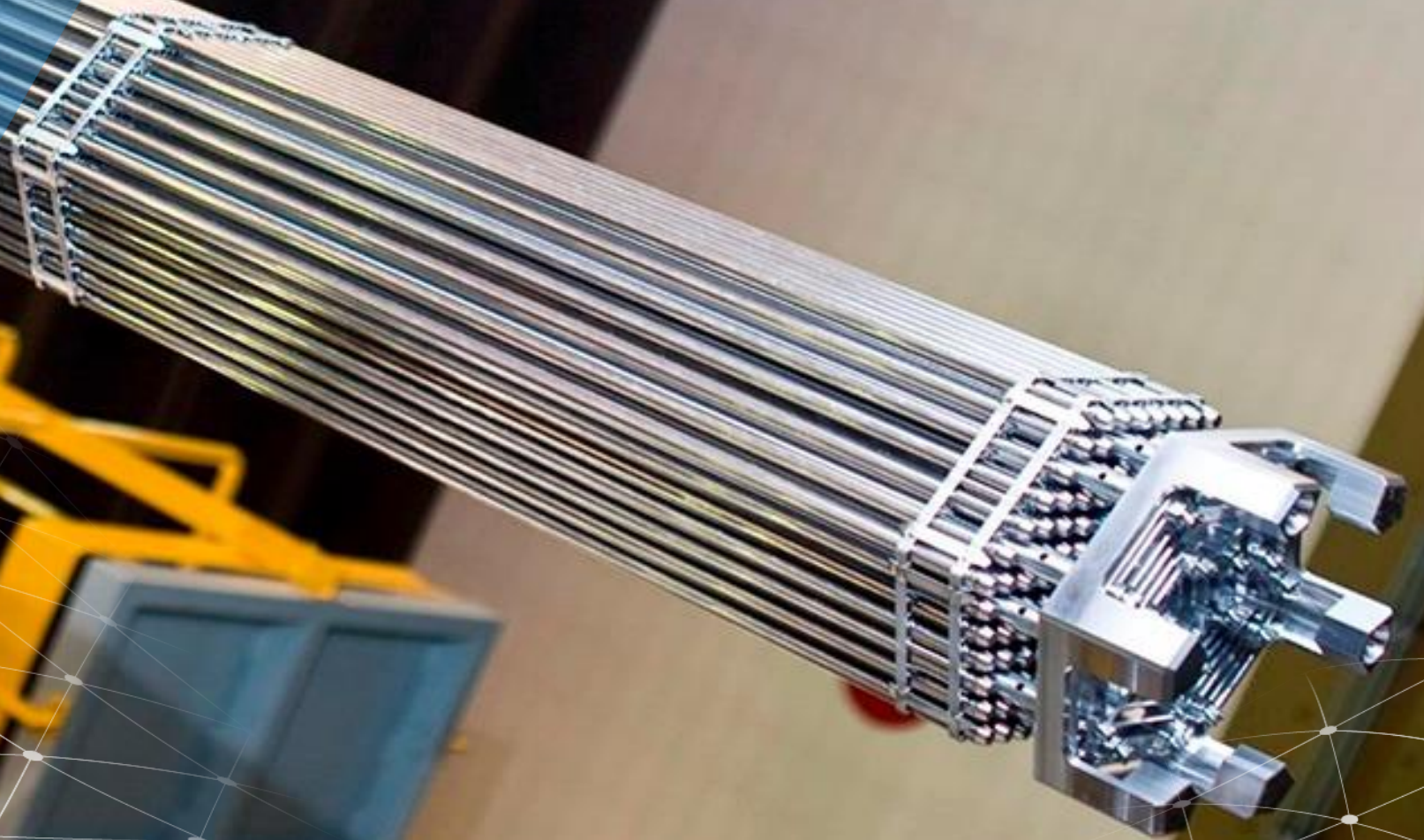
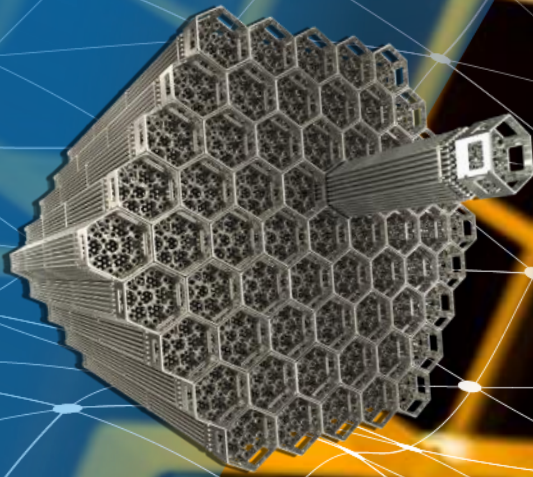
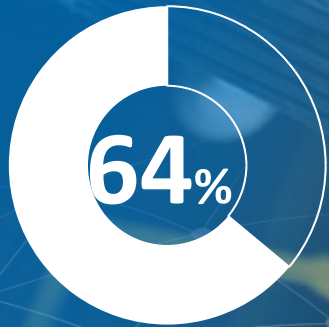
REACTOR PRESSURE VESSEL



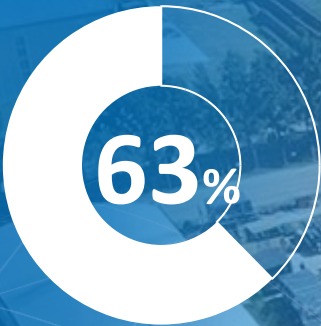
STEAM GENERATORS



FUEL ASSEMBLIES



PHYSICAL ADVANCE GENERAL





▶ INSTITUTIONAL VIDEO

THANK YOU

FOR YOUR ATTENTION



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Comisión Nacional
de Energía Atómica