

## ROLLS-ROYCE SMR PROGRAMME

9<sup>TH</sup> DECEMBER 2025

Clean, affordable energy for all

## ROLLS-ROYCE'S NUCLEAR HERITAGE



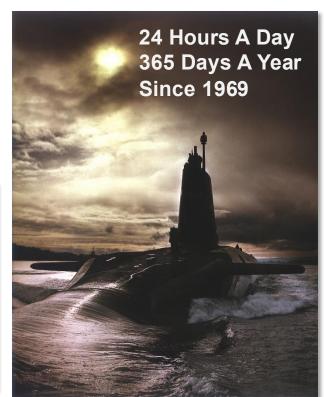
We design, manufacture and support through operation the Royal Navy's fleet of nuclear submarines, and have done so for over 65 years

Rolls-Royce has proudly provided nuclear reactors for all classes of the Royal Navy's Submarine fleet since 1958, and supported the Continuous at Sea Deterrence (CASD) since 1969

We have manufactured and delivered over 90 reactor cores across 30 different plant designs

Our plants have clocked up almost 2.5 million hours of critical operation.

(	Concept	Assessment	<b>D</b> esign	<b>M</b> anufacture	In-Service	<b>D</b> ecommissi on
hase					TRAFALGAR - SSN	<u></u>
ட	VANGIARD, SSRN					>
ifecycle	ASTUTE - SSN					
ram L	DREADNOUGHT - SSBN					
Program	SSN-AUKUS - SSN	-				

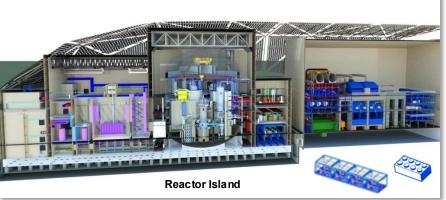


### WORLD LEADING WHOLE POWER PLANT SOLUTION

ROLLS SMR

Standardised and repeatable globally





Rolls-Royce SMR is a complete power solution, deliverable where power is needed, when it is needed, with true full-plant modularisation

Proven
Pressurized
Water Reactor
(75% world fleet today)

470 MWe power output (1,358MWth)

of Electricity (LCOE) £50 - 70 / MWh

60-year life powering 1,000,000 homes

Total
Plant footprint
~22 acres
(5.6-acre structure)

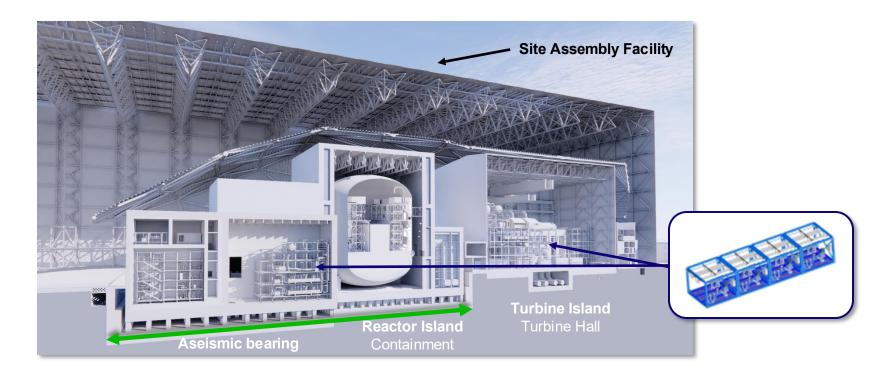
Most progressed through regulatory licensing

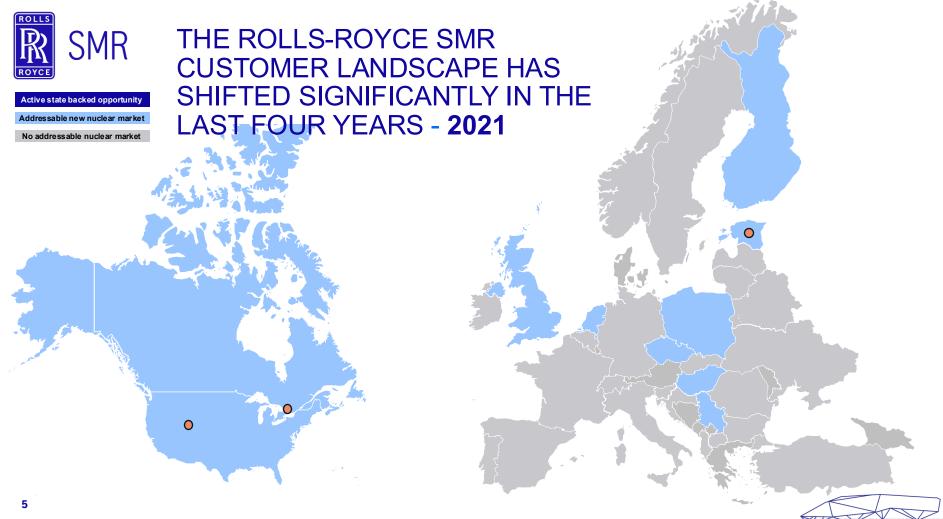
Factory module standardised manufacture, 4-year onsite build

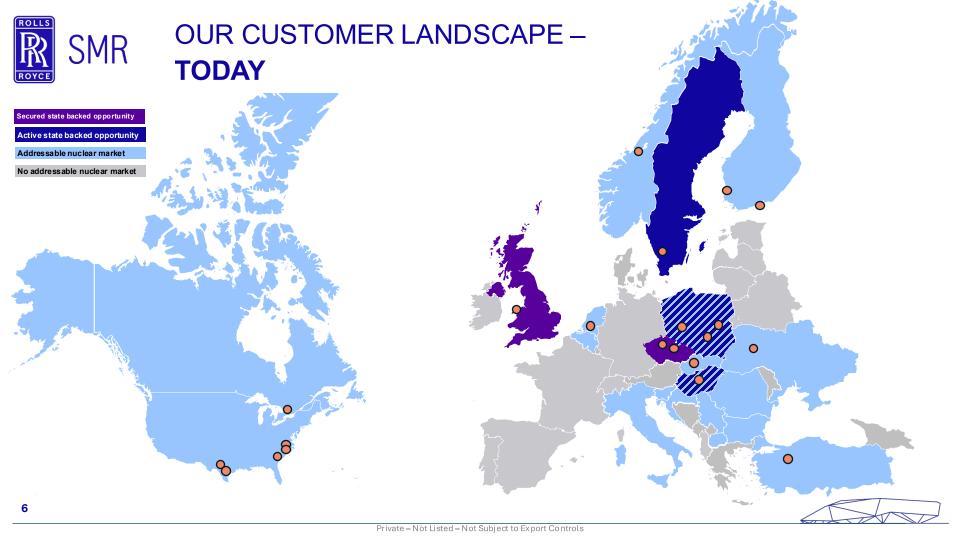
## A WHOLE POWER PLANT APPROACH



Focused on standardization, repeatability, commoditization where allowable









## ROLLS-ROYCE SMR USE CASES

The plant can provide competitive clean base load electricity and thermal power for industrial applications

#### **Baseload Power**



**Grid Electrical Power** 



Private-wire 100% Utilisation

#### **Thermal Power**



**Industrial Heating** 



**Residential Heating** 

#### **Industrial Power**



**Hydrogen Production** 



Sustainable Fuel Production



**Ammonia Production** 



Desalination

> Secure, dependable power at the heart of the energy transition



# NUCLEAR POLICY & INDUSTRY INSIGHTS

- Clear and consistent government policy
- Managing project risk
  - Site development
  - Cost over-runs
  - Offtake fluctuation
- Supply chain development
- Workforce capability



