ROSATOM

rosatom.com

SMALL MODULAR NPP

Innovative. Sustainable. Efficient.

ROSATOM land-based NPP equipped with **RITM series SMRs** is a modern solution for the development of affordable **low-carbon secure energy system**

Every country needs access to reliable and continious energy supply

Affordable energy ensures constant economic development

Nuclear power has an important role to play in solving climate change

Innovative

SMR NPPs ensure long-term energy independence and boosts high-tech sectors of the economy

Unlike conventional fossil fuel power plants, SMR NPPs are not sensitive to fuel prices volatility

Sustainable

SMR NPPs do not depend on weather conditions and can ensure a low-carbon baseload generation for a local grid

Rosatom's SMR contribute to climate change mitigation by preventing the emission of 240 tons of CO2 every year (compared to diesel generation)

Efficient

SMRs can be used for district heating, desalination and hydrogen production

Modular approach enables easy plant capacity extension by adding new power modules

SMR

SUSTAINABLE DEVELOPMENT GOALS

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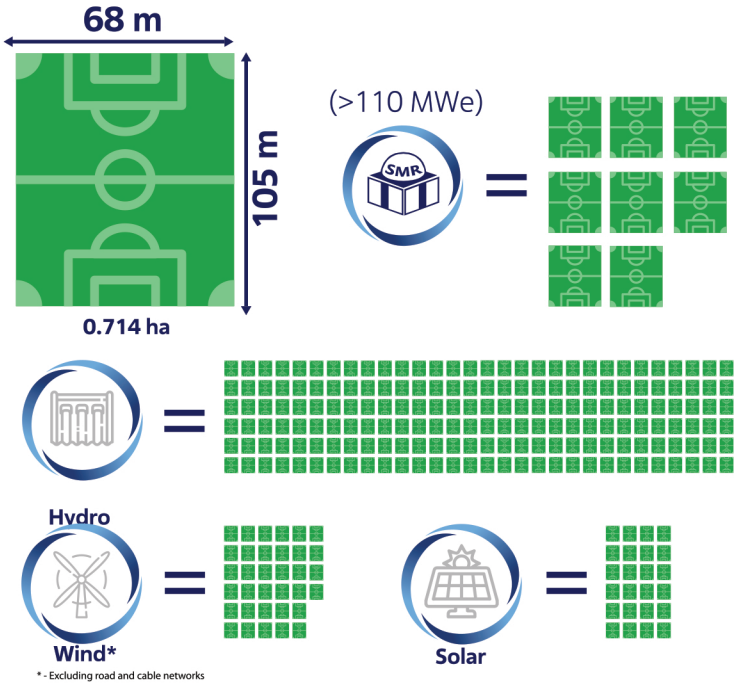
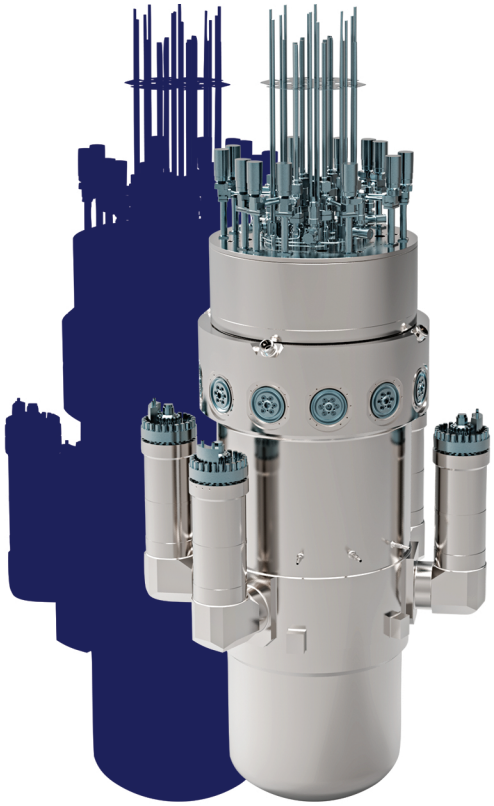
Efficient land use





SMR NPP has the lowest carbon footprint

Direct CO_2 emissions, kg per MW*h

Diesel	792
Coal	820
Gas	490
SMR NPP	0

Design life time, years

SMR NPP	60+
Coal	40-50
Solar	25-30
Wind	25

1 year of SMR NPP operation substitutes (>110 MWe)

- **22 700** Rail cars of coal per year (110 MWe)
- **5 000** Tons of LNG per year (110 MWe)
- **25 000** Barrels of oil per year (110 MWe)

The smallest share of fuel component in elecricity cost

Diesel	85%
Gas	60%
Coal	30%
SMR NPP	20%