



ROSATOM

THE STATE ATOMIC ENERGY CORPORATION ROSATOM

Rosatom: More Than Energy – Reaching Far Beyond

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The 51st JAIF Annual Conference
Tokyo
10th April, 2018

Rosatom: Energy Major with Global Outreach



30_{GW}



OF INSTALLED CAPACITY
OPERATED IN RUSSIA

No 1

BY NPP UNITS
IN INTERNATIONAL
BACKLOG



19 %



OF TOTAL RUSSIAN
ELECTRICITY
GENERATED BY
ROSATOM



over 30 %

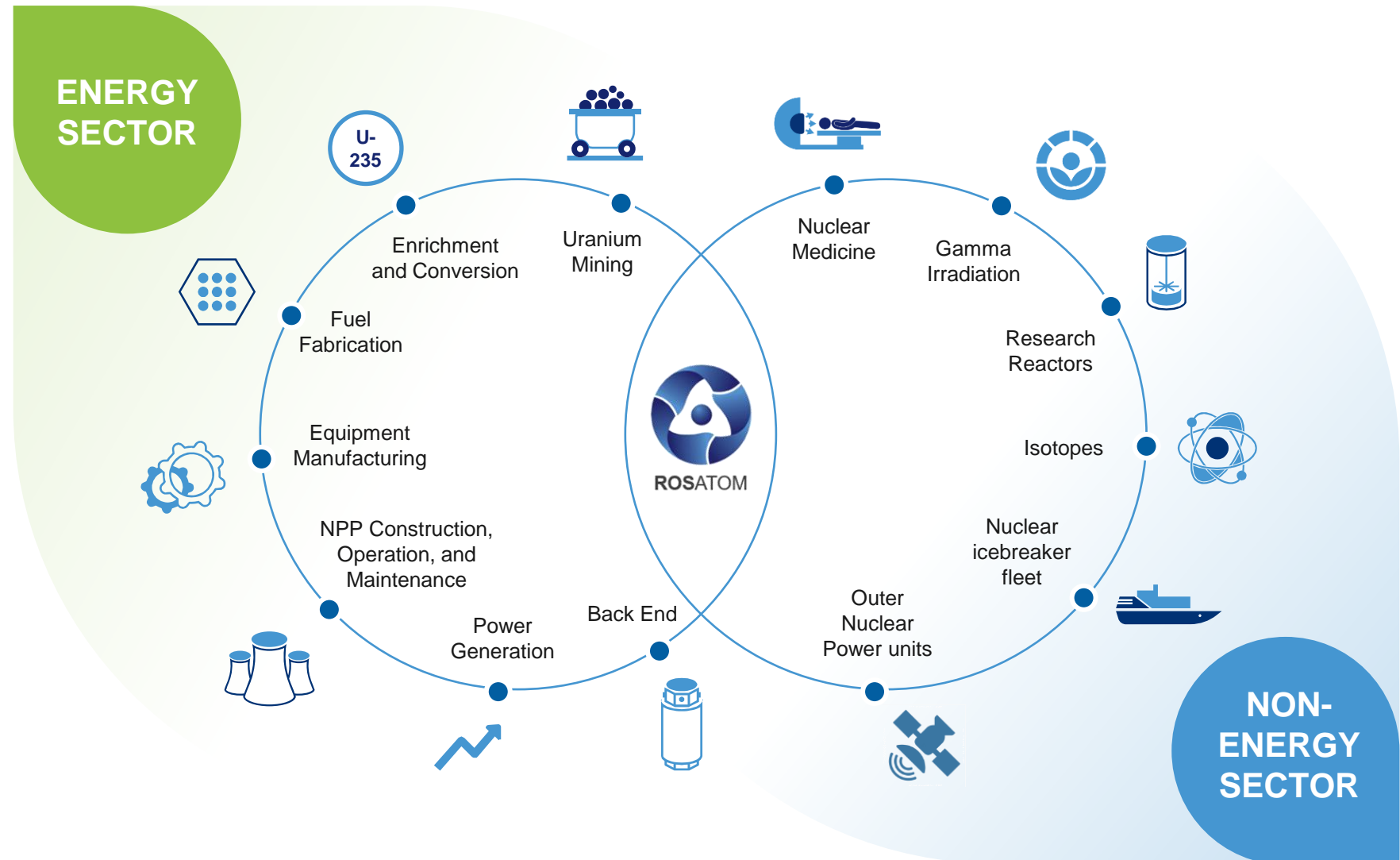
OF GLOBAL
ENRICHMENT
MARKET



13 % OF GLOBAL
URANIUM EXTRACTION



Rosatom is the World's Only Company of a Complete Nuclear Power Cycle



Rosatom's References: Global Fleet of VVER (Pressurized Light Water Reactor NPPs of Russian Design)

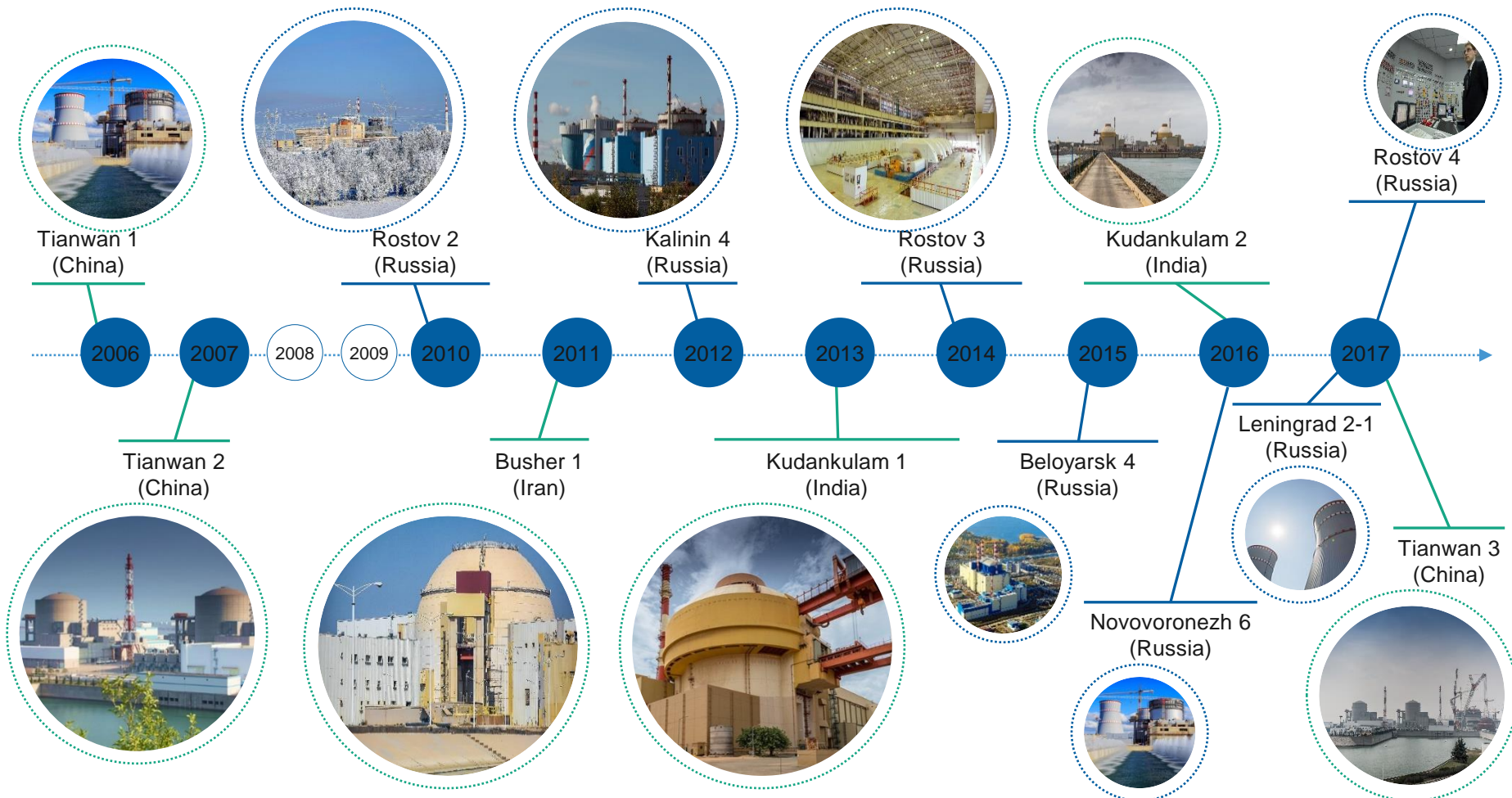


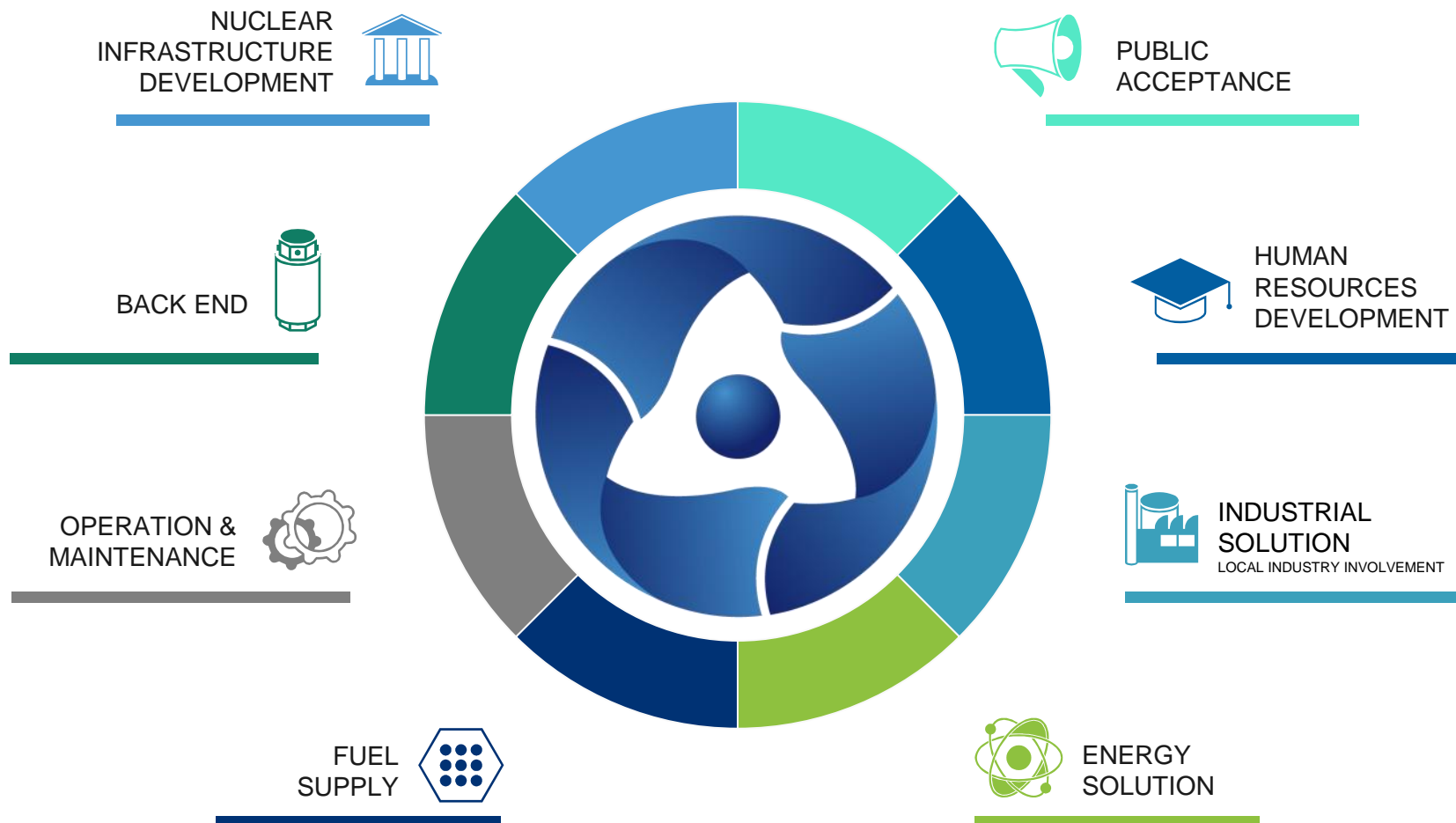
Rosatom is the Only Vendor Implementing Serial Construction Approach Globally



ROSATOM

13 NPP units commissioned in 11 YEARS

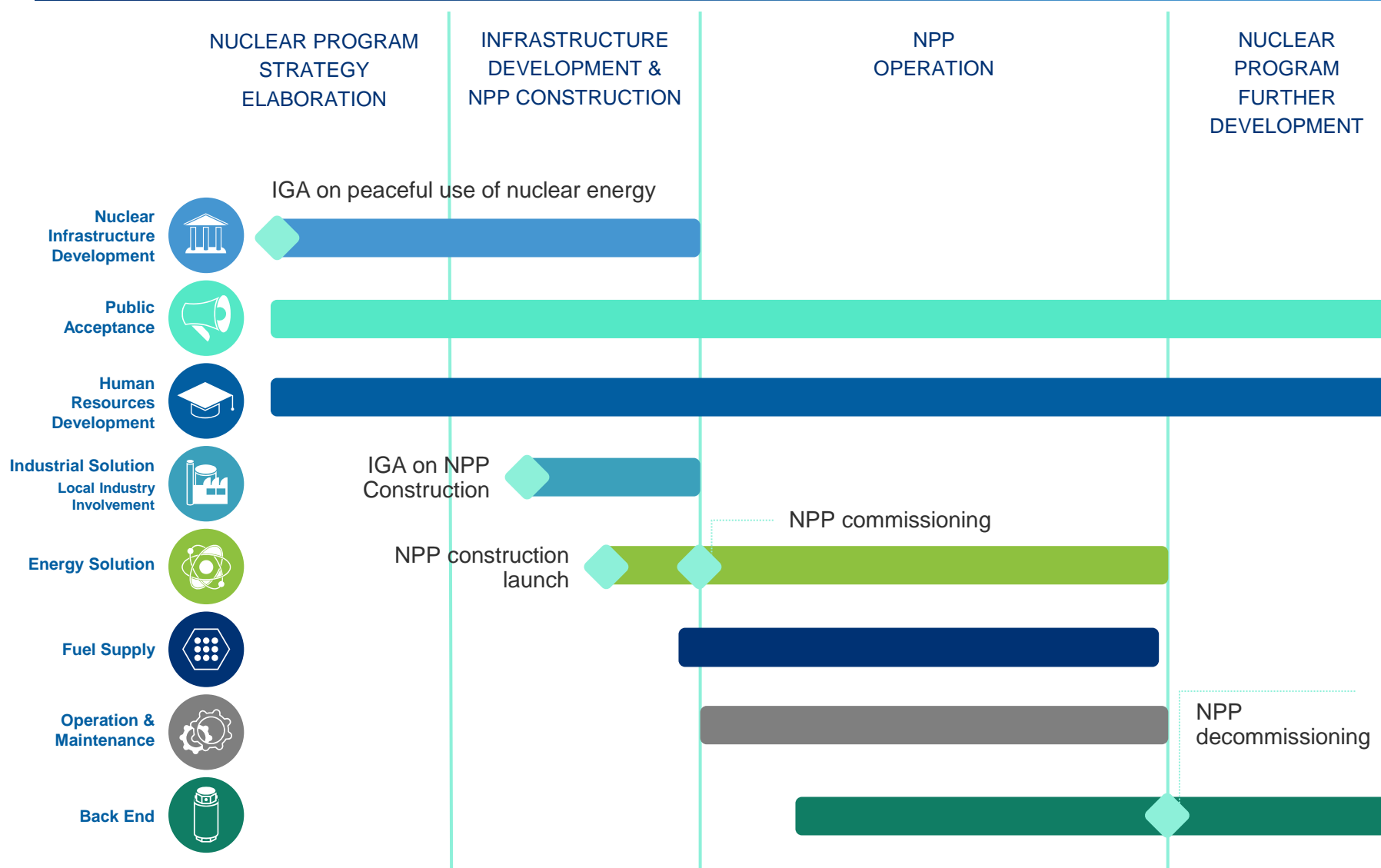




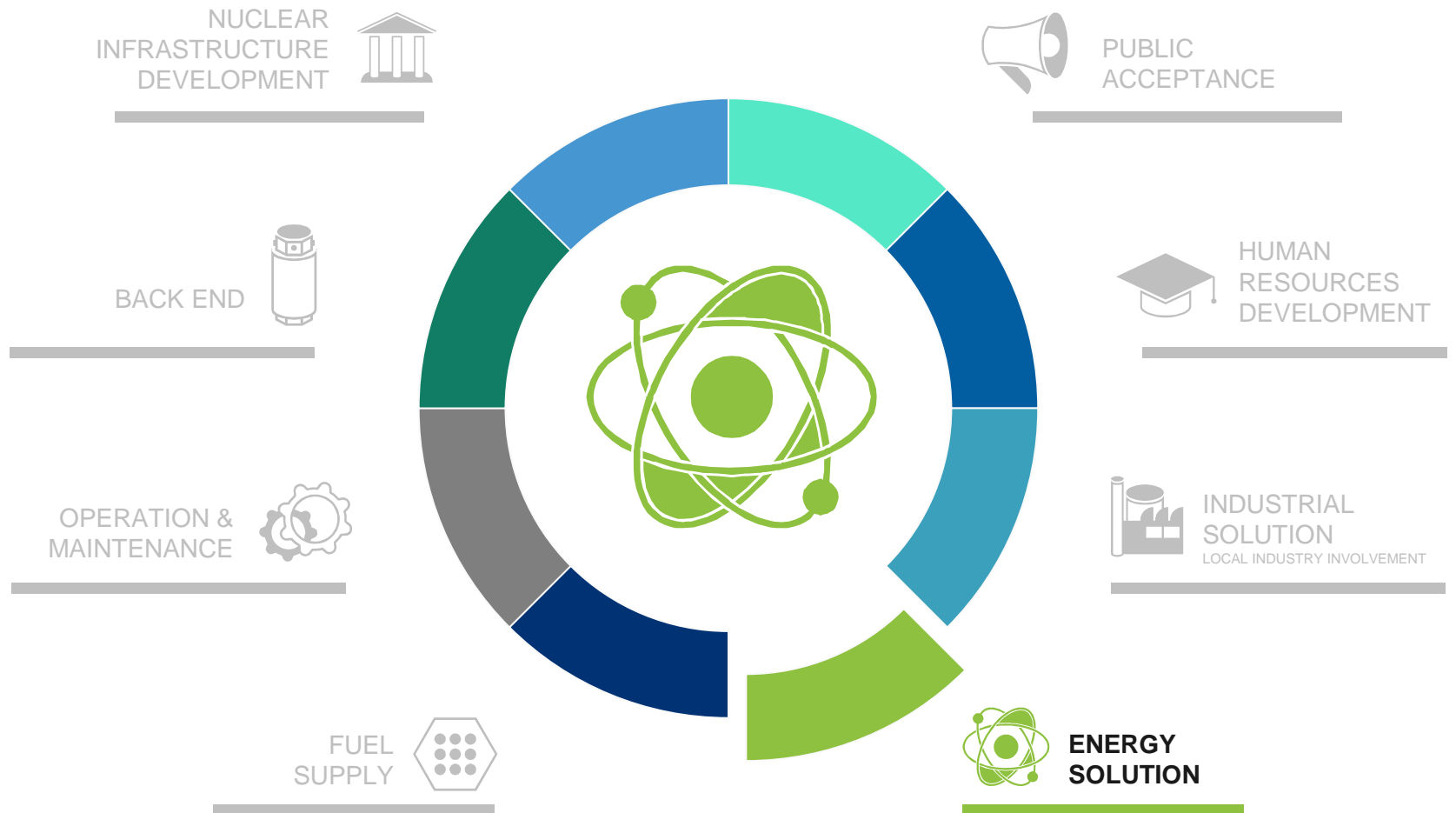
Rosatom Supports the Whole National Nuclear Program



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ENERGY SOLUTION



Advanced Technology: Rosatom Gen III+ VVER Design

VVER-1200 – FUSION OF TECHNOLOGICAL HERITAGE AND INNOVATIONS

First-of-a-class PWR Technology

Performance Indicators



Nominal Output*	1,200 MWe
Life cycle	60+
Efficiency	37%
Own power consumption*	≈ 7.5%
Availability	> 0.9
Maneuverability	100-50-100
Turbine	low Speed/high Speed
Maximum Fuel burn-up	up to 70 MW*day/kg U
Safety systems	active + passive
Seismic load	depends on the site and customer's request
Reference	in commercial operation since Feb, 2017

* depends on a particular project

First VVER-1200 MW Project Commissioned Novovoronezh NPP-2



NOVOVORONEZH NPP II UNIT 1

Commercial Operation –
February, 2017

MORE TO GO:

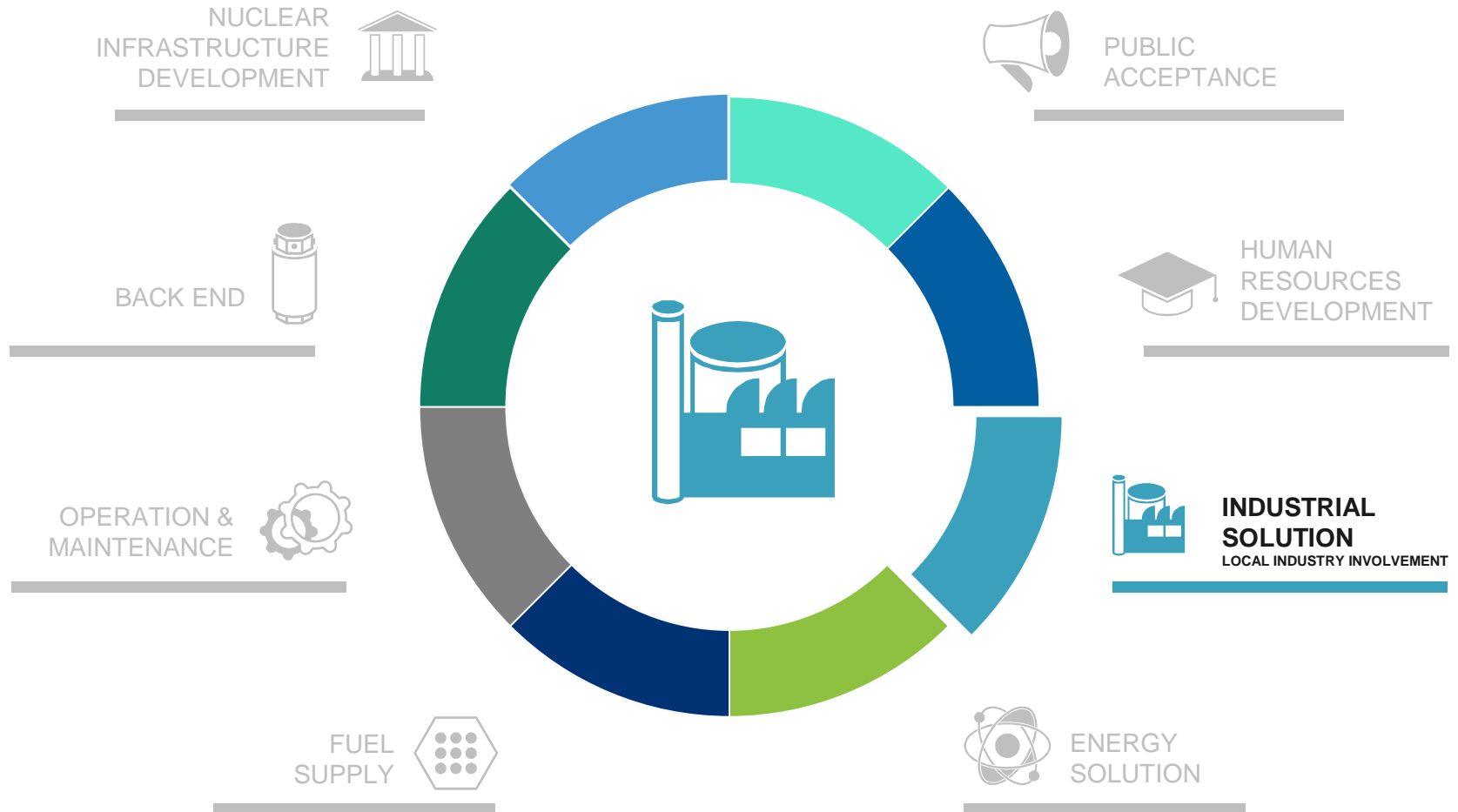
Leningrad NPP (Russia)
Paks NPP (Hungary)
Hanhikivi NPP (Finland)
Ostrovets NPP (Belarus)
Ropoor (Bangladesh)
Al Dabaa (Egypt)

➤ **NOVOVORONEZH II UNIT 1 CAN BE CALLED THE FIRST AND ONLY GENERATION III+ NPP IN THE WORLD THAT IS ALREADY GENERATING POWER.**

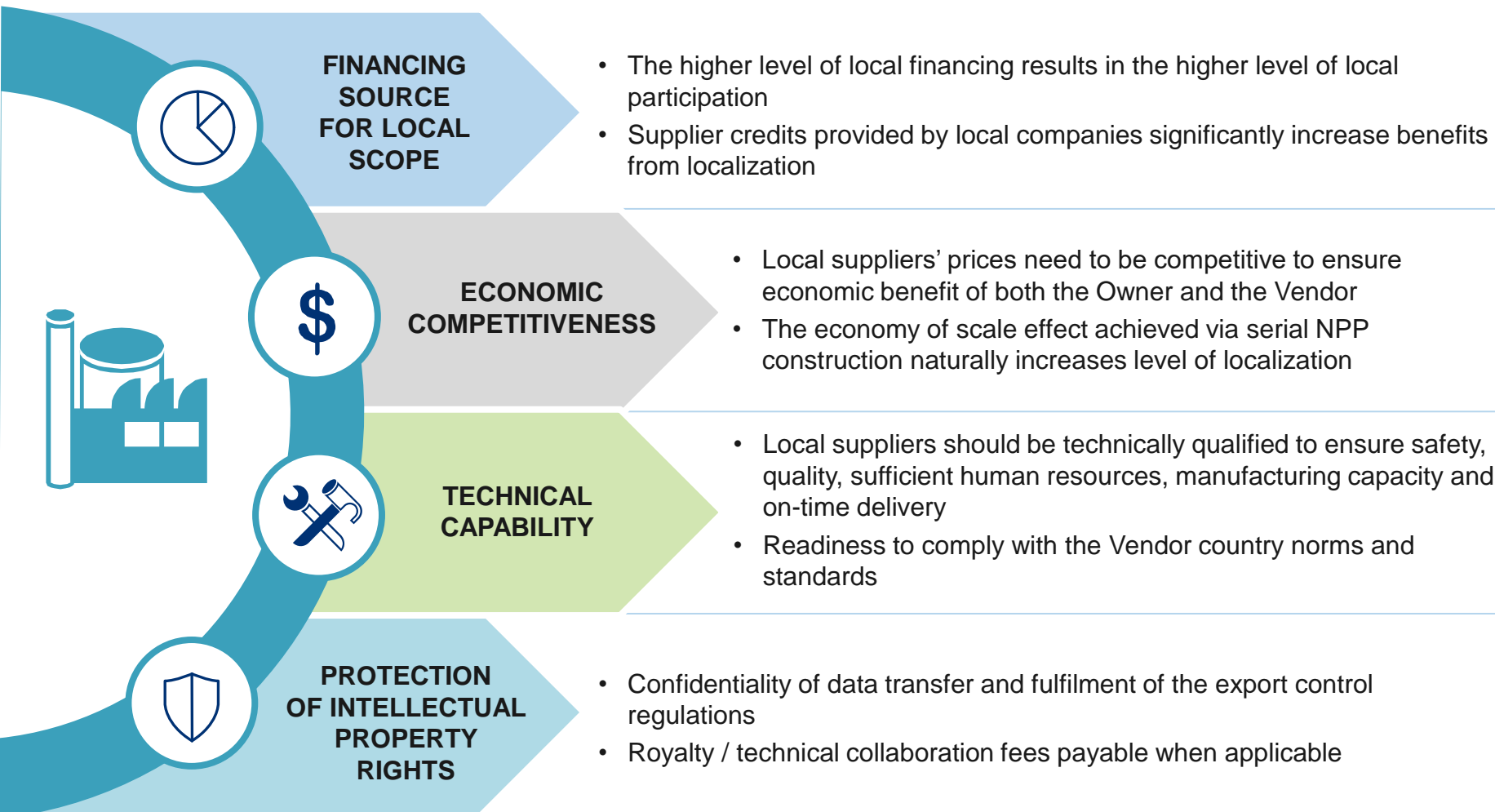
➤ **VVER-1200 REACTOR TECHNOLOGY IS EMPLOYED AT THE UNIT – A FIRST-OF-A-CLASS PWR TECHNOLOGY, COMPLIANT WITH POST-FUKUSHIMA SAFETY REQUIREMENTS.**

INDUSTRIAL SOLUTION

LOCAL INDUSTRY INVOLVEMENT



National Industry Participation Principles



Rosatom Staged Approach to Local Industry Involvement



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"ROSATOM" IS READY FOR PARTNERSHIP WITH LOCAL SUPPLIERS AND INTERNATIONAL COMPANIES TO ENSURE THE MOST EFFECTIVE SUPPLY OF NPP TO THE PARTNER

LEVEL OF LOCALIZATION DEPENDS ON THE PARTNER TECHNICAL QUALIFICATION, FINANCING MODEL, PERFORMANCE OF LOCAL SUPPLIERS, AND APPLICABLE CERTIFICATIONS.



Local manufacturing of heavy and specialized equipment

Engineering services and other balance of plant equipment

Non-critical parts and ancillary equipment

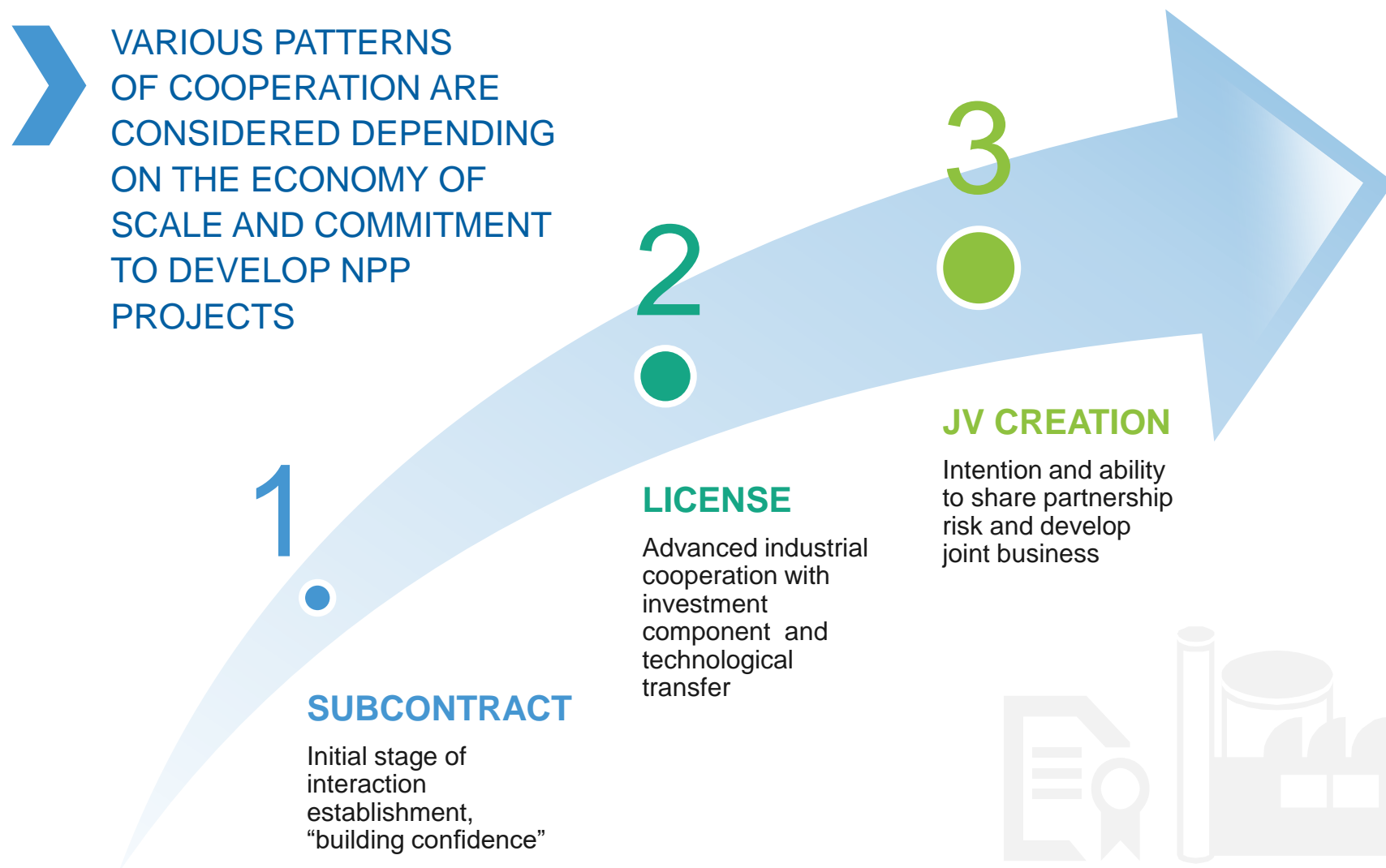
Full or partial responsibility for the civil works and ere

Local labor, construction materials, consumables, tools and materials at site, site infrastructure

ROSATOM SCOPE OF SUPPLY



EXPANSION OF LOCAL INDUSTRY INVOLVEMENT





KUDANKULAM NPP (India)

Units 1&2:

- Construction, erection, commissioning was fully local;
- Minor share of equipment and materials were supplied locally.

Units 3&4:

- Construction, erection, commissioning is fully local;
- Significant share of engineering works and equipment is supplied locally.



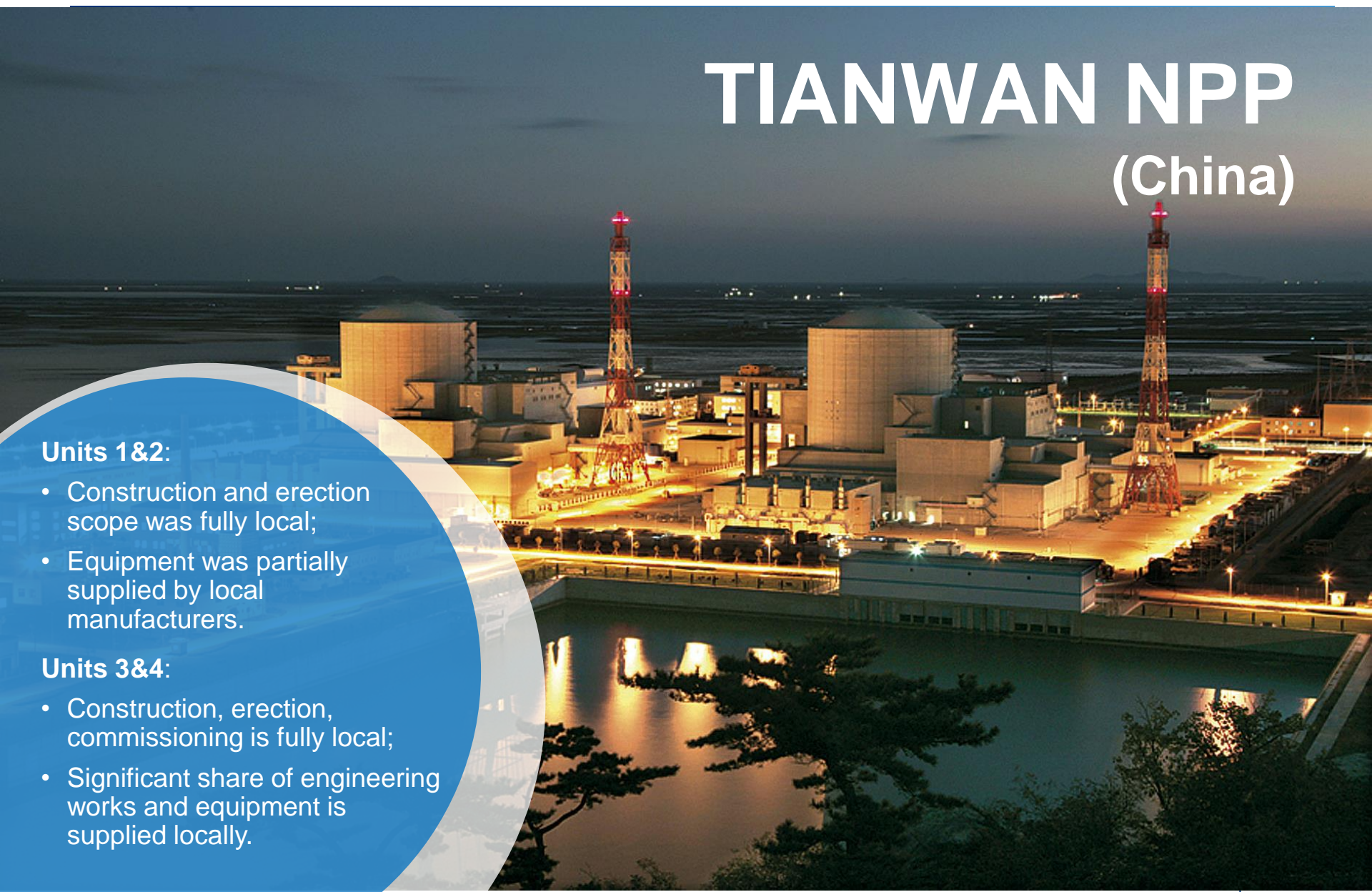
TIANWAN NPP (China)

Units 1&2:

- Construction and erection scope was fully local;
- Equipment was partially supplied by local manufacturers.

Units 3&4:

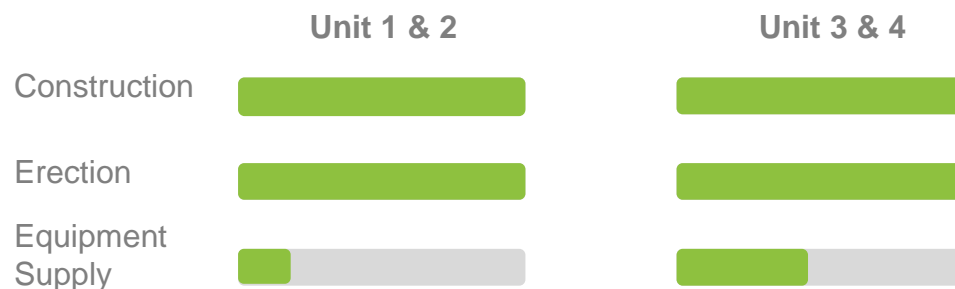
- Construction, erection, commissioning is fully local;
- Significant share of engineering works and equipment is supplied locally.



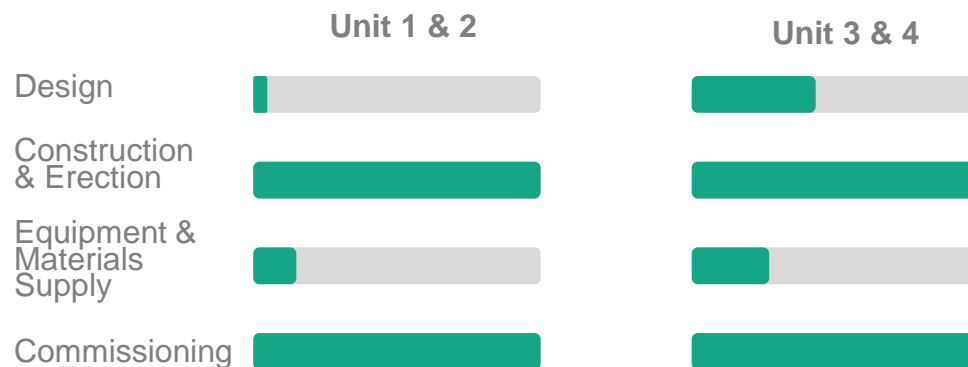
Local Industry Involvement: Rosatom Success Stories



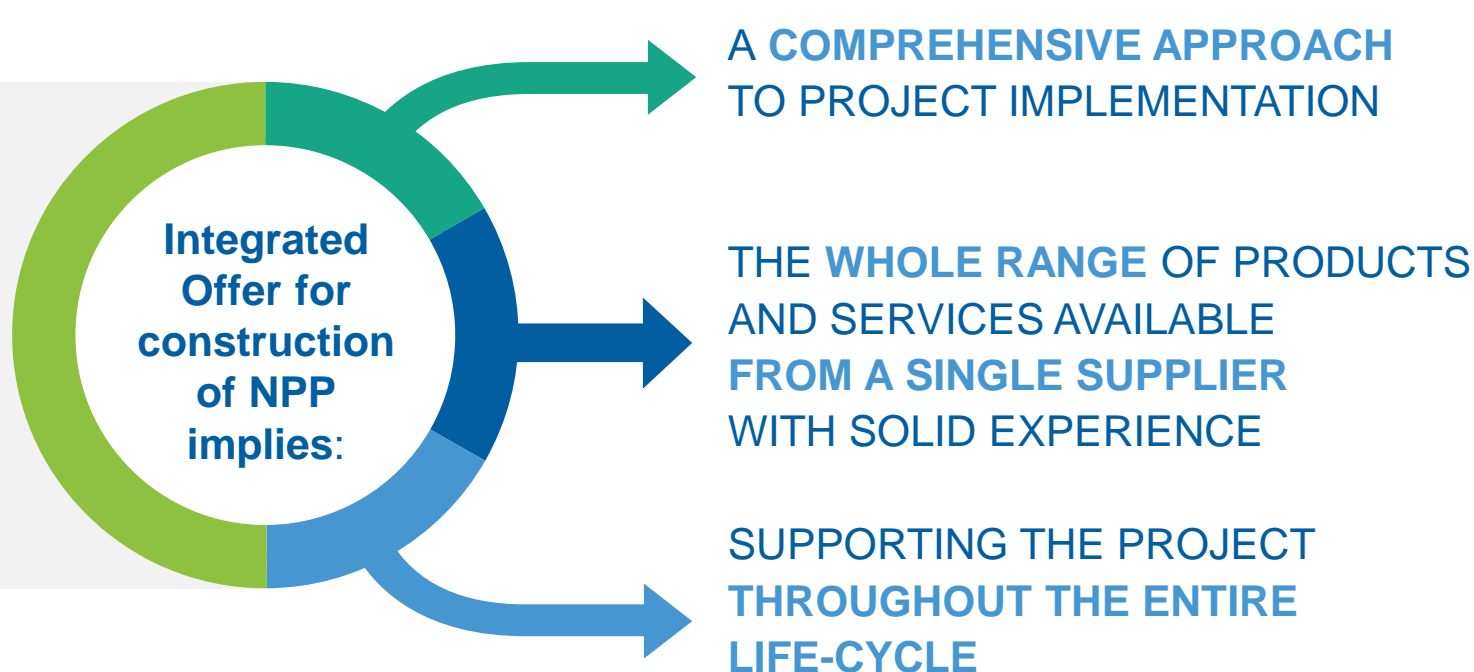
Tianwan NPP (China) – Local Participation:



Kudankulam NPP (India) – Local Participation:



Why to Go with ROSATOM?



CONTACT US



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Q&A

THANK YOU FOR YOUR ATTENTION!

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