

# framatome

## PROtect: The leading Enhanced Accident Tolerant Fuel

Taking fuel safety to the next level by developing advanced fuel systems for nuclear reactors worldwide.

PROtect is our cutting-edge research and development program using a global team of experts, focused on developing and implementing near-term and long-term solutions for advanced fuel systems for nuclear power reactors worldwide.

PROtect provides improved fuel reliability due to increasing wear resistance, very low oxidation kinetics under high-temperature steam and increased fission gas retention.

### A near-term solution

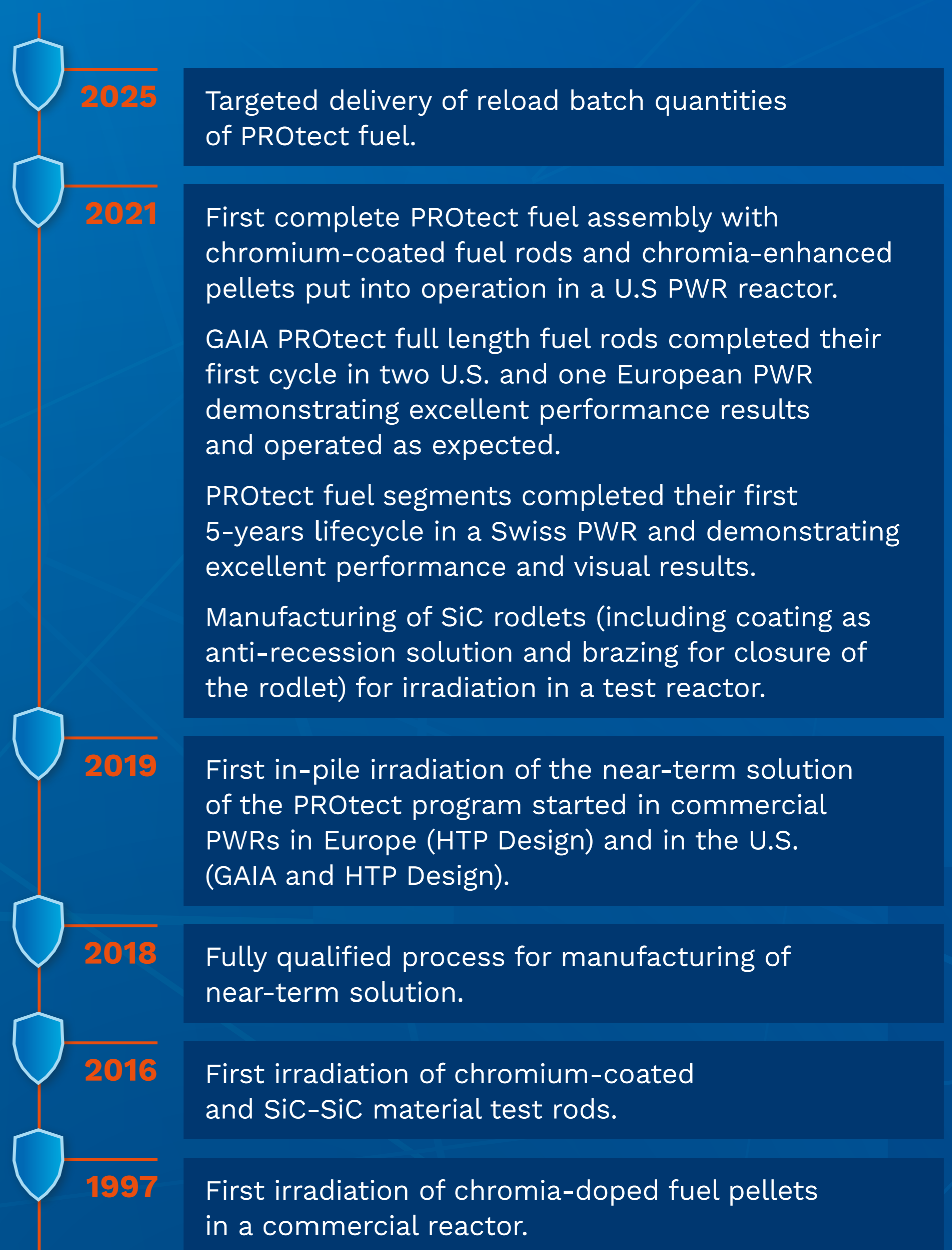
Is based on the close-to-market technologies, chromium-coated fuel rods and chromia-doped fuel pellets.

Today, it provides beneficial margin gains concerning activity release in case of leaker, resistance to chipping of pellets, Design Basis Accident and coping time under severe accidents.

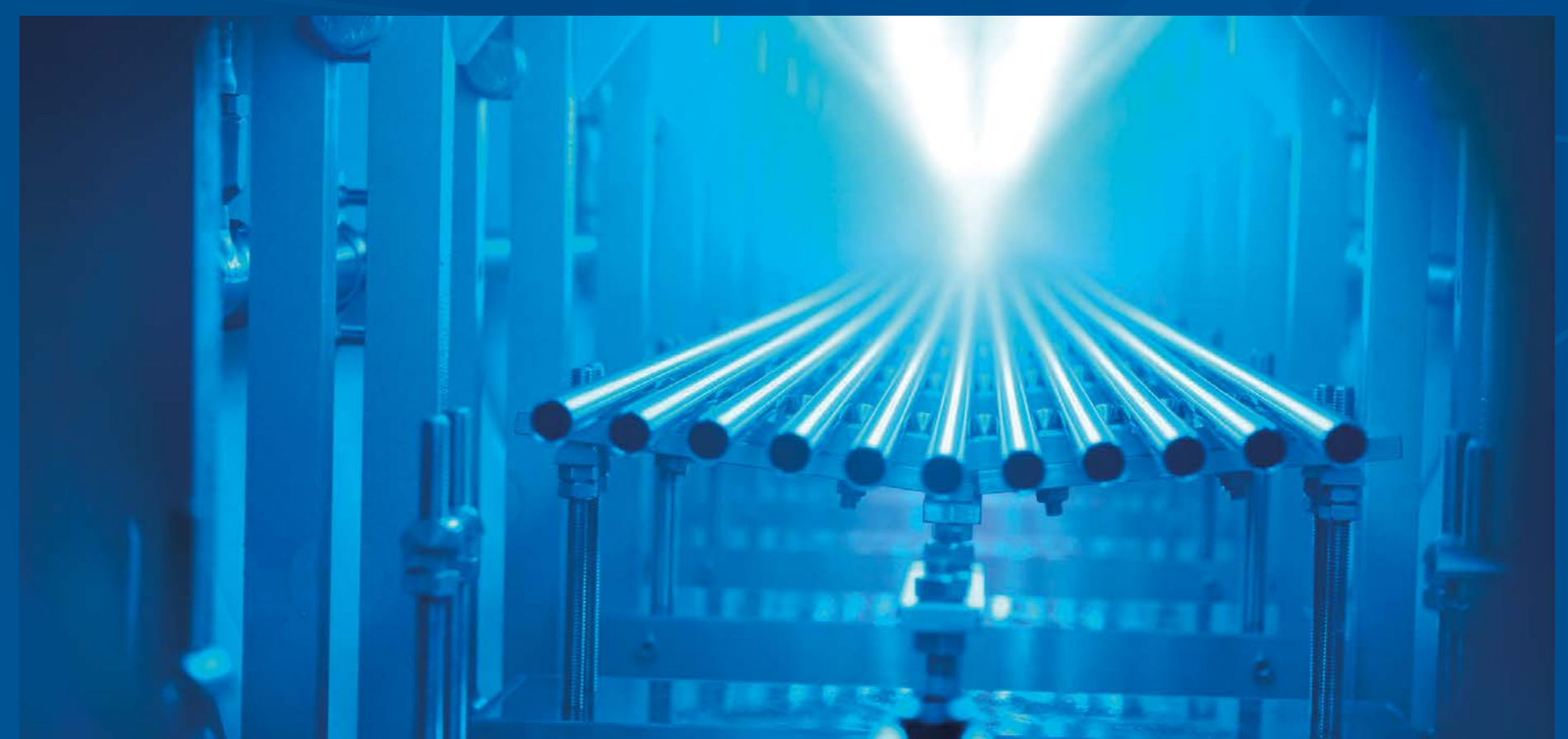
### A long-term solution

Is focused on technologies which will offer more margin gain under Beyond Design Basis Accidents but have substantial development efforts remaining with deployment targeted for mid-2030s. Primarily we are developing a silicon carbide-based cladding solution.

Further, the program is being developed and brought to market with the support and collaboration of the U.S. Department of Energy and support from our international partners and customers.



Chromia-doped fuel pellet – Global commercial availability



Chromium-coating of full length fuel rods

Your performance is our everyday commitment

Contact: [sales-fuel@framatome.com](mailto:sales-fuel@framatome.com)

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