



Advanced Nuclear Landscape

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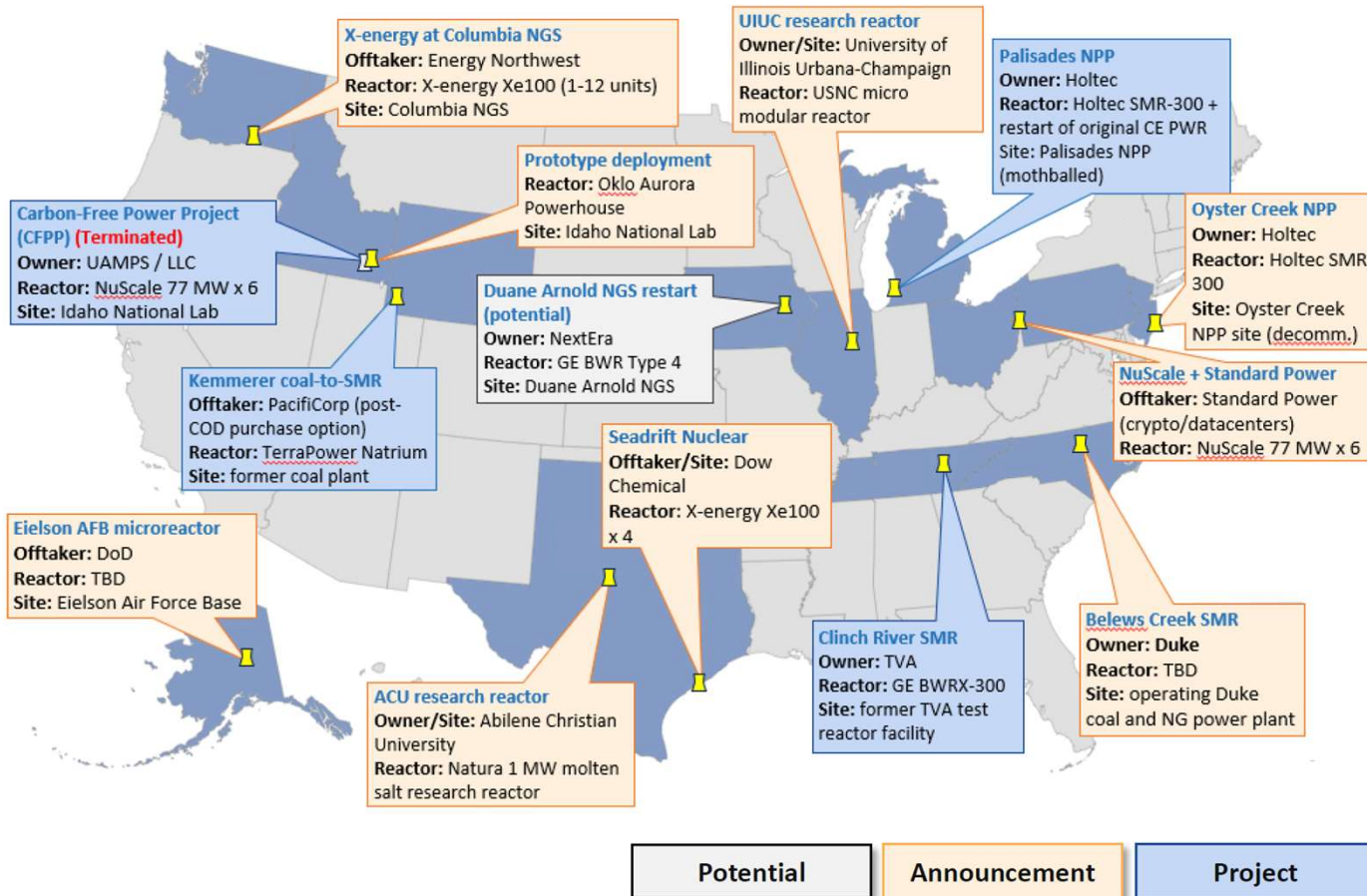
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Advanced Nuclear Reactor Typology

	Gen III+		Gen IV		
	Large Light Water	Light Water SMRs	High Temperature Gas Reactors	Metal/Salt Cooled	Micro
Power output	~1+ GW	~70–300 MW	~80–270 MW	~200–800 MW	~1–50 MW
Typical fuel	LEU	LEU	HALEU	HALEU	HALEU
Coolant	Water	Water	Gas, e.g., helium	Metal or salt	Various
Select programs (reactor developer)	LPO loan guarantees for Vogtle Units 3 and 4 (Westinghouse)	Carbon Free Power Project (NuScale)	Advanced Reactor Demo. Program (X-energy)	Advanced Reactor Demo. Program (TerraPower)	DOD Project Pele (BWXT), Eielson Air Force Base RFP (TBD)

Source: DOE

Project Development Activity



While global pursuit of nuclear energy is at an all-time high, all international builds are sovereign led projects



Down selection to 2 SMRs is expected by Q4 2024; 2 sites designated to build SMRs by mid 2030s.



RRSMR is the preferred SMR, and work is under way to partner with the in-country operator CEZ.

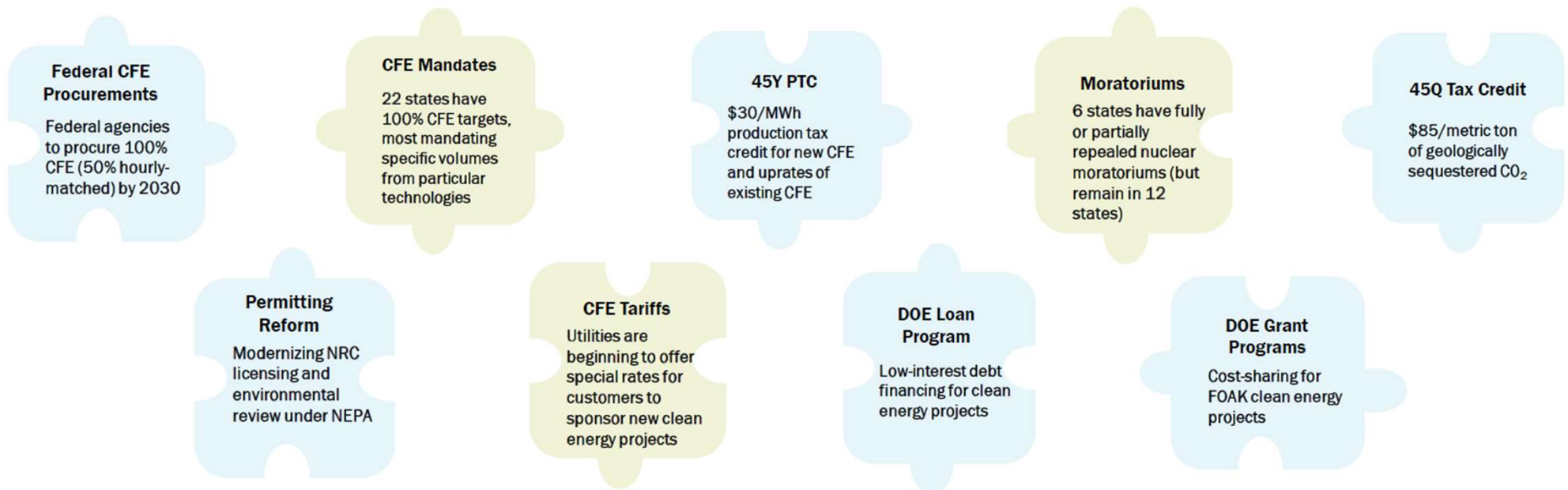


Development of SMRs in Poland can only go ahead if FOAK built elsewhere; industrials prefer GEV BWRX-300



Ontario's Darlington New Nuclear Project has selected the BWRX-300 and strong government backing.

Federal and State Policies to Support Deployment



Policymakers are using a variety of tools to support carbon free energy deployment, but they do not individual or collectively overcome the FOAK risk of new clean technologies.

- Adequate cost overrun and time delay protection
- Long-term purchase commitments or prices to cover costs plus return
- Regulatory and permitting reforms to ease development and reduce project risk