

From Project to Product

Transforming Plant Delivery Models
from First-of-a-Kind to Nth-of-a-Kind

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Make Nuclear Relevant Again



We need to develop products that:

- Deliver great value for their cost
- Are easy to buy
- Are attractive to investors
- Can be installed rapidly with low project risk
- Are low cost to operate
- Deliver unique value to society
- Can be scaled to meet a significant portion of energy consumption

Key Products/Markets



Flexible Generator – Electricity Market



Hydrogen Cogeneration – Electricity & Fuels



Coal Plant Heat Source – Electricity Market



Hydrogen/Synfuel Gigafactory – Fuels Market

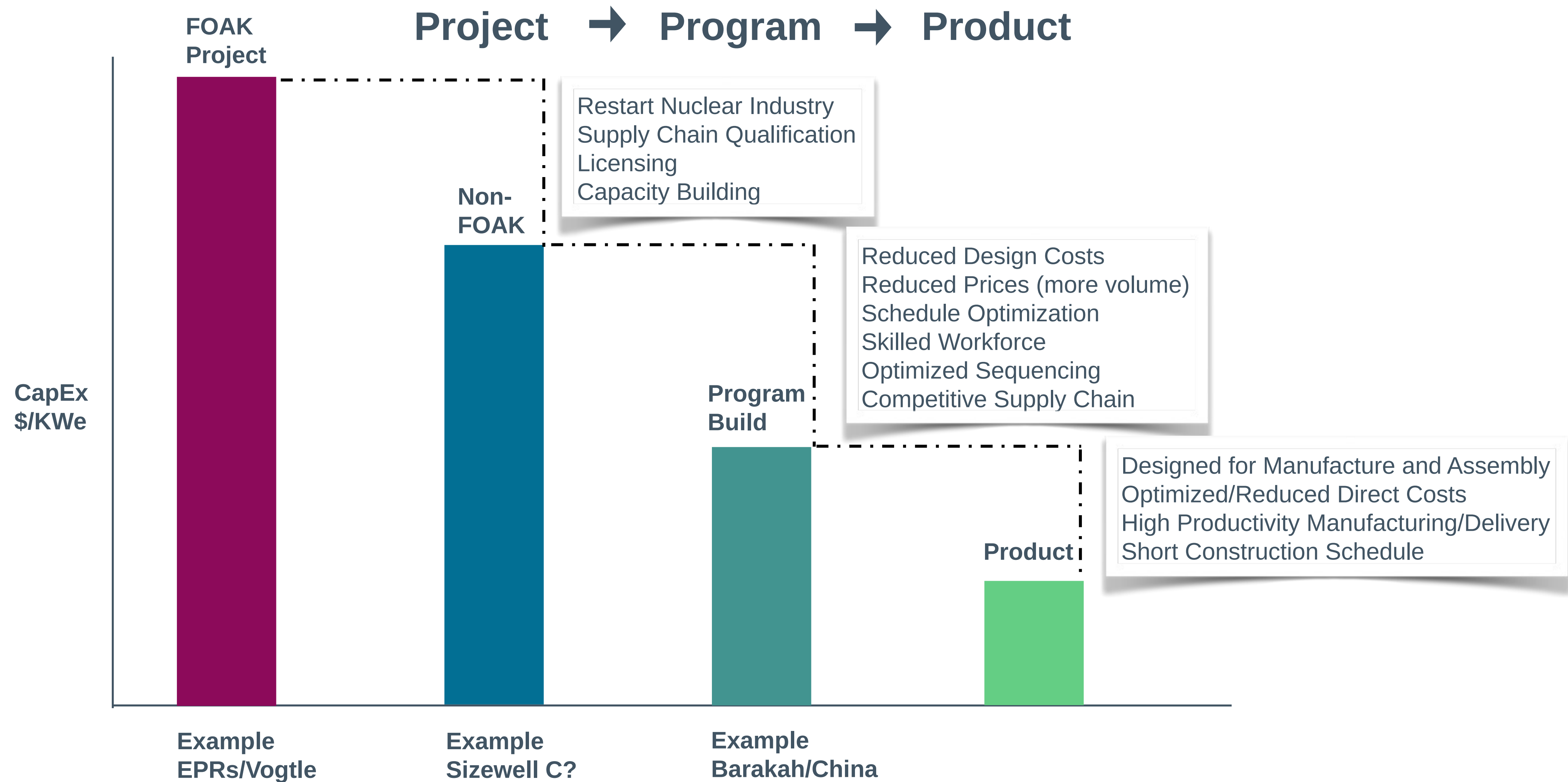


Cost Targets for Key Product/Markets

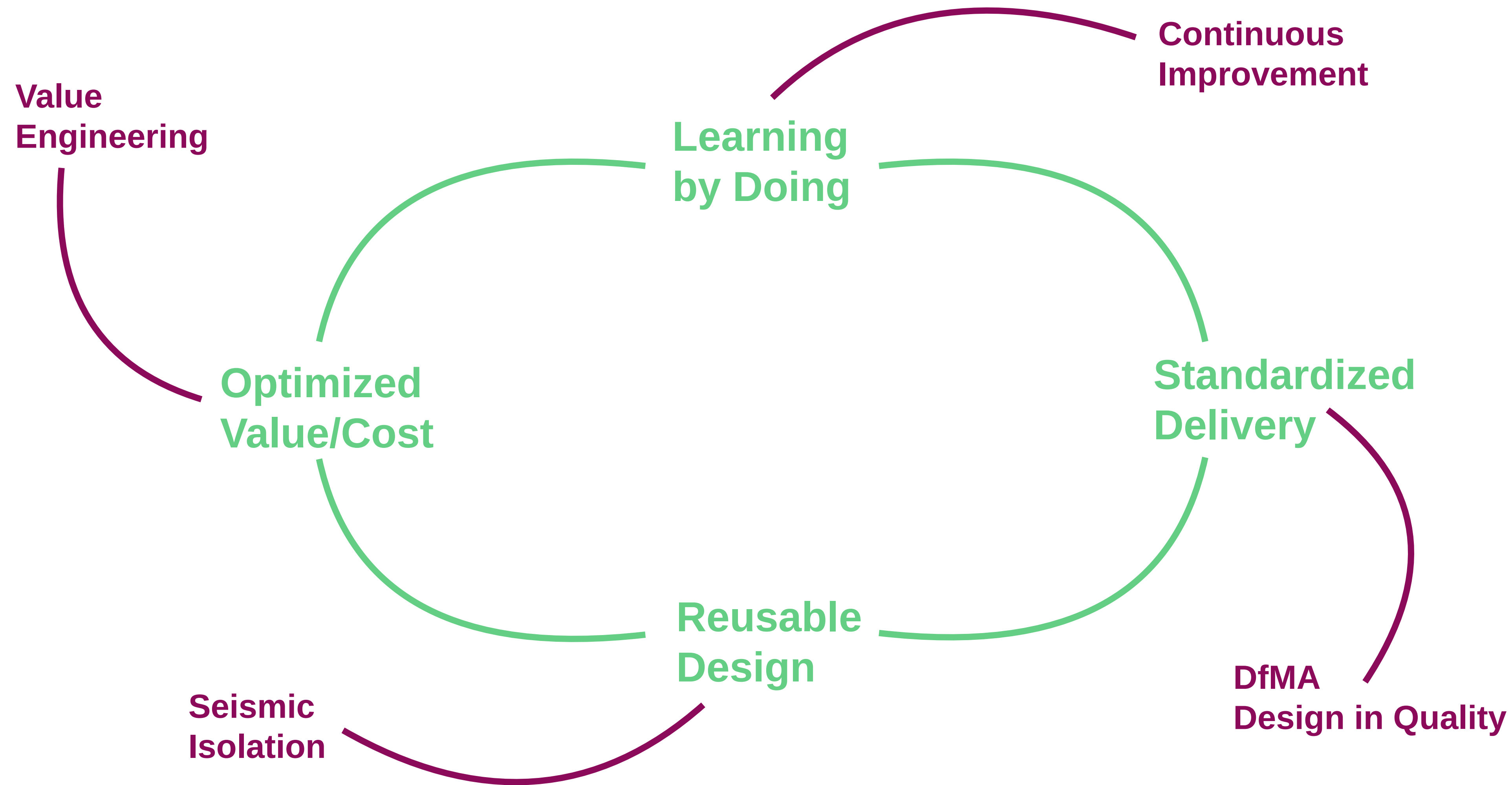


Market Application	Competitor	CapEx Target	OpEx Target	Source
Flexible Generator	NGCC	\$2,500–3,500/kWe (inc. thermal energy storage)	\$7–10/MWh	Cost and Performance Requirements
Coal Plant Heat Source	Coal Boiler	\$1,500–2,000/kWe (heat source & heat transfer only)	\$7–12/MWh	Forthcoming report
Hydrogen Cogeneration	Peaker Turbine Natural Gas	\$2,500/kWe	\$0.52/kg-H ₂	Nuclear for UK Net Zero (forthcoming)
Hydrogen/Synfuel Gigafactory	Oil and Gas Production	\$1,400/kWe	\$0.37/kg-H ₂	Rethinking Deployment Scenarios (EPRI forthcoming)

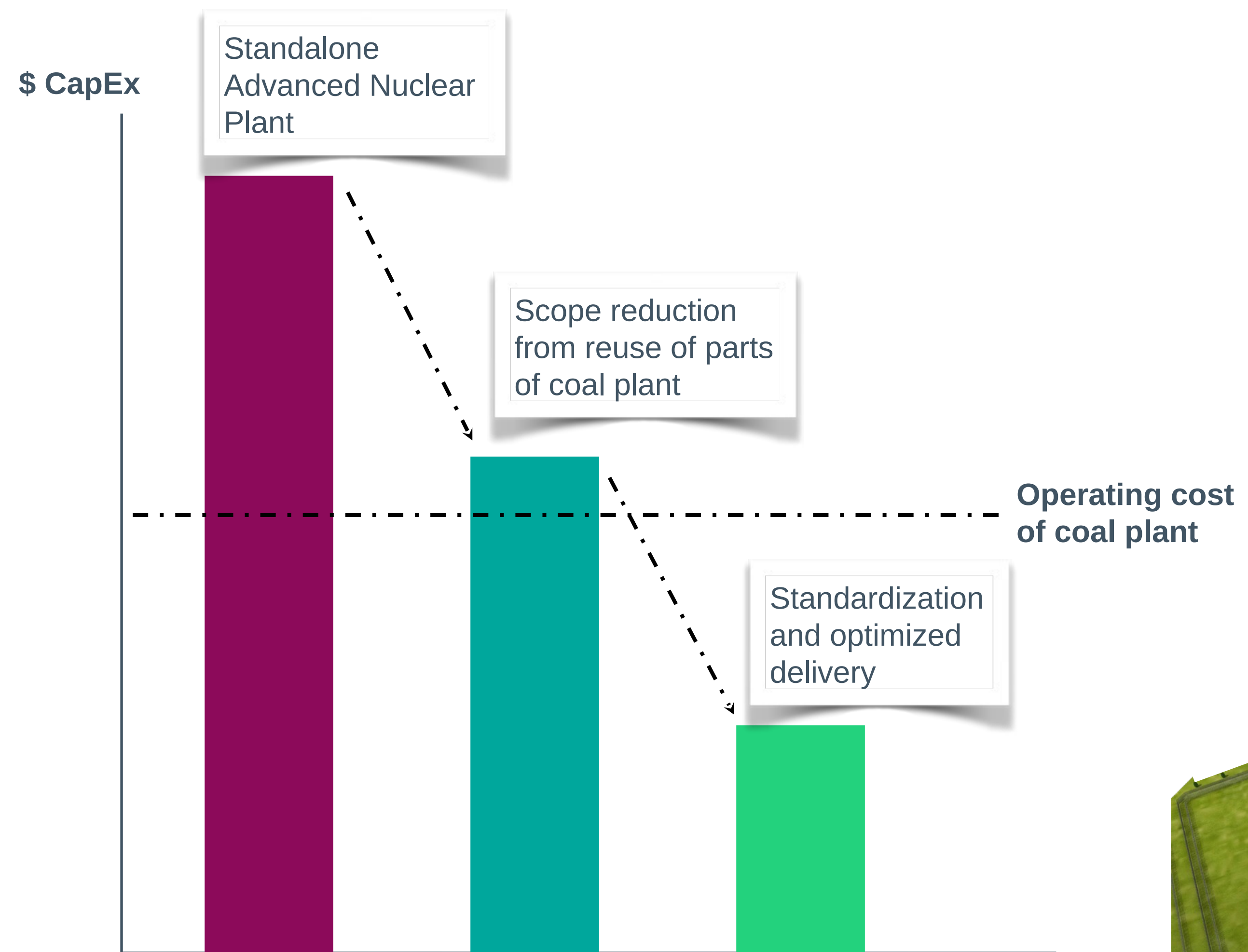
Pathway to Low Cost



Enabling Product Thinking



Cost Reduction from Coal Plant Repowering



What Could Success Look Like?



Flexible Generator – Electricity Market



Market	GW	US\$
US	250	\$625 B
World	2,000	\$5,000 B

Hydrogen Cogeneration – Electricity & Fuels



Market	GW	US\$
US	300	\$750 B
World	2,000	\$5,000 B

Coal Plant Heat Source – Electricity Market



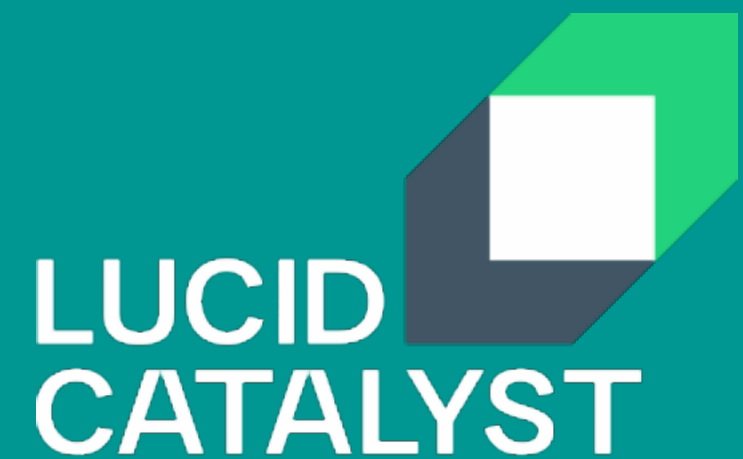
Market	GW	US\$
US	250	\$375 B
World	2,200	\$3,300 B

Hydrogen/Synfuel Gigafactory – Fuels Market



Market	GW	US\$
US	486	\$680 B
World	5,832	\$8,165 B

LucidCatalyst delivers strategic thought leadership to enable rapid decarbonization and prosperity for all.



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