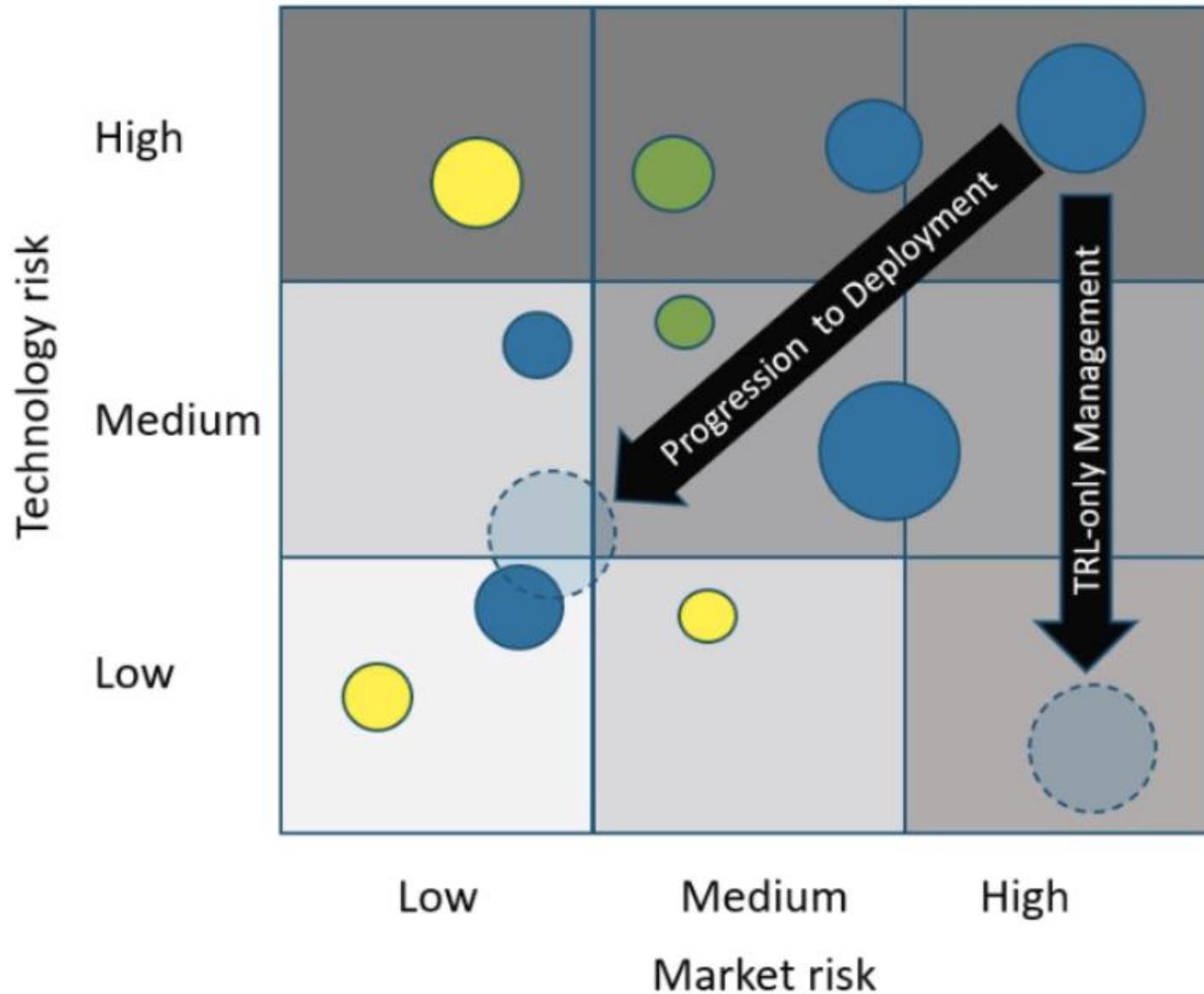


ARPA-E perspective: Developing commercial and technological readiness in parallel

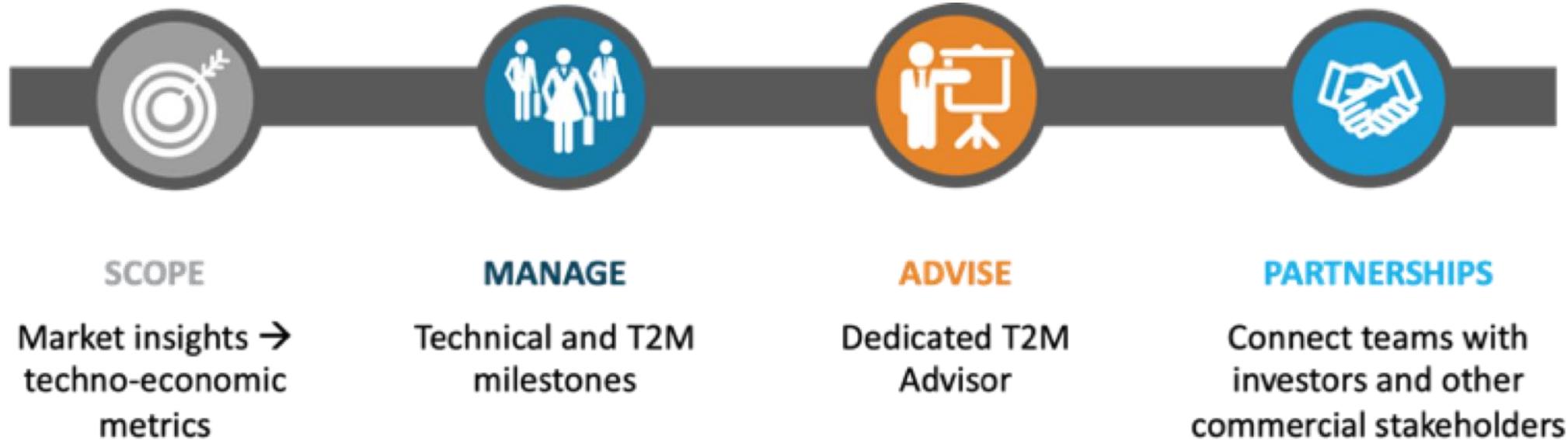
DOE Workshop on Fusion Energy Development via Public Private Partnerships
Sam Wurzel – Technology to Market Advisor, ARPA-E

June 1st, 2022

Simultaneously reducing market and technology risk



Market risk reduction at ARPA-E: Tech to Market



Market Evaluation

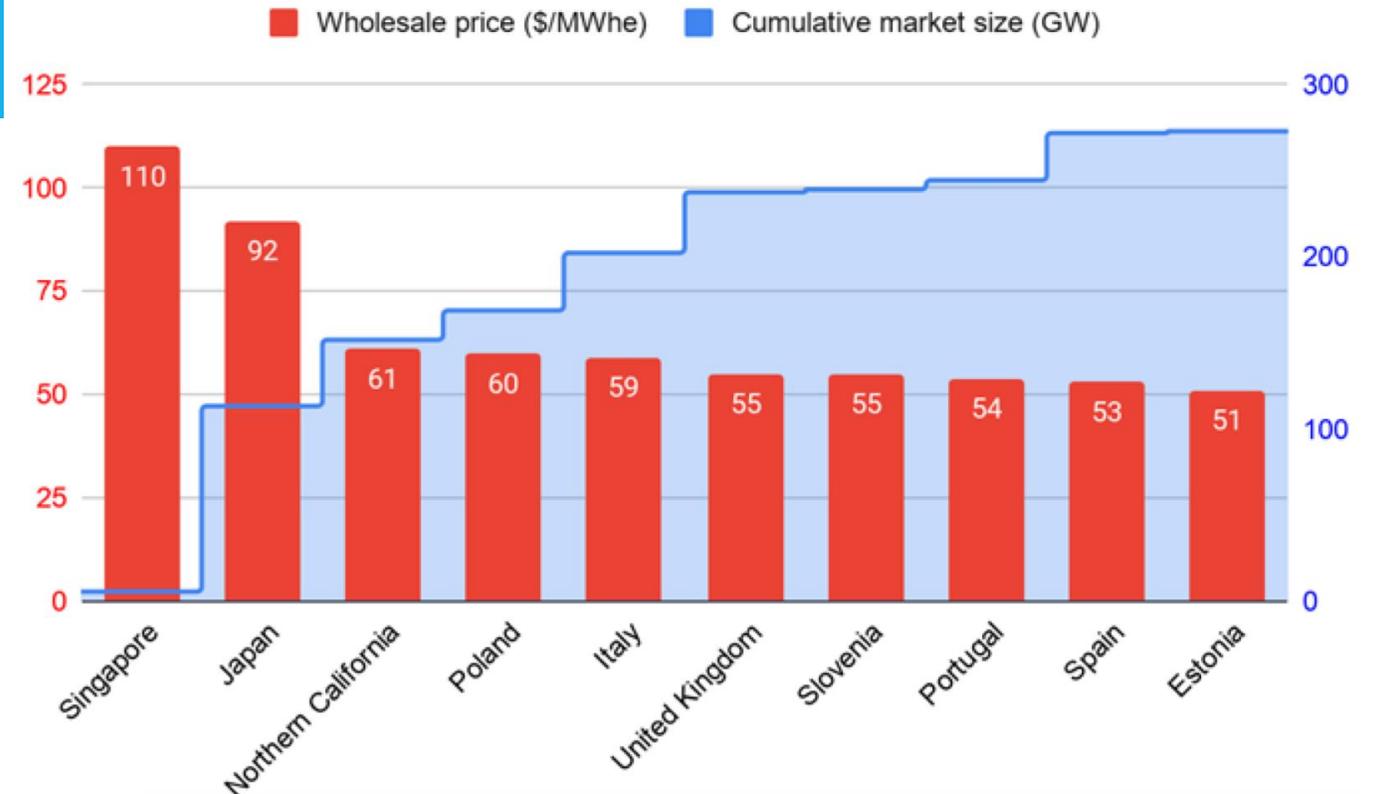
Journal of Fusion Energy (2021)40:18
<https://doi.org/10.1007/s10894-021-00306-4>

ORIGINAL RESEARCH

Potential Early Markets for Fusion Energy

Malcolm C. Handley¹ · Daniel Slesinski¹ · Scott C. Hsu¹ 

Accepted: 17 June 2021



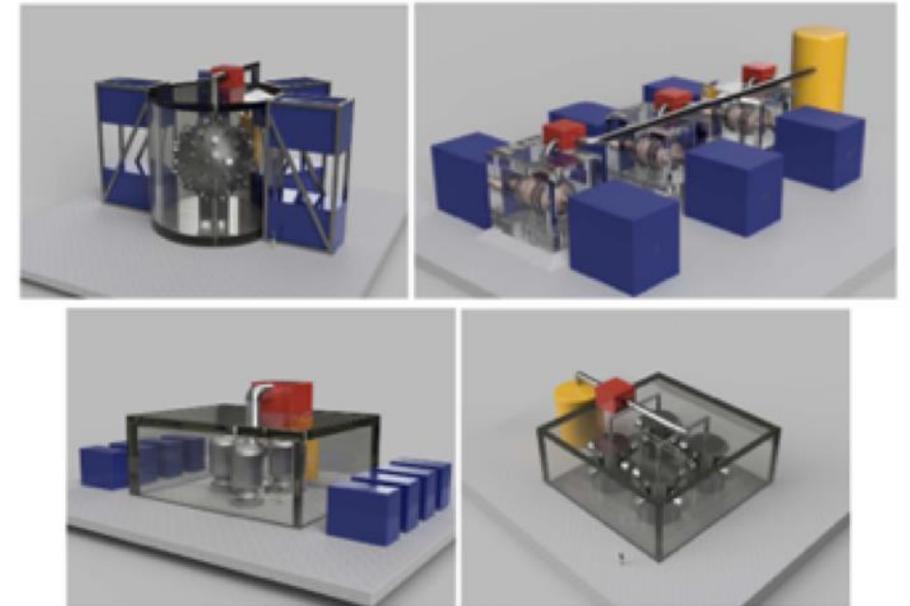
Costing Evaluation



Woodruff Scientific, Inc

Revisit of the 2017 Costing for Four ARPA-E ALPHA Concepts
DE-AR001175

Item	Cost
CapEx	~2.4\$/W, \$1.2B for ~500 MWe
Average LCOE of four concepts	43 \$/MWh



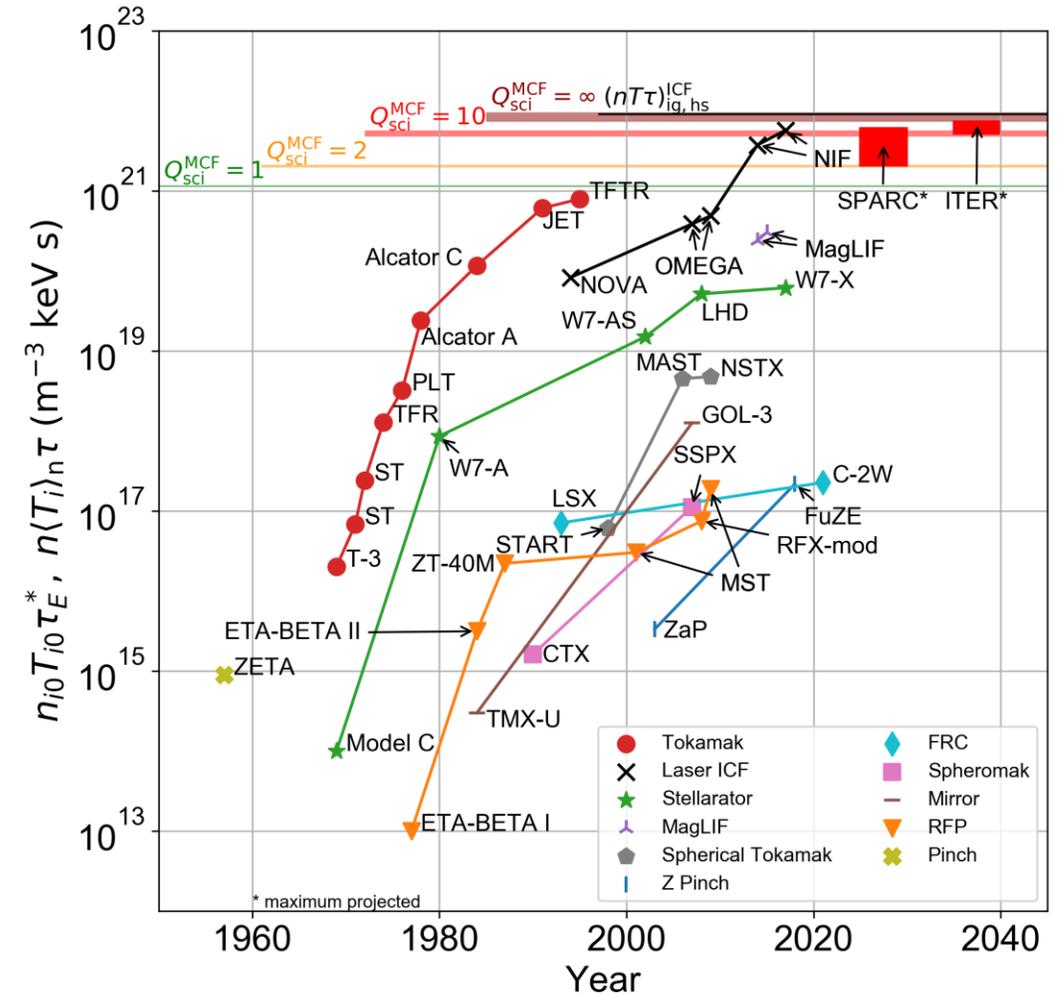
Working with investor stakeholders



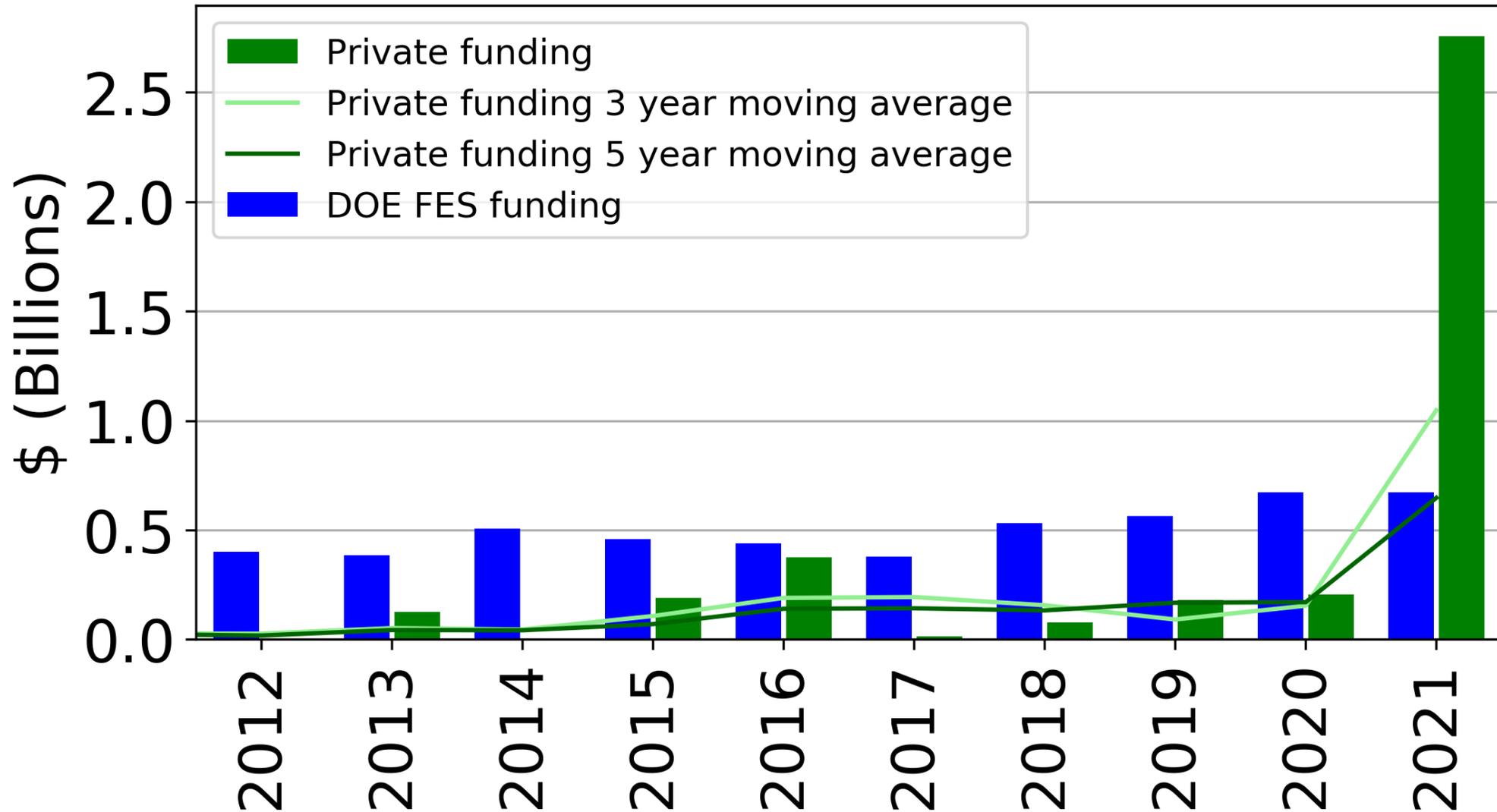
By Eric Kounce TexasRaiser - Located south of Midland, Texas
Public Domain, <https://commons.wikimedia.org/w/index.php?curid=4639595>



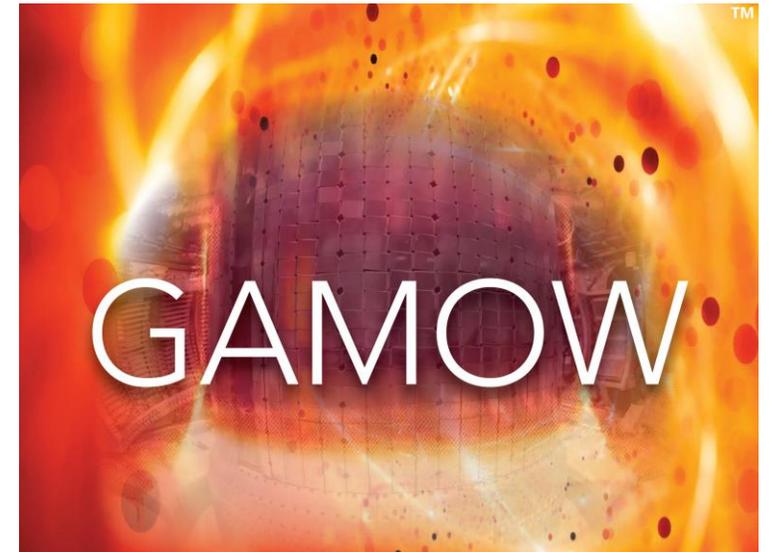
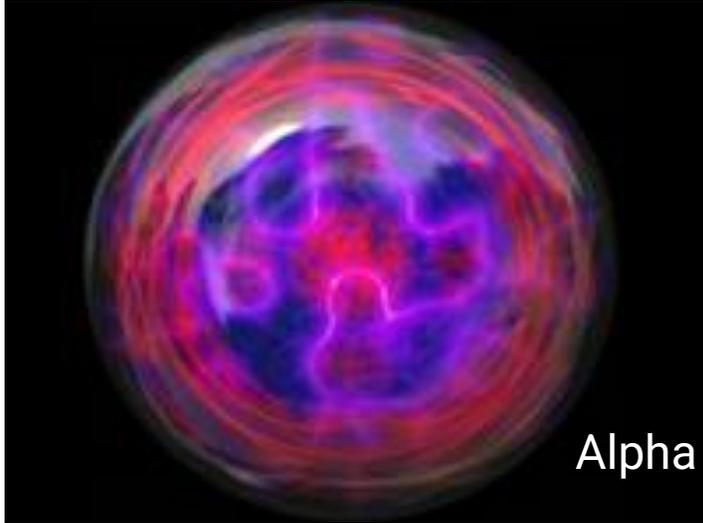
Coolcaesar, CC BY-SA 4.0, via Wikimedia Commons



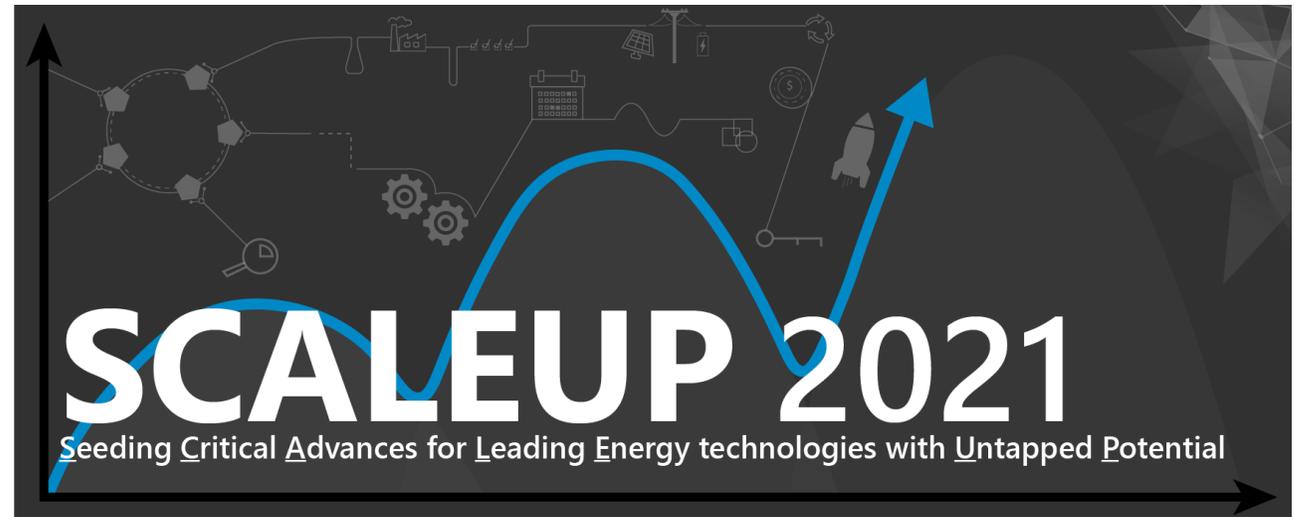
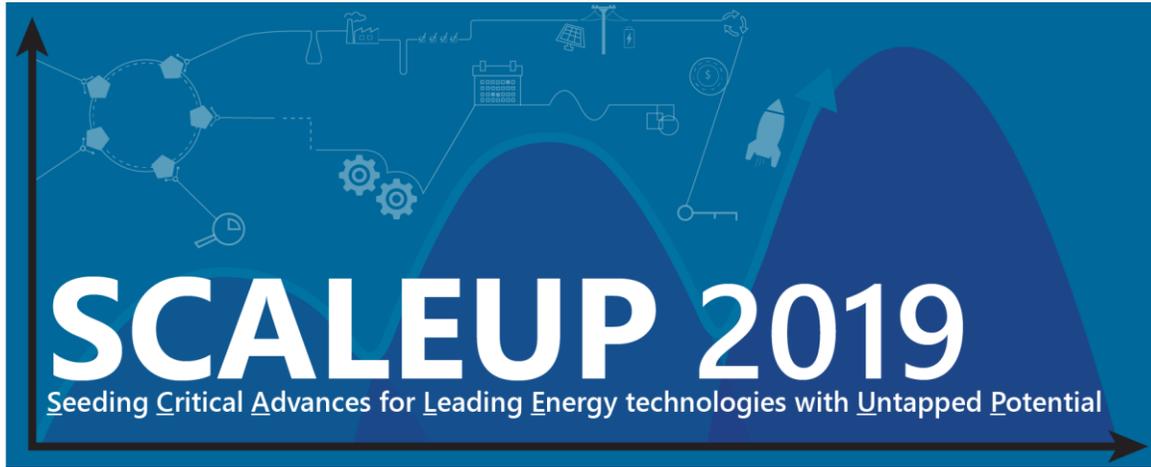
Recognizing market pull



ARPA-E Fusion Programs



SCALEUP as a model



Future ARPA-E fusion programs...

... will support DOE's bold decadal vision for fusion

THANKS

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