

Innovating Across Nuclear

We Need Clean Energy

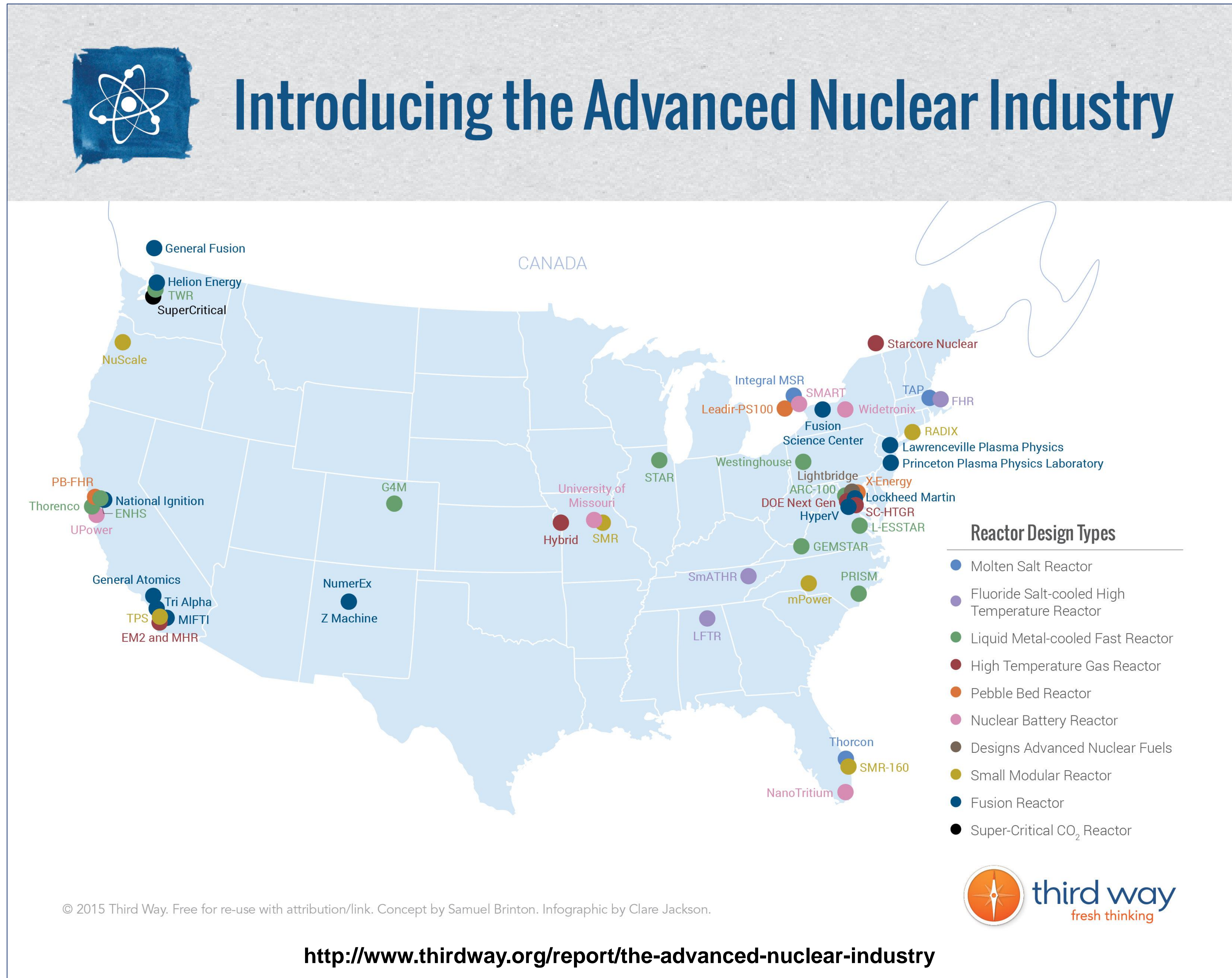
To improve global health, move people out of energy poverty, and take care of the environment, we need clean energy.

Building more sustainable energy is a huge priority in the U.S. and globally, which is in turn driving changes in our energy systems.

And Nuclear Innovation

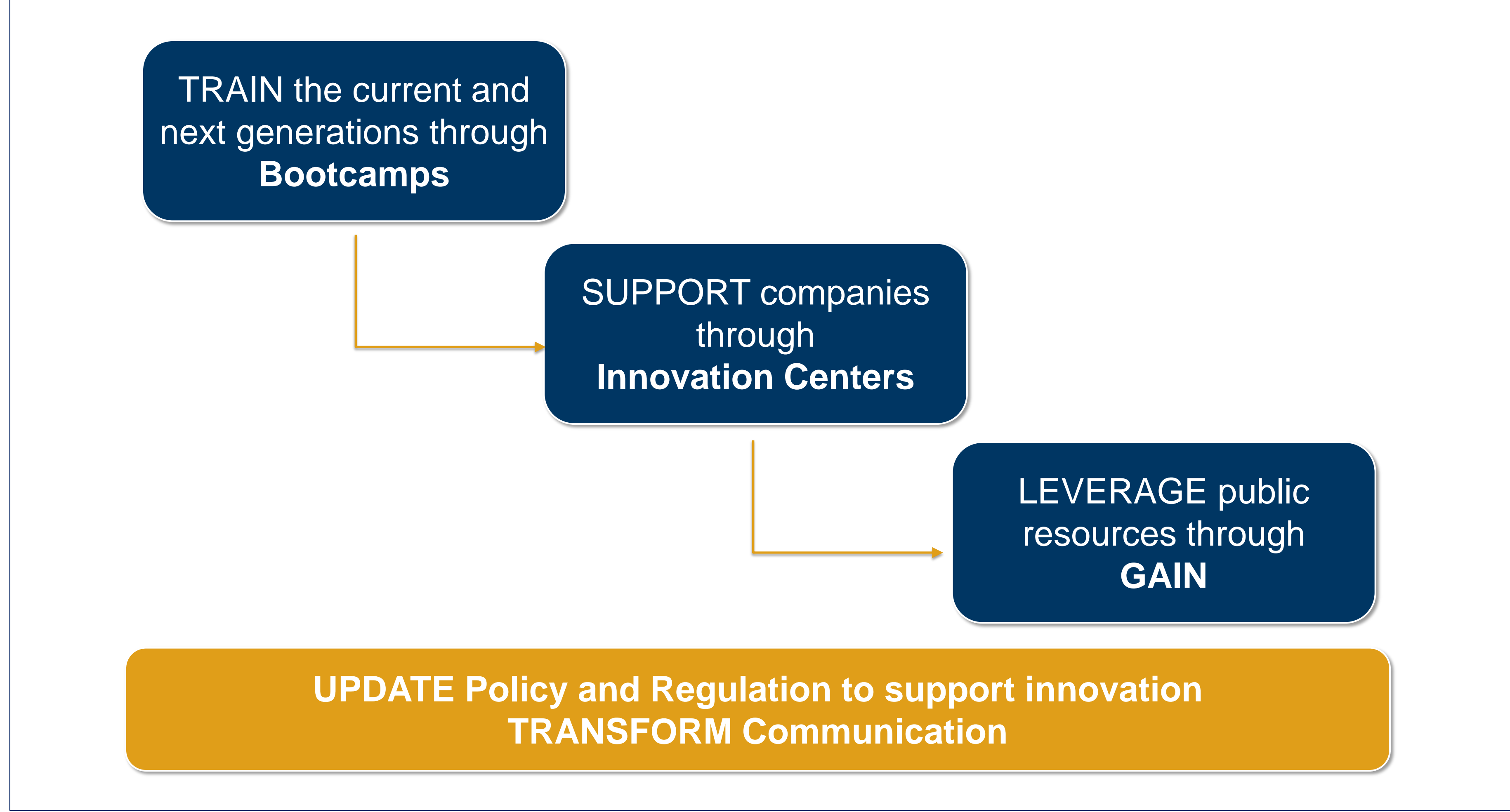
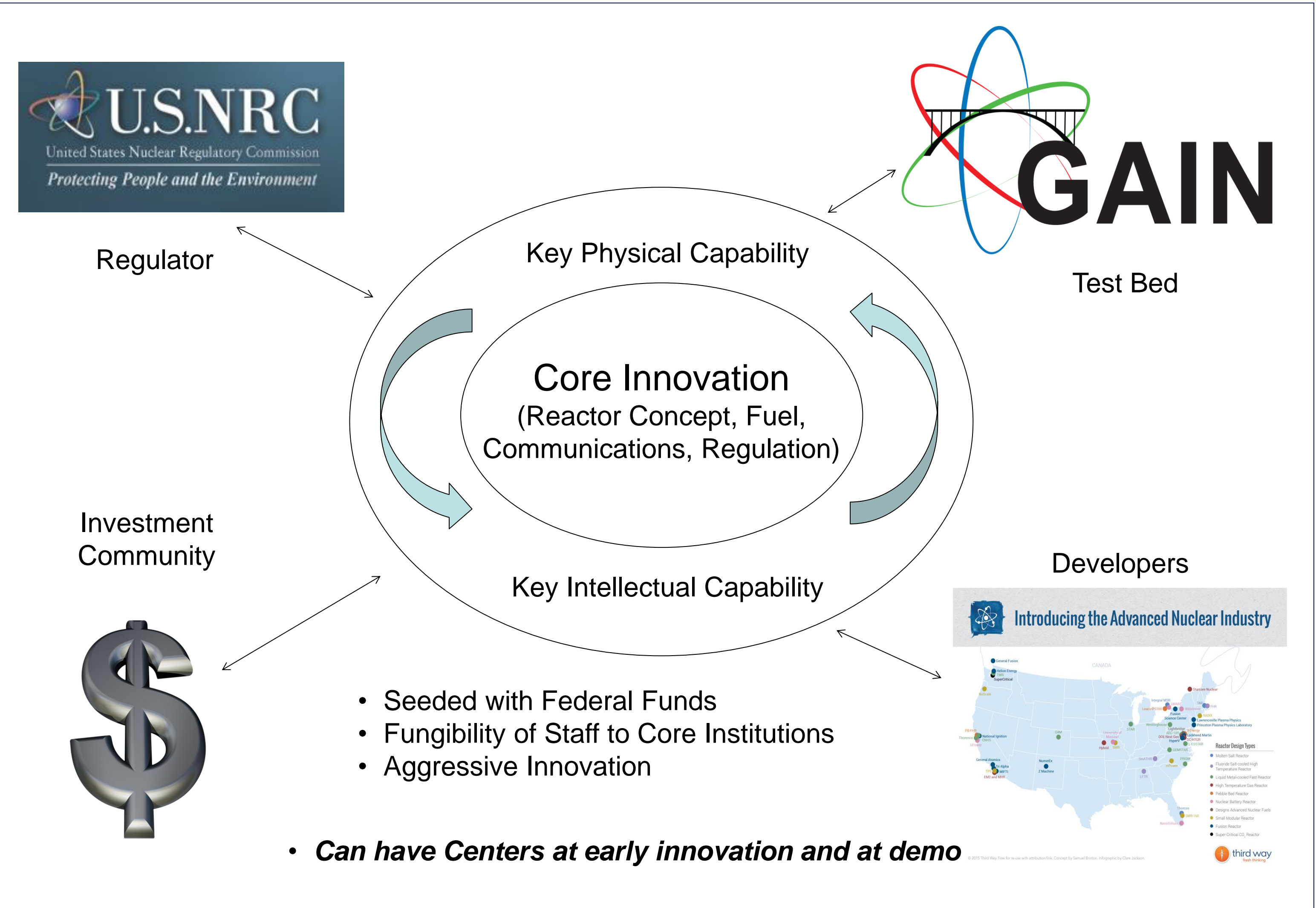
We need to innovate all low carbon energy sources in real time to reduce carbon emissions while expanding access to reliable energy.



Nuclear energy is a key clean energy source, but we need real innovation to overcome technical and non-technical barriers alike.





- Teach students *how* to innovate:
 - Entrepreneurship
 - Nuclear aspects
 - Non-traditional material
- Two week pilot program August 1-12
- Team design projects
 - Teams have non-technical member
- Large company involvement
- Experts teach and mentor
- Judged completion





Integrated institute managing a distributed test-bed and demonstration platform, dedication to innovation in Nuclear Energy

Public-private partnership including Industry, Entrepreneurs, National Laboratories, and Academia

Headquartered at the Idaho National Laboratory

New DOE-NE Initiative within the Clean Energy Initiative

- Tens of \$B in DOE and partner assets (experimental and computational)
- More than \$1M in yearly investments for R&D and infrastructure
- \$12.5B in loan guarantees
- \$10M in SB vouchers
- Expertise and intellectual infrastructure



Nuclear Innovation Alliance

The NIA's mission is to lead advanced nuclear energy innovation by addressing:

- Regulatory Pathways
- Testing and Development
- International Cooperation
- Financial Support

Assemble companies, investors, experts, stakeholders, students
Find ways to bring new ideas to market more efficiently

Vision

Private companies are able to access resources developed at national laboratories worldwide to significantly lower the barrier to entry and cost, and enhance the licensability of new designs

Private companies are able to find and capitalize on a well-trained, innovative, inspired talent pool coming out of universities and professional training programs

Regulatory agencies facilitate innovation while upholding the integrity of safe regulation.

Policies support global cooperation, regulatory certainty, electricity market health, appropriate technology transfer.

We have trust, partnerships, collaboration with the public.

Private companies bring new technologies that crosscut needs in existing plants and new plant designs; adoption of these technologies reduces the time and cost of plant development and implementation; and these companies are financially successful.

Private companies bring new designs and ideas that are financially viable and meet global environmental and safety goals.

All of that is supported by a system that is aligned with what we say is important. Companies are rewarded for making the world better.

Acknowledgements

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