

# Response to ARPA-E RFI Regarding Pre-Pilot and Pilot R&D Projects

DAVID M. HART | MAY 2019

---

ITIF provided recommendations to the Advanced Research Projects Agency – Energy regarding pre-pilot and pilot R&D projects to scale, mature, and advance ARPA-E funded clean energy technologies.

---

## Main Points

1. ITIF agrees with the RFI's premise that scale-up and U.S. manufacturing of innovations made by ARPA-E award recipients is an important challenge that ARPA-E, along with other components of DOE and other federal agencies, particularly the Department of Defense, should seek to address.
2. ARPA-E should invest in scale-up, pre-pilot, or pilot projects that have the potential to provide stronger performance signals to customers and profit signals to investors than its traditional applied research projects provide.
3. The effort should be focused particularly on low-carbon energy hardware technologies that require a long time and large expenditure to commercialize and that must break into commodity markets or face competition supported by mercantilist policies of other countries.
4. ARPA-E should take a flexible approach to cost-sharing for scale-up, pre-pilot, or pilot projects, including in-kind contributions.
5. ARPA-E should encourage knowledge-sharing from scale-up, pre-pilot, or pilot projects.

6. Proposals for ARPA-E scale-up, pre-pilot, and pilot projects should be encouraged to include different and larger teams than ARPA-E applied research projects.
7. ARPA-E should require substantial US manufacturing of technologies that derive from scale-up, pre-pilot, and pilot projects.