The Advanced Research Projects Agency-Energy (ARPA-E) supports high-risk, high-reward research that the private sector will NOT conduct. Since 2009, ARPA-E has funded more than 400 potentially transformational energy technology products including:

- A 1-megawatt silicon carbide transistor the size of a human fingernail
- Microbes that use hydrogen and carbon dioxide to create liquid transportation fuel
- A near-isothermal compressed air energy storage system

**Since 2009...**

| ARPA-E has provided | 56 projects have formed new companies | 68 projects have partnered with other government agencies for further development | 74 projects have attracted more than $1.8 billion in private-sector follow-on funding |
|---------------------|---------------------------------------|************************************************************************|************************************************************************|
| $1.5 billion in R&D funding to more than 580 projects | | | |

Source: DOE 2017

Stony Brook University, in partnership with Brookhaven National Laboratory, has received $10.25 million in ARPA-E funding since the program’s inception.

Stony Brook conducts groundbreaking research with ARPA-E funding:

- Creating a new super energy-saving, cost-efficient air conditioning vent for commercial and residential use at low cost
- Condensing water out of flue gas to provide additional cooling that may enable power plants to be built in dry and land-locked areas at a time when using open bodies of water for cooling has become a national and global concern
- Developing a small, low-cost, highly efficient and clean natural gas generator designed for use in homes to provide electricity and heat