

# Mason Energy-Water Research Opportunities

Prepared for the Mason Energy Symposium

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# Observations

- Large interest in energy, broadly distributed across multiple areas of study/research
- Academia reflects same disaggregation of energy governance – many, many special interests
- Research in technical areas better aligned with laboratories
- Little integration across schools/departments in social sciences (incl. economics, psychology, and sociology), law, public policy, intl. relations, and security studies
- Professional groups, think tanks, and local/state/federal govt. want student involvement
- GMU's location is biggest asset
- Grant-writing is under-valued



# Research Trends

- Interdisciplinary approaches favored
- Infrastructure and resiliency
- Energy storage
- Smart cities/communities
- How about at Schar?
  - MPP-oriented
  - Courses in climate change and energy security



# What has worked? What hasn't?

- Certain amount of echo-chambering → similar groups pulling from the same audience
- CESP successes/failures.
  - Provost Multidisciplinary Research Grant in 2016
    - Did not lead to expected collaborations with VA-based COOPs and Munis.
  - College of Science Research Grant in 2016
  - Unsuccessful with larger grant opportunities → e.g. Trans-disciplinary Centers of Advanced Study (Center for Energy Security and Resilience)
  - Patriot Green Fund → mixed success
  - Private Donors
- Focusing on collaborations
- CESP is the predominant entry point between energy community and GMU



# Opportunities

- They abound
- Opportunity for GMU academic programs to better integrate non-technical, energy-related fields of study
  - top-down initiative?
  - Lost opportunities to attract excellent talent
- Partnerships with labs, NGOs, and corporations almost a requirement for large grants
- What if I had \$1M?
  - Pilot professional certification programs
  - Establish a physical laboratory presence

- Economic Club Doctoral Fellowship Dissertation
- Cosmos Scholars
- Curriculum Impact Grant
- Smith Richardson Foundation
- Dissertation Completion Grant Collaborative Research Grant
- Center for Engaged Scholarship
- Georgia Energy Policy and Tech Innovation Center
- Decision, Risk and Management Sciences (DRMS) Doctoral Dissertation Research Improvement Grant (DDRIG)
- EPA P3 Program
- Russell Sage Organization
- The Commonwealth Research Commercialization Fund (CRCF)



# Opportunities – Public Service Announcement

## DOE Seeks Feedback on the Use of Challenges and Prize Competitions to Address Critical Water Issues

The Department of Energy (DOE) is seeking feedback on key barriers that may prevent long-term access to low-cost water supplies that could be best addressed through challenges and prize competitions. Challenges and prize competitions rely on competitive structures to drive innovation among a broad set of participants and usually offer financial and/or other rewards to winners and finalists. This Request for Information (RFI) was first released in conjunction with a [roundtable discussion](#) led by Energy Secretary Rick Perry on the use of federal prizes and challenges to drive innovation, particularly when it comes to critical water issues. DOE may use the information provided through this RFI to develop challenges and prize competitions to address these key water issues.

[Responses to this RFI](#) must be **submitted electronically** to [WaterPrizeRFI@ee.doe.gov](mailto:WaterPrizeRFI@ee.doe.gov) no later than **5:00 p.m. EST on May 14, 2018**.

if you or anyone in your energy policy group at George Mason would be interested in **presenting your thesis work at the Association of Energy Engineers-Baltimore**. The President of the chapter and encourages students in the local area to present and be exposed to members in the energy industry. AEE holds meetings every month 3rd or 4th Thursday evening from 6 to 9 p.m. in greater Baltimore area. They are at [www.aee-baltimore.org](http://www.aee-baltimore.org).

