

# Energy at Hopkins

## FOR INDUSTRY

### COMMUNITY

“Much like the Whiting School of Engineering, the academic home for the Ralph O’Connor Sustainable Energy Institute (ROSEI), ROSEI is very enthusiastic about collaborating with private companies to further expand our research and education goals,” said Ben Schafer, ROSEI director. “Collaborating with domestic green energy industry leaders is critical for ROSEI to provide the most beneficial impact for the U.S. energy transition.”

### GROWTH

ROSEI has grown by developing a strong working relationship with GE Vernova. The two groups have worked together on a series of proposed projects to tackle some of the world’s most pressing problems related to climate change. The proposals, which are awaiting funding decisions from government agencies, pertain to ROSEI’s work on the grid, wind energy, and carbon management.

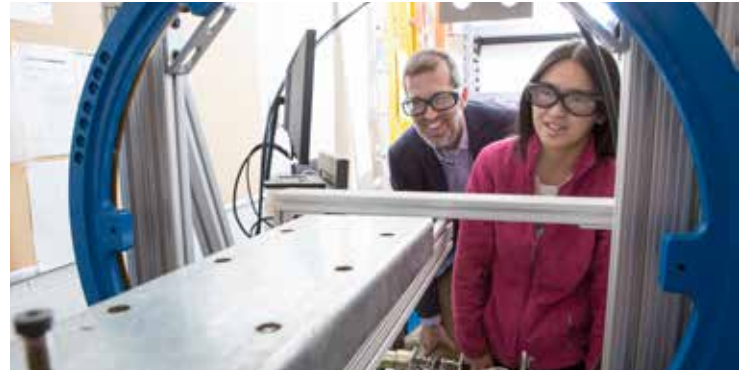
Chip Cotton, an account executive for energy R&D, was the Vernova representative. One of the primary reasons for working with ROSEI is the track record Johns Hopkins has of producing accomplished and innovative students. The goal is to expose these future leaders to GE through the partnership. ROSEI’s ability to support companies spun out of technology created at Hopkins also impressed Cotton.



Scan for more information on ROSEI and GE Vernova Team Up.

**“One of the harder things about working with academic institutions is you can get into situations where there is a lack of appreciation of what drives the market in terms of financial success. Organizations like ROSEI and Hopkins have demonstrated they understand those challenges and have mechanisms in place to stand up those companies, meaning we won’t have to do any sort of educating on how industry works.”**

— Chip Cotton, an account executive for energy R&D



The Whiting School of Engineering is also looking for collaborators in its research efforts, and there are multiple options for engaging with the school, which include:

- **Participation in seminars and symposiums:** WSE regularly holds seminars and symposiums that attract multidisciplinary audiences to discuss ground-breaking research. Contact the school to participate or deliver a talk.
- **Sponsored student activity:** Corporate partnerships are important to growing the future pipeline of engineering leaders. Help develop the education and careers of students through capstone projects, PhD fellowships, competitions, internships, and much more.
- **Sponsored research:** Integrate your research and development with world-renowned faculty and state-of-the-art facilities, centers, and institutes.

### INNOVATION

Research in ROSEI is focused on enabling innovations that address our vast energy needs and their consequences. ROSEI researchers cover a broad array of sustainable energy topics but have made significant strides in its four research pillars—Carbon, Grid, Storage and Wind—and we encourage collaborations between individuals with a variety of research backgrounds.

**Carbon:** Our work in carbon management, particularly in partnership with the Department of Energy’s ARPA-E program, has already spun out two companies – one working on cleanly converting natural gas to hydrogen at point of use, and one working on direct air capture of carbon.



**Storage:** Our work in energy storage spans a remarkable partnership with the Johns Hopkins Applied Physics Lab (APL). The ROSEI-APL partnership is investigating more sustainable storage solutions and looking at integrated solar-storage solutions.

**Wind:** ROSEI is leading Maryland's presence in a new national center—titled Academic Center for Reliability and Resilience of Offshore Wind (ARROW)—that aims to expand the local offshore wind industry and provide greater opportunities for Maryland residents and businesses to participate in the growing clean energy economy.

**Grid:** ROSEI is leading a new global center—titled Electric Power Innovation for a Carbon-free Society (EPICS)—with a total budget of \$15 million that is focused on helping society transition towards 100% renewable energy for power grids.

## RESOURCES

Johns Hopkins Technology Ventures (JHTV) is the commercialization and entrepreneurship hub of the university, responsible for fostering a rich innovation ecosystem and translating Johns Hopkins discoveries into accessible technologies, products, and services that benefit society. JHTV provides the following resources for potential partners:

- A database of all university technologies that are available for licensing.
- Staff members that specialize in brokering and managing sponsored research collaborations and assisting in the formation, execution, and management of these partnerships to support the advancement and commercialization of Johns Hopkins research.
- Staff members who serve as a commercialization concierge and scout high-value and high-impact technologies to help accelerate them to market.



Scan to learn more about available technologies.

WSE provides a variety of ways for companies to improve their workforce. This includes:

- **Non-credit professional and executive education:** We offer career advancement and reskilling for organizations and individuals with customized courses, workshops, and seminars through Johns Hopkins Engineering's Lifelong Learning.
- **For-credit professional education:** With more than 750 courses and 400 expert faculty, the school offers professionals and employees multiple credited courses toward earning a master's degree, both online and in-person residential.
- **The Doctor of Engineering Program:** Explore the school's Doctor of Engineering program, a doctoral-level graduate degree program designed for working engineers and scientists. The degree is customized for a company and its employees to enable research that will meet the needs of the individual and the organization.

## JOIN US!

Researchers at Johns Hopkins University's ten academic divisions and at the university's Applied Physics Laboratory have made Hopkins the nation's leader in federal research and development funding each year since 1979. Research isn't just something we do—it's who we are. Every day, our faculty and students work side by side in a tireless pursuit of discovery, continuing our founding mission to bring knowledge to the world.

Looking for a university to partner with to advance your company's research and education goals? JHU, Hopkins Engineering, and ROSEI are the ones you should be talking to.



Scan to learn more about opportunities for companies.



JHU and ROSEI contingent meeting Maryland Governor Wes Moore at the 2023 ARPA-E Innovation Summit



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