

EVPP 490-009 / 505-005: Food, Energy, Water Nexus
Fall 2019, Tuesdays/Thursdays 12:00-1:15 pm
Instructor: Jennifer Sklarew, Ph.D.

Food, energy and water systems face individual challenges to their sustainability and resilience. The linkages between these systems can generate additional challenges, but integrative solutions that leverage these systems' interdependencies are emerging. In EVPP 490/505: Food Energy Water Nexus, we'll discuss resilience and sustainability challenges that involve the food, energy water nexus, as well as innovative solutions to these challenges. Our discussions will bridge multiple disciplines, as we examine the technological, economic, and institutional dimensions of the nexus in various places around the globe at local and national scales, as well as in the context of the Sustainable Development Goals (SDGs) for food, energy and water.

The semester project will enable students to explore the food-energy-water nexus challenges in a place of your choosing. You also will examine solutions that leverage these systems' interdependencies. Students will have the opportunity to apply your own specific research interests.

In our discussions, I look forward to sharing my professional experiences in energy and environmental policymaking, as well as my own research on food, energy, and water nexus challenges and synergies. We also will engage with guest speakers working on these issues in the private sector, NGOs, and at various government levels. Past speakers have included government officials from the State Department, USDA and the Department of Energy; entrepreneurs from aquaponics farms and energy companies; and practitioners and academics focusing on food, energy and water challenges in developing nations. Please feel free to contact the instructor with any questions!

About the instructor:

Dr. Sklarew's 25-year career in energy and environmental policymaking and analysis informs her research and energy policy courses. She designed and has taught EVPP 533, Energy Policy, since 2014. Her published and funded work examines how institutional relationships and catastrophic events drive energy, environmental, and climate policymaking and change. Specific areas of focus include sustainability and resilience challenges in the energy-water nexus, as well as solutions that leverage energy-water interdependencies. Dr. Sklarew also currently leads a project to design, build and deploy hydropower micro-turbines on Mason's Fairfax campus to analyze the technological, ecological, geographical, socio-economic and institutional challenges to turbine deployment. Her faculty-student team will use this data to develop a toolkit of potential solutions and lessons learned, to which they will add as they conduct additional pilots in overseas communities facing severe energy and water insecurity. Dr. Sklarew's published work appears in *Energy Research & Social Science*, *Renewable Energy Law and Policy Review*, *Foresight and STI Governance* *The CIP Report*, and *The Washington Post*. Forthcoming publications include a book chapter on institutional roles in the Flint water crisis.