

ROUNDTABLE ON SCIENCE AND TECHNOLOGY FOR SUSTAINABILITY

**Workshop on Deploying Sustainable Energy during Transition:
Implications of Recovery, Renewable, and Rebuilding**

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Deploying Sustainable Energy during Transition Context and Issues

- The severity of recent extreme events is necessitating **rebuilding at a massive scale** in Houston, Puerto Rico, the Virgin Islands, California, and elsewhere.
- Internationally, Haiti and Christchurch earthquakes destroyed cities and have led to **massive rebuilding efforts**.
- Urban leaders and planners are increasingly recognizing the **potential of renewable energy sources** for their rebuilding plans.



Deploying Sustainable Energy during Transition Context and Issues (cont.)

- However, **social science, economics, and engineering challenges** have limited the deployment of sustainable energy systems in these environments.
- Engagement by **private citizens and industry** plays a key role in these transitions.
- At the same time, a number of **municipalities and businesses** are developing plans for deploying sustainable energy systems as part of their long-term planning and policies.
- These efforts have their own challenges, both **technical and socio-economic**.



Key issues to be discussed today

- What are the **engineering and social science barriers** to acceptance of large-scale sustainable energy deployment under different circumstances?
- How can an affected area **optimize resources across a system** instead of optimizing each sector independently (e.g., energy, housing, transportation, water, and food)?
- **What additional research is needed** to better understand the potential and limitations of deployment?

Structure of the Day

- **Framing Remarks:** Gary Machlis, Clemson University
- **Session I:** The Role of Sustainable Energy Sources in Post-Disaster Response/Renewal
- **Session II:** The Role of Sustainable Energy Sources for Transition Planning: Anticipatory Approach
- **Session III:** Connecting Knowledge to Action: Deploying Sustainable Energy Systems in Transition
- **Discussion on Research Needs and Next Steps**

