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**