



## **EU-US Transatlantic Research and Debate Program**

### **Report on Transatlantic Collaboration on Renewable Energy**

#### **Policymaker Summary**

As a component of comprehensive energy needs, renewable energy is increasingly critical to global climate change mitigation, energy security, and economic development. Climate change goals, in particular, require transition to a global renewable energy platform, coupled with vast improvements in energy and resource efficiency. In recent years, the European Union and the United States, have experienced significant penetration of renewable electricity market technologies for both on-grid and off-grid systems.

At the same time significant barriers exist in the areas of cost, investment, and technology in both regions. Solutions are more likely to be developed and implemented with enhanced collaboration at the national/regional, state/Member State, and local levels in the European Union and the United States. This includes greater peer learning, information exchange, and technical assistance to enable high-priority policy and mechanism development and implementation. New collaboration needs to collapse the barriers of time and distance, focus on the highest priority policies and measures, and dramatically reduce information and experience gaps.

This report, funded by the European Union Delegation to the United States and The Marisla Foundation in the context of the EU-US Transatlantic Research and Debate Program, examines current high-priority challenges and barrier removal policies and measures in the renewable energy sector for further collaboration between all levels of government in the European Union and the United States. It provides recommendations for the development of future enhanced collaboration mechanisms that are specifically designed to accelerate and expand market penetration of central and distributed renewable electricity generation technologies. In the process, the report reviews important aspects of commonality and differences between the European Union and the United States on clean energy issues and identifies lessons learned to guide future development and deployment of response actions. This includes experience with specific economic and policy instruments that have been tested in the clean energy sectors under variety of conditions and locations in both regions. It reviews current high-priority challenges for transatlantic cooperation and identifies improvement areas for future

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development. The report is intended to expand collaboration and capacity for policymakers as well as private partners in both regions.

## **Key findings**

### EU-US Common grounds

1. Both the European Union and the United States have strong new climate change and clean energy goals at the regional/national, and subnational levels that will require greater levels of renewable energy market penetration.
2. Both regions have high levels of diversity across individual subnational and national jurisdictions in the areas of energy costs and prices, economic structure, energy systems, renewable energy growth, and implementation capacities.
3. In both regions renewable energy has a strong track record and high potential for economic recovery and stimulus, and for diversifying energy sources and reducing potential conflicts and energy security concerns.
4. Both regions have experienced significant levels of economic hardship that have impacted the selection and success of policy, technology, and investment mechanisms to implement expanded renewable energy programs.
5. Both regions face similar significant barriers to renewable energy market penetration in terms of cost, investment and technologies.

### EU and US Policy responses to overcome RE barriers

6. Numerous strategies for the control of both “hard” and “soft” costs of renewable energy have been tested in Europe and the United States with significant success and future potential.
7. New approaches for clean energy investments are emerging and indicate significant potential for alternatives to supplement or replace conventional financing and support scale up.
8. On and off grid electric systems require significant evolution of technology. Institutional changes will vary depending on the type and scale of technology deployed.

### EU-US Collaboration to overcome RE barriers

9. Rapid access to best available information and technical systems, as well as real time technical assistance and strategically focused transatlantic transfers are major barriers for national and subnational adoption of renewable energy programs.
10. Problem–focused and goal-oriented cooperation supported by virtual mechanisms will collapse barriers associated with time, space, information, and assistance to enable critical exchange, learning and assistance between the European Union and the United States, and to ultimately expand access to renewable energy barrier reduction strategies and support.
11. Immediate opportunities exist for improved transatlantic cooperation. However, governments are likely to be limited in their ability to upgrade collaboration at the speed and scale needed to match market penetration needs, and require third party support.
12. Transatlantic cooperation can be linked to support for other regions including Asia, Africa, and South America for greater benefits.

## Key Recommendations

1. Current transatlantic cooperation mechanisms should be enhanced to meet new goals and methods, and new mechanisms should be developed as needed.
2. Enhancements should focus on:
  - i. outcome-oriented collaboration on mutually supportive actions to remove cost, investment and technology barriers; and
  - ii. virtual mechanisms for thought leadership, peer learning, and technical assistance to collapse time, distance, information, and assistance barriers and accelerate response actions.
3. Enhanced transatlantic collaboration should include state and local level counterparts from the EU and US, in addition to national and regional counterparts, and private sector.
4. Enhanced cooperation between the EU and US should be opened to regional collaboration in Asia, Africa, Central and South America, and other regions.
5. Third party partnerships should be established to facilitate enhancements to cooperation and support to governments, including exchange and assistance.

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