

# Progress/Status of Current EGNRET Projects

March 1, 2011 13:30-14:00

## EGNRET Ongoing Projects

- Addressing Grid-interconnection Issues in Order to Maximize the Utilization of New and Renewable Energy Sources (EWG 02/2009)
- Using Smart Grids to Enhance the Use of Energy Efficiency and Renewable Energy Technologies (EWG 01/2009S)



Asia-Pacific  
Economic Cooperation

**EGNRET**

**EGNRET 36** *Washington, DC 28 February - 4 March, 2011*

## ■ Addressing Grid-Interconnection Issues in order to Maximize the Utilization of New and Renewable Energy Sources (EWG 02/2009)

- This Japan-led project is examining the grid-interconnection issues associated with large penetration levels of renewable energy.
- The objective of this project is to identify and summarize research that is being undertaken or solutions that have already been identified regarding issues that limit the amount of new and renewable energy that can be grid-interconnected, including a focus on energy storage solutions.
- A one day workshop for the project was held at EGNRET 35 on October 12, 2010. presentations are available at <http://www.egnret.ewg.apec.org/workshops/Grid-interconnection/index.html>

# Current EGNRET Projects



## ■ Using Smart Grids to Enhance the Use of Energy Efficiency and Renewable Energy Technologies (EWG 01/2009S)

- This US self-funded project will examine the status and potential within APEC economies of smart grid technologies to enhance the use of renewable energy and energy efficient buildings, appliances and equipment.
- A detailed survey will be sent out and the results are being analyzed.
- A follow-up on workshop will take place to examine the findings of the study and lay a path forward for future progress in these areas.
- The project is on time, and should be completed by March 2011.

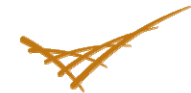
# U.S. EGNRET 2009-2010 Projects

Cary Bloyd

EGNRET-36

Washington D.C., USA

February 28-March 2, 2011



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# USA Project: Using Smart Grids to Enhance Use of Energy Efficiency and Renewable Energy Technologies (EWG 01/2009S)

- ▶ This US self-funded project will examine the status and potential within APEC economies of smart grid technologies to enhance the use of renewable energy and energy efficient buildings, appliances and equipment
- ▶ A detailed survey was sent out and the results are being analyzed
- ▶ The project is on time, and should be completed by March 2011
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# The project survey was completed by 16 economies

- ▶ The survey is comprised of five sections:
  - The *Baseline* section is oriented to familiarity of all concerned parties (customers, utilities, and policy makers) with the smart grid concept, technologies, and applications.
  - The *Standards*, *Institutional*, and *Policy/Regulatory* sections are to identify issues relevant to these three domains.
  - The *Other* section asks if the respondent can specify issues not addressed by a survey question and for other information that might be helpful in developing the status and recommendations.



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# Survey results points to the importance of communicating smart grid benefits

- ▶ All economies included in the survey indicate that customers have either no familiarity with Smart Grid, or it is familiar to only a minority of customers
- ▶ Over a third of the economies indicate that 75-100% of policy makers and utility providers are now aware of Smart Grid
- ▶ Awareness is hampered by a common definition
- ▶ To the extent that smart grid technologies are perceived to reduce the need for new supply resources, customer receptivity is improved, as many generation projects face public opposition.



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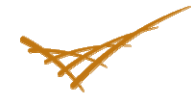
# Review of Past EGNRET Projects

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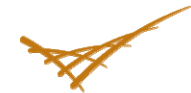
A review of all EGNRET projects was recently provided by the EWG

The report "Overview of APEC Energy Working Group Projects" identifies and categorizes 250 EWG projects conducted since 1992

[http://www.egnret.ewg.apec.org/news/07\\_emm8\\_017\\_EWG\\_Projects\\_Overview20070711154700.pdf](http://www.egnret.ewg.apec.org/news/07_emm8_017_EWG_Projects_Overview20070711154700.pdf)

## Recent EGNERT projects (1)

- ▶ APEC 21<sup>st</sup> Century Renewable Energy Development Initiative (Collaborative VI): Successful Business Models for New and Renewable Energy Technology implementation in APEC Economies (New Zealand)
- ▶ APEC 21<sup>st</sup> Century Renewable Energy Development Initiative (Collaborative VI): Best Practices in New and Renewable Energy Technologies in Urban Areas in the APEC Region (USA)
- ▶ APEC 21<sup>st</sup> Century Renewable Energy Development Initiative (Collaborative IX): Workshop and Report on Implications of Bio-refineries for Energy and Trade in the APEC Region (Chinese Taipei)



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## Recent EGNERT projects (2)

- ▶ APEC 21<sup>st</sup> Century Renewable Energy Development Initiative (Collaborative I): Workshop on Best Practices in Energy Efficiency and Renewable Energy in Commercial Buildings (Mexico)
- ▶ APEC 21<sup>st</sup> Century Renewable Energy Development Initiative (Collaborative VIII): Workshop on Recent Advances in Utility Based Financial Mechanisms that Support Renewable Energy and Energy Efficiency (USA)
- ▶ APEC 21<sup>st</sup> Century Renewable Energy Development Initiative (Collaborative IX): Alternative Transport Fuels – Implementation (New Zealand)

## Recent EGNERT projects (3)

- ▶ APEC 21st Century Renewable Energy Development Initiative (Collaborative V I) Renewable Energy Products Database: Paving the Way for Deployment of Renewable Energy (USA)
- ▶ International Biofuels Conference 2007, Japan, Self-funded
- ▶ APEC 21<sup>st</sup> Century Renewable Energy Development Initiative (Collaborative IX): Establishment of the Guidelines for the Development of Biodiesel Standards in the APEC Region (Thailand)

## Recent EGNERT projects (4)

- ▶ APEC 21st Century Renewable Energy Development Initiative (Collaborative VIII) Local Banks Training Program for Financing Energy Efficiency and Renewable Energy Projects (Mexico)
- ▶ APEC 21st Century Renewable Energy Development Initiative (Collaborative V I) Evaluation of the Role of Village Power Applications in Response to the Tsunami Recovery Effort (Thailand)
- ▶ APEC 21st Century Renewable Energy Development Initiative (Collaborative VIII) Information Sharing on Financing Public Sector Energy Efficiency and Renewable Energy Projects (USA)



## Recent EGNERT projects (5)

- ▶ APEC 21<sup>st</sup> Century Renewable Energy Initiative (Collaborative III: Development and Implementation of a System for Accrediting Renewable Energy Training (Australia))
- ▶ APEC 21<sup>st</sup> Century Renewable Energy Development Initiative (Collaborative VI): Development of a Sourcebook of Hydrogen Codes and Standards for APEC Member (USA)
- ▶ APEC 21<sup>st</sup> Century Renewable Energy Development Initiative (Collaborative IV): Adoption of Renewable Energy Standards Phase II– Final Groundwork (USA)