

APERC's Future Research Activities

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Outline

- The Big Picture: The Role of APERC's Research
- Outlook 6th Edition: What Should Be Included?



The Big Picture: The Role of APERC's Research



Some Historical Background

- Prior to 2009, APERC's primary focus was on research
 - In addition to the *Outlook* (3 editions by then) and *Overview*,
 APERC produced a series of one-off research reports on various topics
- In 2008, APERC was asked to coordinate the first Peer Review of Energy Efficiency (PREE) for New Zealand
 - This was the first of APERC's cooperative projects
 - Feedback was good, and ministers soon instructed APERC to coordinate more PREE's, as well as a variety of other cooperative efforts
 - These cooperative efforts have been well-regarded by participants, as evidenced by the high rankings they have consistently received in the EWG's funding priority polls



So What Became of APERC's Research?

- In 2009, APERC made a conscious decision that we should focus more on cooperative projects, rather than research reports
 - We felt that APEC economies needed one-on-one real-world advice on improving energy efficiency and promoting low-carbon energy much more than they needed research reports
 - Evidence that APERC's research was having an impact on realworld decisions was lacking
 - Because APERC researchers are generally recruited through economy governments, they tend to be well-qualified to work directly with economy government officials. On the other hand, APERC researchers with the skills needed to do cutting-edge research have been unusual.



The Research That Continued

- The Past: APEC Energy Statistics (actually IEEJ/EDMC)
- The Present: APEC Energy Overview
- The Future: Outlook, our flagship research project
- Compendium of Energy Efficiency Policies of APEC Economies
- Research in support of cooperative projects, especially CEEDS:
 - Building and appliance energy efficiency standards
 - Better urban planning
 - ESCO's
- Research in support of EWG decision making:
 - APEC energy intensity improvement goal
 - Pathways report dealing with meeting climate change challenges



The Outlook 5th Edition

- Business-as-Usual (BAU) case provides objective and detailed look-ahead at where each economy's current policies are likely to lead
- In addition, the *Outlook 5th Edition* went beyond previous *Outlooks* in the extent of its original research
 - Alternative cases provided some cutting-edge ideas for improvement: high-gas scenario, virtual clean car race, further work on urban planning
 - Well-organized compilation of other APERC research findings:
 APEC energy intensity target, building and appliance energy efficiency standards, climate change



The Big Picture: Summary

- How can APERC best leverage its (limited) resources to produce value for APEC economies?
 - Continue emphasis on cooperative projects, but focus resources where returns are highest
 - Continue APERC's regular publications: Outlook, Overview, APEC Energy Statistics, and Compendium
 - Use Outlook as a vehicle to introduce some new ideas into APEC's thinking



Outlook 6th Edition: What Should Be Included?



The Outlook Challenge

- APERC is not the only organization that publishes an international energy outlook; others include IEA, USEIA, IEEJ, ASEAN, ADB, OPEC, oil companies (Exxon, BP), more
- The key findings and BAU projections of these outlooks tend to be very similar
- If APERC is going to continue to do an Outlook, how can it have value in this environment?



What Can Be Unique About APERC's Outlook?

- 1. Can give more detailed attention to specific APEC economies, especially the smaller ones
- 2. Can focus on APEC-specific topics (energy intensity improvements, fossil-fuel subsidy rationalization, APEC regional trade)
- 3. Can have something original to say (5th Edition addressed opportunities in urban planning, alternative vehicles including hyper-cars, and removing barriers to natural gas, 'sidebars')



What Are Some Original Topics the Outlook 6th Edition Might Address?

- Opportunities in distributed combined heat and power (co-generation)
- Opportunities in electricity trade in the APEC region
- Opportunities in geothermal energy
- Opportunities in telecommuting
- Opportunities in new approaches to climate change agreements
- Other ideas?



Closing Thought: Tapping Our Researcher's Talents

- APERC researchers come to us from a number of economies, and have varied backgrounds
- To make the *Outlook* richer, and to provide a richer experience for our researchers, we want to make sure our researchers have an opportunity to follow-up on their interests
- So we will seek their suggestions for topics that they wish to investigate. Examples from the 5th Edition, sidebars:
 - "Industrial Energy Intensity, China and the United States"
 - "Improving Energy Efficiency with Residential Fuel Cells"
 - "Improving the Efficiency of Coal-Fired Electricity Generation"



Questions and Discussion