



PACIFIC
ENERGY SUMMIT

Innovative Generation: Powering a Prosperous Asia

Melia Hotel • Hanoi, Vietnam • March 20–22, 2012

AGENDA OVERVIEW

Tuesday, March 20

17:30–18:30	Opening Reception	FOYER (Level 7)
18:30–21:00	DINNER DISCUSSION	What Is at Stake? Finding the Path to Economic and Environmental Security THANG LONG BALLROOM (Level 7)

Wednesday, March 21

07:30	Registration Opens	FOYER (Level 7)
08:30–10:30	SESSION ONE	The Energy Mix: Mapping the Next Generation of Power Supplies THANG LONG BALLROOM (Level 7)
11:00–12:30	SESSION TWO	Designing Efficient and Flexible Domestic Power Markets THANG LONG BALLROOM (Level 7)
12:45–14:00	LUNCH	Efficiency and Integration: The Advantages of Regional Cooperation GRAND BALLROOM Section 3 (Level 1)
14:15–15:30	ROUNDTABLE 1	Energizing Vietnam's Growth: Clearing the Path Ahead THANG LONG BALLROOM Roundtable Area (Level 7)
	ROUNDTABLE 2	Nuclear Power in Asia: Post-Fukushima FUNCTION ROOM 7 (Level 2)
16:00–17:30	SESSION THREE	Electricity for All: Expanding Access to Boost Economic Development THANG LONG BALLROOM (Level 7)
17:30–20:00	Evening Reception	FOYER (Level 7)

Thursday, March 22

07:30	Registration Opens	FOYER (Level 7)
08:00–09:15	MORNING COFFEE	Renewable Energy Sources: The Tipping Point THANG LONG BALLROOM Roundtable Area (Level 7)
09:30–11:00	SESSION FOUR	Starting Up, Scaling Up: Financing Infrastructure THANG LONG BALLROOM (Level 7)
11:15–12:30	ROUNDTABLE 3	Testing the Waters: Assessing the Impact of Hydroelectric Projects FUNCTION ROOM 3 (Level 2)
	ROUNDTABLE 4	Unlocking the Potential of Natural Gas in Power Generation FUNCTION ROOM 7 (Level 2)
	ROUNDTABLE 5	Can Technology Transform Coal? THANG LONG BALLROOM Roundtable Area (Level 7)
12:45–14:00	LUNCH	Defining New Prospects: A View from Vietnamese Industry GRAND BALLROOM Section 3 (Level 1)
14:15–15:45	SESSION FIVE	Utilizing Innovation: Realizing the Potential of New Technology THANG LONG BALLROOM (Level 7)
16:15–17:30	CLOSING SESSION	Roundtable Reports Powering a Growing Asia: Policy Options THANG LONG BALLROOM (Level 7)



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Tuesday, March 20

17:30–18:30 **Opening Reception**

FOYER

Level 7

18:30–21:00 DINNER DISCUSSION

**THANG LONG
BALLROOM**

Level 7

*Dress code for
the opening
reception
and dinner
program is
professional
business attire
or national
dress.*

***What Is at Stake?
Finding the Path to Economic and Environmental Security***

The opening dinner will introduce the topics to be discussed at this year's Pacific Energy Summit. The Asia-Pacific is the most economically dynamic region in the world, boasting astonishing growth figures of nearly 7% in 2011. To keep pace, the power sector must shift into high gear. Adequate electricity supplies are fundamental for every sector and to ensure Asia's growing prosperity. Though vital to improving living standards and furthering development goals, power generation is also the source of 42% of global energy-related carbon emissions. Preserving a livable and secure environment, while meeting economic and social goals, requires commitment, leadership, and the confidence to explore innovative and collaborative solutions. The steps taken today will have a lasting impact on the economy, environment, and energy markets for decades to come.

Welcome: DANG Dinh Quy
Diplomatic Academy of Vietnam

Dennis C. BLAIR
Board of Directors, The National Bureau of Asian Research

Keynote: HOANG Quoc Vuong
Ministry of Industry and Trade, Vietnam

Moderator: Tatsuo MASUDA
*Nagoya University of Commerce and Business, Japan
Japan Petroleum Exploration Company*

Discussant: Robert D. HORMATS
Department of State, United States

This session will have simultaneous translation between Vietnamese and English.

07:30 **Registration Opens**

FOYER
Level 7

08:30–10:30 **SESSION ONE**

**THANG LONG
BALLROOM**
Level 7

Welcome: DANG Dinh Quy
Diplomatic Academy of Vietnam

Dennis C. BLAIR
Board of Directors, The National Bureau of Asian Research

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Fueling Asia's Future with Energy Partnerships

Remarks: Melody MEYER
Chevron Asia Pacific Exploration and Production

The Energy Mix: Mapping the Next Generation of Power Supplies

Power is the foundation for economic growth and improving living standards. Policymakers face a wide array of fuel choices at various price points—each with varying environmental impacts and infrastructure requirements. This session will examine the role of each energy source in meeting Asia's rising power demand. Considering the regional short-term and long-term supply and demand forecasts for energy and power, where will resources come from, and what actions can we take to address the negative environmental effects of rapid energy consumption?

- What is the outlook for energy supply and demand? What key issues should policymakers consider when forecasting future prices for core commodities?
- What are the regional power needs for the next 10–20 years? Given the region's current energy balance, what will we need to do to meet these future requirements?
- How much consideration should be given to energy diversity?
- What are some of the infrastructure, environmental, and relative price factors that should be taken into account when choosing power-generation sources? How can policymakers promote low-carbon conventional power plants?

Moderator: Mikkal HERBERG
The National Bureau of Asian Research

Panelists: Ken KOYAMA
The Institute of Energy Economics, Japan

NGUYEN Thi Hong Lien
Vietnam Electricity (EVN)

This session will have simultaneous translation between Vietnamese and English.

10:30–11:00 **Coffee Break**

11:00–12:30 SESSION TWO

**THANG LONG
BALLROOM**
Level 7

Designing Efficient and Flexible Domestic Power Markets

Market design mechanisms offer large gains in efficiency, reliability, and economic development, especially in promoting investment. Other potential gains include the ability to maintain cost-reflective prices, to open the field to multiple players, to support power trading and power exchange, and to implement demand-management tools. As we examine how to maximize electricity production, while managing energy consumption and environmental impacts, the following questions come to the fore:

- What are the pros and cons of various examples of market reform and market design? Where can we find different models of success?
- What are policy options for countries seeking a smooth transition away from inefficient pricing mechanisms and blanket subsidies?
- How can policymakers and regulators facilitate greater efficiency in production and consumption?

Moderator: Charles EBINGER
Brookings Institution

Panelists: Emma COCHRANE
ExxonMobil Gas and Power Marketing

Donald HERTZMARK
DMP Resources

Mark HUTCHINSON
IHS Cambridge Energy Research Associates (CERA)

Kwang-In KIM
Korea Power Exchange

This session will have simultaneous translation between Vietnamese and English.

12:45–14:00 LUNCH

**GRAND
BALLROOM**
Section 3
Level 1

Efficiency and Integration: The Advantages of Regional Cooperation

Increasing intraregional trade of power and fuel could help balance electricity supply and demand, increase reliability of supplies, reduce costs, and optimize the use of the region's resources and infrastructure. Expert speakers will discuss positive models for enhanced regional cooperation to support the exchange of ideas, energy, and electrons within the context of overall economic integration and energy security.

Moderator: Dennis C. BLAIR
Board of Directors, The National Bureau of Asian Research

Panelists: Srinivasan PADMANABAN
United States Agency for International Development, India

Amnuay THONGSATHITYA
Ministry of Energy, Thailand

This session will have simultaneous translation between Vietnamese and English.

14:15–15:30 ROUNDTABLE WORKSHOPS

These concurrent workshops provide participants the opportunity to break into small groups to join an in-depth roundtable discussion.

Roundtable 1

THANG LONG
BALLROOM
Roundtable
Area
Level 7

Energizing Vietnam's Growth: Clearing the Path Ahead

Vietnam's economic growth rate of 7%–8% per year translates to an increase in electricity demand of 14%–15%. While the energy sector is turning to a range of power sources to meet this demand, more private investment is necessary. In the transition to a competitive generation market (CGM), Vietnam must manage the short-term economic impacts on the market winners and losers, in addition to the challenges of rising inflation. With a focus on Vietnam's current power market and potential future reforms, experts will identify how stakeholders can partner to meet Vietnam's rising electricity needs, with additional consideration given to:

- How is the Government of Vietnam facilitating the country's CGM transition, and what is the private sector's role in this transition?
- What were the lessons learned from the Sixth Power Development Plan (PDP), and how did it help shape the Seventh PDP?
- What are some good examples for how to incorporate energy efficiency, environmental/climate change issues (both mitigation and adaptation), and demand management in the planning process?
- How do domestic and international developers evaluate risk before undertaking projects? What assurances are investors looking for prior to investing?

Moderator: Anthony JUDE
Asian Development Bank

Panelists: NGUYEN Anh Tuan
Institute of Energy

 NGUYEN Van Vy
Office of the Prime Minister, Vietnam

 Hank TOMLINSON
Chevron Vietnam

This session will have simultaneous translation between Vietnamese and English.

Roundtable 2

FUNCTION
ROOM 7
Level 2

Nuclear Power in Asia: Post-Fukushima

The March 2011 Fukushima nuclear disaster reopened the debate about the safe use of nuclear power. Many countries are moving ahead with nuclear energy development in consideration of climate change concerns and potential shortages in traditional energy supplies. Among other factors, public concern about safety may determine the role nuclear that power will play in meeting energy demand and climate change goals. A series of fundamental questions underpin any discussion of the future of nuclear power development:

- What lessons have we learned from the Fukushima nuclear disaster? What did it teach us about managing different risks?
- What are the key determinants for the future outlook of the nuclear energy industry? Will nuclear energy be able to compete with other energy sources?
- Who are the key actors in the effort to inform public perception of nuclear power?
- How do we develop and implement solid legal and regulatory structures, meet financing and investment needs, and fulfill human resource requirements?

Moderator: Charles EBINGER
Brookings Institution

Panelists: Hooman PEIMANI
Energy Studies Institute

PHAN Minh Tuan
Vietnam Electricity (EVN)

15:30–16:00

Afternoon Break

FOYER
Level 7

16:00–17:30 SESSION THREE

**THANG LONG
BALLROOM**
Level 7

Electricity for All: Expanding Access to Boost Economic Development

Access to electricity is central to expanding economic development and improving the quality of life for the nearly 700 million people in the region who are without it. Accurate assessments of the potential social and economic benefits of improved access would help better promote policies that increase the availability of electricity for economically productive activities in both rural and urban areas.

- What are some examples of successful policies that have allowed countries to overcome the challenges of rural electrification and provide access in unplanned urban areas?
- Are there examples of rural electrification programs that do not require ongoing subsidies?
- For countries with different regulatory agencies for urban and rural areas, how can policymakers facilitate information-sharing and integrated policies toward improving electricity access?

Moderator: Pil-Bae SONG
Asian Development Bank

Introducers: Jose Rene D. ALMENDRAS
Department of Energy, Philippines

HOANG Quoc Vuong
Ministry of Industry and Trade, Vietnam

Panelists: Edith BUENO
National Electrification Administration, Philippines

Daniel WADDLE
National Rural Electrification Cooperative Association International

Fuqiang YANG
Natural Resources Defense Council (NRDC)

This session will have simultaneous translation between Vietnamese and English.

17:30–20:00 **Evening Reception**

FOYER
Level 7

07:30 **Registration Opens**

FOYER
Level 7

08:00–09:15 MORNING COFFEE

**THANG LONG
BALLROOM
Roundtable
Area**
Level 7

Renewable Energy Sources: The Tipping Point

Significant progress has been made recently in developing renewable energy technologies, as well as in lowering their costs. Recognizing the need to reduce carbon emissions and to meet a rising energy demand, these growing industries could represent an important portion of energy portfolios if they can compete with other fuel sources. Renewable energy is also an area with enormous potential for international collaboration. Experts will discuss the future of renewable energy sources and technologies.

- What is the outlook for wind, solar, and other renewables to become reliable and cost-competitive sources of energy while costs continue to decline?
- What role, if any, should governments play in supporting the development of renewable energy sources?

Moderator: Letha TAWNEY
World Resources Institute

Panelists: Young Chang KIM
Ajou University; International Atomic Energy Agency

Oliver MASSMANN
Duane Morris Vietnam LLC

Manoj VOHRA
Economist Intelligence Unit

Phyllis YOSHIDA
Department of Energy, United States

09:30–11:00 SESSION FOUR

**THANG LONG
BALLROOM**
Level 7

Starting Up, Scaling Up: Financing Infrastructure

Investment in infrastructure is critical to meeting current and future electricity demand. Energy analysts predict that by 2025 an investment of more than \$10 trillion will be needed for electricity generation just to sustain current production levels. An additional \$10–12 trillion will be necessary to meet primary energy demand growth, translating into a cost of nearly \$1.5 trillion per year through 2025. Due to high start-up costs and the long-term planning required for energy infrastructure, choices made now will have an impact for years to come. Key issues arise as we delve into policy frameworks to develop financing for electricity and energy infrastructure:

- How can we promote infrastructure improvements to increase energy supplies to meet current and future power needs?
- How can policymakers accurately assess which financing models are the most effective and should be adopted to further development goals?
- How can we incentivize further development and eliminate obstacles to investment, including in new technologies such as distributed generation?
- What are some successful examples of public-private partnerships in the power-generation sector, and how can both policymakers and private companies work together to emulate their success?

Moderator: Fung Lin LEUNG
Fulbright & Jaworski LLP

Panelists: Hideo NAITO
Japan Bank for International Cooperation

Agung WICAKSONO
*President's Delivery Unit for Development Monitoring and Oversight,
Indonesia*

This session will have simultaneous translation between Vietnamese and English.

11:00–11:15 **Coffee Break**

11:15–12:30 ROUNDTABLE WORKSHOPS

Roundtable 3

FUNCTION
ROOM 3
Level 2

Testing the Waters: Assessing the Impact of Hydroelectric Projects

River basins in the region are economically, environmentally, and socially valuable. Governments that prioritize hydroelectric projects in economic, energy, and poverty-alleviation strategy also need to assess the social and environmental consequences of dams.

- What lessons can we draw from successful hydroelectric projects like Nam Theun II and Theun Hinbourn? What do these examples tell us about community engagement?
- How can policymakers and developers evaluate the relative environmental, social, and economic impacts of hydroelectricity?
- How can researchers, governments, industries, and NGOs work together to monitor hydroelectric activities and measure impacts on river basins such as the Mekong River?

Moderator: Anthony JUDE
Asian Development Bank

Panelists: Franz GERNER
The World Bank

Victor JONA
Ministry of Industry, Mines and Energy, Cambodia

PHAM Quang Tu
Consultancy on Development

Viraphonh VIRAVONG
Ministry of Energy and Mines, Laos

Roundtable 4

FUNCTION
ROOM 7
Level 2

Unlocking the Potential of Natural Gas in Power Generation

Building on the 2011 Pacific Energy Summit theme, “Unlocking the Potential of Natural Gas in the Asia-Pacific,” we will examine key threads that emerged from discussions at the 2011 Summit. Natural gas is abundant and significantly cleaner-burning than other fossil fuels. Moreover, the versatility of gas-fired power plants allows for greater integration of renewable energy into the grid. Yet infrastructure is also more expensive, and the right investment climate is thus essential. We will in this session ask experts to assess the prospects of “the Golden Age of Gas.”

- What prevents us from incorporating more natural gas into the fuel mix for power generation, and what actions are needed to address these challenges?
- What types of policies would encourage the use of gas for power generation?
- How can natural gas support increased use of renewable energy sources?

Moderator: Mikkal HERBERG
The National Bureau of Asian Research

Panelists: Kwon-Hong RYU
Wonkwang University School of Law

Chi ZHANG
British Petroleum

Roundtable 5

THANG LONG
BALLROOM
Roundtable
Area
Level 7

Can Technology Transform Coal?

Asia accounts for about two-thirds of the world's coal consumption, and China and India alone are expected to account for 80% of the increase in global coal consumption in the next 25 years. 80% of that coal will be used to generate electricity. While coal is often regarded as a "cheap" and "dirty" fuel, escalating demand for this readily available fuel source and new technologies that reduce coal's carbon footprint challenge both of these assumptions. A panel of experts will assess trends in regional coal markets and policy tools for promoting smart coal extraction and consumption through the effective use of technology:

- How can technology help resolve the tension that exists between the desire to develop and use coal as an inexpensive and available energy source and concerns about its negative environmental impacts?
- Can technologies such as carbon capture and sequestration be truly cost effective?
- Will underground coal gasification be an economic and environmental game-changer?
- Is there an opportunity for multilateral institutions and other development organizations to positively impact coal projects in terms of the environmental footprint? How can the new Technology Mechanism under the United Nations Framework Convention on Climate Change help transfer cleaner coal technology to Asia?

Moderator: PHAM Hoang Luong
Hanoi University of Science and Technology

Introducer: TRAN Xuan Hoa
Vietnam National Coal and Mineral Industries Group (Vinacomin)

Panelists: NGUYEN Xuan Thang
GE Energy

Mark THURBER
Stanford University

This session will have simultaneous translation between Vietnamese and English.

Thursday, March 22

12:45–14:00 LUNCH

**GRAND
BALLROOM
Section 3**
Level 1

Defining New Prospects: A View from Vietnamese Industry

Moderator: VU Tu Thanh
US-ASEAN Business Council

Speaker: PHAM Thi Thu Hang
Vietnam Chamber of Commerce and Industry

Respondent: HOANG Tien Dung
Institute of Energy

This session will have simultaneous translation between Vietnamese and English.

14:15–15:45 SESSION FIVE

**THANG LONG
BALLROOM**
Level 7

Utilizing Innovation: Realizing the Potential of New Technology

Early and targeted use of innovation in the power sector can play a vital and growing role in increasing energy supplies, improving power generation efficiency, and reducing the environmental impacts of Asia's rising power demand. Yet optimizing power generation and effectively managing demand require a clear vision of the policies that support the smartest use of technology. Both policymakers and private companies can contribute to fully realizing the potential of new technology and human resources to help solve energy and environmental challenges.

- What systems must be deployed and established to fully realize the potential of new technologies for greater energy efficiency, to reduce environmental impacts, to manage demand, and to develop new energy supplies in the power sector?
- How do we invest to forge a skilled labor force and ensure we have the experts with the technological know-how needed to develop new energy sources and to facilitate the adoption of new technology and energy-efficient behavior?
- How can collaboration and cooperation between government and industry prompt better development and use of new technology?
- How can we find the right balance between the role of government in setting the overall policy goals and objectives, and the role of the market in implementing these in the most efficient manner?

Moderator: Peter HUGHES
Ricardo Strategic Consulting

Panelists: Philip JONES
*Washington Utilities and Transportation Commission
National Association of Regulatory Utility Commissioners, United States*

Young Chang KIM
Ajou University; International Atomic Energy Agency

Ambuj SAGAR
Indian Institute of Technology Delhi

This session will have simultaneous translation between Vietnamese and English.

15:45–16:15 **Afternoon Break**

16:15–17:30 CLOSING SESSION

Roundtable Reports

**THANG LONG
BALLROOM**
Level 7

Powering a Growing Asia: Policy Options

Drawing on the diversity of backgrounds and expertise, participants will join Summit leaders in an exchange of main discussion threads, lessons learned, new insights, and perspectives. Far from the end of the conversation, this is an opportunity for ongoing collaboration and to crystallize partnerships and cooperation toward a shared vision of the reliable, affordable, and environmentally friendly power generation required to sustain the Asia-Pacific's economic growth.

Moderator: Dennis C. BLAIR
Board of Directors, The National Bureau of Asian Research

Closing Remarks: DANG Dinh Quy
Diplomatic Academy of Vietnam

This session will have simultaneous translation between Vietnamese and English.

A NOTE ON THE SUMMIT FORMAT

The Pacific Energy Summit provides an informal setting for leaders to discuss energy challenges, share best practices, and forge new collaborations.

The 2012 Summit will feature plenary sessions that consist of a moderated panel discussion followed by an open dialogue in which all Summit delegates will share their thoughts and questions on how to meet Asia's electricity needs and promote environmental stewardship. The Summit will also feature several roundtable workshops. Workshops will provide participants an opportunity to assemble in small groups for an in-depth roundtable discussion on specific issues raised during Summit sessions. Key outcomes of the roundtable discussions will be shared in the plenary.

To facilitate interactive dialogue, the Pacific Energy Summit does not allow PowerPoint presentations and follows a modified approach to Chatham House Rule. Media is invited to the event; however, no Summit participant is quoted without first giving explicit permission.

Kindly note that all presentations and discussions at the Summit will be conducted in English, with simultaneous translation between Vietnamese and English available for the opening dinner, plenary sessions, and lunch presentations.