EXECUTIVE SUMMARY

The Financing Energy Infrastructure Workshop, an initiative of the EWG Business Network (EBN), was held in recognition that APEC economies face significant challenges in mobilising private capital and international financial resources to fund the estimated $US 3.4 trillion to $US 4.4 trillion in energy infrastructure investments required over the next 20 years.

As a first step towards addressing impediments to investment, this Workshop sought to enhance understanding of future investment needs in the region and facilitate linkages between government officials, financial sector representatives and energy business representatives. In doing so, the Workshop also responded to the direction given by APEC Energy Ministers, at their meeting in July 2002, to “explore mechanisms for working more closely with financial institutions to facilitate infrastructure development within the region”.

The Workshop comprised several presenters and facilitated discussion, drawing on the presentations and expertise of participants to identify several preliminary best practices for financing energy infrastructure. These will be further developed out-of-session and presented to the EWG for their consideration and for reporting to the 6th APEC Energy Ministers’ Meeting in June 2004.
EBN Workshop on Financing Energy Infrastructure
Hong Kong, China, 19 March 2004

WORKSHOP OBJECTIVES AND STRUCTURE

The workshop brought together representatives from government, the private sector and the financial community within the region to discuss key issues regarding the financing of energy infrastructure. Participants were encouraged to identify best practices in energy infrastructure financing and develop recommendations for consideration by the EWG and APEC Energy Ministers.

Mr Alfred Chan, Managing Director, Hong Kong and China Gas

Mr Chan provided the workshop’s opening address, encouraging vibrant discussion and providing participants with his observations on the importance of infrastructure investment and the need to address the environmental impacts of energy production and consumption.

Hong Kong, China needs to borrow money to finance energy infrastructure development although its energy growth rate is limited and its infrastructure is relatively well placed (the Permanent Aviation Fuel Facility is the major energy investment project mooted for the near future). However, Hong Kong, China is on the doorstep of China, an economy which is undergoing immense urbanisation and modernisation and has enormous energy demand growth (5-5.5% per annum). To meet this a diverse energy mix is needed, including from renewable energy sources, and new infrastructure needs to be built, require significant investment.

As such, the workshop is a timely response to the challenges of energy infrastructure investment.

Mr Andrew Lloyd, EBN Chair and Mining Executive, Rio Tinto Australia

Mr Lloyd also referred to China’s enormous economic growth and demand for energy and other natural resources.

China is leading the way in terms of economic growth within the region with other APEC economies following. Energy infrastructure financing is therefore an issue of extreme importance to the region and this workshop is most timely. The workshop, the first to be hosted by the EBN, will also form an important part of international efforts to address a variety of energy-related challenges.

Ms Vicki Brown, EWG Lead Shepherd (representative)

Ms Brown outlined the EWG structure and highlighted that energy infrastructure investment forms a crucial part of efforts to strengthen regional energy security and further sustainable development. She emphasised that outcomes from the workshop will be reported to the EWG and be presented to APEC Energy Ministers for their consideration in June.
1. OVERVIEW OF THE DEMAND FOR AND SUPPLY OF ENERGY INFRASTRUCTURE FINANCE IN APEC

Mr Masaharu Fujitomi, President, Asia Pacific Energy Research Centre (APERC)

Mr Fujitomi outlined key findings from the APERC study, ‘Energy Investment Outlook for the APEC Region’, which was completed in 2003:

• The region is experiencing **significant energy growth** (estimated at 2.1% per annum for the 2000-2020 period). As such, **enormous new investment** in energy infrastructure is required (estimated at US$3.4-4.4 trillion for the same period).

• 49% of new investment is required for the electricity generation and transmission sectors, and 23% for oil and gas production, processing and petrochemicals.

• **China has the largest** investment requirements, representing 29% of the APEC region (US$1.1-1.3 trillion). This is followed by the United States (24%) and Russia (16%).

• The **size of energy investment** varies depending on an economy’s level of economic development, industry structure and living standards. Developing APEC economies require more investment relative to their GDP.

• **Risk is a key barrier** for energy investment, including economic risk (completion, discount-rate, currency, environmental, raw material supply, infrastructure), political/institutional risk (political instability, expropriation), and force majeure.

• Important **investment lessons** can be drawn from the independent power projects previously undertaken within the region.

• In some economies, particularly developing economies, **attracting finance is essential** to ensuring the development of infrastructure projects, and mobilising financial resources has also proved difficult.

• To attract investment, project developers need to appropriately **assess the demand prospect**, and the availability and affordability of infrastructure.

• In addition to the financial viability of energy projects, Governments need to **account for their economic and social benefits**.

**Discussion**

Participants reflected on the presentation and identified a number of key challenges and issues regarding energy infrastructure financing:

• The sheer **scale of investment** that is needed, particularly in emerging economies. This requires a huge amount of capital which is beyond the capacity of governments (and possibly globally) and creates competition between economies;

• **Transaction costs** are high, in part because replication of standardised due diligence is difficult if not impossible;

• The challenge of **sharing risk** in ways that are fair and well-balanced among the parties;

• **Currency valuation** risk;

• **Project capital** issues, for example the need for top/off-take guarantees;

• **Land-use** issues. Can they be circumvented through the provision of tax and other incentives?
• Restructuring debt and its impact on the level of project uncertainty and unpredictability;
• How to make infrastructure investment competitive with other investment options and what government can do to address (eg policy settings);
• How to make projects viable from a commercial and technical sense and to achieve predictable cash flow;
• The dilemma of policy-makers regarding the optimal level of government intervention, particularly as over-subsiding of energy tariffs can kill competition;
• Possible entry into force of the Kyoto Protocol may help drive investment in new and renewable energy infrastructure.

2. ACHIEVING SUSTAINABLE OUTCOMES

Mr Anand Prakash, Managing Director, Asia, FE Clean Energy Group

Mr Prakash outlined FE Clean Energy’s approach to achieving sustainable energy infrastructure.

Mr Prakash noted that sustainable infrastructure is a term that has been used widely and that for FE Clean Energy, the term means energy efficiency, renewable energy and carbon credits.

FE Clean Energy is a fund manager with two private equity funds totalling approximately US$110 million. It is launching a new fund to invest in clean energy in Asia with the aim to invest equity in projects that generate commercial returns and maximise the generation of carbon credits. The fund will be a public-private partnership with committed investors including the Asian Development Bank, Japan Bank for International Cooperation, Mitsubishi Corporation and Chubu Electric. Investors are being motivated to join the fund by the commercial returns of these projects.

FE Clean Energy has found that challenges to implementing energy efficiency and renewable energy projects in emerging markets are commercial and financial, not technology-related. Energy efficiency financing suffers from limited experience with structuring and financing suitable investments (which involve engineers and ESCOs, and lending is typically asset, not cash-flow based), small deal size with high transaction costs (unattractive to financial institutions), credit risk, and a lack of tax and fiscal incentives. Renewable energy financing suffers from an unreliability of renewable resources, small deal size, credit risk, regulatory issues, and the limited availability of capital.

Barriers could be addressed through the following strategies which provide significant opportunities for public-private collaboration:

What fund managers can do:
• Duplicate/bundle small projects.
• Prioritise higher return projects to offset transaction costs.
EBN Workshop on Financing Energy Infrastructure
Hong Kong, China, 19 March 2004

- Identify good credit and credit risks and develop ways to enhance the credit of companies which fail more conventional credit checks.
- Develop credit guarantee facilities.
- Target economies with the most progressive regulatory frameworks and incentives.
- Target international financial institutions and other investors.
- Use government-sponsored and low-interest loans.
- Make available concessionary debt administered through local financial institutions.
- Mobilise pension funds to support market-based private equity investing.

What governments/public sector can do:
- Share risks early through providing matching funds or technical assistance.
- Create grants requiring repayment based upon a pre-negotiated event.
- Develop insurance products that guarantee savings.
- Build the capacity of governments to implement appropriate policies, document and publicise case studies of good practice and lessons learnt.
- Offer fixed rate long-term local currency debt.
- Implement clean development mechanisms.

Discussion

Participants reflected on the presentation and considered whether there were other ways to define sustainable infrastructure and whether there were other issues relevant to facilitating investment.

Participants generally agreed that the definition of sustainable infrastructure includes, but is much broader than, renewable energy and energy efficiency.

Regarding the financing of renewable energy and energy efficiency projects, participants identified a range of challenges and opportunities:
- There is a lack of availability of local funds for renewable energy projects.
- Projects tend to be small with high transaction costs, although costs can be lowered by initiatives such as standardised documentation and subsidisation.
- Does this represent a role for government?
- The viability of renewable energy projects is largely dependent on the renewable source’s price, availability and certainty.
- Carbon credits have the potential to drive energy efficiency projects.
- Grants are needed to assist with upfront costs, investment and site tests.
- Innovative financing mechanisms such those suggested by FE Clean Energy are an effective source of equity funding.
- Bundling projects into special purpose vehicles for debt financing is effective in spreading risk and reducing transaction costs.
3. THE PRIVATE PERSPECTIVE

Mr Vikas Batra, Director, Project and Structured Finance, ANZ Investment Bank

Ms Batra outlined how ANZ Investment Bank, an Australian-based bank that invests in energy infrastructure projects throughout Asia, finances energy infrastructure projects and identified several lessons learnt from their investment experience.

Investors confront a number of key risk areas when seeking to invest in infrastructure projects:

- **Completion/implementation risk** - land acquisition, approval, consents and permits, changes to project specifications, design/technology/process, construction/capital cost overruns and completion delays.

- **Operating risk** - ability to meet project targets and specifications, difficulty in collecting accounts receivable, inability to deliver minimum volumes, non-compliance with minimum standards and environmental requirements, strikes and labour disputes and force majeure.

- **Economic and market risk** - higher or fixed costs, end-user demand for services, end-users ability to pay, competitiveness of rate structure.

- **Financial risk** - inflation, foreign exchange rate and interest rate fluctuations, equity investor return.

- **Political risk** - political instability, expropriation, currency inconvertibility, unstable laws/regulatory environment, inability to implement rate increases.

**Lessons Learnt:**

To address **commercial risk** in infrastructure projects, a number of key lessons have been learnt:

- **Technical risk** - work with proven technology and avoid being an early adopter.

- **Legal risk** - do not assume the “sanctity of contract” as although contracts underpin projects, economics/markets underpin contracts.

- Be aware of natural **force majeure**.

- **Feedstock/off-take** - double down on the “currency bet” if using imported fuel, maximize the use of indigenous energy sources, and avoid take or pay supply contracts, especially when the project output is merchant.

- **Financial risk** - minimise the mismatch between the currency and interest rate.

- **Construction risk** - be careful not to significantly underestimate this risk, including for projects in developed markets.

- **Financial risk** - in many of the countries where concessions have been negotiated the issue is more the ability, not willingness, to pay.

- **Demand forecasts** - more often they are wrong than right so the accuracy and reliability of forecasts remains a key issue. Reserve margins also remain too high in most emerging markets and the cost of maintaining this margin is very high.

- **Sizing the infrastructure** - plants need to be sized to match the load, e.g. building base load capacity for a peaking market is not sensible.
To address political risk in infrastructure projects, a number of key lessons have been learnt and several mitigation techniques are suggested:

• Investment decisions need to be taken carefully as investment can’t be relocated easily (the ‘hostage effect’).
• Limited self-help options are available to investors.
• The commercial viability of projects is paramount.
• Due to the ‘public-good’ requirement of energy infrastructure, it is often difficult to get high economic rent on infrastructure projects.
• Front-end bottlenecks often emerge and need to be managed.
• Projects also face the risk of back-end renegotiation.
• Indirect mitigation techniques include generating government support, seeking treaty protection, co-financing, generating local participation in the project and using offshore accounts.
• Direct mitigation techniques include establishing political risk insurance/guarantees.

In structuring projects that “stand the test of time”, it is proposed that several best practices be adopted. Experience has shown that adopting all or most of these elements results in projects generally performing to expectations or at least minimising losses:

• Adopting transparent and competitive bidding processes – this enables multilateral participation and minimises future re-negotiation risk.
• Establishing an “economic tariff” that is affordable to off-taker.
• Seeking projects that fulfil a real need – better matching of demand and supply.
• Involving multilaterals – although this does not provide iron clad protection, it does help mitigate risk. Using “soft” umbrella B loan structures is also unlikely to be sufficient to lenders moving forward.
• Establishing political risk cover for both equity and debt.

**Mr Brian Little, Executive Director and Regional Head of Project Finance/Structured Debt, Integrated Energy Asia, ABN AMRO PF**

Mr Little outlined how infrastructure project financing can be successfully restructured using the Pt Paiton Energy project as a case study.

ABN AMRO successfully restructured the debt of Pt Paiton Energy, a US$2.7 billion fully completed and commissioned coal-fired base load power plant in Indonesia (the first ‘mega-IPP’). The project has been regarded as the most complex Asian Project Finance restructuring that has been successfully closed to date.

Significant debt restructuring was required as a result of the macroeconomic crisis in Indonesia and its effect on domestic power demand. Under the original structure:
• the original debt profile was not politically defensible;
EBN Workshop on Financing Energy Infrastructure
Hong Kong, China, 19 March 2004

- lenders required certainty in the fuel chain creating an expensive fuel cost;
- the public tariff of PLN was heavily subsidised by the Indonesian government creating a politically sensitive gap with private power tariffs;
- the debt profile was based on demand projections, not actual demand; and
- the mitigation structure was based on legal litigation and not project logic.

Restructuring, which intended to provide a long-term and sustainable structure for all stakeholders, saw:
- the tariff revised to a sustainable and defensible level;
- the burden shared equitably between all stakeholders;
- sponsors agree to accept a lower but reasonable return on their investment;
- USEXIM participate in debt on the condition that they risk-shared with commercial banks;
- consensus and parity among lenders and guarantor/insurers (agencies);
- debt profiles matched to meet amended cash-flow;
- 3rd party claims allowed to be settled; and
- debt and equity exposure not being increased.

The process benefited from being transparent, having communication between equity and debt and a commitment from the sponsors and project to see the process through to a successful conclusion. (It is important to note that insurance was not a factor in the restructuring. Some consider it to be of limited value and it simply creates another risk).

Mr Kyu Bang, Head of M&A, Shinhan Macquarie Financial Advisory Co Ltd (SMFA)

Mr Bang outlined how the Macquarie Bank, Australia’s largest independent full-service investment bank, has approached energy infrastructure financing in the Republic of Korea.

Macquarie Bank provides a full range of investment banking, capital markets and retail financial services. SFMA is Macquarie’s investment banking arm in Korea. It advises on investing in niche markets and is increasingly looking to energy infrastructure. Macquarie has financed several infrastructure projects (eg tunnels, roads), however, the only energy infrastructure project to date has been advising Meiya Power on its acquisition of the Combined Cycle LNG Gas-fired Yulchon power project from Mirant.

Investment in energy infrastructure is a long term proposition so confidence in an economy’s regulatory regime is an essential factor in deciding on whether to invest. Political risk is another key consideration. As governments regulate and have considerations that are broader than commercial, it is important that the regulator has a level of independence.

The current deregulation situation within the Korean energy sector:
- Gas - Korea has one privatised organisation, CityGas, with prices regulated by the Ministry of Commerce, Industry and Energy. The sole importer and distributor of LNG in Korea is the government-owned KOGAS and CityGas’s 32 regional companies are regional monopolies on the downstream side. With its margin
secured and supply cost adjustments calculated annually, any changes in international LNG prices can be passed on to customers

- **Electricity** - generation, transmission and distribution is currently government-owned with delays to proposed privatisation. Several privately-owned IPPs operate and district heating is mostly government-owned.

**Types of financial investors** include:
- **Pure equity** - have strong understanding of project finance and are active in managing the finance and operation;
- **Combined equity and debt** - include large pension funds and life insurance companies, have traditionally participated in syndicated loans for project
  finance and receive returns from equity distributions and debt interest; and
- **Developer investor** - have weak understanding of project finance, rely strongly on government revenue guarantees and obtain returns from dividends.

In terms of what investors require before making an investment:
- **Returns** - an internal rate of return (IRR) of approximately 15% (depending on type of infrastructure), yield of 7-10% and term of 20-30 years.
- **Risk** - generally prepared to accept traffic and interest rate risk. Generally not prepared to accept construction completion risk, construction cost/period overrun risk and operational and maintenance (O&M) risk.

Mr Bang’s presentation [see PowerPoint presentation for more details] also:
- identified the nature and advantages and disadvantages of three sources of debt financing for infrastructure projects in Korea: 1) bank loans (Korean Wan), 2) bonds issue (Korean Wan), and 3) foreign debt;
- described energy infrastructure project financing in new market systems;
- described financing for projects in competitive markets;
- highlighted negative and positive factors for Independent Power Producers (IPPs); and
- ways to facilitate project financing for IPPs in the new market.

**THE PUBLIC PERSPECTIVE**

Mr Koichiro Tsuchiya, Chief Representative, Representative Office in Hong Kong, Japan Bank for International Cooperation (JBIC)

Mr Tsuchiya provided a public project financier’s perspective on financing energy infrastructure.

Key features and structures of a successful deal include:
- Support from host-economy governments through the provision of guarantees to off-take undertakings - enhancing credit risk of the off-taker and facilitating lower interest spread financing;
EBN Workshop on Financing Energy Infrastructure  
Hong Kong, China, 19 March 2004

- Creating an **attractive investment climate** - legal, tax, accounting, tariff, foreign exchange and investment promotion, understanding privatisation and having infrastructure suitable for foreign investment;
- **Market stability** - stable government policies (eg energy market reform);
- **Stable future demand** - consistent and flexible sector development plan; and
- **Stable exchange rates** to minimise the risk of tariff revenue-debt service mismatch.

To facilitate this, host governments should seek to establish stable political systems and sustained economic growth, enhance their investment climate, understand the cost and benefits of privatisation, BOT and BOO projects, support projects throughout their life-time and foster a domestic securities market.

However, current challenges remain, including the mixed record of privatisation, a lack of willingness by governments to provide support, the decreased number of investors from the United States and Europe, and the limited availability of terrorism insurance. Possible solutions include host government efforts to maintain investor confidence, mobilising dialogue between host governments and public institutions (eg World Bank, ADB, JBIC), tailoring risk evaluation and accepting risk, utilising public financial institutions, fostering domestic and financial and capital markets and relevant authorities in the host economy closely collaborating.

Public institutions can play an important role by using their bargaining power to mitigate political risk, catalyse private financing, enhance the investment climate, facilitate the financing process, provide favourable lending tems and promote developed economy business and investment capabilities. This can be achieved by direct lending, B loans, partial credit and partial risk guarantees, political risk insurance, equity contribution and grant and technical assistance (JBIC provides project finance through overseas investment loans and export credits).

**Mr Jo Yamagata, Principal Investment Officer, Infrastructure Finance Division, Private Sector Department, Asian Development Bank (ADB)**

Mr Yamagata highlighted key issues relating to the financing of energy infrastructure and described the types of services the ADB offers, sighting the Bangladesh Meghnaghat Power Project and the Turkmenistan-Afghanistan-Pakistan Natural Gas Pipeline Project.

The ADB provides both public (assist government) and private sector (assist private enterprises without sovereign guarantee) operations under one umbrella. Their energy-related activities seek to “Increase availability and access to energy, particularly for the poor, in a least-cost and clean, environmental-friendly manner” and focus on poverty alleviation, private sector participation, sector reform, environmental impacts (regional and global) and regional cooperation.

As government budgets are limited and official development assistance low, mobilising private sector investment is critical to financing energy infrastructure. To facilitate private sector participation, good governance, transparency and accountability is essential, as is having a sound energy pricing policy, removing
restrictions on ownership and management and technological choices, and integrating environment considerations.

To assist public sector operations, the ADB provides long term loans, financial assistance, political risk and credit guarantees, and co-financing and syndication. Examples of ADB projects include the Bangladesh Meghnaghat Power Project and the Turkmenistan-Afghanistan-Pakistan Natural Gas Pipeline Project.

Discussion

The workshop identified several key enablers to facilitating financing in energy infrastructure:

- Government leadership;
- Certainty of buyers at a price to ensure project viability;
- “Financability” of equity and debt;
- Clear legal and regulatory frameworks and dispute resolution mechanisms;
- Projects that transcend government (ie, withstand changes);
- Honest and reputable judiciary;
- Support from multilateral financial institutions; and
- Confidence in an economy’s future;
- Investment for the future development (eg. education)

Common issues that exist across economies include:

- Currency mismatch and the capacity to manage;
- Tax treaties (eg to avoid double taxing)
- Access to tradable carbon credits to subsidise projects;
- Credit-worthy private sector parties with access to assets;
- Access to the Energy Charter Treaty mechanism;
- Neutral dispute mechanism to support enforcement;
- Cross-border regulatory differences (eg, pipeline and power grid projects);
- Repatriation of capital.

Lessons learnt (‘What not to do’):

- Project sponsor – poor governance, lack of credibility, poor project analysis, reliance on subsidies, failure to obtain local buy-in, inadequate communication with all stakeholders;
- Host economy – overregulation, inconsistency, excessive reliance on other stakeholders, national sensitivity, graft, excessive politicisation, short-term thinking;
- Private debt providers – aversion to all risk, greed, excessive prescription, going outside their brief, time-wasting/delay;
- Local community – failure to acknowledge need for investor to have commercial return, excessive environmental requirements, failure to play their role in supporting project, allow narrow-focused interest groups to hijack agenda;
- Multilateral institutions- buck-passing, excessive bureaucracy, over-politicisation of process, lack of local leadership.

Best practices:

- Host-country commitment to projects;
- Sound economics (eg, affordable tariffs, real demand);
- Credible project sponsors – proven track-record, willingness to share in risk;
- Soundness/viability of project;
• Government assurance to mitigate risk;
• Stable, transparent, consistent and predictable legal and regulatory frameworks;
• Mechanisms to mitigate currency mismatch;
• Technically sound, realistic and reliable projects (eg, not overly ambitious);
• Early dialogue between project sponsors, financiers and host governments;
• Smaller projects may have characteristics that require specific initiatives to encourage economies of scale and reduce transaction costs:
  - standardisation of documentation;
  - project bundling;
  - seed money;
  - technical assistance to catalyse (eg energy audits and other baseline information gathering and analysis);
  - tax incentives (eg favourable depreciation arrangements, waiving import duties).
WORKSHOP SPEAKERS AND PARTICIPANTS

Vikas BATRA, Director, Project and Structured Finance, ANZ Investment Bank
Stuart BENSLEY, Senior Consultant, ResourcesLaw International
Vicki BROWN, Assistant Secretary, International Energy, Department of Industry, Tourism and Resources (ITR)
Joe CHAN, Senior Engineer, Electrical and Mechanical Services Department (EMSD)
Lily CHAN, Vice President, ABN AMRO Bank NV
SH CHAN, Planning Director, CLP Power Hong Kong Ltd
Wing Kin Alfred CHAN, Managing Director, HK and China Gas Co Ltd
Frank CHU, Senior Electrical and Mechanical Engineer, EMSD
Morgan CLARK, General Manager, Commercial Affairs, Unocal Corporation
Larisa DOBRIANSKY, Deputy Assistant Secretary, Department of Energy
Naoko DOI, Senior Researcher, Asia Pacific Energy Research Centre (APERC)
Tom FISHER, Senior Vice-President, Commercial Affairs, Unocal Corporation
Masaharu FUJITOMI, President, APERC
Laura HUDSON, Manager, Federal and International Affairs, Unocal Corporation
Jimmy HUI, Electrical and Mechanical Engineer, EMSD
Yonghun JUNG, Vice-President, APERC
Bang KYU, Head of M&A, Shinhan Macquarie Financial Advisory, Macquarie Bank
Barrie LEAY, Chairman, Ecodyne Limited
Daniel LIEW, Partner, Simmons & Simmons
Man Onn LIM, CEO, Partnership for Equitable Growth
George LING, Chief Engineer/Energy Efficiency, EMSD
Brian LITTLE, Executive Director and Regional Head of Project Finance/Structured Debt, Integrated Energy Asia, ABN AMRO PF
Andrew LLOYD, Mining Executive, Rio Tinto Australia
Juan Ramon MOTA, Team Leader, APERC
David NATUSCH, Managing Director, Resource Development Ltd
Mike NG, Assistant Vice-President, ABN AMRO Bank NV
Anand PRAKASH, Managing Director, FE Clean Energy
Robert PRITCHARD, Senior Partner, ResourcesLaw International
Jesus RODRIGUEZ, Attorney, Beristain, Rodriguez & Associates
Leticia RUIZ, Attorney at Law, Elaisa Internacional
EBN Workshop on Financing Energy Infrastructure
Hong Kong, China, 19 March 2004

Kwong Mian SIM, Senior Vice-President, Singapore Power Ltd
Aidan STORER, Manager, EWG Secretariat, ITR
Xianguo TONG, Director (Program), APEC Secretariat
Koichiro TSUCHIYA, Chief Representative, Representative Office in Hong Kong, Japan Bank for International Cooperation
Joel TU, Senior Policy Officer, EWG Secretariat, ITR
Rosario VENTURINA, Senior Vice-President, Trans-Asia Power Generation Corporation
Roland WILLIAMS, Director, Origin Energy Ltd
Joe YAMAGATA, Principal Investment Officer, Asian Development Bank
Pak-sing YEUNG, World Power Management Consultancy Ltd