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EDITOR'S NOTE

This issue of *ERIA Frames* focuses on energy.

As the community building process of the East Asia region spirals with accelerating speed towards the end of 2015, energy issues—and their accompanying complex challenges—have become more magnified as ever. With increasing energy demand from the countries of ASEAN and the East Asia Summit brought about by the galloping pace of development, yet dwindling energy resources and complicated negative externalities, the clarion call for concerted efforts regarding energy has never been as loud as before. Regional cooperation and integration can play a pivotal role in addressing energy challenges, mitigating this Damocles sword that now looms over the region should it strike.

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LEAD STORY

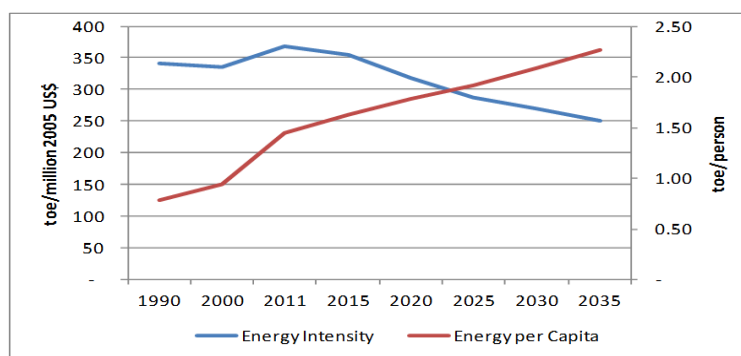
Towards the Great Energy Transition in ASEAN: Lessons from China and India

By VENKATACHALAM ANBUMOZHI, ERIA SENIOR ENERGY ECONOMIST

The world is at a critical juncture in its efforts to achieve energy security, combat climate change, and fulfil its desire for local control over energy production. In response to these broad-based public concerns, government policies—including renewable energy targets, emission controls, and finance initiatives—are driving the great transition from fossil fuels to renewables and enhanced energy efficiency.

A new energy economy is emerging. The old economy, fuelled largely by coal and oil, is being replaced with one powered by bios, solar, and wind. We saw it in 2015, when energy intensity of East Asia countries reduced substantially as illustrated in Figure 1.

Figure 1. Changes in Energy Intensity in East Asian Countries



Source: ERIA, 2014.

This was made possible by the use of energy efficient and renewable energy technologies at the economy, sectoral, and local levels. These

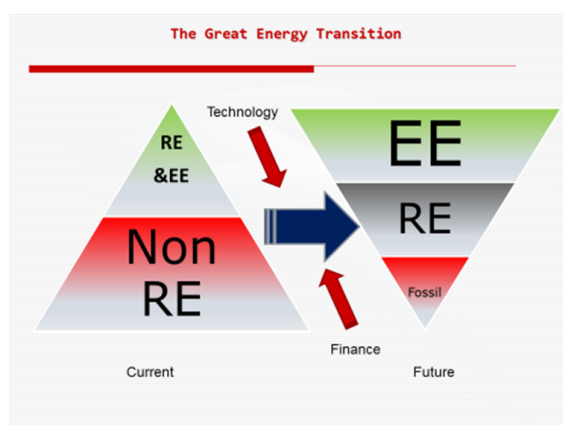


technologies are diverse in their stages of development, target markets, and scale. They include early stage capital-intensive wind farms and mass-produced consumer goods, such as energy efficient land bulbs, which new network infrastructure such as smart grids can facilitate. This diversity introduces new and unique barriers, opportunities, and policy changes that are not yet properly understood. These challenges are discussed from the perspective of energy technology transfer as being progressed in China and India.

Changing Directions and Rationales for Energy Technology Transfer

The great transition needs technology that accelerates the shift from fossil fuels to more renewables and energy efficiency (Figure 2).

Indeed, this transition progresses much faster than most people realise, and needs to be accelerated. We are looking at the prospect of a half century's worth of transition within the next decade. The cost of energy from fossil fuel is largely commodity dependent and will increase over time as fuels become more scarce. On the other hand, producing power from renewable energy is largely dependent on technology, with costs falling as research and development (R&D) improves. Every country has its own supply of renewable energy—widely distributed and inexhaustible. The best available efficient technology has to be brought in. This applies to energy efficiency, too. In contrast to fossil fuel, the amount of renewable energy consumed today does not reduce the amount available tomorrow. What is needed is acceleration of technology diffusion, supported by right policies at the national and regional levels that avoid market distortions.



The term 'technology transfer' is often misunderstood in energy transition debates and has a range of meanings and interpretations.

For some, it is simply the transfer of technological hardware from one location to another, such as from a developed country like Japan to a developing country like

Indonesia. But in a wider sense, technology transfer also includes the knowledge and skills necessary for the recipient firm or organisation to operate, maintain, and develop the transferred technology. Additional capabilities are required for three reasons: (i) they strengthen the ability of firms in developing countries to operate and maintain technologies effectively, and to learn by doing, which improve technologies in the field; (ii) renewable and energy efficient technologies need to be adapted to a particular country context; (iii) the transfer of technology and hardware can contribute to the process of 'catching up' by firms from developing countries as a key component of industrial development.

A range of policy challenges flow from this. There is a need to (i) acknowledge the central role of firms as owners of technologies, rather than as merely recipients of such technologies, which governments transfer to them at will; (ii) implement frameworks and incentives that take into account the reasons firms or organisations make technologies available in developing countries—and to steer the direction of such great energy transition.

Building Indigenous Capabilities for Transition: Lessons from China and India

Indigenous efforts in countries play an important complementary role in acquiring technologies from international resources. With respect to wind power in China, the national government's 863 R&D program has been an important source of capability building for leading Chinese firms. This has placed these firms in a better position to absorb foreign technologies, for example, via licensing and joint ventures. It has also complemented other strategies such as selective takeovers which have improved access to tacit knowledge embodied in skilled personnel. In China's cement industry, technologies that improve energy efficiency are now bought from the domestic market.

The National High Hybrid Propulsion Program of India has brought together both public and private sectors to indigenise this technology in the domestic car market. Its small and medium enterprises use indigenous technologies, some of which have evolved into energy efficient ones. A stepwise, incremental approach to cooperating with others to make more firms more energy efficient was followed. This incremental approach also led to growing confidence amongst entrepreneurs to experiment with, develop, and adopt their own cost-effective technological solutions.

Limited access to intellectual property rights (IPRs) is often cited as a barrier to the development of energy transition capabilities, but not sufficient for the development and deployment of renewable energy and energy efficient technologies. IPRs for most technologies are rarely codified

in a single patent. Multiple patents usually exist, and significant 'tacit knowledge' that is not codified is required to make use of them. For some technologies, the acquisition of IPRs is possible at a reasonable cost. For example, Indian and Chinese firms have been able to access wind photovoltaic technologies from international suppliers through licensing, joint ventures, and even some takeovers.

Despite significant evidence of indigenous support for innovation in China and India, problems remain in both countries. In China, links between firms and research institutes are sometimes weak, which means the full benefits of the 'national innovation system' have yet to be realized (Levi et al., 2011). Firms lack engineering and design capabilities; for example, electric vehicles often focus on incremental innovation. Similarly for Indian photovoltaic developments, there is a disconnect between the research base and the needs of firms. Firms recognise that some of India's technological institutes are actively engaged in excellent research, but find it difficult to bridge the R&D for better commercial products.

Domestic Finance and Policy Mechanisms in China and India

In China and India, incentives for the deployment of wind power have been crucial in supporting domestic firms. In China, this deployment support has been complemented by government funding for development of technology. Controversially, local content rules and restrictions restrain international firms from selling products in China's market. With respect to the nascent area of offshore wind, initial Chinese projects have to be mostly owned by domestic firms. Selective use of such measures to protect new industries is a frequent feature of catching up strategies. The tax breaks, grants, and energy intensity targets of India's government have also helped deploy indigenous and overseas technologies. Some of the cases revealed a more mixed picture. An important brake on the progress of hybrid vehicle technologies in India has been the lack of incentives for consumer adoption (Lee et al., 2009). Tax breaks have not been sufficient to overcome such barriers.

At the international level, the clean development mechanism has been particularly a source of additional finance that benefit early growth of the onshore wind energy programs of China and India. Some bilateral programs, such as the US–China program on electric vehicles and the Japan–India scheme on low-carbon technologies, are specifically designed to domesticate foreign technologies, and thereby play a significant role in developing new industries. The policy and research focus of these initiatives are welcome but fostering collaboration between the firms is also important. Whilst they have not focused primarily on

China and India, the Green Climate Fund may hold useful lessons for future finance and technology mechanisms that support the great energy transition in Asia. A key feature of these and other funds is their 'transformational ambition'. The fund does not only help finance transformation and demonstration of new energy technologies but also encourages improvements in policy frameworks and capabilities to create additional demand for these technologies.

Implication for ASEAN Member States

The experience of China and India may hold helpful lessons for other emerging economies of ASEAN in accelerating energy transition in several ways. The key messages are:

- Technology transfer and diffusion have a central role to play in the great energy transition of emerging economies. At the same time, contexts in the background of energy security, climate change, and industrial competitiveness are important. There are key differences between countries, technologies, and markets. Lessons drawn from China and India have applicability to many ASEAN Member States which have similar needs and fewer resources.
- The transfer of renewable energy and energy efficient technologies is only part of the process in energy transition. It cannot be analysed or supported in isolation from policy innovations. In many cases, technology transfer and indigenous innovation play complementary roles.
- Intellectual property barriers to energy transition do not apply equally to all renewable energy and energy efficient technologies. In many cases, IPR barriers have not prevented Indian and Chinese firms from producing these technologies. However, these barriers can slow down the rate at which firms can commercially produce such technologies, particularly if they wish to innovate at the cutting edge.
- International and bilateral action and finance that support a great energy transition need to be complemented by domestic policy incentives. Many energy efficient technologies and renewable energy actions have significant incremental costs compared to other fossil fuel alternatives.

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Policy Brief

- *Transmission Channels of Economic Shocks in ASEAN* by Ruperto Majuca and Jesson Pagaduan

Discussion Papers

- *Learning from the ASEAN+1 Model and the ACIA* by Nanda Nurridzki
- *Value and Limitations of the ASEAN Agreement on the Movement of Natural Persons* by Yoshifumi Fukunaga and Hikari Ishido
- *Assessing the Progress of ASEAN MRAs on Professional Services* by Yoshifumi Fukunaga
- *Current State and Issues of the Automobile and Auto Parts Industries in ASEAN* by Hideo Kobayashi
- *The CLMV Automobile and Auto Parts Industry* by Hideo Kobayashi and Yingshan Jin
- *The Indian Automotive Industry and the ASEAN Supply Chain Relations* by Tristan Leo Dallo Agustin and Martin Schröder
- *Globalization: A Woman's Best Friend? Exporters and the Gender Wage Gap* by Esther Ann Bøler, Beata Javorcik, and Karen Helene Ulltvei-Moe
- *Did China Tire Safeguard Save U.S. Workers?* by Sunghoon Chung, Joonhyung Lee, Thomas Osang
- *Exporting and Firm-Level Credit Constraints - Evidence from Ghana* by Mai Anh Ngo
- *Beyond Trade Creation: Free Trade Agreements and Trade Disputes* by Tan Li and Larry D. Qiu
- *Low Carbon Green Growth in Asia: What is the Scope for Regional Cooperation?* by Venkatachalam Anbumozhi
- *Tariff Pass-through of the World-wide Trade: Empirical Evidence at Tariff-line Level* by Kazunobu Hayakawa and Tadashi Ito
- *Firm-level Impact of Free Trade Agreements on Import Prices* by Kazunobu Hayakawa, Nuttawut Laksanapanyakul, and Shujiro Urata
- *AEC Blueprint Implementation Performance and Challenges: Investment Liberalization* by Ponciano S. Intal, Jr.
- *The Challenge of China and the Role of Deepening ASEAN Integration for the Philippine Semiconductor Industry* by Emily Christi A. Cabegin
- *Market-Based Mechanisms to Promote Renewable Energy in Asia* by Venkatachalam Anbumozhi, Alex Bowen, Puthusserikunnel Devasia Jose
- *Trade Creation Effects of Regional Trade Agreements: Tariff Reduction versus Non-tariff Barrier Removal* by Kazunobu Hayakawa, Tadashi Ito, and Fukunari Kimura

Research Project Reports

- *Disaster Risks, Social Preferences, and Policy Effects: Field Experiments in Selected ASEAN and East Asian Countries* by Yasuyuki Sawada and Sothea Oum
- *Innovation, Technology Transfers, Finance, and Internationalization of SMEs' Trade and Investment Policy Best Practices for ASEAN and East Asia* by Sothea Oum, Patarapong Intarakumnerd, George Abonyi, and Shigeo Kagami

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ERIA UPDATES

ERIA's SME Mission to Malaysia

The 'Only One' Small and Medium-sized Enterprises (SME) Mission to Malaysia was held on 2–4 March 2015 in Kuala Lumpur. The mission, co-organised by the Economic Research Institute for ASEAN and East Asia (ERIA) and the Asia Professional Education Network (APEN), was attended by 21 delegates from 11 Japanese SMEs.

An 'Only One' SME is an enterprise that has leading technology in a specific area. The 11 Japanese SMEs that took part in the mission have high technical know-how in agriculture, auto parts, construction,

jewellery, and information technology services, amongst others. The 11 SMEs are interested in investment and business expansion in Malaysia.

APEN, ERIA, and the Universiti Teknologi Malaysia conducted a workshop where delegates from the Japanese SMEs exchanged ideas on working together and expanding business ties with the delegates from Malaysian companies. ERIA Executive Director, Prof. Hidetoshi Nishimura, in his opening remarks, encouraged SMEs to be proactive in exploring trade and investment opportunities in ASEAN and East Asia.

After the workshop, the mission visited SME Corporation Malaysia, and met with CEO Dato' Hafsah Hashim. ERIA and APEN highlighted their mission and vision to develop SMEs in ASEAN as drivers of economic growth.

The delegates likewise paid a courtesy call to Dato' Seri Mukhriz Mahathir, Chief Minister of the State of Kedah, Malaysia, in 4 March. Prof. Hidetoshi Nishimura expressed his sincere appreciation to the Chief Minister for receiving the mission. He further affirmed that ERIA will support Malaysia's chairmanship of ASEAN in 2015 by preparing a development vision document for Malaysia and by working to strengthen cooperation



amongst ASEAN, ERIA, and Malaysia. Dato' Seri Mukhriz Mahathir welcomed the delegates to invest and do business in Kedah. □

OECD Southeast Asia Regional Forum



Prof. Hidetoshi Nishimura, Executive Director of the Economic Research Institute for ASEAN and East Asia (ERIA), attended the OECD Southeast Asia Regional Forum on 25 March 2015 in Jakarta, Indonesia.

This forum, sponsored by the Organisation for Economic Co-operation and Development (OECD), brought together policymakers from Southeast Asia and OECD member countries, international and regional organisations, experts, and business representatives to explore regional economic integration issues. This will feed into the ASEAN Economic Community (AEC) and its post-2015 agenda and clarify how the policy focus of the programme can support the integration process.

Prof. Nishimura was the rapporteur in session four on, 'Productivity Enhancing Policies Supporting Regional Integration.' This session covered efforts by Cambodia, Malaysia, Philippines, and Thailand to raise productivity as a prerequisite for fully realising the benefits of integration, as well as the institutional arrangements for bringing productivity to the centre of economic

policymaking in an efficient and transparent manner. Dr. Dionisius Narjoko, ERIA economist, was a discussant and highlighted ERIA's relevant research on the importance and benefits of good regulatory practices and responsive regulatory regimes—in other words, a 'responsive ASEAN.'

Prof. Nishimura summarised the discussion and provided strategic comments to the session. He stressed the importance of regional cooperation in building institutions and bureaucracies for a better regulatory regime and in support of productivity growth in ASEAN, saying that 'one area we hope ASEAN leaders would consider for AEC Post 2015 is implementing good regulatory practices and responsive regulatory regimes in ASEAN, which is the heart of a responsive ASEAN in the ERIA report on AEC Post 2015 titled *ASEAN Rising*.'

Prof. Nishimura also met with OECD Secretary-General H.E. Mr. Angel Gurría to discuss further cooperation between ERIA and OECD. □



ERIA Holds Seventh Academic Advisory Council Meeting



The Academic Advisory Council (AAC) of the Economic Research Institute for ASEAN and East Asia (ERIA) held its seventh meeting on 13 April 2015 at the ERIA Annex Office in Jakarta. Prof. Dr. Hank Lim Giok-Hay from the Singapore Institute of International Affairs presided as the AAC chairperson.

The AAC is composed of internationally renowned scholars and experts from member countries of the East Asia Summit. The council, which meets annually, provides advice to ERIA and evaluates ERIA's research activities.

In his opening remarks, Prof. Hidetoshi Nishimura, Executive Director of ERIA, reviewed the activities of the past year and reported on ERIA's overall progress. He said that the link-up between ERIA and the Organisation for Economic Co-operation and Development is pivotal in promoting ERIA's profile and work, including the conduct of joint programmes and activities.

Prof. Nishimura highlighted ERIA's hard work and meaningful research, which the East Asia Summit appreciated last year. He also pointed out ERIA's 28th

rank amongst the top 50 International Economic Policy Think Tanks as recognised in the Global Go To Think Tank Report 2014.

He also said that with the realisation of the ASEAN Economic Community this year, ERIA is supporting the ASEAN Socio-Cultural Community, the core element of the people-centred ASEAN. 'This new perspective would be one of our major deliverables for this year', he reiterated.

Prof. Nishimura also mentioned his courtesy call to Malaysian Prime Minister Dato' Sri Haji Mohammad Najib bin Tun Haji Abdul Razak in Kuala Lumpur in 1 April where he expressed ERIA's readiness to contribute to the success of the Malaysian chairmanship through the Institute's research-related activities.

The council discussed the 42 ERIA projects for fiscal year 2014 covering the whole range of topics in the areas of deepening economic integration, narrowing development gaps in ASEAN and East Asia, and achieving sustainable development of economy and society.

In his closing remarks, Prof. Nishimura said ERIA will continue to exert utmost efforts for excellence in its research and policy recommendations. 'Based on today's discussion, we will improve our work programme and prepare for the submission to the Eighth Governing Board meeting which will be held on 5 June 2015', he pledged. □

Asia Leaders Business Summit

The Asia Leaders Business Summit 2015 was held on 17 March 2015 in Tokyo, Japan, and brought together Japanese and Asian business leaders, including those of small and medium enterprises and venture companies, to explore business opportunities.

Prof. Hidetoshi Nishimura, Executive Director of the Economic Institute for ASEAN and East Asia (ERIA), gave the opening lecture titled 'AEC 2015 and its post-2015 Vision.' He highlighted the priority measures of the

ASEAN Economic Community (AEC) Blueprint that ERIA has proposed and its potential achievements in 2015, especially in how these measures will affect companies active in the ASEAN region. He concluded that 'in the midst of the AEC process, the private sector, seeing this as a business chance, should be actively involved in the development of Asia, and evolve together.' □

Challenge the Barriers to Power Grid Interconnection in ASEAN and East Asia Countries

by YANFEI LI, Energy Economist

Recently ASEAN countries, especially Lao PDR, Malaysia, Thailand, and Singapore, have been pushing to accelerate the process of power grid interconnection and region-wide power exchange enabled by such infrastructure. Specifically, a scheme for a Lao PDR–Thailand–Malaysia–Singapore (LTMS) connection with small-scale multilateral power exchange amongst the four countries is being studied. Bilateral power trade has taken place intensively in the Greater Mekong Subregion. However, the recent moves, including LTMS and the feasibility studies being carried out by the Heads of ASEAN Power Utilities and Authorities, are targeting multilateral power trade mechanisms and business models.

ERIA has conducted research projects consecutively in the past three years to study the benefits, feasibility, and key challenges and barriers to power grid interconnection in the region. The 2013 report shows the significant net economic savings achievable through such interconnection, as it facilitates further development of the cheaper renewable energy resource in the region, especially hydropower, and saves a large portion of the investment in expensive peak power generation capacities. The 2014 report focused on the economic rationale and feasibility of selected power grid interconnection projects. The study estimates that the new transmission infrastructure project connecting Lao PDR, Thailand, Malaysia, and Singapore generates the most net economic benefit and is, therefore, economically feasible. This is followed by the interconnection between Viet Nam, Lao PDR, and Thailand, as well as another line that connects only Thailand and Lao PDR. These transmission infrastructure projects should, therefore, be prioritised.

The 2015 ERIA study on power grid interconnection will focus on the economic feasibility of the LTMS project. It will also discuss the key barriers and challenges to multilateral interconnection, mainly covering (i) regional coordination of infrastructure development plans and rules for data and information communication, (ii) wheeling charge (transmission tariff) for multilateral cross-border power trade with proper unbundling and coordinated review criteria in each participating country, and (iii) harmonisation of technical standards, including operation and connection standards.

Next, in future, the market design for power trading in the region should be carefully studied, following existing regional trading models such as those of Europe's Nordic

system and continental regional systems and the United States' PJM system. An appropriate market design will be the key to mobilise the massive investment needed, especially from the private sector, to implement power grid interconnection projects and other power infrastructure, and then profit from their operation.

Market design is a broad concept that includes (i) the allocation of costs, revenues, and rights to use the cross-border transmission lines; (ii) the development of the mechanism to determine tariff on cross-border and domestic transmission, and the prices of grid balancing and ancillary services, as well as the resolution in case of congestion in the interconnected grid system, if market-based approaches are used to resolve issues (i); (iii) algorithms for the prices of electricity in cross-border trade which clear the market and, correspondingly, the rules for dispatching; (iv) special treatment or regulations on the electricity generated from intermittent renewable energy sources; (v) coordination and harmonisation amongst participating countries in the trading licences, import tariff, tax structure, and system gate closure time.

Also, with the comprehensive and appropriate market design, power market coupling amongst the participating ASEAN countries would be feasible. Market coupling implies that, at wholesale market level, supply and demand bids—together with available transmission capacities and other system capacities from involved country markets—are put into one algorithm to identify the most economically efficient dispatching plan and the incurred flow of energy into each country market.

The market design should be able to give correct price signals for investment in both power generation capacities and cross-border transmission infrastructure to be incentivised. Clear rules to balance the interconnected grid should also give enough incentive to maintain its stability and reliability. This way, power grid interconnection in the region will not only deliver cheaper and cleaner power supply but also enhance energy security in the power sector.

Power grid interconnection in this region will undoubtedly happen, intensively integrating the regional energy market. Carefully studying these economic and technical issues will give us a clear road map on what actions are needed and when and how, so that steady but firm progress will be made. More importantly, political will based on the vision and trust of leaders and governments in the region is necessary to actually take these implied actions. □

Thoughts provides commentaries and perspectives on certain ASEAN and regional-related issues written by ERIA scholars and other stakeholders in the region. The usual disclaimer applies. Please forward any feedback to yanfei.li@eria.org or to the editor of ERIA Frames at contactus@eria.org

Policy Research Institute Conference on Globalisation and Equitable Development

The Institute of Developing Economies, JETRO (IDE-JETRO), Centre for Strategic and International Studies (CSIS) Indonesia, and Economic Research Institute for ASEAN and East Asia (ERIA) organised a Policy Research Institute Conference on Globalisation and Equitable Development on 20 April 2015 at CSIS Indonesia.

Dr. Yose Rizal Damuri, Head of the Department of Economics, CSIS Indonesia, welcomed the participants and expressed hope that the results of the conference will support new developments in Indonesia.

Dr. Takashi Shiraishi, President of IDE-JETRO and a member of ERIA's Academic Advisory Council, and Prof. Hidetoshi Nishimura, ERIA Executive Director, delivered the opening remarks. Prof. Nishimura said that 'the theme of the conference on how to achieve equitable development in globalisation is ERIA's fundamental mandate since ERIA is one of the institutions that promote economic integration and the narrowing of development gaps in East Asia at the same time.'

The session on service liberalisation and non-tariff barriers in Asia discussed how much service industries are liberalised. Participants agreed that harmonising service sector commitments would contribute to a smoother supply chain. Likewise, a sophisticated

international database on non-tariff measures is important.

During the session on international and domestic development gaps, discussions focused on the economic impact of the Shanghai Pilot Trade Zone on China's neighbouring economies and the spillover of foreign direct investments to Indonesia.

In the session on climb-up value chains in globalisation, discussions focused on how developed countries could participate in higher value-added tasks and chains.

The results of an ERIA study on the determinants of SME participation in production networks were presented in the session on SME participation in supply chains. Findings revealed that a number of firm-level characteristics—productivity, foreign ownership, financial access, activities related to innovation, and entrepreneurship matters—increase the participation of SMEs in production networks.

Around 30 experts and policymakers gathered and exchanged ideas on what policy measures are required for equal development as globalisation increases the development gaps amongst nations and regions. □

International Symposium on Energy Policy Development in Myanmar



The International Symposium on Energy Policy Development was held on 6 February 2015 in Nay Pyi Taw, Myanmar. Highlighted in the discussions are the energy development challenges—and opportunities—that Myanmar still faces after its integration into the global economic system in 2011.

Said symposium was organised by the Ministry of Economy, Trade and Industry of the Government of Japan, the National Energy Management Committee of the Government of Myanmar, the University of Tokyo, and the Overseas Human Resources and Industry Development Association, in cooperation with the Economic Research Institute for ASEAN and East Asia (ERIA). Specifically, this event looked at recent developments in the global energy arena, particularly in ASEAN, and discussed five possible energy policy directions by Myanmar.

Mr. U Zay Yar Aung, Minister of Energy and Chairman of NEMC, outlined in his inaugural speech the energy security challenges and the importance of rural electrification to accelerate economic growth. Prof. Nobuo Tanaka, former Executive Director of the

International Energy Agency, delivered the keynote address, highlighting the need for sufficient supply of clean and affordable energy to support the rapid growth of Asian economies and Myanmar, in particular. He emphasised that to achieve energy security, Myanmar must aggressively explore new supply sources and technology, and progressively integrate rural energy markets and infrastructure.

Participants from energy-related ministries presented policy proposals on energy technology and human resource development, electricity pricing, energy efficiency, energy market, and rural electrification based on six energy policy workshops held between September 2014 and January 2015.

First ASEAN–Japan Symposium on Disaster Management

The Economic Research Institute for ASEAN and East Asia, the National Disaster Mitigation Agency of Indonesia (BNPB), and the Government of Japan held the first ASEAN–Japan Symposium on Disaster Management on 2 April 2015 in Jakarta, with the theme ‘Building National Resilience in ASEAN Countries: Initiatives of Risk Control through International Cooperation and Technologies’.

This symposium—the first of three (the second will be in Viet Nam and the third, in Myanmar)—aims to raise awareness in building national resilience amongst government officials and related institutions regarding disaster management policies in the East Asia region, and to provide a venue for sharing and exchanging experiences on cooperation in disaster management.

In his opening remarks, Ambassador of Japan to ASEAN, H.E. Koichi Aiboshi, affirmed that Japan will support the building of disaster resilience in the region through the ASEAN Humanitarian Assistance (AHA) Centre.

Wisnu Widjaja, Deputy for Prevention and Preparedness of the National Disaster Mitigation Agency of Indonesia, and Larry Maramis, Cross-Sectoral Cooperation Director of the ASEAN Secretariat, both stressed the importance of this kind of symposium in sharing knowledge and experience to help countries in the region achieve a better disaster management programme. Mr. Maramis also hoped that the event could help fill the gaps in what the Sendai Framework could not offer in terms of developing a more effective disaster risk reduction response.

The keynote speaker, eminent energy experts, and Dr. Venkatachalam Anbumozhi, Senior Energy Economist at ERIA, commented on these policy proposals based on technical soundness and practical applicability. This session provided a common ground for senior officials across ministries and institutions and an opportunity for inter-ministerial coordination. The participants will revise the draft of the proposals, incorporating the comments received during the symposium, and present these to the National Energy Management Committee in May 2015 for effective implementation.□

Mr. Said Faisal, Executive Director of the AHA Centre, said that to build national resilience in ASEAN, we need to (i) address the changing landscape in disaster management, (ii) change the ways of doing things through innovation, (iii) go towards evidence-based and fact-based disaster management, (iv) develop the disaster management industry, and the (v) improve professionalism in disaster management.

The first session—‘Initiatives to Build National Resilience in ASEAN and Japan’—focused on the experience of and lessons learnt by Japan and Indonesia from their past disasters, and recommendations on what to improve for better national resilience.

The second session was on ‘Risk Control through International Cooperation and Technologies’. Panellists from Japan’s Ministry of Land, Infrastructure, Transportation and Tourism, the Organisation for Economic Co-operation and Development, and the Japan Bosai Platform reviewed current international cooperation in disaster management and emphasised the importance of such cooperation between the public and private sectors.

ERIA Executive Director Prof. Hidetoshi Nishimura, in his closing remarks, highlighted the need to strengthen international cooperation to build national resilience. He hoped that the symposium would enable stakeholders and government officials to incorporate some of the key points of the discussions in their future policies.

About 100 people from government, non-government organisations, private institutions, and media attended the event.□

ERIA Holds Ninth Annual Conference on Empirical Investigations in Trade and Investment



The Economic Research Institute for ASEAN and East Asia, in collaboration with Keio University, hosted the Ninth Annual Conference on Empirical Investigation in Trade and Investment (EITI) in Bali, 17–19 March 2015. Said conference provided a forum for economists from the Americas, Asia, and Europe specialising in cutting-edge, empirical economic research to present their latest research on international trade and investment.

Professor Andrew B. Bernard, in his opening remarks, thanked ERIA for holding EITI, which is now a

prestigious conference for empirical studies on international economics. The presentations covered the following topics, amongst others: (i) various aspects of trade, including export decisions and productivity growth; (ii) trade, development, and macroeconomics, which introduced novel facts on trade that have not yet been fully explored; (iii) the effect of trade on labour; and (iv) the effect of trade liberalisation on trade duration, trade disputes, and trade with third countries, which revealed complex pictures on the effect of trade liberalisation. Intense discussions on methodology, data, implications, and possible models followed these presentations, shedding new insights and interpretations on the papers.

Passionate conversations about the papers extended even during meals on session breaks; participants likewise exchanged ideas on their ongoing research. Overall, the conference was filled with active discussions and comments, making the event a productive and fruitful one. □

ASEAN Socio-Cultural Community Council Recognises ERIA's Support

The 13th ASEAN Socio-Cultural Community (ASCC) Council, in its meeting on 26 March 2015 in Melaka, Malaysia, recognised the support of the Economic Research Institute of ASEAN and East Asia (ERIA) in developing the framework for the ASCC post 2015. ERIA initiated the development of this framework in close cooperation with the Ministry of Tourism and Culture of Malaysia and the ASEAN Secretariat.

The Council's appreciation was contained in the following excerpt of its Joint Ministerial Statement:

Excerpt from the Joint Ministerial Statement of the 13th ASCC Council

... 4. We appreciated the research by the Economic Research Institute for ASEAN and East Asia (ERIA) leading to an Interim Report on Framing the ASCC Post-2015 which served as a reference to the development of the draft ASCC Attendant Document...

Second Meeting on Effective Investment of Power Infrastructure in East Asia

The Economic Research Institute for ASEAN and East Asia (ERIA) held a second meeting of the ERIA research working group for the 'Study on Effective Investment of Power Infrastructure in East Asia through Power Grid Interconnection'. The meeting was held in Da Nang, Viet Nam on 13 February 2015.

The research team from The Institute of Energy Economics, Japan discussed the challenges to establishing the regional power grid interconnection. The three issues discussed were (i) regional coordination of infrastructure development plans and rules for data and information communication, (ii) wheeling charge for multilateral cross-border power trade with proper

unbundling and coordinated review criteria in each participating country, (iii) harmonisation of technical standards including operation and connection standards.

Preliminary key policy implications and recommendations for effective investment and development in power grid interconnection in the EAS region were drawn. Participants also discussed the European, Nordic, and Indian models as references in developing regional multilateral power trade framework. Whilst the LTMS is looking for an appropriate model to follow, it could actually be the first step in developing a full-scale APG interconnection. □

ERIA Contributes to the IEA High-Level Consultative Workshop on Energy and Climate

The Economic Research Institute for ASEAN and East Asia (ERIA), through its senior energy economist, Dr. Venkachatalam Anbumozhi, contributed to the high-level workshop on energy and climate organised by the International Energy Agency (IEA) on 5 March 2015 in Paris, France. Acknowledging that the energy sector is the source of about two-thirds of total emissions, the IEA realises that transforming this sector is crucial to meeting the stated goals; hence, this workshop.

Said workshop is in preparation for the 21st session of the Conference of the Parties to the United Nations Framework Convention on Climate Change to be held in Paris in December 2015, as the year represents a critical juncture in global efforts to tackle climate change. This conference will mark a decisive stage in negotiations on the abatement of greenhouse gas emissions as it is expected to adopt a major outline of the post-2020 regime.

In his keynote speech, France's Minister for Ecology, Sustainable Development and Energy, H.E. Paul Watkinson, issued a rallying call to the public and private sectors of both advanced and emerging economies to work towards integrated energy strategies and climate abatement ahead of the December summit.



ERIA's Dr. Anbumozhi discussed the implications of the Intended Nationally Determined Contributions and planned policies of major Asian economies for energy markets and long-term climate objectives. Referring to ERIA studies, he brought out tangible and pragmatic renewable energy targets being implemented by East Asia Summit economies that can raise climate ambitions without restraining economic growth.

More than 50 distinguished experts from governments, energy companies, international organisations, academia, the financial community, and civil society offered their insights on the role of the energy sector in climate mitigation. The results of this workshop also provided essential input in shaping the analysis, key findings, and messages of the World Energy Outlook Special Report being prepared by IEA for release in June. □

Towards Responsive Regulations and Regulatory Coherence in ASEAN and East Asia

The Economic Research Institute for ASEAN and East Asia organised the second technical workshop on 'Deconstructing Effective and Efficient Regulatory Management System in ASEAN and East Asia' on 20–21 April 2015 in Kuala Lumpur. The workshop was a continuation of the first workshop held in September 2014. Ten country study authors and representatives from the Malaysia Productivity Corporation (MPC) and the New Zealand Embassy in Jakarta attended. The 10 country study authors presented two case studies on regulatory improvement in their respective countries. These presentations were followed by econometric analyses on regulatory management system elements table as well as a discussion on insights and key findings of the study.

The presentations and discussions on the case studies highlighted, amongst others, the importance of a strong political will by the leaders, the need for incentive structures built into the system, the presence of supporting institutions to provide evidence-based analytical support and to facilitate public-private partnerships, as well as the need for improvements in the quality of civil services.

The study is a joint project between ERIA and the New Zealand Institute of Economic Research, with the strong support of the Government of New Zealand, the Government of Malaysia through the Ministry of International Trade and Industry, and the MPC. The draft of the integrative report is expected to be finished in August 2015. □

ERIA Executive Director Pays Courtesy Call on Prime Minister of Malaysia



Prof. Hidetoshi Nishimura, Executive Director of the Economic Research Institute for ASEAN and East Asia (ERIA), and senior ERIA officials paid a courtesy call on Malaysian Prime Minister, Dato' Sri Haji Mohammad Najib bin Tun Haji Abdul Razak, in Kuala Lumpur, Malaysia, on 1 April 2015.

Prof. Nishimura explained that ERIA has been requested to support the Chair of the ASEAN Summit and the East Asia Summit (EAS) in the Chairman's Statement of EAS. He likewise expressed ERIA's readiness to contribute to the success of the Malaysian Chairmanship of ASEAN

through the Institute's research and related activities. The two dignitaries further discussed ERIA's activities in ASEAN and EAS.

Prime Minister Najib noted ERIA's contribution as a Sherpa organisation of ASEAN and EAS, and its research contributions to the Asian region. He acknowledged and encouraged the activities that ERIA will conduct in 2015 to support the Malaysian Chairmanship.

Before his meeting with Minister Razak on 30 March 2015 Prof. Hidetoshi Nishimura also paid a courtesy visit to Dato' Sri Abdul Wahid bin Omar, Minister in the Prime Minister's Department at the Minister's Office in Putrajaya, Malaysia. Their discussions covered current and future regional developments. Minister Omar acknowledged the progress of ERIA in promoting the ASEAN Economic Community and the ASEAN Socio-Cultural Community post 2015. □

ERIA VISITORS

(January–April 2015)

ERIA received the following dignitaries and visitors in year 2015 in its office.

Name	Title/Affiliation	Date
H.E. Mr. Ong Keng Yong	<i>Former Secretary General of ASEAN</i>	13 January 2015
H.E. Dato' Hasnudin Hamzah	<i>Ambassador of Malaysia to ASEAN</i>	22 January 2015
H.E. Mr. Suresh K. Reddy	<i>Ambassador of India to ASEAN</i>	22 January 2015
Mr. Yoichi Nemoto	<i>Director of ASEAN+3 Macroeconomic Research Office</i>	4 February 2015
H.E. Ms. Nina Hachigian	<i>U.S. Ambassador to ASEAN</i>	24 February 2015
H.E. Mr. Kazuo Kodama	<i>Ambassador of Japan to OECD</i>	27 March 2015
H.E. Mr. Lundeg Puresuven	<i>Foreign Minister of Mongolia</i>	23 April 2015
H.E. Ms. Stephanie Pamela Lee	<i>Ambassador of New Zealand to ASEAN</i>	24 April 2015
Ir. Dr. Sanjayan Velautham	<i>Executive Director of ASEAN Centre for Energy (ACE)</i>	29 April 2015

ERIA Frames

is a bimonthly newsletter issued by the Economic Research Institute for ASEAN and East Asia (ERIA).

It presents a picture of the Institute's various works and activities on ASEAN and East Asia issues.

It also describes recently completed and ongoing research as well as highlights of seminars, workshops, and feedback from capacity building workshops.

Thoughts and perspectives on regional issues as written by ERIA scholars and other stakeholders in the region are also presented.

ERIA Frames can be downloaded at www.eria.org.

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