



**ANNUAL
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Economic Research Institute for ASEAN and East Asia

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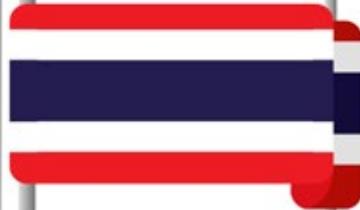
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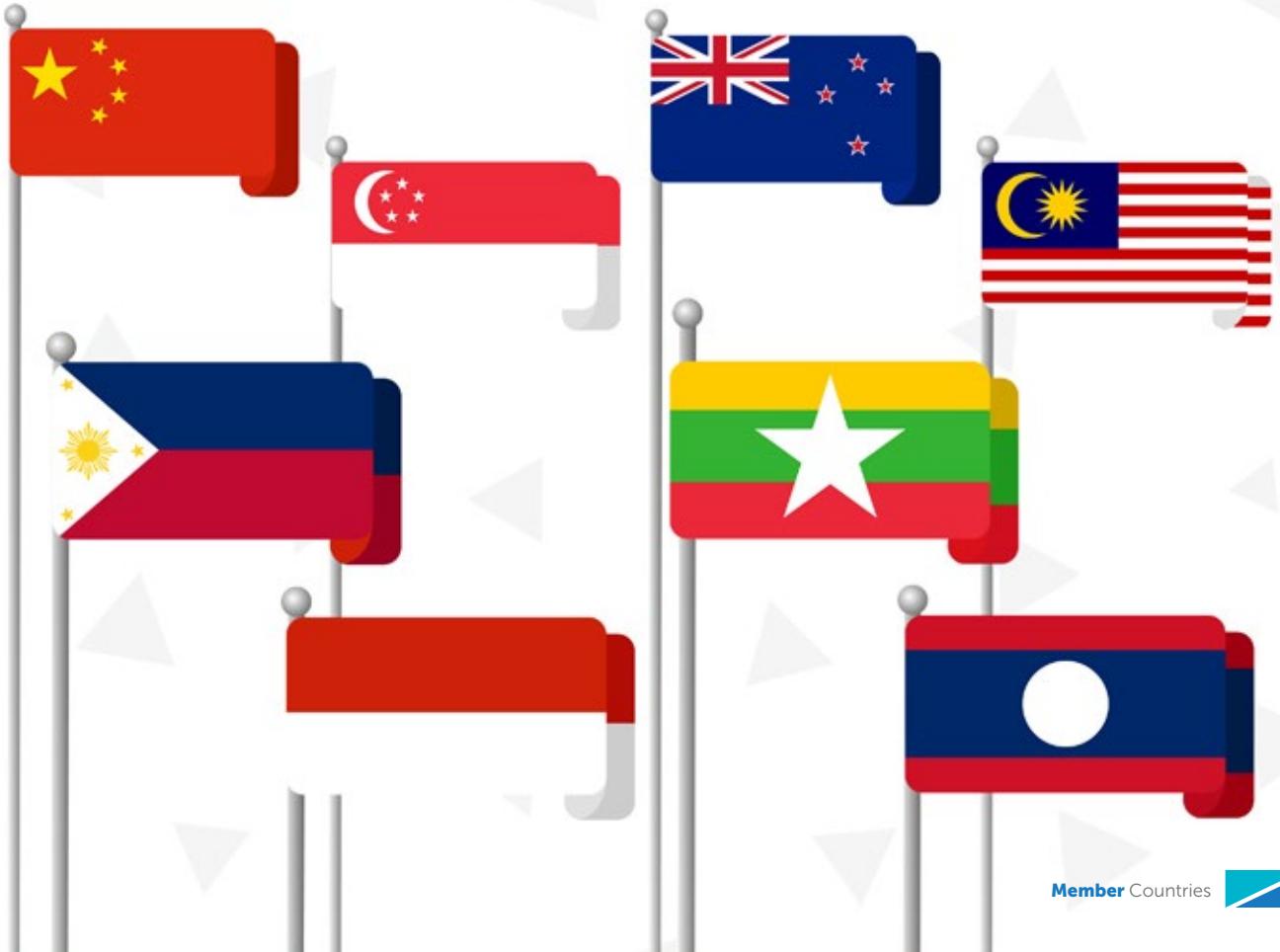
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Our Member Countries



Australia - Brunei Darussalam - Cambodia - China - India -
Indonesia - Japan - Lao PDR - Malaysia - Myanmar -
New Zealand - Philippines - Republic of Korea -
Singapore - Thailand - Viet Nam



A portrait of Prof. Hidetoshi Nishimura, an elderly man with glasses, wearing a dark suit, a light purple shirt, and a patterned tie. He is looking slightly to the right of the camera with a neutral expression. The background is a blurred indoor setting with warm tones.

Prof Hidetoshi Nishimura
President

Message from the President

Greetings!

Fiscal year (FY) 2016 was a challenging year for ERIA as it needed to help chart the future direction of ASEAN and East Asia after the establishment of the ASEAN Economic Community (AEC) in 2015. Looking back at the deliverables of this fiscal year reveals that ERIA expanded its field of activities and helped chart the new direction of ASEAN Community 2025.

In March 2016, ERIA successfully held its first Extraordinary Governing Board Meeting in Tokyo, Japan. The meeting emphasised the need for ERIA to regularly review its policy focus centring on (i) deepening East Asian integration, (ii) realising an inclusive ASEAN Community, and (iii) addressing issues extending beyond the region, such as innovation. ERIA will continue to conduct activities with the cooperation of member countries.

We have also paid successful courtesy calls to the Deputy Prime Minister and the Prime

Minister of Japan and explained the plan of reform starting in March 2016. Then in June, during the Ninth Governing Board Meeting in Jakarta, the Governors discussed the future strategy of ERIA to support the economic integration of this region. They unanimously decided to create a new department – named ‘Policy Design Department’ – to propose actionable policy recommendations for each member state. Tan Sri Dr Rebecca Fatima Sta. Maria, former secretary general of the Ministry of International Trade and Industry, Malaysia, accepted ERIA’s invitation to head this new department. Under her initiative, ERIA strongly committed to the negotiations on the Regional Comprehensive Economic Partnership (RCEP), held in Jakarta and Kobe, and provided inputs directly to the negotiators of each ASEAN Member State.

In research, ERIA and UNCTAD (United Nations Conference on Trade and Development), with the cooperation of government officials and experts of each country in the region, completed the comprehensive database of non-tariff measures (NTMs) in ASEAN. Everyone can freely access our website (<http://asean.i-tip.org/Default.aspx>) where about 6,000 NTMs are listed. Even though tariff rates have decreased in this region, NTMs may obstruct trade liberalisation. This database ensures transparency for traders inside and outside of this region.

Another flagship project was the Lao PDR at the Crossroads: Industrial Development Strategies 2016–2030, which was the major deliverable of the Lao PDR chairmanship of ASEAN and East Asia Summit in 2016. The key report on this project, which ERIA proposed to the leaders at the Mekong–Japan Summit on September 2016 in Vientiane, provided two important messages: labour productivity and connectivity. The labour productivity of the agriculture sector is less than half compared with that of other industry sectors. Thus, if agriculture productivity improves at the same level as others, many members of the labour force can move to other industrial sectors. The other message is connectivity. Lao PDR, located at the centre of the Mekong region, should take advantage of its ‘landlocked’ position by being ‘land-linked,’ like Switzerland, to facilitate ASEAN connectivity.

ERIA’s activities significantly started to expand not only in AEC but also in the ASEAN Socio-Cultural Community (ASCC) and ASEAN Political-Security Community (APSC). On the ASCC, ERIA started to research on the health care and care industry to build the social safety management system in ASEAN. Another important field is disaster risk management.

ERIA – in cooperation with the Organisation for Economic Co-operation and Development (OECD), United Nations Office for Disaster Risk Reduction (UNISDR), United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), and the Government of Indonesia – held a big symposium on ‘World Tsunami Awareness Day’. This provided an overview on the outcomes of relevant events in 2016 to enhance awareness of tsunami disaster in the region.

On the APSC, ERIA’s good relations with the ASEAN Inter-Parliamentary Association (AIPA) started when ERIA, upon AIPA’s invitation, attended the AIPA General Assembly in Nay Pyi Taw, Myanmar, in September. ERIA proposed to strengthen relations with AIPA, which were sealed with the approval of the ‘Memorandum of Understanding to Develop AIPA’s Capacity on Matters Concerning ASEAN Economic Community and ASEAN Economic Integration in Various Areas’. So far, ERIA has built a good channel to recommend policies directly to the members of parliament of ASEAN Member States.

ERIA’s reach has also expanded globally in FY2016. In July, ERIA was formally invited to the Asia-Europe Meeting (ASEM 11) Summit in Ulaanbaatar, Mongolia. ERIA and the Government of Mongolia presented at the 15th Asia-Europe Business Forum – a side event of the ASEM Summit – the ‘Asia-Europe Connectivity

Vision 2025' that highlighted the importance of connectivity to cope with global catastrophic crisis. ERIA, during the Stakeholders' Session of the ASEM Summit Plenary attended by 53 Leaders and heads of international organisations, presented its observations on the world economy after Britain's exit from the European Union. On the energy stream, ERIA was invited to the 15th International Energy Forum in Algiers, Algeria in September to introduce our energy outlook on the ASEAN and the East Asia Summit regions. ERIA also presented at the 4th IEF-IGU (International Gas Union) Ministerial Meeting in Delhi, India on the natural gas market in East Asia. Through this, energy-related activities have been significantly spread out and the functions of the International Energy Agency gradually carried out in East Asia.

ERIA's efforts in 2016 did not go unnoticed, with regional leaders commending ERIA's continuous support through the Chairman's statements of various ASEAN and East Asian summits. At the 11th East Asia Summit, the Leaders encouraged ERIA to continue its support to the Chair of the ASEAN and East

Asia Summits. ERIA, in the 'Vientiane Declaration on Promoting Infrastructure Development Cooperation in East Asia', was also recognised as a strategic partner in promoting quality infrastructure investment in the region. Our key project, Comprehensive Asia Development Plan (CADP) 2.0, was also mentioned in this 'Declaration' and was referred to in the new Master Plan on ASEAN Connectivity 2025. This is by increasing technical assistance, utilising existing funds, and providing training programmes for professionals in infrastructure and connectivity-related sectors.

In January 2017, the Global Think Tank Report 2016 ranked ERIA as number 32 among the top 85 international economic think tanks. This confirms that ERIA's research has been highly valued globally.

Whereas we are proud of these achievements in 2016, we will not rest on our laurels. We in ERIA continue to be prepared to face and wrestle with challenges in the years ahead. This as we work harder towards deeper ASEAN economic integration and economic development in East Asia.

Prof Hidetoshi Nishimura
President



Event Highlights



The First Extraordinary ERIA Governing Board Meeting

12 March 2016, Japan

The first Extraordinary ERIA Governing Board Meeting was held in Tokyo on 12 March 2016. Chaired by Dato Paduka Lim Jock Hoi, the discussion examined ERIA's achievements during its first 9 years and the region's expectations regarding ERIA's role in promoting a stable and prosperous ASEAN and East Asia. ERIA was honoured by the presence of H.E. Mr Toshihiro Nikai, Chairman of the General Council of the Liberal Democratic Party, Japan; H.E. Mr Motoo Hayashi, Minister of Economy, Trade and Industry; H.E. Le Luong Minh, Secretary General of ASEAN; and H.E. Dr Surin Pitsuwan, former Secretary General of ASEAN and now Special Advisor to ERIA; as well as Governing Board representatives.



Lao PDR at the Crossroads: Industrial Development Strategies 2016–2030

30 March 2016, Lao PDR

ERIA and the Ministry of Industry and Commerce of Lao PDR organised a National Policy Dialogue to discuss future strategies for the country's industrialisation. The dialogue was based on the joint research conducted by ERIA, Economic Research Institute for Trade (ERIT), National Economic Research Institute (NERI), and Daiwa Institute of Research Ltd.

ERIA Chief Economist, Prof Fukunari Kimura, presented an overview of the Lao PDR at the Crossroads study. He explained the policy implications, based on the concepts of geography and connectivity, on the country's industrialisation and economic development. Contributors from Daiwa Institute of Research, ERIT, IDE-JETRO, NERI, and ERIA also presented research findings.

About 200 people from different ministries, representatives from the Lao regions, national and international private sector, and Lao-based international development organisations attended the dialogue.



First SEOM-EAS-ERIA Roundtable

1 July 2016, Lao PDR

Senior Economic Officials from East Asia Summit (EAS) countries expressed their hope that ERIA studies could help bridge the development gaps in ASEAN and EAS countries as the ASEAN Economic Community moves forward. Bridging these gaps is crucial as most of the countries are involved in mega free trade agreements (FTAs), such as the Trans-Pacific Partnership Agreement (TPP) and the Regional Comprehensive Economic Partnership (RCEP).

ERIA Economist Dr Lurong Chen presented on ‘21st Century Regionalism, Mega FTAs, and Asian Regional Integration’, saying that involvement in global value chains – rather than involvement in mega FTAs – should be the focus to sustain long-term productivity. He added that innovation and protection of intellectual property rights for the long term are key elements in creating innovation in the country’s fundamental productivity.



15th Asia-Europe Business Forum

13–14 July 2016, Mongolia

ERIA delegation participated in the 15th Asia-Europe Business Forum (AEBF 15) in Ulaanbaatar, Mongolia, one of the side events of the 11th Asia-Europe Meeting (ASEM 11). Several stakeholders from the public and business sectors, including H.E. Mr Saikhanbileg Chimed, Prime Minister of Mongolia, attended this event.

Prof Hidetoshi Nishimura presented ERIA research projects on Asia-Europe Connectivity and North East Asia Power Grid Interconnection, which were done under the memorandum of understanding between ERIA and the Government of Mongolia. He emphasised (i) pursuing a holistic programme of connectivity which recognises the interlinkages between physical, institutional, and people-to-people connectivity; and (ii) recognising energy connectivity as a crucial aspect of physical and institutional connectivity, and intensifying efforts for hard and soft infrastructure for cross-border energy transmission and energy security.



11th Asia-Europe Meeting

15–16 July 2016, Mongolia

Delegates from ERIA attended the 11th Asia-Europe Meeting (ASEM 11) in Ulaanbaatar, Mongolia. ERIA President Hidetoshi Nishimura reported on the outcomes of the 'Asia-Europe Connectivity Vision 2025: Challenges and Opportunities', a joint project between ERIA and the Government of Mongolia. He, together with Mr Orgil Luvsantseren, Ambassador and ASEM Senior Official at the Mongolian Ministry of Foreign Affairs, also launched said publication to international media.



Appointment of Tan Sri Datuk Dr Rebecca Fatima Sta. Maria as Senior Policy Fellow

13 September 2016, Indonesia

ERIA appointed Tan Sri Datuk Dr Rebecca Fatima Sta. Maria as Senior Policy Fellow of ERIA's new Policy Design Department. Her work will connect ERIA's research to the needs of policymakers in the region, enabling them to make

more informed governance decisions. Dr Rebecca has extensive knowledge of ERIA's work, having served on the Governing Board since 2015.

Dr Rebecca, during her inaugural seminar on 13 September 2016, presented 'RCEP: Challenging ASEAN Centrality'. Her presentation highlighted her wealth of experience during her 30 years of service in Malaysia's Ministry of International Trade and Industry. The seminar, themed 'ASEAN Economic Integration and the Role of ERIA', was graced by a distinguished audience comprising several ambassadors to ASEAN, ASEAN Secretariat officials, embassy officials, and researchers from other think tanks.



15th Regional Comprehensive Economic Partnership (RCEP) Negotiations

17–21 October 2016, China

Attending this meeting were officials from Australia, China, India, Japan, Korea, New Zealand, and the 10 ASEAN countries as well as delegates from the ASEAN Secretariat and ERIA. Discussions focused on market access negotiations regarding trade in goods, services, and investment, rules of origin, intellectual property, and competition, among others.

ERIA Senior Policy Fellow and former Secretary General of Malaysia's Ministry of International Trade and Industry, Tan Sri Datuk Dr Rebecca Fatima Sta. Maria, in her two presentations, highlighted a few recommendations and some benefits of services liberalisation for RCEP member countries. Among these are reduced price as a result of improved productivity, real income gains, and increased foreign investments.



Seventh ASEAN Connectivity Symposium

20 October 2016, Lao PDR

ERIA hosted the Seventh ASEAN Connectivity Symposium on 'Intensifying Partnerships to Realise the Master Plan on ASEAN Connectivity 2025'. The symposium brought together over 180 government officials, diverse stakeholders, and experts on connectivity.

H.E. Thongphane Savaphet, Vice Minister of Foreign Affairs of the Lao PDR, in his keynote address, highlighted the importance of connectivity for the Lao PDR: the country needs to transform from a 'landlocked' to a 'land-linked' country.

In his opening remarks, Prof Hidetoshi Nishimura raised the issue of ASEAN's increasing global prominence and posed the question on what kinds of deliverables can be offered to stakeholders beyond ASEAN. Attendees included ambassadors from ASEAN member countries and ambassadors to ASEAN from dialogue partners.



World Tsunami Awareness Day 2016 in Jakarta

15 December 2016, Indonesia

ERIA, UN Office for Disaster Risk Reduction (UNISDR), Japan International Cooperation Agency (JICA), Organisation for Economic Co-operation and Development (OECD), Indonesian Mitigation Agency (BNPB), and the Government of Japan hosted the symposium on 'World Tsunami Awareness Day (WTAD) 2016 – Indonesia'.

Speaking at the event, in alphabetical order, are luminaries such as Indonesia's Vice President H.E. Drs H. Muhammad Jusuf Kalla; H.E. Mr

Toshihiro Nikai, Secretary General of the Liberal Democratic Party of Japan; H.E. Kazuo Sunaga, Ambassador of Japan to ASEAN; and Special Ambassador for the WTAD and Special Advisor to ERIA President, H.E. Prof Akiko Yamanaka, among others.

A highlight of the symposium was the presentation by students from Japan and Aceh on the Report on the High School Students Summit held in Kuroshio in November 2016. At this summit, the youth attendees discussed what the next generation could do to overcome – if not mitigate – the risks of disasters caused by natural hazards.



ERIA–AIPA Memorandum of Understanding

16 December 2016, Indonesia

The memorandum of understanding (MoU) between ERIA and the ASEAN Inter-Parliamentary Assembly (AIPA) spells out the cooperation between the two organisations in conducting research, capacity building programmes, as well as exchange of information regarding research outcomes and policy recommendations on economic issues.

Signatories to the MoU were Prof Hidetoshi Nishimura, President of ERIA, and H.E. Isra Sunthornvut, Secretary General of AIPA. Witnesses to the signing were Mr Teru Fukui, Member of Japan’s House of Representatives; H.E. Kazuo Sunaga, Ambassador of Japan to ASEAN; Prof Akiko Yamanaka, Special Advisor to the President of ERIA; and Mr Nobuyasu Nikai, Executive Secretary to the Secretary General of Liberal Democratic Party of Japan. Secretary General Sunthornvut stated that AIPA is formulating projects and initiatives that will move AIPA and ASEAN forward. He hoped both organisations could gather stakeholders comprising parliamentarians,

civil society, academics, ERIA economists and policy fellows, and ASEAN peoples to discuss important social, political, and economic issues for ASEAN.



Third Asia Cosmopolitan Awards Ceremony

14 January 2017, Japan

ERIA and the Nara Prefecture of Japan held an awarding ceremony, the Nara Forum 2017, for the Third Asia Cosmopolitan Awards. This award aims to recognise on a biennial basis individual(s) or organisation(s) that have significantly contributed to the development of a peaceful and stable East Asian Community, the narrowing of development gaps in the region, and the establishment of sustainable social growth towards cultural and economic integration in East Asia.

The Grand Prize awardee is H.E. U Thein Sein, former President of the Myanmar, for his leadership during Myanmar's transitional period. The Economic and Social Science Prize is awarded to Professor Masahisa Fujita, for his work in the field of economic geography. For the cultural category, the awardee is H.E. Mr Herman Van Rompuy for his Haiku poetry, an Asian art that promotes harmony and mutual understanding. Mr Van Rompuy is the first full-time president of the European Council and an accomplished Haiku poet.



Research

Deepening Economic Integration



21st Century Regionalism, Mega FTAs, and Asian Regional Integration

Status: Completed by April 2017

*Geographic scope: Indonesia, Japan, Philippines,
Thailand, Viet Nam*

This study aims to provide solid economic and legal analyses to help ASEAN and East Asian countries formulate trade policies in the new era, especially for those countries that intended to join the Trans-Pacific Partnership (TPP) agreement. It analyses and discusses the rules and regulations set by the TPP that could be the new global standard of international trade and investment in the future. It covers three main areas: intellectual property rights, investment, and state-owned enterprises.

The project aims to:

- Provide a rigorous analysis of the TPP agreement and to evaluate its economic effects on ASEAN and East Asian countries.
- Assess the effects of the TPP on the economic integration progressing in ASEAN, such as the

ASEAN Economic Community and Regional Comprehensive Economic Partnership.

- Guide ASEAN and East Asian countries on the actions to be taken regarding trade, investment, and economic policies.

ASEAN SME Policy Index

Status: Ongoing

Geographic scope: ASEAN

The 26th ASEAN Summit in April 2015 highlights the importance of ASEAN in strengthening microenterprises and in improving the competitiveness of small and medium-sized enterprises (SMEs) in its member countries. The ASEAN Strategic Action Plan for SME Development 2016–2025 (hereafter SAP) manifests this idea of supporting the vision of the ASEAN Economic Community.

In this context, ERIA and the OECD propose a research project to renew the earlier ASEAN SME Policy Index. This new index should serve as a tool to assess the strength of SME policies, instruments, and institutions of ASEAN Member

States (AMSs), according to the SAP and the level of policy convergence in the priority areas defined by the AMSs.

Two reasons for renewing the policy index. First, the framework of the new policy index will use the SAP instead of the ASEAN Strategic Action Plan for SME Development (2010–2015). The different frameworks result in different policy dimensions that the new policy index will cover. The overall mandate for this work in the SAP aims at improving policies overall and moving towards policy convergence across ASEAN.

Second, the new policy index intends to improve the focus and method of data gathering of the earlier index. It will combine quantitative assessment of the range and intensity of the policy inputs with quantitative information on the outputs of different policy measures. Such data and information will be complemented by data on the structure and the performance of SME population and the evolution of the business end economic environment in order to obtain a full picture of the factors that shape SMEs in each ASEAN country. Thus, the new policy index will be based more on factual information or data instead of the more qualitative information of the earlier index.

Digital Economy, Innovation, and East Asia's Competitiveness in GVCs, Phase I: Cross-border e-Commerce in ASEAN and East Asia

Status: Ongoing

Geographic scope: ASEAN, East Asia, Mekong Subregion; China, Indonesia, Republic of Korea, Malaysia, Thailand, Viet Nam

The development of e-commerce tends to further promote Asian regional integration by facilitating cross-border trade, investment, and factor movement. Meanwhile, it will also call for new rules and regulations and requires cross-border cooperation in governing e-business. For ASEAN countries, this is a topic directly related to its ambition of establishing a highly competitive economic region and the achievement of ASEAN Economic Community 2025.

The project aims to advance the international debate on the development of e-commerce, the facilitation of cross-border production sharing, and the deepening of regional integration and cooperation in ASEAN and East Asia. It covers the following issues:

- development of cross-border e-commerce;
- e-commerce, global value chains, and regional production sharing;
- e-commerce and inclusive economic growth: development of small and medium-sized enterprises, job creation, poverty reduction, labour mobility, etc.;
- barriers to cross-border e-commerce; and
- e-commerce regulation and governance.

East Asian Economic Integration, Second Edition (RCEP, Second Edition)

Partners: Research Institutes Network members, Asian Development Bank Institute, Economic Research Institute for Northeast Asia, The Australian National University, prominent economists, governments of RCEP countries

Status: Ongoing

Geographic scope: Australia, Brunei Darussalam, Cambodia, China, India, Indonesia, Japan, Republic of Korea, Lao PDR, Malaysia, Myanmar, New Zealand, Philippines, Singapore, Thailand, Viet Nam

The Regional Comprehensive Economic Partnership (RCEP) is a critical element in regional integration in East Asia and Pacific. RCEP takes initiatives on regional

economic integration in East Asia to a higher level:

- In contrast to the ASEAN+1 FTAs (free trade agreements) where individual ASEAN Member States (AMSs) had essentially bilateral commitments with the ASEAN+1 dialogue partners, the AMSs would likely need to have common commitments vis-à-vis the partners (with perhaps a few exceptions) under RCEP.
- The commitments of the dialogue partners need to be common commitments congruent with those of the AMSs.
- The commitments under RCEP need to be substantially better than those under the ASEAN+1 FTAs. In short, RCEP should not be merely a consolidation of the ASEAN+1 FTA commitments simply because mere consolidation is feasible only at the lowest common denominator that delivers far less than a number of the ASEAN+1 FTAs. RCEP would need to be a high-quality agreement for it to be credible and worthy of the resources and time expended for the negotiations and related activities to ensure its successful conclusion. Moreover, given that RCEP effectively includes an implicit FTA agreement among China,

Japan, and the Republic of Korea which results in trade and investment diversion from ASEAN compared to the ASEAN+1 FTAs, only deeper facilitation and liberalisation commitments would provide additional benefits to AMSs compared to the current ASEAN+1 FTAs.

Globalisation, Structural Change, and Growth

Status: Completed

Geographic scope: China, Indonesia, Japan, Republic of Korea, Viet Nam

This research is eighth in the series of ERIA Microdata Research conducted annually under a different theme. It aims to gauge the impact of globalisation on economic growth in the region using firm-level data. Despite many studies conducted on this subject, our understanding of this issue is far from satisfactory. Although macroeconomic growth models show positive effect of globalisation on long-term economic growth, controversy on the effect among cross-country empirical studies remains. The heterogeneous firm trade theories and empirical studies based on those theories have uncovered several new mechanisms of the aggregate welfare and productivity effect of trade. Yet, most, if not all, of the studies tend

to focus on one-time level effect, not growth effect.

Meanwhile, sustained economic growth is almost always accompanied by structural changes of the economy, such as composition of industries, firms, and activities towards more capital-, skill-, and technology-intensive ones. Without structural changes defined in this way, an economy may not be able to sustain improvement in living standards. Thus, further exploring how globalisation affects structural change will enrich our understanding of the effect of globalisation on economic growth and of its mechanisms.

This research finds and explains various details linking globalisation to growth.

Global Value Chain, Cities, and Urban Amenities

Status: Phase 2 Ongoing

Geographic scope: ASEAN, China, Japan, Republic of Korea

The current study focuses on the role of cities in creating urban networks and urban

amenities, attracting and developing skills and human capital, and driving creativity. This in turn supports the development and liberalisation of the services sectors and the operation of the global production value chain Asia. These linkages of urbanisation, innovation, services, and the global value chains form the key agenda for the next stage of development and growth in Asia.

This study focuses on the following:

- The regional competitiveness and productivity of cities and what drives creativity in urban areas, leading to innovation and more extensive entrepreneurial activities. Success in this respect also leads to larger cities, achieving economies of scale, which further reinforces success. Such success might then be able to offset the cost of high population density of cities.
- The attraction of cities with urban networks and amenities to skilled workers to live and work, thereby contributing to greater services 'unbundling', and linkages to global production value chain activities. Not only 'skilled' workers are required but also those who are innovative and can operate in different ways. Since new types of work would emerge, the flexibility of the labour market also plays a role in this context.
- The extent to which a creative and innovative

urban environment, which is attractive to the right types of workers, leads to greater support for services liberalisation. This will have important implications for the next stage of growth of the region and the regional free trade agreements such as the Regional Comprehensive Economic Partnership in developing strategies for liberalising the services sector.

- The key policy considerations in terms of strategies for the second stage 'unbundling' or fragmentation of industrial production and its implications for services sector liberalisation. Understanding the effects of urban amenities on the development of small and medium-sized enterprises and entrepreneurial activities in the region is important.
- The observation that both first and second stages 'unbundling' are occurring concurrently in Asia. Understanding the policy considerations for countries in different stages of growth and of fragmentation and the linkages between the first and second stages fragmentation is also important.

Impact of FTA on Trade and Industry (Phase I)

Status: Ongoing

Geographic scope: Australia, Cambodia, China, Indonesia, Japan, Republic of Korea, Philippines, Thailand, Viet Nam

Bilateral and regional free trade agreements (FTAs) and economic partnership agreements (EPAs) have proliferated in the last 25 years, partly due to the slow progress of multilateral trade agreements.

Reviews on international trade agreements are important and need to be undertaken regularly, given a constantly changing economic environment and policy direction of countries involved in the agreements. One first needs to carefully assess the impact of an agreement to properly review its costs and benefits. This project attempts to do this; it examines the impact of FTA on trade and on how it affects the dynamics of industry or firms in a country. It asks whether an FTA changes the structure of industry or characteristics of firms, including the firms' production and/or exporting characteristic. In assessing the impact, the project uses the firm/plant-level data and connects these with trade data.

The project has two phases: (i) phase 1, conducted in FY 2016, aimed to examine the impact of FTA on trade using trade data at the industry level; (ii) phase 2, to be conducted in FY 2017 and continues the work of phase 1, connects trade data with microdata and examines the adjustments at the firm/industry level. Phase 1 attempts to cover as many RCEP (Regional Comprehensive Economic Partnership) countries as possible, where data is available. Main deliverables are depository of available data by countries covered by the project, and empirical analysis on the determinants of FTA use.

International Migration and Development in East Asia

Status: Completed

Geographic scope: Indonesia, Japan, Malaysia, Thailand, Viet Nam

This study aimed to (i) better understand the patterns, causes, and consequences of international migration; and (ii) help a better

formulation of immigration policy to increase gains from trade and investment liberalisation. The study addressed the following themes:

- International migration and regional production networks/industrial clusters
- The impact of international migration on labour markets (in sending and receiving countries)
- The interaction between regional integration and cross-border migration
- The effects of immigration policies and the implications for country and regional development

The project emphasises quantitative studies using micro-level data, especially first-hand data drawn from surveys designed and conducted by the participants. The survey data complemented the available data that statistical agencies released.

Maritime Connectivity in Southeast Asia: Its Role and Challenges towards Integration

Partners: LPEM FEB-UI (Institute for Economic Research, University of Indonesia) as major partner; other members come from the Philippine Institute of Development Studies, Maritime Institute of Malaysia, Victoria University Australia, Nanyang Technological University of Singapore, Hong Kong Polytechnic University

Status: Completed

Geographic scope: Australia, Hong Kong, Indonesia, Malaysia, Philippines, Singapore, Thailand

The Master Plan on ASEAN Connectivity identifies three key issues in the region's marine development: port infrastructure, maritime services, and port performance. This study focused on maritime status and port development in Australia, Hong Kong, Indonesia, Malaysia, Philippines, Singapore, and Thailand.

The study revealed the following:

- Port development among East Asian countries covered in this study is diverse.

Hong Kong, Singapore, and Malaysia are way ahead of their peers. Thailand, Indonesia, and the Philippines need to improve and use their ports as an element of regional production network.

- Trans-shipment plays an important role in port utilisation since only a few ports fulfil the requirement of becoming hubs in the region.
- Most Southeast Asian ports, except those of Singapore and Malaysia, suffer from inefficiency, red tape, and underutilised capacity.
- Indonesia's ports remain underutilised as it uses Singapore as a hub for export and import connectivity. As an archipelagic country, Indonesia has just started emphasising the development of its domestic connectivity and less on ASEAN connectivity. Reform in soft infrastructure in the port sector is still fragmented, since the road map of port development is detached from the whole supply chain system.
- The slow modernisation of ports also hampers port development in the Philippines and, to some extent, Thailand. The main challenges come from internal factors, including reforming the port management system and having smooth connectivity with other segments of the supply chain system. Meanwhile, challenges from external factors include decisions made by large shipping lines to make a port call or not.

Microdata Analysis on the Impact of Globalisation of Firms

Status: Ongoing

Geographic scope: East Asia, India, Indonesia, Japan, Republic of Korea, Viet Nam

Extensive theoretical and empirical literature on firms and trade in the past has indeed deepened our knowledge on key issues of international trade: how firms become globally engaged and how globalisation affects firms and the aggregate economy. At least two features are likely to be important to better understand these issues but have not been the centre of attention of mainstream academic literature. These are interfirm linkages in and across countries, over and above the standard product market competition and factor market demand linkage, and knowledge or information spillovers.

To give some examples, first, firms may have transaction or buyer–seller relationship with each other. This often exists in a broader context of global value chain. Second are ownership linkages among firms, which take

the form of a parent–subsidiary relationship in its simplest form or of a more complex form, such as a group of affiliated firms. Third are geographical linkages among firms. In the presence of external economies of scale, the location of firms in an industry tend to be geographically concentrated, which may facilitate the interaction of firms and humans across space. Finally, there are other types of linkages among firms – among foreign and domestic firms, globally engaged and domestically oriented firms, etc. – that rely on formal or informal personal/business networks and interactions, worker/manager mobility, etc.

These various interfirm linkages will likely be important for understanding how firms become globally engaged and how globalisation affects firms and the aggregate economy. Against this background, this project aims at addressing the following key questions: What linkages exist among firms? How are they determined and how do they evolve over time? What roles do they play in firms' decision to become globally engaged? Do they matter for understanding the effects of globalisation on firms and the economy, and how?

Non-tariff Measures in ASEAN (Renewal of Database and Country Report, Phase III)

Partners: National Team 1.5 track, ASEAN SEOM, ASEAN HLTF-EI, ASEAN Business Advisory Council, ASEAN countries, Research Institutes Network members, prominent economists working on NTMs; UN Conference on Trade and Development, World Trade Organization (WTO), representatives of ASEAN countries at the WTO, Organisation for Economic Co-operation and Development

Status: Phase I (Data): Completed

Phase II (Report): ongoing

Geographic scope: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam

With tariffs constrained by the WTO, the number of non-tariff measures (NTMs), designed to protect domestic firms and industries, is expected to increase. This trend is quite possible in ASEAN, whose growth in terms of economy and trade is among the fastest. Between 2008 and 2011, the number of NTMs rose substantially across the globe. This increase is not necessarily a bad sign for the economy. As consumer wealth around the

world rises, the demands on governments for health, safety, and environmental protection increase as well.

Many developing countries have greatly benefited from integration into the global economy through international trade in goods and services. Previously, developing countries' integration into international markets was made possible by appropriate conducive policies such as tariff liberalisation, initiatives related to trade facilitation, and aid for trade. Today, deeper integration in the global economy depends not only on liberal tariffs and supportive policies; it increasingly also requires policy responses to various forms of complex trade-related regional economic integration.

For ASEAN, however, the latest official data on NTMs is available only for 2009, as released by the ASEAN Secretariat. Several surveys have been conducted to fill the gap, but more work is needed. Thus, this project seeks a strong multi-agency collaboration between ERIA and UNCTAD, supported by experts on NTMs, to (i) collect, validate, and classify NTMs data from official sources issued by governments; (ii) improve the general understanding of these measures and their impact on world trade; and (iii) provide insights on policy recommendations to streamline NTMs and trade regulation reforms.

As the NTM data for ASEAN are collected according to the MAST NTM classification and UNCTAD's NTM

data collection approach, analyses can be prepared and policy options can be devised to appropriately assess the trade and development impacts of such barriers to trade.

This project will update the database vis-à-vis current national regulations. It will also assess the impact of trade-related reforms by providing reliable and updated NTM information, conducting rigorous analyses on NTMs and how these will affect trade policy and overall trade performances, comparing NTMs in the ASEAN region to those of other regions, and providing inputs in streamlining NTMs in this region.

Non-tariff Measures in East Asia

Partners: National think tanks and universities in East Asia, UN Conference on Trade and Development, World Trade Organization (WTO), East Asian and ASEAN Senior Economic Officials, ASEAN High Level Task Force, National Team 1.5 track

Status: Ongoing

Geographic scope: Australia, China, India, Japan, Republic of Korea, New Zealand

With tariffs constrained by the WTO, the number of non-tariff measures (NTMs) designed to protect domestic firms and industries is expected to increase. This trend is quite possible in ASEAN whose growth in terms of economy and trade is one of the fastest.

NTMs in general are policy measures, other than ordinary customs tariffs, that could affect the economy in international trade. Thus, NTMs include wide and diverse policies affecting international trade in goods, changing the quantities traded, or prices, or both (UNCTAD, 2013).

Many developing countries have greatly benefited from being integrated into the global economy through international trade in goods and services. Such integration was made possible by appropriate policies, such as tariff liberalisation, and by initiatives related to trade facilitation and aid for trade. Today, deeper integration in the global economy depends both on liberal tariffs and supportive policies, and on increased policies in various forms of complex trade-related regional economic integration. The rise of specialisation and fragmentation of production has led to increased trade in intermediate goods and to regional production networks.

The inclusion of six East Asian countries in the NTM database, as a complement to the NTM data of 10 ASEAN countries collected the year before, will be a significant milestone for economic integration research in the region.

This project aims to provide analytical exercises of impact assessment on trade-related reforms by providing reliable and up-to-date information and by analysing NTMs. The completion of the NTM database of +6 East Asian countries will be useful for policymakers for further integration.

Reducing Unnecessary Regulatory Burdens on Business and Engendering Informed Regulatory Conversations in Priority Integration Sectors in ASEAN

Partners: Research Institutes Network, Malaysia Productivity Corporation

Status: Ongoing

Geographic scope: All ASEAN Member States except Singapore

ASEAN Member States (AMSs) face two critical challenges in an increasingly open

and integrated ASEAN: (i) to promote a conducive business and investment environment, and (ii) to improve economic performance and productivity. To meet these challenges, AMSs need to focus on reducing unnecessary regulatory burdens (RURB) on business and on minimising border barriers to attract greater investment in infrastructure and people. RURB is also an important element of ASEAN's drive towards institutionalising good regulatory practice in the ASEAN Economic Community Blueprint 2025.

RURB addresses unnecessary costs arising from poorly designed or excessive regulation, and from poor administration and enforcement of regulations. RURB supports national regulatory reform initiatives to improve overall regulatory regimes such that policies and regulations complement one another in support of greater efficiency, enhanced competitiveness, and increased trade.

This research focuses on reducing unnecessary regulatory burdens, particularly in trade-related activities of firms in selected sectors that have significant export potential or are of significant policy interest in each AMS (excluding Singapore) covered in the study.

Services Supply Chains – Implications and Opportunities for RCEP

Status: Phase I Completed

Phase II Ongoing (December 2016–June 2017)

Geographic scope: Australia, Cambodia, China, Indonesia, Japan, Republic of Korea, Malaysia, Philippines, Thailand, Viet Nam

This project intends to study value chain activities in service supply chains in the region. It is expected to contribute to the understanding of supply chain activities and implications for the Regional Cooperative Economic Partnership (RCEP) that is currently under negotiation.

This project examines services from a supply chain perspective and provides a deeper assessment of the implications for policy coverage and design of commitments in RCEP related to services.

Specifically, the project aims to:

- Develop a new methodology for identifying and mapping the international supply chain in services activities, in all supply modes.
- Apply this methodology to a series of

services, chosen to provide relevant sectoral and economic coverage in RCEP countries, through interviews with participants in the supply chains.

- Consolidate comments on key policy issues that impede international transactions or distort the shape of supply chains.
- Identify implications for the specification of services commitments in RCEP to enable countries to respond to those policy issues.
- Specify complementary capacity building to support the implementation of policy reform.
- Identify the key factors that contribute to the competitiveness of ASEAN members as participants in these supply chains and the drivers of 'upgrading,' productivity gains, and labour markets.

Study on Trade Facilitation Indicators in ASEAN

Partner: Department of Trade and Industry, Philippines

Status: Ongoing

Geographic scope: ASEAN region

Trade facilitation refers to the streamlining and coordination of international trade procedures governing the movement of goods across borders. Inefficiencies across regulatory areas that significantly

impact the movement of goods can be corrected by informed policymaking. This so-called data-driven decision model, however, requires trade facilitation data that is valid, reliable, accurately measured, relevant, and robust. The quality of the data reflecting trade-obfuscating measures directly informs the nature of the actions that can be undertaken by national regulators. The availability of data also contributes to creating an environment where business stakeholders have access to reliable information that allows them to make sound operating and investment decisions.

ERIA intends to create indicators for the Trade Facilitation Index and the Transport, Transit, and Goods Facilitation Index.

The project is a joint initiative of ERIA's Research and Policy Design Departments, in support of the Department of Trade and Industry's deliverable for ASEAN 2017 of a trade facilitation index.

The Indonesian Economy: Trade and Industrial Policy

Partners: The Government of Indonesia, renowned economists around the world working on the Indonesia's economy

Status: Ongoing

Geographic scope: Indonesia, Southeast Asia

Trade evolves. Production is sliced. Much of production is based on production networks. Imports are largely used as inputs for exports. Many countries are engaged directly and indirectly in producing final products. The development of global production chains, with increased use of imported inputs, reduced the domestic value-added content for each unit of manufactured goods and exports.

Indonesia's manufacturing sector was among seven gainers in the share of the world's manufactured products over the past 3 decades, even though relatively small, in terms of contribution to the world's value added in manufacturing. Indonesia's contribution increased from 0.1% in 1970 to 1.8% in 2011. The winners in the manufacturing sector over the last 3 decades are developing countries that industrialised by joining, rather than by building, production networks

which are part of the production networks of the US and Germany, namely Poland and Turkey, and part of the production networks of Japan, namely China, Korea, Indonesia, and Thailand (Baldwin, 2013:24).

However, the share of Indonesia's machinery parts and components exports to total exports, which is widely used to indicate the degree of participation in international production networks, remains low. Indonesia relatively lags behind its peer countries – the Philippines, Singapore, Malaysia, and Thailand, and even Viet Nam. For Indonesia, the share of exports of machinery parts and components to total exports and total imports are 13% and 37%, respectively in 2000 (Ando and Kimura, 2013). This leads us to ask what we know about the value added of Indonesia.

This study aims to provide (i) evidence on the value added of Indonesia's products, and (ii) insights in designing trade, and industrial and investment policies to improve the value added of Indonesia's products

Trade in Value Added of Southeast Asia

Partners: Research Institutes Network members, prominent economists, Organisation for Economic Co-operation and Development

Status: Completed

Geographic scope: Australia, Brunei Darussalam, Cambodia, China, India, Indonesia, Japan, Republic of Korea, Lao PDR, Malaysia, Myanmar, New Zealand, Philippines, Singapore, Thailand, Viet Nam

East Asia Pacific (EAP) economic growth has outperformed world growth for the last 2 decades, except in 1997–1999 due to the Asian financial crisis. Most East Asian economies are well positioned to weather renewed volatility. The drivers of global economic growth are shifting towards East Asia, and emerging East Asian economies are well positioned to benefit from the growing power of Asian economies. The emerging Southeast Asian economies experienced strong growth in the last 2 decades and are estimated to be on a par with China.

China's growth pattern is changing as it moves up the income stages. It will likely rely more on consumption and less on investment and exports, and more on services and less on industry. This creates opportunities for Southeast Asia to expand their economies through trade and investment.

The study aims to provide a framework on globalisation's second unbundling related to trade and industrialisation in Southeast Asia.

It aims to rigorously analyse Southeast Asia's value added and trade competitiveness; and product development, product variety, quality upgrading, export market concentration, and new market creation of its manufactured export products.

The study was expected to provide inputs in improving Southeast Asia's value added and trade competitiveness, and to provide lessons learnt in building or joining production networks.

Narrowing Development Gaps



2016 Progress Survey Report of Infrastructure Projects in CADP 2.0

Status: Completed

Geographic Scope: ASEAN countries, China, India

The original version of the Comprehensive Asia Development Plan (CADP), submitted to the East Asia Summit in 2010, presented a grand spatial design of economic infrastructure and industrial placement in East Asia.

CADP 2.0, which was submitted to the 10th East Asia Summit in 2015, expands the framework of the original CADP to a new development strategy. It reformulates the conceptual framework for connectivity and innovation, and discusses the quality of infrastructure projects. Thus, it connects the conceptual framework with actual hard and soft infrastructure projects.

CADP 2.0 lists 761 East Asian infrastructure projects in a wide range of sectors – roads and bridges, railroads, ports, electric power, among others – which the research team surveyed in 2015–2016. The progress status may not be noticeable because of the short

period the survey was conducted. However, the results reflect to some extent the political and economic situation in each country and the influence of government policies.

This study presents the progress of these infrastructure projects and summarises the trends and prospects obtained from the survey.

Among the results are:

- Completed projects, including partial operation, comprise about 6% of the total. Projects beyond construction stage increased by 11 percentage points from the previous year.
- The completed projects in Greater Mekong, Brunei-Indonesia-Malaysia-Philippines East Asian Growth Area, and Indonesia-Malaysia-Thailand Growth Triangle increased by 6, 8, and 10 percentage points, respectively. The Mekong's progress is the fastest.
- The percentage of completed projects is high in Viet Nam and Myanmar but low in the Philippines and the Lao PDR.
- The progress in the special economic zones and the energy sector is relatively fast, but that of railroad projects is slow.
- The progress of cross-border projects

is slow compared to that of non-cross-border projects.

- The survey results in 2015–2016 indicate similar tendencies to the survey conducted in 2011–2014.

The progress of projects according to project implementation status, as defined by the original CADP, is also significant.

ASEAN at 50: Retrospectives and Perspectives on the Making, Substance, Significance, and Future of ASEAN

Partner: Research Institutes Network

Status: Ongoing

Geographic scope: ASEAN region

This is a joint project of the Philippine government and ERIA as part of the commemorative events to celebrate ASEAN's 50th anniversary in 2017, under the Philippine chairmanship of ASEAN.

The research will produce a commemorative publication that brings the retrospectives and perspectives of key people who have been involved in the making and working of ASEAN; voices from ASEAN peoples; and the analytical insights, perspectives, and

reflections of eminent persons and experts on the evolution, substance, and future of ASEAN. The publication will consist of five volumes:

Volume 1 presents the voices of selected Leaders and officials from ASEAN Member States on the retrospectives and reflections on ASEAN in the past 50 years and in the future. The essays will be complemented with integrative chapters on (i) the evolution of ASEAN in the economic, political-security, and socio-cultural arenas; (ii) the importance of the donor community in ASEAN development; and (iii) ASEAN leaders and leadership.

Volume 2 presents the results of the ERIA and the RIN survey on what ASEAN means to ASEAN peoples, especially their aspirations and expectations of ASEAN into 2025.

Volume 3 focuses on the interface of the ASEAN Economic Community (AEC) and the reform policies of ASEAN Member States, the progress of ASEAN economic integration, and the impact of and challenges to the region's economic integration initiatives.

Volume 4 presents the reflective essays and papers of experts and analysts on the

significance and future of ASEAN in the political-security and the socio-cultural arenas.

Volume 5 consists of reflective essays and papers of experts and analysts on the significance and future of the AEC.

International Mobility of Highly Skilled Professionals: Lessons for Developing Countries

*Partner: The Institute of Developing Economies, Japan
Status: Completed*

Geographic scope: Japan, Republic of Korea, Taiwan

In the era of the global competition for talent, international mobility of highly skilled professionals is universal. Such type of mobility is significant for both firms and governments, and has been attracting much attention from scholars and policymakers. Earlier studies showed mobility of highly skilled professionals has merits, such as technology transfer, productivity increase, innovation capability building, etc.

Two issues marked the existing studies. First, most studies focused on international mobility from developing countries to developed countries or between developed countries. Second, the process of

such mobility was not studied in-depth. This study investigates the international mobility of highly skilled professionals from developed countries to developing countries.

This study focuses on cases where Korean and Taiwanese firms scouted for Japanese engineers.

The research revealed the following:

- Highly skilled professionals are likely to leave the country if (i) the social system of the country does not allow the professionals to continue working after retirement; (ii) the professionals are retired or are about to retire; and (iii) job satisfaction of the professionals drop significantly.
- They are likely to be scouted by firms in developing countries if (i) these professionals have long work experience; (ii) they are more 'visible' to other companies; and (iii) they know and/or are provided enough information about work and living overseas.
- Highly skilled professionals are likely to take offers from firms in developing countries if the supporting system for work and daily life is efficient. This also aids their

performance.

- They will likely go to and work in a developing country if it is stable and secure.

Policy Report on Local Currency Bond Markets in Asian Emerging Markets

Partners: Centre for European Policy Studies (Europe), Association of South East Asian Nations and Economic Research Institute for ASEAN and East Asia (Indonesia), Research Institute of the Central Bank of China or PBoC (China), Observer Research Foundation (India)

Status: Completed

Geographic scope: China, India, Indonesia

Setting aside the development of financial markets has been proven costly because the current system of financing has not yet fully utilised its potentials to support development financing, especially for infrastructure projects. In most emerging Asian economies, corporate bonds are underdeveloped, leaving governments to occupy the market.

The developing financial markets in Asia are still 'thin' and have many opportunities for further expansion. To develop a healthy and progressive bond market, both monetary and fiscal policies should converge, prerequisite building blocks in place, and regulatory

capacity improved. The economies should provide fiscal incentives for more long-term investments, which will affect the financial markets. One key factor is the broadening of the investor base.

**Research Project for Policy
Recommendations to ASEAN Countries
on Realisation of Higher Value Added of
Agricultural Products**

Partner: Organisation for Economic Co-operation and Development (OECD)

Status: Ongoing

Geographic scope: Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, Viet Nam

Although the agro-food market in Southeast Asia has been supported by steady population and economic growth, as well as deepening regional and international economic integration, it still has unresolved issues, such as low incomes of small-scale farmers. However, there is plenty of scope in improving food value chains (FVCs) – including in the production, processing, circulation, and trade of agro-

food products – from both institutional and technical aspects.

ASEAN recognises that poverty reduction and food security are critical issues related to the agro-food sector. Improving FVCs is thus an important measure to reduce poverty and secure food supply. A wide range of potential strategies can improve FVCs even if they are applied only domestically.

This project aims to contribute to economic development and poverty reduction, particularly in rural areas, by providing policymakers practical information based on FVC assessment in ASEAN countries. It will focus on FVCs around small producers. An analytical framework that considers various evaluation scales will be constructed through dialogue with officials of the ministry of agriculture in each country. The analysis will clarify the current situation of FVCs, and identify specific obstacles to, and appropriate measures for, the development of efficient FVCs in selected ASEAN countries.

This project will be implemented in collaboration with a global value chain study by the OECD.

Lao PDR at the Crossroads: Industrial Development Strategy 2016–2030

Status: Completed

Geographic scope: Lao PDR

This project was initiated upon the request of H.E. Khemmani Pholsena, Lao PDR's Minister of Industry and Commerce. The government was concerned that whereas economic growth increased per capita income more than seven times from US\$235.2 in 1991 to nearly US\$1,800 in 2015, growth had been based on a few sectors that were dependent on exhaustible mineral resources. Further, development gaps had widened between and within regions.

This research presented potential inputs to medium- and long-term comprehensive industrial development strategies, including concrete policy recommendations that are likely to contribute to the country's further development and growth. More specifically, the research aimed to pose policy measures that could turn the weakness of Lao PDR – its landlocked location – into its strength. The unique viewpoints presented are based on

geography and connectivity, and how they affect industrialisation and economic development.

This research was expected to assist the Lao PDR government to achieve inclusive and sustainable economic growth, upgrade its industrial structure, diversify exports, have tighter connectivity, and narrow geographical development gaps.

SME Participation in ASEAN and East Asian Regional Economic Integration

Partner: Institute of Southeast Asian Studies

Status: Completed

The economies of ASEAN and East Asia have become increasingly integrated. This process of regional economic integration has been driven by the mutually reinforcing market forces and both regional and preferential trade agreements. A major area of concern among policymakers has been the extent to which small and medium-sized enterprises (SMEs) are participating and benefiting from regional economic integration. It is a valid concern given that about 95%–99% of all firms in the region are SMEs. Furthermore, SMEs are also likely to be more resource-constrained (compared to large firms) to

take advantage of the benefits from trade and investment liberalisation. Despite their importance, systematic and comprehensive research on these issues is lacking. This research project aims to undertake a systematic, comprehensive, and comparative analysis of SME participation in ASEAN and East Asian regional economic integration.

Major policy findings of the study are:

- SMEs in ASEAN still lack knowledge of the current free trade agreements (FTAs) imposed in ASEAN countries and, thus, tend to not utilise the ongoing trade agreements.
- Whether SMEs are benefiting from various trade agreements adopted by ASEAN countries and whether they have been relatively competitive are still unclear.
- Lack of data either in the form of census or firm survey in less developed countries such as Myanmar makes it more difficult to monitor the likely impact of FTAs on local firms, especially SMEs.
- Meanwhile, the ongoing various trade agreements within ASEAN and between ASEAN and other countries/regions are considered opportunities by bigger industrialised countries such as China, who

uses both ATIGA (within-ASEAN FTA) and ASEAN's position in the Regional Comprehensive Economic Partnership and the Trans-Pacific Partnership agreement to reap bigger markets and participate deeper in global value chains.

Technological Catching-Up and Innovation Policies in China: What is Behind the Largely Successful Story

Partner: The Southwestern University of Finance and Economics

Status: Ongoing

Geographic scope: East Asia Summit region

The study aims to discuss a generalised framework or model to understand the innovation and technological catching-up policies of China. First, it comprehensively reviews the theories on this topic in the literature. Second, it summarises the policy framework and phenomenon of rapid progress of technological catching-up and innovation in China. A proposal on a new theoretical framework follows to explain the accelerated catching-up process. Empirical methods are applied to provide evidence and support the proposed theoretical framework. The study then develops an empirical model to analyse the main driving forces of such technological progress in China.

At the micro level, case studies of CGN, a leading state-owned nuclear energy company, and Huawei, a prominent Chinese private company in the telecommunications industry, provide further insights on what firm-level strategies – combined with or leveraging on state-level policies – enable a successful story.

This study would contribute to the literature in three ways:

- It would give a detailed and in-depth review of the characteristics of several selected industrial sectors in China, and examine what factors have been driving these successful cases and what may have worked as China's disadvantages.
- Through a quantitative method, the influence of these factors on success or failure is tested statistically.
- The two case studies would shed some light on how these factors work at the firm level and could identify additional findings.

The Role of Public Finance in Infrastructure Finance

*Partners: Asian Development Bank Institute,
Organisation for Economic Co-operation and
Development (OECD)*

Status: Ongoing

*Geographic scope: Indonesia, Japan, Philippines, Viet
Nam, North America, OECD countries*

The demand for infrastructure in Emerging Asia is large. Developing new infrastructure, maintaining existing infrastructure, and upgrading ageing ones will contribute to inclusive and sustainable growth of countries and can deepen their connection with the global economy. Nevertheless, financing these investments has been a great challenge for the region. Broadening the financing methods, including domestic fiscal and financial efforts, will attract more investments for infrastructure and contribute to sustainable growth. Efforts to secure infrastructure financing have typically relied on private resources, public-private partnerships, and international lending. These approaches may be complemented by providing more public incentives

for investors, issuing government bonds, and financing using tax revenues.

This project focuses on the domestic fiscal and financial policy options of emerging Asian countries to fund infrastructure development and maintenance. Areas of study include reducing risks, improving rates of return, improving governance mechanisms, avoiding moral hazards, as well as balancing the strengths and weaknesses of financing options. This study will be informed by the experiences of advanced economies in these areas, while

considering country-specific circumstances and their relevance to emerging Asian countries.

Country case studies in the project will cover exploration of optimum resource mobilisation and its formulation/structure, revenue stream estimation, prioritised sectors, institutional frameworks, and implementation strategies.

Sustainable Economic Development



Business Opportunities and Managerial Challenges for East Asian SMEs in the Globalized Economy: An In-depth Case Study of Japanese SMEs Multi-plant Operation in East Asia for Apparel and Clothing Accessories Production

Status: Ongoing

Geographic scope: China, Japan, Thailand, Viet Nam

Three unlisted Japanese small and medium-sized enterprises were selected to study firm strategy based on information available only to insiders ('insider management studies'). Phase 1 of this research focuses on Firm A, a producer and seller of apparel products. The research team collected information by visiting Firm A's domestic and international factories and conducting in-depth interviews of its factory and distribution managers.

Focus is mostly on the economic reasons for maintaining labour-intensive production in Japan and the benefits from multi-factory operations in three countries. The study also sheds light to the importance of procurement/production/delivery lead times, the

difference in defect rates among Firm A's factories and subcontractors, and the burden of repairing defectives.

Japan's clothing industry struggles to manage risks associated with seasonal changes in sales and exchange fluctuations. This single-firm, multi-factory case study strategy helps better understand these issues; it enables inter-factory comparison of producing a specific product under the same quality standard. To manage the seasonality, Firm A combines make-to-stock and make-to-order. Choice of production sites for a specific product depends on procurement, production, and delivery lead time. Make-to-order requires a 'quick response', which factories in Japan can achieve. Each Japanese factory takes only 1 day to transport its products to the Saitama delivery centre; China takes more than 5 days; and Viet Nam, 1 week. Factory location influences on-time delivery; Firm A's factories in Japan and China and its distribution centre in Japan are near toll gates of expressways.

These findings contradict a widespread perception that labour cost is crucial to the choice of production sites for the labour-

intensive apparel manufacturing processes, leading to the conclusion that Japan is disadvantaged in apparel manufacturing. Such conventional perception significantly influences policy debates in upper-middle income countries in Southeast Asia that face competition from less-developed countries. This case study can provide policymakers and practitioners with new perspectives of policy alternatives and business strategies. It will describe such findings, investigate whether the findings from Firm A can be applied to other Japanese firms, and develop a theoretical framework for further empirical studies.

Distributional Effects of Disasters on Food Security in ASEAN

Status: Ongoing

Geographic scope: ASEAN, focusing on Cambodia, Lao PDR, Myanmar, Viet Nam

The ASEAN Socio-Cultural Community (ASCC) Blueprint and East Asia Summit (EAS) statements clearly recognise the need for concerted efforts to address the issue of disasters and climate change and their impacts on socio-economic development, health, and the environment. ASEAN Member States (AMSS) agreed to implement 11 related actions based on the

principles of equity, flexibility, effectiveness, common but differentiated responsibilities; and enhance their institutional capabilities. Ensuring adequate access to food for all ASEAN peoples is also a priority agenda for ASCC Blueprint implementation. However, climate change and the increasing number of natural disasters are affecting regional and local food security.

Why are AMSs not investing more in disaster resilience, despite the prevalence and rising costs of disaster events? This may be because decision-makers in governments, businesses, and households tend to focus on avoiding losses from disasters, and perceive the return on investment as uncertain. Effective policy actions require sector-specific damage and loss of data for the agriculture and trade ministries of AMSs. The national strategies on disaster risk reduction and climate change adaptation that support resilience must address the types of disasters with the greatest impact on the agriculture sector. Government must design measures specific to the crop, livestock, and fisheries subsectors, and be enabled to adopt more systematic strategies that counteract the

impact of disasters on the growth and development of the agriculture sector, and on national and regional food security.

Nevertheless, the business rationale for climate change adaptation and disaster risk management should be based on the multiple dividends of resilience. Actions should look beyond avoiding losses (the first dividend) but to wider benefits to be gained independently whether disaster occurs.

Hence, the objectives of this study are to (i) understand key food security challenges posed by disasters and climate change and the required actions taken by policymakers to address these risks, (ii) share experiences on adjustment of key planning instruments relating to the agriculture sector, (iii) exchange experiences on successful adaptation measures across key vulnerable areas, (iv) undertake cost-benefit analysis and identify necessary structural and non-structural measures that could contribute to a resilient ASEAN.

Economic Policy Making in the Indonesian Economy

Partner: Centre for Strategic and International Studies

Status: Completed

Geographic scope: Indonesia

Indonesia's President Joko Widodo started his government with great confidence, following the successful presidential election and strong public support for his economic agenda. Great expectations emerged for his agenda of reforms to achieve strong economic growth and higher living standards. The policies he introduced in the first few months of his leadership were encouraging. These include significantly reducing fuel subsidies and introducing new social assistance programmes.

However, the positive signal was short-lived. Several months later, it became clear that the government lacked a robust framework to achieve strong growth. Many policies or ideas for policies were not deliberated during preparation, did not have a visible strategy for implementation, or were inconsistent with other policy objectives.

While still subject to debate, the potential underlying issues are weak understanding (by policymakers) of the problem at hand, or lack of solution that can quickly be implemented or feasible for some issues, such as those in infrastructure development. Adding to the complexity of the problem is the tendency towards inward-looking policies and the emphasis on stability (over rapid growth) in the President's general economic agenda.

The research should contribute to the government by providing knowledge, ideas, or updated information to help the President and his government put effective policies in place. This project does so by supporting discussions on key policy issues by scholars and relevant stakeholders. Implicit in this project is the idea to contribute to the process of building a strong yet independent advisory group driven by the local research community.

The project addresses several topics such as infrastructure, food security, trade and industry, investment and business climate, fiscal policy and macroeconomic challenges, food security, and services. The outcome of the project includes 16 policy briefs and a website (www.paradigmaekonomi.org).

Human Resource Management and Coordination for Innovative Activities in Production Networks: Towards Effective Uses of Internal and External Resources

Partner: The Institute of Developing Economies, Japan

Status: Ongoing

Geographic scope: India, Indonesia, Japan, Lao PDR, Malaysia, Philippines, Thailand, Viet Nam

This research focuses on the presence or absence of formal R&D organisations and on internal factors of firms to realise innovation.

Key findings include:

- Top management (owners/founders or professional chief executive officers) played important roles in initiating and executing technology upgrading in relation to human resource management.
- An organisational culture open to new ideas and to acquiring new knowledge cannot be taken for granted. The open innovation concept is becoming a norm for R&D/innovation management. Firms should enhance their 'internal' capabilities

to realise an open innovation strategy.

- Firms involved in innovative activities have a strong customer orientation. This, combined with top management's leadership, may help firms develop an organisational culture for innovation.
- Cross-functional team is widely introduced to use the internal resources of firms. ISO (International Organization for Standardization) standards are used to develop organisations focusing on innovation. Quality control practices are fundamental to innovative activities.
- A reward system – job promotion and monetary rewards – for personnel contributing to upgrading is present in some innovative firms. A separate career path for researchers helps retain those people and increase their morale.
- Firms need to collaborate and cooperate with other firms and institutions. Sales engineers play key roles in understanding customer needs and in establishing collaborative relationships with their customers. Trade fairs are used to find both customers and partners for innovative activities.

Industry 4.0: Empowering ASEAN for Circular Economy

Status: Completed

Geographic scope: ASEAN, China, Germany, Japan, and Republic of Korea

The emerging economies of Asia are experiencing strong growth, accompanied by increased production and consumption. Ample evidence suggests that the regional economic development experienced in ASEAN, China, and India is associated with Industry 1.0 (through introduction of mechanical production facilities powered by water and fossil fuel). This slightly differs from Industry 2.0 (where mass production is based on the division of labour and renewable electrical energy). This was followed by Industrial Revolution 3.0, where electronics, information and communications technology, and robots played a key role in automating production. For the last several years, analysis of industries 1.0, 2.0, and 3.0 has been largely absent from the assessment of integrated economic and environmental policy formulations. Recent agreements on Intended Nationally Determined Contributions (INDCs) by major developing countries of the East

Asia Summit (EAS) also highlight the importance of understanding the improvements in resource efficiency that will drive Industrial Revolution 4.0.

Industry 4.0, where a new economic model replaces the linear approach to industrialisation and which considers resource constraints and application of product and process innovation, will become an economic and social imperative for the EAS region. Linking economic opportunities in ecosystem boundaries of industrialisation requires a disruptive paradigm shift.

This study revealed the following:

- The introduction of Industry 4.0 in the manufacturing environment is ushering new opportunities for export-oriented middle-income countries. But the status of technology and innovative capacity is not yet considered seriously in sectoral policies.
- In the transition towards a circular economy, refurbishment can be applied to regain value from used products, reduce waste, and improve resource efficiency. Indicators in cities and sectors need policy attention.
- Creating integrated business models to meet the targets of Industry 4.0 and a circular economy needs further policy incentives and capacity building programmes.

Policy Index for Natural Disasters Resilience

Status: Ongoing

Geographic scope: 50 pilot cities in Indonesia (but the formula can be applied anywhere)

ASEAN is one of the world's most vulnerable regions to natural disaster. This project aims to evaluate the influential factors to a region's resilience, construct the index to represent said resiliency, and apply the formula to pilot regions.

The research faces several challenges: (i) there is no universal definition of resilience; (ii) scholars have constructed some formula but so far there is no evidence to prove their accuracy; and (iii) the value of variables is usually relative from one region to another because of different use by locals.

Using the Schipper and Langston (2015) approach, the research team will define the influential variables to represent the capabilities of learning, options, and flexibility to be used as proxies for resilience. The three groups of variables to characterise influential variables are financial and economic capital, social

capital, and institutional capital. The research team will construct a relative position of the city for each variable. The result will provide policymakers with the data of areas that need to be maintained or improved.

Reducing the Vulnerability of Supply Chains and Production Networks

Partners: ASEAN Socio-Cultural Community, ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)

Status: Completed

Geographic scope: ASEAN, China, India, Japan, Republic of Korea

The global supply chain and production network is an example of an economic structure that is vulnerable to impacts of unexpected events. Whereas several studies investigated the direct impacts on specific geographical areas or production networks over the past decade, quantifying the economic effects of extreme weather events and economic crisis on such production networks gained less attention. The great complexity of the global economic system, coupled with methodological and data gaps, makes it difficult to estimate the interrelated effects of unexpected events.

The apparent ability of some supply chains to recover faster than others has recently triggered an important policy debate on supply chain resilience. A clear understanding of this phenomenon is a fundamental step in building socio-economic resilience. Within this context, this study aims to (i) define the conceptual and sectoral domains of supply chain risk management and resilience by examining the welfare effects of extreme weather events and other economic shocks on the selected global supply chain in East Asia Summit economies; (ii) analyse the scope of public-private partnerships in tackling the risks by exploring empirically the effects of supply chain risks and information management, and the four formative supply chain capabilities of flexibility, velocity, visibility, and collaboration; and (iii) propose a regional cooperation framework in the context of major manifest supply chain vulnerability events, such as disasters and global financial crisis.

The study revealed the following:

- Extensive supply chains can negatively affect recovery because of higher vulnerability to network disruption, and positively through support from trading partners, easier search for new partners, and the general benefits of agglomerations – thus, policies to support the resilience programme.
- Procurement activities and public financing immediately after disasters significantly contribute to creating supply chain resilience. Certain intra-organisational and inter-sectoral issues also impact supply chain resilience. Business continuity plans need specific considerations.

This study identified which supply chain capabilities can support the containment of disruptions and how these capabilities can be supported by the ASEAN Agreement on Disaster Management and Emergency Response (AADMER).

Social Protection Floor: A Perspective from Developing East Asia

Partners: National Economic Research Institute ; Philippine Institute of Development Studies; Thailand Development Research Institute; National University of Singapore; Fudan University; Ministry of Labour, Invalids, and Social Affairs of Viet Nam; Council for Agricultural and Rural Development Cambodia
Status: Completed

Geographic scope: China, India, Indonesia, Philippines, Thailand, Viet Nam

East Asian economies have different ways and time frames in developing and implementing social protection programmes. The study portrays and critically discusses the how public policy responds to the dynamics of global trends, including the Millennium Development Goals and the ASEAN Sustainable Development. Adopting a social protection floor progressively requires dedicated funds that largely come from the state budget. The issue of creating sufficient fiscal space to finance social security is usually only being lightly discussed, while it is actually one major challenge in implementing the social security system.

This study discussed implications on fiscal space and reviewed different aspects of methodologies needed to assess the sustainability of social protection. The cases were from East Asian countries with the largest population – China, India, and Indonesia – and several emerging economies – the Philippines, Thailand, and Viet Nam. There had been ample lessons from each country and suggestions for moving forward.

The study also examined the concept of social protection system and its floors, and

reviewed the debate on – and methodologies needed to assess – social protection sustainability and affordability. Availability of good quality statistics on social protection expenditure, financing, coverage, and adequacy is a precondition for good quantitative governance of any public expenditure programme. Therefore, attention is drawn to existing challenges towards the availability of social protection statistics at the national and international levels. Policymakers should be aware of these data limitations when they undertake social protection initiatives.

Finally, the study tackled the debate on going beyond pure static accounting in assessing the financial sustainability of public expenditure and discussed various challenges associated with incorporating projection results into inter-temporal government accounts.

Energy



A Review on Institutional Framework, Principles, and Key Elements for Integrated Electricity Market: Implications for ASEAN

Status: Ongoing

Geographic scope: ASEAN

ASEAN member countries are becoming large energy consumers and growing participants in the global energy market. Cross-border electricity trade becomes increasingly important in the context of fast-rising energy demand and growing urban population. This study attempts to set out the common principles, methodologies, institutions, and structure for designing an integrated cross-border electricity market and delivering practical policy implications for ASEAN. To allow cross-border electricity trade, the region will need a target model, common vision, and principles that govern electricity market and grid operation. Energy prices administratively determined by national governments should be shifted to market-oriented pricing mechanism. Integrated electricity market has enormous potential that can be realised at reasonable costs. When individual countries pursue

regional cooperation mechanism to secure their energy supply, investment comes in and contributes to optimising available energy resources throughout the region. The research uses questionnaire survey as the main methodology to determine the necessary and feasible institutional components in building an integrated ASEAN electricity market. This contributes primary data on the status and feasibility of electricity market integration in ASEAN and enables further analysis and insights on corresponding policy recommendations.

Achieving an Integrated Electricity Market in Southeast Asia: Addressing the Economic, Technical, Institutional, and Geo-political Barrier

Partners: Brunei National Energy Research Institute (BNERI); The Institute of Energy Economics, Japan (IEEJ); The University of Western Australia (UWA); and Nanyang Technological University (NTU) (Singapore)
Status: Completed
Geographic scope: ASEAN

The research was divided into four interdependent research clusters. Clusters 1 and 2 applied case studies on Brunei, Indonesia, Malaysia, and the Philippines (BIMP) using different methods. Cluster 1, led by the IEEJ, conducted dynamic linear programming model to simulate the development of power infrastructure, interconnection, and exchange of power in this subregion of ASEAN. It emphasised the economic rationale and feasibility of electricity market integration in the region. Cluster 2, led by BNERI, focused on the regulatory, institutional, and technical barriers in BIMP, and developed a roadmap to solve these issues. This study gave some insights on regional-specific barriers or issues for other regions based on an established understanding of the common issues from previous studies. Cluster 3 was conducted jointly by ERIA and the Energy Research Institute at NTU.

The study, mainly on the Nordic and European cases of electricity market integration, analysed both their business models and overall market design for grid interconnection and cross-border trading of electricity. In doing so, the study eventually tried to deliver implications on the possible business model and market design for ASEAN. The Cluster 4 study, carried out by a researcher from UWA, discussed political and institutional barriers to the formation of an integrated

ASEAN electricity market and derived several practical strategies in addressing such barriers as policy implications.

Addressing Energy Efficiency through Traffic Improvement

Partner: The Institute of Energy Economics, Japan

Status: Ongoing

Geographic scope: East Asia Summit region, Viet Nam

A related ERIA study conducted in FY 2015 analysed possible actions and policies that could maximise effectiveness of the planned bus rapid transit (BRT) system in Da Nang City, Viet Nam. The study analysed the effect of feeder-line busses for BRT use, considering the latent preference of citizens to use busses. Findings revealed that the existing plan cannot meet the modal share target of public transport in the city (35% in 2035). Thus, the city may be required to expand the BRT line, introduce a metro system earlier, or be redesigned for the city to be more MRT friendly. Using Da Nang City as the case study for a

second time, this research analyses what transportation system is necessary to achieve a targeted modal share, and thus quantify the amount of efficiency improvement. The study will also draw policy implications for both Da Nang City and the East Asia Summit region.

This study is consistent with the strategic theme of 'Energy Efficiency and Conservation' in the ASEAN Economic Community Blueprint 2025, and contributes to improving efficiency in the transport sector. It is also consistent with the goal of creating sustainable communities outlined in the ASEAN Socio-Cultural Community Blueprint 2025.

The study will have the following policy implications:

- While various measures contribute to improving traffic and energy efficiency, measures must be in accordance with the development of urban and transport infrastructure and motorisation stages.
- Since the development of transport infrastructure consumes so much time and cost, such development should be based on a forward-looking, long-term viewpoint.
- Investment from a long-term viewpoint may sometimes fail to bring about any major effects in the short term. Therefore, strong leadership and an integrated execution body are required for implementing such investment.

Building a Network on Collaborating Towards Social Acceptance of Nuclear and Coal Power in Asia

Partner: The Institute of Energy Economics, Japan

Status: Completed

Geographic scope: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam

The radioactive disaster at the Fukushima Daiichi Nuclear Power Station, triggered by the tsunami following a major earthquake on 11 March 2011, seriously impacted the region. More than 100,000 local residents were forced to abandon their homes. People in emerging Asian economies were greatly shocked not only because it was one of the three most serious nuclear accidents, but also because it happened in Japan, known as one of the most advanced countries in technology and infrastructure. After the disaster, social acceptance of nuclear energy generally turned negative or non-supportive.

At the same time, economic efficiency should be considered when developing power stations in Asia. Thus, coal-fired power stations are appealing because of their supply stability and lower cost. Yet despite the availability of technologies that mitigate some of the environmental impact of coal, concern about emissions sometimes hampers the deployment of coal-fired power stations.

Therefore, cultivating mutual reliance and agreement among stakeholders such as government, licensees, and local municipalities is crucial in developing facilities that combine nuclear and coal power. Intense and practical research on issues, such as the specific features of nuclear/coal power, their role in energy security and climate change, social influence, and disclosure of risk information, would be highly valued. Collaboration and practical action supporting social acceptance of nuclear and coal power would provide substantial contribution to the smooth development and utilisation of these types of energy in Asia.

Thus, this study provides member countries considering nuclear/coal power a practical approach to achieve wider social acceptance. Also, the results of this study will serve as a model case for establishing social consensus on certain public issues.

Cooperation, Exchange of Information, and Assistance between East Asian Regulators in Nuclear or Radiological Incidents and Emergencies

Partner: Finland's Radiation and Nuclear Safety Authority (STUK)

Status: Completed

Geographic scope: Indonesia, Japan, Republic of Korea, Malaysia, Philippines, Singapore, Thailand, Viet Nam

Severe nuclear or radiological emergencies have direct or indirect global effects, as evidenced by the Fukushima Accident of 2011. A less severe emergency may affect several countries in a region. Several nuclear facilities already exist – and an even larger fleet of nuclear power plants are under construction or planned – in the East Asia Region. Thus, cooperation in preparedness for nuclear or radiological emergencies is increasingly important to ensure that the impact of any such emergency is minimised as much as possible. Regional collaborative frameworks complement established international conventions on this subject to enhance the safety and security of nuclear applications, as shown by the Nordic and European experiences. This research was

a proposal for practical cooperation in case of, and in preparation for, nuclear or radiological emergency among ASEAN countries. It describes the formation, structure, communication methods, and coordination mechanisms of an East Asian coordination working group for cooperation in nuclear or radiological emergency and cooperation arrangements among its members. It reflects the vision of a comprehensive and effective regional collaboration mechanism, although a step-by-step approach may need to be taken for institutionally and politically easier items to be agreed first and the more difficult ones to be adopted later and in a gradual manner.

The study revealed the following:

- All member countries have a common awareness that every country should play a role in regional cooperation on nuclear emergency preparedness and response, irrespective of the development status of commercial nuclear power generation.
- East Asian countries can learn practices and guidelines from European countries, especially Nordic countries, on regional information sharing and collaborating systems in case of a radioactive emergency.
- It would be appropriate to make use of a relevant framework in East Asia, such as the ASEAN Network of Regulatory Bodies on Atomic Energy concept, to achieve the most effective emergency preparedness and response.

Cost Assessment of Energy Security Improvement in EAS Region

Partner: The Institute of Energy Economics, Japan

Status: Completed

Geographic scope: East Asia Summit

Energy security is a centre pillar of energy policy in all East Asia Summit countries. Self-sufficiency in energy supply forms the basis of energy security, and there are many policy options to improve it. These include enhancing oil production, increasing the use of domestically available renewable energy, and improving the efficiency of energy use.

Meanwhile, governments are requested to use their tax income economically and effectively by carefully assessing each policy option. This study attempts to assess and compare the costs and effects of different policy options to determine which is more economically effective. Such assessment is expected to help policymakers choose which option will improve self-sufficiency in energy supply, thus, the country's energy security.

The study has the following policy implications:

- Since the costs and benefits of each policy option to improve self-sufficiency differ, policymakers, by using this kind of assessment, can choose which is more economically efficient.
- A country-specific assessment will provide better indication for policymakers since the costs and benefits differ in each country.
- Economic efficiency, while part of the policy choice process, is not the only element that should be considered.

Creating Better Social Acceptance for Electric Power Infrastructure

Partner: The Institute of Energy Economics, Japan

Status: Ongoing

Geographic scope: Thailand

The East Asia Summit region needs to develop every kind of power plant to supply electricity for future demand. However, some types of power, including coal, nuclear, grid, and even renewable power sources such as wind are facing protest from surrounding residents or non-governmental organisations. Therefore, it is crucial to enhance social acceptance of electric power infrastructure for achieving stable electricity supply and well-balanced power supply mix.

This study focuses on a case study in Thailand where conflict continues between advocates and opponents of coal-fired power plants. The study will try to come up with a process in reaching consensus, which reflects the case's unique background. This is because that discussion in Thailand is thought as typical case, thus implication can be disseminated among the ASEAN region.

The study is consistent with the wide range of strategic themes in the AEC Blue Print 2025 and with the goal of creating a resilient society in the ASCC Blueprint 2025. It particularly corresponds to principles of 'D.5. ii ensure availability and accessibility of affordable energy services'.

Developing Sustainable Collaboration Model for Implementing Integrated Space-Based/Geospatial Disaster Management Infrastructure to Strengthen Resilience in the ASEAN Community

Status: Ongoing

Geographic scope: ASEAN and East Asia

Strengthening the resilience of natural disaster infrastructure in ASEAN countries – considered an important issue for economic development among East Asia and ASEAN countries – is urgently needed. The ASEAN Agreement on Disaster Management and Emergency Response (AADMER) developed the AADMER Work Program 2010–2015 to cover all aspects of disaster management.

The ERIA project 'Applying Space-Based Technology for Building Resilience in ASEAN Region' conducted in 2014 concludes that both space geospatial technologies have notable potential to strengthen this resilience. However, sustainable mechanisms to practically integrate the technologies into disaster risk management (DRM) have not been well established. The study points out the necessity of (i) trans-border mechanisms to deliver geospatial and space-based information from data providers to end users in disaster-affected areas with support of international activities; and (ii) financial schemes involving the private sector, or public–private partnerships (PPPs), to collaboratively integrate the technologies in a sustainable and practical manner.

To establish the trans-border mechanism with PPP scheme, the study proposes establishing a trans-border DRM platform as a DRM service infrastructure for public

disaster management agencies and private companies in the ASEAN region. The platform comprises the following: (i) data resources interoperable and expandable at regional and global scales; (ii) knowledge on how to apply the technologies to DRM; and (iii) human network of stakeholders that includes national and local governments, technology providers, and financing partners. To ensure sustainable operation, the platform collects operation fees from DRM service providers while these service providers develop businesses using the platform.

This study aims to (i) analyse the feasibility of the proposed platform in terms of technology and finance, (ii) design the platform based on the feasibility study, and (iii) lay out strategies to establish and operate the platform in a practical and sustainable manner.

Development of Eco Town Model in the ASEAN Region through Adoption of Energy-Efficient Building Technologies, Smart Grid, and Transportation, Phase 1

Partner: Brunei National Energy Research Institute

Status: Completed

Geographic scope: Brunei Darussalam

The recent economic growth in ASEAN has driven energy demand in the region to grow about 2.5 times since 1990 and is expected to triple by 2035. ASEAN will need to apply the concept of low-carbon city or eco town to curb increasing demand and mitigate emissions of greenhouse gases. Both could threaten the sustainability of future energy supply and negatively impact the environment, health, and tourism – i.e. the quality of life.

In this study, eco town model refers to a town, scalable to any size based on the geographical and socio-economic features of an ASEAN country, seeking to become low energy or low carbon. It targets to reduce its CO₂ emissions and has a concrete low-energy development plan irrespective of its size, characteristics, and type of development (greenfield or brownfield development).

The model aims to promote the development of eco towns in the region by providing basic principles that can assist government officials in planning effective energy-efficient policies and formulating appropriate combinations of low-energy measures while taking into account socio-economic conditions and city or town specific characteristics. Thus, this study focuses on the introduction of current and future energy-efficient technologies on buildings and road transport as well as smart grid technologies. Such technologies can be applied to any town in an ASEAN country.

Economic Impact of Removing Energy Subsidies in Malaysia

Partner: The Institute of Energy Economics, Japan

Status: Completed

Geographic scope: Malaysia

ERIA applied two approaches to analyse the economic impact of removing energy subsidies: (i) a price impact analysis using Malaysian I-O table 2010 and (ii) a macro impact analysis using the Malaysian

macroeconomic model. Price impact analysis shows serious price hikes to other subsectors when subsidies are removed from both the gas and power sectors. Subsectors, such as hotel and restaurant, finance and insurance, water, and non-metal and mineral, will have a price increase of 4%–5% if the government removes subsidies from the gas and power sectors. This price hike is serious because Malaysia's wholesale price index increased to 9% in 2000–2012. Thus, the government should take care of these subsectors to mitigate the high price hike. On the other hand, macro impact analysis shows that GDP shrinks due to overall price hike. However, if the Malaysian government could expend surplus budget for capital formation, which results from stopping the subsidies, GDP could increase slightly. Thus, removing energy subsidies, especially electricity, could positively impact Malaysia's economy.

Electricity Supply Mix and Role of Policy in ASEAN

Partner: The Institute of Energy Economics, Japan

Status: Completed

Geographic scope: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam

Increasing demand for electricity combined with lower income levels have prompted ASEAN Member States (AMSs) to develop large-scale power-generating capacity economically and efficiently. Mitigating environmental burdens is also becoming more important. Thus, simultaneously achieving the 3Es – energy supply security, economic efficiency, and environmental protection – in power development has become indispensable in the energy policy of ASEAN countries.

Each country has its policies and targets for future power supply mix; yet without appropriate implementation tools, such policies or plans are unlikely to be implemented. Every energy source has its own advantages and disadvantages; some effort is required to make full use of the advantages and minimise the disadvantages. Therefore, creating a system featuring a mixture of electricity sources is crucial to ensure a stable supply. This study aimed to suggest policy tools for policymakers to realise an appropriate power supply mix.

Once the optimal mix has been envisioned, the next step is to determine policies that could prompt the most effective implementation of such a mix. A key condition for successful

implementation is to introduce market models that are most appropriate in light of each AMS's policy priorities.

The policy implications of this study are as follows:

- The applicable policy tool for achieving electricity mix target differs according to each country's development stage and market model.
- A simple 'copy and paste' system will not work effectively; therefore, every country or region needs to understand its own situation first.
- Every government and/or region is suggested to envision its future electricity supply mix to indicate a preferred direction for investment.
- On the industry side, a life-cycle cost evaluation of power station investment must encompass the true value of different investment options.

Energy Connectivity in Myanmar

Partner: University of Tokyo

Status: Ongoing

Geographic scope: Cambodia, Lao PDR, Myanmar, Thailand, and Viet Nam

Myanmar has achieved consistently high growth rates in the past several years, emanating from the need to find sustainable energy sources. In countries of the Mekong River Basin, the electricity and gas networks

or grids were the symbol of progress itself, with increasing numbers of grid-connected people a measure of economic development. Nevertheless, more than half of Myanmar's population do not have access to modern electricity.

Grid-based development has several limitations. Even with access, the grid in many regions is often unreliable, with power cuts being a common frustration. This study focuses on developing an energy road map for Myanmar as that of other Mekong River Basin countries. It will focus on the following themes which have been identified as significantly important in enhancing rural and national electrification in Myanmar: (i) comparison between mini-grids and national grid extension, (ii) possible financial mechanism to support rural electrification, (ii) potential of hydropower development focusing on small and mid-sized hydropower projects, and (iii) possible role of foreign investment, particularly from neighbouring countries.

The study also comprises a comparative analysis on common energy challenges of Mekong River Basin countries, such as rural electrification and connectivity.

This study uses the following methodologies: (i) simulation analysis that examines the economic rationale of the comparative advantage between mini-grids and the national grid extension to enhance the country's electrification; (ii) extensive fieldwork that filled the knowledge and information gaps to grasp the enabling conditions for the successful electricity development in the rural areas of Myanmar; (iii) stakeholder analysis to understand, from a regional perspective, Myanmar's affluent energy and resources, such as natural gas and hydro.

Energy Outlook and Analysis of Energy Saving Potential in East Asia Region

Partner: The Institute of Energy Economics, Japan

Status: Ongoing

Geographic scope: East Asia Summit region

Sustained population and economic growth in the East Asia Summit (EAS) region has significantly increased energy demand, with the Total Final Energy Consumption projected to double from 2012 to 2040. Demand in the transport sector is projected to grow most rapidly, followed by demand in the industry and commercial sectors, and, finally, that of the residential sector. Increasing energy demand threatens the energy

security of the region. Thus, potential energy saving is key to reducing energy demand and CO₂ emissions. This study presents an alternative policy scenario for the EAS region that could save energy consumption by 2040 compared to the business-as-usual scenario. Finally, the study proposes policy recommendations based on projected energy consumption trends to realise hidden fuel savings and contribute to sustainable growth.

This study is updated every 2 years, and involves (i) re-estimating energy demand formulas shifting from International Energy Agency data to national energy data, (ii) creating a new scenario to ensure that CO₂ emissions in 2040 are at the same level as 2013, (iii) summarising INDC (Intended Nationally Determined Contributions)/NDC of EAS countries. A new scenario could suggest that to maintain CO₂ levels, stricter energy efficiency and conservation goals and shifting to low-carbon energy sources such as solar are needed.

Energy Outlook in Thailand

Status: Ongoing

Geographic scope: Thailand

This project supports the Thai Energy Policy and Planning Office to develop an energy outlook model that applies an end-use approach, and the Chiang Mai University to analyse the energy consumption patterns in Thailand's household sector.

The research will assess (i) detailed issues in energy demand side, (ii) energy consumption pattern of the household sector in Thailand, and (iii) major critical points of power development in Thailand.

Energy Policy Road Map of Greater Mekong Region

Partners: University of Tokyo, University of California

Status: Ongoing

Geographic scope: Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam

While the Greater Mekong Region has attracted increased international attention since its integration into the global economic system in the late 1990s, it still faces many energy development challenges. Such

challenges and opportunities are the focus of this study whose functional objectives are (i) a quantitative scenario analysis of major factors of rural electrification, including future electricity demand forecast, amount of needed power generation capacity in the off-grid areas, costs required for rural electrification, etc.; (ii) a qualitative analysis of obstacles in power development particularly in the border areas; and (iii) human resource development (HRD) in policymaking/implementation for energy policymakers and researchers.

This ongoing project has the following policy recommendations so far:

- Assuming that the national electrification target for universal energy access is in 2030, the integration of decentralised power systems into planned centralised systems might be a crucial aspect to make the target feasible.
- To facilitate integrated infrastructure development, public–private partnerships should be soundly coordinated with proper reforms to encourage foreign direct investment.
- For the relevant plan-do-check-act (PDCA) cycle, an HRD programme for

governmental offices is necessary. It is also important to provide a common ground for energy-related ministries and other stakeholders to discuss and work together.

Formulating Policy Options for Promoting Natural Gas Utilisation in the EAS

Partners: The Institute of Energy Economics, Japan, Nomura Research Institute

Status: Ongoing

Geographic scope: ASEAN

The September 2016 Energy Ministers Meeting mandated ERIA to conduct a study on natural gas markets in the East Asia Summit (EAS) region.

The study aims to (i) clarify possible areas that can be shifted to natural gas in each field, such as power generation, industry, residential, and transportation; (ii) calculate potential gas demand in EAS countries; (iii) clarify challenges and issues to promote use of natural gas; (iv) propose optional gas distribution network and calculate the amount of funding required for investment; and (v) propose policy options essential to promote natural gas shifting and investment in related infrastructure and equipment in the region.

The study will investigate future gas demand potential in ASEAN countries and India, and clarify the necessary investment amount. By doing so, this study will raise awareness on the market size of natural gas in EAS countries, clarify the challenges to expand the natural gas market, and propose the policy options necessary to address such challenges.

Globalisation of Low-Carbon Technologies

Partner: ASEAN Centre for Energy

Status: Completed

Geographic scope: East Asia Summit countries (ASEAN +6)

In recent years, tremendous strides have been made to advance low-carbon energy systems – innovating, scaling up investment, bringing down system costs, implementing the right policy frameworks, and interconnecting large amounts of variable renewable energy supply into the grid. Reflecting this, many countries have put forward ambitious plans to increase low-carbon energy to generate power. Combined, the low-carbon renewable energy plans of China, India, and ASEAN will result in

an increase from approximately 9,000 TWh in 2012 to 20,000 TWh in 2030.

In addition, several promising initiatives currently being implemented will buttress the Intended Nationally Determined Contributions (INDCs). Some 40 implementing agreements carry out technology programmes in the areas of renewable energy (solar, wind, bios, geothermal); fossil fuels (clean coal, enhanced oil recovery, carbon capture and storage); fusion power (tokamaks, materials, technologies, safety); and energy efficiency (building, electricity, industry, and transport). To find solutions, the public and the private sectors must work together. INDCs can provide an important impetus to enhance and achieve global efforts to mitigate carbon emissions, double the share of low-carbon energy in the supply mix, and accelerate green growth.

There is growing awareness of the urgent need to turn INDCs into analytical works and concrete actions. Yet despite energy-related goods accounting for more than 10% of international trade, policymakers, academics, and the business community perceive several barriers to the diffusion of these low-carbon technologies nationally and regionally. This study was designed to identify the opportunities and barriers in INDCs for diffusion of low-carbon energy technology

and to propose the incentive mechanisms at the local, national, and regional levels to the required scale.

The study revealed the following:

- Given the rapid increase in demand for a large and stable supply of electricity in rapidly industrialising countries in the region, low-carbon technologies provide a compromise solution to attain energy security and reduced emissions.
- To make low-carbon technologies and measures commercially viable, globalisation of technologies is needed. The cooperation of Asia, the European Union, Japan, and the United States on low carbon can speed up the commercialisation through demonstration, direct investment, joint venture, build-operate-transfer (BOT) schemes, financial aid, and capacity building.

Institutional Strategy and Economic Impacts by Energy Subsidy Removals in the EAS Region

Status: Completed

Geographic scope: East Asia Summit region

ERIA and the International Energy Agency (2013) estimate fossil fuel subsidies to amount to US\$51 billion in Southeast Asia for 2012 alone. Fossil fuel subsidies encourage wasteful energy use, burden government budgets, defer investment in energy infrastructure and efficient technology, and further undermine renewable energy uptakes. Some ASEAN countries have taken actions to remove subsidies but these must be accompanied by careful strategy and steps as subsidy removal is often a politically sensitive subject. However, energy subsidies incentivise consumption and can increase energy demand. When these subsidies are inefficient, they can lead to fiscal pressure, harmful emissions, and potentially undermine sustainable green growth in East Asia countries. In theory, reduced subsidies will encourage more energy-efficient consumption, leading to a positive impact on international energy prices and energy security, and will make renewable energy and technologies more competitive. Reducing local pollution and cutting

down greenhouse gas emissions further benefit the environment and society.

This study presents recommendations on steps and approaches to energy subsidies that are acceptable to the public.

Integrating NER India with Regional Economies through Cross Border Energy Sector Development

Partners: The Institute of Energy Economics,

Japan; Confederation of Indian Industries

Status: Ongoing

Geographic scope: Bangladesh, India, Myanmar

There is increasing policy and academic interest in strengthening economic connections between the North Eastern Region (NER) of India and major economic centres in South and Southeast Asia. This region has several critical and strategic advantages in jointly participating in the development process of the neighbouring countries of Bangladesh, Bhutan, Myanmar, and Nepal. These adjoining countries, along with other states of India,

have been among the most dynamic in Asia and have produced highly impressive socio-economic development. Advantages of economic integration among these countries also emanate from politico-historical linkages, geographical proximity, socio-cultural cohesiveness, economic complementarities, and scope for further economic integration towards ASEAN and China.

However, progress of trade and investment as well as industrial development in the eight states of NER has been relatively limited by various infrastructure bottlenecks, policy misalignments, and information gaps. This study aims to (i) determine the energy sector development needs and potentials of electricity generation in NER; (ii) analyse the opportunities for cross-border energy trade between NER and other neighbouring countries such as Bangladesh, Myanmar, and Nepal; (iii) estimate the cost of such arrangements and investment possibilities; (iv) draw policy implications for prioritised investment needs, which cover regulatory reforms, financial flows, and institutional cooperation at the national and international levels.

Integrative Strategy and Policies for Promotion of Appropriate Renewable Energy Technologies in Lower Mekong Basin Region

Partner: Institute of Energy, Viet Nam

Status: Ongoing; Phase I completed in December 2016

Geographic scope: Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam

Cambodia, the Lao PDR, Myanmar, Thailand, and Viet Nam – neighbouring countries in the Lower Mekong Basin Region – have great potential for cooperation and development. Exploitation of renewable energy (RE) sources is an appropriate option to meet rising electricity demand and to increase energy security and economic competitiveness.

This study aims to set up the strategy and policies for RE development for these countries. It attempts to identify what RE technologies should be prioritised and what their social, economic, and environmental benefits are. Major criteria in selecting these prioritised RE technologies are (i) reduced potential of greenhouse gas; (ii) abatement cost; (iii) government priorities; and (iv) sustainable development benefits on the economy, society,

and the environment using cost–benefit analyses. The calculations of costs and benefits for each RE technology will be put in a long-term energy system. Outputs of calculations will be used as a base in selecting RE technologies and the appropriate future-installed capacity for each technology. Because of similar economic conditions and exploitation status of RE sources, but limited input data for modelling, cost–benefit calculations for RE technologies and their impact on low-carbon and sustainable development will be carried out for Viet Nam as a case study. RE policy instruments applied effectively in other countries will also be reviewed and analysed based on the country-specific financial conditions to determine the effective policies that could reduce the project costs of RE technologies.

Multilateral Joint Study for LNG Market

Status: Ongoing

Geographic scope: East Asia Summit countries

Energy demand in East Asia Summit countries is rising. The role of natural gas in energy supply becomes increasingly important in economic efficiency, diversification of energy, effective use of domestic resources, and reducing environmental burden arising from energy use, among others. At the same time, the

global liquefied natural gas (LNG) market has seen big changes in recent years. In terms of supply and demand, many new LNG importers are entering the market, yet LNG demand of large importers such as Japan, China, and Europe is becoming uncertain. At the same time, new liquefaction capacities are coming into operation in the next few years. Yet, both oil-linked and spot prices are experiencing a downward trend. Importing countries may welcome this trend but it would have side effects for supply-side investment.

The Asian LNG market cannot be insulated from these changes in the global market. Although recent price trends seem to indicate that the 'Asian premium' (higher LNG prices in Asia) has diminished, the essential problem has not been resolved. The 'Asian premium' will easily come back again depending on crude oil price. Therefore, substantive reform is needed to achieve sustainable and sound development of the East Asia LNG market.

This study has the following policy implications:

- Private sector stakeholders are encouraged to pursue pricing mechanisms that most appropriately and timely reflect prevailing LNG market conditions, and can eventually

serve as an alternative to oil indexation in structuring long-term contracts.

- The public sector should create an environment suitable for the development of a market that properly reflects regional supply and demand conditions by (i) liberalising end-user markets, (ii) supporting development of necessary infrastructure, and (iii) ensuring reasonable open access to relevant facilities.
- Private sector stakeholders are encouraged to eliminate destination restrictions in FOB (freight on board) LNG transactions and relax them in DES (delivered ex ship) transactions.
- Stakeholders should remain committed to the principle of mutual cooperation, which has been the core of sound development of the LNG industry.

Operationalising ASEAN Petroleum Security Agreement

Status: Ongoing

Geographic scope: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam

This research examines the best ways to revise the existing ASEAN Petroleum Security Agreement (APSA)/Coordinated Emergency Response Measures to make it more effective. The study will recommend concrete actions to operationalise such ways, including defining executing bodies and establishing the permanent APSA secretariat.

Possible Cooperation Framework for Oil Stockpiling and Emergency Response System of East Asia

Partner: The Institute for Energy Economics, Japan

Status: Completed

Geographic scope: ASEAN

As the economies of ASEAN countries expand, energy demand has remarkably grown in the last decade. Oil demand particularly has recorded the largest increase. Due to stagnant indigenous oil supply in ASEAN, the growth in oil demand has resulted in increased oil import, which makes ASEAN countries more vulnerable to external supply disruption or highly volatile international oil prices.

As for sources of oil import for ASEAN countries, the share of Middle Eastern countries will continue to increase, suggesting that oil supply in ASEAN will contain more risk factors, given the persistent political instability in the Middle East. In addition, the oil supply security system in ASEAN in general is still at the development stage. Thus, international cooperation is needed to promote and invigorate oil supply security arrangements in

the region. Given the global and integrated nature of the oil market, promoting regional cooperation for oil supply security arrangement in ASEAN benefits all East Asian countries.

This study aims to explore and evaluate potential cooperative actions among East Asian countries to secure their oil supply.

The study has three components: component 1 provides potential scenarios of oil supply disruption in ASEAN; component 2 explores options of oil stockpiling; and component 3 discusses how government and industry can form a collaborative relationship to secure oil supply.

The study found that:

- Unexpected oil supply disruption will catastrophically impact ASEAN countries through an energy price surge or increase in trade deficit, and increased social discontent and potential political instability.
- The most cost-effective option to start stockpiling is to expand existing storage capacity and set a stockpiling target. Tank leasing to commercial players will ease the burden of constructing storage facilities, and can be another cost-effective means.
- Recognising transparency and equity is important

to involve industrial players in stockpiling development efforts. Utilising other regional players that have an interest in the ASEAN oil business may be worth considering.

Preparation of Energy Statistics and Energy Balance Construction for Setting up a Sustainable Energy Development Plan in Cambodia

Partner: Ministry of Mines and Energy of Cambodia

Status: Completed

Geographic scope: Cambodia

Lack of information and inadequate capacity to carry out comprehensive planning are the main contributing factors to the current condition of the energy sector in Cambodia. The Ministry of Mines and Energy (MME) requested ERIA's support in developing energy statistics and energy balance for the country's sustainable energy development plan. The project aims to strengthen the MME to be sustainable and capable of (i) employing advanced techniques, methodologies, and modelling tools in institutionalising the collection, processing,

and analysis of energy statistics; and (ii) establishing and managing an energy information system. Through this project, the country is expected to establish a systematic collection of energy data from various energy supply companies and other government agencies/corporations to enable it to compile accurate energy statistics for sustainable energy planning.

Sea Lane Security of Oil and LNG in the East Asia Summit Region

Partners: The Institute of Energy Economics, Japan; The Energy and Resources Institute, India

Status: Completed

Geographic scope: China, Indonesia, Malaysia, Singapore, Thailand, South China Sea, Strait of Hormuz, Western Indian Ocean

With robust demand yet modest supply growth of energy in the region, the East Asia Summit area is expected to rely more on imported oil and natural gas. However, without an international pipeline infrastructure, the region imports these products through sea transport. Sea lane security of oil and liquefied natural gas (LNG) is then vitally important to ensure energy supply in the region. This study firstly forecasts future oil and LNG import into the Asia-Pacific region to assess congestion in the Hormuz and Malacca/Singapore straits. Secondly, the study identifies various risks to sea lane

security in terms of key background elements (congestion, geography, geopolitics, climate change, poverty, and law and order) and trigger events (piracy, terrorism, regional conflicts, accidents, and extreme weather events). Trigger events, in turn, impact the energy security of the region in the form of supply disruptions, price volatility of traded goods, financial risks to the industry including increased insurance premium, and physical risks to human life. Finally, the study introduces countermeasures adopted by countries, such as China, Indonesia, and Thailand, to mitigate various risks.

The study highlights the (i) development of alternative routes to avoid choke points, (ii) creation of joint regional patrols to prevent maritime piracy, and (iii) adoption of measures to minimise the environmental impacts of oil spills.

Study of Renewable Energy Potential and its Effective Usage in EAS Countries

Partner: National Institute of Advanced Industrial Science and Technology (AIST), Japan
Status: Ongoing
Geographic scope: ASEAN, Japan

East Asian Summit (EAS) countries recently increased imports of crude oil and petroleum products to meet the corresponding increase in energy demand of the transport sector. Each country has promoted the introduction and uptake of biofuel produced from feedstock grown domestically. On the other hand, the fuel consumption of EAS countries predicted from the types of vehicle fleet is quite different from each other and does not always adjust to national policies that promote use of biofuel. From the viewpoint of effective use of resources and solution of the problem of oil refinery capacity, it is important to balance biofuel demand and supply through international trade.

This study has the following three components: (i) potential study of diversified transportation energy mix, (ii) research of next generation biofuels, and (iii) bio methanol as an energy carrier.

The study revealed the following:

- There exists a possibility for multilateral cooperation on renewable energy and its effective use based on the outlook simulated by energy consumption and vehicle registration in East Asia and ASEAN countries.
- In the transition towards a circular economy, refurbishment can be applied to regain value from used products, reduce waste, and improve resource efficiency. Indicators in the cities and

sectors need policy attention. East Asian and ASEAN countries should make their renewable energy policy target robust.

- R&D information of next generation biofuel and energy carrier technologies will decide the uptake of biofuels in the transport sector.

Study on Power Grid Interconnection and Electricity Trading in Northeast Asia

Partners: Asia Pacific Energy Research Centre, Mongolia's Ministry of Energy, Energy Systems Institute (Russia), Nanyang Technological University (Singapore)

Status: Completed

Geographic scope: China, Japan, Mongolia, Republic of Korea, East Russia

This study analysed the costs and benefits of power grid interconnection in the Northeast Asia region – covering north and northeast of China, Japan, Mongolia, East Russia, and the Republic of Korea – using a linear programming and optimisation model. Such analysis yielded several important observations on the feasibility and optimal plans of power infrastructure development

for power grid interconnection in the region. Large-scale interconnections among Mongolia, Russia, and China were identified as needed and feasible in almost all scenarios. Savings in the total system cost of all countries vary at US\$500 billion in total in about 30 years as a net present value, compared to the case of no power grid interconnection and thus no trade of electricity. This is equivalent to about 10% of total system cost for all countries involved. On the environment side, some 4 billion tons of carbon dioxide (CO₂) emissions – about 10% of total carbon emissions in the case of no interconnection – could be reduced during the same period. Solar photovoltaic, which has a better match with peak power demand, appears to be more competitive than wind power and to be developed at a large scale in Mongolia starting 2033 or 2038, depending on the scenario.

Study on the Advancement of an Energy Management System (EMS) in the EAS Region

Partner: Mitsubishi Research Institute

Status: Completed

Geographic scope: East Asia Summit region

This study aimed to (i) analyse the potential for deploying an advanced energy management system (EMS) in the East Asia Summit region, especially

focusing on ASEAN countries; and (2) propose, upon identifying the policy challenges common in the region, policy recommendations to promote EMS. The study was conducted for 2 years; its report outlines the results of the second-year study focusing on the applicability of EMS for factories. It is meant to complement the first-year study report (ERIA Research Project FY2014 No. 39, published in September 2015) on EMS for office buildings. It likewise proposes a set of policy recommendations promoting the deployment of EMS in the ASEAN region.

This second-year study report discusses the importance of deploying EMS from a practical viewpoint. Waste of energy is caused not only by using inefficient appliances but also by inefficiently using appliances. Energy efficiencies may be achieved without replacing energy-consuming appliances with more efficient ones by monitoring and analysing the operational data of these appliances and by optimising their operational setup. Installation of EMS, which provides visual information, can serve as the solution. However, because of this indirect role of EMS, the benefit of installing it may be unclear. Therefore, this study points out that a policy intervention is necessary to support the diffusion of EMS.

Several case studies focus more on factory energy management systems or FEMS and subsectors which showed how effective energy-saving measures differ, depending on industries. This study lists typical energy-saving measures, indicated effective measures for specific industries, and described specifically how these measures will be implemented.

Study on the Formation of the ASEAN Power Grid Generation and Transmission System Planning Institution (AGTP) and the ASEAN Power Grid Transmission System Operator Institution (ATSO)

Partner: Tokyo Electric Power Company, Heads of ASEAN Power Utilities/Authorities (HAPUA)

Status: Ongoing

Geographic scope: ASEAN

This project aims to provide technical and advisory services to HAPUA on the criteria, structures, roles, and requirements in forming two institutions necessary to advance the ASEAN Power Grid (APG). Such institutions are the AGTP and the ATSO. HAPUA will report the key findings of this study to the ASEAN Ministers of Energy Meeting in 2017/2018 as an implementation measure of the ASEAN Plan of Action on Energy (APAEC) Phase 1, 2016–2020, and to the ASEAN Secretariat as it monitors and facilitates the implementation of measures under the ASEAN Economic Community Blueprint 2025.

In an interconnected APG, the AGTP will (i) be responsible for regional power systems planning, (ii) be the key coordinating institution among ASEAN countries on investment decisions regarding power generation and transmission assets, and (iii) enable regional sharing of energy resources through the implementation of the APG and harness the full potential of benefits from multilateral trade of electricity among ASEAN Member States (AMSs).

ATSO, in charge of regional systems cooperation, will be the key institution that enables actual physical trade of electricity among the AMSs by maintaining and ensuring the balance, stability, and reliability of the interconnected power grids across borders.

Sustainability Assessment of Utilising Conventional and New-Type Geothermal Resources in East Asia

Partner: National Institute of Advanced Industrial Science and Technology (AIST), Japan

Status: Ongoing

Geographic scope: ASEAN, China, Japan, Republic of Korea, and New Zealand

In attempting to maximise the potential use of renewable energy sources, many Asian countries have been developing their geothermal resources, although the types of geothermal resources vary from country to country. Countries with rich high-temperature geothermal resources have utilised their potential by generating conventional steam power. Even in countries without volcanoes, heat extraction from deeper underground using EGS (Enhanced/Engineered Geothermal System) techniques and/or from shallow underground for direct use have been studied and pilot-schemed.

Geothermal technologies, such as reservoir engineering, monitoring techniques, scale-controlling techniques, and others, which are all essential for sustainable utilisation of geothermal resources for both power generation and direct use, pose both challenges and opportunities.

This study aims at identifying those challenges, developing country-specific solutions, and sharing information to improve technology for sustainable geothermal use in Asian countries.

This project envisages guidelines for sustainable use of geothermal energy. The guidelines will be formulated separately for (i) power generation and direct heat use and (ii) ground source heat pump (GSHP) since the necessary technologies are different for these two

categories. These guidelines shall be useful to practising engineers and managers with newly started geothermal business, or to researchers in related fields.

The project also provides recommendations to policymakers for more intensive use of geothermal energy.

Major findings of the study are:

- The countries that achieved substantial geothermal development have in place a sound geothermal development plan explicitly stated in their energy policy, whereas others do only implicitly.
- Long-term engineering and financial programmes for geothermal power generation are necessary because geothermal development takes 5–7 years.
- For direct heat use, governments should incentivise to use thermal use of geothermal energy (such as the renewable heat obligation law in the Republic of Korea).
- For promotion and sustainable use of GSHP, governments should support R&D on hydrogeological studies, case studies, and long-term monitoring. Governments should also encourage international research collaboration on these topics.

Temburong Eco Town

Partners: Brunei National Energy Research Institute (BNERI), External urban design companies such as Nihon Koei

Status: Ongoing

Geographic scope: Brunei Darussalam

ERIA is working with BNERI to transform Temburong, Brunei Darussalam into a smart and eco-friendly city through the application of smart energy technologies. Phase 1 of the study focuses on energy efficiency technologies, which will be applied in Temburong. Phase 2 involves a simulation study based on daily climate data to seek the optimal capacity of solar photovoltaic cells, wind, and diesel generators.

Based on the results of Phase 2 and the basic concept of Temburong Smart City that the Brunei government prepared, ERIA will request an external urban planning company to design a blueprint of Temburong to constitute Phase 3.

Unlocking the Potentials of the Private Sector for Accelerated Low-Carbon Energy Transition

Status: Ongoing

Geographic scope: East Asia Summit countries (ASEAN +6)

While the ASEAN Economic Community (AEC) Blueprint aims to progressively liberalise the investment regime of ASEAN Member States (AMSs) to achieve free and open investment, it also recognises the importance of making such investments sustainable through mitigating greenhouse gas emissions by means of effective policies and market-based measures, among others. Recognising the limited global reserve of fossil energy and unstable world

prices of hydrocarbon products as well as meeting the COP 21 Paris Agreement targets, AMSs should accelerate the transition to low-carbon energy, as well as promote open trade, facilitation, and cooperation in related low-carbon industries with the requisite infrastructure.

Following on the Paris Climate Agreement, Asia's attention is now firmly fixed on advancing viable, scalable low-carbon energy solutions at different levels. Most of the estimated investments required to scale up low-carbon energy systems will come from the national and international private sector. However, concerted and coordinate efforts by national and sub-national governments, public financing institutions, and international organisations are essential to unlock the potential of the private sector. Governments can accelerate this trend by targeting more of their funds to leverage private finance.

There are several reasons for leveraging private finance to accelerate the transition to low-carbon energy and to achieve the Nationally Determined Contributions (NDC) agreed as part of the Paris Agreement. First, advanced countries have not yet agreed on any clear plans to meet their commitment to provide US\$100 billion annually by 2020 for developing countries to reach the NDC targets. Second, per current estimates, more than US\$100 billion per year is needed to meet the low-carbon transition challenges that include not only investments in renewable energy but also energy efficiency and other strategies, such as deployment of clean coal and carbon capturing and storage technologies at a scale required. Third, government budgets of both advanced and emerging economies are often constrained

by financial debts and other austerity policies, with little clarity on when and how public financial flows will be scaled up to meet the targets set for 2030.

The question for the prudent policymakers is to what extent emerging Asian economies can transition to the low-carbon economy, and how to deepen private sector stocks underpinning low-carbon energy solutions? Hence, this study aims to (i) examine the priority private sector investment needed for the region to attain the NDC targets; (ii) identify technical, fiscal, and market-based regulatory barriers to scale up private low-carbon investments in key sectors; and (iii) propose innovative policy solutions that will unleash the potentials of private finance to support the transition pathway.



Outreach and Dissemination

Communications



Media Relations and Exposure

Media exposure increased by **37%** in FY2016–2017 compared to the year before partly as a result of closer connections to a larger pool of journalists and partly as a result of an increase in the number of opinion pieces from our researchers.

ERIA has focused on establishing new relationships and deepening already-existing relationships with media throughout Southeast Asia. ERIA currently has over 300 media contacts and the number keeps increasing.

Journalists from respected media around the region, including *South China Daily*, *The Jakarta Post*, *Nikkei Asian Review*, *Yomiuri Shimbun*, *The Korea Times*, *The Diplomat*, *The Nation*, *Antara News*, *Bloomberg*, *The Straits Times*, *Voice of America*, *The Star Online*, *The Irrawaddy*, *Vientiane Times*, *Bangkok Post*, and *The China Post* increasingly sought the opinion of ERIA management and researchers as well as information from the communications team about ERIA research and activities (see Annex I).

Opinion articles written by ERIA researchers and research associates accounted for about **26%** of media exposure. FY2016 saw a dramatic increase in the number of ERIA researcher op-eds appearing in regional newspapers, with a total of **20** different pieces by **13** researchers appearing **35** times during the fiscal year, compared to 7 articles by four researchers appearing 11 times in FY2015–2016.

ERIA also organised the annual Editors Round Table which was held in Vientiane at the same time as the ASEAN Economic Ministers meeting in early August and which was attended by ASEAN's Secretary General. This year we even

hosted a surprise birthday party for ASEAN, much to the delight of the Secretary General.

E-newsletter

This year ERIA began using MailChimp to create and disseminate invitations and announcements to its key stakeholders around the world. In March 2017, ERIA has 2,185 contacts, or nearly 75% more subscribers to MailChimp compared to the same period a year ago. The contact list is divided into several segments to ensure more targeted campaigns for ERIA's various announcements.

In addition to *Frames*, the monthly newsletter covering current topics and ERIA affairs (events, new publications, etc.), we also publish a specialised monthly newsletter, *East Asia Updates*, created by Lili Yan Ing and her team. This newsletter, disseminated usually a week after *Frames* is issued, cover economic issues across the whole region.

Contact Management System

In a bid to improve our engagement with stakeholders and to keep a better record of its various networks, ERIA started to use a contact management system named Insightly. Previously we maintained contact information in a spreadsheet but, with the new system, all contacts have been transferred to the



online program. This allows many strategic new functions, including tagging according to our own categories. The contacts managed through Insightly are periodically synchronised with Mailchimp, so that new contacts will also receive ERIA's announcements.

Social Media

Acknowledging the importance of social media to help attract new audiences and grow its networks, ERIA pushed for increased strategic use of social media in its outreach and dissemination programme in 2016. We have active accounts in the following social sites and publication dissemination accounts: Facebook, Twitter, YouTube, LinkedIn, Google Plus, and Medium. ERIA has steadily gained more followers on those various sites and engaged with followers from a greater diversity of backgrounds. As of **31 March 2017**, ERIA had **2,730** likes (total cumulative) on its Facebook page, **304** followers on Twitter, and **255** followers on LinkedIn.

	March 2016	March 2017	% Increase
Facebook Likes	351	2,730	678
Twitter Followers	123	304	147
LinkedIn Followers	130	255	96

Website

In the second half of 2016, ERIA started designing and creating a new website to replace the current website that was launched 5 years ago. The new website will be more engaging and have a responsive design to optimise users' browsing experience through various devices: computers, tablets, and mobile phones. It will also feature more organised research and publications sections to help users navigate the wealth of information available on the website.

FY2016 saw over 65,000 website sessions and about 195,000 page views. Sessions from desktop users declined 16%, but there was a 53% jump in mobile users, supporting our assumption that our website needs to be increasingly oriented towards mobile users.

Publications

ERIA's research and findings are published and disseminated as books, research reports, discussion papers, and policy briefs. FY2016 has been a productive year, with ERIA producing 8 books, 18 research reports, 25 discussion papers, 3 policy briefs, and 2 co-publications.

During the Lao PDR chairmanship of ASEAN in 2016, ERIA published the *Lao PDR at the Crossroads: Industrial Development Strategies 2016–2030*, which provided inputs to the country's comprehensive industrial development vision for the next 15 years. The book was launched during a national policy dialogue held in Vientiane, Lao PDR in March 2016. In looking beyond ASEAN, ERIA published *Asia-Europe Connectivity Vision 2025: Challenges and Opportunities*, and presented it during the 11th Asia-Europe Meeting held in Mongolia in July 2016.

ERIA also released publications on non-tariff measures, regulatory management systems, and energy-related issues in ASEAN and East Asia.

ERIA has been co-publishing with academic and professional printers. For this fiscal year, it published *Production Networks in Southeast Asia* with Routledge and *Investing in Low-Carbon Energy Systems: Implications for Regional Economic Cooperation* with Springer.

See Annex J for the complete list of ERIA publications released in FY2016.



Seminars and Symposia

ERIA organised 12 seminars and symposia in FY2016, including one forum in conjunction with the Third Asia Cosmopolitan Awards ceremony. All these were held in collaboration with key institutes and government agencies from the East Asia region, such as the Organisation for Economic Co-operation and Development, Center for Strategic and International Studies, and the Institute of Developing Economies–Japan External Trade Organization (IDE–JETRO). These seminars and symposia aim to (i) contribute to the Chair of ASEAN, (ii) advocate findings of research where ERIA was involved, (iii) seek inputs from academia as requested by senior government officials in the region, and (iv) promote ERIA as an international organisation with a crucial role in East Asian regional integration (see Annex H).

In FY2016, ERIA's focus on disaster management and building national resilience in ASEAN continued as it organised the World Tsunami Awareness Day 2016 Symposium: 'First Anniversary of World Tsunami Awareness Day' in December. In the wake of uncertainties related to economic integration, ERIA organised a joint symposium with IDE-JETRO entitled 'New Normal, Integration, and Inequality'. As part of its media relations,

the Institute also organised the Fifth Editors' Roundtable themed 'The ASEAN Community 2025 Vision'. Editors and journalists from East Asia Summit member states participated in the event, which was held in the Lao PDR and co-organised with the *Vientiane Times*.

Asia Cosmopolitan Awards

ERIA and the Nara Prefecture organised the Third Asia Cosmopolitan Awards. This biennial event recognises individual(s) and/or organisation(s) that have substantially and significantly contributed to (i) developing a peaceful and stable East Asian Community, (ii) narrowing developmental gaps in the region, and (iii) establishing sustainable social growth towards cultural and economic integration in East Asia.

The winners of the Third Asia Cosmopolitan Awards are as follows:

Grand Prize: HE U Thein Sein, former President of the Republic of the Union of Myanmar

Economic and Social Science Prize: Prof Masahisa Fujita, Professor, Konan University

Cultural Prize: HE Prof Herman Van Rompuy, Haiku Ambassador for Japan-EU Friendship

The award ceremony and the commemorative 'Nara Forum' was held in Nara Prefecture on 15 January 2017.



Capacity Building Programme



Capacity Building Programme

In FY2016 the Capacity Building Programme (CBP), building on foundations established in 2015, branched out into new fields. This reflected the increasing and positive engagement between government officials and the CBP, and a growing awareness about the benefits a robust programme can bring. ERIA is well placed to deliver capacity building support around its research, specialist fields of interest, network of experts, and strong relations with governments in the region.

Over the last year, 126 government officials participated in 10 ERIA CBP activities. Participants came from 31 ministries and state institutions in Cambodia, the Lao PDR, Myanmar, and Viet Nam (CLMV).

Generous funding from the Government of Australia continued to make the programme possible.

Component 1: Capacity Building through Participation in Research

Integrating government officials in research alongside national and international academics allows officials to gain a strong understanding of the complexity of issues, exchange data, promote a policy focus to the study, and

network with their peers. In FY2016–2017, officials participated in four new ERIA studies alongside two ongoing studies from 2015 to 2016.

Ongoing Studies

- **SME Participation in ASEAN and East Asian Regional Integration**
Commencing in August 2015, this study looks at participation of small and medium-sized enterprises (SMEs) in regional trade, production networks, enabling factors for SMEs, and policy imperatives to promote participation in an increasingly integrated region.
- **Reducing Unnecessary Regulatory Burdens**
In an increasingly integrated region, states must foster a conducive business and investment environment, and improve economic performance and productivity. Reducing unnecessary regulatory burdens (RURB) is an important way to do both; this study focuses on RURB for priority exports. The participation of government officials has raised awareness about RURB in ministries and engendered an appreciation for informed regulatory conversations.



New Studies

- Industry 4.0: Empowering ASEAN for Circular Economy**
 The transition to a circular economy is a unique opportunity for economies to become resource efficient, competitive, and innovative, and to eradicate wasteful use of raw materials. A public–private dialogue was organised to discuss the challenges of how countries and corporations can strike a balance between growth and resource efficiency. Senior officials from CLMV countries participated in the dialogue, sharing their insights on current policy approaches.
- Global Production Value Chain, Cities and Urban Amenities: Implications for Services Trade Liberalisation in East Asia and ASEAN**
 A 12-country study, this research looks at the relationship between the growth of cities, trade and global production value chain, key to understanding how cities can become the focal point for trade and investment, and the services liberalisation required to support this. Government officials commented on the country presentations covering issues that included country sectoral development, trade links, infrastructure and industrial parks.



- **21st Century Regionalism, Mega FTAs, and Asian Regional Integration**

The Trans-Pacific Partnership and the Regional Comprehensive Economic Partnership are mega-free trade agreements. New rules and regulations are expected to have an economic impact on all Asian economies, with many states looking at the potential impact on state-owned enterprises, intellectual property, and investment. Government officials from CLMV countries participated in these discussions, commenting on papers presented.

- **Distributional Effects of Disasters and Climate Change on Food Security**

Concerted efforts are needed to address the issue of climate change-induced disasters and their impact on socio-economic development, health, and the environment. This study, in which CLMV government officials are participating, is designed to understand the distributional effects of disasters and climate change, and the related food security challenges. It also analyses the required actions taken by policymakers to address the risks, share experiences on adjusting key planning instruments, with cost-benefit analysis of structural and non-structural measures that could contribute to ASEAN resilience.

Component 2: Increasing Understanding of Technical Issues: Pushing PPPs Forward

On 27–28 June 2016, government representatives from CLMV countries spent 2 days learning about different models of public–private partnership (PPP) with a focus on complex issues affecting their feasibility, including financial viability, economic viability, and efficient risk allocation. Participants came from a mix of ministries from their respective countries, reflecting the importance of officials from a wide range of ministries understanding the issue.

Component 3: Increased Research Capacity

Following the successful completion of a ‘Trade, Growth, and Policy Modelling’ workshop series for the Ministry of Economy and Finance and the National Bank of Cambodia (November 2015–May 2016), a similar workshop series is being implemented in the Lao PDR for officials from nine ministries. ERIA is partnering with the Asian Growth Research Centre, Ngee-Ann Adelaide Education Centre to implement this.

In the workshop series, participants learn how to apply advanced modelling techniques to their work. Participants are divided into teams to carry out research applying these methodologies, with prizes awarded for the best research papers. The first prize winner in Cambodia went to a team of five young economists for their research paper, ‘Potential Output and Growth Scenarios in the Medium and Long-Run for Cambodia’.

Component 4: National Policy Dialogue

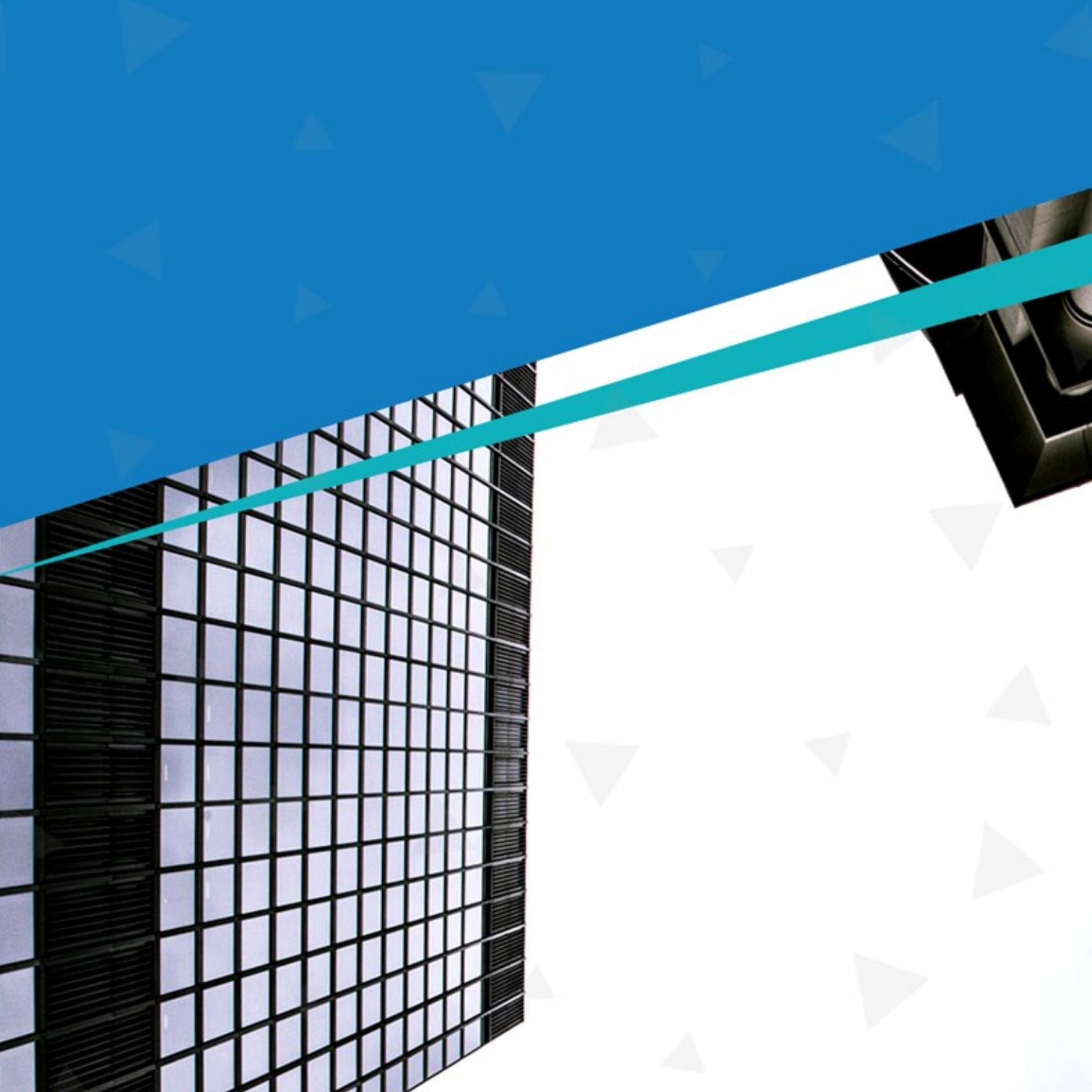
On 31 October 2016, a National Policy Dialogue, ‘Benefits and Challenges for Reducing Unnecessary Regulatory Burden’, was held in Yangon, Myanmar, to raise awareness about RURB in general and the findings of the preliminary report for Myanmar (see Component 1) in particular. Over 200 participants attended this event, including senior government officials, leading businessmen, members of national and international business associations, international organisations, and academics. In the afternoon session, participants were divided into two groups to discuss and get feedback on two issues for the Myanmar fishery sector study.

Component 5: The Executive Leaders' Initiative

Each year ERIA holds a 3-day Executive Leaders' Initiative for Deputy Directors General (DDGs) from ministries covering agriculture, trade and commerce, and transportation. This meeting gives DDGs a unique opportunity to think about a common issue from their own institutional perspectives.

Following the December 2015 meeting, the DDGs met again in September 2016 to discuss developing domestic and export markets for tropical fruits, an area of great economic potential for the region. The event was co-hosted by the Department of International Trade Promotion, Ministry of Commerce, Thailand.

See Annex K for the complete list of ERIA CBP activities.





 **Annexes**

Annex A

Governing Board Members

The Governing Board is the supreme decision-making body of ERIA. It is composed of 17 members – 16 of whom come from member

countries with various backgrounds (such as in academia, policymaking, and business) – and the Secretary General of ASEAN.

ASEAN Secretariat	H.E. Le Luong Minh	Secretary General, ASEAN
Brunei Darussalam (Chairman)	Dato Paduka Lim Jock Hoi	Permanent Secretary, Ministry of Foreign Affairs and Trade
Cambodia	H.E. Ros Seilava	Under Secretary of State, Ministry of Economy and Finance; Member of the Supreme National Economic Council
Indonesia	Prof Armida Salsiah Alisjahbana	Professor of Economics, Universitas Padjadjaran, Member Indonesian Academy of Sciences and Senior Advisor to the Minister of National Development Planning/Head of BAPPENAS
Lao PDR	Dr Leeber Leebouapao	Vice President of the National Institute of Economic Research
Malaysia	Datuk J. Jayasiri	Secretary General of the Ministry of International Trade and Industry
Myanmar	H.E. U Tun Tun Naing	Permanent Secretary, Ministry of Planning and Finance
Philippines	Mr Gregory Lim Domingo	Former Secretary of the Department of Trade and Industry
Singapore	Ambassador Barry Desker	Distinguished Fellow and Bakrie Professor of Southeast Asia Policy, S. Rajaratnam School of International Studies, Nanyang Technological University

Thailand	Mr Winichai Chaemchaeng	Vice Minister for Commerce, Ministry of Commerce
Viet Nam	Dr Nguyen Dinh Cung	President, Central Institute for Economic Management
Australia	Prof Warwick McKibbin	Chair in Public Policy, Australian National University's Centre for Applied Microeconomic Analysis
China	Prof Zhang Yunling	Professor of International Economics; Academy Member and Director of Academy Division for International Studies, Chinese Academy Social Sciences
India	Dr Ajit Ranade	Chief Economist, Aditya Birla Group
Japan	Mr Fujio Mitarai	Chairman and CEO of Canon Inc.; Honorary Chairman of Nippon Keidanzen (Japan Business Federation)
Korea	Mr Tae-Shin Kwon	President, Korea Economic Research Institute; Former Minister of the Prime Ministers' Office; Former Ambassador of Korea to OECD
New Zealand	Dr John Wood, Amd (Retd), QSO (Adjunct Professor)	Chancellor, University of Canterbury; Former Senior New Zealand Diplomat

Annex B

Academic Advisory Council Members

The Academic Advisory Council is composed of internationally renowned scholars of East Asia Summit countries and experts from universities, research institutions, the private sector, international organisations, and non-governmental organisations.

The Council provides advice and support to the Office of the Executive Director on the

- annual work programme,
- review and evaluation of research outcomes, and
- review and evaluation of the performance of researchers.

Prof Dr Peter Drysdale	Emeritus Professor, Crawford School of Economics and Government, Australia
Prof Zhang Yuyan	Director, Professor, Institute of World Economics and Politics, Chinese Academy of Social Sciences (CASS), Beijing, China
Mr Pravin Kumar Agarwal	Senior Fellow and Director, The Energy and Resources Institute (TERI), India
Dr Takashi Shiraishi	President, Institute of Developing Economies, Japan External Trade Organization (IDE-JETRO)
Dr Shankaran Nambiar	Senior Research Fellow and Head, Policy Studies Division, Malaysian Institute of Economic Research
Prof Gary Richard Hawke	Emeritus Professor, Victoria University of Wellington Senior Fellow, New Zealand Institute of Economic Research, New Zealand
Prof Dr Hank Lim Giok-Hay (Chairman)	Senior Research Fellow, Singapore Institute of International Affairs (SIIA), Singapore



Annex C

Research Institutes Network

The Research Institutes Network consists of research institutes from 16 East Asia Summit countries. ERIA requests the Research Institutes Network to:

- Support ERIA's research activities by providing country information and research findings from individual countries and

giving advice on research themes and policy recommendations.

- Encourage the dissemination of ERIA's research outcomes to policymakers and political leaders who implement policies as well as to opinion leaders in member countries.
- Support ERIA's capacity building programme.

Brunei Darussalam	Brunei Darussalam Institute of Policy and Strategic Studies (BDIPSS)	Australia	Australian National University (ANU)
Cambodia	Cambodian Institute for Cooperation and Peace (CICP)	China	Chinese Academy of Social Sciences (CASS)
Indonesia	Centre for Strategic and International Studies (CSIS)	India	Research and Information System for Developing Countries (RIS)
Lao PDR	National Institute of Economic Research (NIER)	Japan	Institute of Developing Economies (IDE-JETRO)
Malaysia	Malaysian Institute of Economic Research (MIER)	Korea	Korea Institute for International Economic Policy (KIEP)
Myanmar	Yangon Institute of Economics (YIE)	New Zealand	New Zealand Institute of Economic Research (NZIER)
Philippines	Philippine Institute for Development Studies (PIDS)		
Singapore	Singapore Institute of International Affairs (SIIA)		
Thailand	Thailand Development Research Institute (TDRI)		
Viet Nam	Central Institute for Economic Management (CIEM)		

Annex D

Energy Research Institute Network

The Energy Research Institute Network consists of research institutes from 16 East Asia Summit countries. ERIA requests the Energy Research Institute Network to:

- Support ERIA's energy research activities by providing country information and research findings from individual countries and giving advice on energy research themes and policy recommendations.
- Encourage the dissemination of ERIA's energy research outcomes to policymakers and political leaders who shall implement policies as well as to opinion leaders in member countries.
- Support ERIA's capacity building programme.
- Participate in ERIA energy research activities.

Brunei Darussalam	Brunei National Energy Research Institute (BNERI)
Cambodia	Ministry of Mines and Energy (MME)
Indonesia	Indonesian Institute for Energy Economics (IIEE)
Lao PDR	National University of Laos (NUOL)
Malaysia	Universiti Tenaga Nasional (UNITEN)
Myanmar	Ministry of Energy (MOE)
Philippines	University of the Philippines, National Engineering Center (UPNEC)
Singapore	Energy Research Institute, Nanyang Technological University (NTU)
Thailand	Chulalongkorn University (CU)
Viet Nam	Institute of Energy (IE)

Australia	The Australian National University (ANU)
China	Centre of Energy and Environment Policy Research, Beijing Institute of Technology
India	The Energy and Resources Institute (TERI)
Japan	The Institute of Energy Economics, Japan (IEEJ)
Korea	Seoul National University (SNU)
New Zealand	The University of Auckland (UoA)
Mongolia	Energy Economics Institute, Ministry of Energy
United States of America	The National Bureau of Asian Research (NBR)

Annex E

ERIA Officials and Researchers



Not in photo:



Lili Yan Ing
(Senior Economist)



Dionisius Narjoko
(Senior Economist)



Masahito Ambashi
(Economist)



Yasushi Ueki
(Economist)



Yanfei Li
(Energy Economist)



Maura Ada Decosterd
(Research Fellow)



Rahmasari Istiandari
(Research Associate)



Tsani Fauziah Rakhmah
(Research Associate)

Research

Top left-right:

Jaysa Rafi Prana (Research Associate), Kamiyama Shigeki (Managing Director for Research Affairs), Venkatachalam Anbumozhi (Energy Economist), Yuanita Suhud (Research Associate), Marie Kenza Yousri (Research Officer), Abigail (Research Associate), Eiichi Kusano (Economist), Han Phoumin (Energy Economist), Lurong Chen (Economist), Rizqy Anandhika (Research Associate)

Bottom left-right:

Ponciano Intal, Jr. (Senior Economist), Shujiro Urata (Senior Research Advisor to the President), Fauziah Zen (Senior Economist), Fukunari Kimura (Chief Economist), Shigeru Kimura (Special Advisor to the President on Energy Affairs)

General Affairs

Left-right:

Izuru Kobayashi (Chief Operating Officer), Takeo Tsukuda (Finance Director), Kyota Yamamoto (Deputy Director General), Rendy Prasetya (Managing Officer for Research Operations on Legal Affairs)



Communication and Outreach Department

Left-right:

Jeremy Gross (Director of Capacity Building), Lydia Ruddy (Director of Communications), Kavi Chongkittavorn (Senior Communication Advisor), Maria Priscila P. del Rosario (Chief Editor and Publication Director), Sadami Sugimoto (Planning and Coordination Director)



Policy Design Department

Left-right:

Anita Prakash (Director General), Rebecca Sta. Maria (Senior Policy Fellow)





Annex F

Summit Statements in FY2016

CHAIRMAN'S STATEMENT OF THE SIXTH EAST ASIA SUMMIT FOREIGN MINISTERS' MEETING

26 July 2016, Vientiane, Lao PDR

ASEAN Connectivity

20. The Ministers noted the implementation of the Master Plan on ASEAN Connectivity (MPAC) and looked forward to the Master Plan on ASEAN Connectivity 2025. In this regard, the Ministers looked forward to the convening of the 7th ASEAN Connectivity Symposium entitled "Intensifying Partnerships to Realise the Master Plan on ASEAN Connectivity 2025" to be held on 20 October 2016 in Vientiane, Laos. The Ministers recognised the role of ERIA in promoting regional economic integration, and urged ERIA to continue with this role in coming years.

THE 48th ASEAN ECONOMIC MINISTERS' (AEM) MEETING

3 August 2016, Vientiane, Lao PDR - JOINT MEDIA STATEMENT

46. Noting the progress, the Ministers encouraged the relevant agencies and parties involved to intensify their efforts towards delivering the SAPSMED 2025 strategic goals. In this connection, the Ministers welcomed the on-going collaboration and support of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, the Economic Research Institute for ASEAN and East Asia (ERIA), the Japan-ASEAN Integration Fund and the AEM-METI Economic Cooperation Committee (AMEICC), the Korea-ASEAN Industrial Technology Cooperation, the OECD Programme for ASEAN SMEs (OPAS) and the Government of Canada, and the USAID ASEAN Connectivity through Trade and Investment project (US-ACTI).

Technical Assistance and Capacity-Building

54. ASEAN's integration efforts have been strongly supported through technical assistance and capacity building rendered by dialogue and development partners. This cooperation covers key projects under

the trade in goods, services and investment, competition, consumer protection, MSMEs, statistics, agriculture and the Initiative for ASEAN Integration. The Ministers expressed appreciation to the assistance provided under the AADCP II, EU-ARISE, the Regional EU-ASEAN Dialogue Instrument (READI), the EU-ASEAN Capacity Building Programme for Monitoring Integration Progress and Statistics (EU-ASEAN COMPASS), the US ACTI, the German Federal Ministry for Economic Cooperation and Development (BMZ) projects as implemented by the GIZ and the support provided by the Asian Development Bank, the World Bank, International Monetary Fund (IMF) and ERIA.

THE FOURTH EAS ECONOMIC MINISTERS' MEETING

5 August 2016, Vientiane, Lao PDR - JOINT MEDIA STATEMENT

Updates on ERIA's Activities

8. The Ministers noted the importance of interaction between ERIA (Economic Research Institute for ASEAN and East Asia) and the policy makers of EAS countries and, to this end, the Ministers welcomed the convening of the Roundtable Discussion between EAS Senior Economic Officials and ERIA Researchers, which was held on 1 July 2016. The Ministers were also pleased to note the updates on ERIA's on-going and future research activities, including studies on Non-Tariff Measures (NTM) and Good Regulatory Practices (GRP). The Ministers welcomed the report of the 9th ERIA Governing Board Meeting held on 16 June 2016, and noted that the Governing Board had endorsed the renewed commitments of ERIA to the East Asia Region as described in its Medium-Term Work Plan, which includes establishing the Policy Design Department, setting up formal bridging mechanisms to enhance interaction with policy makers in the region, and various measures to further enhance ERIA's research and capacity building. The Ministers also encouraged ERIA to develop possible next steps drawing upon the outcomes of their research activities, and thanked ERIA for its continuous support and looked forward to its continued contribution to the region's integration efforts. To this end, the Ministers encouraged EAS participating countries to continue extending their support to ERIA.

JOINT STATEMENT OF THE EIGHTH, MEKONG-JAPAN SUMMIT

7 September 2016, Vientiane, Lao PDR

13. The Leaders highly appreciated the continuous contribution to the Mekong countries from the Economic Research Institute for ASEAN and East Asia (ERIA). In this connection, they commended the completion of its report on 'Lao PDR at the Crossroads: Industrial Development Strategies 2016-2030'.

CHAIRMAN'S STATEMENT OF THE 11TH EAST ASIA SUMMIT

8 September 2016, Vientiane, Lao PDR

Turning Vision into Reality for a Dynamic ASEAN Community

ASEAN Connectivity

18. We noted the implementation of the Master Plan on ASEAN Connectivity (MPAC) and the adoption of the Master Plan on ASEAN Connectivity 2025. In this regard, we looked forward to the 7th ASEAN Connectivity Symposium entitled "Intensifying Partnerships to Realise the Master Plan on ASEAN Connectivity 2025" to be held in October 2016 in Vientiane, Lao PDR. We recognized the role of ERIA in promoting regional economic integration, took note of the Statement of the 9th Governing Board Meeting of ERIA, and encouraged ERIA to continue its role in supporting ASEAN Connectivity in the coming years. We encouraged ERIA to continue its support to the Chair of ASEAN Summit and the East Asia Summit.

19. We underscored the importance of promoting infrastructure development in East Asia to facilitate trade, investment and service competitiveness in the region and acknowledged that the mobilization of means of implementation of infrastructure projects is critical. In this regard, we adopted the Vientiane Declaration on Promoting Infrastructure Development Cooperation in East Asia.

VIENTIANE DECLARATION ON PROMOTING INFRASTRUCTURE DEVELOPMENT COOPERATION IN EAST ASIA

8 September 2016, Vientiane, Lao PDR

- Encourage all EAS participating countries and other external partners, including Economic Research Institute for ASEAN and East Asia (ERIA), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), the Asian Development Bank (ADB), the AIIB, Organisation for Economic Co-operation and Development (OECD) and the World Bank to promote quality infrastructure investment in the region through considering increasing technical assistance, utilizing the existing funds and providing training programmes for professionals in infrastructure and connectivity related sectors, including on smart green infrastructure, and sharing experiences and policies and practices to ASEAN Member States;
- Continue efforts to make regional connectivity vibrant and effective through the early completion of projects listed in the MPAC 2025 and the Comprehensive Asia Development Plan 2.0 to improve East-West Economic Corridor and Southern Economic Corridor;

JOINT MINISTERIAL STATEMENT OF THE 10TH EAST ASIA SUMMIT ENERGY MINISTERS MEETING

22 September 2016, Nay Pyi Taw, Myanmar

4. To advance the EAS collaboration on natural gas, the Ministers welcomed Japan's proposal to facilitate collaboration and discussion among EAS countries with the support of the ASEAN Council on Petroleum (ASCOPE), the ASEAN Centre for Energy (ACE) and the Economic Research Institute for ASEAN and East Asia (ERIA), on ways in which governments can spur the development of natural gas markets that are open, transparent, competitive and resilient, and promote new technologies for the storage and efficient use of this clean energy resource. The Ministers noted that Japan will endeavor to formulate pro-market policy options to ensure that gas markets operate efficiently for possible

consideration of the next EAS ECTF meeting.

5. The Ministers noted with satisfaction the good progress made by the Work Stream on Energy Efficiency and Conservation to promote energy efficiency and conservation (EE&C) in the EAS region, specifically in information sharing, formulating EE goals and action plans, in helping visualise the medium and long-term savings potential from implementing EE measures, and formulating roadmaps for promoting EE technologies in the region.

7. The Ministers appreciated Japan's consistent efforts to support and implement the initiatives of the EAS ECTF Work Stream on EE&C. The Ministers also encouraged further progress to accelerate deployment of EE technologies, such as smart energy management technologies and distributed energy systems, and looked forward to achieving stable and efficient energy supply in the region while reducing carbon emissions.

8. The Ministers noted with satisfaction the three major activities implemented by the Work Stream on Biofuels for Transport and Other Purposes in the past year, including the Biofuels Database Project in EAS countries, the annual Renewable Energy Researchers Invitation Program, and the joint studies on renewable energy potential in certain EAS countries and their effective utilisation.

9. The Ministers were also pleased with the progress of work under the Work Stream on Renewable and Alternative Power Generation, specifically under various initiatives to strengthen policies for scaling-up investments in renewables, RE technology demonstration and testing, RE resource mapping, sustainable hydropower generation technology and mitigation of climate change impacts, and geothermal resource utilisation. The Ministers expressed appreciation for the initiatives led by the United States and Brunei Darussalam for trainings and workshops on hydropower climate change risk and the roundtables on PV integration technologies as well as the development of tools and applications for analysing sub-regional hydro, wind and solar development.

Annex G

Outreach Activities of ERIA Researchers

RESEARCHER	PUBLICATIONS	INTERNATIONAL WORKSHOPS/ CONFERENCES/LECTURES
<p>Fukunari KIMURA (Chief Economist)</p>	<p>1. 'Industrialization and Poverty Reduction in East Asia: Internal Labor Movements Matter' with Mateus Silva Chang. in <i>Journal of Asian Economics</i>, February 2017, pp 23–37</p>	<p>1. Presented 'Infrastructure and Development in Asia: The Quality of Infrastructure and Project Implementation' at the CAG–GSEC Workshop “The Asian Century and China–Japan Cooperation” Tokyo, Japan, 16–17 January 2017</p>
	<p>2. Technology Transfer in ASEAN Countries: Some Evidence from Buyer-Provided Training Network Data' with Tomohiro Machikita and Yasushi Ueki in <i>Economic Change and Restructuring</i>, Volume 49, Issue 2, August 2016, pp 195–219.</p>	<p>2. Presented 'Urban Amenities and Innovation in Developing Countries: The Case of ASEAN and East Asia' at the Allied Social Science Associations Meeting, ACAES/AEA “Cultivating Innovation in Asia” Chicago, United States, 6 January 2017</p>
	<p>3. Comment on 'Economic Impacts of Improved Connectivity for ASEAN: An Application of the Geographical Simulation Model' in <i>Asian Economic Policy Review</i>, Volume 11, Issue 2, July 2016, pp 307–308.</p>	<p>3. Presented 'Modern International Production and Distribution Networks: the Role of Global Value Chains' at the Economic Seminar at Centro de Estudios Publicos Santiago, Chile, 6 October 2016</p>
	<p>4. Comment on 'Analysis of the FTA Negotiation between China and Korea' in <i>Asian Economic Policy Review</i>, Volume 15, Issue 3, Fall 2016, pp 188–189.</p>	<p>4. Presented '<i>Plan Economico del Primer Ministro de Japon y el TPP</i>' at a conference organised by Fundacion Chilena del Pacifico, Mitsui&Co., and Universidad de Chile Santiago, Chile, 5 October 2016</p>
	<p>5. The Role of China, Japan, and Korea in Machinery Production Networks' with Ayako Obashi in <i>International Economic Journal</i>, Volume 30, No. 2 (June), pp 169–190.</p>	<p>5. Presented 'A Novel Development Strategy with Utilizing Global Value Chains' at JICA Comprehensive Study on Automotive Industry in EAC, Study Mission Tokyo, Japan, 29 September 2016</p> <p>6. Presented 'A New Development Strategy for Southeast Asia based on the Expansion of Production Networks and Preferential Trade Agreements' at Harvard Kennedy School, Ash Center for Democratic Governance and Innovation, Seminars on Economic Development in East Asia Massachusetts, United States, 22 September 2016</p> <p>7. Served as a local organizer, a paper presenter and a discussant, and a chair of a session at the Asian Economic Panel Tokyo, Japan, 22–23 August 2016</p>

RESEARCHER

Fukunari KIMURA
(cont.)

PUBLICATIONS

INTERNATIONAL WORKSHOPS/ CONFERENCES/LECTURES

8. Presented 'CADP 2.0: Key Messages for Connectivity and Economic Integration' at the East Asia Summit and East Asia Cooperation International Forum 'OBOR, CADP 2.0 and the Future of East Asia Integration' by Chinese Academy of Social Sciences (CASS) and Economic Research Institute for ASEAN and East Asia (ERIA)
Beijing, China, 25–26 July 2016
9. Presented 'Deepening and Widening of Production Networks in ASEAN' and 'The Role of China, Japan, and Korea in Machinery Production Networks' at Keio International Economics Workshop
Tokyo, Japan, 14 July 2016
10. Presented 'Political Economy of Preferential Trade Arrangements: the Case of Japan' for a lecture at the Graduate School of International Studies, Yonsei University
Seoul, Republic of Korea, 31 May 2016
11. Presented 'Industrialization and Poverty Reduction in East Asia: The Importance of Labor Movements from Informal to Formal Sectors' at the Japan Foundation's Center for Global Partnership, Trade, Growth and Economic Inequality in the Asia-Pacific Region, International Conference
Tokyo, Japan, 20–21 May 2016
12. Presented 'Political Economy of Preferential Trade Arrangements: the Case of Japan' (with Arata Kuno) at the 57th NSD (National School of Development) Policy Talk: 'CJK Conference on Institution, Integration, and Innovation' by Peking University, Waseda University, and Korea University
Beijing, China, 13 May 2016
13. Presented 'The ASEAN's Response: Global Value Chains in the Context of Trade and Investment Policies' at the 5th Association of Vehicle Importers and Distributors (AVID) Thought Leadership Forum
Manila, Philippines, 8 April 2016

RESEARCHER

Masahito
AMBASHI

PUBLICATIONS

1. 'Competition Effects on Industrial Productivity: An Analysis of Japanese Industries on the Basis of the Industry-Level Panel Data' in *Asian Economic Papers*. Forthcoming 2017
2. 'Introduction: Servicification and Industrialization' in *Industrialization through Servicification in Lao PDR*, Chapter 1, Collaborative Research Project between ERIA and IDE-JETRO 2016. Forthcoming 2017
3. 'A Brief Guide to Donald Trump's Conflicts of Interest in Southeast Asia' in *Southeast Asia Globe*, 20 January 2017
4. 'Uber Could Face Stiff Resistance in Cambodia's Crowded Ride-Hailing Market' in *Southeast Asia Globe*, 18 January 2017
5. 'Powerful Chinese Investment Group Seeks Cambodian Partnerships' in *Southeast Asia Globe*, 1 December 2016
6. 'What Happens in Southeast Asia when Trump Scraps the TPP?' in *Southeast Asia Globe*, 17 November 2016
7. 'Indonesia Has a Strong Concern about Neighbouring Countries' Industry Accumulation through TPP' in *NNA Asia*, 21 July 2016 (in Japanese)
8. 'Grantbacks, Territorial Restrictions, and the Type of Follow-on Innovation: The "But for..." Defense' with Pierre Regibeau and Katharine Rockett, *CEPR Discussion Papers 11575*, Centre for Economic Policy Research (CEPR), October 2016

INTERNATIONAL WORKSHOPS/ CONFERENCES/LECTURES

1. Presenter on 'Competition Effects on Industrial Productivity: An Analysis of Japanese Industries on the Basis of the Industry-Level Panel Data' at the Asian Economic Panel (AEP) Tokyo, Japan 23 August 2016
2. Presenter on 'The Development of Industrial Estates and Industrial Studies' at Strengthening the Capacity of the Members of NA and PPA on Necessary Economic-Related Issue Seminar Vientiane, Lao PDR, 21 July 2016

RESEARCHER

Venkatachalam
ANBUMOZHI

PUBLICATIONS

1. 'Clean Energy Transition for Fueling Economic Integration in ASEAN' with V. Sanjayan, T. Fauziah, and Beni Suriyadi in *Handbook of Energy in Asia*, London: Routledge, Forthcoming 2017
2. 'Geothermal Barriers, Policies and Economics', a paper for the *Proceedings of the World Renewable Energy Congress XVI* (5–9 February 2017) in Perth, Australia.
3. 'Managing the Stranded Assets and Protecting the Food Value Chains from Natural Disasters' with V.R. Reddy, a paper published in the *Proceedings of the 9th ASAE International Conference: Transformation in Agricultural and Food Economy in Asia* (11–13 January 2017) in Bangkok, Thailand, pp 1158–1183.
4. *Investing in Low-Carbon Energy Systems: Implications for Regional Economic Cooperation* with K. Kalirajan, F. Kimura and X. Yao, ed., Sydney: Springer, August 2016, pp 496.
5. 'Serendipity of Low Carbon Energy Systems and the Scope of Regional Cooperation' with X. Yao in *Investing in Low-Carbon Energy Systems: Implications for Regional Economic Cooperation*, Sydney: Springer, August 2016, pp 1–27.
6. 'Aiding the Transition: Innovations with Japan's Bilateral Offset Mechanism' with A. Ogihara in *Investing in Low-Carbon Energy Systems: Implications for Regional Economic Cooperation*, Sydney: Springer, August 2016, pp 281–308.
7. 'The Hard Choices that Asia Must Make' with K. Kalirajan, and F. Kimura in *Investing in Low-Carbon Energy Systems: Implications for Regional Economic Cooperation*, Sydney: Springer, August 2016, pp 465–485.
8. 'Coping with Globalization and Climate Change: Lessons Learned from Pro-poor Business in South Asia' in *Corporations and Sustainability: The South Asian Perspective*, Sheffield: Greenleaf Publishing, April 2016, pp 104–116.

INTERNATIONAL WORKSHOPS/ CONFERENCES/LECTURES

1. Discussant at the High-level workshop on Energy and Development, organised by International Energy Agency Paris, France, 27 March 2017
2. Speaker at the 2017 Berlin Energy Transition Dialogue, organised by Federal Ministry of Economic Affairs and Energy Berlin, Germany, 20–21 March 2017
3. Keynote Speaker on 'Opportunities and Priorities for Sustainable Energy Policy Making in ASEAN' at the Second Sustainable Energy and Technology Asia (SETA) 2017 Bangkok, Thailand, 8–10 March 2017
4. Moderator for the CEO Forum in 'Energy Policy Making in Asia' at the Sustainable Energy and Technology Asia (SETA) Bangkok, Thailand, 8 March 2017
5. Panellist at 'International Best Practices in Energy Efficiency Implementation', organised by Institute for Policy, Advocacy, and Governance Dhaka, Bangladesh, 5 March 2017
6. Speaker on 'Robust and Sustainable: Strengthening Resilience Capacity of ASEAN against Disasters', at the APCC–ASEAN Disaster Management Regional Symposium Jakarta, Indonesia, 10–11 February 2017
7. Chair at 'Panel on Green Economy in Remote Areas' in the international conference 'Towards 100% Renewable Energy' Perth, Australia, 8 February 2017
8. Keynote Speaker and Session Chair on 'Brilliance of Eco-industrial Clusters in Urban-Rural Fringe Areas' at Training Program on Industrial Cluster Development Chennai, India, 3–5 January 2017

RESEARCHER

PUBLICATIONS

INTERNATIONAL WORKSHOPS/ CONFERENCES/LECTURES

9. 'Towards a New Economic Future: Innovations for a Low-Carbon World in G20 and Global Governance' for Chongyang Institute of Financial Studies, Renmin University of China, Beijing, 2016, pp 226–231.
10. 'Remaking of National Energy Policy Analysis for Global Sustainability: A Meta Analysis on Barriers and Path Dependencies in Asia' with Y. Suhud, a paper published in the *Proceedings of the Sustainability Summit on Energy, Peace and Global Governance*, Bhubaneswar: Xavier University 2016, pp 70–84.
11. 'Rethinking of Geothermal Power Development in East Asia: Economic Opportunities and Technical Barriers', a paper published in the *Proceedings of the 38th New Zealand Geothermal Workshop* in Auckland, pp 638–651.
9. Speaker on 'Green Infrastructure Financing and Regional Cooperation in Green Growth' at a Seminar on "Financing Quality Infrastructure for Long term Investment and Mobilizing Private Sector Capital" organised by OECD and ADBI
Ha Noi, Viet Nam, 19–20 December 2016
10. Panel Discussant on 'G20 and Global Climate Policy' at the T20 Kick-off Conference: "Cohesion in Diversity: Accompanying the German G20 Presidency"
Berlin, Germany, 1–2 Dec 2016
11. Discussant on 'Emerging Policy Choices for Promoting Sustainable Agriculture' at Policy Analysis Workshop on "Transition Towards Sustainable Agriculture in the Context of the 2030 Agenda for Sustainable Development, Strategic Implementation, Follow up and Review" by Centre for Alleviation of Poverty through Sustainable Agriculture (CAPSA)
Bogor, Indonesia, 15–17 November 2016
12. Keynote Speaker on 'Challenges in Implementing Nationally Determined Contributions' at the Roundtable on 'Accelerating Low Carbon Technology Transfer: Helping Developing Countries Implement Nationally Determined Contributions' on Singapore International Energy Week
Singapore, Singapore, 27 October 2016
13. Speaker on 'Potentials of Bio-energy Application in APEC Member Economies' at the Expert Group on New and Renewable Energy Technology (EGNRET) Symposium
Jakarta, Indonesia, 10–11 October 2016
14. Speaker and Session Chair on 'Globalization of Green Technologies: Role of University–Industry Partnerships' at the APCTT-ESCAP-TAP Regional Workshop on Enhancing Innovations and Competiveness of MSMEs in Response to the ASEAN Integration for Agro-Enterprises
Manila, Philippines, 28–29 September 2016

RESEARCHER

Venkatachalam
ANBUMOZHI
(cont.)

PUBLICATIONS

INTERNATIONAL WORKSHOPS/ CONFERENCES/LECTURES

15. Speaker on 'Prospects of Coal in Mitigating the Climate Change and Meeting the NDC targets' at the ASEAN Energy Business Forum 2016
Nay Pyi Taw, Myanmar, 21–23 September 2016
16. Keynote Speaker on 'Navigating Stormy Energy and Sustainable Future' at the National Productivity Council
Chennai, India, 11 August 2016
17. Panellist on 'Aligning G20 Policies for the Transition Towards Global Sustainability' at the G20 Think Tank Summit
Beijing, China, 29–30 July 2016
18. Discussant on 'Climate Friendly Growth in Developing Asia' at the Asian Development Outlook 2016 Workshop, organised by the Asian Development Bank
Manila, Philippines, 25 July 2016
19. Speaker on 'Energy in ASEAN: Problems and Possible Solutions' at ASEAN-US Science and Technology Fellow Orientation Workshop
Jakarta, Indonesia, 23 June 2016
20. Speaker and Session Chair on 'Effects of Natural Disasters to Agricultural Water Management and Global Food Value Chains' at the OECD Conference on 'Vulnerability of Agricultural Production Networks and Global Food Value Chain due to Natural Disasters'
Vienna, Austria, 20–22 June 2016
21. Special Lecturer at UNIDO on 'Prospects and Challenges to Circular Economy in Asia: With Special Focus on Eco-Industrial Parks'
Vienna, Austria, 20 June 2016
22. Panellist on 'Reconciling Free Trade and Climate Change Regimes' at the G20 Think Tank workshop on Sustainable Trade
Geneva, Switzerland, 8 June 2016

RESEARCHER

PUBLICATIONS

INTERNATIONAL WORKSHOPS/ CONFERENCES/LECTURES

23. Speaker on 'Driving Sustainable Infrastructure Development and Finance' at IISD-EFG Forum on Sustainable Infrastructure and Finance Building Blocks in Emerging Economies
Geneva, Switzerland, 7 June 2016
24. Keynote Speaker on 'Eco-Innovation and SME Inter-firm Networks for Circular Economy and 2030 Targets' at ASEIC Global Eco-Innovation Forum
Seoul, South Korea, 1 June 2016
25. Discussant on 'Economics of Climate Stabilization' at the Asian Development Outlook Workshop Greening Asia's Growth, organised by Asian Development Bank
Manila, Philippines, 30–31 May 2016
26. Panel Speaker on 'Is it Possible to Reconcile Economic Prosperity with Climate Sustainability?' at the IEEJ 50th/APERC 20th Anniversary Joint Symposium
Tokyo, Japan, 26–27 May 2016
27. Speaker and Session Chair on 'Strategic Assessment of Value Chain and Changing Conditions for Mainstreaming Climate Change Adaptation' at the Asian Productivity Organization (APO) workshop on Mainstreaming Climate Change Adaptation in Agriculture
Dhaka, Bangladesh, 25–28 April 2016
28. Presented 'Low-Carbon Development and Multi-energy Utilization: Globalization of Technologies' at the 10th China New Energy International Forum
Beijing, China, 20–21 April 2016
29. Keynote Speaker and Session Chair at the ASEAN Grid Connectivity: A Game Changer to Strengthen Investment Climate and Boost Confidence of Developers, 19th Annual Power and Electricity World Asia Conference
Jakarta, Indonesia, 13–14 April 2016

RESEARCHER	PUBLICATIONS	INTERNATIONAL WORKSHOPS/ CONFERENCES/LECTURES
Lurong CHEN	1. Op-ed: 'TPP's demise does not mark end of US 'pivot to Asia' in <i>Strait Times</i> , 7 February 2017	1. Speaker at Asia Pacific Forum 2016 Ha Noi, Viet Nam, 24–25 November 2016
	2. Article: 'RCEP Is Not the Anti-TPP' in <i>The Diplomat Magazine</i> , December 2016	2. Speaker at APIR's 5th Anniversary Symposium Osaka, Japan, 15 November 2016
	3. Op-ed: 'RCEP to Consolidate Asian Integration' in <i>The Jakarta Post</i> , 13 December 2016, and <i>The Straits Time</i> , 14 December 2016	3. Discussant at 2016 Shanghai Global Think Tank Forum Shanghai, China, 9–11 November 2016
	4. Op-ed: 'What the RCEP Means' in <i>Khmer Times</i> , 5 December 2016	4. Public Speaker, 'The Problems of Disruptive Innovation' at Universitas Indonesia Jakarta, Indonesia, 7 November 2016
	5. Article: 'Determinants of Trade in Parts and Components: Latin America and East Asia', in <i>Journal of Chinese Economic and Foreign Trade Studies</i> , 2016 Vol. 9 Iss: 3, pp 245–252	5. Panellist at KTRA plenary on 'Recent Global Trade Issues and Implications' Seoul, Republic of Korea, 21 October 2016
	6. Interview: 'The Establishment of ASEAN Community and its Implications for China' in <i>China Daily</i> , April 2016	6. Presenter on 'Mega FTAs and 21st Century Trade', SEOM-EAS Consultation with ERIA Roundtable Vientiane, Lao PDR, 1 July 2016
		7. Lecturer on 'Mega FTAs and Asia' at RSIS-WTO Parliamentarian Workshop Singapore, 17–19 May 2016
		8. Discussant at EITI Annual Meeting 2016 Ha Noi, Viet Nam, 9–12 March 2016
		9. Presenter on 'Markets Matter: The Potential of Intra-Regional Trade in ASEAN and Its Implications for Asian Regionalism' at Asian Economic Panel Seoul, Republic of Korea, 2–3 March 2016

**RESEARCHER**

HAN Phoumin

**PUBLICATIONS**

1. *Energy Outlook and Energy Saving Potential in East Asia 2016* with Shigeru Kimura and Cecilya Laksmiwati Malik, International Energy Forum (IEF). Forthcoming 2017
2. OECD (2017), *Economic Outlook for Southeast Asia, China and India 2017: Addressing Energy Challenges*. Paris, France: OECD Publishing.

**INTERNATIONAL WORKSHOPS/
CONFERENCES/LECTURES**

1. Presenter on 'The Analysis of Distributed Energy System and Its Implications for Electrification - The Case of ASEAN Member States' at the 15th East Asia Economic Association Bandung, Indonesia, 4–6 November 2016
2. Presenter on 'Financing Renewable Power Generation and Supporting Framework' at ASEAN Energy Business Forum 2016 Nay Pyi Taw, Myanmar, 21–23 September 2016
3. Presenter on 'Sustainable Development in ASEAN: Efficiency and Clean Energy' at ASEAN Young Entrepreneur Council Malaysia, 29–30 July 2016
4. Presenter on 'Energy Outlook and Energy Saving Potential in EAS 2016' at OPEC Technical Meeting Vienna, Austria, 18 July 2016
5. Presenter on 'Financing Framework and Policies for Renewable Energy: The Promotion of Renewable Power Generation' at the Regional Workshop on Overcoming Critical Bottlenecks to Accelerate Renewable Energy Deployment in ASEAN+6 Countries Bangkok, Thailand, 14–15 June 2016

RESEARCHER

Lili Yan ING

PUBLICATIONS

1. *Production Networks in Southeast Asia* with Fukunari Kimura, Oxon: Routledge, February 2017
2. 'Introduction' in L. Ing, and F. Kimura, eds., *Production Networks in Southeast Asia*. Oxon: Routledge, February 2017
3. 'Imported Inputs on Indonesia Product Quality and Variety' with Chandra Triputra in L. Ing, and F. Kimura, eds., *Production Networks in Southeast Asia*. Oxon: Routledge, February 2017
4. 'Insight: Trump's Economic Policy and Impact on Indonesian Economy' in *The Jakarta Post*, 29 November 2016
5. 'Simplifying Rules of Origin, Reducing Non-tariff Barriers' with Olivier Cadot in *The Jakarta Post*, 8 September 2016
6. 'Survey of Recent Developments: Addressing Indonesia's Infrastructure Deficit' with David Ray in *Bulletin of Indonesian Economic Studies*, Vol 52, Issue 1, 6 April 2016

INTERNATIONAL WORKSHOPS/ CONFERENCES/LECTURES

1. Presenter on 'Seizing the Investment Opportunity in Indonesia and ASEAN' at the ASEAN Business Dialogue Forum Jakarta, Indonesia, 23 November 2016
2. Presenter on 'Quality Competition and Firm Productivity at Beijing Forum 2016', Peking University Beijing, China, 4–6 November 2016
3. Presenter on 'China and Indonesia: Quality Competition and Productivity' at Beijing Forum 2016, Peking University Beijing, China, 3–6 November 2016
4. Presenter and Discussant on 'Indonesia, ASEAN and ASEAN Integration Agenda' at 'The Geoeconomic Future of Asia: How Economics, Politics, and Trade Will Shape Southeast Asia' by Center for American New Security (CNAS) Washington DC, United States, 27 October 2016
5. Presenter on 'Facilitating Trade in Goods in ASEAN' at the ASEAN Business and Investment Summit Vientiane, Lao PDR, 7 September 2016
6. Panellist on 'ASEAN, Indonesia, and Other Opportunities' at the 9th ASEAN and Asia forum organised by Singapore Institute for International Affairs Singapore, Singapore, 22 August 2016
7. Presenter on 'Non-tariff Measures in ASEAN' at the Second ASEAN Senior Economic Officials Meeting for the 47th ASEAN Economic Ministers Meeting (SEOM 2/47) and related meetings Kuala Lumpur, Malaysia, 8 April 2016

RESEARCHER	PUBLICATIONS	INTERNATIONAL WORKSHOPS/ CONFERENCES/LECTURES
Ponciano INTAL, Jr.		<ol style="list-style-type: none"> 1. Presenter at the 'Trans-Asian Mobilities and Encounters: Exchange, Commodification and Sustainability', an international conference by Monash University (Melbourne) and Chulalongkorn University (Bangkok) Bangkok, Thailand, 23–24 January 2017 2. Presenter on 'East Asia's Transformation and Regional Architecture' at PAFTAD38: Asian Economic Integration Strategies Canberra, Australia, 22–24 November 2016 3. Presenter at APIR's 5th Anniversary Symposium Bali, Indonesia, 15 November 2016 4. Presenter on the Session: Economic Outlook, at the ADB-ASIAN Think Tank Development Forum 2016: Promoting Sustainable Urbanization in Asia and the Pacific New Delhi, India, 27–28 October 2016 5. Presenter at the ASEAN RCEP Trade Negotiating Committee Beijing, China, 16 October 2016 6. Advisor at the 2016 Partnership for Economic Policy (PEP) Annual Conference: 'From Policy Engagement to Research Uptake: Lessons For and From Developing Country Researchers' Manila, Philippines, 6–8 June 2016 7. Presenter at the Fourth SEOM-EAS Consultations Kuala Lumpur, Malaysia, 8 April 2016
Yanfei LI	<ol style="list-style-type: none"> 1. 'Financing Renewable Energy in the Developing Countries of the East Asia Summit Region: Introduction' in <i>Energy Policy</i>, 14 April 2016 	<ol style="list-style-type: none"> 1. Presenter at Shanghai Institute for International Studies Workshop on 'Green Energy: the G20 Vision' Shanghai, China, 24–25 February 2017 2. Presenter at the 5th IEF-IGU Ministerial Gas Forum New Delhi, India, 6 December 2016

RESEARCHER

Yanfei LI
(cont.)

PUBLICATIONS

INTERNATIONAL WORKSHOPS/ CONFERENCES/LECTURES

3. Presenter at the LNG Producer-Consumer Conference 2016
Tokyo, Japan, 2016
4. Presenter at the ASEAN Smart Grid Congress 2
Putrajaya, Malaysia, 8–9 November 2016
5. Presenter at the 15th International Convention of the East Asian Economic Association
Bandung, Indonesia, 5–6 November 2016
6. Presenter at IEEJ Energy Outlook Launch Ceremony and Symposium
Tokyo, Japan, 21 October 2016
7. Presenter at the ASEAN Energy Business Forum, 34th ASEAN Ministers on Energy Meeting (AMEM) and EAS Energy Ministers Meeting (EMM)
Nay Pyi Taw, Myanmar, 20–22 September 2016
8. Presenter at Dynamic of Natural Gas Markets in East Asia: the Momentum on Pricing Transition, a workshop organised by the Energy Studies Institute of National University of Singapore
Singapore, Singapore, 30 August 2016
9. Presenter at the 11th ASEM Summit and the 15th Asia-Europe Business Forum
Ulanbaataar, Mongolia, 13–14 July 2016
10. Presenter at the 10th China New Energy International Forum
Beijing, China, 20–21 April 2016
11. Presenter at a Seminar on ASEAN Energy Policy Research, organised by Beijing Institute of Technology (BIT)
Beijing, China, 19 April 2016

RESEARCHER	PUBLICATIONS	INTERNATIONAL WORKSHOPS/ CONFERENCES/LECTURES
Dionisius NARJOKO	<ol style="list-style-type: none"> 1. Exporting and Upgrading of Product Portfolio: Evidence from Korea, Japan, and Indonesia' in <i>Asian Economic Journal</i>, Vol. 30, Issue 4, December 2016, pp 349-379 	<ol style="list-style-type: none"> 1. Presenter at EABC Workshop for RCEP Business Stakeholders and EABC Dialogue with RCEP Trade Negotiating Family Tangerang, Indonesia, 4–6 December 2016 2. Presenter at the 'Impact of the Digital Economy on SMEs and Ways to Measure' Bandar Seri Begawan, Brunei Darussalam, 22 November 2016 3. Presenter at ASEAN Roundtable meeting at ISEAS Singapore, Singapore, 30 August 2016 4. Presenter at Senior Economic Officials Meeting (SEOM) for Leaders from East Asian Summit Countries Vientiane, Lao PDR, 1 July 2016 5. Presenter at the First ASEAN Coordinating Committee on Micro, Small, and Medium Enterprises (ACCMSME) meeting, invited by Spring Singapore Singapore, Singapore, 31 May 2016 6. Presenter on 'Sustainable Development Goals and Trade: Achieving Win-wins' at ADBI Workshop Dhaka, Bangladesh, 22–23 March 2016
Yasushi UEKI	<ol style="list-style-type: none"> 1. 'Policy Issues for Developing Local Auto parts Suppliers in ASEAN: Findings from Questionnaire Surveys in Thailand and Vietnam' in Hidetoshi Nishimura, Hideo Kobayashi (eds.), <i>The Automobile and Auto Components Industries in ASEAN, ERIA-TCER Series in Asian Economic Integration Vol. 7</i>. Tokyo: Keisoshobo 2. 'A Internet e o desenvolvimento do e-commerce: implicações para as políticas públicas da América Latina' in <i>Pontes</i>, 17 August 2016. Geneva: International Centre for Trade and Sustainable Development (http://www.ictsd.org/node/97994) 	<ol style="list-style-type: none"> 1. Best Presentation Awardee on 'A Study of Innovation and Linkages With External Resources in ASEAN Firms' with Hidenori Shigeno, Masatsugu Tsuji, and Hiroki Idota at the 27th Meeting of Association of Product Development and Management Shiga, Japan, 19 November 2016 2. Presenter on 'How Teams Interact with Interfirm Technology Transfers for New Variety' with Tomohiro Machikita at the 15th Biennial Convention of the East Asian Economic Association (EAEA) Bandung, Indonesia, 5 November 2016

RESEARCHER

Yasushi UEKI
(cont.)

PUBLICATIONS

3. 'Does Safety-Oriented Corporate Social Responsibility Promote Innovation in the Thai Trucking Industry?' with Chawalit Jeenanunta, Tomohiro Machikita, Masatsugu Tsuji in *Journal of Business Research*, Vol. 69, Issue 11, November 2016, pp 5371–5376.
4. 'Connectivity in the Technology Transfer Process among Local ASEAN Firms' with Masatsugu Tsuji, Hiroki Idota, Hidenori Shigeno, and Teruyuki Bunno in *Contemporary Economics* by University of Finance and Management in Warsaw, Vol. 10, Issue 3, September 2016, pp 193–204.
5. 'Customer Pressure, Customer–manufacturer–supplier Relationships, and Quality Control Performance' in *Journal of Business Research*, Vol. 69, Issue 6, June 2016, pp 2233–2238.
6. 'Does Kaizen Create Backward Knowledge Transfer to Southeast Asian Firms?' with Tomohiro Machikita and Masatsugu Tsuji in *Journal of Business Research*, Vol. 69, Issue 5, May 2016, pp 1556–1561.

INTERNATIONAL WORKSHOPS/ CONFERENCES/LECTURES

3. Presenter on 'Connectivity in the Technology Transfer Process Among Local ASEAN Firms' with Masatsugu Tsuji, Hiroki Idota, Teruyuki Bunno, Hidenori Shigeno, and Tomohiro Machikita at the 8th IEEE International Conference on Management of Innovation and Technology (ICMIT2016) Bangkok, Thailand, 19–22 September 2016
4. Excellent Paper Awardee for 'A Study of the Connectivity to External Linkages for Innovation in ASEAN Local Firms' with Hiroki Idota, Hidenori Shigeno, and Masatsugu Tsuji at the 9th Academy of Innovation and Entrepreneurship (AIE) Conference Sydney, Australia, 2–3 September 2016
5. Presenter on 'Future of Digital Era: Predicting the Global Economic Outlook' at the 14th Economix International Seminar: Global Economic Challenges, organised by Faculty of Economics and Business, Universitas Indonesia Depok, Indonesia, 7 November 2016
6. Presenter on 'Productivity Policy Challenges in ASEAN and East Asian Economic Integration' at the APO-OECD-ESCAP-ERIA Joint Experts Meeting: "Asian Productivity Outlook and Policy 2016: Enhancing Productivity in Southeast Asia", organised by APO and Vietnam Productivity Institute Ha Noi, Viet Nam, 12 September 2016
7. Presenter on 'Infrastructure and Firm Capacity Development for Making Better Connections in Factory Asia' at the OECD-ERIA Joint Regional Symposium Making Global Value Chains Work for ASEAN Ha Noi, Viet Nam, 13 June 2016

RESEARCHER

Fauziah ZEN

PUBLICATIONS

1. Reviewer in *Journal of Economics and Development*, Jakarta: Faculty of Economics of University of Indonesia
2. Reviewer in *Journal of Energy Policy*, Amsterdam: Elsevier
3. Participation in PPP and Infrastructure Dialogue Partners: ADBI, GIZ; OECD-ADBI: High Level Panel on Long-term Investment for Infrastructure

INTERNATIONAL WORKSHOPS/ CONFERENCES/LECTURES

1. Discussant at JICA-LPEM FEBUI Workshop on 'Taxes and Social Policy: Sustainable Growth Under Informality' Jakarta, Indonesia, 6 January 2017
2. Speaker at 'Global Development Trends and Challenges in Emerging Asia: Making the Most of OECD Development Centre', organised by OECD Development Centre and Ministry of Foreign Affairs of Japan Tokyo, Japan, 19 December 2016
3. Speaker at 'Quality Infrastructure and the Multilateral Development Banks' conference, organised by Centre for Strategic and International Studies and Japanese Ministry of Economy, Trade, and Industry Washington DC, United States, 15 December 2016
4. Speaker at 'Activating Institutional Investors for Sustainable Infrastructure Finance in Asia - Fostering Local Resource Mobilization' an LCY Bond Market Seminar Jakarta, Indonesia, 24 November 2016
5. Presenter at the 15th International Convention of EAEA: Sustainable and Inclusive Development in Asia and Global Economy Bandung, Indonesia, 5–6 November 2016
6. Speaker at the Connectivity Conference: 'Intensifying Partnerships to Realise the Master Plan on ASEAN Connectivity 2025' Vientiane, Lao PDR, 20 October 2016
7. Speaker at 'Project Financing and Sustainable Development of Railway Infrastructure' organised by ADBI and Public Debt Management Office of Kingdom of Thailand Bangkok, Thailand, 10–11 August 2016

RESEARCHER

Fauziah ZEN
(cont.)

PUBLICATIONS

INTERNATIONAL WORKSHOPS/ CONFERENCES/LECTURES

8. Session Chair at 'Mobilizing Public Finance for Infrastructure Development in Emerging Asia', the Fifth OECD-AMRO-ADB/ADB-ERIA ASIAN Regional Roundtable on Macroeconomic and Structural Policy Challenges
Tokyo, Japan, 14–15 July 2016
9. Speaker at the ASEAN-Korea PPP Forum: 'PPP in Agriculture Sector'
Manila, Philippines, 31 May–2 June 2016
10. Speaker at 'Logistics and Maritime Studies on One Belt One Road', a conference organised by Hong Kong Polytechnic University
Hong Kong, Hong Kong, 10–11 May 2016
11. Speaker at ADB Annual Meeting, BMZ and GIZ: 'Enhancing the Local Investor Base in Asia's G20 Bond Market'
Frankfurt, Germany, 3 May 2016
12. Speaker on 'ASEAN Connectivity', an Economic Diplomats meeting of Korean Embassies in Southeast Asia
Jakarta, Indonesia, 29 April 2016
13. Several interviews with national televisions on various fiscal issues and the ASEAN Economic Community.

Annex H

Seminars and Symposia

DATE	EVENT	VENUE
25 April 2016	Seminar on the Role of Public Finance in Asian Infrastructure Development 60 participants, co-organised with Asian Development Bank Institute (ADBI) and Organisation for Economic Co-operation and Development (OECD)	Tokyo, Japan
3 May 2016	Public Lecture with Pierre Sauvé: 'A Bridge Too Far? Skeptical Ruminations on the Transatlantic Trade and Investment Partnership (TTIP)' 50 participants, co-organised with Universitas Pelita Harapan (UPH)	Jakarta, Indonesia
13 June 2016	OECD-ERIA Joint Regional Symposium: 'Making Global Value Chains work for ASEAN' 150 participants, co-organised with OECD	Hanoi, Viet Nam
14-15 July 2016	5th OECD-AMRO-ADB/ADBI-ERIA: 'ASIAN Regional Roundtable on Macroeconomic and Structural Policy Challenges' 120 participants, co-organised with OECD and Asian Development Bank (ADB)	Tokyo, Japan
8 August 2016	The 5th ERIA Editors Roundtable: 'The ASEAN Community 2025 Vision' 55 participants, co-organised with Vientiane Times	Vientiane, Lao PDR
22 August 2016	The 9th ASEAN and Asia Forum: 'A New Growth Paradigm: Connect, Innovate, Reform' 200 participants, organised by Singapore Institute of International Affairs (SIIA) co-funded by ERIA	Singapore
7 September 2016	ASEAN Business and Investment Summit 2016: 'Operationalizing The AEC – Turning Vision Into Reality' Special Session 'Presentation of ASEAN Economic Reports', co-hosted with OECD	Vientiane, Lao PDR
20 October 2016	The 7th ASEAN Connectivity Symposium: 'Intensifying Partnerships to Realise the Master Plan on ASEAN Connectivity 2025' 180 participants, co-organised with the ASEAN Secretariat and the Lao PDR Mission to ASEAN	Vientiane, Lao PDR
8 November 2016	ERIA and CSIS Joint Public Lecture by Prof Ross Garnaut: 'Asia and the Global Response to Climate Change' 60 participants, co-organised with Centre for Strategic and International Studies (Indonesia)	Jakarta, Indonesia
15 December 2016	World Tsunami Awareness Day 2016 Symposium: 'First Anniversary of World Tsunami Awareness Day' 250 participants, co-organised with the United Nations Office for Disaster Risk Reduction (UNISDR), OECD, Japan International Cooperation Agency (JICA), supported by Indonesia's National Disaster Management Authority (BNPB) and Government of Japan	Jakarta, Indonesia

 DATE	 EVENT	 VENUE
15 January 2017	The Third Asia Cosmopolitan Awards 200 participants, co-organised with Nara Prefecture	Nara, Japan
7 March 2017	ERIA and IDE-JETRO 2017 Joint International Symposium: 'New Normal, Integration, and Inequality' 140 participants, co-organised with Institute of Developing Economics–Japan External Trade Organization (IDE-JETRO)	Jakarta, Indonesia

Annex I

Media Exposure

- 2016 -

NO	TITLE OF NEWS OR ARTICLE	MEDIA WHERE IT APPEARED	EVENT	DATE
1.	SMEs: Case for pursuing a regionally integrated policy approach	The Financial Express	ERIA SME Policy Index research is featured	4 April
2.	Cambodia laying tracks for transport future	Voice of America	ERIA is featured	12 April
3.	INDCs and Philippine economic and energy realities	Business World Online	ERIA's Energy Outlook 2015 is featured	11 May
4.	Quicken pace, ASEAN told	The Star Online	ERIA's non-tariff measures project is featured	2 June
5.	Beyond Price, Speed: China Advised to Consider Other Critical Factors as It Exports Bullet Trains	Yibada	Dr Yanfei Li, ERIA energy economist, is featured	29 June
6.	A song by any other name	The Irrawaddy	Mr Shimpei Yamamoto, former ERIA managing director for research affairs, is featured	30 June
7.	The Winners and Losers of the AEC – it's no EU for better or worse	Blue Notes ANZ	Non-tariff measures is cited	18 July
8.	Assembly members beef up on economic issues	Vientiane Times	Prof Nishimura, ERIA President, on strengthening capacity of the members of NA and PPAs seminar	22 July
9.	Cooperation at EAS level. Korea, Japan, Australia, NZ share common bond to tackle worldwide protectionism	Business Korea	ERIA is featured	8 August
10.	PHL economy 'immune' to China, report says	Business World Online	The 5th Editors Roundtable 2016 and Dr Ponciano S. Intal, Jr., ERIA senior economist, are featured	9 August
11.	Senior editors of ASEAN share views for vision's ASEAN community'	Vientiane Times	The 5th Editors Roundtable 2016 and Prof Nishimura are featured	9 August
12.	Discussions at East Asia Summit focus on non-tariffs for cosmetics	Cosmetics Design Asia	ERIA's non-tariff measures project is featured	10 August

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NO	TITLE OF NEWS OR ARTICLE	MEDIA WHERE IT APPEARED	EVENT	DATE
13.	Regional Editors Meet in Laos	Khmer Times	The 5th ERIA Editors Roundtable 2016 is featured	11 August
14.	ASEAN-China free trade agreement backed to ease regional tensions	Manila Bulletin	Dr Ponciano Intal, Jr. is featured	12 August
15.	Japan: designing the future of ASEAN	MK Korea	The 5th Editors Roundtable 2016 is featured	15 August
16.	China's bullet trains now running in Liaoning Province, gearing up for global sales	Yibada	Dr Yanfei Li is featured	16 August
17.	Sen Manny Pacquiao is ASEAN's poster boy	Manila Bulletin	The 5th ERIA Editors Roundtable 2016 and ERIA are featured	21 August
18.	ASEAN Powers Up	Bangkok Post	The 5th ERIA Editors Roundtable 2016 is featured	22 August
19.	China an apt example of sustainable growth	Ecns.cn	Dr V. Anbumozhi, ERIA senior energy economist, is the author	31 August
20.	China can lead by example	China Daily Asia	Dr Anbumozhi is the author	2 September
21.	India-ASEAN ties : Bound to act east	Sunday Guardian Live	ERIA is featured	3 September
22.	Saving ASEAN from superficial integration	Nikkei Asian Review	Dr Lili Yan Ing, ERIA economist, is featured on ASEAN Business and Investment Summit (ABIS) 2016	7 September
23.	Simplifying rules of origin, reducing non-tariff barriers	The Jakarta Post	Dr Lili Yan Ing is the author	8 September
24.	ASEAN-BIS calls for more collaboration	Vientiane Times	Dr Lili Yan Ing is featured	8 September
25.	What's your impression of Laos as host of the ASEAN Summits?	Vientiane Times	Mr Kyota Yamamoto, ERIA deputy chief operating officer, is featured	8 September

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NO	TITLE OF NEWS OR ARTICLE	MEDIA WHERE IT APPEARED	EVENT	DATE
26.	China summit signals 'a new phase'	China Daily Asia	Dr Anbumozhi and Mr Kavi Chongkittavorn, ERIA senior communication advisor, are featured	9 September
27.	Obama, Lagarde and making business easier at ASEAN	ANZ Blue Notes	Dr Lili Yan Ing is featured	9 September
28.	How to Proceed Infrastructure Development in Developing Countries – Learn by Japan's Experience	Nikkei	Dr Fauziah Zen, ERIA economist, is the author	9 September
29.	Call to Action Summit: Progress on trade will boost least-developed countries	China Daily Asia	Prof Nishimura is featured	weekly edition 9-15 sep 16
30.	Non-tariff Measures Limit Integration in ASEAN	Vientiane Times	Dr Lili Yan Ing is featured	10 September
31.	Asean leaders adopt chairman's statement at summits	Vientiane Times	NTM and trade facilitation are cited	10 September
32.	More harmony needed in Asean food standards	East Asia Forum	ERIA's non-tariff measures project is featured	10 September
33.	Prominent Malaysian Official Joins ERIA as Senior Policy Fellow	Jakarta Globe	Inaugural Seminar to Welcome Dr Rebecca as ERIA senior policy fellow is featured	14 September
34.	Partners in Progress Connections: Chinese financing helps to meet ASEAN's infrastructure needs	China Daily Asia	Dr Fauziah Zen is featured	weekly edition 16-22 sep 16
35.	Asia content business summit kicks off in Malaysia for first time	New Straits Times online	ERIA is featured	22 September
36.	Coal outgrows hydropower	The Phnom Penh Post	ERIA is featured	11 October
37.	Seeking Harmony	China Daily Asia	Prof Nishimura is featured	21 October
38.	How ASEAN can advance the SDG agenda	The Jakarta Post	Dr Anbumozhi is the author	27 October
39.	Impact of ASEAN Integration	Yomiuri Shimbun	Prof Nishimura and Prof Urata, senior research advisor to the ERIA president, are featured	31 October

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NO	TITLE OF NEWS OR ARTICLE	MEDIA WHERE IT APPEARED	EVENT	DATE
40.	What happens in Southeast Asia when Trump scraps the TPP?	Southeast Asia Globe	Mr Masahito Ambashi, ERIA economist, is featured	17 November
41.	Habibie Center Gelar Forum Dialog Bisnis dalam Meraih Peluang Perdagangan ASEAN	Mi'raj News	Dr Lili Yan Ing is mentioned	23 November
42.	ASEAN on SDG 2030 Agenda	The Korea Times	Dr Anbumozhi is the author	24 November
43.	Brunei Participates in Japan Halal Expo	Borneo Bulletin	ERIA and Prof Nishimura are featured	25 November
44.	World Tsunami Awareness Day' Kicks off in Kochi, Japan	The Nation	World Tsunami Awareness Day is featured	25 November
45.	アセアン統合の衝撃	Yomiuri Shimbun	Asia Cosmopolitan Awards winners are announced	26 November
46.	Aceh students join tsunami-awareness campaign in Japan	The Jakarta Post	World Tsunami Awareness Day is featured	28 November
47.	Insight : Trump's economic policy and impact on Indonesian economy	The Jakarta Post	Dr Lili Yan Ing is the author	29 November
48.	Powerful Chinese investment group seeks Cambodian partnerships	Southeast Asia Globe	Mr Masahito Ambashi was featured	1 December
49.	'Young leaders vow to raise awareness of natural disasters'	Nikkei Asian Review	World Tsunami Awareness Day is featured by Mr Kavi Chongkittavorn	1 December
50.	RCEP Is Not the Anti-TPP	The Diplomat	Dr Lurong Chen is the author	3 December
51.	What the RCEP Means	Khmer Times	Dr Lurong Chen is the author	5 December
52.	ASEAN: Escaping from A Shallow Integration	APEC Currents Newsletter	Dr Lili Yan Ing is the author	9 December
53.	U Thein Sein Wins Award for Leadership During Burma's Transition	The Irrawaddy	ACA winners announcement is featured	9 December

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NO	TITLE OF NEWS OR ARTICLE	MEDIA WHERE IT APPEARED	EVENT	DATE
54.	More harmony needed in Asean food standards	AEC News Today	ERIA's non-tariff measures project is featured	12 December
55.	RCEP to consolidate Asian integration	The Jakarta Post	Dr Lurong Chen, ERIA economist, is the author	13 December
56.	RCEP to consolidate Asian integration: The Jakarta Post Columnist	The Straits Times	Dr Lurong Chen is the author	14 December
57.	Peringatan "Hari Kesadaran Tsunami Dunia" jadi cara sebar pengetahuan soal tsunami	Antara News	World Tsunami Awareness Day 2016 - Indonesia are Prof Nishimura are featured	15 December
58.	Wapres JK: Pendidikan dan Budaya Tanggap Darurat Bencana Harus Dibangun	Detik News	World Tsunami Awareness Day 2016 - Indonesia and Prof Nishimura are featured	15 December
59.	Jepang Berikan Bantuan 500 Tenda Pengungsi Korban Gempa Aceh	Detik News	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December
60.	Hindari Korban Bencana, Pemerintah Fokus ke Pendidikan dan Kualitas Bangunan	Berita Satu	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December
61.	Wapres Tidak Berharap Bantuan Asing untuk Korban Gempa Aceh	Berita Satu	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December
62.	Wapres: Bencana tak Bisa Ditiadakan tapi Korban Bisa Dihindari	Berita Satu	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December
63.	Japan channels aid to victims of Aceh earthquake	The Jakarta Post	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December
64.	Belajar dari Kultur Tanggap Bencana Masyarakat Pulau Simeulue Aceh	Metro TV News	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December

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NO	TITLE OF NEWS OR ARTICLE	MEDIA WHERE IT APPEARED	EVENT	DATE
65.	JK Tekankan Pentingnya Edukasi Hadapi Bencana	Republika Online	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December
66.	Wapres JK: Indonesia Perlu Budayakan Antisipasi Bencana	Viva News	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December
67.	Cerita JK, Lagu Dangdut Efektif Kumpulkan WNI Korban Bencana	Viva News	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December
68.	Jepang Tawarkan Bantuan Hadapi Bencana Dadakan	Viva News	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December
69.	Keajaiban' Warisan Leluhur Selamatkan Warga dari Tsunami Aceh	Liputan 6	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December
70.	VP Kalla Underlines Importance of Tsunami Early Warning System	Tempo English	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December
71.	Kalla Menganggap Peringatan Dini Tsunami Sudah Berjalan	Tempo	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December
72.	Wakil Presiden Harapkan Masyarakat Terdidik Hadapi Bencana	Tempo	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December
73.	Pemerintah Bikin Sistem Peringatan Dini Bencana Terintegrasi	Tempo	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December
74.	Wapres Ingatkan Pentingnya Langkah Deteksi Dini Hadapi Bencana	KOMPAS	World Tsunami Awareness Day 2016 - Indonesia is featured	15 December
75.	Pemerintah Bangun Sistem Terpadu Peringatan Dini Bencana	Benar News	World Tsunami Awareness Day 2016 - Indonesia and Prof Nishimura are featured	16 December

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NO	TITLE OF NEWS OR ARTICLE	MEDIA WHERE IT APPEARED	EVENT	DATE
76.	Semakin Terlatih Hadapi Gempa	Sumatera Ekspes Online	World Tsunami Awareness Day 2016 - Indonesia is featured	16 December
77.	Pemerintah Jepang Berikan Bantuan 500 Tenda Pada Korban Gempa Aceh	Tribun News	World Tsunami Awareness Day 2016 - Indonesia is featured	16 December
78.	Sharing Disaster Prevention Mindset with the World	The Daily Jakarta Shimbung	World Tsunami Awareness Day 2016 - Indonesia is featured	16 December
79.	Mr Teru Fukui's Interview: World Tsunami Awareness Day and Indonesia: Not Even One to be Sacrificed	The Daily Jakarta Shimbung	World Tsunami Awareness Day 2016 - Indonesia is featured	16 December
80.	Japanese High School Students Visit Aceh	The Daily Jakarta Shimbung	World Tsunami Awareness Day 2016 - Indonesia is featured	19 December
81.	As the World Turns Away From Globalization, How Should ASEAN Respond?	The Diplomat	Dr Lili Yan Ing is the author	24 December
82.	Korea needs to forge own path with ASEAN	The Korea Times	Dr Anbumozhi was featured	25 December
83.	One year after establishment of AEC	The Korea Times	Dr Anbumozhi was featured	25 December
84.	DOF cites 2016 achievements	Manila Times	ERIA is mentioned	29 December

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NO	TITLE OF NEWS OR ARTICLE	MEDIA WHERE IT APPEARED	EVENT	DATE
85.	Finding investors a challenge for ASEAN connectivity projects	Nikkei Asian Review	Dr Fauziah Zen, ERIA economist, is featured	1 January
86.	Asean at 50: Thailand must do more	The Nation	ERIA's non-tariff measures project is featured	2 January
87.	Former President U Thein Sein wins regional award	Myanmar Times	Asia Cosmopolitan Awards winners announcement is featured	5 January
88.	Thein Sein recalls Myanmar's reform process	Nikkei Asian Review	The 3rd ACA Ceremony is featured	17 January
90.	Uber could face stiff resistance in Cambodia's crowded ride-hailing market	Southeast Asia Globe	Mr Masahito Ambashi, ERIA economist, is featured	18 January
91.	The RCEP has become more relevant than ever	Bangkok Post	Dr Rebecca Fatima Sta Maria, ERIA senior policy fellow, is the author	19 January
92.	The rise of anti-globalisation and its impact in Asia	Asian Correspondent	Prof Hidetoshi Nishimura, ERIA president, is featured	20 January
93.	A brief guide to Donald Trump's conflicts of interest in Southeast Asia	Southeast Asia Globe	Mr Masahito Ambashi is featured	20 January
94.	The United States' non-stop pivot to Asia	Bangkok Post	Dr Lurong Chen, ERIA economist, is the author	26 January
95.	Former President Thein Sein urges USDP to make enormous effort to win in elections	Mizzima	The 3rd ACA Ceremony is featured	27 January
96.	RCEP: More relevant now than ever for Asean	The Nation	Dr Rebecca Fatima Sta Maria is the author	28 January
97.	Japan breathes new life into regional, non-US trade pact	The Japan Times	Dr Lurong Chen is featured	30 January
98.	Trump Risk to Next Asian Economic Tigers Seen in Indonesia	Bloomberg	Dr Lurong Chen is featured	1 February
99.	Indonesia hits Trump shift to protectionism	Business Mirror	Dr Lurong Chen is featured	1 February

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NO	TITLE OF NEWS OR ARTICLE	MEDIA WHERE IT APPEARED	EVENT	DATE
100.	US trade policies causing anxiety to Asian economic tigers	The Star Online	Dr Lurong Chen is featured	2 February
101.	China's Economy: The New Normal and the Virtuous Circle	The Diplomat	Dr Yanfei Li, ERIA energy economist, is the author	2 February
102.	The United States non-stop pivot to Asia	The Jakarta Post	Dr Lurong Chen is the author	3 February
103.	Indonesian groups among world's influential think tanks: Report	The Jakarta Post	ERIA is mentioned	3 February
104.	JETRO to push Japan-India business collaboration in Africa	The Japan Times	Mr Izuru Kobayashi, ERIA chief operating officer, is featured	5 February
105.	TPP's demise does not mark end of US 'pivot to Asia': The Jakarta Post Columnist	The Straits Times	Dr Lurong Chen is the author	7 February
106.	Demise of TPP does not mark end of US 'pivot to Asia'	The New Paper	Dr Lurong Chen is the author	8 February
107.	Asia globalisation not going astray	Bangkok Post	Rizqy Anandhika, ERIA research associate, is the author	15 February
108.	RCEP: More relevant now than ever	The Jakarta Post	Dr Rebecca Fatima Sta Maria is the author	20 February
109.	Is the pendulum of globalization swinging to the east?	The Jakarta Post	Rizqy Anandhika is the author	23 February
110.	The East's rising global economic role	The China Post	Rizqy Anandhika is the author	26 February
111.	Art of the Trade Deal: China-Championed Pact Faces Tricky Talks	Bloomberg	Dr Rebecca Fatima Sta Maria is featured	27 February
112.	China-championed pact faces tricky talks	Business Mirror	Dr Rebecca Fatima Sta Maria is featured	27 February

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NO	TITLE OF NEWS OR ARTICLE	MEDIA WHERE IT APPEARED	EVENT	DATE
113.	Third coal-fired plant on order	The Phnom Penh Post	Dr Han Phoumin, ERIA energy economist, is featured	28 February
114.	RCEP Could be Completed by Year-end	Myanmar Times	Dr Rebecca Fatima Sta Maria is featured	2 March
115.	PH, Japan Call for Quality Trade Deal	Malaya Business Insight	ERIA is mentioned	3 March
116.	The Institution Behind East Asia's Transformation	East Asia Forum	Dr Ponciano Intal, Jr., ERIA senior economist, is the author	5 March
117.	Should preferences be offered to develop Vietnam's auto industry?	Vietnam Net	Prof Fukunari Kimura, ERIA chief economist, is featured	7 March
118.	The US and ASEAN: Deal or No Deal?	The Jakarta Post	Dr Lili Yan Ing and Abigail are the authors	7 March
119.	Amid rising uncertainty RI sees hope in Asian peers	The Jakarta Post	ERIA-JETRO symposium is featured	8 March
120.	ASEAN leads RCEP Negotiation	Daily Jakarta Shimbun	ERIA-JETRO symposium is featured	8 March
121.	The US and ASEAN: Deal or No Deal?	Myanmar Times	Dr Lili Yan Ing, ERIA economist and Abigail Ho, ERIA research associate, are the authors	9 March
122.	The US and ASEAN: Deal or No Deal?: The Jakarta Post Columnists	Strait Times	Dr Lili Yan Ing and Abigail Ho are the authors	10 March
123.	ASEAN moving into RCEP	Khmer Times	Dr Lili Yan Ing is featured	15 March
124.	Insight: ASEAN monetary authorities brace for uncertain 2017	The Jakarta Post	Jaysa Rafi Prana, ERIA research associate, is the author	15 March
125.	Insight: ASEAN Monetary Authorities Brace for Uncertain 2017	Malay Mail Online	Jaysa Rafi Prana is the author	15 March

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NO	TITLE OF NEWS OR ARTICLE	MEDIA WHERE IT APPEARED	EVENT	DATE
126.	ASEAN Monetary Authorities Brace for Uncertain 2017: The Jakarta Post Columnist	The Straits Times	Jaysa Rafi Prana is the author	16 March
127.	US, ASEAN need to strike trade	Bangkok Post	Dr Lili Yan Ing and Abigail are the authors	17 March
128.	How far should we expect the RCEP ship to sail?	Bangkok Post	Maura Ada Decosterd, ERIA Senior Trade Law and Policy Officer, is the author	18 March
129.	Ex-president hosts dinner to celebrate award	Myanmar Times	ERIA and the Third Asia Cosmopolitan Awards are featured	21 March
130.	After Brexit, an ASEAN-EU trade agreement?	The Jakarta Post	Dr Lili Yan Ing and Abigail Ho are the authors	21 March
131.	Asean typifies anti-globalisation	Bangkok Post	Dr Lili Yan Ing and Abigail Ho are the authors	27 March
132.	RCEP: Mengkaji Perkembangan Perjanjian Kemitraan Ekonomi	Kantor Staf Presiden Indonesia's website	ERIA is featured	30 March

A. Books

<u>NO</u>	<u>TITLE</u>	<u>AUTHOR(S)</u>	<u>ISBN</u>
1.	Asia-Europe Connectivity Vision 2025: Challenges and Opportunities	Edited by Anita Prakash	ISBN: 978-602-8660-91-4
2.	Cambodia National Energy Statistics 2016	By General Department of Energy and General Department of Petroleum, Ministry of Mines and Energy of Cambodia and supported by ERIA	ISBN: 978-602-8660-96-9
3.	Energy Outlook and Energy Saving Potential in East Asia 2016	Edited by Shigeru Kimura and Han Phoumin	ISBN: 978-602-8660-94-5
4.	Lao PDR at the Crossroads: Industrial Development Strategies 2016-2030	By Hidetoshi Nishimura, Fukunari Kimura, Masahito Ambashi and Souknilanh Keola	ISBN: 978-602-8660-90-7
5.	Non-tariff Measures in ASEAN	Edited by Lili Yan Ing, Santiago Fernandez de Cordoba, and Olivier Cadot	ISBN: 978-602-8660-89-1
6.	The Development of Regulatory Management Systems in East Asia: Deconstruction, Insights, and Fostering ASEAN's Quiet Revolution	By Ponciano Intal, Jr. and Derek Gill	ISBN: 978-602-8660-92-1
7.	The Development of Regulatory Management Systems in East Asia: Country Studies	Edited by Derek Gill and Ponciano Intal, Jr	ISBN: 978-602-8660-93-8
8.	Towards a Circular Economy: Corporate Management and Policy Pathways	Edited by Venkatachalam Anbumozhi and Jootae Kim	ISBN: 978-602-8660-95-2

B. Research Project Reports

NO	TITLE	AUTHOR(S)	NUMBER
1.	Accounting Standards for Small- and Medium-Sized Enterprises in ASEAN	Edited by Keisuke Mizunoura	ERIA Research Project Report 2015-22
2.	Achieving an Integrated Electricity Market in Southeast Asia: Addressing the Economic, Technical, Institutional, and Geo-political Barriers	Edited by Yanfei Li and Shigeru Kimura	ERIA Research Project Report 2015-16
3.	Addressing Energy Efficiency in the Transport Sector through Traffic Improvement	Edited by Ichiro Kutani and Yasutomo Sudo	ERIA Research Project Report 2015-10
4.	Building a Collaboration Network towards the Social Acceptance of Nuclear and Coal Power in East Asia	Edited by Tomoko Murakami	ERIA Research Project Report 2015-19
5.	Cooperation Framework for Oil Stockpiling and Emergency Response System	Edited by Yoshikazu Kobayashi and Venkatachalam Anbumozhi	ERIA Research Project Report 2015-7
6.	Cost Assessment of Energy Security Improvement in East Asia Summit Region	Edited by Ichiro Kutani, Mitsuru Motokura and Naoki Okubo	ERIA Research Project Report 2015-6
7.	Development of the Eco Town Model in the ASEAN Region through Adoption of Energy-Efficient Building Technologies, Sustainable Transport, and Smart Grids	Edited by Shigeru Kimura, Romeo Pacudan, and Han Phoumin	ERIA Research Project Report 2015-20
8.	Economic Impact of Removing Energy Subsidies in Malaysia	Edited by Shigeru Kimura	ERIA Research Project Report 2015-13
9.	Financing Renewable Energy Development in East Asia Summit Countries: A Primer of Effective Policy Instruments	By Shigeru Kimura, Youngho Chang, and Yanfei Li	ERIA Research Project Report 2014-27
10.	Globalization and Performance of Small and Large Firms	By Chin Hee Hahn and Dionisius A. Narjoko	ERIA Research Project Report 2013-3
11.	Harmonization of Standards and Mutual Recognition Agreements on Conformity Assessment in Indonesia, Malaysia, Thailand, and Viet Nam	Edited by Samuel D. Scoles	ERIA Research Project Report 2015-15

NO	TITLE	AUTHOR(S)	NUMBER
12.	Integrative Strategy and Policies for Promoting Appropriate Renewable Energy Technologies in Lower Mekong Basin Region: With Special Focus on Viet Nam	Edited by Venkatachalam Anbumozhi and Nguyen Anh Tuan	ERIA Research Project Report 2015-21
13.	Joint Study for Liquefied Natural Gas Market	Edited by Ken Koyama, Ichiro Kutani and Yanfei Li	ERIA Research Project Report 2015-11
14.	Research for Consideration of a Policy Proposal to Reform the Natural Rubber Industry's Structure and Stabilise Farmers' Dealing Conditions in Thailand	Edited by Hajime Yamamoto	ERIA Research Project Report 2015-12
15.	Sea Lane Security of Oil and Liquefied Natural Gas in the East Asia Summit Region	Edited by Shigeru Kimura, Tetsuo Morikawa, Siddharth Singh	ERIA Research Project Report 2015-14
16.	Study on Electricity Supply Mix and Role of Policy in ASEAN	Edited by Emiri Yokota and Ichiro Kutani	ERIA Research Project Report 2015-18
17.	Study on Power Grid Interconnection and Electricity Trading in Northeast Asia	Edited by Yanfei Li and Shigeru Kimura	ERIA Research Project Report 2015-9
18.	Study on the Advancement of the Energy Management System in the East Asia Summit Region	Edited by Yasushi Iida, Inoue Shota, and Yanfei Li	ERIA Research Project Report 2015-17

C. Discussion Papers

NO	TITLE	AUTHOR(S)	NUMBER
1.	"Just Do Your Job": Obedience, Routine Tasks, and the Pattern of Specialization	By Filipe R. Campante and Davin Chor	ERIA Discussion Paper 2016-35
2.	A Review on Institutional Framework, Principles, and Key Elements for Integrated Electricity Market: Implications for ASEAN	By Tsani Fauziah Rakhmah and Yanfei Li	ERIA Discussion Paper 2016-26
3.	Analysis of Distributed Energy Systems and Implications for Electrification: The Case of ASEAN Member States	By Han Phoumin and Shigeru Kimura	ERIA Discussion Paper 2016-28

NO	TITLE	AUTHOR(S)	NUMBER
4.	Competition Policy vs. Industrial Policy as a Growth Strategy	By Tatsuo Hatta	ERIA Discussion Paper 2016-40
5.	Determinants of Demand for Technology in Relationships with Complementary Assets among Japanese Firms	By Masayo Kani and Kazuyuki Motohashi	ERIA Discussion Paper 2016-38
6.	Distributional Impacts of Climate Change and Food Security in Southeast Asia	By Srivatsan V. Raghavan, Jiang Ze, Jina Hur, Liu Jiandong, Nguyen Ngoc Son, Sun Yabin, and Liong Shie-Yui	ERIA Discussion Paper 2016-41
7.	FDI, Services Liberalisation, and Logistics Development in Cambodia	By Vannarith Chheang	ERIA Discussion Paper 2016-39
8.	Food Supply Chain Disruption due to Natural Disasters: Entities, Risks, and Strategies for Resilience	By Vangimalla R. Reddy, Shardendu K. Singh and Venkatachalam Anbumozhi	ERIA Discussion Paper 2016-18
9.	Formation of Automotive Manufacturing Clusters in Thailand	By Ikuo Kuroiwa and Kriengkrai Techakanont	ERIA Discussion Paper 2016-32
10.	Facilitating ASEAN Trade in Goods	By Lili Yan Ing and Olivier Cadot	ERIA Discussion Paper 2016-20
11.	Financial Reforms in Myanmar and Japan's Engagement	By Tomoo Kikuchi and Takehiro Masumoto	ERIA Discussion Paper 2016-27
12.	Impact of Free Trade Agreement Utilisation on Import Prices	By Kazunobu Hayakawa, Nuttawut Laksanapanyakul, Hiroshi Mukunoki and Shujiro Urata	ERIA Discussion Paper 2016-24
13.	Indonesia and China: Friends or Foes? Quality Competition and Firm Productivity	By Lili Yan Ing, Miaojie Yu, Rui Zhang	ERIA Discussion Paper 2016-29
14.	International Investment Agreements and Investor-State Disputes: A Review and Evaluation for Indonesia	By Stephen L. Magierav	ERIA Discussion Paper 2016-30

NO	TITLE	AUTHOR(S)	NUMBER
15.	Measuring Tax Administration Effectiveness and its Impact on Tax Revenue	By Arindam Das-Gupta, Gemma B. Estrada, Donghyun Park	ERIA Discussion Paper 2016-17
16.	Misallocation and Productivity: The Case of Vietnamese Manufacturing	By Doan Thi Thanh Ha, Kozo Kiyota and Kenta Yamanouchi	ERIA Discussion Paper 2016-19
17.	Mobility of Highly Skilled Retirees from Japan to the Republic of Korea and Taiwan	By Byeongwoo Kang, Yukihito Sato and Yasushi Ueki	ERIA Discussion Paper 2016-31
18.	Optimal Trade Policy and Production Location	By Ayako Obashi	ERIA Discussion Paper 2016-25
19.	Shipping inside the Box: Containerization and Trade	By A.Kerem Coşar and Banu Demir	ERIA Discussion Paper 2016-37
20.	The Automotive Value Chain in Thailand	By Ikuo Kuroiwa	ERIA Discussion Paper 2016-33
21.	The Internationalisation of Firms and Management Practices: A Survey of Firms in Viet Nam	By Isao Kamata, Hitoshi Sato and Kiyoyasu Tanaka	ERIA Discussion Paper 2016-34
22.	The Trade Effects of Border Controls: Evidence from the European Schengen Agreement	By Gabriel Felbermayr, Jasmin Gröschl and Thomas Steinwachs	ERIA Discussion Paper 2016-36
23.	Towards Responsive Regulatory Management Systems: Country Report for Viet Nam	By Vo Tri Thanh and Cuong Van Nguyen	ERIA Discussion Paper 2016-22
24.	Towards a Requisite Regulatory Management System: Philippines	By Gilberto M. Llanto	ERIA Discussion Paper 2016-21
25.	Transparency in Non-tariff Measures: An International Comparison	By Lili Yan Ing, Olivier Cadot and Janine Walz	ERIA Discussion Paper 2016-23

D. Policy Briefs

NO	TITLE	AUTHOR(S)	NUMBER
1.	ASEAN as an FDI Attractor: How Do Multinationals Look at ASEAN?	By Masahito Ambashi	ERIA Policy Brief 2016-04
2.	Implications of Mega Free Trade Agreements for Asian Regional Integration and RCEP Negotiation	By Fukunari Kimura and Lurong Chen	ERIA Policy Brief 2016-03
3.	TPP, IPR Protection, and Their Implications for Emerging Asian Economies	By Fukunari Kimura, Lurong Chen, Maura Ada Iliuteanu, Shimpei Yamamoto and Masahito Ambashi	ERIA Policy Brief 2016-02

E. Co-publications

NO	TITLE	AUTHOR(S)	PUBLISHER	ISBN
1.	Production Networks in Southeast Asia	Edited by Lili Yan Ing and Fukunari Kimura	Routledge	ISBN: 978-113-82-2283-0
2.	Investing in Low-Carbon Energy Systems: Implications for Regional Economic Cooperation	Edited by Venkatachalam Anbumozhi, Kaliappa Kalirajan, Fukunari Kimura, and Xianbin Yao	Springer	ISBN: 978-981-10-0761-3



Annex K

Capacity Building

 DATE	 EVENT	 VENUE
23 May 2016	Final Event, Evidence - Based Policy Modelling Co-organised with Ministry of Economy and Finance of Cambodia, Asia Growth Research Centre, and Ngee Ann-Adelaide Educational Centre	Phnom Penh, Cambodia
5–6 June 2016	Industry 4.0: Empowering ASEAN for Circular Economy and Seeking a Coordinated Strategy on E-Waste	Bangkok, Thailand
7 June 2016	ERIA-UNESCAP-UNIDO Informal Roundtable, 'Seeking a Coordinated Strategy on Addressing E-waste' Co-organised with the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)	Bangkok, Thailand
27–28 June 2016	Pushing Public-Private Partnerships Forward Co-organised with Ministry of Economic and Commerce, Lao PDR	Vientiane, Lao PDR
20–22 September 2016	Executive Leaders' Initiative on Developing Domestic and Export Markets for Tropical Fruit Co-organised with Ministry of Commerce, Thailand	Bangkok, Thailand
22–23 October 2016	Technical Workshop I on Global Production Value Chain, Cities and Urban Amenities	Jakarta, Indonesia
23–24 October 2016	Dialogue Workshop on 21st Century Regionalism, Mega FTAs, and Asian Regional Integration	Bangkok, Thailand
31 October 2016	National Policy Dialogue on Benefits and Challenges for Reducing Unnecessary Regulatory Burdens Co-organised with Ministry of Planning and Finance, Myanmar	Yangon, Myanmar
1–2 November 2016	Technical Workshop III on RURB Co-organised with Ministry of Planning and Finance, Ministry of Agriculture, Livestock and Irrigation, Myanmar	Yangon, Myanmar
1–3 November 2016	First Capacity Building Workshop on Trade, Growth and Policy Modelling Workshop for Government Officials Co-organised with Ministry of Planning and Investment, Lao PDR, Asia Growth Research Centre, Ngee Ann-Adelaide Educational Centre	Vientiane, Lao PDR
11–12 January 2017	The 9th ASAE International Conference Transformation in Agricultural and Food Economy in Asia	Bangkok, Thailand
10–13 January 2017	Second Capacity Building Workshop on Trade, Growth and Policy Modelling Workshop for government officials Co-organised with Ministry of Planning and Investment, Lao PDR, Asia Growth Research Centre, Ngee Ann-Adelaide Educational Centre	Vientiane, Lao PDR
24–25 March 2017	Technical Workshop II on Global Production Value Chain, Cities and Urban Amenities	Bangkok, Thailand



About ERIA

The Economic Research Institute for ASEAN and East Asia (ERIA) is an international organisation providing support to the Chair of the ASEAN Summit and the East Asia Summit through policy research focusing on three pillars: deepening economic integration, narrowing development gaps, and achieving sustainable development in the region.

Its establishment was formally agreed among 16 heads of government at the Third East Asia Summit in Singapore on 21 November 2007. It works closely with the ASEAN Secretariat, researchers, and research institutes from East Asia to provide intellectual and analytical research and policy recommendations.

Headquarters:
Mezzanine Floor
The ASEAN Secretariat
70A, Jalan Sisingamangaraja
South Jakarta 12110, Indonesia

Annex Office (Mailing Address):
Sentral Senayan II, 5th & 6th floor
Jalan Asia Afrika No. 8
Gelora Bung Karno, Senayan
Jakarta Pusat 10270, Indonesia

Website: www.eria.org