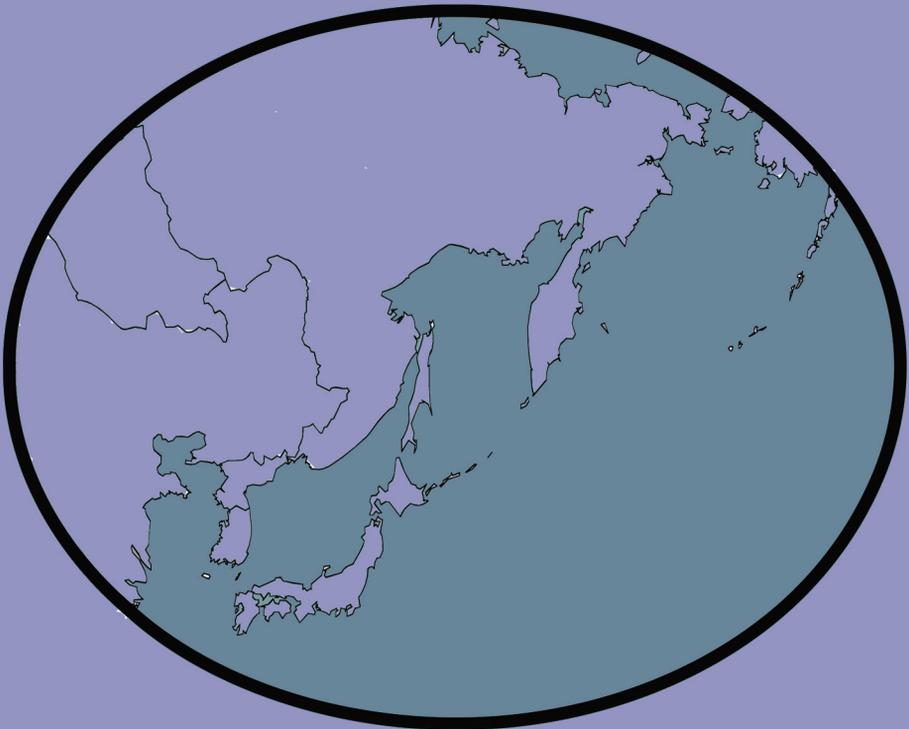




Consensus Toward a Northeast Asian Economic Community

Edited by
Lee-Jay Cho and Chang Jae Lee



Korea Institute for International Economic Policy

The Korea Institute for International Economic Policy (KIEP) was founded in 1990 as a government-funded economic research institute. It is a leading institute concerning the international economy and its relationship with Korea. KIEP advises the government on all major international economic policy issues and serves as a warehouse of information on Korea's international economic policies. Further, KIEP carries out research by request from outside institutions and organizations on all areas of the Korean and international economies by request.

KIEP possesses highly knowledgeable economic research staff. Our staff includes many research fellows with PhDs in economics from international graduate programs, supported by dozens of professional researchers. Our efforts are augmented by our affiliates, the Korea Economic Institute of America (KEI) in Washington, D.C. and the KIEP Beijing office, which provide crucial and timely information on local economies. KIEP has been designated by the government as its Center for International Development Cooperation and the National APEC Study Center. KIEP also maintains a wide network of prominent local and international economists and business people who contribute their expertise on individual projects.

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HYUN Jung Taik *President*



Conference Proceedings 16-01

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KIEP Korea Institute for International
Economic Policy

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Preface

The year 2016 brought to the fore new and renewed challenges to the process of Northeast Asia economic community-building. Brexit in Europe and the protectionist, anti-globalization tone of the US election, raised questions over the future prospects of regional cooperation efforts there and elsewhere. Meanwhile, in Northeast Asia, North Korea's nuclear activities and the concomitant sanctions in response to these, represented a substantial political setback for the region. However, there were some bright spots in the landscape of Northeast Asia economic cooperation. Following a tenth round of negotiations, China, Japan, and South Korea reiterated their dedication to accelerate discussions on a trilateral Free Trade Agreement. In addition, China continued to proactively promote its Bridge and Road Initiative (BRI) and South Korea reaffirmed a commitment to its proposed Eurasia Initiative. Both these initiatives aim to expand infrastructure and trade links across Asia and Europe, and represent a major opportunity to strengthen economic interconnectivity to and within Northeast Asia.

How will envisioned projects for interconnectivity and development be financed? China has proposed the Asian Infrastructure Investment Bank (AIIB)-a multilateral financial institution promoted by the Chinese government and established in 2014. Although the AIIB has gained momentum and visibility, questions remain regarding the viability of its mission and efficacy of operations, given its ambitiously large geographic coverage, and because the AIIB is excluded from the capital markets of the US and Japan (as these two have not joined), leaving China to provide both the AIIB's initial funding and managerial dominance. A more appropriate approach for the Northeast Asia region, is a Northeast Asia Development Bank (NEADB). A great deal of effort, research, and dialogue has already been devoted to the NEADB; in fact, initiators of the AIIB adopted some of the propositions resulting from NEADB research.

These challenges and opportunities serve to highlight the need to continue to explore and pursue Northeast Asian economic community-building strategies as well as specific projects. With this in mind, the Korean Institute for International Policy (KIEP) and the Northeast Asia Economic Forum (NEAEF) have embarked on the next stage of research into functional economic cooperation with the aim

of achieving ‘consensus’ toward a Northeast Asian Economic Community.

It is important to note that any effort to reach consensus should be informed by global, regional, national, and local trends and needs. The current state of world affairs highlights the tension that exists between the primary beneficiaries of economic prosperity and those regions and populations that lag behind-this is evident when we compare countries, but it is also a critical issue ‘within’ states. This is one of the reasons that the work of KIEP and NEAEF on Northeast Asia remains vital. Our emphasis on the potential of functional economic cooperation projects allows us to examine the compatibility of broader regional initiatives (such as the BRI and the Eurasia Initiative) and their linkages to practical subregional (i.e. the Greater Tumen Initiative), national, and local projects that can have a real effect on the areas and people that need it most. With that in mind, our work continues on functional economic cooperation issues such as, regional trade, cross-border energy, transportation and logistics infrastructure development, and capital mobilization. We also examine the potential of emerging industries in Northeast Asia, tourism, for instance, and how best to serve the interests and needs of individual subregions and localities by promoting interlinkages among them and with the broader regional initiatives. In short, our focus on functional economic cooperation allows us to take a holistic and inclusive approach to economic development and community-building.

This volume is the product of our continued research on building a Northeast Asian economic community. It includes research presented at the Annual Conference of the Northeast Asia Economic Forum (NEAEF) in Changchun, China in 2016.

KIEP would like to express its gratitude to Dr. Cho Lee-Jay, Chairman of NEAEF, for his stewardship of this project and for his tireless commitment to promoting peace and prosperity in Northeast Asia. KIEP is also grateful to the authors of the chapters in this volume, and to the conference participants and discussants for their contribution to this work. KIEP would also like to acknowledge the Dr. Karla Fallon’s valuable editorial input on the preparation of this volume.

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Introduction and Overview

Cho Lee-Jay and Lee Chang Jae

The Northeast Asia Economic Forum (NEAEF) is a regional nongovernmental organization created in 1991 to sponsor and facilitate research, networking, and dialogue relevant to the economic and social development of Northeast Asia. The Forum is also committed to promoting understanding and relations among the peoples of Northeast Asia, North America, and Europe.

NEAEF's main objective is to conduct research and conference activities aimed at functional economic cooperation such as cross-border energy, transportation and logistics infrastructure development, and capital mobilization. The Forum holds annual conferences, workshops, and seminars for planning, facilitating, coordinating, and implementing international and interdisciplinary solutions to common policy problems. It is the only nongovernmental regional organization in which all the nations of Northeast Asia and the US are consistent and active participants.

For the year 2016, NEAEF in collaboration with the Korea Institute for International Economic Policy (KIEP), carried out activities aimed at building a Northeast Asian economic community. NEAEF has established the basis of a strong network for functional cooperation, for example, regular discussions among stakeholders on financing cross border infrastructure development. For the year 2016, the goal was to take more concrete steps toward a Northeast Asian economic community including efforts to increase dialogue with North Korea, with a view to future functional cooperation. NEAEF has continued to maintain a cooperative networking approach and exchanges with North Korea regarding the Tumen River Area and North Korean special economic zones.

This year's volume titled, *Consensus Toward a Northeast Asian Economic Community* presents the results of a project implemented in 2016 that includes the planning meeting discussions as well as the presentations and summaries of the 2016 NEAEF Annual Conference in Changchun, China.

Planning Meeting in Honolulu

In March 2016, NEAEF organized a planning meeting to identify activities for the year aimed at promoting a Northeast Asian economic community. This was done in cooperation with NEAEF's partners, the Korea Institute for International Economic Policy (KIEP) and the University of Hawaii College of Social Sciences. The meeting was held at the Kaimana Beach Hotel in Honolulu. The meeting discussed the following activities:

- NEAEF plans and venue for the 2016 Meeting in Changchun, China on 10-14 August 2016
- Upgrading the level of discussions on establishing a Northeast Asian economic community.
- Recent developments of the Asia Infrastructure Investment Bank (AIIB) established by China and controversies and difficulties in implementing the original AIIB plan. The mission of the AIIB has been described as overly ambitious in geographic scope as well as in the scope of activities. In contrast, the mission of the proposed Northeast Asian Development Bank is more narrowly defined both in terms of geography (Northeast) and in terms of scope of activities: addressing infrastructure development and cross-border cooperation. South Korea has expressed concerns over how the AIIB proposal will evolve in the future and has raised questions regarding how in real terms the AIIB might contribute to infrastructure construction affecting the Korean Peninsula.
- The Tumen River Area project continues to be important to future economic cooperation in Northeast Asia, and it essential to assess the potential and the implications of the Rason Special Economic Zone in terms of its effect on cross border areas.
- Renewed effort and support for the Tumen project is crucial because of its geographic location-connecting Russia, China, and Mongolia, and because of its strategic location in terms of Northeast Asian regional economic cooperation.
- Collaboration with North Korea focusing on the Tumen area can be linked to other Special Economic Zones and may be conducive to economic integration in the riparian areas as well as the Korean Peninsula.

- Examining North Korea's outlook and tentative future plans for Special Economic Zones.
- Planning a field observation trip and group discussions in Rason, North Korea.

The 2016 Annual Northeast Asia Economic Forum Conference in Changchun, China

The 2016 Northeast Asia Economic Forum was held in Changchun, Jilin Province, China from 10-12 August, 2016. Hosted by Jilin University and its Northeast Asian Studies College and Center for Northeast Asian Studies, leaders and experts from China, Japan, Mongolia, Russia, South Korea, the United States, and the European Union gathered to advance NEAEF's mission of facilitating research, networking, and dialogue relevant to the economic and social development of Northeast Asia. The 2016 Forum addressed themes covering Jilin Province's role in regional economic development and cooperation, China's Belt and Road Initiative (BRI), cross-border infrastructure and special economic zones, tourism cooperation, financial cooperation, energy, and the environment-all within the context of building an economic community in Northeast Asia, one of the most dynamic regions of the world.

Dr. Cho Lee-Jay, Chairman of the NEAEF, officially opened the Forum, warmly welcoming the distinguished participants and noting its return to Changchun, one of the birthplaces of the NEAEF 25 years ago. This was followed by welcoming remarks from Yang Zhenbin, Secretary of the CPC Committee of Jilin University, who highlighted the University's importance to the themes of the Forum and cooperation in Northeast Asia more broadly. Jiang Zhenghua, Former Vice-Chairman of the Standing Committee of the National People's Congress of China, Park Kwan-Yong, Former Speaker of the National Assembly of the Republic of Korea, and Stephen Cowper, Former Governor of Alaska also added congratulatory remarks to conclude an enthusiastic and high profile opening ceremony.

Tsuyoshi Yamaguchi, Member of the House of Representatives and Former Deputy Minister of Foreign Affairs of Japan, delivered a keynote address on "Promoting a Northeast Asian Economic Community." Mr. Yamaguchi, a well-

known expert on Northeast Asia, set an earnest tone for the Forum, noting that the recent tide of events, including the UK voting to leave the European Union (Brexit) and trends evident during the US election process, has undermined faith in regional cooperation. However, he concluded by expressing optimism over the potential of a Northeast Asian economic community and encouraging all participants to continue to work toward this vision; and he highlighted potential instruments for progress such as, continued free trade negotiations and a Northeast Asian Development Bank (NEADB).

The opening session, titled “Jilin Province’s Economic Development and Northeast Asia Regional Cooperation in the Context of the Belt and Road Initiative,” focused on the larger theme of the Belt and Road Initiative (BRI) as an example of a comprehensive, multilateral, and systematic platform for cooperation that is inclusive and different from typical regional organizations (involving both bilateral and multilateral economic cooperation). It was noted that the BRI initiative also has the potential to connect with and build upon other regional organizations such as the Greater Tumen Initiative (GTI) and the Asia-Pacific Economic Cooperation (APEC). Given its key position in northeast China, Jilin Province could play a key role in connecting Russia, Japan, North and South Korea to the historic Silk Road trading route that the BRI aims to better integrate. There will be challenges including China’s slowing economic growth and difficulties in financing projects in northeast China, and work will be needed to overcome political, economic, and cultural bottlenecks that have limited concrete advancement of cross-border trade in northeast China particularly.

The second session on “Cross-Border Infrastructure and Special Economic Zones in Northeast Asia” began with several presentations on two examples of Special Economic Zones (SEZs) in North Korea, namely Rason and Kaesong. The close links between economic development of North Korea and its military program were discussed, as well as the potential for SEZs to contribute to economic development, higher wages, improved communications, and manufacturing infrastructure. As illustrated by the Jilin University study team led by Prof. Zhang Huizhi prior to this annual conference, Rason provides an example of the importance of maintaining cooperation between China and North Korea to ensure the success of jointly managed zones, in contrast with Kaesong, which was recently closed due to political tensions between North and South Korea. The session continued with a presentation on shipping and logistics in Northeast Asia, which

outlined areas in which express container shipping, customs procedure integration, and coordinated information systems can greatly improve the integration of regional economies. Discussants commented on the ability of Mongolia to facilitate discussions, Russia's potential provision of energy across borders, and the further development of cross-border infrastructure and SEZs.

The third session on "Future Tourism Cooperation in Northeast Asia" co-sponsored by the Northeast Asia Tourism Forum explored some key issues in promoting both inbound and outbound tourism especially in Japan, China, and North and South Korea. It was noted that tourism among all major industrial sectors has in recent years shown remarkable increases despite slower economic growth in all countries in Northeast Asia. Japan's recent campaigns to increase inbound tourism were also presented, as well as key steps for tourism activation, such as developing customized itineraries and products, alliances between different modes of transportation, simplifying travel documentation and visa procedures, greater seasonal attentivity, and improving human resources for local tourism including language and cross-cultural training. The Tumen River has many assets that have not been developed for tourism, and more research will be necessary to unlock the potential of the intersection of natural beauty and intersecting cultures in this area. It will also be important to determine how the modern integrated resort, which includes regulated gaming, can be responsibly developed in the interest of stimulating local economies while managing competition across the region. Discussants recognized the importance of market research-based investment in tourism to avoid overinvestment or wasted resources.

The morning session of the second day (fourth session) dealt with the theme of "Building a Northeast Asian Economic Community." Presenters varied in their optimism about the likelihood of major progress toward this in the short-term, but were united in their view that it is a dream worth fighting for and continuing to work for into the future. Recent regional development plans such as China's BRI initiative, South Korea's Northeast Asia Peace and Cooperation Initiative, Russia's Eurasian Economic Community, and Mongolia's Steppe Road plans emerged from discussions as key building blocks to be encouraged, and presenters shared national perspectives on the issues. Other points of emphasis included promoting people-to-people communication and advancing China-Japan-South Korea relations, which lie at the heart of Northeast Asia relations, particularly through the tripartite Free Trade Agreement (FTA) that remains under negotiation.

The ramifications of international trends were also debated, with many interesting proposals emerging. A comparative outlook of the European Union for a Northeast Asian economic community was brought to discussion. For example, the possibility of Northeast Asia using economic cooperation with the European Union as a tool to incentivize the US to re-engage with global economic integration should 2016 election results push it toward insularism.

The fifth session explored “Financial Cooperation in Northeast Asia.” Much of the discussion focused on the potential of the region to build new institutions of financial cooperation in addition to pre-existing institutions such as the Asian Development Bank (ADB) and Asia Infrastructure Investment Bank (AIIB). The AIIB has not evolved into what it was intended to be as specified in its original mission statement. The mission of AIIB is perceived to be too ambitious in its geographic coverage areas as well as in its scope of activities. The AIIB’s most recently proposed “piggy-back” arrangements, for instance permit the AIIB to substitute AIIB funds for funds the ADB and IBRD had agreed to provide. The “Piggy-back” approach is not a viable long-term alternative for a development bank. It leaves unanswered the basic questions of how, where, and at what cost the AIIB will secure funds for on-lending for future infrastructure projects.

The concept of the NEADB has been a core concern and topic at the Forum for more than a decade, and the presenters made a strong case for why such a bank would foster mutually complementary relationships and enable sustainable economic growth in the region. Emphasis was placed on distinguishing the NEADB from other transnational development banks, and clarifying its mission. Significant hurdles arose in multiple presentations, including tensions surrounding North Korea’s nuclear program, uncertainty in global financial markets, uncertainty regarding callable capital, and competing national interests in building the bank’s governance system. Other topics that were discussed were the possibility of lending to sub-sovereign infrastructure projects, how to identify bankable projects, how to increase limits on risk for development banks, and the importance of financial cooperation in promoting regional economic and political cooperation. The consensus was that planning for the Northeast Asian Development Bank should continue despite recent political setbacks, and research should be conducted through transnational collaboration to ensure multilateral buy-in and feasibility, principally, through the Research Center for Financial Cooperation in Northeast Asia.

The sixth and final session examined “Energy and Environment in Northeast Asia,” a topic of crucial importance because of the region’s fossil fuel dependence and acute environmental challenges. Presenters emphasized international trends such as low oil and gas prices as well as specific issues facing the domestic economies of Northeast Asian countries. Hawaii was presented as an example of how ambitious targets for renewable electricity generation can be achieved. Hawaii is on its way to becoming a high-level renewable energy society, and it was noted that there are significant areas for Hawaii to collaborate with Northeast Asian countries in such as, energy storage, transportation, photovoltaics (PVs), hydropower, and big data. Japan offered insights into the unique challenge of balancing nuclear energy with both safety concerns and greenhouse gas emission reductions. Cross-cutting themes that emerged included the drivers and barriers to renewable energy adoption, equity concerns, the importance of appreciating the broader energy management landscape beyond just electricity generation, and how the private sector can be leveraged to drive innovation across the region. Discussants agreed that the future of energy in Northeast Asia remains uncertain and that regional cooperation will be crucial to promote sustainable development that both meets growing energy demand and addresses environmental challenges such as climate change.

In conclusion, despite the many challenges in a very complex region, the conference ended on a high note, providing a renewed sense of commitment to pursue a multilateral strategy focusing on greater functional economic cooperation in the Northeast Asia community. The conference participants were encouraged by the acknowledgement of this year’s annual conference in Changchun by the State Council of the People’s Republic of China-the State Council released the conference theme and summary on its website immediately after the conference.

The conference expressed a common desire for the active participation of North Korea and emphasized the importance of beneficially integrating it into the future Northeast Asian economic community. The 2016 Conference advanced NEAEF’s mission by focusing on key issues and topics that encourage regional cooperation and economic integration.

Field Visit to Rason Special Economic Zone, North Korea

The NEAEF maintains cooperative networking relations and exchange with North Korea regarding the Rason Special Economic Development Zone.

In 2015, because of a terrifying hurricane, a scheduled field visit for 30 August to the 1st of September to the Rason Special Economic Zone (Rajin-Sonbong) was postponed at the request of North Korea until the recovery effort from this natural disaster was to be completed in the early part of 2016.

Earlier, in 2014 and for the first time in many years, a field trip was organized by the NEAEF and a delegation led by Dr. Cho Lee-Jay and Glyn Ford visited Rason Special Economic Zone (SEZ) from 31 August to the 2nd of September. During that visit, participants were much impressed by the strategic/geographic future potential for a major transportation hub centered in Rajin and Sonbong. On that occasion the participants witnessed significant development and change in the SEZ.

We agreed that the environmentally clean landscape of Rason, with its valuable marine and other resources should be preserved for both its long-term future economic value and appreciation. The Rason SEZ, through infrastructure linkages with neighboring territories and their complementary resources, holds great potential for economic development and enhanced quality of life. We believed that this kind of field trip to North Korea is a very valuable annex to the annual conference. The proposed field trip for 2016 was important in terms of clarifying the implications of linking North Korea to the creation of a Northeast Asian economic community (in the context of economic cooperation in the Korean Peninsula). However, by mutual agreement, the 15 to 19 August 2016 field trip to Rason Special Economic Zone was postponed due to extenuating circumstances on both sides.

Conclusion

The 2016 project resulted in a detailed assessment of regional and international developments and thus contributed to serious discussions on regional development issues for Northeast Asia-toward a Northeast Asian economic community. The 2016 NEAEF Conference covered themes including Jilin Province's

role in regional economic development and cooperation in the context of China's 'Belt and Road Initiative,' cross-border infrastructure development and special economic zones, tourism cooperation, financial cooperation, energy and the environment.

Notably, at a critical stage, the project has contributed to evaluations of China's AIIB in terms of this bank's suitability and limitations vis-à-vis responding to Northeast Asia's need for cross-border physical connectivity through infrastructure development. It should be noted that South Korea's proposal for a Northeast Asian Development Bank (NEADB)-put forth at a series of venues starting with the Beijing Summit-is based on discussions of the annual conferences of the Northeast Asia Economic Forum.

The NEADB has been a subject of research and analysis for more than a decade. General agreement has been reached on the bank's parameters and components, for example, capital structure, share-holding, membership, etc. The NEADB proposal compliments the concept of a 'Creative Convergence Effect,' the 'Northeast Asia Peace and Cooperation Plan,' and the 'Inter-Korean Trust-building Process' that the South Korean government advocates. NEAEF has always believed that a development bank for Northeast Asia represents a vital institutional framework for a future Northeast Asian economic community.

Financing cross-border infrastructure would bring enormous benefit to the Northeast Asian region and beyond. Peaceful economic cooperation and integration in the Tumen area is consonant with South Korea's vision and strategy for inter-Korean economic cooperation and with a Northeast Asian economic community. The NEAEF, for many years and through continued efforts, has sustained momentum for establishing a development bank for Northeast Asia. There is broad consensus on the desirability of a multilateral bank to provide long-term capital for cross border infrastructure projects that enhance cross-border trade.

Discussion and assessment of new initiatives for investment in infrastructure such as the Asian Infrastructure Investment Bank (AIIB) represent valuable inputs to decision-making of policymakers at the national level in the region. The Northeast Asia Economic Forum has acted as a catalyst by providing relevant information and guidance and by facilitating dialogue with and among high level policymakers in Northeast Asia.

This volume, *Consensus Toward a Northeast Asian Economic Community*,

summarizes the results of our 2016 project and includes information on our planning meeting and the presentations and summaries of the 2016 NEAEF Annual Conference in Changchun, China. The content of this volume also provides a basis for future discussions and consideration by government policymakers and researchers in Northeast Asia; it represents an important step in our continuous efforts toward building a Northeast Asian economic community.

Statements by Hosts and Country Representatives

Welcoming Remarks

Yang Zhenbin

Secretary of the CPC Committee of JLU

As we host the 2016 Northeast Asia Economic Forum here at Jilin University, we gather to discuss the economic developments and cooperation in Northeast Asia. We express our warm welcome and sincere thanks to delegates from all the countries. Recent economic patterns indicate that we have entered an important period; growth in industrialized countries has slowed and regional turbulence is on the rise. Climate change, environmental degradation, and terrorism, are all becoming more severe. Decades later, problems left from the Cold War still remain to be solved. Regional cooperative mechanisms remain quite weak-these issues are influencing regional peace and cooperation. China's President Xi Jinping has visited countries of the Middle East and South Asia to propose the 'One Belt One Road' initiative, an important initiative to promote regional cooperation and global governance-to build tolerance, trust, community, responsibility, a common destiny. Recent talks have proposed the revival of northeast China as an industrial base, and this will be good for regional cooperation.

Jilin University-in northeast China-has good ties with neighboring institutions. It is well placed to facilitate cooperation with Northeast Asian countries. In August 2016 Jilin University celebrated its 70th birthday, and we are happy to see that it has become one of the largest and most comprehensive universities in the country. It has unique advantages in chemistry, medicine, and international studies, as well as a long history of northeast China studies. In the 1970s, research offices for the study of Japan, South Korea, North Korea, and Russia were established at the University. In 1994 these were integrated to form the Northeast Asian Studies College. A team of experts there conduct leading research on the Tumen river area development, regional historical development, northeast China

development, etc.

To hold this conference is a great honor for Jilin University and it affords us an opportunity to communicate with leaders and experts from different countries. Dr. Cho Lee-Jay has contributed greatly to the study of demography in different countries, and he continues to invite and encourage a young generation of students and professionals (through the NEAEF Young Leaders Program (YLP)) to discuss issues of critical importance to Northeast Asia. We are very grateful for YLP participation in this meeting. We also have at this annual conference very important experts from China, Japan, South Korea, Russia, and the US who will discuss culture, history, population, and other topics. We hope that through this conference we can build a platform for people-to-people exchanges and to contribute to regional cooperation. I sincerely hope it will be a great success and wish everyone a nice and happy stay in Changchun.

Congratulatory Remarks

Jiang Zhenghua

Former Vice-Chairman, Standing Committee of the National People's Congress, China

I am very happy to come to beautiful Changchun and address the 25th annual conference in Jilin University. Jilin means 'forest,' and Changchun means 'spring in all seasons.' I hope we all have a pleasant and comfortable time here. Over the past 25 years with Dr. Cho Lee-Jay's support and through the annual conference we've made a great contribution to regional cooperation. I would like to express our respect and gratitude to Dr. Cho Lee-Jay and all the guests here, and to give our sincere thanks to Jilin University for their efforts in organizing this event. On behalf of all the delegates here, we thank you.

The world is in a critical period of international system and global pattern changes. In Northeast Asia there are many factors influencing regional safety and security. In particular, the US promoting Terminal High-Altitude Area Defense (THAAD) in South Korea is harmful to peace, cooperation, and people-to-people cooperation prospects in the region. Many of us oppose this and question the actions and intentions of the US. Even some experts in the US share these opinions. This shows that peace and economic development is a common aspiration in the region. China recently proposed five values: innovation, coordination, sharing, peace, and opening-up. The 'One Belt One Road' initiative is a key part of this strategy. Furthermore, South Korea has proposed the Eurasian Initiative, Russia has proposed Eurasian economic lines, and Mongolia proposed the cross-land development strategy. Different countries have proposed various development plans. These are beneficial to the development of Northeast Asia region and give momentum to the common economic development of Asian countries. We hope these can promote deeper cooperation in this region in the future.

Jilin represents an important area and pivot for Northeast Asia development-this year China proposed to revive this area as an industrial base. By 2025 we should have important results in trying to adjust economic patterns and implementing structural reforms. It is envisioned that by 2030 northeast China will be a base for equipment and technology that is internationally competitive.

I am confident we will realize the economic upgrading of this area and make new contributions to economic cooperation in Northeast Asia. This will support infrastructure development, promote tourism, and improve the environment. I sincerely hope the participants of the NEAEF annual conference will have in-depth exchanges and discussions, promote win-win cooperation, and provide new suggestions. I have high expectations, especially for non-governmental exchange because politicians have too much interest in ‘amusing the fat cats,’ and they mainly ‘carry water on both shoulders.’ We cannot expect that they alone will come up with clear and good solutions. ‘Off the table’ discussions are important too.

Park Kwan-Yong

Former Speaker of the National Assembly, Republic of Korea

I am pleased to be attending this year's forum in Changchun City, an essential center of the three provinces in northeast China. I wish to express my gratitude to the Northeast Asia Economic Forum (NEAEF) and Jilin University for your support and efforts in organizing this forum. I would also like to thank the partner institutions and representatives for your kind cooperation. I am especially grateful to the Chinese delegations and to Dr. Cho Lee-Jay, chairman of the Northeast Asia Economic Forum, for their earnest support and outstanding dedication in organizing the 25th forum.

Twenty-five years ago, this forum was established with a vision to bring prosperity, peace, and to advance economic cooperation and development in the region. Since then, the forum has been held annually, encouraging fruitful dialogue on regional cooperation. I, too, have participated in the forum more than 15 times.

In this year's forum, we have important topics to discuss: issues regarding community building, the economic development of Jilin Province in terms of regional cooperation, infrastructure development, special economic zones, cross-border tourism, financial cooperation, energy, and environmental. Through these discussions, I hope that progress can be made toward building a community and collaboration in the region.

In addition, I would like to express my sincere congratulations on the achievements of the 11th Young Leaders Program (YLP). As a strong advocate of this program, I am very proud of its progress and development. I hope that young leaders from the Northeast Asia region can foster friendships, share their visions and goals, and collaborate on building a network that will bring prosperity to the region.

Looking back on the past 25 years, it is clear that we have overcome many difficulties and challenges. We have dedicated tremendous efforts to bringing prosperity to the region. I would like to thank you and express my sincere hope that with your cooperation and partnership, the efforts and visions of the NEAEF will continue.

Stephen Cowper

Former Governor of Alaska

My first meeting with this organization was in 1997, and there someone asked, “This is for Northeast Asia, what is Alaska doing here?” Besides the answer that previously we were owned by Russia, the real answer is that 50-70% of Alaskan exports go to Northeast Asia. That’s why we wanted to be a part of this organization. Like other speakers, I want to commend Jilin University and other organizations that are helping with this important meeting. It’s a great pleasure to be here for the first time in this excellent and historic city. The subjects that are being discussed by the people who have come to this meeting are very important globally, particularly those on population trends, a topic being led by China. This is a problem that will arise in every country in the world, and the thinking and the analysis that is being done on this subject going forward will be very important to the ways that other nations attempt to solve that problem. So China, thanks for that, you’re ahead. I want to say how much I’ve enjoyed being here in the city thus far, and I’m looking forward to seeing old friends. Some of us have been here for 20 consecutive years, and none of us has gotten any younger.

Keynote Address

Yamaguchi Tsuyoshi

Member of the House of Representatives and Former Deputy Minister of Foreign Affairs, Japan

It is my great honor to be here to meet these distinguished participants and discuss how we can promote the idea of a Northeast Asian economic community. I very much appreciate the preparation done by all those who worked hard to make this 2016 Annual Conference of the Northeast Asia Economic Forum possible. Let me also express my sincere appreciation to Jilin University for its warm hospitality in hosting the Forum and receiving us today.

I understand that various discussions have been held here over the years about how the idea of a Northeast Asian economic community could be promoted and realized. I am sure that the work done here today and previously will be seen as laying the extremely valuable ‘theoretical groundwork’ for the politicians that someday, eventually, decide to pursue official talks to realize a Northeast Asian economic community.

But today, how many of us here are optimistic about the possibility of a Northeast Asian economic community? I think very few nowadays, especially after Brexit. Up until Brexit, things were going all right for those of us who believed in integration. It was almost taken for granted that regional or global integration was one of the ‘inevitableities of history.’ But after Brexit, things have changed, and there seems to be huge momentum working against integration.

Be that as it may, I am one of those who believe in the future of a Northeast Asian economic community. I am sure many people here, however pessimistic these days, share the same feeling. Let us discuss and find ways to make it happen someday. Let us open paths where there are none and transform the impossible to the possible.

Northeast Asia has great potential to become a powerful engine for the world economy. The region includes the world’s second (China) and third (Japan) largest economies. Moreover, South Korea ranks 11th and Russia 12th. Nevertheless, a Northeast Asian economic community is yet to come-politicians have not gathered together to hold official talks for such a regional community.

In that sense, Northeast Asia represents a missing link within the network of regional integration. But once established, it may possibly become the richest economic community in the world.

When we refer to the Northeast Asian economic community, the question arises, which countries are we talking about? Russia, China, South Korea, Mongolia, and Japan should no doubt be included. What about the United States? Geographically, the United States may not be considered a part of Northeast Asia. But I would send an invitation to the US as a charter member of Northeast Asian economic community. What about North Korea? Geographically, North Korea is a part of Northeast Asia. But it would be difficult to invite North Korea as a charter member. North Korea must change its behavior if it wants to 'join the club.'

With the above 'membership' in mind, my vision is to combine this Northeast Asian economic community with other initiatives such as, a Japan-China-South Korea trilateral Free Trade Agreement (FTA), the ASEAN Economic Community, and perhaps with a Trans-Pacific Partnership (TPP). This would largely cover the Asia Pacific region, and might be called the Asia Pacific Economic Community.

Once established, it will not only provide the mechanisms for regional prosperity, through free trade and investment, but also lay the groundwork for peace in the region. It could, for example, provide momentum for various confidence-building measures such as, notification of maneuvers and exercises, exchanges of information on military budgets and new equipment, exchanges of personnel, establishment of a direct ('hotline') communications system, etc.

But recent events-not least Brexit-have complicated this picture. Until Brexit, we almost took it for granted that regional or global integration was inevitable. The finalized proposal for the TPP was agreed upon in 2016 (although its conclusion is now in doubt); the ASEAN Economic Community (AEC) was established in 2015, another major milestone in the regional economic integration agenda. The Tripartite Free Trade Agreement negotiations among Japan, China, and South Korea were resumed. Progress is anticipated in the negotiations for a Regional Comprehensive Economic Partnership (RCEP) comprising the ASEAN 10 + 6 countries (Japan, China, South Korea, Australia, New Zealand, and India).

But the atmosphere has changed; when Britain decided to leave the EU and after Mr. Trump was elected in the US, the question arose: What does it

all mean?

Mr. Trump has been critical of TPP and trade agreements in general which suggests that US foreign policy may be turning inward and changing. This may be a big turning point in history.

The US played an enormous role in the post-war world for peace and prosperity. Pax Americana was real. But after the wars in Afghanistan and Iraq, things may have changed. The US economy is still number one, but its relative position has weakened. The United States shifted its focus to the Asia Pacific region to reinvigorate its economy by increasing trade and investment there. The TPP was supposed to be the main instrument for that purpose. It makes good sense to me. But Mr. Trump's rejection of the TPP could undermine the position of the United States, and lead to the real end of Pax Americana.

Arnold Toynbee, a British historian, predicted that the center of gravity would shift from the Atlantic to the Pacific, from the West to the East. If Britain is leaving the EU, and Mr. Trump is saying "America will be next," the consequence may be to undermine the influential positions of both Britain and the US in the world. I would not like this, but it looks like it may happen. I wonder if Toynbee's prophecy is proving true. Promoting the idea of a Northeast Asian economic community may be in line with Toynbee's prophecy, and after Brexit, it has become all the more important to recapture the momentum of regional integration.

According to The Economist: "Although the drawbridge-uppers have all the momentum, time is not on their side. Young voters, who tend to be better educated than their elders, have more open attitudes. A poll in Britain found that 73% of voters aged 18-24 wanted to remain in the EU; only 40% of those over 65 did."¹⁾ Still, the present situation is not positive.

We must recognize the geostrategic importance of Northeast Asia in the years to come. As previously stated-Northeast Asia is home to the world's second and third largest economies, in addition to the 11th and 12th largest. Although it remains to be seen what the US approach to global trade will be, should the US (the world's largest economy) join the club of a Northeast Asian economic community, this community will definitely become the richest economic

1) The Economist, "Drawbridges Up" (20 July 2016) at <http://www.economist.com/news/briefing/21702748-new-divide-rich-countries-not-between-left-and-right-between-open-and>

community in the world, and will be a powerful engine of growth for the world economy.

All of us here must work harder to ensure our discussions lead to and encourage official government-to-government talks on a Northeast Asian economic community.

If we can eventually combine it with the tripartite Japan-China-South Korea FTA, the Regional Comprehensive Economic Partnership (RCEP), and the ASEAN Economic Community and more, we can realize a Free Trade Area in Asia Pacific (FTAAP). This will become a dynamic mechanism to revitalize the world economy. This is a historic mission for the leaders of the countries of Northeast Asia. I encourage other politicians to recognize this.

How do we reach this goal or start the process?

Countries in Northeast Asia vary in terms of their development stage, and this will be especially so if the US joins a Northeast Asian economic community. As it stands, reaching a free trade agreement among all these countries may not be easy. However, there is already some progress. The FTA between the US and South Korea, the FTA between China and Korea, and The Japan-Mongolia Economic Partnership Agreement are already in effect. Negotiations on the Japan-China-South Korea tripartite FTA have resumed. The RCEP also is making progress. Regarding Russia, however, I hear nothing regarding FTAs (in the context of Northeast Asia). Although Japan's Prime Minister Abe is very keen to take a step further in relations with Russia, the Japanese Government seems to have no plans yet to discuss an FTA with Russia.

A Northeast Asian economic community may be a long way away, but a thousand miles begins with one step.

Before pursuing an FTA for Northeast Asia, we may have to begin with joint projects in areas such as energy, finance, environment, and tourism. These joint projects among countries would help create a favorable environment for future FTA talks, eventually leading to a Northeast Asian economic community.

Regarding Russia, since Mr. Putin has been focusing on the Russian Far East, I hope that joint projects involving Russia in the energy sector, for example, will help create a favorable environment. The Japanese Prime Minister, Mr. Abe and Mr. Putin were scheduled to meet in September 2016 during the Eastern Economic Forum in Vladivostok. A visit by Mr. Putin to Japan may follow. They talk about a new approach. We should not be too optimistic, but we do

not have to be too pessimistic either.

In 2012, the Japanese Government proposed a conference in Tokyo to discuss ideas to promote economic cooperation in Northeast Asia focusing on energy and finance, and it invited scholars from six countries, Russia, China, South Korea, Mongolia, the US and Japan. Actually, I did this as the vice-minister for foreign affairs. Dr. Cho Lee-Jay, who is chairing today kindly accepted our invitation and I remember we had fruitful discussions. My proposal was to establish 'the Northeast Asian Development Bank,' and I remember Russia was very keen on this idea. However, there has been no follow-up to this conference since I left government. It is a great pity.

In the meantime, China proposed the Asian Infrastructure Investment Bank (AIIB), and it has been established. Still, I think that my proposal for a Northeast Asian Development Bank is quite valid. The AIIB may be busy taking care of projects in Central Asia or the Silk Road area. A Northeast Asian Development Bank can focus on Northeast Asia, including the Far Eastern part of Russia. There can be a division of labor among these development banks. I hope our efforts, will pave the way to talks on an FTA for Northeast Asia.

Moving beyond an FTA, what about a regional currency in Northeast Asia? It may be a tempting idea for those who promote regional integration, but for a regional currency to be possible, governments must agree on unified financial policies and unified monetary policies. We are a long, long way from this, such a proposal is perhaps too ambitious. It seems especially so after we've witnessed what happened in Britain. At least for the foreseeable future, unified financial or monetary policies, like those in the EU, may be unrealistic in Northeast Asia.

Be that as it may, especially among Japan, China, and South Korea, there is already substantial cooperation and integration. In terms of trade, Japan's number one partner is China, the US is second, and South Korea is third. Japan is China's second largest trading partner and South Korea is third; the US remains China's largest trading partner. South Korea's most important trading partners are China, Japan, and the US in that order. Thus, among Japan, China, and South Korea, in terms of trade, we see substantial integration already. If we include the US, the case becomes even clearer. The four countries are already closely intertwined in terms of trade.

I am one of those who initiated the negotiation process for the Japan-China-South Korea FTA, and I do hope that the process will move forward and

the negotiation will be concluded. It would represent a very significant milestone in the promotion of a Northeast Asian economic community.

In the tourism sector, we see a similar situation. There are ever larger flows of tourists among Japan, China, and South Korea.

Based on this, we can say that Japan, China, and South Korea represent the three center pillars in the building of a Northeast Asian economic community. The leaders of these three countries must realize that they have great roles to play in the process of community-building.

At the same time, we must address what we might refer to as ‘nationalism issues:’ territory issues, history issues, etc., so that these will not hinder the process of creating a Northeast Asian economic community.

As for territorial disputes, I would rather see the governments concerned discuss these for two hundred years than resort to physical force. These challenges must remain a diplomat’s job, not a soldier’s.

Japan’s Prime Minister Abe is also very keen to improve Japan’s relations with China. Relations soured and have remained thus since the Senkaku Islands incident in 2012. A viable solution might be to agree to continue dialogue on whatever the two countries disagree on. There have been several meetings between Mr. Abe and Mr. Xi Jinping, but they were brief (30 minutes or so) and held as side-line meetings during APEC or some other international conference. A real summit meeting is yet to be held either in Beijing or in Tokyo. Someday, when Mr. Abe and Mr. Xi do hold a summit meeting, trilateral negotiations on a FTA among Japan, China, and South Korea will gain momentum.

I do hope that the governments in the region fully appreciate the potential of a Northeast Asian economic community, in terms of the region’s geostrategic importance and the need to surmount ‘nationalism issues.’ Interdependence rather than narrow-minded nationalism will make the world more peaceful and prosperous.

History has proven that economic integration can eradicate war and create peace. For hundreds of years Germany and France engaged in wars with each other. Now nobody even talks about the possibility of a war between Germany and France. Likewise, Japan and the United States fought a severe war 70 years ago, but now nobody talks about war between these two countries. The two countries’ economies are highly intertwined now. Economic integration, together with more understanding among countries, will be a vital instrument for creating

peace and prosperity in Northeast Asia. In this sense, the concept of a Northeast Asian economic community is more important than ever.

At the beginning of this keynote address, I touched upon the adverse momentum for integration. We must fight back. We must defend the consensus that trade makes the world richer and cherish the ideal that people of different hues and faiths can get along.

I am convinced that we can derive inspiration from discussions held during this meeting, and find the means to promote and realize the idea of a Northeast Asian economic community.



Part I

**Jilin Province's Economic
Development and Northeast Asia
Regional Cooperation in the Context
of the Belt and Road Initiative**



The Belt and Road Initiative (BRI)¹⁾

Zhang Jianping

Every year we discuss regional economic cooperation and integration, yet we continue to face not only continuing barriers and problems but also emerging barriers. Thus, what we need are new insights and new approaches to problem-solving. The ‘Belt and Road’ (BRI) serves as an example of a new approach to cooperation and integration. It represents a new way of thinking, from the Chinese side, on how to promote not only economic cooperation but also peaceful cooperation in the region.

Please note that the terminology applied here is quite deliberate. The BRI or ‘One Belt, One Road’ is a Chinese *initiative*, not a strategy. We suggest that all the countries on the road cooperate, and then we discuss what we want to do and share our achievements. The BRI is a comprehensive, multilevel, and systematic cooperation platform. We realize that more than two thirds of countries along the route are low or middle-income countries. For example, along the route many areas in Asian countries do not have reliable access to electricity. Last May, at the Asian Development Bank (ADB) annual conference, I sat next to a representative from Japan. I mentioned then that of course the BRI will be open to any interested economies including Japan, the US, and EU. Should any of them want to promote infrastructure development, then they are welcome. This and people-to-people communication represent the basis for promoting regional economic development, regional production networks, and facilitating trade and investment promotion. It is envisioned that many free trade

1) In this volume the terms Belt and Road Initiative (BRI), Bridge and Road Initiative (BRI) and One Belt One Road Initiative (OBOR) are used interchangeably.

zones will be established along the route and that we can set cooperative targets. Many years ago, the area was known as a tea and silk trade route, but now we foresee investment, financial support, infrastructure development, and people-to-people exchanges along this road. The concept of the BRI is open and inclusive, and the space of cooperation is open and inclusive. As with the post-war Marshall Plan, there will be a focus on investment and foreign aid, but the BRI will also promote people-to-people exchange. It bears repeating: the fields of cooperation are open and inclusive, and the ways of cooperation are open and inclusive too. I think that the BRI will combine both ‘Chinese medicine’ and ‘Western medicine’ to promote cooperation (where the FTA is viewed as typical western medicine).

When we compare the BRI and Asia-Pacific Economic Cooperation (APEC), we find that the BRI economy could reach US\$21 trillion, this is much less than APEC. Looking at population, APEC is 40% of the global population and BRI is 63%. But looking at BRI’s exports, we find that they are only half those of APEC’s—there is a big gap between the BRI and APEC. However, there is also great potential for the many countries along the road and for third parties. For China, the BRI is part of a broader opening-up plan—creating a new type of regional cooperation platform. Many of the different economies along the BRI suffer from problems associated with economic and structural problems. China, Russia, Mongolia, Japan, Korea, India—these countries need to achieve a greater economic balance among their national regions (within their own borders). This is why so many internal regions are interested in the BRI and want to join BRI cooperation. Among these are: Heilongjiang Province—intends to promote a ‘Silk Road of Land and Sea’; Inner Mongolia wants a ‘Grass Silk Road’; Jilin Province wants to promote the ‘Silk Road Economic Belt of Greater Tumen’; Gansu Province wants a ‘Golden Belt of Silk Road’; and Chongqing has plans for the ‘Y-shaped Channels.’ Russia has expressed an interest in promoting the development of ‘Trans-Eurasia’; Russia has also promoted the establishment of the Eurasian Economic Union—potentially, these may connect with the BRI. South Korea is also very positive about BRI-compatible initiatives, particularly a Europe-Asia Initiative. What about the US and Japan? These two countries

are welcome to play a role in the development of the platform and its use. However, as in the case with the Greater Tumen Initiative (GTI), where the four contiguous economies could reach consensus on economic cooperation, the areas involved will find it much harder to get central governments involved, partly due to the geopolitical environment.

In the future, we must forge a new relationship between the BRI and Northeast Asia economic cooperation. In the past, the Northeast Asia Economic Forum (NEAEF) has concentrated on many important fields such as, transnational infrastructure and energy cooperation, and environmental protection. I foresee that all these issues of regional economic cooperation examined by NEAEF will become an important component of the BRI platform.

However, regional economic cooperation is not the same as regional integration. After years of effort we have made some progress in terms of a China-South Korea Free Trade Agreement (FTA), but the larger goal of economic integration—a Northeast Asia FTA—alludes us. Nevertheless, and despite barriers, regional cooperation remains a valid and important goal. We require multiple approaches to regional economic cooperation. Do we still need to negotiate the China-Japan-South Korea FTA? The subject of regional integration may have to wait until ‘tomorrow.’ In the meantime, we can still pursue regional economic cooperation and China can do so through the BRI.

In northeast China, I believe Jilin Province is advantageously placed to participate in China’s broader plans for regional economic cooperation. Jilin also has a clear goal: ‘The Silk Road Belt of Greater Tumen.’ Compared to Heilongjiang and Liaoning provinces, Jilin has more improved infrastructure and more promising economic growth trends. In 2015 Liaoning had negative growth. Significantly, Jilin is less reliant on traditional manufacturing sectors than are Liaoning and Heilongjiang. The role of new economy sectors, such as the pharmaceutical sector, has and continues to grow in Jilin. We must continue to have an open mind and to adapt to upgraded and upgrading levels of internationalization. Jilin province should work to advance its service sectors and high value-added sectors. And how do we attract and keep more talent? I see software development as well in the future of Jilin. I hope too that Free

Trade Zones will be established in Jilin Province including one encompassing the Changchun-Jilin-Yanji-Hunchun area. In short, I see a more open and outward oriented Jilin.



Jilin Province and the 'One Belt, One Road' Initiative

Li Tie

The Belt and Road Initiative (BRI) or 'One Belt One Road Initiative' (OBOR) will play an important role in promoting Northeast Asia economic cooperation. Throughout history, Northeast Asia has been a key player in 'Maritime Silk Road' trade and exchanges, but we can see that in recent history Northeast Asian cooperation has been marked by problems. Therefore, significant policy coordination, infrastructure connectivity, and people-to-people exchanges in this area are yet to be achieved. The OBOR Initiative envisions connectivity with the historical Maritime Silk Road. Jilin Province has enjoyed a long history of maritime exchange-during the Tang Dynasty, for example, Longcheng was a regional capital and goods were shipped by sea from Longcheng to Japan. This and many other examples, illustrate the important role of Jilin Province in the Silk Road. The OBOR Initiative aims to realize the connectivity and use of maritime and land transportation corridors. Already northeast China is attempting to take advantage of geographical location to connect Inner Mongolia and Russia and improve railway connection to Russia. To the west it will connect to Russia and through the maritime route it will connect to the Russian Far East, North Korea, South Korea, and Japan. Geographic position is quite an advantage for Jilin. Russia, has promoted linkages to Eurasia, including Belarus and Kazakhstan, through the establishment of the Eurasian Economic Union (subsequently also including Armenia and Kyrgyzstan, and potentially Tajikistan). Russia has also advocated for the development of the Russian Far East. Mongolia also has sought to promote Eurasian trade and has been active

in building connections through Korea. Russia, Mongolia, and South Korea all have interests that intersect with the OBOR strategy, especially interconnectivity and trade.

Jilin Province participates in Northeast Asia development through the Greater Tumen Initiative (GTI), which aims to create a regional continental bridge and a road to the Japan Sea. Tumen River area cooperation was proposed in 1992 and, with support from the United Nations Development Program (UNDP), the countries of the region attempted to build a land and maritime corridor to the sea and to Mongolia. We might consider Jilin to be the cradle of Tumen River cooperation. Jilin Province now faces the biggest development opportunity since China's reform and opening; it has long been and continues to be an active advocate for cooperation with Russia and Mongolia. The OBOR initiative will bring new opportunities for Tumen River area cooperation. The GTI has over the years experienced many setbacks due to ideological differences and political obstacles; the OBOR initiative can give new momentum to transport and trade connectivity efforts and to people-to-people exchanges. Jilin Province should play an active role in promoting and advancing the OBOR initiative.

We have a historic opportunity to improve connectivity, in particular rail links. There is now, perhaps more than ever, a consensus in the region regarding the importance of connectivity, especially regarding building infrastructure. We are also working toward better sea connections for the Tumen River area—we foresee use of a new seaport for this area. Establishing this 'sea connection' has been difficult and it continues to represent a constraint to economic exchange that affects the whole region. Sea connectivity for the Tumen region remains a challenge as it requires cooperation among China, Russia, and North Korea. Innovative approaches are needed to turn bilateral cooperation into multilateral cooperation. Some have described the current situation as the 'golden age' of China-Russia relations—this is the right time then to move forward with bilateral and multilateral cooperation projects, including a port for the Tumen River area. At the same time, we should be promoting the development of Vladivostok free port and feeder port to serve Russia, and support trade with and of China and Asia. We should also promote the Arctic Sea Route, to reduce transport distance

to Europe by 40%, and avoid channels mainly controlled by the United States. This can facilitate Russia's Arctic sea route exploration.

Tourism is another important basis for trade that should be promoted. China, Russia, South Korea, and Mongolia will benefit from highlighting tourism as a key area for cooperation within the GTI. China's priorities identify 'one belt and six clusters,' including scenic spots in the Tumen region, the tourism-logistics cluster, entertainment cluster, railway travel cluster, as well as tourism by cruise ship, river and sea cruise boats. We have been earnestly pushing forward the development of such Tumen River delta tourism. Jilin Province is endowed with great resources for tourism development, including the famous Changbai Mountain, a popular destination especially for tourists from Northeast Asia.



The Tumen River Area and the Belt and Road Initiative (BRI)

Wu Hao

We will soon be celebrating the 25th anniversary of cooperation in the Tumen River area. Our efforts span over 24 years and we have advanced from studies and projects focused on the relatively small area of the Tumen River delta to encompass what we call the greater Tumen region—the area covered in the Greater Tumen Initiative. However, we must acknowledge that our efforts remain constrained by ideological, political, economic, and cultural challenges. We also continue to face systemic and institutional obstacles. Facilitating regional cooperation in the Tumen River area, therefore, remains a difficult task.

In the 1990s we proposed it would take 20 years and US\$30 billion to transform the Tumen River area into a transport hub for Northeast Asia. In 2005 we adopted the 2006-2016 Strategic Action Plan for the Greater Tumen Initiative (GTI). At each stage the goal has been to create a regional community, to raise standards of living, to attract foreign investment, and to turn this area into a growth pole. But these goals have yet to be met. One reason is the lack of active participation from central governments. For a period of time the United Nations Development Program (UNDP) funded, organized, and coordinated Tumen River cooperation, but the UNDP could never take the place of governments in promoting regional development. As the UNDP reached its limit in terms of extending support for the program and lacking real central government support, the UNDP eventually withdrew from the program. To date, central governments have not taken on sufficient responsibility for Tumen River area development. The GTI needs cooperation and participation above the

vice-minister level-government participants to date have lacked the power to commit and push forward regional collaboration.

Another significant challenge is that financing mechanisms for the region are inadequate. Financing is key to regional development. The Asian Development Bank (ADB) is now an observer at the GTI, and there have been discussions on the possibility of the ADB setting up a special fund for the development of the Tumen River area, but this has not been realized. There have also been discussions on setting up a permanent Secretariat dedicated to Tumen area development, but suggestions for facilities and collaboration by the various countries involved have not been taken seriously enough by the relevant central governments. A great deal of expert research on regional cooperation has been conducted, but at this writing, there are no central government-backed substantive plans. When it comes to coordination in this region, there are no strong and effective measures. Cooperation in the Tumen River delta, therefore, is moving slowly. China's Belt and Road Initiative (BRI) may finally provide the impetus for Tumen region cooperation and development.

However, the BRI is not guaranteed to promote development in the Tumen River area. Northeast Asia is said to play an important role in the BRI, but government plans to date are not specific to Northeast Asia or the Tumen region. It appears that most plans have a westward or southward element; there are limited plans with an eastern or northeastern focus. Northeast Asia development still requires large infrastructure investments, for example: we need to finalize railroad connections to the Russian Far East and finish high-speed rail between Beijing and Moscow. To date, Central Asia, the southwest of China, and Southeast Asia appear as priorities in development strategies. Northeast China has been identified as an important window allowing Europe and Northeast Asia to be connected. This should be used to highlight that various strategies are mutually supportive and should be interlinked including, the Silk Road, Eurasian economic cooperation, Mongolia's economic initiative, and the China-Russia- Mongolia economic corridor.

The BRI should also be used to encourage development of border areas and to encourage the development of globally marketable products in northeast

China. The BRI potentially is very conducive to Tumen region cooperation. The BRI may also help to solve the investment problems of the Tumen region. The BRI proposal, has forced China to consider the difficulties underdeveloped areas face in financing infrastructure. The BRI might turn the attention of existing investment facilities to the Northeast Asian region as well as the countries of the region thereby improving their ability to secure funding and financing. Although it is very important to harness opportunities created by the BRI, we should not stop there. China should simultaneously look to Northeast Asia and Southeast Asia. Northeast China should become a key strategic point of connection to the '21st Century Maritime Silk Road.'



Part II

**Cross-Border Infrastructure and
Special Economic Zones in
Northeast Asia**



The Current Situation in the Korean Peninsula: The North's Perspective

Glyn Ford

The Nuclear Program

The problem is a total incommensurability between the two sides. It is Pyongyang's very commitment to economic reform that is the barrier to denuclearization. North Korea's nuclear programme- alongside the missile and space programme- have an underpinning inexorable logic from Pyongyang's perspective. They are the key to unlocking the possibility of economic reforms. In the view of Pyongyang, weapons of mass destruction are a necessary-but not sufficient-condition for economic renewal. Increasingly since the collapse of the Soviet Union in 1989, the North Koreans have been forced to live the same self-lie that won the US the Cold War and led to the decline and fall of the Soviet Empire.

More and more of the North's limited resources are sucked into the endless arms race with the Seoul-Washington-Tokyo triad. South Korea's military expenditure alone is nearly five times that of Pyongyang's, while the North's defence budget barely equals 2% of that of the United States, Japan, South Korea. The impossibility of matching resources has become increasingly clear. The clashes around the Northern Limit Line's disputed maritime boundary over the last decade and more, despite the very different portrayal in Kim Hak-soon's 2015 smash hit movie of the same name, have demonstrated that even the 'iron will' of North Korea's navy cannot overcome high technology and virtual

state-of-the-art military equipment. In conventional weaponry, the North has not so much fallen behind in the race, but is rather more in danger of being lapped.

What makes the situation even worse is that kick-starting the economy needs a potential pool of new labor. Unlike China, with their enormous reservoir of rural poor and peasantry, North Korea is rather a 'failed' industrial state with no available pool of peasant labor ready and eager to make a rural-urban transition.

Thus, the nuclear programme is an indispensable security guarantee acting, in Pyongyang's eyes, as a deterrent to military adventurism by the US *à la* Iraq, Libya, and Syria. This was made very clear at this year's Party Conference with the commitment to the 'Byungjin' policy of simultaneously strengthening the economy on one hand, and maintaining the military deterrence on the other, through nuclear weapons and missile development.

Unification

The North still pays lip service to early unification, but hearts and minds are no longer in it. The leadership is well aware that their gross domestic product (GDP) is 50 times smaller than that of the South. On this basis, early reunification could and would be nothing but assimilation by another name, and with all the consequences that would follow. This is only reinforced by recent actions of the government in Seoul. The peaceful resolution of conflicts, as in South Africa, Ireland, East Timor, Peru, and Colombia, has truth and reconciliation firmly founded on both sides involved enduring the unendurable, accepting the unacceptable, and forgetting and forgiving the unforgettable and intolerable, as the crimes of the guilty are washed away in the interests of the greater good. For Pyongyang, the grab by Seoul of the United Nations Office for Human Rights in North Korea, dedicated to an industrial-scale production of perpetrators and crimes, is a clear signal of reality over rhetoric. On this basis, the South is, in the eyes of the North, not serious about slow, gradual, and peaceful unification.

In terms of abstract 'justice' this is difficult to challenge. Nevertheless, it is predicated on an 'unconditional victory' by the South, for in any negotiated settlement the Office's product will prove more of a hindrance than help. This logic is what drives Pyongyang's 'realpolitik' of 'better apart,' at least for the next decades and generations. North Korea's exemplar is not the process of German unification, but rather the Irish peace process, where there was peace without unification.

The Six Party Talks are dead. As the North says: "The talks were about stopping us becoming a nuclear power, but now we are one-so what's to talk about?" This was made all the worse by Tokyo's threat of a veto on any settlement that does not simultaneously resolve the intractable issue of the fate of Japanese citizens abducted two generations ago by the North. If anything, Pyongyang is looking for new institutional structures for dialogue, possibly modelled on the Helsinki process, with its different baskets spanning economic cooperation, security and human rights, and with no 'tit for tat' approach, but one where trades can be across baskets rather than within them.

This is the political and economic backdrop to North Korea's continued experimentation with diverse models of economic reforms and Special Economic Zones (SEZs).

The Special Economic Zones (SEZs)

There are several models of SEZs, all based on investment laws not too dissimilar from those of China. The oldest one is the Rajin-Sonbong SEZ (1991, now called Rason). Covering an area the size of Singapore, situated at the triple point borders of North Korea, Russia, and China, Rason is a North Korean version of Shenzhen, fenced off from the rest of the country to prevent entry, rather than departure. A visiting European Ambassador some years ago referred to Rason as a "casino where they turn lights off at night." While as yet no Shenzhen, it is now certainly far more than that.

Rason's internal bottleneck to development is, first and foremost, energy.

The 200 MW Sonbong (Unggi) oil-fired power station that was the recipient of the Heavy Fuel Oil delivered as part of the Agreed Framework while awaiting KEDO's two Light Water Reactors to go online—all abandoned in 2002 by Washington—is now closed. There are claims it is to be converted into a coal-fired station, but there are no reports of any work underway. Currently, much of the demand for electricity is supplied from Hunchun (China) power stations, but that cannot be guaranteed to last, with Beijing under pressure to follow the letter of the UN Sanctions Regime. The Chinese froze plans in 2013 to further link Rason into the Jilin electricity grid.

Communications and infrastructure are better with a new (four year old) 53 km Chinese-built road between Hunchun and Rason, and a Russian-built and Russian-gauge railway from Khasan (Russia) to Rason port. From China the problem is the Tumen River bridge linking the two countries. Built during the Japanese occupation in 1938, it was partly refurbished by China in 2010, but the promised new bridge is still on hold. There are rumours of a heliport and airport, although the latter would be extremely close to the border with China. Whether a joint airport model would be viable is an interesting question.

Rason Port is the most northerly ice-free port in winter, and in summer it could ship through the Northern Passage if global warming continues to degrade Arctic ice. With China's railways at capacity, such a functioning facility could serve as a valuable outlet for China's northeastern provinces. There are also a Thai communications center, banks and a small Chinese-led real estate market. The *de facto* currency in the SEZ is the RMB, rather than the Korean won.

In reality, Rason is a minor success. Visible economic activity is focused in the clothing sector, with seven factories partly dependent on a Joint Agreement with China on textile exports that are made up and re-exported (brands include Kappa, Lands' End, NBA, although it is unclear whether they are aware of the sub-contracting to North Korea). In total there are 3000 workers. In the fish processing sector there are four factories and 2000 workers. The main production, which is seasonal, is squid, again for the Chinese market. Both groups of workers are paid the equivalent of US\$80 per month, with a

60-hour week in textiles and 48-hour week in fish processing.

The claimed balance of investment is 70% Chinese, 20% Russian, and 10% other. Nevertheless, save the railway, it looks overwhelmingly Chinese. This was one of the very reasons thought to be behind the demise of Jang Song-taek. If the Chinese get serious about sanctions, Rason will be in trouble, although at serious cost to China's bordering provinces, while any serious easing of the situation could see Rason take-off.

The much advertised and the much delayed SEZs in Sinuiju and on Hwanggumpyong and Wihwa Islands are planned on the Rason model. There was finally some evidence of work starting on Hwanggumpyong in 2014, but there have been no clear signs of the SEZs in and around Sinuiju being anywhere near being open for business.

The second SEZ model was that of the Kaesong Industrial Complex (KIC) and the Mount Kumgang Tourist Zone where, unlike Rason, the local population was fenced out, coming in solely to work. Here the North's land and labor was married to the South's capital, management, and consumers. Mount Kumgang Tourist Zone effectively closed in 2008 after a South Korean tourist was shot and killed, after she entered a military zone.

In contrast KIC was a success with, as a first phase, the employment of 54,000 workers in more than 80 factories. In total, it was closed six times, for periods between a few days and several months. The root of the trouble was always political. It served as a convenient 'whipping boy' for both sides when they wanted to make a point, whether it was Seoul's Joint Military Exercises with Washington or the North's nuclear tests and satellite launches.

It finally went because of the North's concerns about it functioning as a Trojan horse, rather than cash cow, and the South seeing it as a barrier to full international solidarity with Seoul as regards the sanctions regime. After all, it was difficult to persuade other countries to reject North Korean workers when Seoul was turning a nice profit with over 50,000 of them, let alone with the projected 450,000 of the third stage. KIC was closed in 2016 by Seoul. At best it awaits a new President in Seoul in December 2017, while many think the closure looks permanent.

A third model of SEZ was announced in October 2013, with 13 new zones designated. Most were small bespoke zones across the provinces, either close to the Chinese border or in coastal cities and between 1.4 and 8 km². In July 2014 a further six zones were added to the list. They have very different functions. There are Export Processing Zones near Nampo and Industrial Development Zones at Wiwon, on the Chinese border, in the Hyondong suburb of Wonsan, and in the Hamhung/Hungnam conurbation. Agricultural Zones are in Pukchong and Orang. Plus there are proposed Tourist Zones in Onsong (Chinese trippers from Tumen) and Sinphyong (a scenic site not far from the Masik Pass Ski Complex on the road between Pyongyang and Wonsan). Further Economic Development zones cover an area near the Chongjin steelworks, Hyesan near Mount Paektu, and Manpo. The additional six zones included a further zone near Nampo, a ‘Green Zone’, and zones near a major coalfield and in the center of the North’s rice-bowl area. Finally, the Unjong Zone is dedicated to high-tech and biology.

While Rason, Mount Kumgang and the much delayed Rason-style operations on Hwanggumpyong and Wihwa islands, in what is sometimes referred to as the Sinuiju International Economic Zone, have different oversight-as did KIC-these 19 now not so new SEZs are all the responsibility of the Ministry of External Economy (MoEE), after the work of the separate Joint Venture Investment Commission was folded in with the State Economic Development Commission, under the MoEE umbrella. There is little evidence, apart from the above, of serious foreign direct investment (FDI) in any of these zones in 2015 or 2016, despite Pyongyang’s attempt to drive internal investment from the center to those areas finding favor with the leadership, such as Wonsan. It is difficult to imagine much foreign investment elsewhere. Any potential investor would be demanding terms that are comparable to those in the SEZs for any other investment.

The constant hunting for new economic models that might confound earlier failure is both a demonstration of Pyongyang’s commitment to economic reforms and their failure to see-or refusal to acknowledge-that the problem is political and not economic. It is a standoff. Pyongyang sees the ‘Byungjin’ policy as

providing the necessary climate and conditions for reform, while for the West and the rest it is nuclear weapons and ballistic missiles that preclude the very investment sought.

Prospects for Peace on the Peninsula

Over the coming years, there will be new attempts to broker peace on the Peninsula. However, there is no point unless all the parties concerned agree to a self-denying ordinance that they will not break off the talks and take their ball home every time Pyongyang launches a satellite or tests a nuclear weapon. The one thing that is increasingly clear is that a hard landing will be catastrophic for the Peninsula and the region. At best, it will resemble the refugee crisis in Turkey and Europe with 10 million refugees and more flooding into South Korea and China, while at worst it will be refugees and an insurrectionary civil war like in Syria. Those neoconservatives in Washington and Seoul, Tokyo and Brussels need to be careful what they wish-and organize-for. They might just get it. Even when there is light at the end of the tunnel there is no tunnel.



Cross-Border Relations and North Korea: The Age of Sanctions

Anthony Michell

My previous reports to the NEAEF annual conference have tended toward optimism, while this report expresses fears of a worse time to come for all the borderlands. South Korean President Park Geun-hye was unmoving in her belief that the best way to deal with North Korea is to squeeze it financially. This decision came in advance of United Nations Security Council Resolution 2270 (UNSCR 2270), with the closure of Kaesong, a decision that was entirely unexpected and taken without further debate or warning to Kaesong investors. President Park, both personally and through the South Korean foreign office, also attempted to cut off North Korea from its interests in Africa and from the small amounts returned to North Korea by overseas workers. The US, EU, and Japan have followed President Park's example, leaving only China and Russia as modifiers of the sanctions. This has now thrown much of the sanction unity into question as to whether China will take North Korea under its wing once again. For trade with North Korea, everything depends on where you are. For those in South Korea there is no hope, but for those Chinese along the border smuggling has always been a part of life. North Korean ships may be under more surveillance but early attempts to use that power by the Philippines failed.

Responses to North Korea's Nuclear Test

The first response to North Korea's fourth nuclear test came on 13 February

2016 with President Park's decision to close Kaesong. The question is: was this a punishment or did the South shoot itself in the foot? Park was retiring to the Lee Myung-bak strategy enshrined in the 2010 sanctions. "starve the North out." There will still be legal challenges by the 120 businesses put out of business and the newly enlarged opposition after the 13 April 2016 election in South Korea, if not before. Park's action effectively stops US\$300 million to North Korea but loses US\$3 billion of output for the South.

On 2 March 2016, the UNSC approved resolution UNSCR 2270 imposing comprehensive sanctions on North Korea. On regular visitor reports, Pyongyang had never looked better than in March 2016, and this prosperity (though not necessarily electricity) was spreading throughout the country. For two to three months we looked for signs of sanctions' impact, we were expecting reactions to be fast. One major cross border activity casualty had already occurred-the closure of Kaesong-and more followed:

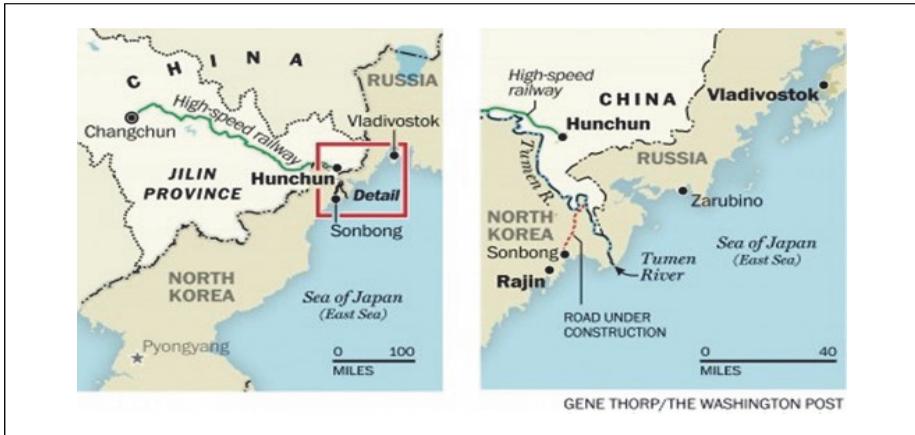
- The withdrawal of South Korea from the Eurasia Project using Rason, even though the Russians had specifically excluded this from sanctions
- Russian cancellation of joint venture projects with North Korea
- Fears of a new 'arduous march' (a metaphor for famine) were declared in April 2016
- A presumed increase in smuggling

The End of the Eurasia Project and All Russian Projects

Russia had excluded the Eurasia Project from the 13 March sanctions, but President Park was having nothing more to do with it. South Korean companies KORAIL, POSCO, and HMM were told that the project was dead. The fate of the US\$25 billion Pobeda project between Russia and North Korea to modernize the infrastructure and electricity supply to North Korea remained unclear until TASS Russian news agency announced a Russian order to freeze

all financial transactions with North Korean banks and halt imports of minerals under fresh sanctions adopted in March 2016.¹⁾ Moscow issued a presidential decree to close subsidiaries, branches, and joint ventures of North Korean banks within 90 days from the date of the UNSCR 2270 and cease imports of minerals. At this writing, the date of implementation remained unclear.

Figure 1. Eurasia Project Infrastructure



Source: Gene Thorp, Washington Post.

Rason and Yongil (Yanji)

Reports are that Chinese investors, mainly offering real estate, are giving up as now there are no takers for new apartments, a booming business a couple of years before. Reports from Rason are mixed and not always reliable (in his report on 2015, for example, Mike Spavour seemed confused about currency regulations). A 2015 exhibition in the area claimed participants from China, Russia, Ukraine, Uzbekistan, Canada, and Italy. Country-specific sanctions

1) The Chosun Ilbo, "Russia to Cut Ties with N. Korea," The Chosun Ilbo (9 May 2016) at http://english.chosun.com/site/data/html_dir/2016/05/09/2016050901457.html.

notwithstanding, under UNSCR 2270, new ventures in North Korea are not explicitly proscribed unless they are dealing with industries such as weapons, nuclear, coal, certain minerals, or with North Korean financial institutions. But the financial sanctions obviously could affect foreign interest and investors, and the shadow of secondary sanctions no doubt hangs over larger players. In addition to evidence that China has clamped down on North Korea-linked accounts, Russia-as previously mentioned here-announced that it will shut down all joint ventures with North Korean financial institutions and ban key mineral imports. This is a stark contrast from the Vladimir Putin of two years ago who forgave US\$11 billion of North Korean debt.²⁾

Greater Tumen Initiative

The Greater Tumen Initiative (GTI) has also been affected. This initiative in as far as it involved North Korea. was an ‘on again off again’ situation dating back to the early 1990s. I was involved in the 2008 attempt to get North Korea to rejoin the GTI-at that time North Korea was unhappy with all UN organizations. Attempts to attract North Korea back to the GTI, however, were thwarted by ongoing tensions between South Korea and North Korea. The plan for the GTI was for it “to become the first multilateral forum in Northeast Asia for economic development and cross-border cooperation in the region.”³⁾ The long-standing members of the GTI are China, Russia, Mongolia, and South Korea. “In September2005, the target zone was expanded to cover the three northeastern provinces of China, Rajin and Sonbong of North Korea, the Maritime Province of Russia, and the East Sea of Korea.”⁴⁾ The hope was for the GTI to evolve from a mechanism for cooperation to an international organization.

2) VOAnews “Russia Forgives North Korea Debt,” VOAnews (17 June 2014) at <http://www.voanews.com/a/russia-forgives-north-korean-debt/1939188.html>.

3) Business Korea, “Greater Tumen Initiative The First Multilateral Forum in Northeast Asia Foundered,” Business Korea (12 February 2016) at <http://www.businesskorea.co.kr/english/news/politics/13814-greater-tumen-initiative-first-multilateral-forum-northeast-asia-founded>.

4) *Ibid.*

It was reported that the South Korean government intended to raise hundreds of thousands of dollars a year until 2022 in GTI trust funds, launch economic cooperation projects in the fields of energy, transport logistics and agriculture ...”⁵⁾ All of this is now uncertain at best. Attempts to bring North Korea back to the GTI have failed, and it will be difficult to involve North Korea again.

Dandong

Dandong on the border of DPRK and China is an important location for assessing trade between North Korea and China, since 70% of all China-North Korea trade passes through this port. Following UNSCR 2270, reporters rushed to the Chinese border city of Dandong in Liaoning Province expecting an immediate change. Despite harsh measures to limit economic interchange with North Korea, trade continued. A North Korean in Dandong explained it thus, “[e]verything’s determined by who makes money. Money is power...”-reported in April 2016.⁶⁾ As in the past, it appears that Chinese customs officers waited to see what the central government’s intention was and for how long they should enforce a tough policy.⁷⁾ As the Chinese media escalated criticism of South Korea’s interest in the Terminal High Altitude Area Defense (THAAD) system in July 2016, in Dandong, customs inspections seemed less severe, though back pockets may have been filled. “Customs inspections at the border post used to get tighter right after the North’s previous nuclear tests but it didn’t last long,” a businessman in Dandong...told Dong-A Ilbo. “This time, after the fifth nuclear test, is the same as before.”⁸⁾ As of summer 2016, some banks were closed,

5) *Ibid.*

6) The Hankyoreh, “The Effect of Sanctions at the Corridor between N. Korea and China,” The Hankyoreh (1 April 2016) at http://www.hani.co.kr/arti/english_edition/e_northkorea/737868.html.

7) Malcolm Moore, “China Breaking UN Sanctions to Support North Korea,” The Telegraph (13 April 2013) at <http://www.telegraph.co.uk/news/worldnews/asia/northkorea/9991907/China-breaking-UN-sanctions-to-support-North-Korea.html>.

8) Kim Hyo-jin, “N. Korea-China Border Trade Active despite Sanctions,” Korea Times (18 September 2016) at http://www.koreatimes.co.kr/www/news/nation/2016/09/116_214189.html.

money still flowed though not necessarily through official transfers. Between US\$2-2.5 billion are smuggled through every year.

A Warning to Smugglers

Unsupported estimates suggest that US\$2-2.5 billion are smuggled every year through Dandong and other border points. On 12 June 2016, Japan's Yomiuri Shimbun newspaper reported "that Chinese authorities had carried out a late-night raid on the home of a high-ranking North Korean agent named Kim in Dandong...apprehending the suspect and confiscating gold bars and 30 million yen (US\$281,000) in cash. Details were also reported to North Korea's embassy in Beijing, with Pyongyang dispatching officials to China in response, the report said."⁹⁾ The move is widely seen as a warning to smugglers at a time when we can assume smuggling is on the rise.

Other Crossings: Official and Unofficial

There are seven official crossing points for North Korea, but most trade crosses through unofficial points; the Tumen river is easily fordable in many places; half of Tumen refinery's output for example, crosses unofficially. Smuggling through Dandong is simplest (outbound) but where Chinese oversight becomes too strict, other crossings and unofficial crossings come into play.

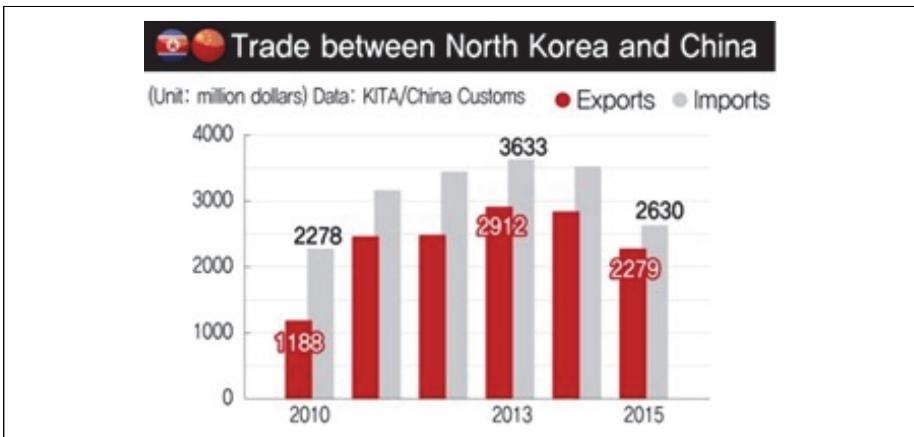
Imports and Exports

Totals of official trade are probably fairly reported, but types of product

9) Kim Oi-hyun, "North Korean 'man in charge' in Dandong Arrested for Smuggling," The Hankyoreh (13 June 2016) at http://english.hani.co.kr/arti/english_edition/e_northkorea/747995.html.

are not so reliable. It is very difficult to have good data, especially regarding types of goods, e.g. soap classified as steel, and origin/destination information is often inaccurate. Crude oil is apparently not included in any data (nor is most of the refined product from Tumen Refinery). Valuations in any country's data can be suspect where an ad valorem tariff applies. It is common to use UN aggregated trade tables for direct trade with North Korea, but this is subject to misinformation on origin and destination and product. Figures tabulated by KOTRA (Korea Trade Promotion Corporation) should be treated with caution, but appear to show China's share of North Korea trade as growing. However, this under-records Southeast Asian trade. For example, when cargo is declared as going to Taiwan from Singapore no one checks statistically if it really arrived in Nampo.¹⁰⁾

Figure 2. Trade between North Korea and China



Source: The Hankyoreh.

10) The Hankyoreh, "The Effect of Sanctions at the Corridor between N. Korea and China," The Hankyoreh (1 April 2016) at http://www.hani.co.kr/arti/english_edition/e_northkorea/737868.html

Prices in North Korea and Warnings of a ‘New Arduous March’

Stability of prices in North Korea is also difficult to determine. James Pearson thought prices were stable, but others disagreed. Sanctions began in March 2016, and from 6-7 May 2016 there was a military march with foreign journalists and lots of attention there. Some estimated that the economy had decreased by 1% in 2015 and 2016. This seems to match the ‘new arduous march’ proclamation by the North Korean government (a reference to the metaphor-arduous march-for the famine of 1995-1999). Within one month of the sanctions, food was rationed, and reduced to a 370 grams daily allotment per person (below 600 grams UN and 573 grams South Korea recommendations).

Impact on Aid Workers

By late April 2016, the Love North Korean Children charity, was in trouble over importing a new truck. George Lee, chairman of Love North Korean Children which is based in Seoul and London, said the environment has clearly changed after the sanctions. It is the first time that facilities from China to North Korea by non-Chinese have been blocked at Chinese customs in Dandong. The money collected within South Korea is now stuck there and plans for a factory expansion initiative have been postponed. Donations were also hit; most money comes from the US or the UK but Korean organizations followed government instructions and stopped donating. Other charities have experienced similar problems. The sanctions have limited aid workers’ ability to import materials, donations, transportation, and to transfer funds.

Investors Leave the North

Two of North Korea’s long-term investors left North Korea in 2016, first Nigel Cowie and then Michael Hay who has had a legal practice in the North

for many years announced suspension of operations. US investors all apply to the US Office of Foreign Assets Control for permission to continue tour companies and charitable activities, but if denied they must give up. Other foreign investors report difficulties in getting western suppliers to continue to sell them simple products like antibiotics. The behavior of Chinese investors unknown.

Finding a way to have legitimate transactions with North Korea is a present challenge, including transferring humanitarian funds. There is a need for an EU equivalent process to that of the US Office of Foreign Assets Control. EU companies and citizens need a clear process to get official approval to operate in North Korea (or rather exclusion from sanctions). The US Office of Foreign Assets Control has a long history of dealing with this matter and has informal and non-bureaucratic procedures in place. The EU needs something similar.



A Snapshot of North Korea and the Role of Chinese Cooperation

Zhang Huizhi

This chapter provides a snapshot of Pyongyang in 2015/2016 and a more detailed review of the current state of Rason.

Pyongyang

I have visited Pyongyang every year since 2010. From 1993 to 1995 I studied in Pyongyang. At the time, it was a very poor place, and people could not feed themselves. I was shocked by the poverty at the time. By 2010 and since Kim Jong-Un took office, North Korea had undergone profound changes. From 2011 to 2013, there was positive economic growth (0.8-1.3%), but by 2015 because of economic sanctions, North Korea was experiencing negative growth (-1.1%). The Chinese may have a better understanding of North Korea's economic management system-it is a system that emphasizes agricultural and industrial production.

The following photographs provide a glimpse of life in Pyongyang. Photos show a traffic jam during rush hour (Figure 1) and two students looking casual and relaxed as they walk after school (Figure 2). Pyongyang gives the impression of quite a peaceful place. These next photographs show a shopping mall and a supermarket (Figures 3 and 4). The photos were taken during a holiday season and a festive atmosphere is evident. I was surprised to see North Korean consumers pushing carts full of goods and products. Cash cards are currently

very popular in Pyongyang. I have also included a photo of a skating area/park, entry to which costs 5-6 Korean won (Figure 5).

Figure 1. Pyongyang traffic

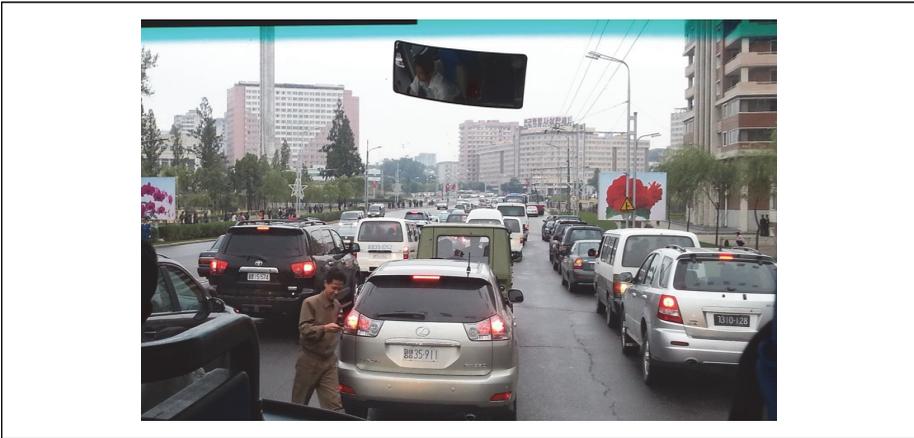


Figure 2. Students walking casually after school



Figure 3. Pyongyang shopping mall and supermarket



Figure 4. Pyongyang shopping mall and supermarket, festive display

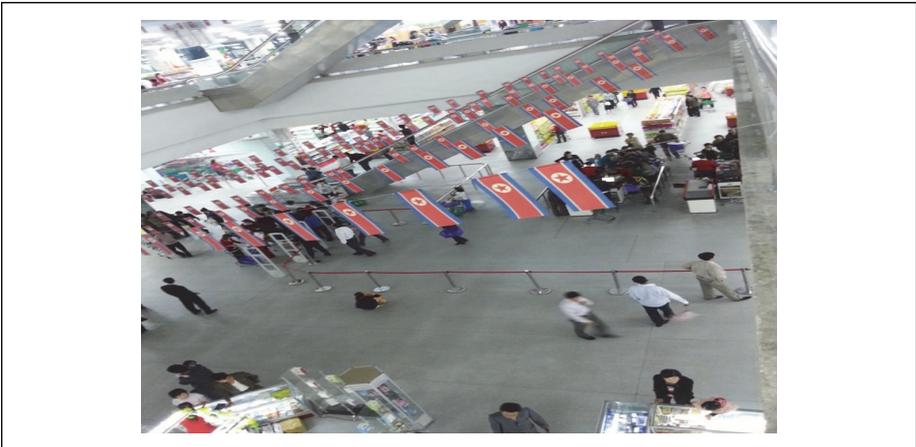


Figure 5. Skating area/park



Rason

The Rajin- economic zone was given Special Economic Zone status in 1991. After the signing of a common development agreement in 2011, a common committee was established in 2012 to develop the area. Under this committee's leadership, the zone has seen much progress in terms of manufacturing and the services industry. The following photographs show the third terminal of Rajin port (Figure 6), operated by Russia to transport coal; and the Huixin garment processing factory (Figure 7). Huixin has 200 workers producing various kinds of garments for foreign export. Each garment product earns a US\$3 profit. Every year 300,000 garments are produced, so we can calculate that they make US\$900,000 per year. The cost for producing underwear is 0.5-0.6 RMB, and the annual volume is 25 million pieces per year. Figure 8 shows the computer room for the Huixin garment factory; Huixin is promoting IT-driven development. The computer room is used to connect with Pyongyang and, in collaboration with universities, to provide workers with remote training on garment design and fabric-related knowledge.

Figure 6. Rajin port



Figure 7. Huixin garment factory in Rason



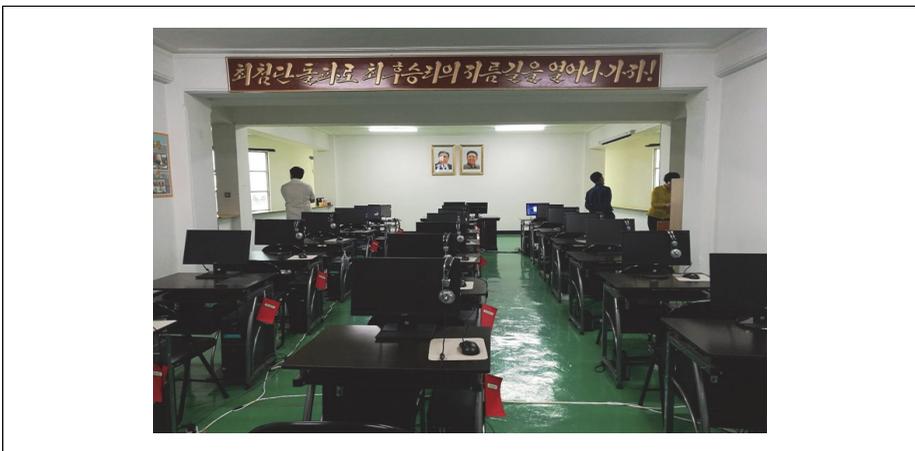
Jilin University in China has a long history of cooperation with the Rajin market. North Koreans responsible for the development of the market visited Jilin to establish cooperation with Jilin University. Various products including

furniture, are sold at the market. Most of the goods available at the Rajin market are imported from China. Workers in Rajin are well dressed and enjoy many amenities. There is good variety of food products available at the market, including rice, meat, and seafood. Products are sold at market prices and at the same price for North Koreans and foreigners.

Transportation means available include cars, taxis, motorbikes, and bikes. There is no shuttle between cities, however, so if a person needs to go to a different city a taxi is required. However, shuttle service is available between Rajin and its suburbs.

Before the common management agreement for Rajin was reached, there was much left incomplete. China has been vital to the development of Rajin. Much of the construction in Rajin is the result of China-North Korea common management, to the extent that some buildings are indistinguishable from those in China. Under common management, laws and regulations have brought out the best in this zone. China has cultivated a lot of talent in Rajin in terms of economic development. Cooperation with China is critical to the development of North Korea.

Figure 8. Huixin factory computer room





Toward Better Logistics Connectivity in Northeast Asia

Inoue Satoshi

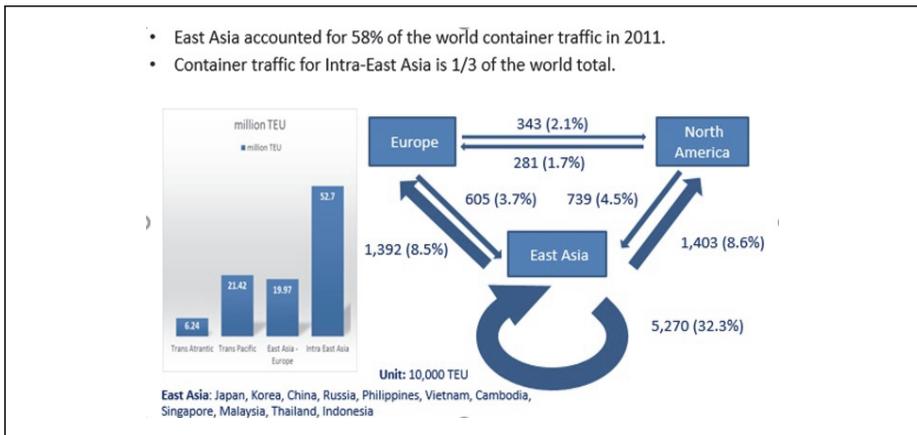
This chapter focuses on logistics, especially for shipping and transportation of goods all over the world. Amazon, for instance, has more than 300 distribution centers in dozens of countries. Amazon should more appropriately be called a smart physical distributor rather than just an online retailer. This is the era of supply chain management.

Without a coordinated global logistics system, many of the industries we have today could not exist. As more businesses are now market-driven or customer-oriented, we might say that the age of mass production is already gone. It was over 100 years ago that the first Ford Model T was sold, and it didn't change for almost twenty years.

Large-scale transportation is often made possible through maritime container transportation. Many people do not understand where container transportation is the busiest. Shipping among countries of East Asia accounts for 32.3% of global maritime container transport, whereas shipping between North America and Europe takes up less than 4%. And East Asia's share of world trade is increasing, as it grows faster than other regions in the world. As you look at container transport for Japan, you can see that 70% of the trade is to and from Northeast Asia. If you add in South and Southeast Asia, this reaches 82.6%

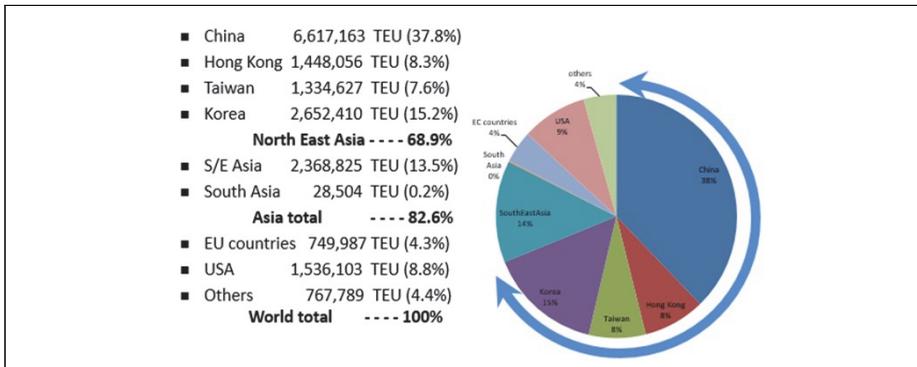
of Japan’s world trade. This region has developed as a major area for global shipping, with many ports that are yet to be developed.

Figure 1. World container trade centers around East Asia



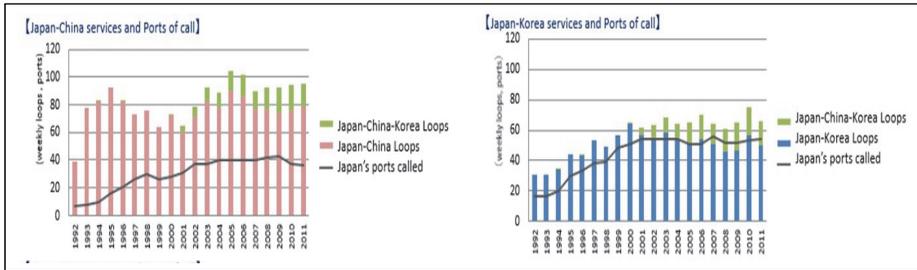
Source: Japan Ministry of Land, Infrastructure, Transport, and Tourism (MLIT), Maritime Report 2013.

Figure 2. Japan’s major container trade partners (2011)



Source: Compiled from Japan Ministry of Land, Infrastructure, Transport, and Tourism (MLIT) port statistics (2011).

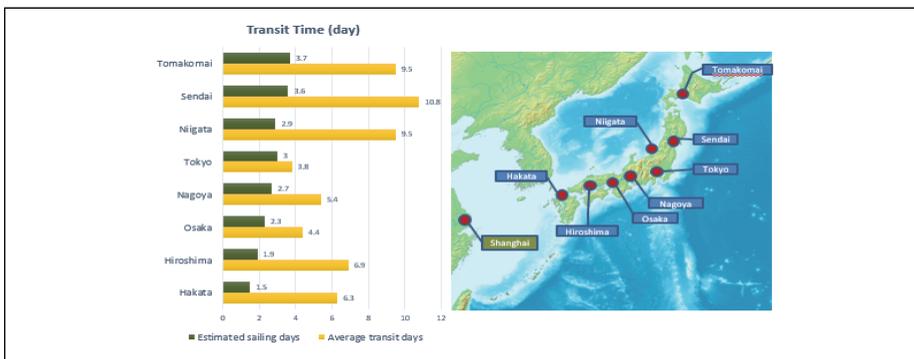
Figure 3. Container shipping between Japan and China/Korea



Source: N. Kuroda (2013).

However, despite these extensive networks, the quality of shipping connectivity in the Northeast Asia region is still of rather poor quality. Figure 4 shows that the average shipping time between various Japanese port cities and Shanghai is often double or triple the estimated sailing time. This is because most container services are not direct, but rather stop in many ports on the way to their final destination. We need to push for direct container shipping between ports of this region. I like to call this the ‘Northeast Asia Maritime Express.’

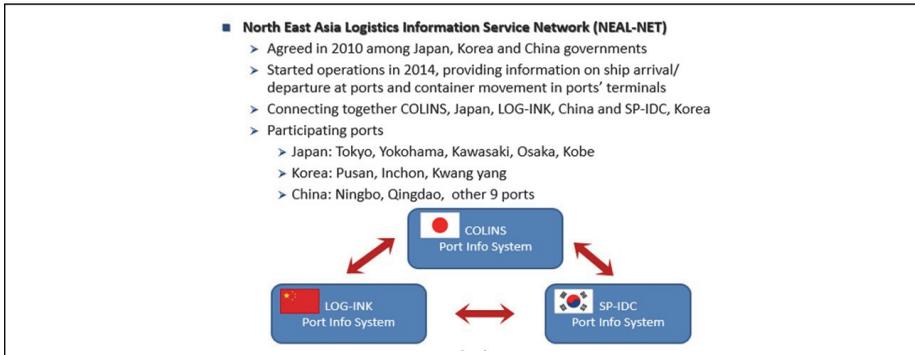
Figure 4. Sailing days from Japanese ports to Shanghai



The Northeast Asia Logistics Information Service Network is a type of collaboration among the governments of China, Japan, and Korea to share

information on arrival/departure at ports and container movement. About 20 ports participate in this system.

Figure 5. Port information system for Northeast Asia



In summary, to fully take advantage of the geographical proximity of the region, it will be important to improve logistics connectivity. Priority should be given to the development of an extensive network of container shuttle services in the region—a ‘Northeast Asia Maritime Express.’ Second, customs processes must be harmonized, with mutual recognition of Authorized Economic Operator (AEO) status. Third, the coordination of information systems remains important, and the East Asia Port Community System should be continued.

To achieve and monitor these goals, I propose creating a Regional Ports Connectivity Index, where ports can be evaluated and statistical trends can be assessed for different ports to improve logistics between different ports.

There is one international service between Sakae-Minato to Tonghae, then to Vladivostok, and returning as a weekly service ferry. Since the inception of services, they have suffered a financial loss. Local governments have helped to support this initiative and local businesses found that this has helped greatly in the export of small parts to China and Russia. With these new customers, this international ferry service may help to promote businesses. Maritime connections across the Japan Sea have great potential for improvement.



Part III

**Future Tourism Cooperation in
Northeast Asia**

International Tourism and Japan as a 'Tourism Nation'

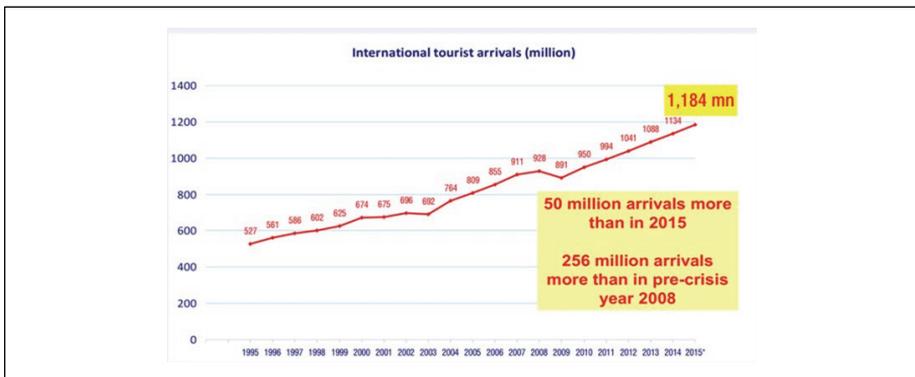
Suzuki Masaru

International Tourism

This chapter presents an overview of recent international tourism trends, it introduces Japan's 'tourism nation' concept, and suggests how to improve tourism in Northeast Asia.

According to a 2016 report of the United Nations World Tourism Organization (UNWTO), international tourist arrivals (overnight visitors) grew by 4.4% in 2015, reaching a record 1.2 billion, up from 50 million in 2014. International tourism soared to new heights in 2015. The healthy performance of this sector

Figure 1. Inbound tourism in the world

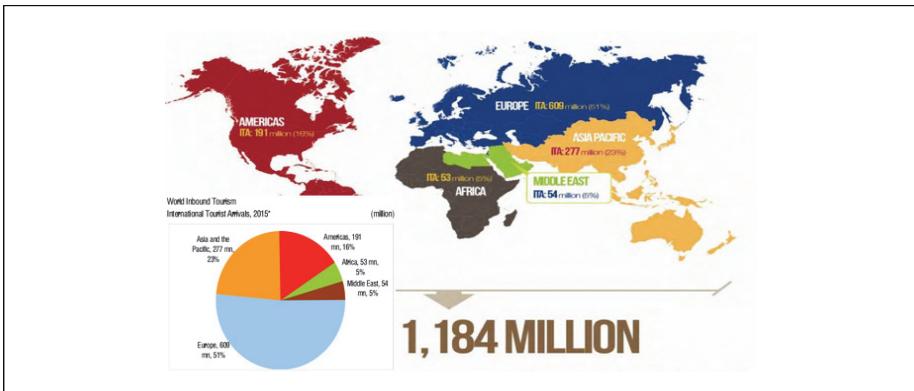


Source: World Tourism Organization.

is contributing to economic growth and job creation in many parts of the world.

Asia and the Pacific recorded 13 million more international tourist arrivals in 2015 reaching 277 million, an increase of 4%. Asia and the South Pacific, including the Northeast Asia region, experienced a surprising average growth rate of 6.2% in the years 2005-2014. China, with double-digit growth in expenditure every year since 2004, continues to lead global outbound travel, benefitting Asian destinations such as Japan and Thailand, as well as the United States and European destinations. The growing rate of international tourism will be significant in the Asia Pacific and Northeast Asian regions.

Figure 2. International tourist arrivals 2016 (share %)



Source: World Tourism Organization.

Japanese Tourism

Japan has pursued the goal of becoming a ‘tourism nation’ (tourist destination) since 2003 when it launched an official campaign to increase inbound tourism. The goal was to attract 10 million visitors per year by 2010 (this was not met), but by 2013 after the 2011 earthquake, the number of foreign visitors to Japan was 10.36 million, which exceeded the past record of 8.4 million in 2010. This

was fueled by active promotion of tourism as well as the depreciation of the Japanese yen.

On the other hand, recently, the number of Japanese traveling overseas has declined. This decline reflects the effects of the economic recession and political tensions between Japan and its Northeast Asian neighbors. Despite Japan's 'Visit the World' campaign aimed at encouraging Japanese tourists to travel abroad, in 2016 the number of Japanese overseas travelers was only 16 million. The depreciation of the Japanese yen has influenced this as well. Current trends in Japanese tourism could be described as 'moving forward inbound' but 'standing still outbound.'

Japan also recently launched a campaign called 'Yokoso! Japan' (in English it was called 'Japan! Endless Discovery!'), which intends to convey the impression that Japan is a country where visitors can have endless experiences. The Japanese government will also host the 2020 Olympic and Paralympic Tokyo games. At the end of March 2016, the government set targets of more than 40 million visitors by 2020, and 60 million visitors by 2030.

Promoting Tourism in Northeast Asia

Below is a list of tasks at hand that will promote tourism in Northeast Asia:

1. Develop and improve tourism destinations and products. This includes, creating itineraries suited to the market: cultural experience tours, eco/green tourism, country border tours, school excursions, and journeys by trains and cruise ships/ferries.

Mono-destination and triangle/multi-destination tours including land-only package tours should also be promoted. Airfare is expensive, and freedom is important to customers during visits. Suitable first time visit and repeat visit tours should be designed and made available as should Free Independent Traveler (FIT) opportunities. Repeat visitors have become more common and these customers place an emphasis on freedom during their visits, thus FIT and 'skeleton' type tours have become popular in recent years.

2. Create cruise/ferry-airline-bus-train alliances rather than competition among transportation suppliers. It may be possible to offer special fares when combining different modes of transportation.

Airfares in Northeast Asia are very expensive and there are few flights available. Many airline services are reduced or suspended during the winter months. High season and low season trends are very clear, and tourist movement in winter decreases.

Regional network airlines (including low-cost carriers), hotels, and travel agents should be cooperating and collaborating to provide cheaper airfares, by for example, promoting ‘special price’ and ‘special excursion airfares’ in Northeast Asia.

The aim should be to create alliances among cruise/ferry-airline-bus-train transport rather than competition among transport suppliers. For example, tours could be organized to travel one way by cruise or ferry and the by air the other way. It may be possible to offer a ‘Fly and Cruise/Ferry Special Fare.’ The effects of this kind of strategy have proven extremely positive. Train and bus alliances are also effective.

3. Simplify travel documentation and visas. Examples of this include visa exemptions (based on region visited, traveler’s age, specific market-school excursions and seniors, multiple entry business visas, etc.) We also envision ‘working holiday visas’ for young people of Japan and China, for example. Visa procedures should be quick and customs, immigration, and quarantine (CIQ) procedures should be simple.

4. Develop and launch tourism promotions that encourage foreign tourists to visit all areas in Northeast Asia throughout the year. This should include joint marketing and promotions by governments and the private sector targeted within and outside the region.

5. Provide up-to-date tourism information, security information (risk management) and assistance, and tourism statistics (these are scarce for Northeast Asia). Procedures should be in place on how to assist tourists in the event of emergency-car accidents, earthquakes, severe weather, terrorist attack, etc.

6. Cultivate human resources, especially the development of professionals for local tourism industries, both for inbound and outbound tourism. Japan lacks inbound tourism professionals.



Rise of the Integrated Resort and Gaming Regulations

Bo Bernhard and S. Ray Cho

The term ‘integrated destination resorts’ originated in Hawaii, introduced in the late 1950s. The term was used to describe the master-planned nature of an all-inclusive, self-contained, multi-amenity resort.¹⁾ This is in contrast to tourism facilities that develop in a more unplanned and proliferative fashion. The term ‘integrated’ is not yet firmly defined in the tourism literature but for our purposes, we will refer to the economic linkages a resort has with its host community. It is also the magnitude of those linkages that are a key determinant of the extent to which it promotes local economic development.²⁾ Fast forward to the late 2000s where the socially conservative country of Singapore approved two licenses to develop integrated resorts that include casino style gambling. The government lifted long-standing bans and opened the doors to a new trend where there is broader public and private enthusiasm for casinos, which are seen as beneficial with respect to increased tourism, economic development, and tax revenue.³⁾ By this point in time, the term ‘integrated resorts’ is serving also as a euphemism designed to cloak some of the stigma surrounding the term

1) L.E. Helber, M.V. Conlin, and T. Baum, *Redeveloping Mature Resorts for New Markets* (Chichester, UK: John Wiley & Sons, 1995), 105-113.

2) Geoffrey Wall, “Integrating Integrated Resorts,” *Annals of Tourism Research* 23, no. 2 (1996), 713-717.

3) Joan Henderson, “Betting on Casino Tourism in Asia: Singapore’s Integrated Resorts,” *Tourism Review International* 10, no. 3 (2006), 169-179.

‘casino.’⁴⁾ Today, integrated resorts that include regulated gaming are arguably the most successful invention in the sector that is global tourism, as they out-produce Disneylands, mega-stadiums, and virtually any other tourist attraction on the metrics that matter to governments (to put a name to them: footprints, jobs, and dollars). These resorts have grown in number especially across the Asian continent including Macao, Singapore, South Korea, and Russia to name a few. Japan is currently debating if and how the integrated resort could fit into its tourism strategy. Not unlike Japan, governmental agencies around the world are trying to figure out ‘who they are’ as they navigate the often-complex world of gaming and regulation.

Amid a broader stigma and often overlooked when thinking about gaming is this observation: gaming is one economic sector where strong government regulation led to *increased* business success. In various settings (Las Vegas is one, and so is Macao), the moment that jurisdictions got serious about gaming regulation (and cleaned out the ‘bad guys’) is the very moment that things became profitable. This makes sense, when one thinks about it: after all, cleaner, safer environments are more attractive to more people, and hence gaming’s figurative ‘doors’ were suddenly open to growing array of new customers.

So to varying degrees, the world is starting to awaken to the fact that the modern integrated resort affects local economies and communities in unique ways that other businesses cannot claim. For starters, gaming taxes, policy, and regulation make integrated resort development a complex business pursuit, especially in jurisdictions with limited history of legalized gambling. The perceived impacts of integrated resort development are not without critics and supporters and there are growing bodies of evidence that can point in many directions. Further adding to the complexity, the modern integrated resort itself is quickly evolving as consumer tastes shift toward a vast array of non-gaming attractions.⁵⁾

4) Andrew MacDonald and William. A. Eadington, “The Case for Integrated Resorts,” *Inside Asian Gambling* (November 2008), 37-43.

5) William R. Eadington and Meighan R. Doyle, eds., “Integrated Resort Casinos: Implications for Economic Growth and Social Impacts,” *Institute for the Study of Gambling & Commercial Gaming College of Business, University of Nevada* (2009).

In our belief, these complex challenges mean that we must think deeply about, and invest in, what we might call *gaming regulatory intellectual capital*. This means investing in the two things that universities bring to the table: teaching and research. We need to learn from the best teachers in the gaming regulation field—those who have rigorously applied best practices over their own careers as regulators. And we need to listen to research, as regulating with good intentions but *without* a sound scientific foundation can lead to problematic consequences.

Today, gaming regulators can and should benefit from the improving body of research on their topic of interest. For instance, both brain science and treatment science is further advanced than it ever has been in human history, which can and does generate more positive outcomes for those who seek treatment. This can help us address what economists would call ‘costs’ via stronger responsible gaming programs, if this science is in fact incorporated into these approaches. At a macro level, we can see that not all gaming is created equal—and that tourist-driven, multi-amenity casino resorts tend to do a better job of maximizing benefits while minimizing certain costs.

Finally, there is the not-at-all-small matter of culture. We know, thanks to anthropologist Per Binde’s⁶⁾ work, that different cultures gamble differently—just as they behave differently in a variety of spheres. To this end, we must ‘glocalize’—we must learn all we can about global best practices, and then we must view (and research) them using our own local lenses, our own local expertise, and with our own local populations. We learned this the hard way, trying to impose American-inspired programs like ‘problem gambling telephone helplines’ in countries (like South Korea) where one does not, ever, talk about these kinds of ‘shameful’ things to a stranger on the phone.

It is our hope, as the University of Nevada Las Vegas and as the International Gaming Institute that we will serve as a teaching and research ‘beacon,’ an intellectual hub with intellectual capital, and as a resource to our friends throughout the world.

6) Per Binde, “Gambling Across Cultures: Mapping Worldwide Occurrence and Learning from Ethnographic Comparison,” *International Gambling Studies* 4, no. 1 (June 2005), 1-27.

References

- Eadington, William R. and Doyle, Meighan R. eds. 2009. "Integrated Resort Casinos: Implications for Economic Growth and Social Impacts." Institute for the Study of Gambling and Commercial Gaming, College of Business, University of Nevada.
- Helber, L. E., Conlin, M. V., and Baum, T. 1995. *Redeveloping Mature Resorts for New Markets*, 105-113. Chichester, UK: John Wiley & Sons.
- Henderson, Joan. 2006. "Betting on Casino Tourism in Asia: Singapore's Integrated Resorts." *Tourism Review International*, 10, no. 3, 169-179.
- Mac Donald, Andrew and Eadington, William. A. 2008. "The Case for Integrated Resorts," *Inside Asian Gambling*, 37-43.
- Per Binde. 2005 "Gambling Across Cultures: Mapping Worldwide Occurrence and Learning from Ethnographic Comparison." *International Gambling Studies*, 4, no. 1, 1-27. (June)
- Wall, Geoffrey. 1996. "Integrating Integrated Resorts." *Annals of Tourism Research*, 23, no. 2, 713-717.



Northeast Asia Subregional Trans-Border Tourism

Zhao Lin

Why Should We Study Tourism?

Tourism is the future of the world. It is not just for leisure; it brings people from different countries and cultures closer together. Tourism is a part of life, it changes people, it completes people. We might say that tourism is part of society and culture. We might consider it as the origin of networking, social relations, education, and cultural change. Tourism is a critical element of economies. It is a key industry for many countries-it creates jobs, generates income for businesses, and promotes foreign currency exchanges.

Given its importance, all countries device policies on tourism, both at the national and local level. These tourism policies take into consideration and often influence the economy, living standards, the environment, social justice, and cultural development.

Potential Subregional Tourism

Sub-regional tourism resources can be categorized as: natural resources, social and economic resources, borders and cultures, urban and industrial resources. Markets and facilities are critical to tourism development, included here are local markets, populations and economy, transportation, and facilities. Because of the variety of sectors and breadth of issues associated with tourism,

it is important to adopt a broad vision for tourism encompassing economic and cultural development.

The Northeast Asia subregion has great potential for trans-border tourism. The proximity of several countries and cultures allows tourists to experience a mix of cultures, languages, products, people, music, art and architecture. The trans-border tourist is also exposed to a variety of trade, business, and education practices.

The Tumen River delta could offer such a trans-border experience through a 'special zone' for tourist excursions by land and water. The Tumen River flows through three countries in Northeast Asia before reaching the Sea of Japan/East Sea. There is potential to develop a tourist route that connects more than ten cities on land and six countries through navigation. This potential for tourism, however, remains untapped or undeveloped.

There are several areas in this envisioned 'special zone' that are already proven tourist attractions. Integrating various attractions in the six countries of Northeast Asia (China, South and North Korea, Japan, Mongolia, and Russia) would allow the trans-border tourist to experience exquisite natural scenery and fascinating cultural exchange. The Northeast Asia subregion offers: mountains and snow, original forests, lakes and wetlands, archeological sites, mountains and other geographic features of cultural significance, great biological diversity.

Challenges

Despite the great potential, there are many challenges for tourism in this region. Many areas of the region remain underdeveloped. There is a notable lack of mutual confidence and exchanges among the people of the region. Visa procedures are difficult and inconvenient. There are also a lack of translators and specialists in international cooperation. Transportation remains a problem as well. Minimal work has been done in marketing and advertisement, and there is a lack of competent and efficient management of tourism initiatives in the 'special zone' envisioned.

Solution-What We Can Do?

We must conduct further and more detailed research into the tourism resources of the region. This should be based on a ‘cooperative approach’ that includes comparative studies and cultural diversification. This should be the basis of a plan to promote a region-wide and interlinked tourism.

Trans-border tourism considerations should be incorporated into larger transportation plans. These include plans for high-speed trains, larger or higher-capacity ports and airports, highway improvements and connectivity. The countries of the region should consider trans-border connectivity in their regional and national infrastructure and communication plans.

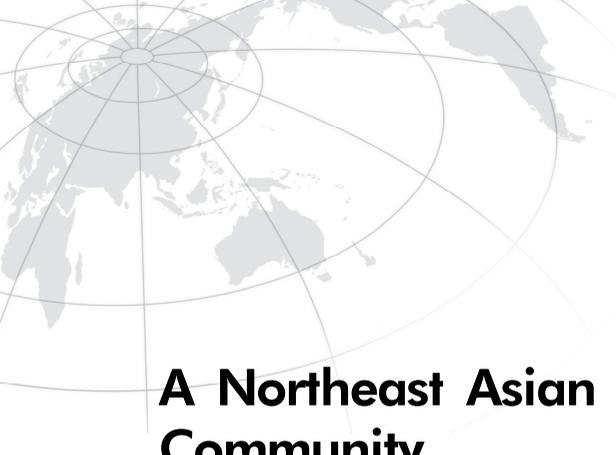
The trans-border areas of Northeast Asia should become centers for language learning and diversified cultural research. The variety of languages and cultural resources of border areas represent special and rich tourism resources.

The tourism industry must be developed through good market research. Tourism is somewhat special compared to other industries since it is still an emergent industry, and is highly seasonal. It is very sensitive, so when we evaluate the resources and conduct market research this should be incorporated into infrastructure building plans. We should not simply aim to build as much as we can. Infrastructure in line with tourism should be developed rationally. For example, Disneyland has been a great success in many parts of the world, yet its success in Shanghai has been limited by various factors. Because it has similar attractions in Tokyo and Hong Kong, it competes with them for tourists. Tokyo and Shanghai are both large shopping centers, we will see how competition among these two Disneylands unfolds. In my opinion, we should diversify tourist attractions so that the industry overall has more to offer and is more and more prosperous. The tourism industry has not been as closely linked to the economic recession as one might assume, and it acts differently to the real estate industry, since much tourism remains accessible to middle income earners.



Part IV

**Building a Northeast Asian
Economic Community**



A Northeast Asian Economic Community

Zhang Yunling

Northeast Asia is a region linked by geography, history, culture, people, and especially by current levels of economic integration. But the region has experienced complex changes in relations. Diverse national interests and divided geopolitics weaken the sense of and consensus over community-building among the peoples and policymakers of the region. In every region, there are diverse national interests, this is natural, but the fractious geopolitics of this region is unique and remains an obstacle to economic integration.

The Concept of Community

The concept and plans for a Northeast Asian economic community have long been a subject of discussion. Generally, China seems to take a cautious approach to the concept of community. However, there appears to be renewed interest in ‘community.’ Recently, China’s president Xi Jinping has discussed the ‘economic community’ and ‘destiny’ of this region. It is helpful then to clarify what community means in terms of the Northeast Asia region. Community, in this sense, is a way for people from different countries to live together based on shared interests, shared political will, and shared or agreed upon rules. Political will remains a big problem for this region. But Xi Jinping has described a ‘community of destiny’-and this can be interpreted as evidence of China’s ‘political will.’ A community of destiny is a value-driven community

based on common sense and responsibility. In Asia-Pacific there's been debate over whether the goal should be a community with a capital 'C' or a small 'c.' We seemed to have agreed on a small 'c' community. A small 'c' community is based on shared interests supported by activities, arrangements, and agreements. A capital 'C' community is also value-driven but its aim is more ambitious as it includes institution-building and governance. The Northeast Asian economic community (NEAEC) currently could be said to be a small 'c' community, and one in which the spirit of community is still quite weak.

Supporting a Northeast Asian Economic Community (NEAEC)

A NEAEC should have three pillars of support. One is economic integration-with an open market structure (Free Trade Agreements, for example) and high intra-regional share of trade and investment. At this writing, intra-regional investment in Northeast Asia is very low. Free Trade Agreements (FTAs) are still under negotiation, and we don't know how long these will take to conclude. Thus, Northeast Asia's economic pillar of support is still very weak. But the market is moving and changing so we must take steps to support it with a spirit of cooperation and proper economic mechanisms and policies. The second pillar of support is policy and political will. Policies require political will, without this, they cannot be enacted and implemented. The third pillar is public support; this is crucial. Although a NEAEC has been discussed since 1990s, it remains 'a dream.' The truth is that academics have long researched and promoted a regional community, but politicians have not taken it on board.

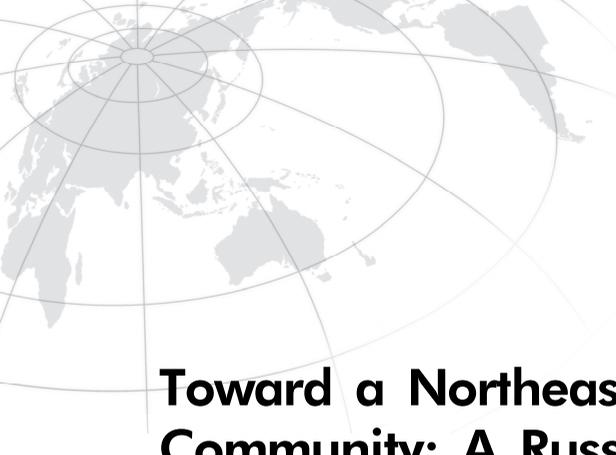
Therefore, a Northeast Asian economic community still faces many challenges. The first major challenge is that economic restructuring-may reduce intra-regional trade and investment. The second is the slow progress in China-Japan-South Korea Free Trade Agreement negotiations. The third major challenge is that China-Japan-South Korea cooperation is often interrupted by political and security problems. A Northeast Asian economic community should include Russia, Mongolia, and North Korea as well, but China, Japan, and South

Korea remain the central players in regional cooperation and community-building. Lack of progress in building functional institutions continues to impede a Northeast Asian economic community, although proposals such as the NEADB continue to be put forward and investigated. Implementation in Northeast Asia remains unsatisfactory. A final challenge is ‘uncertainty;’ the future of international relations in the region is uncertain. Whether it be relations among China, Japan, and Korea, or within and with the Korean Peninsula, or bilateral relations between any of these countries and Russia—there is no certainty or even predictability.

China supports Northeast Asian economic integration and cooperation in general, and places priority on Free Trade Agreements. China appears to favor the East Asian Community proposed by the East Asia Vision Group—the goal is a trade bloc that includes East Asia and Southeast Asia by 2020. However, a Northeast Asian economic community has not received the same kind of support or interest from China. This reflects the complex relations in Northeast Asia. In Track-3 discussions it’s been agreed to establish the East Asia economic community by 2020. There is no such agreement over a Northeast Asian economic community. A China-Japan-South Korea summit meeting is high on the agenda on all sides, but whether such a meeting takes place or not is highly dependent on the political environment. Cultural and people-oriented activities, including tourism are actively encouraged by the Chinese government. The trouble lies with political and security areas of cooperation. Given this situation, it may be wise for us to take a step back, to go back to a point of origin. Improvement of political and security relations in Northeast Asia, especially among China, Japan, and South Korea and the Korean Peninsula is key. Northeast Asia remains a divided region. A search through the internet reveals that, presently, there is little talk of ‘community.’ Instead, the focus seems to be on ‘national interest.’ Cultural exchanges have moved very quickly in this region, these may be slowing down. In the 1980s for example, there was a strong movement for people-to-people contact and cooperation in Japan. This is no longer so evident. In the area of education, there used to be a joint team devoted to textbooks, for example, but this has stopped. For a period, market trends and

market-oriented government policies seemed to be helping to overcome some political and security obstacles, but this does not appear to be happening now.

At the moment, a Northeast Asian economic community seems to be a dream, but a worthwhile dream and one to strive toward. Our continued efforts are necessary to realize this dream. Great patience is needed, but we will succeed.



Toward a Northeast Asian Economic Community: A Russian Perspective

Sergei Sevastianov

Introduction

Northeast Asia plays an increasingly important role for Russia, because Moscow aims to use its political and economic relations with Asian states to enhance the economic development and comprehensive security of the Russian Far East (RFE) and Eastern Siberia. From a classical Russia point of view, Northeast Asia encompasses northeast China, Japan, South Korea, North Korea, Mongolia, and the Russia Far East (RFE). In addition, from a geographical and political point of view, it is natural to look at Eastern Siberia as a region connecting European Russia with its Far Eastern territories. The Russian Federation government while proposing various plans to develop its eastern territories never separates the RFE and Eastern Siberia.¹⁾ This chapter is organized into four sections. In the first, RFE development plans are put into historical context, and the most critical aspects of modern Russian policy to develop the territories of the RFE and Eastern Siberia are examined. The second section discusses Russian regional policy in terms of the most promising areas

1) See, for example “Strategic Concept of Socio-economic Development of the Far East, Republic of Buryatia, Transbaikal Territory, and Irkutsk Oblast till 2025,” approved in 2009 by the Russian Government, at http://insor-russia.ru/files/insor_2009_English_1202.pdf; and “Program for the Development of the Gas Industry in Eastern Siberia and the Russian Far East till 2020,” approved by the Russian Ministry of Industry and Energy in 2007, at <http://bazazakonov.ru/doc/?ID=1608424>.

of functional cooperation. The third section focuses on Russian perspectives on and possible role in Northeast Asia integration. The final section analyzes subnational models of economic cooperation in Northeast Asia.

Past and Present of Russian Regional Policy in the Far East

Of special concern is the declining socioeconomic situation of the RFE (relative to other parts of Russia). This is mostly because tariffs on energy, fuel, transportation, etc., are much higher there than in other parts of the country, rendering local production uncompetitive. This has caused a prolonged negative demographic trend—over the last 20 years the RFE has lost about two million people, and its population now is only 6.3 million. A critical challenge for Moscow is how to stop or at least diminish the outflow of Russian citizens from the RFE to the more prosperous central part of the country. Under market economic conditions, the Russian Government could not simply increase salaries for the entire RFE population (as was done during the Soviet era). Instead, taking into consideration the abundant natural resources (especially energy) of the RFE, Moscow decided to introduce long-term plans to develop the RFE by allocating a sizable amount of the Russian federal budget to the construction of new infrastructure there (international energy power grids, oil and gas pipelines, high speed railways and highways, sea ports, etc.). The goal is to stimulate local and export business activity that will reproduce and become permanent—thereby creating high paying jobs, bringing in more taxes to local budgets, and finally stopping the outflow of the local Russian population. A major increase in public funds allocated to RFE development programs (from around one billion rubles in 2000 to 17.5 billion rubles in 2007) enabled progress in energy infrastructure projects, such as the East Siberia-Pacific Ocean (ESPO) oil pipeline, the Sakhalin-Vladivostok gas pipeline, construction of new railroads and ports, etc. Concurrently, Northeast Asia experienced faster economic and energy demand growth than other parts of the world, and Russia is the only country in Northeast Asia with sufficient diversified energy resources to sustain both domestic growth

and satisfy considerable export requirements. Thus, Russia proposed shifting an increasing share of its energy exports to Asia, and in July 2006 Putin made a commitment to increase the Asian share of Russian energy exports from the current 3% to 30% within 15 years.²⁾ This means that by 2020 Russia would sell to Asia a minimum of 60 million tons of oil and 65 billion cubic meter of gas per year. Thus far, the most measurable success is in new infrastructure development projects to transfer oil and gas to Russian and foreign consumers.

In 2012 the Ministry of the Development of the Far East was established. One of its main objectives is the development and implementation of the government program of '*Socio-economic development of the Far East and the Baikal region.*' In the autumn of 2013 Yuri Trutnev was appointed as the representative of the President of Russia in the Russian Far East, along with Alexander Galushka, who was appointed Minister of the Development of the Russian Far East. Galushka and Trutnev announced the so-called '*territories of advanced development*' (*a preferential regime for taxes and investments*) as the key mechanism for the development of the RFE. This basically treats these territories as free economic zones; however, it was suggested that the 'territories' would be established in areas where some groundwork has already been laid. On 29 December 2014, President Putin signed the law '*on territories of advanced socio-economic development in the Russian Federation.*'³⁾ Within the first three years such territories are to be established in the Russian Far East only. Later, they may be established in any part of the country. Business people wishing to obtain resident status in these territories are to sign an agreement with the authorities. After doing so they become subjects of a special tax regime and simplified business rules. Unlike the Russian special economic zones, which are controlled by the Ministry of Economic Development, the 'territories of advanced development' are controlled by the Ministry of Development of the Russian Far East. In 2014 the Ministry of Development of the Far East established one more office in Vladivostok, while President Putin announced

2) Putin, V., *Proceedings of President Putin's Third Meeting with International Discussion club "Valdai" Members*, 9 September 2006. Available in English at <http://www.kremlin.ru>.

3) <http://publication.pravo.gov.ru/Document/View/0001201412290024>.

Russia's intention to establish a customs regime for a free port in Vladivostok (covering the entire southern part of Primorsky Krai).

Energy and Transportation Infrastructure Development in Eastern Siberia and the RFE

Energy and transportation play a crucial role in the economy of Eastern Siberia and the RFE. Therefore, they have been chosen as Russia's strategic assets for economic integration with Northeast Asia. In recent years, Moscow has substantially increased public budget allocations to improve regional energy and transportation infrastructure in these parts of the country.

Moscow is interested in increasing the role of Northeast Asian countries in investing in oil and gas projects in Eastern Siberia and the RFE, and in transferring modern technology. Until recently, Moscow was unwilling to allow foreign companies a majority stake in any Russian oil and gas project. However, in February 2015 Deputy Prime Minister A. Dvorkovich stated at the Krasnoyarsk Economic Forum that he did not see any political obstacles to surrendering shares of over 50% in Russia's strategic oil and gas deposits to Chinese companies, except for projects on the continental shelf of Russia.⁴⁾ This statement reveals a significant change in the Kremlin's traditional approach to national control of oil and gas deposits and is due to the negative impact of economic sanctions and substantive drop in prices for oil and gas. Russia considers China to be the most promising destination for its energy exports as well as a main source of financial capital.

Russia is also interested in Japan's financial resources. During a Russia-Japan conference in November 2015, Igor Sechin, President of Rosneft, Russia's largest Russian oil company, claimed that his company was ready to grant Japanese companies standard profitable terms for projects to develop

4) "Dvorkovich Doesn't See Political Obstacles to Surrender Shares of over 50% in Oil and Gas Deposits to China," RIA Novosti (27 February 2015) at <http://ria.ru/economy/20150227/1049908556.html>.

Russia's strategic oil deposits. He claimed that signing such contracts would not require any further special consideration at political or administrative levels on the Russian side.⁵⁾

The Eastern Siberia-Pacific Ocean oil pipeline (ESPO) is a key Russian project to supply oil to Northeast Asia. ESPO-1 covers a section from Tayshet (Irkutsk Oblast) to Skovorodino (Amur Oblast); ESPO-2 covers a section from Skovorodino to Kozmino (Primorsky Krai). Proven reserves of the oil fields of Eastern Siberia and the RFE are sufficient for successful operation of the pipeline for at least another 30 years at the current level of supply. It is expected that 30 million tons of oil could be shipped to China (ESPO-1) and the other 50 million tons would go through Kozmino (ESPO-2) by 2020. At the end point of the ESPO-2 pipeline, Rosneft plans to construct a petrochemical complex.

Gazprom's so called *Grand Eurasian Strategy* envisages gradual unification of gas deposits at Western and Eastern Siberia into a joint resource system that will make it more reliable and thus fully serve the interests of domestic and foreign customers. To achieve this strategic goal, Gazprom is focusing on implementing three major projects: The Power of Siberia, The Power of Siberia 2 (in the planning phase), and the Sakhalin projects (Sakhalin 2 and Sakhalin 3).

In terms of potential economic and political benefits, the optimum strategy for Russia is a combination of gas supplies to China through the Power of Siberia pipelines with implementation of LNG projects to sell it to customers in East Asia. Regarding transregional transportation, two strategic routes are of great importance: The Trans-Siberian Railroad and the North Sea Route, and Moscow is taking measures to promote both.

As for trans-border cooperation in Northeast Asia, Russia and China are showing a growing interest in developing corridors between the ports of Primorsky Krai and the Northeastern Chinese provinces of Heilongjiang and Jilin. These Chinese provinces cannot effectively use Chinese domestic ports, because Dalian port is overloaded, making cargo transfer very expensive. Thus,

5) See https://www.rosneft.ru/press/news_about/item/177281/ and <https://www.rosneft.ru/press/news/item/176971/>.

Jilin and Primorsky are very interested in developing a transportation corridor: The Busan (South Korea)/Niigata (Japan)-Zarubino (Russia)-Jilin Province (China) corridor. While Heilongjiang and Primorsky Krai are interested in launching another transportation corridor starting at the southern ports of Primorsky (Vostochniy, Nakhodka, etc.).

Investing in the Rason Trade and Economic Zone (construction of an intermodal trans-shipment complex) and reconstruction of the railway between Khasan and Rajin have proven to be successful projects for Russia in North Korea. The primary goal was to encourage international container traffic from the station of Rajin along the Trans-Siberian Railway. The project implemented by Russia in Rason is part of an ambitious plan to connect the Trans-Korean Railway with the Trans-Siberian Railway which would result in the longest Eurasian transport corridor.

Russia's Potential Role in Northeast Asia integration

Moscow has strong economic interests in the Korean Peninsula, and it is interested in the eventual formation of a unified Korea. A unified or open Korean Peninsula could become Russia's gateway to East Asia. Without this, Russia's regional infrastructure development projects (that should boost exports of Russian natural resources) might remain indefinitely on hold. One such major project is the planned connection of the Trans-Korean railway with the Trans-Siberian railway to transit cargo from Korea and the Pacific to Russia and Europe. Another project is the planned electric powerline from the Russian Far East to South Korea via North Korea. But the real breakthrough project could be the gas pipeline to supply Russian natural gas from Sakhalin and Eastern Siberia to South Korea through North Korean territory.

The latest activity by North Korea, however, does not bode well. North Korea's nuclear test of 6 January 2016 and rocket launch on 7 February 2016 elicited a very strong reaction from Seoul-all trilateral projects on the Korean peninsula have been stopped. Weighing current political risks, several Japanese and Korean

firms have declined to start new investment projects in the Russian Far East.

Nevertheless, in an effort to attract more investment from Russian and foreign investors into new projects, the Russian Government has granted RFE territories more economic freedom to establish several ‘territories of advanced developments (TAD).’ In terms of Sea of Japan Ring economic integration, five TADS recently proposed by Primorsky Krai are of significance: the Rosneft petrochemical cluster, Zarubino seaport, Russian Island (research and development cluster), Mikhailovskiy Agricultural Park, and Nadezhdinskiy Industrial and Logistical Park.

There are some striking parallels if we compare Russian plans to develop the Primorsky region and Chinese plans to develop Yanbian Korean Autonomous Prefecture (YKAP). Chinese officials see the realization of the Greater Tumen Initiative (GTI) mostly in terms of multi-sector development of infrastructure in Yanbian. Hopes have been on the “Economic development region of Changjitu,” which includes the cities of Changchun and Jilin, and the region of the Tumen River estuary, including Tumen city. In April 2012, the State Council of the People’s Republic of China established a “pilot zone of international cooperation in the city of Hunchun,” bordering Russia. According to the plan, the pilot zone’s GDP volume could increase fourfold by 2020, this would have multiplicative effects on the economy of Russia’s Primorsky territory.⁶⁾ These plans correspond well with the most recent initiative by President Putin to introduce a special regime for a ‘free port’ in southern Primorsky Krai.

Subnational Models of Economic Cooperation in Northeast Asia

Subnational level cooperation between local governments (prefecture, province, krai, etc.) in Northeast Asia has taken many forms, from annual conferences run by multilateral organizations to ad hoc meetings between local

6) Sergei Sevastianov, “Subregional Cooperation between Yanbian and Primorye, and Possible Akita Involvement,” *Akita International University Global Review*, Volume 6 (2014): 3-12.

government representatives. Among the most visible are the Greater Tumen Initiative (GTI) and the Association of Northeast Asia Regional Governments (NEAR).

Tumen River Area Development Program (TRADP) and the Greater Tumen Initiative (GTI)

The Tumen River Area Development Program (TRADP) was initiated in 1995 by the United Nations Development Program (UNDP) and five member countries: China, North Korea, Mongolia, South Korea, and Russia. During its history the TRADP evinced several shortcomings:

1. The project never became a priority for the participating countries. As a result international financial institutions (the World Bank and Asian Development Bank) were not interested in supporting it.
2. Power was too concentrated in the leading donor's hands (the UNDP). This resulted in the neglect of participating states' interests and regional specifics thus decreasing the effectiveness of multilateral cooperation.
3. There was limited involvement of the business sector.
4. TRADP membership remained incomplete: the absence of Japan as a member and potential financial donor was keenly felt.

In 2005, to increase operational effectiveness, the TRADP evolved into the Greater Tumen Initiative (GTI) which is characterized by more genuine member-state ownership. In the case of Russia, this was evident in the priority given to the envisioned role of Primorsky Krai and Vladivostok as centers of economic growth, business activity, and regional cooperation.

The core decision-making institution of the GTI is the Consultative Commission which is composed of vice-ministers from the GTI member governments. The Transport Board, Trade Facilitation Committee, Tourism Board, Energy Board, and Environmental Board were created to strengthen

cooperation and coordination in five priority sectors.

In 2011, the GTI Consultative Commission Meeting in Pyeongchang, South Korea saw the establishment of the GTI Northeast Asia Local Cooperation Committee (LCC), a new unit tasked with promoting local government engagement-synergy in cooperation among local and central governments. The member states continued to stress the GTI's focus on transportation, tourism, trade, energy, and environmental cooperation, with the aim of transforming the GTI into a full-fledged international organization. The challenge of cross-border cooperation was raised by the local governments, who called for the simplification of border-crossing procedures and visa policies.

Regarding the engagement of Japan and North Korea (the latter officially withdrew from the GTI in 2009), progress is limited. Japan remains reluctant to join the GTI. Inclusion of the Japan Sea area into the GTI would have enhanced benefits as the Sea of Japan trade route is a very important part of the GTI transport corridor. It also would expand areas of cooperation to include not only sea transportation but also fisheries, under-sea resource development, etc., which are of interest not only to current GTI members but also potential ones such as, North Korea and Japan.

Another GTI weakness is insufficient representation, which currently stands at the vice-minister level. It should be upgraded to the prime minister or at least the vice-prime minister level to be more effective.

The Association of Northeast Asian Regional Governments

The Association of Northeast Asian Regional Governments (NEAR) was established in Gyeongsangbuk-Do, South Korea in 1996 under the initiative of regional governments from four Northeast Asian states, including China, Japan, South Korea and the Russian Federation (Mongolia and North Korea joined later), to promote active and smooth interaction and cooperation among various districts in Northeast Asia.

NEAR has implemented extensive exchange and cooperation projects in

various fields ranging from economy and trade to educational and cultural exchange, environment, disaster prevention, cross-border cooperation, science and technology, maritime affairs and fisheries, tourism, mineral resources development, energy and climate change, and women and children. Throughout the years NEAR has established an institutional structure.⁷⁾ The General Assembly is the supreme body of the association and it meets biannually. Subcommittees (13) have been established to address distinct fields of interregional cooperation. Subcommittee meetings attract up to several hundred people each time, with representatives from at least five of six member countries (North Korea is consistently absent) making NEAR the most representative international non-governmental organization (INGO) at the subregional level in Northeast Asia.

Conclusion and Recommendations

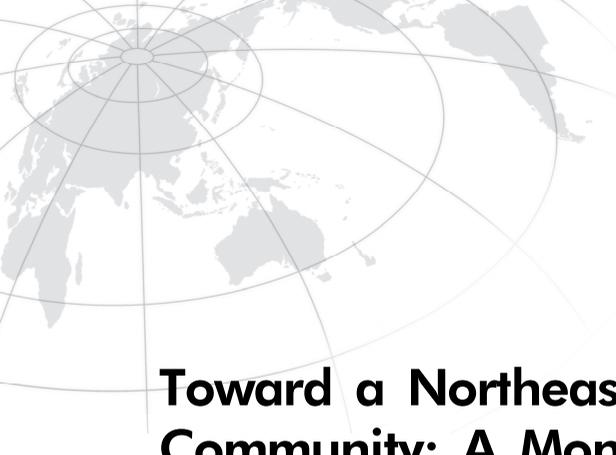
The continued deterioration of Russian-American relations has created preconditions for the formation of a new geopolitical reality, wherein Russia's 'pivot' to the East becomes inevitable. Hence more concerted efforts toward the realization of Russian-Chinese, Russian-Korean and other regional projects are likely. For example, the interests of Russian and Chinese businesses in creating effective transportation corridors (Primorye-1 and Primorye-2) are now fully matched, though some financial issues are not yet solved. From a Russian point of view, under a new geopolitical reality, China is a valuable strategic partner, this gives more importance to the Russian Far East's cooperation with its Chinese neighbors in Heilongjiang and Jilin, the Yanbian Korean Autonomous Prefecture (YKAP), and the border cities of Hunchun, Suifenhe, etc.

Russia is also exploring new ways to cooperate at the regional level with North Korea. In fact, since 2014, a series of high-level bilateral visits gave new impetus to trade, economic, and investment cooperation between Russia and

7) http://www.neargov.org/en/page.jsp?mnu_uid=2817&.

North Korea. The agendas of meetings between local officials were mostly devoted to concrete projects, especially in the sphere of agriculture.

Japan is the only country in East Asia that imposed economic sanctions on Russia, but they were mostly symbolic and did not have much effect on bilateral projects. The moment is right for Japanese businesses to engage more actively in regional cooperation projects. While trilateral projects thus far have been stalled, the prospects for bilateral economic projects between Russia and South Korea are promising, especially taking into account the opportunities afforded by new tax and investments regimes in the Russian Far East and especially in southern Primorsky.



Toward a Northeast Asian Economic Community: A Mongolian Perspective

Ganbold Baasanjav

Economically, Northeast Asia was the most rapidly growing region in the world for more than five decades. From around 2010, however, and because of the global economic crisis and the slowdown in China, the region's GDP growth has remained stagnant. It is predicted that Northeast Asia will soon recover from the global recession and regain its place as the world's leading economy-perhaps in two to three years.

From the political and security points of view, there are many concerns that continue to shape Northeast Asian perceptions such as tensions in the Korean peninsula, disputes over territorial sovereignty, maritime disputes, and long-running historical tensions. All hinder regional economic integration. There are also non-traditional security threats such as cybersecurity, climate change, and environmental degradation. However, these challenges also serve to highlight the need for multilateral dialogue and there has been some progress in promoting initiatives in this region. Examples of these include China's Belt and Road Initiative (BRI), South Korea's Northeast Asia Peace and Cooperation Initiative (NAPCI), Russia's proposal for a Eurasian Economic Union, and Mongolia's Steppe Road/Grassland Road Initiative-all of which could be complementary and help facilitate economic integration. Other regional and financial structures include the Asian Infrastructure Investment Bank (AIIB) and the regional energy cooperation mechanisms that are taking shape, like Gobitec and the Asian Super Grid.

As far as Mongolia is concerned, it is interested in easing tensions and

facilitating dialogue among Northeast Asian Countries. Mongolia is a small country with liberal political institutions and a market economy. It maintains friendly relations with all countries in the region including North Korea. Mongolia's dialogue has been quite successful. One of the initiatives started by the President in 2013 was a series of Mongolia-hosted regional conferences on trust-building. These conferences-among them the Northeast Asian Women Parliamentarians Conference-included the participation of North Korean delegates. Mongolia also hosted the Northeast Asian City Mayors conference for the third time. In July 2016, Mongolia hosted the Asia-Europe Summit for its largest gathering. Mongolia hopes to increase its regional profile while helping to build a Northeast Asian economic community.

The countries of Northeast Asia need to manage emerging challenges such as meeting rapidly rising energy demand. Northeast Asia attracts much attention for its energy security issues. The International Energy Agency (IEA) World Energy Outlook projects that demand in Northeast Asia will rise by 1.25 billion tons over the next 25 years. Improving energy security and tackling climate change are the greatest challenges which Northeast Asia faces today. This is about reducing greenhouse gas emissions for the next decades, like the UN and regional governments are trying to do. Mongolia is endowed with many kinds of mineral resources, including coal-about 160 million tons according to some estimates. But these fossil fuels are no longer in fashion, what other options are there? Fortunately, Mongolia is also pursuing renewable energy sources like wind and solar. Because Mongolia is at a high altitude it has great potential to produce wind energy. For solar energy, Mongolia has the Gobi Desert with all-year-round sunlight, so it has great potential for solar energy as well.

Mongolia is involved in two successful regional energy cooperation projects. One is Gobitec, a regional cooperative solar energy export project. Mongolia and China are considered excellent sites for photovoltaic (PV) systems to be integrated into a regional network. A second project is based on the findings of Korean researchers of coal-bed methane gas in Mongolia in the Gobi Desert. Mongolia is estimated to have about 40 million tons of methane, and the governments of Mongolia and South Korea are working on a feasibility study

to explore these coal-bed methane reserves. This project would require about US\$1 billion investment. If it is successful, the whole city of Ulaanbaatar could be powered by the gas.

How does Mongolia view these developments in Northeast Asia? In 2015 the presidents of Mongolia, China, and Russia, agreed to establish the China-Mongolia-Russia economic corridor-it represents a combination of the initiatives put forward by the respective countries. The governments of all three countries have been working on plans for this project. An important related document includes a list of priority projects. There are 32 projects to be initiated over the next five years including infrastructure projects such as, building roads, as well as, cooperation projects in industry, tourism, environment, science and technology, health, and humanitarian assistance. All 32 projects are open to investment from international financial institutions as well as those from China, Mongolia, and Russia.

Plans also include building railways to connect Mongolia with China's seaports, as well as alternate routes through Russia to its Far East seaports and North Korea's seaport. Mongolia plans to export raw materials such as coal. The next stage is to build oil and gas pipelines and the digital infrastructure to help further connect the region. An important question is how will these 32 priority projects and the planned economic corridor be financed? The Asian Development Bank, Silk Road Fund, Shanghai Cooperation Organization, and the New Development Bank are all potential options.¹⁾

From the Mongolian perspective, economic relations with Japan also are of great importance. In 2014 Mongolia and Japan signed a Free Trade Agreement (FTA); this is the first FTA Mongolia has signed with a foreign country. Based on this FTA, many products will be eliminated from custom duty and tariff lists. This will result in linking the Mongolian economy closer, not only to Japan, but to the regional economy as a whole. Mongolia is currently considering with which country or group of countries it will next enter into a

1) The New Development Bank was previously referred to as the BRICS Development Bank, it was established by Brazil, Russia, India, China, and South Africa-collectively called the BRICS states.

Free Trade Agreement. China and Korea are a priority. The FTA with Japan, will serve as a lesson for Mongolia and will likely influence its approach to further FTAs.

Mongolia is consciously striving to contribute to regional dialogue mechanisms. Mongolia wishes to take an active role in regional cooperation, in the production and export of renewable energy, for example. Finally, Mongolia is examining how best to be part of a regional FTA system, starting with its partnership with Japan.



Part V

**Financial Cooperation in
Northeast Asia**



Financing Issues: The Asian Infrastructure Investment Bank (AIIB)

Stanley Katz

The first annual meeting of the Asian Infrastructure Investment Bank (AIIB) was held in June 2016 in Beijing, China. At last count, 57 countries have joined the Bank. Neither the United States nor Japan is among them. Unlike the World Bank and the regional banks, the AIIB Board of Directors is not resident in the city where the Bank's headquarters are located but apparently will meet in Beijing from time-to-time as needed. The AIIB has only a small group of professional staff but has already named five vice-presidents.

The AIIB has produced several policy papers on various subjects of concern to the Bank (e.g., the environment). These policy papers were made available to attendees of the annual meeting. Notably missing is any analysis or commentary on the financing issues the Bank faces. Some of these issues are intractable and arise from an inherent conflict between the design of the Bank and the type of loans it intends to offer. Some of these issues may have been identified and addressed following the annual meeting. If so, their conclusions have not been made public (I have requested copies of any financial policy papers that are available to the public and am awaiting a response from the AIIB as of this writing.)

The AIIB announced at its annual meeting that it has approved financing for four projects. One is a stand-alone electrification project in Bangladesh; the other three are co-financed with the World Bank and the Asian Development Bank (ADB). As the co-financing modality, the World Bank and ADB will presumably "sell" to the AIIB some of the short and medium-term annual

payments (IOUs) due from borrowers.

This arrangement will permit the AIIB to avoid the difficult and time-consuming work of identifying and vetting projects and of negotiating loan terms and conditions with Pakistan, Tajikistan, and Indonesia. It is a way to get the new Bank up and running quickly. However, the AIIB will have to accept the amounts to be financed and the terms and conditions (e.g., maturities, interest rates, and grace periods, bidding and procurement arrangements, etc.) agreed upon by the World Bank, ADB, and the borrowers. These “piggy-back” arrangements permit the AIIB to substitute AIIB funds for funds the ADB and International Bank for Reconstruction and Development (IBRD-World Bank) had agreed to provide.

The “piggy-back” approach is not a viable long-term alternative for a development bank. It leaves unanswered the basic questions of how, where, and at what cost the AIIB will secure funds for on-lending for future infrastructure projects. In this regard, several funding questions must be addressed by AIIB management. Four of the more pressing ones are outlined below.

Exclusion from US and Japanese Capital Markets

A development bank is essentially an instrument that mobilizes surplus savings in advanced economies and transfers them to developing countries. The AIIB faces a basic problem because it is unable to borrow (i.e., sell its bonds) in two of the world’s most important capital markets: New York and Tokyo. Investment institutions in these two countries are unlikely to buy securities of an international bank that does not have the full faith and credit backing of their own governments.

Capitalization

The capital structure of the AIIB may still be a work in process. It is not clear, for example, how much the 57 member countries have actually “paid in” to the Bank in their national currencies and how much in convertible currencies; nor how much of their total commitments are callable in convertible currencies. Since the currencies of AIIB’s largest shareholders—China, Russia, and India—are not fully convertible, there may be a problem with the adequacy of security for investment banks who would otherwise agree to buy AIIB bonds.

A limited percent of a country’s initial capital investment that it pays in convertible currencies can be used to cover initial administrative, start-up costs such as staff, building, travel, communications, etc. The remaining portion that is callable in convertible currencies is an insurance policy for foreign commercial lenders who would use it to cover their exposure in case of bank failure or a major default.

For these reasons, none of the initial capital contributed by its 57 member countries to establish the AIIB should be used to fund the Bank’s on-going lending operations. These “ordinary” operations should be funded by resources obtained in foreign developed-country capital markets.

Capital Market Uncertainty

The main reason a country elects to tap overseas capital markets through a development bank intermediary is that these banks can usually secure funds at a lower interest cost and with longer maturity and grace periods than the country itself. However, low and negative interest rates in some European capital markets and Brexit have created great uncertainty. When the dust settles, there may be little reason, in terms of comparative costs and maturities, for countries that can tap the euro and sterling markets on their own to use the intermediation of the AIIB.

Meanwhile it appears that AIIB’s “ordinary” lending operations are to be

funded from China's initial US\$30 billion contribution for establishing the AIIB. This is inconsistent with the banking practice of the World Bank and ADB.

Maturity Mismatch

The AIIB was established to finance large, multilateral infrastructure projects that do not fit within the lending parameters of the IBRD or ADB. Infrastructure projects generally yield economic benefits over a long period, 40-years or more. That is longer than commercial lending institutions are willing to cover with their loans-typically 20-25 years.

To undertake such long-pay-out projects, the major development banks have opened adjunct funding arrangements (such as the International Development Association (IDA)-World Bank) to which member countries are periodically requested to grant funds for long-term loans for infrastructure projects. Through these adjunct funding arrangements, the IBRD and ADB have been able to finance infrastructure projects with maturities that extend beyond 20-25 years.

But more recently there has been a noticeable cooling of enthusiasm on the part of donor countries for replenishing (granting) financial resources for on-lending by special adjunct long-term funding arrangements, and at least one of these arrangements has been terminated. At the same time, there is growing recognition that multi-country loans create management and implementation (and graft) problems that can be avoided by country-specific loans. As a consequence, fewer regional projects have been proposed for financing than had been expected. The apparent shortage of bankable infrastructure projects will most likely adversely affect the AIIB's ambitious lending activities.



Financial Cooperation in Northeast Asia: How Japan and the Japan Bank for International Cooperation (JBIC) Contribute to Development

Maeda Tadashi

I have been involved in discussions regarding the establishment of a Northeast Asia Development Bank (NEADB) for over a decade. In my opinion, this is the best alternative to cement economic cooperation in the region.

Characteristics and Potential

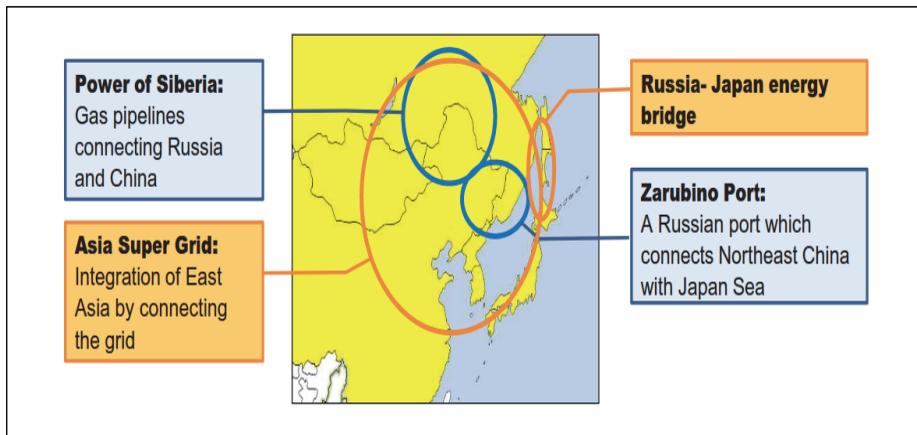
Characteristics

In all the countries of Northeast Asia, there are less developed areas. In Japan, these are the regions on the Japan Sea rim. In China, it is the northeastern provinces. And in Russia, it is the Russian Far East, in spite of Putin's policies to develop this region. Political sensitivities are also an obstacle to cooperation (e.g., the North Korean nuclear issue). Due to these regional variations (in population, size, economic development) and because of political obstacles, connectivity in Northeast Asia has not been achieved.

Potential

There are also many areas with economic compatibility potential, including the development of natural resources in Russia and Mongolia, the competitive labor force of northeast China and North Korea, and the technology advances in Japan and South Korea. Building mutually complementary relationships among these would enable sustainable economic growth. Already there are some examples of promising cooperation, such as the Russia-Japan energy bridge projects in Hokkaido, as well as Zarubino port (in Russia) that serves to connect northeast China to the Japan Sea. Collaboration with Russia on gas pipeline projects is also under discussion. Son Masayoshi, head of the Softbank Group, and other major investors, have expressed interest in an Asia Super Grid, a feasibility study on this is being conducted. Strengthening connectivity in the region is critically important to sustainable development and stability.

Figure 1. Cooperation projects in Northeast Asia



Financial Cooperation

The business strategy of the Asian Infrastructure Investment Bank (AIIB) remains unclear. I have had multiple meetings with the president of the AIIB, and there has been discussion of projects in Mongolia, Russia, China, and South Korea. The AIIB was originally conceived as a potential shift away from reliance on the World Bank or as an alternative to it. Recently, however, the World Bank's rules have been scaled back. Many believe there is a huge demand for infrastructure finance (US\$8 trillion according to AIIB research); in my view, however, there is no scarcity of funding. Liquidity is not the issue. Risk-taking capacity to make projects bankable is much more important.

Currently, sovereign lending is the conventional way of financing infrastructure. The potential share of government lending has been reduced significantly. What is the alternative? Public-private partnerships (PPPs) offer one alternative. Another that has been overlooked includes municipal, provincial, and state loans.

From a Japanese point of view, information-sharing on the goals of the Belt and Road Initiative (BRI) by the Chinese leadership has been lacking. Because of this, the BRI concept is not very popular in Japan. Some believe that the aim of the BRI is to establish Chinese hegemony over the region. I don't think this is the case. Others believe, the BRI is an effort to find new markets for China's overcapacity in production. I am a member of various international Track 2 organizations, so I have been involved in many meetings where the BRI is discussed-the BRI is a widely-misinterpreted concept.

In my view, cooperation among institutions such as the Russian Direct Investment Fund, the Far East Development Fund, the Bank for Development and Foreign Economic Affairs, the Export-Import Bank Silk Road Fund, and the Japanese Bank for International Cooperation will be very important to project implementation.

I have met many times recently with Chinese banks, and we are working toward creating a new mechanism to jointly invest in the Special Economic Zones of the Russia Far East. One of the key factors is financing for sub-sovereign

borrowers. Challenges include international sanctions against Russia and North Korea.

Figure 2. Financing mechanisms



The Role of Japan

Japan can participate in Northeast Asia development through a ‘Partnership for Quality Infrastructure Investment.’ Given Japan’s experience, it can help build long-lasting infrastructure that will not cost too much to maintain. Japan started high-speed railway construction in 1964 when it hosted the Tokyo Olympic games. Since then, there have been no deaths due to accidents on those trains. This is a remarkable achievement of technology and good maintenance. This ‘Partnership for Quality Infrastructure’ consists of four pillars and is to be implemented in collaboration with other countries and international organizations. To that end, Japan, in collaboration with a strengthened Asian Development Bank (ADB), will provide approximately US\$110 billion (about a 30% increase) for ‘quality infrastructure investment’ in Asia over the next

five years. The Japan Bank for International Cooperation (JBIC) will play a key role in this ‘partnership’ and provide risk financing.

Table 1. Four Pillars of a Partnership for Quality Infrastructure Investment

1st Pillar	Expansion and acceleration of assistance through full mobilization of Japan’s economic cooperation tools
2nd Pillar	Collaboration between Japan and the Asian Development Bank (ADB)
3rd Pillar	Measures to double the supply of funding for projects with relatively high risk profile by such means as enhancement of the function of the Japan Bank for International Cooperation (JBIC)
4th Pillar	Promoting ‘quality infrastructure investment’ as an international standard

Enhancement of JBIC Functions

In May 2016, the Japanese parliament approved the new charter for JBIC. The new charter calls for the enhancement of JBIC functions. These include, establishing ‘special operations;’ expansion of JBIC’s operations in local currencies (long-term borrowings from financial institutions as a means to procure local currency enables expansion of its operations in local currency); and diversification of JBIC’s assistance tools (new assistance tools for overseas infrastructure projects, e.g., acquisition bonds). These operations will enable JBIC to take further risks and provide funding for overseas infrastructure and provide a foundation for socioeconomic activities. The object is to further support Japanese companies expand their business in the field of overseas infrastructure projects such as those that use private funding and know-how. JBIC is aiming to create a special account that will enable it to take on more risk. Specifically, this could extend financing to sub-sovereign entities like regional and local governments. The starting date of operations is 31 May 2017 at the latest. It should be noted, that this can also provide some direction for a Northeast Asian Development Bank (NEADB).



Financing Cooperation in Northeast Asia: A Chinese Perspective

Zou Lixing

Many of us have long been dedicated to a tenet of ‘cooperation, equity, efficiency, innovation, and responsibility.’ How then are we to interpret recent changes in the international situation such as, Brexit, the Turkish coup attempt, and the deployment of Terminal High Altitude Area Defense (THAAD)? These international order changes are likely to have short-term, but not long-term effects. For instance, tension between global economic integration and political and cultural diversification seems increasingly acute. Despite this, in my view, a global system of one superpower and several major other powers will continue, and China will continue to reform and open-up as it modernizes.

We need to recognize the significance of promoting and preparing for the establishment of a Northeast Asian Development Bank (NEADB). The bank will create a new climate of peaceful development in Northeast Asia, and become an important multilateral cooperation mechanism in this region. The NEADB can also give momentum for the creation of a Beijing-Seoul-Tokyo economic circle, Tumen River area development, and China-Mongolia-Russia interconnection -including a high-speed corridor.

Because of this, it is important to determine what will be the relationship between a new Northeast Asia financial institution and the Asian Infrastructure Investment Bank (AIIB). How do we design a new NEADB? We need to fully utilize the long accumulated strategic resources already available to us.

Based on years of discussions on the topic of Northeast Asia development, I believe South Korea and Japan are positive and tentatively supportive of such

initiatives. The US and other countries also stand to benefit from this. Therefore, setting up the NEADB will provide more opportunities for US and Japan to participate in regional financial cooperation. Another important resource is technology. Over the years, the Northeast Asia Economic Forum has organized and supported technical research on the feasibility of establishing a Northeast Asia Development Bank (NEADB) and exploring the relative strength and weaknesses of various proposals for development financing mechanisms. There is a solid foundation already in place in the form of these studies.

What is still required is improvements in methodology and fresh approaches to promoting the preparatory work for and establishment of the NEADB. We also need basic guidelines for, *inter alia*, “cooperation in planning, building, and development for win-win results.” We also require commitments to observe the principles of “mutual trust, policy support, expert management, business models, risk-sharing, social responsibility, and common development.”

Initiatives from local governments and civil associations should be fully tapped, and academic groups such as the Chinese Association of Asia-Pacific Studies led by Jiang Zhenghua and the Research Center for Financial Cooperation in Northeast Asia should be given the support they need. These and other organizations and institutes can work to further improve feasibility plans, provide consultation services for related departments, and win support from the governments of Northeast Asian countries and the banking sector at large.



A Strategy to Facilitate Financial Cooperation in Northeast Asia

Lee Jai-Min

Recent Developments

The closure of Kaesong industrial plant by South Korea, exemplifies the extent of deterioration in North Korea-South Korea relations. Kaesong was the last remaining channel for exchange between South and North. Following the Kaesong closure, the UN security council imposed sanctions on North Korea in response to the latter's nuclear program tests. We cannot predict when such political uncertainty will improve. This makes discussion on a Northeast Asian Development Bank (NEADB) more difficult. Before 2015, South Korea strongly advocated for an NEADB on the precondition that North Korea stop its nuclear program. Unless the North Korea nuclear issue is solved, the South Korean government is unable to continue advancing the NEADB concept. This means inter-governmental discussions on the establishment of the NEADB will be delayed.

Therefore, for the time being, we need to lay the groundwork for the NEADB under the assumption that this situation will be solved in the long run. In this regard, I would like to emphasize two things that should be done now. The first is to design a master plan for the NEADB, and the second is to facilitate financial cooperation using already available instruments.

Designing a Master Plan for the NEADB

Since 1981, many research reports on the NEADB have been produced, but these only portray views from the research organizations of each country. Multilateral research is needed to better reflect multinational interests vis-à-vis the NEADB. In this context, I propose that research institutes of Korea, China, and Japan should work together to create a framework for the NEADB. South Korea can take the lead in this research project, which can be funded by the Korean government.

The results of this multilateral research could serve as a blueprint for action when inter-governmental discussion on the NEADB take place. Research should cover the following topics:

- Purpose
- Character
- Member countries and requirements
- Capital scale and principle of share allocation
- Headquarters location
- Organization
- Operating guidelines
- Types of financing
- Risk management
- Features of major cross-border projects and their finance requirements
- Cooperative relationship with the Asian Development Bank (ADB) and Asian Infrastructure Investment Bank (AIIB)

Initiating Financial Cooperation

Apart from conducting research, we need to move ahead to expedite financial cooperation. We have not seen enough cases of this yet. Accumulated experience in financial cooperation will eventually lead to the successful management of the NEADB.

The Greater Tumen Initiative (GTI) Export Credit Agency (ECA) Council

The GTI (Greater Tumen Initiative) is the only Northeast Asian consultative body with a secretariat dedicated specifically to the development of this region. In September 2014, the GTI established an Export Credit Agency (ECA) Council to seek financial cooperation opportunities. The GTI-ECA Council includes representatives from the Export-Import Bank of China (China Exim bank), Export-Import Bank of Korea (Korea Exim bank), Russia's Bank for Development and Foreign Economic Affairs (*Vnesheconombank/VEB*), and the Development Bank of Mongolia. The ECA Council serves as a platform for project information exchange and for discussions on financial cooperation opportunities in the region. It makes use of the network of export-import banks (Exim banks) and their staff to effectively promote financial cooperation. As the GTI is likely to turn into an international agency in the future, its membership is likely to be expanded, as will that of the ECA Council. We should include and actively seek the involvement of the Japan Bank for International Cooperation (JBIC) as well as US and EU members.

There are several tasks to be completed by the GTI ECA to see results. First, the council should become a permanent organization and expand its membership. Second, it should adopt instruments to facilitate financial cooperation in the region. I suggest that the GTI ECA Council create a multilateral development fund—a Northeast Asia Fund. The Council will need to identify a pilot project and provide financial support through timely use of the Fund. Bankability is one of the most important criteria for attracting private investment.

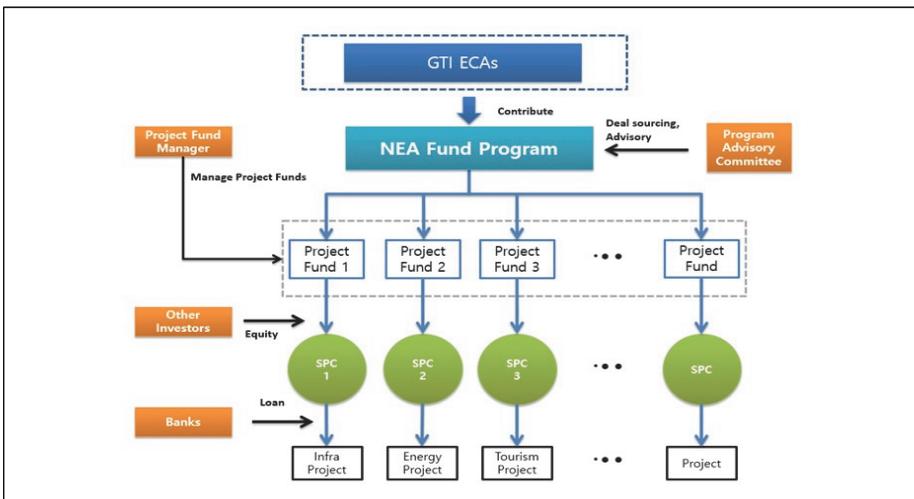
A Northeast Asia Fund

The establishment of a Northeast Asia Fund (the GTI ECA multilateral fund) could be spearheaded by the Korea and China Exim banks; each would have its own target market. At this stage this financing mechanisms might be described as a 'fund of funds' where capital is invested to finance multiple

projects. Each fund within the larger fund serves the purposes of each project.

Each project fund establishes its own special purpose company (SPC) for the construction and operation of a project. It could attract many institutional investors such as the AIIB, ADB, and other ECAs, as co-investors. If the project is deemed profitable, it could attract many private investors. Commercial banks can participate in lending under the guarantees of ECAs. The SPC can raise funds by issuing project bonds in the international capital market.

Figure 1. Structure of a Northeast Asia Fund



The procedures of a Northeast Asia Fund program can be outlined thus:

- Program leaders seek relevant investment opportunities
- Perform due-diligence and make independent investment decisions
- Once consensus is reached regarding investing in a project, the investment opportunity is proposed to prospective co-investors

- Co-investors perform their own discrete and independent due-diligence and make a final decision

Advantages of a Northeast Asia Fund

There are several advantages to establishing a Northeast Asia Fund. The first is that it makes it relatively simple to embark on financial cooperation. With only an agreement on co-investment signed by the GTI ECAs, the Northeast Asia Fund Program can be launched and financial cooperation is facilitated. Such a Fund does not require a sophisticated legal entity (a legal entity would likely require complicated procedures). The second advantage is that investors do not need to make contributions all at once. In the beginning, they can set the amount committed to the Fund. When a feasible project is identified, investors make partial payment of their total committed amount. The third advantage, is that political obstacles may be reduced and funding easier to attract since investment is made on a project basis. If a project is profitable, more private capital can be attracted.

Conclusion

In conclusion, we should not pause discussions on the goal of establishing the NEADB, regardless of recent political uncertainty. Until conditions are more favorable for inter-governmental discussions, we should continue to lay the groundwork for the NEADB. A master plan for NEADB should evolve out of studies by research institutes of China, Japan, and Korea conducted on a multilateral basis. Financial cooperation needs to be initiated by the GTI's ECA Council, which should create a multilateral fund as a financing mechanism.



Part VI

**Energy and Environment in
Northeast Asia**

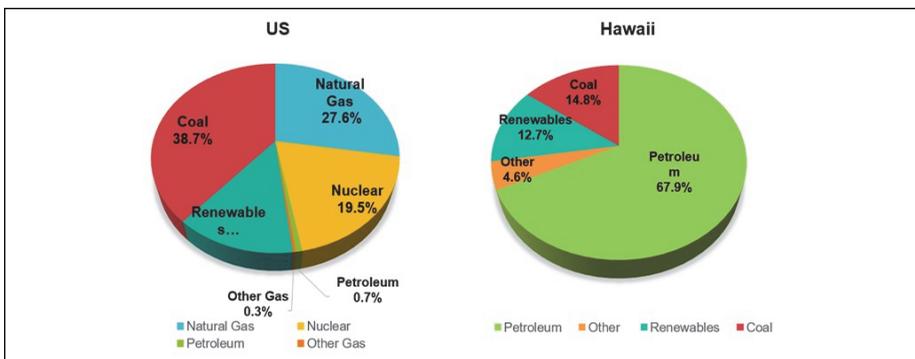
Hawaii's Current Energy Market and Prospects for Energy Generation

Oshiro Asahi and Denise Konan

Hawaii's Energy Market and Renewables

This chapter presents an overview of Hawaii's energy market. What is special about Hawaii's energy market? Hawaii has high solar adoption rates and as a result, it faces certain issues that the rest of the US has yet to encounter. Hence, Hawaii's present experience can serve as a 'postcard from the future' for the rest of the US and elsewhere.

Figure 1. Net energy generation by energy source (all sectors), 2014

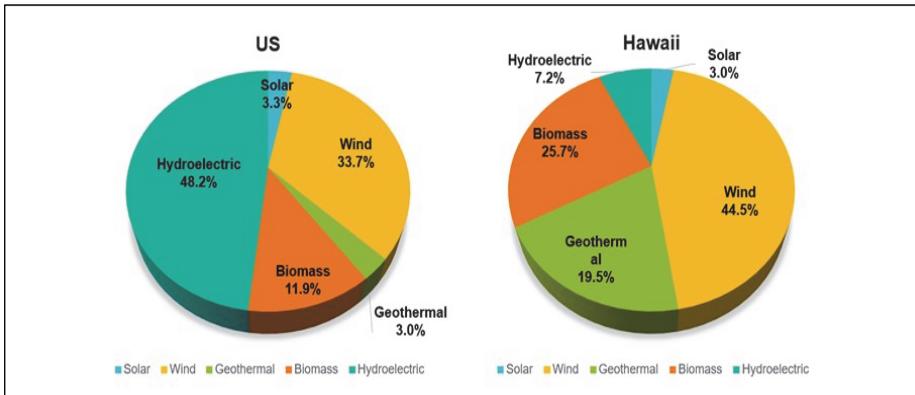


In the first section of this paper, I introduce differences in energy generation between the US and Hawaii to give a general idea of how Hawaii produces

energy relative to the rest of the US. Figure 1 shows Hawaii's heavy dependence on petroleum, and it should be noted that the state imports most of the petroleum it consumes. However, the portion of renewable energy in Hawaii has increased from 5.6% in 2004 to 12.7% in 2014; the US portion of renewables went from 8.3% in 2004 to 13.2% in 2014.

Figure 2 shows net energy generation for renewable energy for both the US and Hawaii. Hawaii has a plethora of wind and geothermal energy, hence wind and geothermal make up a significant amount of renewable energy generation, while the US has more abundance of hydroelectric power.

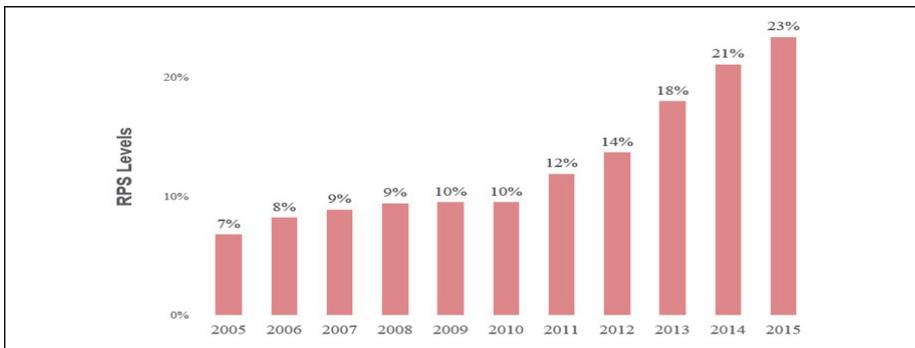
Figure 2. Net energy generation: Renewable energy, 2014



Hawaii's energy market is different from the rest of the US for several reasons. First, Hawaii has very high electricity prices, it has the highest prices in the nation with 32 cents charged per kilowatt hour (kWh). The reason behind these high prices is that Hawaii imports almost all its petroleum and electricity prices follow oil prices. In 2013, for instance, Hawaii imported 91% of the energy it consumed. Second, Hawaii is geographically isolated from the rest of the US, making it difficult to import energy from neighboring places to meet energy demands. Lastly, Hawaii is the first state to set the ambitious goal of producing 100% of its energy from renewable sources.

Hawaii has many natural resources, but achieving the 100% renewable generation involves planning and good policymaking. Renewable portfolio standards (RPS) are a policy that mandates electricity producers supply a share of their electricity from renewable energy resources. RPS targets vary by state. In Hawaii, energy generated by utility, independent power producers, and customer sited grid-connected sources count toward RPS. Thus far, Hawaii is on track to meet its RPS targets. The target for 2015 was 15% of net electricity sales, but Hawaii surpassed this target and achieved 23% of electricity sales from renewable energy. This achievement was mostly led by geothermal energy generation on the Big Island of Hawaii. Hawaii also has succeeded in solar adoption relative to other states in the US due to its high electricity prices. Renewable energy is cheaper for households in the long run—it is cheaper to install solar panels than to pay a high electricity bill of US\$200 per month.

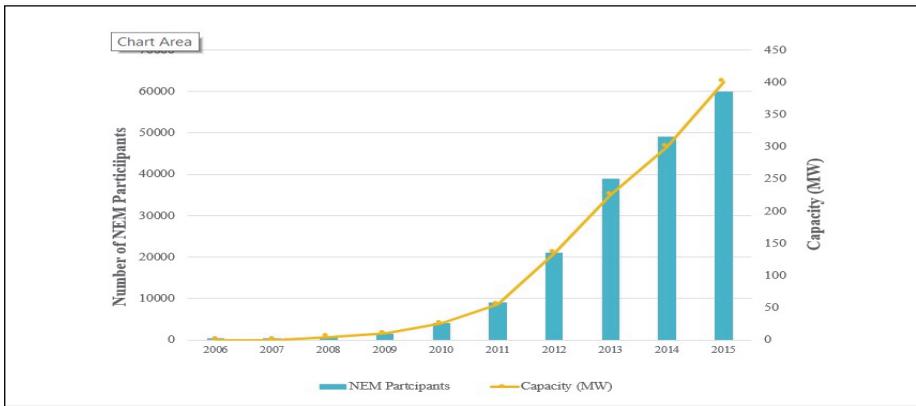
Figure 3. Renewable portfolio standard, 2005-2016



One key policy associated with installing solar panels is Net Energy Metering (NEM). NEM is administered by Hawaii's four electric utilities, and it allows customers to sell their excess energy generation to the utility for credit. This credit can be used if electricity is purchased from the utility. So for NEM, you are still connected to the grid, but you are sending excess electricity to the grid. However, NEM can become a burden for low income households who

cannot install solar because grid maintenance fees are transferred to households who do not have solar. To make things more fair and increase efficiency, Hawaiian electric grid maintenance introduced two new distributed energy programs, the Customer Self-Supply (CSS) and Customer Grid-Supply (CGS).

Figure 4. Changes in number of NEM customers and installed capacity, 2006-2015



CGS has certain distinct characteristics. Unlike NEM, CGS customers forfeit excess credits remaining at the end of the billing cycle. Instead of credits, customers receive lower rates for electricity exported to the grid. Finally, as with NEM, if the customer uses more electricity than exported, they pay for that amount.

Table 1. Locality and Credits

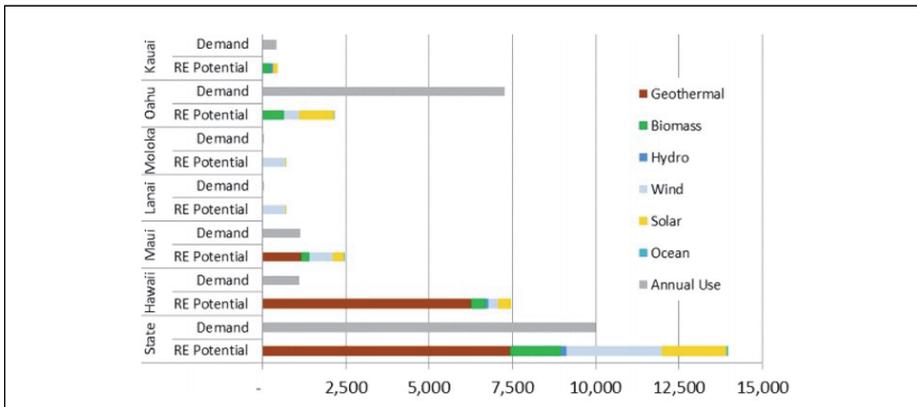
Island	Credit
Oahu	15.07 c/kWh
Hawaii	15.14 c/kWh
Maui	17.16 c/kWh
Molokai	24.07 c/kWh
Lanai	27.88 c/kWh

The Customer Self Supply (CSS) program is for customers who are not planning to export any electricity to the grid, and are planning to use storage technology. Customers are not compensated for any export energy to the grid. A residential customer will pay a minimum monthly bill of US\$25. And there is no cap on the number of customers that are allowed on the CSS program.

Challenges in Renewable Energy

There are two potential problems with solar installation in Hawaii. One is that Hawaii is geographically isolated from the rest of the US, which means if demand for energy exceeds supply, it can't import energy from neighboring areas in the way that California can, for example. Second, increased connection of solar photovoltaics (PV) on the grid can lead to over voltage causing harm to both utility and households. Hence, Hawaiian Electric Company (HECO) has halted new installation of solar systems on the grid. On Oahu, solar penetration has increased above daytime minimum load, which has led HECO to slow down the number of new permits. In Hawaii, the Public Utilities Commission (PUC) sets thresholds that cap grid capacity to be sourced from renewable energy. Once

Figure 5. Renewable potential and demand by island (gigawatts/GW)



threshold is reached, the PUC requires a grid interconnection study to demonstrate the addition installation of renewable energy sources will not be harmful to the grid. If a grid interconnection study demonstrates that addition of new solar installations is not harmful, then HECO will be able to increase solar penetration limits and allow more installation of new solar panels. Positive test results have led HECO to increase the penetration limit to 250% in 2015 (from 120%) of daytime minimum load.

Smart Grid and Microgrid Projects

To address Hawaii's over-reliance on imported oil, Hawaii's Public Utilities Commission (PUC) is examining the potential of Smart Grid and Microgrid Projects. One such project is the Oahu-Maui Grid Tie. This project envisions connecting the electricity grids of these two Hawaiian islands by a 200MW high voltage direct current cable. The two-way grid tie will allow Oahu and Maui to share resources to meet demand. The benefits of this include, reduced electricity rates, more stable electricity rates, reduced pollution, lower costs of environmental compliance, and increased use of renewables, energy development. There remain, however, concerns regarding the potential impact of undersea cables on the marine environment.²⁾

Another project is the JumpSmart Maui project with Hitachi. This project is looking at integrating renewable energy (PV and wind), smart grid technology, and electric vehicles into a new electric grid system on the island of Maui.³⁾

In conclusion, I hope that other countries can learn from the challenges faced and lessons learned in Hawaii, and apply the knowledge in a way that can benefit their energy markets.

2) For this information and further details see Hawaii State Energy Office at <http://energy.hawaii.gov/renewable-energy/oahu-maui-gridtie> and the State of Hawaii Department of Business, Economic Development and Tourism (DBET) publication on the interisland cable project at https://energy.hawaii.gov/wp-content/uploads/2014/02/CableFAQs_FINAL_Feb2013.pdf.

3) Hawaii Natural Energy Institute at <http://www.hnei.hawaii.edu/projects/jumpsmart-maui>.



Challenges Facing Electric Utilities in Japan: Liberalization, Security, and Decarbonization

Iinuma Yoshiki

This chapter analyzes main issues affecting Japan's electric utilities: market reform, electricity generation mix, renewable policies, and greenhouse gas policies.

Market Reform

Japan embarked on energy market reform about 20 years ago in response to differences in electricity prices between Japan and the rest of the world. Due to restructuring, from the 1st April 2016, domestic customers in Japan can choose from different suppliers. However, to date, only 2% of customers have changed suppliers. Nevertheless, as of 2016, all customers now are entitled to choose suppliers. The system should be largely unbundled by 2020 to ensure comparable services.

Japan's energy policy both reflects and impacts the country's electricity generation mix. In Japan, energy policy is re-formulated every three years. Japan's next plan will be formulated in 2017, the current plan is from 2014. The 2014 plan reflects the aftermath of the great accident at Fukushima nuclear plant and the resulting fear of nuclear energy. In 2013 the share of nuclear power was 0% because the operations of all nuclear plants were suspended following

the accident. The role of nuclear energy will very likely become a very contentious issue in the formulation of the 2017 plan, however, Japan cannot avoid the issue any longer.

Table 1. Evolution of Japan's Electricity Market Reform

1st Reform (1995)	<ol style="list-style-type: none"> 1) Introduction of power procurement bidding system for general electric utilities. Permission for independent power producers (IPPs) to enter the wholesale business (liberalization of wholesale supply) 2) Implementation of a system of 'special electric utilities' authorized for retailing in designated service areas 3) Introduction of an incentive system to encourage general electric utilities to improve efficiency (by introducing a yardstick system to assess their performance when they apply to raise electricity rates)
2nd Reform (2000)	<ol style="list-style-type: none"> 1) Liberalization of retailing for extra high voltage customers 2) Change from and approval system to a notification system for rate adjustments (e.g., reductions)
3rd Reform (2004)	<ol style="list-style-type: none"> 1) Liberalization of retailing extended to high-voltage customers 2) Establishment of a neutral body (Organization to Support Electricity Transmission and Distribution) 3) Introduction of a code of conduct for general electric utilities in transmission and distribution (information blocking, inhibition of discriminatory treatment, etc.) 4) Development of nationwide wholesale markets
4th Reform (2008)	<ol style="list-style-type: none"> 1) Activation of wholesale electricity exchange, and improvements in grid use competition conditions 2) Stable supply and environmental suitability (e.g., green energy trading)
Electricity System Reform (2012 to present)	<ol style="list-style-type: none"> 1) Expansion of cross-regional grid operation (establishment of Organization for Cross-regional Coordination of Transmission Operators/OCCTO) 2) Full liberalization of retail market entry 3) Legal unbundling of transmission and distribution, and abolition of retail rate regulation

Figure 1. Vertical integration of electric power companies

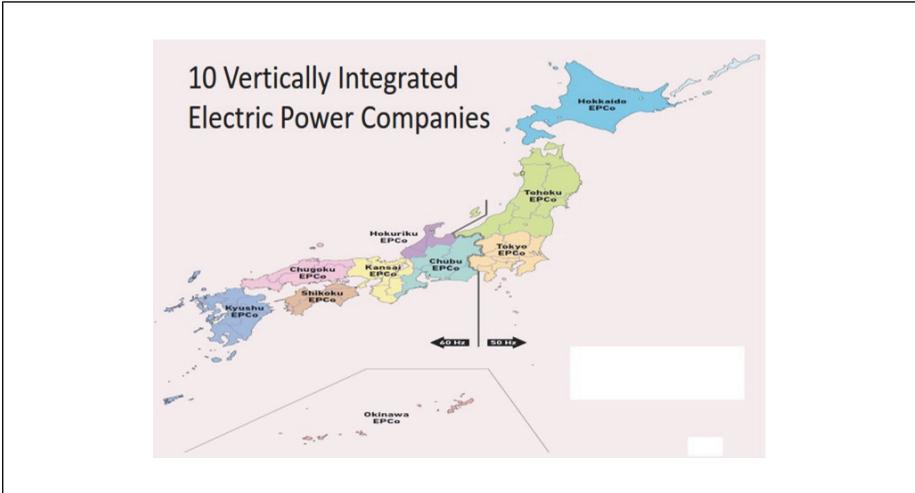


Figure 2. Structure of the electric power industry of Japan

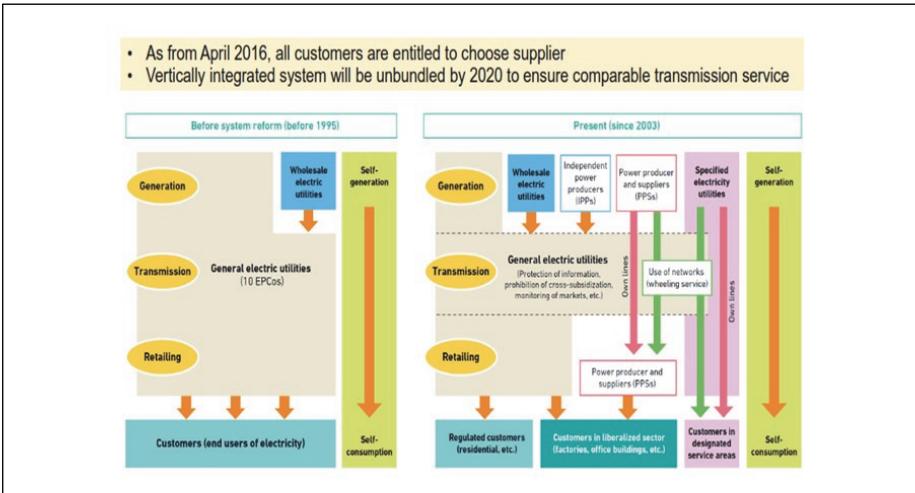
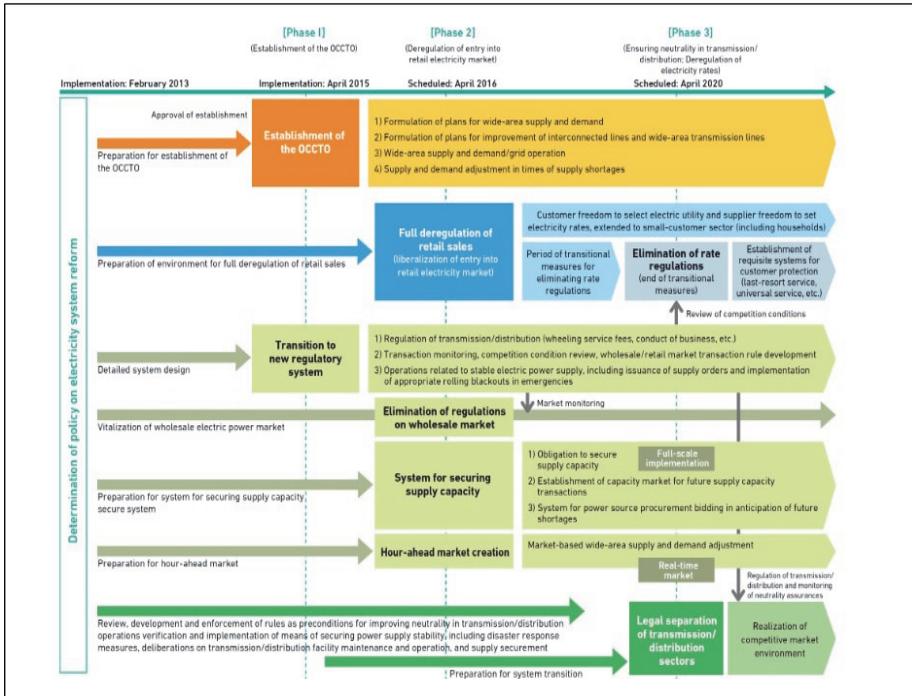


Figure 3. Japan's electric system reform policy

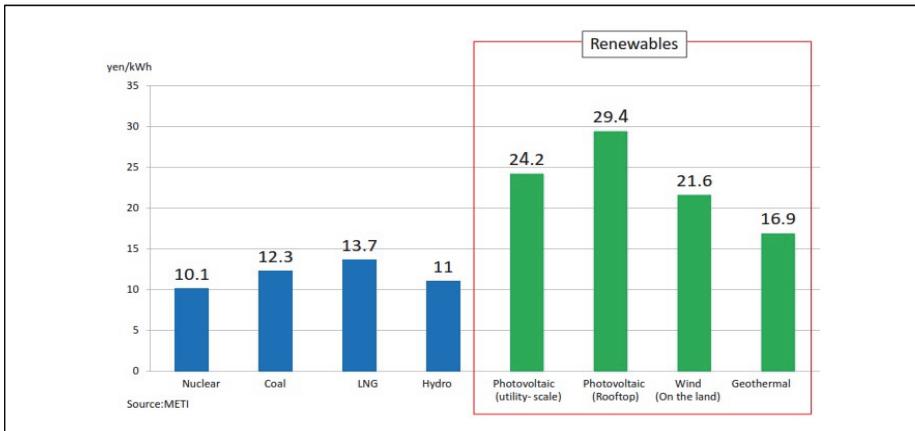


Looking at electricity generation cost by source, it is obvious that in Japan renewable energy is not yet cost competitive with other sources, however, costs are declining very rapidly. Photovoltaics (PV/solar) account for most of the increases in renewable energy production. A Feed in Tariff (FIT) was introduced in 2012; the FIT level has proven lucrative for PVs. Unlike PV, wind-based electricity generation has not increased much for several reasons. For rooftop PV transmission, lines are not needed, but for wind power, transmission lines are necessary to transfer electricity. It also takes several years to conduct environmental assessments to build wind power infrastructure.

Moving on to nuclear power, production has decreased because of safety concerns. Nuclear power units decreased from 54 units in March 2011 to 42

units as of June 2016. Utility companies are ready to restart nuclear power operations, but they are struggling to gain public support. Thus, the future role of nuclear power in Japan is uncertain. If utilities can't achieve their targeted share, newly constructed nuclear power plants will be needed-but it will be very difficult to find any local communities in Japan willing to welcome new nuclear power plants.

Figure 4. Generating cost by source

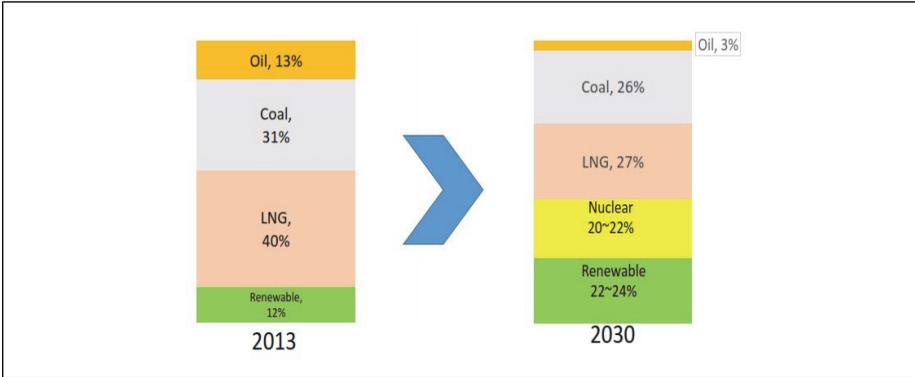


Source: Ministry of Economy, Trade, and Industry (METI)

Table 2. Feed in Tariff (FIT) in Japan (unit: yen)

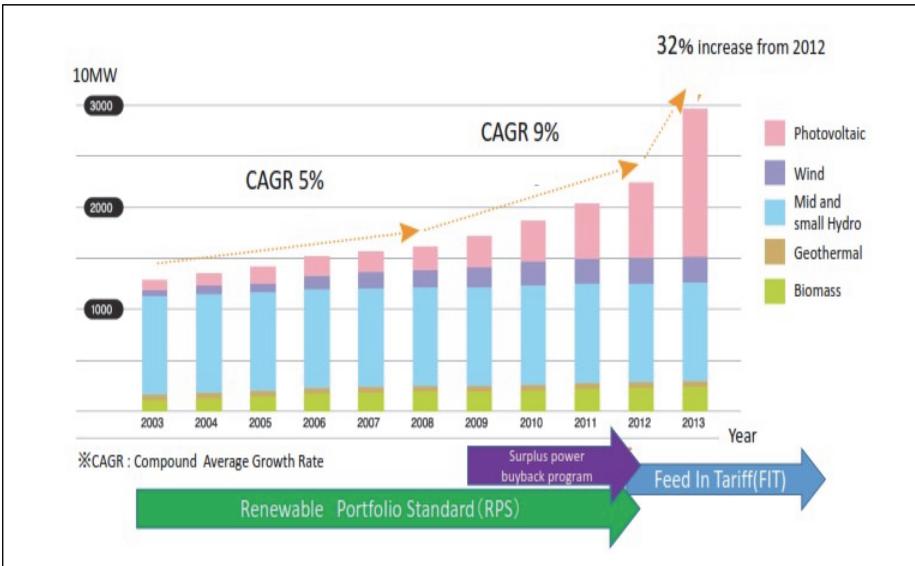
	2012	2013	2014	2015	2016
Commercial PV (>10kW)	40	36	32	29	24
Residential PV (>10kW)	42	38	37	33	31
Wind	22 (>20kW)				
	55 (<20kW)				
				36 (Offshore)	

Figure 5. Outlook for electricity generation mix in 2030



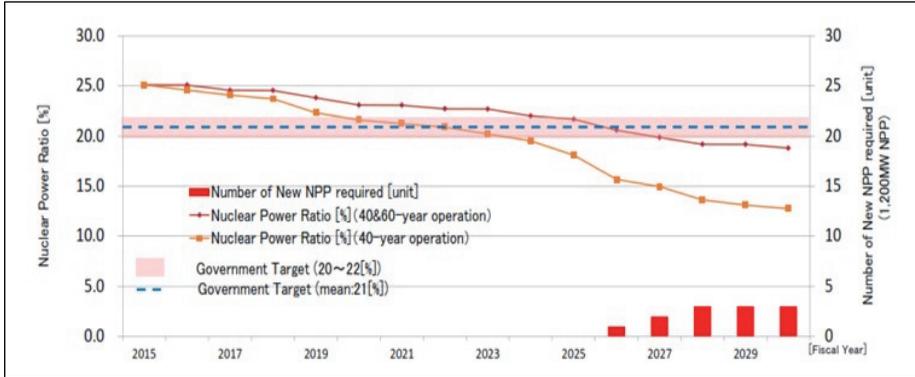
Source: Ministry of Economy, Trade, and Industry (METI)

Figure 6. Renewable energy capacity



Source: Ministry of Economy, Trade, and Industry (METI)

Figure 7. Uncertain future for nuclear power in Japan



Finally, regarding greenhouse gas (GHG) policies and targets, Japan's reduction target for GHG intensity is 26% below 2013 as a base year. This may seem ambitious, but that was a year in which Japan generated no nuclear power (see Figure 5), therefore, it could be easy for Japan to reach its target by just restarting nuclear operations.



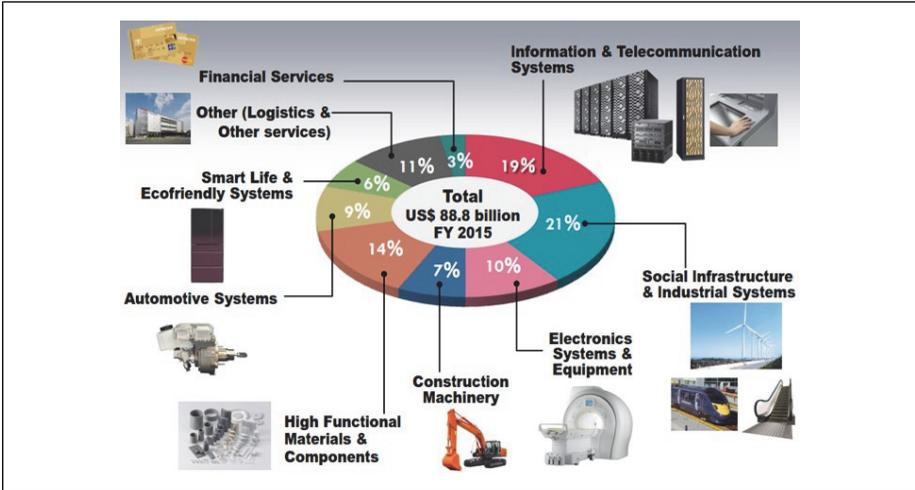
Hitachi's Energy Solution Activities

Sano Ken

The Hitachi Vision

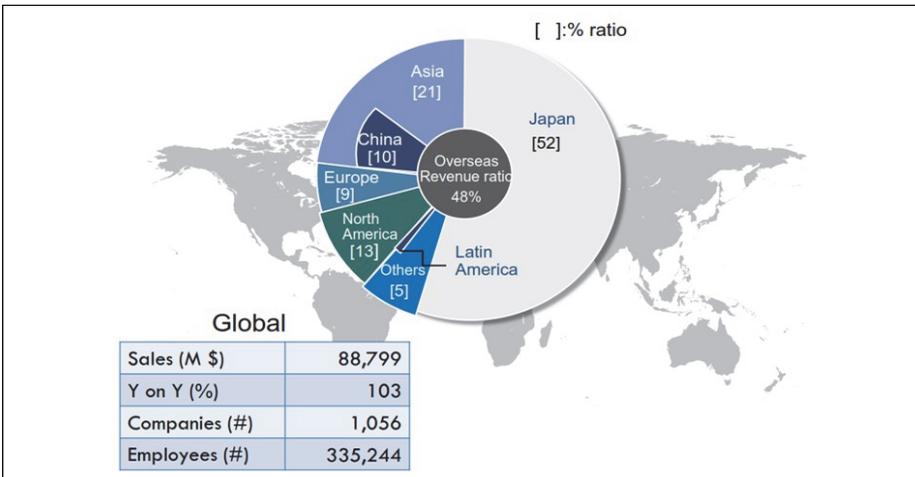
Hitachi is a multinational company, headquartered in Tokyo, Japan. The company is more than 100 years old and now has 336,000 employees. Its net revenue for the fiscal year of 2015 was US\$88.8 billion. Hitachi is involved in a wide range of businesses, a large portion of these are IT and telecommunication systems, but the company also does much work in the fields of social infrastructure and industrial systems. In China, we are now very active in products like elevators and escalators and conventional systems for power generation, mainly for large coal-fired power plants. Hitachi's revenue comes from all over the world: more than half of it is domestic (from Japan), but nearly 50% comes from outside of the country. Revenue from Asia accounts for 21%, including 10% from China-this makes China an important strategic market for Hitachi. Hitachi has articulated a three-year vision plan, and 2016 marks its beginning. The vision for 2018 emphasizes 'Innovation Power for the Information Technology (IT) Era.' Hitachi already has much experience in social innovation systems. What it is aiming to do now is become an innovation partner for the era of 'the Internet of Things' (IoT). Hitachi is focused on advanced social innovation businesses; systems in four key business domains: power-energy; industry-distribution-water, urban, and finance-public-healthcare. The goal is to provide a better future for people.

Figure 1. Consolidated revenue by segment



Note: Figures are on a consolidated basis.
Source: Hitachi, Ltd.

Figure 2. Hitachi revenues by region



Source: Hitachi Ltd.

Hitachi Energy Solution Concepts

Hitachi works on many areas of energy, from production/power generation, to transmission and distribution, to management, and IT systems supporting power retailing. There are many layers within the energy sector and with other sectors that can be combined to find the best solutions for customers. This chapter, introduces two examples of Hitachi projects: The Kashiwa-no-ha Smart City Project in Japan and the JumpSmart Maui project in the US (Maui, Hawaii).

Kashiwa-no-ha Smart City Project

Kashiwa city is located 25 kilometers away from central Tokyo. When a high-speed train connection service between the Kashiwa area and Tokyo began, the local government seized this opportunity to embark on an innovative urban project-the development of the Kashiwa-no-ha Campus (a sub-section of Kashiwa) as a Smart City Project. The idea was to establish a new city adopting the latest technology and an eco-friendly approach. The company selected for this endeavor was Mitsui, a leading land development company. In turn, Mitsui

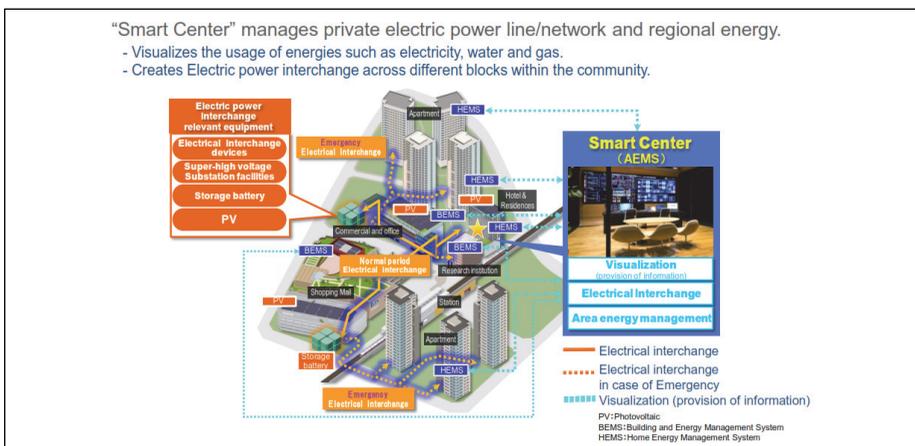
Figure 3. Kashiwa-no-ha smart city and Hitachi area energy management solution (AEMS)



Source: Mitsui Fudasan Company Ltd. and Hitachi Ltd.

picked Hitachi as a partner to provide cutting edge technology to the new campus city. They had three key targets: 1) an environmental symbiotic city, 2) a city of health and longevity, and 3) a city of new industry creation. Hitachi is involved in the first of these targets: providing energy management solutions. Kashiwa-no-ha City is both a new residential area and business area. As one can imagine each has different needs in terms of energy peak demand. Therefore, when one is at peak demand, the others can use batteries to store energy. In the evening, residential demand peaks and the office buildings (the business side) will send stored energy to the residential side. By doing this, peak demand is reduced as is the power that the city draws from local utility power lines. Moreover, because they're also filling their own battery systems, should a natural disaster strike, backup systems will already be in place. This is one example of Hitachi's area energy management systems/solution (AEMS)-an example of how energy demand and supply is collectively controlled. Such a system affords three main advantages: 1) it allows an eco-friendly lifestyle; 2) it suppresses peak electric power demand and reduces CO2 emissions; and 3) it maintains safety and security in case of a blackout. Kashiwa-no-ha Smart City

Figure 4. Hitachi AEMS for Kashiwa-no-ha-a 'smart center'



Source: Hitachi Ltd.

shows that a safe, secure, and sustainable city can be realized based on Hitachi's strengths in IT and 'control technology.' The three advantages or benefits of introducing AEMS, as delineated above, could be seen in cities throughout Asia.

JumpSmart Maui Project

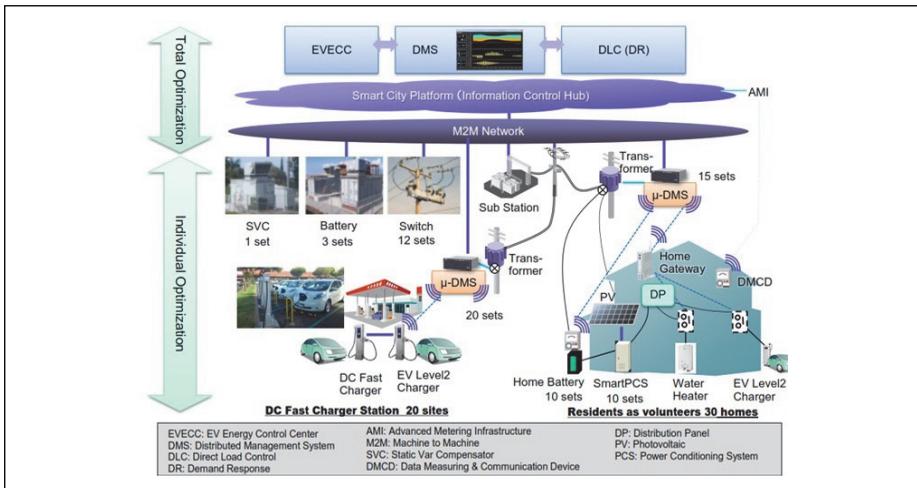
As discussed in an earlier chapter, Hawaii has the highest dependence on oil, by far, among the 50 states of the US. The share of oil-fired power generation is more than 70%, about six times that of Alaska (which has the second highest). If we include surface and air transportation as well as electricity, Hawaii relies on fossil fuels for 90% of its energy consumption. This contributes to the high price of electricity. Electricity prices in Hawaii are more than triple the US average price because of high crude oil prices. In response, Hawaii has set an ambitious plan to achieve 100% renewable energy by 2045, and concurrently reduce CO₂ emissions. Hawaii's targets include the goal of producing 40% of electricity from renewable energy by 2030 (compare with 10% in 2010). The share of renewable energy has increased significantly in Hawaii already. In Maui County, for example, 33% of electricity generated is from renewable energy. On August 2014, the Hawaiian Electric Company (HECO) set out a plan to increase the share of renewables to over 65%, to triple the amount of distributed solar energy, and to reduce electricity bills by 20%.

Hitachi is a partner in these endeavors through the JumpSmart Maui project. Maui has large-scale renewable energy resources. High photovoltaic (PV) and Electric Vehicle (EV) penetrations are expected. However, there will be fluctuations, and these represent challenges for the distribution system. Hitachi provides six cutting-edge solutions: 1) energy efficiency-maximum use of renewable energy; 2) stabilization and balancing with direct load control and load shifting as a demand response function, basically how to reduce peak demand and shift the demand; 3) electric vehicle infrastructure and quick charging stations (EV charger control and batteries); 4) cyber security, systems at each residence need to be secure, Hitachi provides reliable security systems to guard

information; and 5) an autonomous system-energy control via an autonomous decentralized system.

The project has been split into two phases. Phase 1 is already complete. Figure 5 shows the configuration for this Phase. First, there is total optimization, which is what local utility companies manage. Below that is individual optimization, which has been installed into each of the distribution lines that form a part of the project. We installed Static VAR Compensator (SVC), batteries, and switches.

Figure 5. JumpSmart Maui phase 1 system configuration

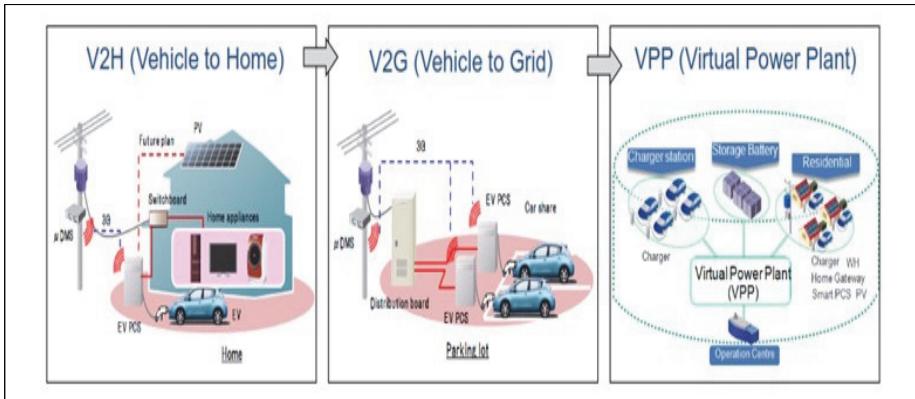


Source: Hitachi Ltd.

This is how it works. Maui Electric’s tower generates a lot of electricity. However, if the demand is low, most of the electricity generated would be thrown away. Instead, the excess is used to charge electric vehicles, even if people aren’t planning on charging at that time. If suddenly the wind stops, then electricity from the batteries can be sent back to the distribution lines, thereby keeping energy stable.

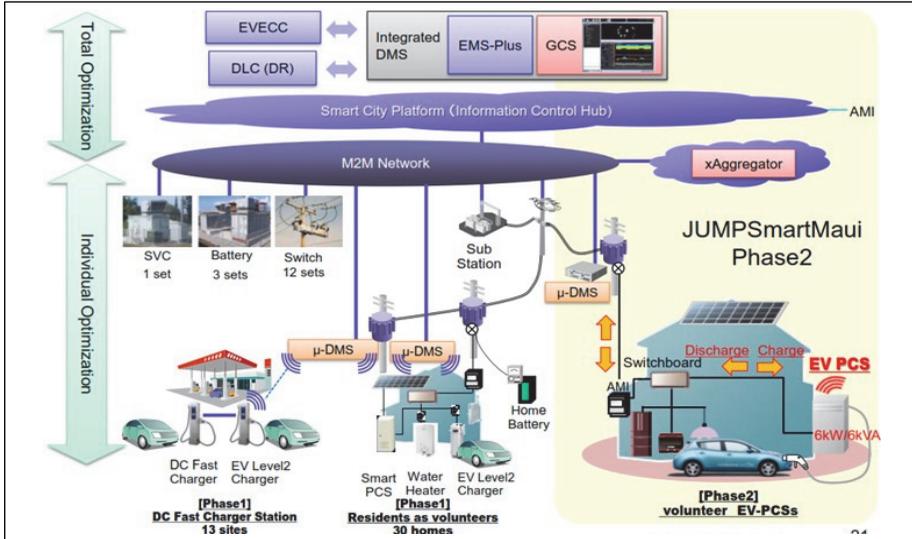
JumpSmart Maui is now in Phase 2 of the project. This is a critical part of the project, and the key term for this phase is VPP or Virtual Power Plant. The VPP works by aggregating and optimizing available distributed energy resources (such as EVs, storage, and home side energy capacity) to use optional energy sources. We already have 200 volunteers for this project with 200 electric vehicles which act as batteries connected to the power grid. If there is a shortage of electricity, the vehicles can send power back to the utility line. Should JumpSmart Maui prove to be a success, Hitachi's goal is to extend its technologies and experiences throughout Hawaii to support Hawaii's goal of 100% renewable energy by 2025.

Figure 6. Virtual power plant (VPP)



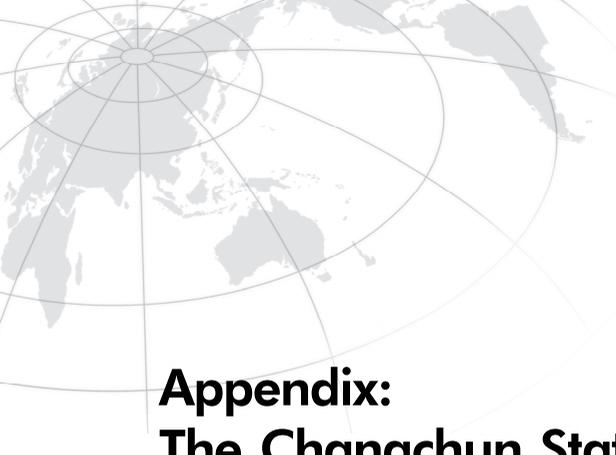
Source: Hitachi Ltd.

Figure 7. JumpSmart Maui Phase 2 system configuration



Source: Hitachi Ltd.

■ ■ ■
Appendix



Appendix: **The Changchun Statement and Agenda**

The Changchun Statement of the Northeast Asia Economic Forum

The 2016 Northeast Asia Economic Forum (NEAEF) was held in Changchun, Jilin Province, China from August 10-12, 2016. Hosted by Jilin University and its Northeast Asian Studies College and Center for Northeast Asian Studies, leaders and experts from China, Japan, Mongolia, Russia, South Korea, The United States, and the European Union gathered to advance the NEAEF mission of facilitating research, networking, and dialogue relevant to the economic and social development of Northeast Asia. The 2016 Forum addressed themes covering Jilin Province's role in regional economic development and cooperation, China's Belt and Road Initiative (BRI), cross-border infrastructure and special economic zones, tourism cooperation, building an economic community, financial cooperation, energy, and the environment—all within the context of Northeast Asia, one of the most dynamic regions in the world.

Dr. Cho Lee-Jay, Chairman of the NEAEF, officially opened the Forum, warmly welcoming the distinguished participants and noting its return to Changchun, one of the birthplaces of the Forum 25 years ago. This was followed by the welcoming remarks of Yang Zhenbin, Secretary of the CPC Committee of Jilin University who highlighted the University's importance to the themes of the forum and cooperation in Northeast Asia more broadly. Jiang Zhenghua, Former Vice-Chairman of the Standing Committee of the National People's Congress of China, Park Kwan-Yong, Former Speaker of the National Assembly of the Republic of Korea, and Stephen Cowper, Former Governor of Alaska also added generous congratulatory remarks to conclude an enthusiastic and high profile opening ceremony.

The Keynote Address of the 2016 NEAEF, “Promoting a Northeast Asian Economic Community,” was delivered by Tsuyoshi Yamaguchi, Member of the House of Representatives and Former Deputy Minister of Foreign Affairs of Japan. Mr. Yamaguchi set a challenging tone for the Forum, noting the recent tide of events including the UK voting to leave the European Union and trends in the US election process that have been undermining faith in regional cooperation. However, he ended with optimism about the potential of a Northeast Asian economic community, encouraging all participants to continue working toward this vision and articulating some potential instruments of progress such as continued free trade negotiations and a Northeast Asia Development Bank (NEADB).

The opening session, titled “Jilin Province’s Economic Development and Northeast Asia Regional Cooperation in the Context of the ‘Belt and Road’ Initiative” (BRI), opened with a discussion of the BRI as an example of a comprehensive, multilateral, and systematic platform for cooperation that was inclusive and different from typical regional organizations, involving both bilateral and multilateral economic cooperation. The BRI initiative also has the potential to connect with and build upon other regional organizations such as the Greater Tumen Initiative (GTI) and Asia Pacific Economic Cooperation (APEC). With its key position in northeast China, Jilin Province may play a key role in connecting Russia, Japan, and North and South Korea to the historic Silk Road trading route that the BRI aims to better integrate. There will be challenges including China’s slowing economic growth and the difficulty of financing projects in northeast China, and work will be needed to overcome political, economic, and cultural bottlenecks that have limited concrete advancement of cross-border trade in northeast China particularly.

The second session on “Cross-Border Infrastructure and Special Economic Zones in Northeast Asia” began with several presentations on two examples of Special Economic Zones (SEZs) in North Korea, namely Rason and Kaesong. The close links between economic development of North Korea and its military program were discussed, as well as the potential for SEZs to contribute to economic development, higher wages, improved communications, and manufacturing

infrastructure. Rason provides an example of the importance of maintaining cooperation between China and North Korea to ensuring success in jointly managed zones, in contrast with Kaesong, which was recently closed due to political tensions between North and South Korea. The session continued with a presentation on shipping and logistics in Northeast Asia, which outlined areas in which express container shipping, customs procedure integration, and coordinated information systems can greatly improve the integration of regional economies. Discussants commented on the ability of Mongolia to facilitate discussions, potential for Russia to provide energy across borders, and the further development of cross-border infrastructure and SEZs.

The third session on “Future Tourism Cooperation in Northeast Asia” explored some key issues in promoting both inbound and outbound tourism especially in Japan, China, and North and South Korea. Japan’s recent campaigns to increase inbound tourism were presented, as well as key steps for tourism activation, such as developing customized itineraries and products, alliances between different modes of transportation, simplifying travel documentation and visa procedures, managing greater seasonal activity, and improving human resources for local tourism including language and cross-cultural training. The Tumen River has many assets that have not been developed for tourism, and more research will be necessary to unlock the potential of the intersection of natural beauty and cultures in this area. It will also be important to determine how the modern integrated resort, which includes regulated gaming, can be responsibly developed in the interest of stimulating local economies while managing competition across the region. Discussants recognized the importance of conducting investment in tourism infrastructure in a realistic and market research-based way in order to avoid overinvestment or wasted resources.

The fourth session continued discussion on the theme of “Building a Northeast Asian Economic Community.” Presenters varied in their optimism about the likelihood of major progress toward this in the short-term, but united in their view that it is a dream worth fighting for and continuing to work for into the future. Recent regional development plans such as China’s BRI, South Korea’s Northeast Asia Peace and Cooperation Initiative, Russia’s Eurasian

Economic Community, and Mongolia's Steppe Road Initiative emerged from discussions as key building blocks to capitalize on, and presenters shared a number of national perspectives on the issues. Other points of emphasis included promoting people-to-people communication and advancing China-Japan-South Korea relations, which lie at the heart of Northeast Asia relations, particularly through the tripartite FTA that remains under negotiation. The ramifications of international trends were also debated, with many interesting proposals emerging. For example, the possibility of Northeast Asia using economic cooperation with the European Union as a tool to incentivize the United States to re-engage with global economic integration should election results push it toward insularism.

The fifth session explored "Financial Cooperation in Northeast Asia." Much of the discussion focused on the potential of the region to build new institutions of financial cooperation in addition to pre-existing institutions such as the Asian Development Bank (ADB) and the Asian Infrastructure Investment Bank (AIIB). The concept of the Northeast Asia Development Bank (NEADB) has been a core concern and topic at the Northeast Asia Economic Forum (NEAEF) for more than a decade, and presenters made a strong case for why such a bank would foster mutually complementary relationships and enable sustainable economic growth in the region. Particular emphasis was placed on distinguishing the NEADB from other transnational development banks, and clarifying its mission. Significant hurdles arose in multiple presentations, including tensions surrounding North Korea's nuclear program, uncertainty in global financial markets, uncertainty regarding callable capital, and difficulty avoiding national interest in building the bank's governance system. Other topics that were discussed comprised the possibility of lending to sub-sovereign infrastructure projects, how to identify projects that were bankable, how to increase limits on risk for development banks, and the importance of financial cooperation in promoting regional economic and political cooperation. The consensus was that planning for the NEADB should continue in spite of recent political setbacks, and research should be conducted through transnational collaboration to ensure multilateral buy-in and feasibility, principally, through the Northeast Asia

Financial Cooperation Research Center.

The sixth and final session examined “Energy and Environment in Northeast Asia.” A topic of crucial importance because of the region’s fossil fuel dependence and acute environmental challenges, presenters emphasized international trends such as low oil and gas prices as well as particular issues facing the domestic economies of Northeast Asian countries. Hawaii provided an example of how ambitious targets for renewable electricity generation can be achieved and Japan offered insights into the unique challenge of balancing nuclear energy with both safety concerns and greenhouse gas emission reductions. Crosscutting themes that emerged included the drivers and barriers to renewable energy adoption, equity concerns, the importance of appreciating the broader energy management landscape beyond just electricity generation, and how the private sector can be leveraged to drive innovation across the region. Discussants agreed that the future of energy in Northeast Asia remains uncertain and that regional cooperation will be crucial to promote sustainable development that both meets growing energy demand and addresses environmental challenges such as climate change.

In the closing ceremony, Dr. Cho Lee-Jay thanked all of the Forum’s participants for their open discussions and thoughtful presentations. He shared his optimistic perspective for the future of the Forum and wished for its continued contribution to regional peace and prosperity.

In spite of the many challenges in a very complex region, the conference ended on a high note, providing a renewed sense of commitment to pursuing a multilateral strategy focusing on greater functional economic cooperation in the Northeast Asia community.

Forum participants expressed appreciation for the support provided by the Freeman Foundation and other sponsors of the Young Leaders Program, now in its eleventh year. This year’s Young Leaders Program fellows represented China, Japan, South Korea, Mongolia, Russia, the United States, and the European Union. The program anticipates that the fellows’ attendance in the Forum will contribute to ensuring a long-term future of cooperation and friendship in Northeast Asia.

The Forum represented further progress toward the NEAEF goals and promoting understanding and relations among the peoples of Northeast Asia, North America, and Europe. In doing so, NEAEF expresses its sincerest gratitude to Jilin University and all volunteers, participants, partners, and cooperating institutions such as the Korean Institute for International Economic Policy, Korea Asia Pacific Institute, Japan Bank for International Cooperation, Japan Electric Power Information Center, Hitachi, China-Asia Pacific Institute, Northeast Asia Financial Cooperation Research Center, China Renewable Energy Society, Tianjin Municipal Government, Northeast Asia Tourism Forum, Track2Asia, and the International Expert Committee on Population Ageing and Longevity.

AGENDA

Annual Conference of the Northeast Asia Economic Forum

10-12 August 2016

Changchun, China

Organized by

Northeast Asia Economic Forum (NEAEF)

Hosted by

Jilin University

Northeast Asian Studies College, Jilin University
Center for Northeast Asian Studies, Jilin University

Cooperating Institutions

Korea Institute for International Economic Policy

Korea Asia Pacific Institute
 Japan Bank for International Cooperation
 Japan Electric Power Information Center
 Hitachi
 China Asia Pacific Institute
 Northeast Asia Financial Cooperation Research Center
 China Renewable Energy Society
 Tianjin Municipal Government, China
 Northeast Asia Tourism Forum
 Track2Asia
 International Expert Committee on Population Ageing and Longevity

Wednesday, August 10

18:30–20:00 Reception Dinner, hosted by Jilin University

Thursday, August 11

9:00–9:40 **Opening Ceremony**
 Chair:
Cho Lee-Jay, Chairman, Northeast Asia Economic Forum

Welcoming Remarks
Yang Zhenbin, Secretary of CPC committee of JLU

Congratulatory Remarks
Jiang Zhenghua, Former Vice-Chairman, Standing Committee of

the National People's Congress, China

Park Kwan-Yong, Former Speaker of the National Assembly,
Republic of Korea

Stephen Cowper, Former Governor of Alaska

10:00-10:50 **Keynote Address: Promoting a Northeast Asian Economic
Community**

Yamaguchi Tsuyoshi, Member of the House of Representatives
and Former Deputy Minister of Foreign Affairs, Japan

11:00-12:15 **Session 1: Jilin Province's Economic Development and Northeast
Asia Regional Cooperation in the Context of the Belt
and Road Initiative**

Chair:

Wang Shengjin, Director and Senior Professor, Center of Northeast
Asian Studies, Jilin University

Presenters:

Zhang Jianping, Senior Economist and Director, Department of
International Regional Cooperation, Institute for International
Economic Research, National Development and Reform Commission,
China

Li Tie, Director, Tumen River International Cooperation Institute,
Jilin Province, China

Wu Hao, Vice Dean, Northeast Asian Studies College, Jilin
University

Discussants:

Zhang Yanzhe, Professor, Institute of Governance and Policy
Analysis, University of Canberra

Kim Junyoung, Researcher, Department of Northeast Asian
Economics, Korea Institute for International Economic Policy

13:30-16:00 **Session 2: Cross-Border Infrastructure and Special Economic Zones in Northeast Asia**

Co-Chairs:

Glyn Ford, Director, Track2Asia, European Union

Cho Lee-Jay, Chairman, Northeast Asia Economic Forum

Presenters:

Glyn Ford, Director, Track2Asia, European Union

Anthony Michell, President, Korea Associates Business Consultancy

Zhang Huizhi, Professor and Vice Dean, Northeast Asian Studies College, Jilin University

Inoue Satoshi, Professor, National Graduate Institute for Policy Studies, Japan

Discussants:

Ganbold Baasanjav, Ambassador of Mongolia to the Republic of Korea

Dmitry Reutov, Head of Marketing, Dalzavod Co., Ltd, Vladivostok, Russia

Liu Zhiping, Vice President, Strategy and Research, SK China

16:15-17:15 **Session 3: Future Tourism Cooperation in Northeast Asia**

Co-Chairs:

Suzuki Masaru, Professor, Kyoei University, Japan

Cho Lee-Jay, Chairman, Northeast Asia Economic Forum

Presenters:

Suzuki Masaru, Professor, Kyoei University, Japan

Bo Bernhard, Executive Director, International Gaming Institute, University of Nevada Las Vegas; **Philip G. Satre**, Chair in Gaming Studies, University of Nevada Reno; and **S. Ray Cho**, PhD Candidate in Hospitality Gaming and Research Assistant, International Gaming Institute, University of Nevada Las Vegas

Zhao Lin, Professor, College of Engineering, Ocean University of China

Discussant:

Piao Yingai, Professor, Northeast Asian Studies College, Jilin University

Friday August 12

9:00-10:30

Session 4: Building a Northeast Asian Economic Community
Chair:

Lee Chang Jae, Distinguished Research Fellow and Former Vice President, Korea Institute for International Economic Policy

Presenters:

Zhang Yunling, Member, National Committee of the Chinese People's Political Consultative Conference; Academy Member and Director of Division of International Studies, Chinese Academy of Social Sciences

Jeong Hyung-Gon, Senior Research Fellow, Korea Institute for International Economic Policy

Sergei Sevastianov, Director, Asia Pacific International Institutions and Multilateral Cooperation Studies Center, School of Regional and International Studies, Far Eastern Federal University, Russia

Ganbold Baasanjav, Ambassador of Mongolia to the Republic of Korea

Glyn Ford, Director, Track2Asia, European Union

10:45-12:15

Session 5: Financial Cooperation in Northeast Asia

Co-Chairs:

Cho Lee-Jay, Chairman, Northeast Asia Economic Forum**Wang Shuzu**, Former Vice Mayor of Tianjin, China

Panelists:

Stanley Katz, Former Executive Vice President, Asian Development Bank**Maeda Tadashi**, CEO, Executive Managing Director, Japan Bank for International Cooperation**Zou Lixing**, Vice President for Research, China Development Bank**Lee Jai-Min**, Professor, Korea Maritime University; Former Vice President, Korea Export-Import Bank

Discussants:

Hong Jae Hyung, Former Deputy Prime Minister and Minister of Finance, Republic of Korea**Zou Ping**, Chairman, China Asia Pacific Institute**Zhang Xiaoyan**, Vice Secretary General, Tianjin Municipal City**Liu Lanbiao**, Associate Dean, School of Finance, Nankai University; Executive Director, Research Center for Financial Cooperation in Northeast Asia

13:15-14:45

Session 6: Energy and Environment in Northeast Asia

Chair:

Stephen Cowper, Former Governor of Alaska; Chief Executive Officer and Chairman, Alpha Wolf Production Inc.

Presenters:

Denise Konan, Professor and Dean, College of Social Sciences, and **Oshiro Asahi**, Research Assistant, University of Hawaii at Manoa**Iinuma Yoshiki**, Director, Research Department, Japan Electric

Power Information Center

Sano Ken, Manager, Government and External Relations Division,
Hitachi, Ltd.

Discussants:

Tarui Nori, Professor of Economics, University of Hawaii at Manoa

Chen Zhiguo, Professor, Northeast Asian Studies College, Jilin
University

15:00-16:00

Closing Ceremony

Chair:

Cho Lee-Jay, Chairman, Northeast Asia Economic Forum

Changchun Statement

Closing of the 2016 Annual NEAEF Conference

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2016

- 16-01 Consensus Toward a Northeast Asian Economic Community
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- 16-02 2015 Trans-Pacific Intellectual Dialogue
Chul Chung, Charles E. Morrison and Mark Thoma

2015

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2010

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2009

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Co-authors

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