

TRADE AND DEVELOPMENT REGIONAL FORUM 2017

Linking Trade and Development
For Inclusive and Sustainable Growth

19-20 July 2017
Bangkok, Thailand



**The International Institute for
Trade and Development (Public Organization)**

IN PARTNERSHIP WITH
Minister of Education

Department of International Economic Affairs, Ministry of Foreign Affairs

Department of Trade Negotiations, Ministry of Commerce

The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)

Thailand Convention and Exhibition Bureau (TCEB)



TRADE AND DEVELOPMENT REGIONAL FORUM 2017

@ Pullman King Power Hotel, Bangkok, Thailand

(Preliminary Programme)

Linking Trade & Development for Inclusive & Sustainable Growth

Background

We are currently experiencing fundamental changes in the patterns of globalization which will have profound implications on current and future trade, development and investment. For instance, within the trade development space, there are currently three important forces playing out in the global policy arena.

- A growing support for trade development especially for developing countries i.e. the newly enshrined WTO Trade Facilitation Agreement on Feb 22, 2017 and the regional framework for Cross-border Paperless Trade Agreement in ESCAP region in 2016 and the e-Trade for All Initiative by UNCTAD announced in 2016, under the Nairobi Meeting.
- A growing resistance to globalization and preferential free trade agreement, have become more apparent in the past decade or so, exacerbated by the economic slow-down and jobless growth in specific sectors of the economy.
- The arrival of the digital technology, the Internet and countless breakthroughs in the field of science and technology, will level the playing field for everyone just as the old adage "Rising Tide Lifts All Boats." This means developing countries can leapfrog ahead and skip the industrial era straight into the post-industrial development era.

Any technology presents both opportunities and threats. But an important factor to consider when adopting digital technology are their implications such as rendering many trade agreements or provisions obsolete and unfit for the digital economy. Or economic development policies that must be examined in greater depth and adapted for the coming changes i.e. technological deflation effect and jobless growth.

Sustainable trade development under the United Nation's Sustainable Development Goals 2030 framework has earmarked trade-led development as the strategy to bridge the social and income inequalities. There are undoubtedly many moving parts to this new equation and at the outset, will require a new approach to policy making.

This two-day forum organized by the International Institute for Trade and Development (ITD) is certainly an opportune occasion to shed light and explore new paths towards inclusive and sustainable development in a disruptive world clouded by a revival of populism and growing protectionism.

The endorsement of the new WTO Trade Facilitation Agreement and other initiatives to reduce trade cost are helping to level the playing field to smaller businesses and entrepreneurs including from emerging and developing countries to be engaged more in trade activities. *(Session I)*.

The disruptive impact of the digital revolution is both a source of opportunities and challenges but a fine management of the digital transition will enhance the role of e-commerce as a key tool for inclusiveness in trade and the general theme on *Digital Economy and Digital Trade (Session III)*.

Despite a challenging global environment, growth in Asia has remained steady but in the context of uncertainty, only deeper regional integration and cooperation will help the region, (ASEAN and the CMLVT) to enhance economic resiliency and support inclusive and sustainable development. Deepening ongoing integration such as the AEC *(Session II)* and exploring new approaches such as the *One Belt One Road Initiative (Session IV)* will offer the region's an alternative growth avenue that it could be looking for.

Other solutions to link trade and development for inclusive and sustainable growth will require a new paradigm and a new mindset. In the case of emerging conversation on *Global Value Chain (GVC)*, studies made by World Economic Forum, the World Bank Report and the EU study clearly highlight the significant opportunities. *Circular Economy* presents to developing economies whom are not only well placed to take full advantage of this new economic model but possibly, outpace developed or advanced economies. This model departs from the traditional "take, make, and dispose" approach, which adopts a new approach to production and consumption through a close loop system using the 3Rs (recycle, reuse, repurpose) *(Session V)*.

To overcome obstacles towards Agenda 2030, Asian policymakers need to adapt swiftly to a new development paradigm where economic growth is no longer enough as a policy response to enhance inclusiveness and sustainability goals. This means policymakers must explore alternative development funding beyond the conventional foreign direct investment (or FDI) channels e.g. taxation, social bond *(Session VI)*.

The fourth industrial revolution and the exponential pace of innovation have deep implications on human development and education. From technological innovation, growing youth employment and ageing society, the policies around human capital development must incorporate how future of trade and investment trends will affect production systems and the nature of work while crafting an education system that is fashioned for the times *(Session VII)*.

Day 1

08.30– 09.00	Registration
09.00 – 09.40	Welcome Remarks by Dr. Kamalinne Pinitpuvadol - Executive Director, ITD, Dr. Mia Mikic - Director, Trade, Investment and Innovation Division, UNESCAP Mrs. Veeraya Puttibundit - Human Resource Officer Expert Level, Department of Trade Negotiations, Ministry of Commerce, Thailand Opening Remarks by Dr. Sophon Naphathorn, M.D., Vice Minister for Education, Ministry of Education, Thailand
09.40 – 10.40	Keynote Speech by Dr. Supachai Panitchpakdi, WTO Director- General (2002-2005), UNCTAD Secretary-General (2005-2013) <i>“A New Paradigm in Trade and Development in the Age of Rising Protectionism and Populism”</i>
10.40 – 11.00	Opening Ceremony for ITD's Exhibition Coffee Break
11.00 – 12.00	Session I <i>The New Trade Facilitation Agreement: A New Horizon for Developing Countries</i> Theme: The new Trade Facilitation Agreement (TFA) which came into force on 22 February, 2017 heralds an important milestone for global trade development. For the first time, the global trade regime will be focused on substantively reducing trade cost across the board. Additionally, it will have direct implications on emerging issues such as the Global Value Chains (GVCs), sub-regional integration, the South-South trade systems, resource efficiency, inclusiveness and transparency. This session provides a state of play of the current trade facilitation in Asia Pacific in particular the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (FA-PT), a unique and the region/ global's first platform of its kind to address paperless cross-border trade. Equally imperative will be the discussions around recommendations in terms of complementary policies, regional cooperation and specific capacity building initiatives needed in light of these promising new developments. Speakers: 1. Poul Hansen - Trade Facilitation Section, UNCTAD Geneva 2. Yann L. Duval - Trade Facilitation Section, ESCAP Moderator: Duangthip Chomprang, ITD

12.00 – 13.00	Lunch Break
13.00 – 14.00	Keynote Speech by Dr. Surin Pitsuwan, ASEAN Secretary-General (2008-2012) “New Geopolitical Challenges to Regional Cooperation and Integration”
14.00 – 15.30	Session II Connectivity, Development & Regional Integration- The Agenda for CMLVT (Cambodia, Myanmar, Laos, Vietnam, Thailand) Theme: AEC Blueprint 2025 proposes a vision towards an integrated, cohesive, competitive and innovative economy with increased cooperation and connectivity among ASEAN Member states. However progress is slow and much still needs to be done to achieve the AEC four pillars and enabling ASEAN to become more resilient to external shocks. Infrastructure gaps need to be addressed to increase land, sea, air and digital connectivity. More coherent regulatory framework and common standards must be pursued. And while NTBs must be streamlined and reduced to achieve frictionless trade of goods, significant efforts are required to enhance trade in services and labor mobility. This session analyses the current challenges and opportunities of regional integration and proposes areas where increased cooperation and partnership may help and build the ASEAN block and the broader region, in a world of <i>rising uncertainties</i>. Speakers: 1. Dr. Aladdin D. Rillo – ADBI, Tokyo 2. Atsuko Okuda – ICT and DRR Department, UNESCAP 3. Arthayudh Srisamoot – Ministry of Foreign Affairs, Thailand 4. Emmanuel A. San Andres – Policy Support Unit, APEC Singapore Moderator: Vincent Chauvet, ITD
15.30 – 15.45	Coffee break
15.45 – 17.00	Session III Building the Digital Economy: A Digital Trade Imperative Theme: There is no doubt that technology changes the trade landscape and provides more opportunities by creating access to the global market. According to UNCTAD recent report, more than 50% of all global trade are enabled by the Internet. More importantly, countries that are adept at fostering digital activities have benefitted more with the emergence of new

industries as well as, the accelerated growth of traditional sectors. Empirical evidence also show that at the individual firm level, firms with online presence tend to be more productive and competitive. According to McKinsey's report in 2014, global digital trade generated more economic value than the traditional flows of traded goods.

- Highlights current policy measures needed to promote investment (international and domestic) and new regulatory framework that enables sustainable digital development whilst addressing the 2030 Sustainable Development Goals.
- Discussion on how digital trade and its derivatives (such as ecommerce, digital data, smart contracts, smart money) can be a driver for frictionless trade, inclusive development in trade for all especially greater participation from MSMEs and entrepreneurs.

Areas Covered:

Digital Economy Economic Model, Policy and Investment

Measuring Digital Economy-Multi-faceted Perspectives

Speakers:

1. Richard Bolwijn – Enterprise & Innovation Division, UNCTAD Geneva
2. Jonathan Tsuen Yip Wong – Trade, Investment and Innovation Division, UNESCAP
3. Joseph Meltzer – Brooking Institution & E15 Initiative
4. Wisit Atipayakoon – ITU Regional Office for Asia and the Pacific
5. GSMA – Mobile Money Initiative Team

Moderator: Duangthip Chomprang, ITD

17.00

Wrap Up

18.00

Welcome Reception (By Invitation Only)

Thursday, 20th July 2017

Day 2

08.30 – 09.00

Registration

09.00 – 09.45

Keynote Speech by: **Dr. Kanit Sangsubhan**, *Secretary General of EEC, Thailand*

“Linking EEC for Trade and Investment within Thailand’s 4.0”

09.45 – 11.00

Session IV

One Belt, One Road Initiative: Outlooks on Future Trade and Investment in the Region South

Theme: The One Belt, One Road Initiative conceived as China's vision of a regionally connected continent linked to the rest of the World, harnesses the power of connectivity of culture, trade and economic cooperation at the heart of its strategy. If successful, this initiative will encompass approximately, 65% of the world's population which contributes one-third of the world's GDP. This session will discuss the current developments of the recent One Belt, One Road Initiative Meeting in Beijing and explore possible responses within APAC as well as to understand how this initiative will contribute to the “Peace and Prosperity” of the people of this region.

Speakers:

1. Chinese/New Silk Road Representative
2. Professor Emeritus Suthiphand Chirathivat, Ph.D. – ASEAN Studies Center, Chulalongkorn University
3. Oliver Redrup – Price Waterhouse Cooper Services Ltd., Singapore
4. Krisda Piampongsant – Thai Chamber of Commerce and Board of Trade of Thailand

Moderator: Dr. Mia Mikic - Trade, Investment & Innovation Division, UNESCAP

11.00 – 11.15

Coffee break

11.15 – 12.30

Session V

Enriching Global Value Chain (GVCs) through the Circular Economy

Theme: Post 2015 is earmarked as the critical crossroad for global development and humanity in general. The underlying theme being, finding a better model of growth where production and consumption are more responsible and sustainable. In this regard, switching from the current linear model of economy to a circular one is attracting more and more attention for its potentially huge financial, social and environmental benefits. Moving towards a circular economy would boost resource productivity in GVCs but

equally important, is the creation of new platform for growth and innovation which favors developing countries.

Hence, the session aims to explore possible trends within the context of the GVC and the circular economy model and how investment facilitation may help close the loop.

Areas covered:

Scope, nature and potential of Circular Economy and its implications on international trade and GVC

Investment facilitation framework, strategies and policies

Regulatory and Legal Framework to consider

Speakers:

1. Dr. Uwe Weber – SWITCH-Asia Network
2. Karishma Banga – Global International Institute, Geneva
3. Dr. Chaiyod Bunyagid – United Analyst and Engineering Consultant Co. Ltd., Thailand
4. Ernesto Hartikainen – Finnish Innovation Fund, SITRA - Finland

Moderator: Vincent Chauvet – ITD

12.30 – 13.30

Lunch Break

13.30 – 15.00

Session VI

Obstacles & Opportunities for Asia's Sustainable Growth

Theme: According to UNCTAD Trade and Development Report 2015, South-South trade in the post-2008 financial crisis has been labelled as the 'great economic transformation' in the global economy. In developing Asia, approximately 4/5 of all South-South trades are intra-regional compared to Latin America, 50% and Continent Africa, less than 50%. In 2009-2010 alone, developing Asia accounted for 85% of the South-South trade. However, at the current developing economies combined accounts for around 45% of the world's trade activities. With so much potential yet to be realized, Asia is on the verge of extraordinary growth in trade and investments. Therefore, trade for development models to address pressing needs of developing economy is very much needed to guide the region's future.

This session explores the future development models including alternative options for funding development initiatives. At the outset, the session will first address the conventional theory behind trade and development including investment promotion regimes and examine its effectiveness in today's economic and trade environment.

- Do tax incentives regimes promote FDI and growth in the current TF/IF environment? Can evidence-based policy approach address this gap?
- What are the alternative tools for Governments to promote growth and sustainable development (including fiscal and non-monetary schemes, technology-based solutions)?

Speakers:

- 1 Dr. Naoyuki Yoshino – ADBI, Tokyo
- 2 Daisuke Hiratsuka – JETRO Thailand
- 3 Piyabutr Cholvijarn – Kenan Institute Asia & Board of Trade of Thailand
- 4 Rolf-Dieter Daniel – EU Chambers of Commerce (EABC)

Moderator: Dr. Aladdin D. Rillo – ADBI, Tokyo

15.00 – 15.15

Coffee break

15.15 – 16.45

Session VII***Future Education for Future Trade and Investment***

Theme: Since the days of ancient times human connectivity began when trade routes were first established to facilitate commerce and later transformed into seats of early civilization. And within these trade routes were borne knowledge centers where like products, ideas and new/old knowledge became the new oil for trade, creating a melting pot of new opportunities and the diffusion of Art and sciences of the times. Trade has always empowered people beyond the realm of trade especially in building new knowledge and enabling innovation. Today, modern trade operates within the same confines. This session explores the shifting trend in STEM related investment and trade, its implications on future education with an aim on understanding the appropriate strategies to attract foreign investment to STEM related industries.

Areas Covered:

- Linking STEM education to Attracting Foreign Investment
- Linking Education to Entrepreneurship

Speakers:

1. Dr. Jeong Hyop Lee – Science Technology & Innovation Policy Institute, KMUTT
2. Emmanuel A. San Andreas – Policy Support Unit, APEC Singapore
3. Katarina Tapio – Finnish Embassy in Thailand
4. Dr. D.B. Kwon – Korean University & KRIVET Former President

Moderator: Dr. Kamalinne Pinitpuvadol, ITD

16.45-17.00

Wrap Up and Closing

** ITD reserves exclusive rights to modify or change any part of the programme without prior notice.*

BACKGROUND

We are currently experiencing fundamental changes in the patterns of globalization which will have profound implications on current and future trade, development and investment. For instance, within the trade development space, there are currently three important forces playing out in the global policy arena.

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- A growing resistance to globalization and preferential free trade agreement, have become more apparent in the past decade or so, exacerbated by the economic slow-down and jobless growth in specific sectors of the economy.

- The arrival of the digital technology, the Internet and countless breakthroughs in the field of science and technology, will level the playing field for everyone just as the old adage "Rising Tide Lifts All Boats." This means developing countries can leapfrog ahead and skip the industrial era straight into the post-industrial development era.

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The endorsement of the new WTO Trade Facilitation Agreement and other initiatives to reduce trade cost are helping to level the playing field to smaller businesses and entrepreneurs including from emerging and developing countries to be engaged more in trade activities. (Session I).

The disruptive impact of the digital revolution is both a source of opportunities and challenges but a fine management of the digital transition will enhance the role of e-commerce as a key tool for inclusiveness in trade and the general theme on Digital Economy and Digital Trade (Session III).

Despite a challenging global environment, growth in Asia has remained steady but in the context of uncertainty, only deeper regional integration and cooperation will help the region, (ASEAN and the CMLVT) to enhance economic resiliency and support inclusive and sustainable development. Deepening ongoing integration such as the AEC (Session II) and exploring new approaches such as the One Belt One Road Initiative (Session IV) will offer the region's an alternative growth avenue that it could be looking for.

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HONOUR

Trade and Development Regional Forum 2017



Opening Remarks by:

Dr. Sophon Naphathorn, M.D.

Vice Minister for Education
Ministry of Education, Thailand



Welcoming Remarks by:

Dr. Kamalinne Pinitpuvadol

Executive Director
International Institute for Trade and Development



Dr. Mia Mikic

Director
Trade, Investment and Innovation Division
United Nations Economic and Social Commission for Asia and the Pacific



Mrs. Veeraya Puttibundit

Human Resource Officer Expert Level
Department of Trade Negotiations
Ministry of Commerce, Thailand

PROGRAM

Day 1 : Wednesday, 19th July 2017

Keynote Speech

"A New Paradigm in Trade and Development in the Age of Rising Protectionism and Populism"



Dr. Supachai Panitchpakdi **Biography**

Supachai Panitchpakdi's career has spanned wide-ranging areas, starting off as an officer of the Bank of Thailand, he became Deputy Finance Minister, Commerce Minister, and twice Deputy Prime Minister. In between he assumed for some years the presidency role of a commercial bank, and chairman of several private corporations including an international insurance company. His international career is noteworthy for the fact that he is the first representative of the developing countries to be appointed Director General of the World Trade Organization (2002-2005) and follows that up with two terms as Secretary General of the United Nations Conference on Trade and Development (2005-2013).

At present he is a board member of the Institute for Cultural Diplomacy in Berlin, a founding member of the Asia-New Zealand Foundation.

SESSION I

The New Trade Facilitation Agreement: A New Horizon for Developing Countries

Theme: The new Trade Facilitation Agreement (TFA) which came into force on 22 February, 2017 heralds an important milestone for global trade development. For the first time, the global trade regime will be focused on substantively reducing trade cost across the board. Additionally, it will have direct implications on emerging issues such as the Global Value Chains (GVCs), sub-regional integration, the South-South trade systems, resource efficiency, inclusiveness and transparency.

This session provides a state of play of the current trade facilitation in AsiaPacific in particular the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (FA-PT), a unique and the region/global's first platform of its kind to address paperless cross-border trade. Equally imperative will be the discussions around recommendations in terms of complementary policies, regional cooperation and specific capacity building initiatives needed in light of these promising new developments.

SPEAKER

- **Poul Hansen**, UNCTAD Geneva - Technology & Logistics Section (Biodata)
- **Yann Duval**, UNESCAP Bangkok - Trade Facilitaion Section (Biodata)



Mr. Poul Hansen

Officer in Charge, Trade Facilitation Section, Trade Logistics Branch, Division on Technology and Logistics, UNCTAD.

Poul Hansen is responsible for issues relating to Trade Facilitation at the United Nations Conference on Trade and Development (UNCTAD), Division on Technology and Logistics (DTL). UNCTAD's mandate is to assist developing and least developed countries as well as economies in transition integrating into global trade, promoting development-centered globalization and inclusive and sustainable growth and development for these countries.

Poul has extensive experience in the area of trade and transport facilitation, having worked for more than 15 years in the UN system on issues such as international trade, transportation, development, international standards, previously working at the UNECE as Secretary for the TIR Convention.

In addition, Poul has also worked in international sports policy as Head of Office for the UN Office on Sport and Development and Peace.

Prior to joining the UN, Poul worked for more than 10 years in the private sector in areas such as public affairs, management consulting and logistics with organizations including Ernst & Young, FreightForward Europe (FFE), The International Road Transport Union (IRU) and the Ziegler Group, gaining experience in a number of industries including transportation and logistics, automotive, manufacturing and retail.

Poul's studies include both master and bachelor levels in Business Administration and International Law from the Aarhus and Copenhagen Business Schools, Denmark.

Yann Duval

Chief, Trade Facilitation Unit, Trade, Investment and Innovation Division, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

Yann Duval is Chief, Trade Facilitation Unit, Trade, Investment and Innovation Division, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). Since joining the United Nations (UN) in 2002, he has designed and delivered capacity building programmes and advisory services on trade policy and facilitation throughout the ESCAP region, including the trade facilitation segment of the Regional WTO Trade Policy Course at the National University of Singapore.

Dr. Duval has been instrumental in the creation and development of the Asia-Pacific Research and Training Network on Trade (ARTNeT), a network of leading research and academic institutions in developing countries of the region aiming at building capacity in trade and investment policy and facilitation research for evidence-based policy making. As coordinator of the ARTNeT trade facilitation research, Dr. Duval has overseen the delivery as well as directly contributed to various regional studies in this area. His recent analytical work has focused on trade facilitation and regional integration, including the development of a global bilateral trade cost database in collaboration with the World Bank.

He currently leads the activities of the United Nations Network of Experts for Paperless Trade and Transport in Asia and the Pacific (UNNExT), a community of experts dedicated to making trade more transparent and efficient through electronic exchange of information. He and his team also provide the technical and secretariat support for the Framework Agreement on Facilitation of Cross-Border Paperless Trade in Asia and the Pacific, a new UN treaty finalized by ESCAP member States in 2016 to enable the mutual recognition of electronic trade-related data and documents among parties.

Prior to joining the United Nations, Dr. Duval was Assistant Professor of International Business and of Agricultural Economics at the Asian Institute of Technology (AIT) and Washington State University (USA), respectively. His work has been published in various academic journals, including International Tax and Public Finance and the American Journal of Agricultural Economics. He holds a Ph.D. in economics from Kansas State University, USA as well as an engineering degree from ESA Purpan, France.

Keynote Speech

"New Geopolitical Challenges to Regional Cooperation and Integration"



DR. SURIN PITSUWAN

Dr. Surin Pitsuwan, 67, is a native of Nakorn Sri Thammarat, Southern Thailand. He received his primary and secondary education in his home province.

He was awarded the American Field Service (AFS) exchange scholarship and was a high school exchange student in Minnesota, USA, in 1967-1968. He returned to Bangkok, Thailand and attended Thammasat University for 2 years before winning a scholarship from Claremont Men's College (now Claremont McKenna College) Claremont, California, to complete his B.A. in Political Science (cum laude) in 1972. He then went on to Harvard University, Cambridge, Massachusetts, U.S.A., where he received his M.A. and Ph.D. in 1974 and 1982 respectively, in the field of Political Science and Middle Eastern Studies.

His entire Harvard career was supported by the Winston S. Churchill Association, the Rockefeller Foundation and the Ford Foundation Fellowships. He also spent a year and a half studying Arabic and conducting his research at the American University in Cairo, 1975-1977, while concurrently a fellow at the Higher Council for Islamic Research, Cairo, Egypt. He worked as a columnist for the Nation and the Bangkok Post, the two leading English daily newspapers in Bangkok, from 1975-1992.

Dr. Surin taught at the Faculty of Political Science at Thammasat University from 1978-1983 and 1984-1986. He also served as an assistant to the Deputy Dean for Academic Affairs during the same period.

Dr. Surin joined the American Political Science Association's Congressional Fellowship Program in 1983-1984, when he interned in the Congressional Office of the late US Representative Geraldine A. Ferraro (D-New York), who later became the Vice Presidential Candidate for the Democrat Party in 1984, and worked for the Senate Republican Conference in the later half of 1984. He taught Southeast Asian Affairs at the American University in Washington, D.C. during that same year.

He returned to Thailand in 1984 to assume a teaching position at Thammasat and ran for a Parliamentary seat from Nakorn Sri Thammarat, his home town two years later. He had been returned to Parliament 8 times since 1986. As an MP, he was appointed Secretary to the Speaker of the House of Representatives (H.E. Chuan Leekpai), Secretary to Deputy Minister of Interior, Deputy Minister for Foreign Affairs during 1992-1995, and Minister of Foreign Affairs from 1997 to 2001. He served as Chair of the ASEAN Ministerial Meeting and the Chair of the ASEAN Regional Forum (ARF) in 1999-2000. In September 1999, while the ASEAN Chair, he led the efforts to get Southeast Asian governments to help restore law and order, and that joint undertaking, with the support of the United Nations and the

Session II

Connectivity, Development & Regional Integration- The Agenda for CMLVT (Cambodia, Myanmar, Laos, Vietnam, Thailand)

Theme: AEC Blueprint 2025 proposes a vision towards an integrated, cohesive, competitive and innovative economy with increased cooperation and connectivity among ASEAN Member states. However progress is slow and much still needs to be done to achieve the AEC four pillars and enabling ASEAN to become more resilient to external shocks.

Infrastructure gaps need to be addressed to increase land, sea, air and digital connectivity. More coherent regulatory framework and common standards must be pursued. And while NTBs must be streamlined and reduced to achieve frictionless trade of goods, significant efforts are required to enhance trade in services and labor mobility.

This session analyses the current challenges and opportunities of regional integration and proposes areas where increased cooperation and partnership may help and build the ASEAN block and the broader region, in a world of rising uncertainties.

international community, brought about peace and security in East Timor.

Upon leaving the foreign affairs portfolio in mid-2001, Dr. Surin was appointed a member of the Commission on Human Security of the United Nations until 2003. He also served as an advisor to the International Commission on Intervention and State Sovereignty from 1999-2001. In 2002, he concurrently served on the ILO's World Commission on the Social Dimension of Globalization until 2004. He was an advisor to the Leaders Project, Washington, D.C., a conference arm of the Cohen Group of former US Secretary of Defense William S. Cohen. He served on the International Advisory Board of the Council on Foreign Relations in New York. He is currently on the Advisory Board of the UN Human Security Trust Fund, the Advisory Board of the International Crisis Group (ICG), an International Academic Advisor of the Centre for Islamic Studies, Oxford University, and an advisor to the Leaders Project, a conference arm of the Cohen Group of former US Secretary of Defense William S. Cohen.

Between 2002-2004, Dr. Surin was also a member of the "Wise Men Group" under the auspices of the Henri Dunant Centre for Humanitarian Dialogue (HDC) in Geneva, advising the peace negotiations between the Aceh Independence Movement (GAM) and the Government of the Republic of Indonesia. He served as a member of the Islamic Development Bank's 1440 A.H. (2020) Vision Commission under the leadership of Tun Dr. Muhammad Mahathir, former Prime Minister of Malaysia, in June 2005.

Dr. Surin was a Deputy Leader of the Democrat Party, Thailand. He also served on the National Reconciliation Commission (NRC), charged with bringing peace and security back to Thailand's deep South. He was appointed Member of the National Legislative Assembly (NLA) before assuming his post as the Secretary General of the Association of Southeast Asian Nations (ASEAN) from 1 January 2008 until 31 December 2012. During that period he was tasked to implement the ASEAN Charter and prepare the region to enter into the ASEAN Community in 2015.

Two of his most recognized accomplishments were spearheading the Asian countries to help restore law and order in East Timor during the violent uprising in the aftermath of the Referendum in August 1999, and leading the ASEAN Member States and the United Nations and other international institutions such as the World Bank, ADB and various other International NGOs to enter Myanmar to rescue that country from the catastrophe of Cyclone Nargis in May 2008 and remained there until the mission was accomplished in December 2010.

Dr. Surin has been conferred 14 honorary doctorate degrees, including one from University of Bristol (UK), Claremont McKenna College, the National University of Malaysia (UKM) University Putra Malaysia (UPM) and University of Malaya (UM).

After his term as Secretary General of ASEAN, Dr. Surin has been appointed Professor Emeritus at Thammasat University and also an Honorary Advisor and Distinguished Visiting Fellow at King Prajadhipok Institute, an academic affiliation of the Thai Parliament. Moreover, he has been also served as the Chairman of the International Institute for Democracy and Electoral Assistance (IDEA), a Board of Advisors of the Centre for Humanitarian Dialogue, the Advisory council of the International Humanitarian City (IHC) under the leadership of Sheikh Muhammad bin Rashid al-Maktoum.

He is concurrently a Visiting Professor, an Adjunct Professor and a Visiting Fellow at the Graduate Institute for Policy Studies, Tokyo, University of Nara, Japan and University of Malaya, university of Brunei, and also a Chairman of the Future Innovative Thailand Institute. He has the title "Tan Sri" from the Royal Palace of Malaysia, in the occasion of the 14th Yang di-Pertuan Agong's birthday. Moreover, Dr. Surin has been nominated to be a Special Envoy for Thailand Candidature for UNSC 2017-2018.

Dr. Surin Pitsuwan is now engaged in the promotion of regional integration in East Asia, educational and political reform efforts in Thailand and a frequent speaker at various international conferences."

SPEAKER

- **Dr. Aladdin D. Rillo / Dr. Naoyuki Yoshino**, ADBI (Biodata)
- **Atsuko Okuda**, ICT and DRR Division, UNESCAP
- **Arthayudh Srisamoot**, Ministry of Foreign Affairs, Thailand (Biodata)
- **Emmanuel A. San Andres**, APEC Secretariat (Biodata)



Aladdin D. Rillo

Senior Economist

Brief Biography

Aladdin D. Rillo joined ADB Institute in May 2013. Prior to that he worked at the ASEAN Secretariat in Jakarta for more than ten years where he served in various positions, including as Director and Chief Economist of the ASEAN Integration Monitoring Office. His other professional experiences include: Senior Manager and Head of Centre for Economic Excellence (Transfer Pricing) at PricewaterhouseCoopers in Toronto, Canada; international consultant at Asian Development Bank; Assistant Vice President and Chief Economist at Development Bank of Singapore Securities Philippines; and visiting lecturer at Chinese University of Hong Kong and Varna University of Economics in Bulgaria. His areas of interests are in trade, finance and regional economic integration, including financial integration and cooperation and monitoring of economic integration. He obtained his MA and PhD degrees in economics from the University of Hawaii at Manoa.



Arthayudh SRISAMOOT

Age, Date of Birth: 55 years (born 29 December 1962)

Current Position: Director-General, Department of International Economics Affairs, Ministry of Foreign Affairs. APEC SOM Leader of Thailand

Education: - Bachelor of Sciences (Economics), Monmouth College, Illinois 1983
- Master of Arts (Economic Policy) University of Chicago, Illinois (graduated September 1984)

Past Positions: 1985-1987 Armed Forces Information Office, Supreme Command

1988-1989 Third Secretary, Department of ASEAN Affairs, Ministry of Foreign Affairs

1990 Second Secretary, Department of Political Affairs (South Asia & Middle East), Ministry of Foreign Affairs

1991-1992 Second Secretary, Department of Economic Affairs,

1992-1996 First Secretary, Royal Thai Embassy, Manila (political/information/protocol)

1996-2001 First Secretary/Counsellor, Department of ASEAN-Affairs,

2002- 2004 Counsellor, Permanent Mission of Thailand to the United Nations Office in Geneva (UNCTAD & WIPO)

Jan 2005 - May 2007 Director, Europe 1 Division (EC and Western Europe)

May 2007 - April 2010 Deputy Director-General, ASEAN- Thailand

April 2010 - Jan 2012 Consul General, Vancouver, Canada.

Jan 2012 - Nov 2014 Director-General, Department of ASEAN Affairs,

Nov 2014 - Mar 2017 Ambassador Extraordinary and Plenipotentiary to the Federal Republic of Austria, Slovak Republic and Republic of Slovenia Permanent Representative to the United Nations and International Agencies in Vienna.

Apr 2017 - present Director-General, Department of International Economics Affairs, APEC SOM Leader of Thailand

Special Courses Attended:

- 1991 Attended 44th UNGA, New York (Sep-Dec)
- 1997 Attended security-related course at the Asia-Pacific Center for Security Studies, Hawaii (3 months)
- 2001 Peacekeeping for Decision-Makers, Newport, Rhode Island, Nov 2006 - March 2007
- Executive Course, Office of Civil Service Commission of Thailand
- 2013 Capital Markets Academy (CMA) Course for Executives
- 2017 Thailand Energy Academy

Special Appointments: - Chairman of the 58th Session of the UN Commission on Narcotics (CND) Dec 2014 - Dec 2015

- APEC SOM Leader of Thailand (2017-present)
- Executive Board Member, EXIM Bank of Thailand (2017-present)

**Emmanuel A. San Andres**

Analyst, APEC Policy Support Unit

Emmanuel A. San Andres holds a Master of Arts in Economics and a Bachelor's degree in Economics from the University of the Philippines School of Economics, where he is also a candidate for a PhD in Economics.

Prior to joining APEC, Mr San Andres was an Economics Officer at the Economics and Research Department of the Asian Development Bank (ADB) in Manila mainly working on poverty, inequality, food security, and social sector issues such as health, education, and employment. He also worked as a consultant for organisations such as the ADB, World Bank, and various non-government organisations where he conducted research on migration and remittances, economic development, taxation, and public policy.

Session III

Building the Digital Economy: A Digital Trade Imperative

Theme: There is no doubt that technology changes the trade landscape and provides more opportunities by creating access to the global market. According to UNCTAD recent report, more than 50% of all global trade are enabled by the Internet. More importantly, countries that are adept at fostering digital activities have benefitted more with the emergence of new industries as well as, the accelerated growth of traditional sectors. Empirical evidence also show that at the individual firm level, firms with online presence tend to be more productive and competitive. According to McKinsey's report in 2014, global digital trade generated more economic value than the traditional flows of traded goods.

- Highlights current policy measures needed to promote investment (international and domestic) and new regulatory framework that enables sustainable digital development whilst addressing the 2030 Sustainable Development Goals.

- Discussion on how digital trade and its derivatives (such as ecommerce, digital data, smart contracts, smart money) can be a driver for frictionless trade, inclusive development in trade for all especially greater participation from MSMEs and entrepreneurs.

SPEAKER

- **Richard Bolwijn**, Enterprise & Innovation Division, UNCTAD
- **Jonathan Wong**, Investment & Innovative Division, UNESCAP (Biodata)
- **Joseph Meltzer**, Brooking Institution and E15 Initiative
- **Wisit Atipayakoon**, ITU APAC Regional Office for Asia and the Pacific (Biodata & Powerpoint)
- **GSMA** – Mobile Money Initiative Team



Jonathan Wong

Jonathan is the Chief of Technology and Innovation at the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). He joined ESCAP from the UK Department for International Development (DFID) where he was the inaugural Head of Innovation. He has worked on a number of high-profile innovation initiatives including the Global Innovation Fund – a partnership between the UK, US, Swedish and Australian governments and the Founder of eBay. The fund invests in innovations and technologies that aim to improve the lives and opportunities of people living in poverty. He also has extensive experience in developing partnerships with innovative corporations, innovative finance, technology, and entrepreneurship development. Jonathan has substantial innovation policy experience having advised governments across Africa and Asia. Prior to joining DFID, Jonathan was a Founding Partner of a technology and innovation venture-capital fund and supported the establishment of the UK National Health Service Institute for Innovation and Improvement.



Wisit Atipayakoon

Mr. Atipayakoon joined the International Telecommunication Union (ITU) in 2005 as a Telecom/ICT Specialist in the Telecommunication Development Bureau (BDT) based in the ITU Regional Office for Asia and the Pacific, Bangkok. He is currently a Programme Officer and an ITU's regional focal point for ICT application development, e-Government & e-Services, ICT accessibility for Persons with Disabilities, disaster/emergency telecommunications, and rural communication development.

Bringing with him many years of professional experience in Information and Communication Technology and project management, he is currently leading a number of projects such as: Digital Broadcasting, ICT application development, Rural ICT policy and Universal Service Obligation (USO); Digital innovations, and etc.

Prior joining ITU, he worked for Lucent Technologies Singapore Pte, Global Crossing Singapore, Asia Netcom, and SAS whereas he practiced engineering and management in transmission network design and implementation, sub-sea cable networks, data mining and data warehousing, business process reengineering and business continuity programme.

Keynote Speech

"Linking EEC for Trade and Investment within Thailand's 4.0"



Kanit Sangsubhan, Ph.D.

Secretary-General

Eastern Economic Corridor Office of Thailand

Dr. KANIT is appointed as Secretary-General of the Eastern Economic Corridor Office of Thailand, also is the Chairman of the Executive Boards, Office of Knowledge Management and Development. Moreover, he takes the position of honorary academic advisor to the Fiscal Policy Research Institute, Ministry of Finance.

Earlier, Dr. Kanit has served as the Director of the Overall Planning Division at the National Economic and Social Development Board (NESDB) during 1996-1999. He also served as an Advisory Staff to Deputy Prime Minister and Minister of Commerce, Dr. Supachai Panitchpakdi during 1994-1996 and as an expert to the Standing Committee on Economics of the House of Representatives, Parliament of Thailand during 1996-1997. He later joined the Asian Development Bank Institute, Tokyo as a visiting scholar during 1999-2000.

In December 2000, Dr. Kanit joined the Fiscal Policy Research Institute, Ministry of Finance as the Director. He was a Member of Advisory Board for Asian Development Bank Institute in 2007 and a Member of Board of the TISCO Bank Ltd. in 2006-2008. He also serves as a Director of Dhanarak Asset Development Board, a position he has held since 2004. In addition, he was appointed as an Honorable Economic Advisor to Prime Minister in 2008. Later, he served as Board of Director, Bank of Thailand during 2009 – 2015 and former the Chairman of National Health Security Financing Sub-Committee, National Health Security Office.

Recently, he has served as Chairman of the Executive Committee Thai Airways and Chairman of the Board, Thai Smile Airways also State Railway of Thailand; as Executive Vice President.

Dr. Kanit holds a Ph.D. in Economics the University of Toronto, after receiving his Bachelors and Masters in Economics from Department of Economics, Thammasat University, Thailand.

Session IV

One Belt, One Road Initiative: Outlooks on Future Trade and Investment in the Region South

Theme: The One Belt, One Road Initiative conceived as China's vision of a regionally connected continent linked to the rest of the World, harnesses the power of connectivity of culture, trade and economic cooperation at the heart of its strategy. If successful, this initiative will encompass approximately, 65% of the world's population which contributes one-third of the world's GDP. This session will discuss the current developments of the recent One Belt, One Road Initiative Meeting in Beijing and explore possible responses within APAC as well as to understand how this initiative will contribute to the "Peace and Prosperity" of the people of this region.

SPEAKER

- Chinese Government Representative
- Professor Emeritus Suthiphand Chirathivat, Ph.D., ASEAN Studies Center, Chulalongkorn University, ITD (Board of Director) (Biodata)
- Oliver Redrup, Price Waterhouse Cooper Services Ltd., Singapore (Biodata)
- Dr. Krisda Piampongsanti, Permanent Representative of Thailand to the WTO Trade, ITD (Board of Director) (Biodata)



Suthiphand Chirathivat
Chulalongkorn University, Thailand
E-mail: csuthipa@chula.ac.th

Suthiphand Chirathivat is Executive Director, ASEAN Studies Center, Chairman, Chula Global Network, and emeritus professor of economics at Chulalongkorn University. Until recently, he was Dean, Faculty of Economics, Chairman of the Ph.D. Program in Economics, Chairman of Economics Research Center and Center for International Economics at Chulalongkorn University.

Professor Suthiphand previously held a position as Advisor to the Ministry of Foreign Affairs, Ministry of Finance, Ministry of Commerce, Ministry of Transport and Communications, thus including Economic Affairs Committee and Foreign Affairs Committee of the Thai Parliament. He represented Thailand for the East Asia Expert Study Group (ASEAN+3 until 2009) and the Comprehensive Economic Partnership in East Asia (ASEAN+6 until 2010). He was recently in the Advisory Committee for the ASEAN 2030 project, run by the Asian Development Bank Institute and other research projects supported by the ASEAN Secretariat.

His academic interests involve the issues related to international trade, investment, finance, regional integration and development, and new arising issues in Asia in relation to the global economy and society. Recent publication includes Celebrating the Third Decade and Beyond: New Challenges to ASEAN-India Economic Partnership (co-eds) (2017), Global Economic Uncertainties and Southeast Asian Economies (co-eds) (2016), ISEAS Publishing, Economics of Regional Integration (2011), (in Thai), Chulalongkorn University Press, Emerging's Asia Growth Practices (2009), Chulalongkorn University, EU-ASEAN Facing Economic Globalisation (co-eds) (2006), Springer-Verlag Berlin Heidelberg, Asia's Monetary Future (co-eds) (2004), Edwards-Elgar. He had also published numerous articles in journals and books. He is advisory board member of Asian Economic Journal and was editor of Chulalongkorn Journal of Economics, advisory board of ASEAN Economic Bulletin, and Asian Business and Management.

Professor Suthiphand holds a Doctorat en Economie from the University of Panthéon-Sorbonne, Paris I. He also serves as Honorary President of the Association of Former Student in France, Thailand and was Vice President of Economics Discipline, National Research Council of Thailand.



Oliver Redrup
Director
Capital Projects & Infrastructure
Office : +65 6236 4053
E-mail : oliver.jw.redrup@sg.pwc.com

Oliver is a Director in PwC's Capital Projects and Infrastructure Team in Singapore. He has deep experience in the Infrastructure sector in the UK and throughout South East Asia. He has worked with Governments and Development Banks to improve the environment for private sector involvement and investment in infrastructure; developing PPP regulations, frameworks and delivering capacity building. He has also advised numerous investors and PPP companies bidding for PPP contracts in Thailand, Singapore, the Philippines and Myanmar. Oliver previously worked for the UK HM Treasury on infrastructure policy and spending plans and his experience spans many sectors including renewable energy, waste and transport.

Selected experience

- **Department of Highways, Thailand** – Oliver is advising the Department of Highways on the development of the \$2bn Nakhon Pathom – Cha Am road project as part of the Thai PPP Programme. The scope of work includes preparing the feasibility study, developing the financial model and preparing the contractual documentation for the PPP contract.

- **SEPO – Oliver** is currently advising SEPO on the development of the PPP Strategic Plan and Pipeline. The scope of work includes reviewing the current evaluation framework for PPP sectors, reviewing international best practice and incorporating learnings into an updated framework which is used to develop a new PPP Project pipeline. The Strategic Plan and Pipeline is reviewed and approved by the PPP Committee and is also subject to a public hearing organized by PwC.

- **Department of Highways, Thailand** – Oliver is advising the Department of Highways on the development of the Hat Yai Border Project Road. This is a project being procured under the Thai PPP Programme.

- **Thailand High Speed Rail** – Oliver advised the Thai government and the State Railway of Thailand on developing an HSR line between Bangkok and Laos. The work includes financial feasibility analysis, review of revenue and cost assumptions and advice on project and concession agreements

- **30MW Biomass plant, Thailand** – Oliver led PwC's advice to a energy investor looking to develop a biomass plant in Thailand. The scope of work was focused on securing both equity and debt financing for the project.

- **Thailand PPP framework** – Working with the Asian Development Bank, Oliver advised the government of Thailand on the development of a PPP framework and procurement process in order to encourage more private sector investment in infrastructure. He delivered capacity building workshops to over 100 government officials from numerous government departments including SEPO, NESDB, MOT, OTTP

- **Project White Rock** – Oliver advised a Chinese State Owned enterprise on their bid for a SEZ and Deep Sea Port in Myanmar. Oliver undertook a commercial review of the bid documents to be submitted to the Myanmar government and is providing ongoing commercial and financial support to the client in their negotiations with the Myanmar government.



Name: Mr. Krisda Piamponsant

Email: krisada.moc@gmail.com

Positions Held:

- Director of ASEAN Trade and Economic Affairs, Department of Trade Negotiations (DTN)
- Senior Expert in Trade Measures, DTN, responsible for RTA negotiations
- Minister (Commercial), Royal Thai Embassy, Washington, D.C., USA
- Minister (Commercial), Royal Thai Embassy and Permanent Mission to the European Union, Brussels, Belgium
- Deputy Permanent Secretary, Ministry of Commerce
- Ambassador, Permanent Representative to the Permanent Mission of Thailand to the World Trade Organisation (WTO)

Current Positions:

- Advisor to Thai-EU Business Council
- Advisor to the Thai Chamber of Commerce and Board of Trade of Thailand.
- Board Member, International Trade and Development, Bangkok
- Advisor to Mitr Phol Groups.

Session V

Enriching Global Value Chain (GVCs) through the Circular Economy

Theme: Post 2015 is earmarked as the critical crossroad for global development and humanity in general. The underlying theme being, finding a better model of growth where production and consumption are more responsible and sustainable. In this regard, switching from the current linear model of economy to a circular one is attracting more and more attention for its potentially huge financial, social and environmental benefits. Moving towards a circular economy would boost resource productivity in GVCs but equally important, is the creation of new platform for growth and innovation which favors developing countries.

Hence, the session aims to explore possible trends within the context of the GVC and the circular economy model and how investment facilitation may help close the loop.

SPEAKER

- Dr. Uwe Weber, SWITCH-Asia Network (Biodata & Powerpoint)
- Karishma Banga, Global International Institute, Geneva (Biodata)
- Dr. Chaiyod Bunyagidj, United Analyst and Engineering Consultant Co. Ltd., Thailand (Biodata & Powerpoint)
- Ernesto Hartikainen, SITRA - Finnish Innovation Fund (Biodata)



Dr. Uwe Weber

Team Leader

Uwe is the team leader for the European Union Funded SWITCH Asia Network Facility, which provides support for networking to the SWITCH Asia programme components, promoting cooperation on sustainable consumption and production between Asia and Europe.

Prior to SWITCH-Asia in September 2013 Uwe worked in Beijing/China from 2007 supporting policy and standards development in the areas of Energy Efficiency as Technical Director of the China Standard Certification Centre, Renewable Energy as Senior Adviser to the Sino-Danish Renewable Energy Development Programme, and the Environment and SCP sectors as Technical Director of the Sino-German Environmental Policy Programme with the Gesellschaft für Internationale Zusammenarbeit (GIZ).

As Managing Director of the European Forum for Economic Cooperation, a not-for-profit company Uwe developed and implemented from 2002 to 2006 various EU-funded economic cooperation projects with European and Asian partners in the addressing Environment and Energy issues.

During 1998 to 2002 Uwe worked for the EU Commission as Operations Manager of the Asia EcoBest economic cooperation programme and Deputy Director of the Regional Institute of Environmental Technology based in Singapore. More than 200 grants were contracted to EU-Asian consortia, supporting actions improving performance in the energy, environment and SCP sectors in Asian developing countries.

Prior to this assignment, Uwe from 1994 built the environmental business portfolio in Asia for the German TÜV Rhineland Group based in Osaka, Japan. Uwe headed the TÜV Rhineland Academy environment section in Cologne from 1991, conceptualising and implementing training courses, seminars and conferences on environmental themes. From 1985 to 1990 Uwe worked as Assistant Professor at the institute of Physical Geography of the Aachen Technical University, RWTH. He received his Doctorate in Geography for his studies on quantifying the impacts of urbanisation on the hydrological cycle. Uwe holds a Master degree (M.A.) in Geography and Philosophy from the RWTH and learned business management and accounting prior to his university studies.

Uwe's regional work experience and professional network covers nearly all South and East Asian countries, while his competency includes Energy Efficiency, Renewable Energy and a broad range of Environmental Themes, enabling him to effectively support and advance the cross-cutting Sustainable Consumption and Production agenda.



Karishma Banga

Karishma Banga is currently a visiting research fellow at Centre for Trade and Economic Integration, Graduate Institute, Geneva. She is also a doctoral researcher at the Global Development Institute, University of Manchester and holds an MPhil in Economics from University of Cambridge. She is a published researcher, with specialisation in international trade and econometrics. Her current research interests include analysing implications of Global Value Chains (GVCs) on developing economies, governance within GVCs and the role of technological capabilities. She is a recipient of Dean's Award for Academic Achievement, University of Manchester.



Chaiyod Bunyagidj

The Advisor to CEO, of the United Analyst and Engineering Consultant, Co., Ltd (UAE), serves on the United Nations Development Program (UNDP) Advisory Panel in Energy and Environment and is a Board Member of the Asia Pacific Roundtable for Sustainable Consumption and Production (APRSCP) and join International Green Purchasing Network (IGPN) as Board member.

Professional Engagement

Known widely to business and public for previous role as the Vice President of Thailand Environment Institute (TEI), and Executive Director of Thailand Business Council for Sustainable Development (TBCSD) and engaged intensively with corporate environmental and social responsibility as well as the national policy and strategy for sustainable development, worked closely with government agencies, private sectors and international organizations, and headed many projects in the areas of environmental performance indicators, environmental management system and auditing, sustainable consumption and production, greening of supply chain, eco-labeling, including education for sustainable development and capacity building and contribution to society was well recognized through his responsibility as advisor, committee member, working group member, and many positions for public/private organizations and programs.

Current Undertaking

August 2015 Chairman of Technical Committee, 16th Eco-Products International Fair, Federation of Thai Industries

2014 – Present Advisory Board, International Green Purchasing Network (IGPN)

2014 – Present Member of Sub-Committee on Technical Green Public Procurement, Ministry of Natural Resource and Environment

2012 – Present Board Member, Asia Pacific Roundtable for Sustainable Consumption and Production (APRSCP)

2011 – Present, Member of Working group on Carbon Footprint Promotion, Thailand Greenhouse Gas Management Organization (Public Organization)

Education Background

1987 Post Doctoral Fellow, The National Institute of Environmental Health Sciences (NIEHS), Research Triangle Park, North Carolina, USA

1984 Ph.D. in Chemistry, Department of Chemistry, The American University, Washington D.C., USA

1979 B.Sc. in Public Health Sciences with Honors, Faculty of Public Health, Mahidol University, Bangkok, Thailand

Executive Education

2014 Successful Formulation & Execution of Strategy, IOD

2009 Monitoring the System of Internal Control and Risk Management (MIR), IOD
2006 Improving the Quality of Financial Report
2005 Improving Board Decision, IOD
2004 Audit Committee Program (ACP), IOD
2004 Director Accreditation Program (DAP), IOD

Directorship

2003 – 2008 Executive Director, Thailand Business Council for Sustainable Development (TBCSD)
1998 – 2012 Vice President, Thailand Environment Institute (TEI) : Initiated Thai Green Label Scheme in 1994

Professional Experiences

2013 Member of Consultant Team; Studies on Ecolabelling & Sustainable Public Procurement in the ASEAN+3 Region, UNEP
2013 Consultant, Sustainable Consumption and Production: Policy Support Component, Thailand (SWITCH-Asia) “Supporting the Implementation of a National SCP Monitoring System”, SWITCH-Asia, GIZ
2013 Consultant, Sustainable Consumption and Production for Low Carbon Economy-Low Emissions Public Procurement and Eco-labeling (SCP4LCE), GIZ



Ernesto Hartikainen

Biodata:

Ernesto Hartikainen is a Circular Economy Specialist at the Finnish Innovation Fund Sitra. This multi-lingual and good-natured “circular economy diplomat” has been responsible for the World Circular Economy Forum 2017 programme and bringing circular economy concepts to Finnish forests.

At Sitra, Ernesto has worked on EU circular economy matters, studied global megatrends and made presentations on a broad range of topics such as the economy, the future and even the role of libraries! He has also been an entrepreneur, acted as a consultant to global companies on new business opportunities in the forest and energy sectors.

Ernesto holds Master's Degrees in technology and economics.

Session VI

Obstacles & Opportunities for Asia's Sustainable Growth

Theme: According to UNCTAD Trade and Development Report 2015, South-South trade in the post-2008 financial crisis has been labelled as the 'great economic transformation' in the global economy. In developing Asia, approximately 4/5 of all South-South trades are intra-regional compared to Latin America, 50% and Continent Africa, less than 50%. In 2009-2010 alone, developing Asia accounted for 85% of the South-South trade. However, at the current developing economies combined accounts for around 45% of the world's trade activities. With so much potential yet to be realized, Asia is on the verge of extraordinary growth in trade and investments. Therefore, trade for development models to address pressing needs of developing economy is very much needed to guide the region's future.

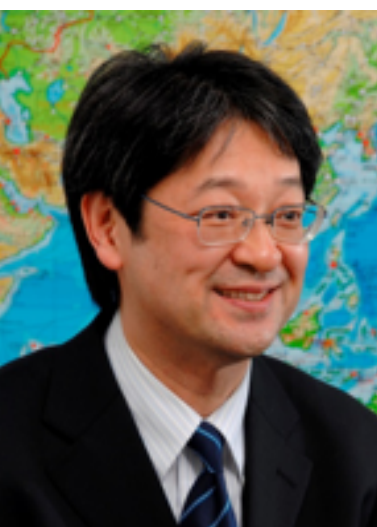
This session explores the future development models including alternative options for funding development initiatives. At the outset, the session will first address the conventional theory behind trade and development including investment promotion regimes and examine its effectiveness in today's economic and trade environment.

- Do tax incentives regimes promote FDI and growth in the current TF/IF environment? Can evidence-based policy approach address this gap?

- What are the alternative tools for Governments to promote growth and sustainable development (including fiscal and non-monetary schemes, technology-based solutions)?

SPEAKER

- Dr. Aladdin D. Rillo (P. 10) / Dr. Naoyuki Yoshino, ADBI(Biodata)
- Daisuke Hiratsuka, JETRO Thailand (Biodata & Powerpoint)
- Piyabutr Cholvijarn, Kenan Institute Asia, Board of Trade of Thailand (Biodata & Powerpoint)
- Rolf-Dieter Daniel, EU Chambers of Commerce (EABC)
- Dr. Alisa Di-Caprio, ADBI-Aid for Trade



Daisuke Hiratsuka

President, Bangkok Research Center, IDE-JETRO
JETRO Bangkok

Mr. Hiratsuka served as Executive Vice President of JETRO in charge of the Institute of Developing Economies (IDE) during the period of April 2012-September 2015. He served as Visiting Professor of Graduate School of International Relations, Ritsumeikan University in Kyoto (2006-2009). He has published numerous books and articles on regional economic integration focusing on East Asia. He edited East Asia's De Facto Economic Integration, Palgrave Macmillan, 2006, and East Asia's Economic Integration: Progress and Benefit, Palgrave Macmillan, 2008, and Input Trade and Production Networks in East Asia from Edward Elgar, 2010. He contributed to International Handbook on the Economics of Integration, Edward Elgar, 2011, and Asia's Free Trade Agreements: How is Business Responding? ADB and Edward Elgar, 2011.

Institute of Developing Economies, Japan External Trade Organization (IDE-JETRO)

Institute of Developing Economies, Japan External Trade Organization (IDE-JETRO) (A research institution affiliated with JETRO, which is an incorporated administrative agency) aims to make intellectual contributions to the world as a leading center of social-science research on developing regions. We accumulate locally-grounded knowledge on these areas, clarify the conditions and issues they are facing, and disseminate a better understanding of these areas both domestically and abroad. These activities provide an intellectual foundation to facilitate cooperation between Japan and the international community for addressing development issues.



Piyabutr Cholvijarn

Mr. Piyabutr Cholvijarn, has served with distinction in the finance and banking industry and in a variety of important government posts, including Deputy Minister of Industry, Vice Minister of Education and Vice Minister of Commerce.

Earlier, Piyabutr served as a senator and as a member of the National Assembly. Widely known in the financial and business community, he worked for 22 years with the Union Bank of Bangkok, rising to the position of President and CEO, serving as head of the bank for more than a decade. He has served in a wide variety of finance and banking committees and boards and has advised ministers of finance and commerce. Intensely interested in education, Piyabutr has lectured at the Royal Military Academy, the Judicial Training Institute and the Kasetsart University MBA program.

Currently Chairman of his family company, Piyanarong Co. Ltd. He also serves as President of the Ke-nan Institute Asia and Advisor to Board of Trade of Thailand.

Educated in the United States, he serves as President of the University of Wisconsin Alumni Association of Thailand and President of the Columbia University Alumni Association of Thailand, for educated in Thailand he is President of Assumption College Alumni Association.

Session VII

Future Education for Future Trade and Investment

Theme: Since the days of ancient times human connectivity began when trade routes were first established to facilitate commerce and later transformed into seats of early civilization. And within these trade routes were borne knowledge centers where like products, ideas and new/old knowledge became the new oil for trade, creating a melting pot of new opportunities and the diffusion of Art and sciences of the times. Trade has always empowered people beyond the realm of trade especially in building new knowledge and enabling innovation. Today, modern trade operates within the same confines. This session explores the shifting trend in STEM related investment and trade, its implications on future education with an aim on understanding the appropriate strategies to attract foreign investment to STEM related industries.

SPEAKER

- **Dr. Jeong Hyop Lee**, Science Technology & Innovation Policy Institute, KMUTT(Biodata & Powerpoint)
- **Emmanuel A. San Andreas**, APEC Policy Support Unit (Biodata & Powerpoint) (**P. 11**)
- **Katarina Tapio**, Finnish Embassy in Thailand (Biodata)
- **Dr. D.B. Kwon**, Korean University & KRIVET Former President (Biodata & Powerpoint)



Lee, Jeong Hyop, Ph.D.

Lee, Jeong Hyop received his Ph. D. in economic geography from the Seoul National University. He is now a senior advisor of the Science Technology and Innovation Policy Institute (STIPI), Thailand for two years from July 2016 to June 2018 and a research fellow at the Science & Technology Policy Institute (STEPI) in Korea, where he served as directors of the Center for STI Development and the Research Planning and Administration. Before he joined STEPI, he worked for the Korea Information Society Development Institute (KISDI). While he has worked for the two government research institutes, he has consulted local and central governments of Korea and foreign governments and worked with several international organizations. And he has published many articles, books and policy reports on the issue of science, technology and innovation.

He has actively engaged in various planning and evaluation committees in Korea. Some of the major programs are the Enterprise City Program of the Ministry of Construction & Transportation, the Techno-park Program of the Ministry of Knowledge Economy, the Research Hospital and the Medi-Cluster Program of the Ministry of Health and Welfare, and the S&T and ICT Globalization Committee of the Ministry of Science, ICT and Future Planning. He has also served as a full time advisor for the Korean Presidential Committee on Northeast Asian Business Hub (Later Presidential Committee on Northeast Asian Cooperation Initiative) where he led the sub-committee on clusters and national innovation systems. He is now a member of the University Reform Committee of the Ministry of Education.

He also has various consulting experiences for developing countries. He helped the Vietnamese Ministry of Science and Technology prepare a five year S&T plan and provided a master plan of industrial technology centers for the Egyptian Ministry of Industry and Technology. And he has experience working with various international organizations such as OECD, the World Bank, APEC, UN agencies. He has initiated a three year consulting project on innovation system diagnosis and STI strategy development for least developed countries from 2012 in partnership with the Asian and Pacific Center for Transfer of Technology (APCTT), UN-ESCAP. He has also worked with ASEAN countries to develop strategic STI roadmaps to address global challenges such as water (Indonesia), food (the Philippines), green energy (Vietnam) and other issues. Lastly he has cooperated with the African Network of Drugs and Diagnostics Innovation (ANDI) to develop STI strategies to overcome neglected diseases in Africa.



Katarina Tapio

Biography

First Secretary Katarina TAPIO is the Deputy Head of the Embassy of Finland since August 2016. In her position she is responsible for Finland's political and trade relations with Thailand and Cambodia. She is currently acting as Chargé d'Affaires a.i. of the Embassy.

Prior to her posting to Bangkok, she worked at the Permanent Representation of Finland to the EU during 2015-2016 as the Finnish delegate in the EU Council Working Group on Asia and Oceania (COA-SI). She also covered EU's external relations to Latin America and the Caribbean. Previously she held positions in the Ministry for Foreign Affairs of Finland at the Department for Trade Policy, and in the Department for Development. Before joining the Ministry in 2013, Ms Tapio worked in Brussels for NYSE Euronext's EU advocacy team influencing EU financial services regulation.

Ms Tapio graduated as Master in Arts from the University of Turku, Finland in 2011.



Dr. D.B. (Dae-Bong) Kwon

Prof. Dr. D.B.(Dae-Bong) Kwon is a professor of LLL & HRD and former Dean of the Graduate School of Education and College of Education at Korea University in Seoul, Korea.

He is an ASEM LLL Hub Research Network-3 member. He is also an appointed International Policy Advisor for the SEIP (Skills for Employment Investment Program) Project, Ministry of Finance, Government of Bangladesh from June 2017 to February 2018. He served as a World Bank Consultant for the Sri Lanka Skills Development Project from June 2013 to June 2014.

From Sep. 2008 to Sep. 2011, with a capacity of the 5th President of the KRIVET (Korea Research Institute for Vocational Education and Training under the Prime Minister), he closely worked with the Ministry of Employment & Labor, and Ministry of Education Science & Skills as well as OECD, UNESCO, and World Bank. As CEO of the KRIVET, he co-organized annual Global HR Forum (2008, 2009, 2010) with Korea Economic Daily Newspaper and Ministry of Education Science & Skills.

He got a World Bank FY 15 VPU Team Award in recognition of outstanding team achievement for Sri Lanka Skills Development Project in April 2015, and a Republic of Korea Green Ribbon Service Medal by the President in recognition of public service in promoting vocational education and employment in January 2013.

Trade and Development Regional Forum 2017

@ Pullman King Power Hotel, Bangkok, Thailand

Linking Trade & Development for Inclusive & Sustainable Growth

Wednesday, 19th July 2017

Keynote Speech

“A New Paradigm in Trade and Development in the Age of Rising Protectionism and Populism”

Dr. Supachai Panitchpakdi, WTO Secretary General (2002-2005), UNCTAD Secretary General (2005-2013)

(Biodata)

Trade and Development Regional Forum 2017

@ Pullman King Power Hotel, Bangkok, Thailand

Linking Trade & Development for Inclusive & Sustainable Growth

Wednesday, 19th July 2017

Session I

“The New Trade Facilitation Agreement: A New Horizon for Developing Countries”

Speaker:

1. Poul Hansen, UNCTAD Geneva - Technology & Logistics Section
(Biodata)
2. Yann Duval, UNESCAP Bangkok - Trade Facilitaion Section
(Biodata)

Trade and Development Regional Forum 2017

@ Pullman King Power Hotel, Bangkok, Thailand

Linking Trade & Development for Inclusive & Sustainable Growth

Wednesday, 19th July 2017

Session II

“Connectivity, Development & Regional Integration - The Agenda for CMLVT (Cambodia, Myanmar, Laos, Vietnam, Thailand)”

Speaker:

1. Dr. Aladdin D. Rillo / Dr. Naoyuki Yoshino, ADBI
(Biodata)
2. Atsuko Okuda, ICT and DRR Division, UNESCAP
3. Arthayudh Srisamoot, Ministry of Foreign Affairs, Thailand
(Biodata)
4. Emmanuel A. San Andres, APEC Secretariat
(Biodata)



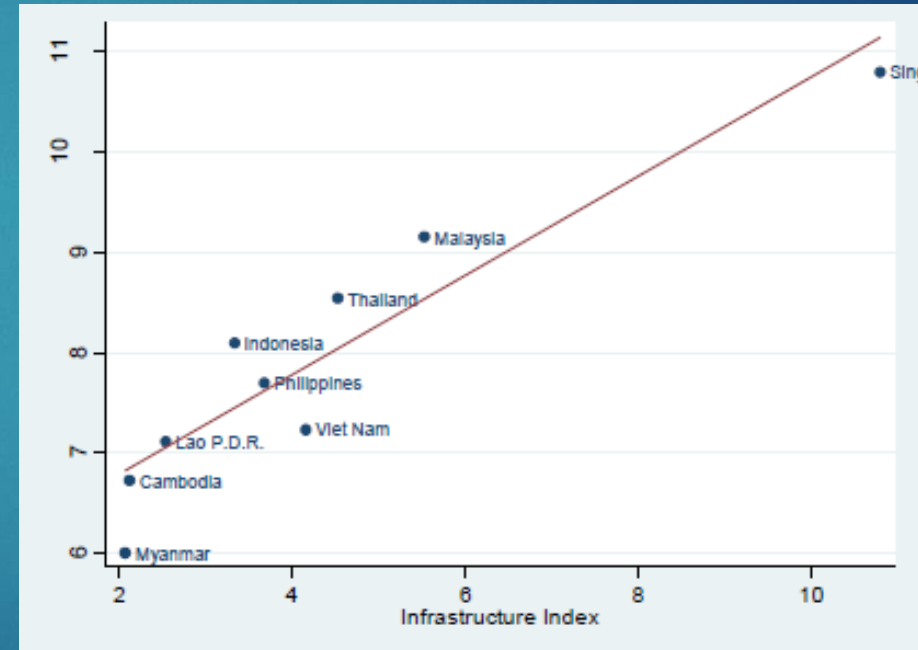
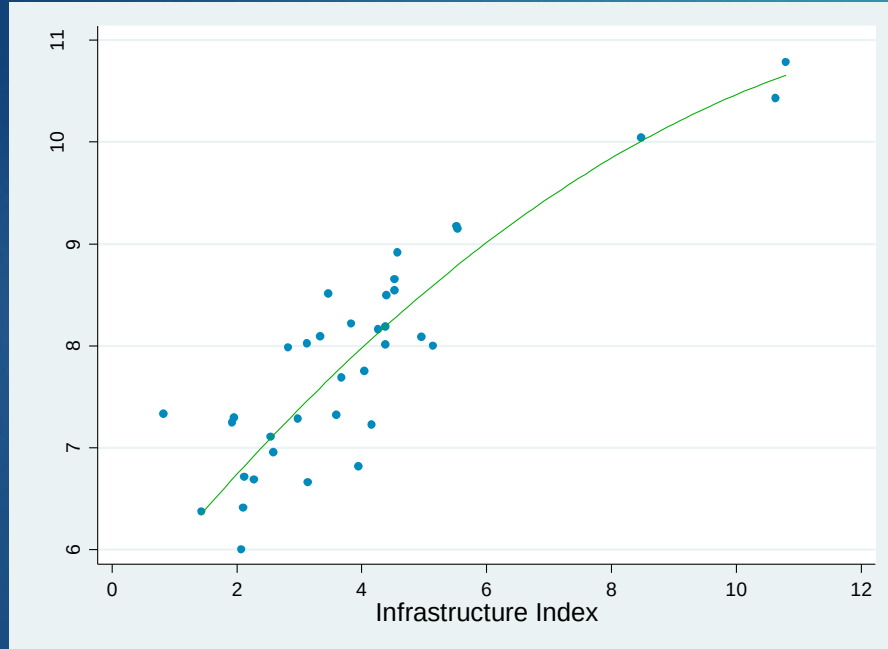
Infrastructure investment in Asia: estimates and policy options

Aladdin D. Rillo
Senior Economist
Asian Development Bank Institute

ITD Regional Trade and Development Forum
Bangkok, 19-20 July 2017

Infrastructure is still critical to Asia

Infrastructure and GDP per capita

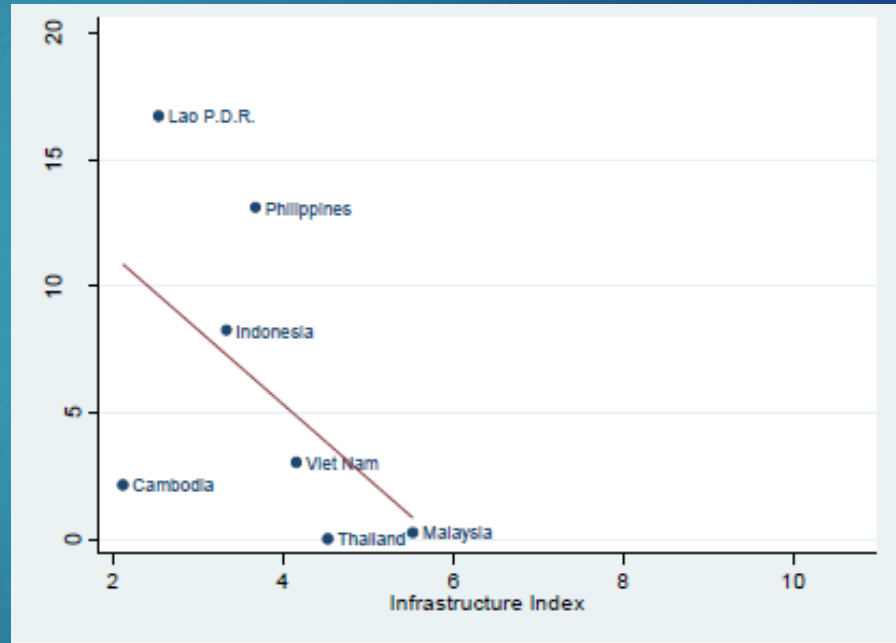
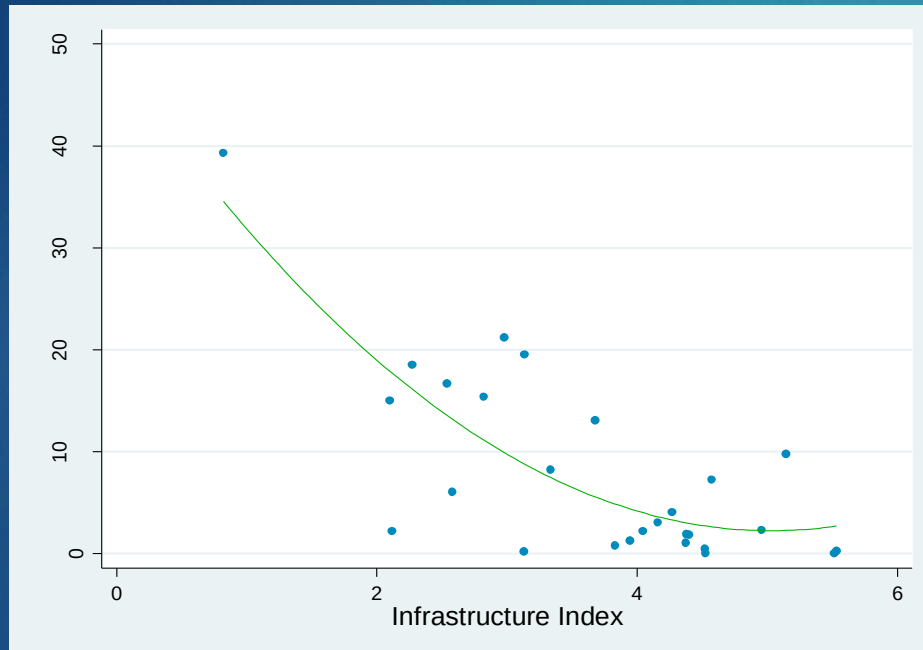


Note: Infrastructure index is computed based on first principal component of infrastructure stocks in roads, airport, electricity, telephone, mobile, broadband, water and sanitation. Higher values represent greater infrastructure availability.

Source: ADB estimates based on data from World Development Indicators and PovcalNet, World Bank

Infrastructure is still critical to Asia

Infrastructure and poverty

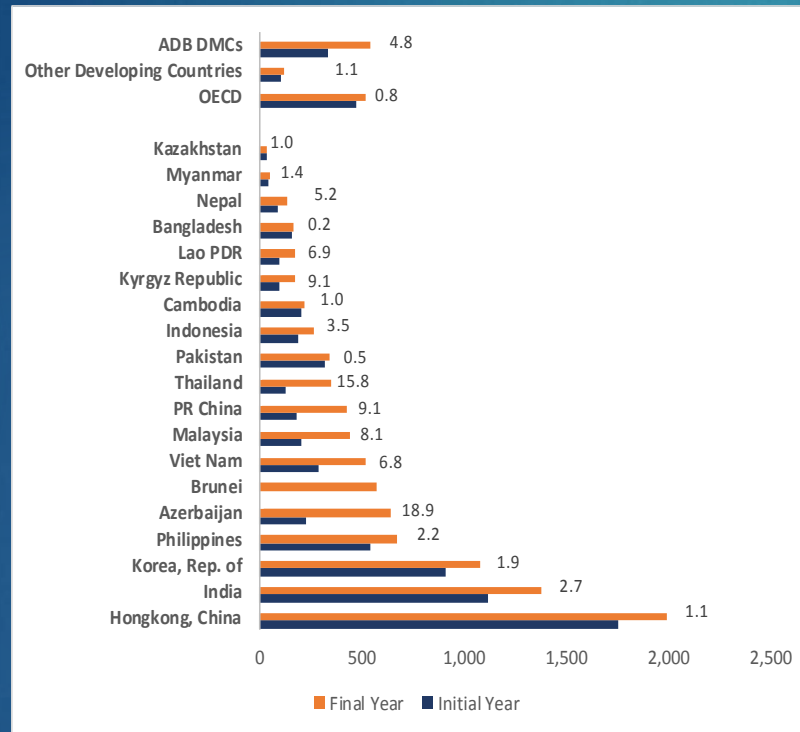


Note: Infrastructure index is computed based on first principal component of infrastructure stocks in roads, airport, electricity, telephone, mobile, broadband, water and sanitation. Higher values represent greater infrastructure availability.

Source: ADB estimates based on data from World Development Indicators and PovcalNet, World Bank

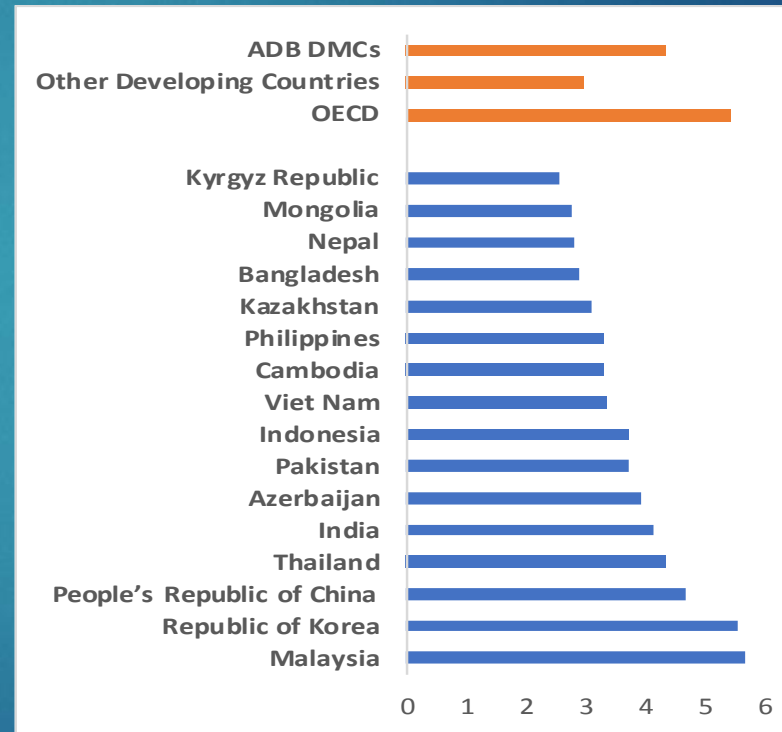
Asia surpassed other developing countries in infrastructure provision

Road Density and Annual Growth



Figures refer to annualized growth rate (2000-2010). Initial year is between 1996-2004 while Final Year is between 2006-2010.
 Regional averages are calculated with land area as weights
 Source: International Road Federation (2012); World Development Indicators, World Bank
 Cited in *Meeting Asia's Infrastructure Needs*, ADB, 2017

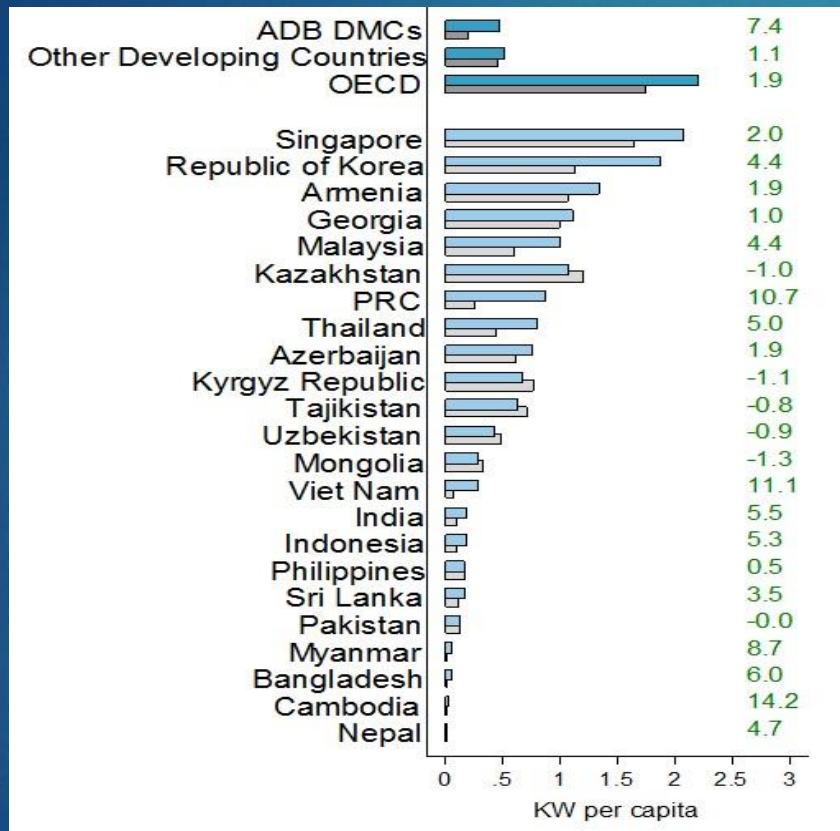
Road Quality, 2015



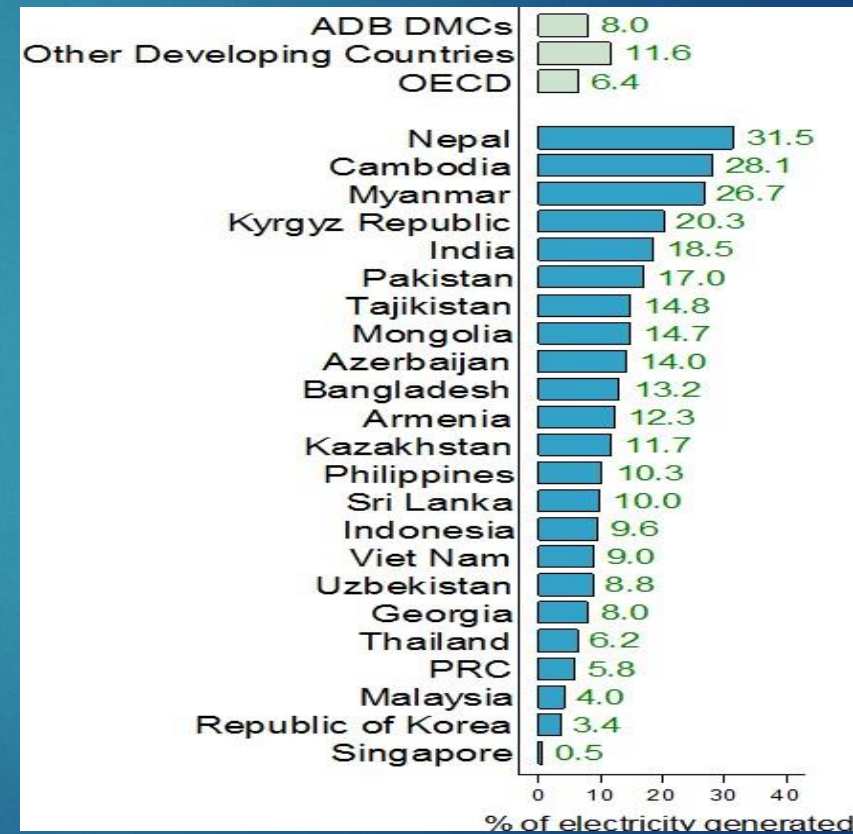
Regional averages of quality are calculated with length of road as weights
 Source: World Economic Forum
 Cited in *Meeting Asia's Infrastructure Needs*, ADB, 2017

But more infrastructure is still needed

Electricity Generation Capacity



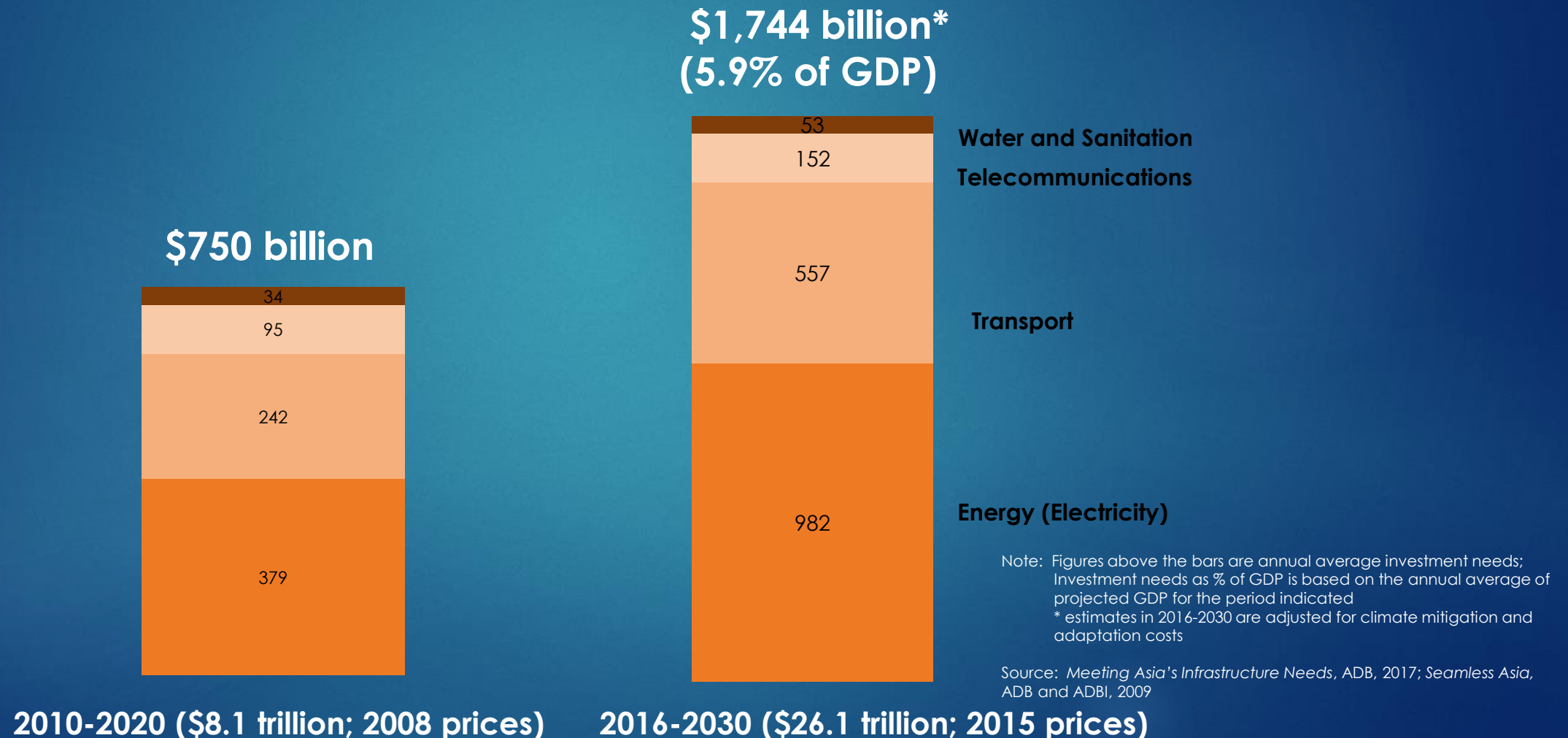
Transmission and Distribution Loss



Figures refer to annualized growth rate (2000-2012).
Regional averages are calculated with population as weights
Source: International Energy Statistics, US Energy Information Administration
Cited in *Meeting Asia's Infrastructure Needs*, ADB, 2017

Regional averages are calculated with total electricity generated as weights
Source: World Bank Development Indicators, World Bank
Cited in *Meeting Asia's Infrastructure Needs*, ADB, 2017

Key challenge: huge need for infrastructure investment in Asia



Infrastructure investment needs vary across sub-regions

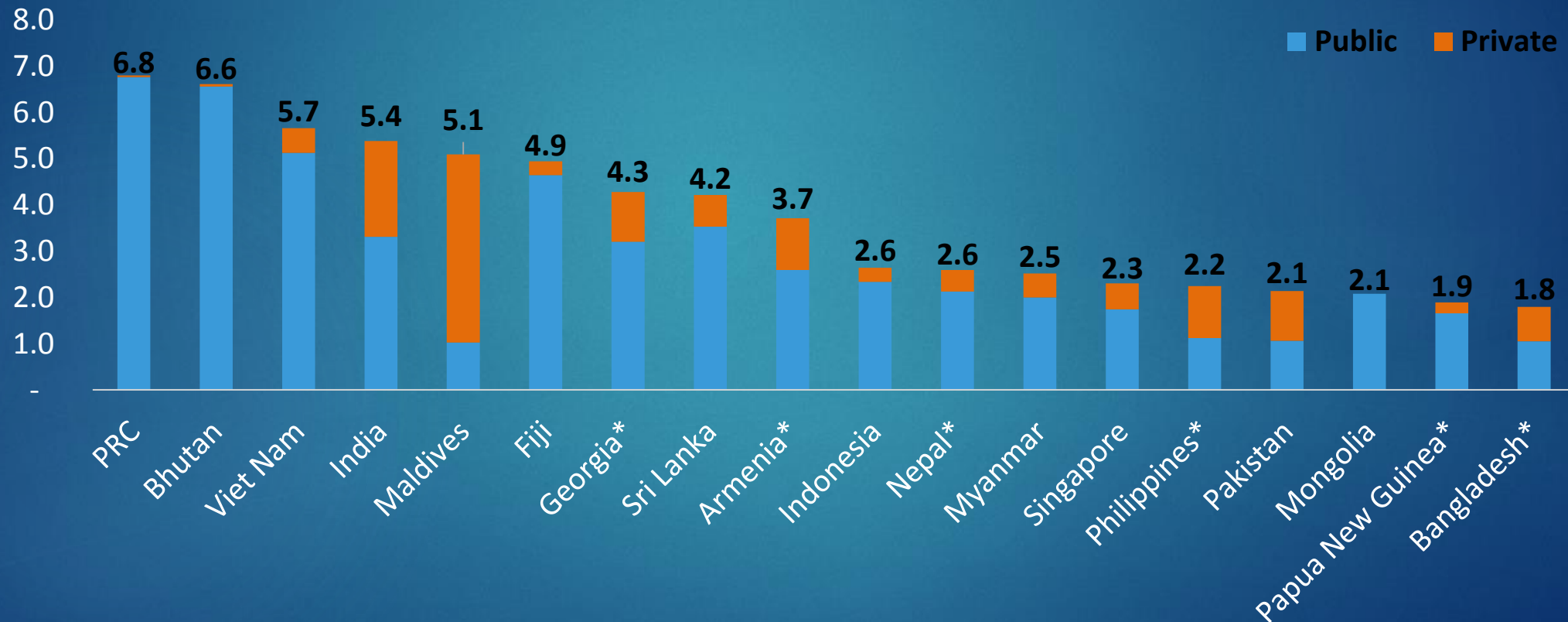
Infrastructure Investment by Region: Asia and the Pacific 2016-2030 (\$ billion, 2015 prices)

Region	Baseline Estimates			Climate-adjusted Estimates **		
	Investment Needs	Annual Average	Investment Needs as % of GDP	Investment Needs	Annual Average	Investment Needs as % of GDP
Central Asia	492	33	6.8	565	38	7.8
East Asia	13,781	919	4.5	16,062	1,071	5.2
South Asia*	5,477	365	7.6	6,347	423	8.8
Southeast Asia	2,759	184	5.0	3,147	210	5.7
The Pacific	42	2.8	8.2	46	3.1	9.1
Asia and the Pacific	22,551	1,503	5.1	26,166	1,744	5.9

Note: Pakistan and Afghanistan are included in South Asia. *** Climate-adjusted estimates include climate mitigation and climate proofing costs, but not include other adaptation costs, especially those associated with sea level rise.

Source: *Meeting Asia's Infrastructure Needs*, ADB, 2017

... and mask considerable variations by country



Note: Figures above bars are average infrastructure investment as % of GDP, computed for the period 2010-14
Public sector includes central government budget only. Actual budget investments except Armenia, Bhutan, Georgia, Maldives, Myanmar and Thailand, which are planned or estimated budget investments

Mind the investment gaps – \$459 billion or 2.4% of GDP

Infrastructure Investments and Gaps: Asia and the Pacific 2016-2020 (\$ billion, 2015 prices)

	Estimated Current Investment (2015)	Climate-adjusted Estimates		
		Annual Needs	Gap	Gap (% of GDP)
Total Asia-Pacific (25)	881	1,340	459	2.4
Total without PRC (24)	195	503	308	5.0
Selected Central Asia Countries (3)	6	12	7	3.1
Selected South Asia Countries (8)	134	329	195	5.7
Selected Southeast Asia Countries (7)	55	157	102	4.1
Selected Pacific Countries (5)	1	2	2	6.9

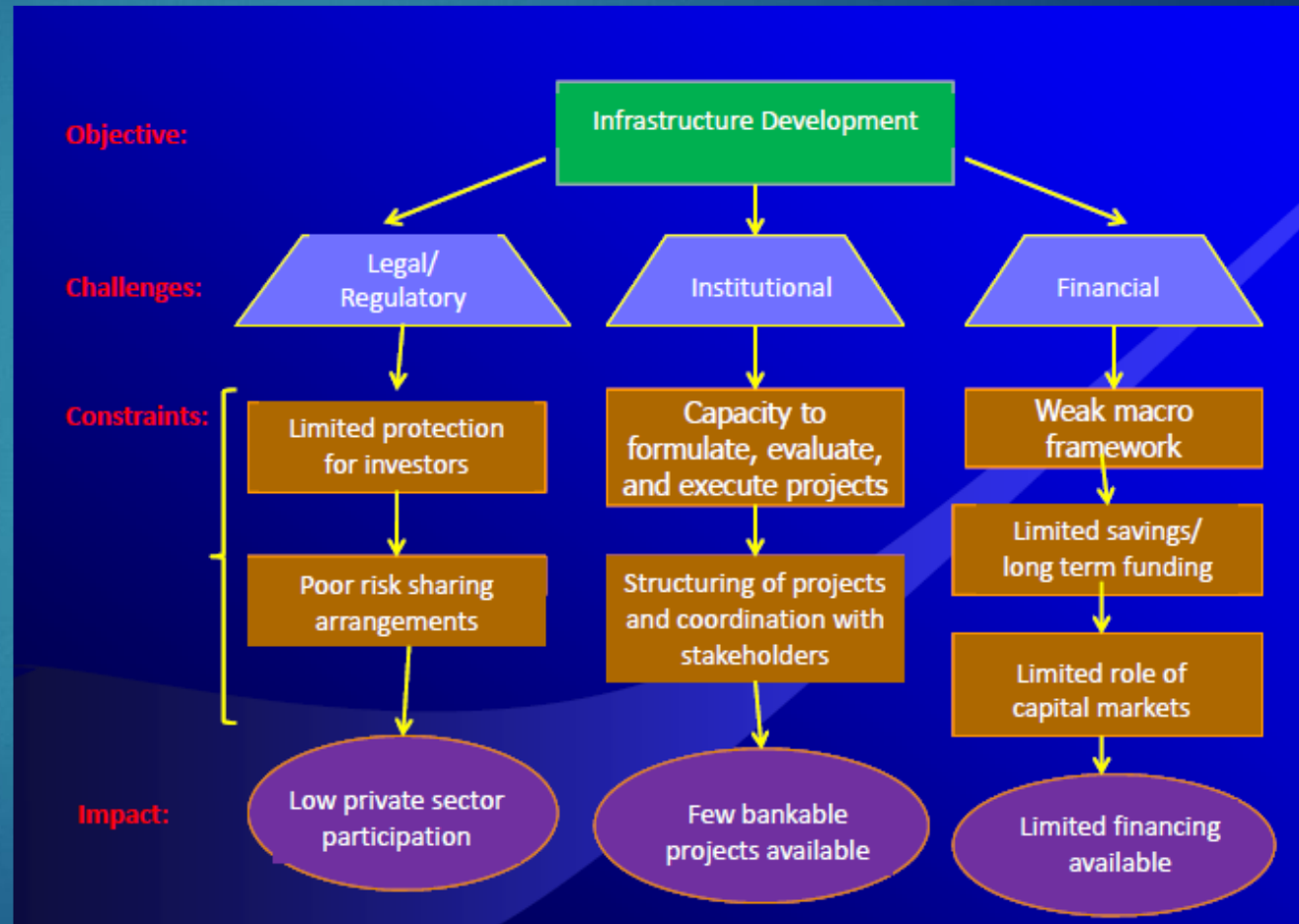
Note: Number in parentheses refer to number of countries. For example, the 7 Southeast Asian countries in the estimation include Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Thailand and Viet Nam.

The gap as a % of GDP is based on the annual average of projected GDP from 2016 to 2020.

Source: *Meeting Asia's Infrastructure Needs*, ADB, 2017

How to close the gaps?

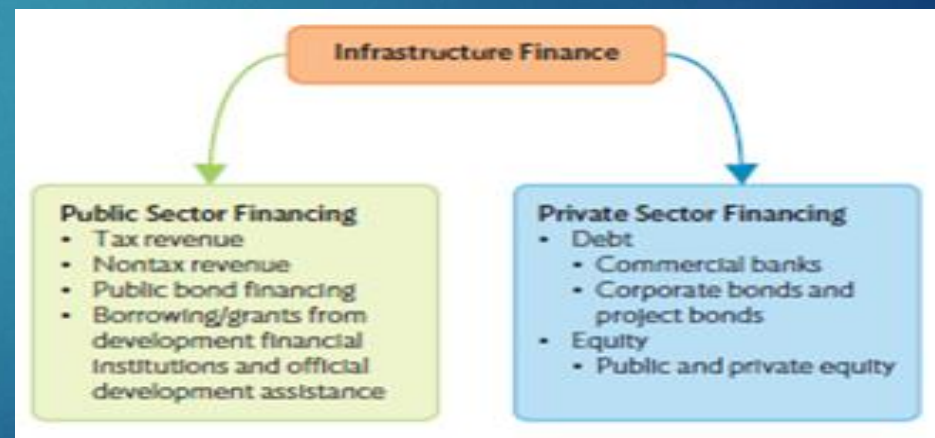
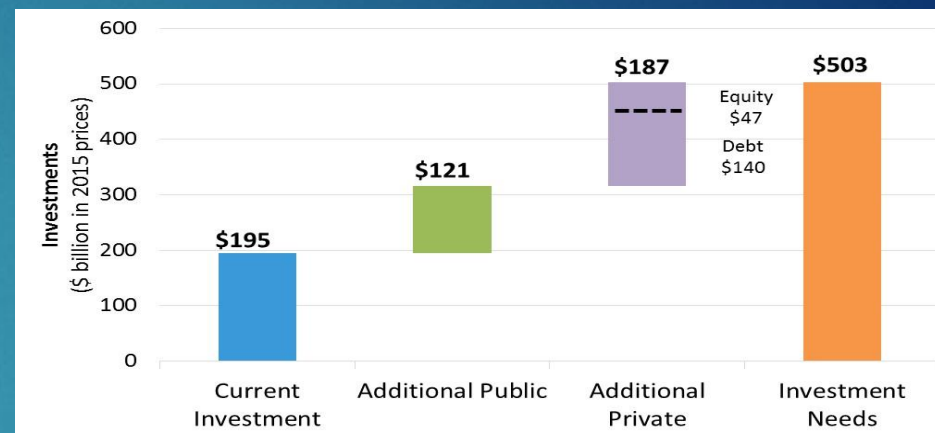
- Finance
- Reforms
- Institutions



Financing is still key

- Efficiency in **public financing**
 - direct fiscal support through capital spending
 - strong public support facilitates private capital financing
- Strengthen **private sector support** mechanisms
 - enhance efficiency of existing modes of private financing
 - making PPP work (i.e., transparency of projects; enforceable contracts)
- Explore **innovative approaches to financing** (e.g., spillover effects of infrastructure projects)

Infrastructure investment by financing source, excluding PRC, 2016-2020 (annual average, \$ billion in 2015 prices)

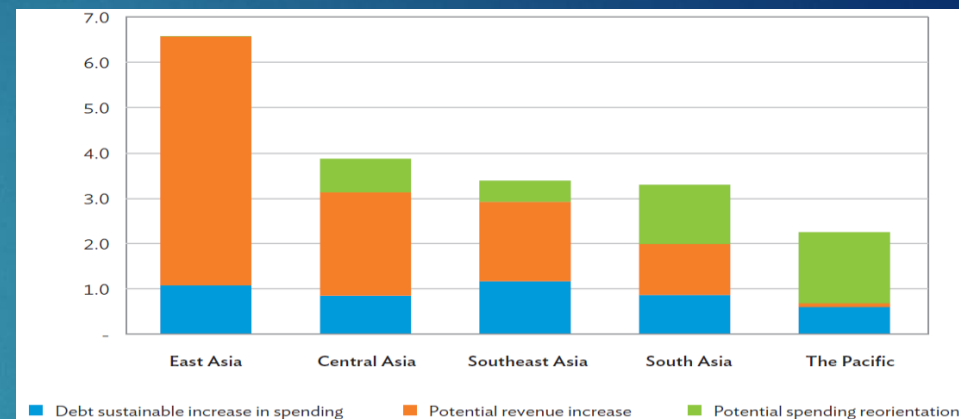


Source: Meeting Asia's Infrastructure Needs, ADB, 2017

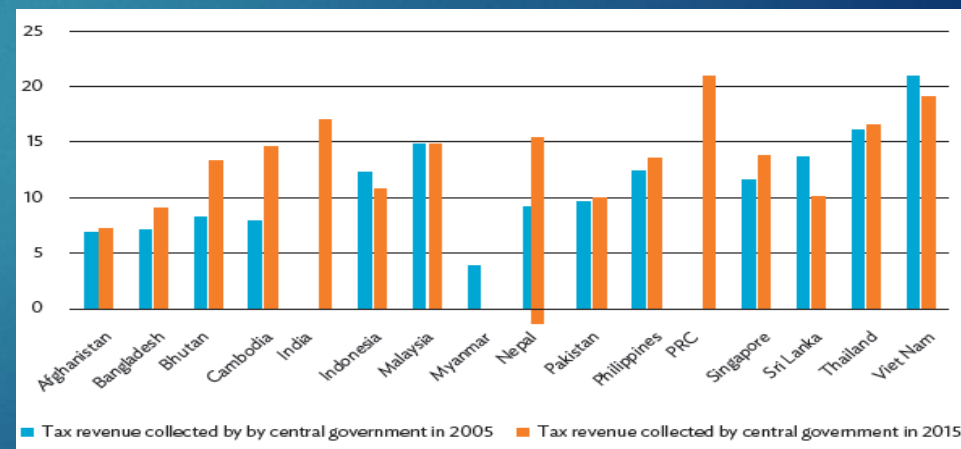
Reforms should continue

- **Fiscal reforms** to enhance sustainability of government finances and public infrastructure investments
- **Increase tax revenues** for capital spending
 - indicative targets: tax/GDP=18%
 - remove loopholes in tax system
 - good governance in tax collection
- **Manage current and future liabilities**
 - set annual budgets within medium-term fiscal frameworks
 - monitor regularly government liabilities

Fiscal space in developing Asia (% of GDP)



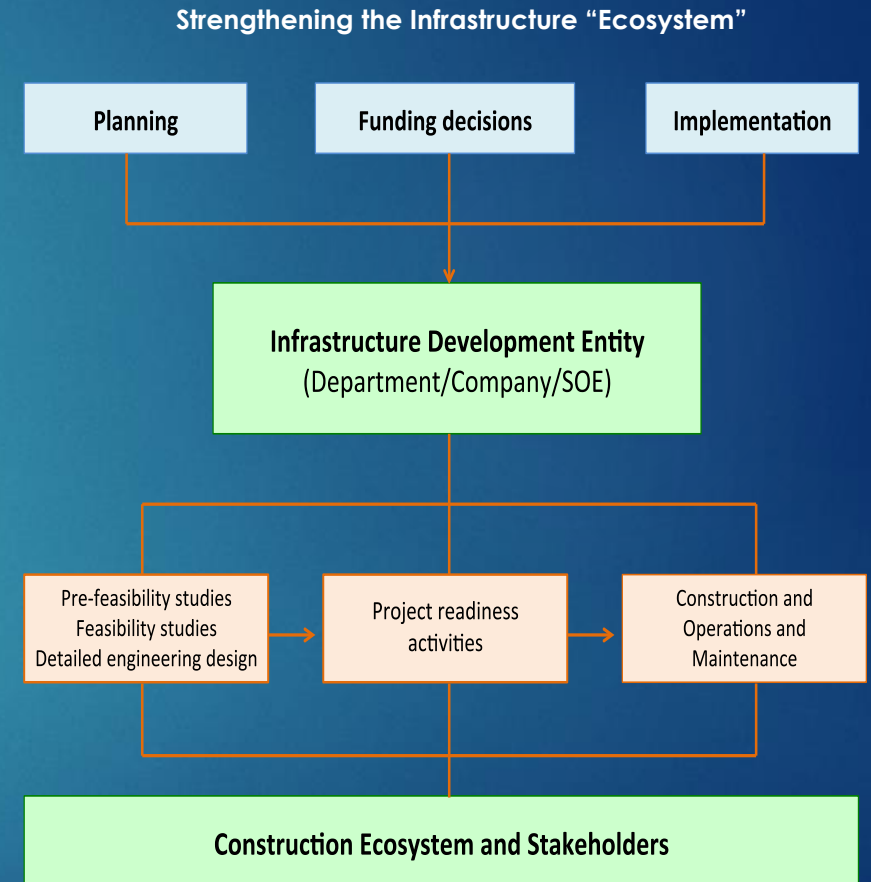
Tax revenues to GDP (%)



Source: Meeting Asia's Infrastructure Needs, ADB, 2017; Ahmad (2015); World Bank 2017

Institutional connectivity matters

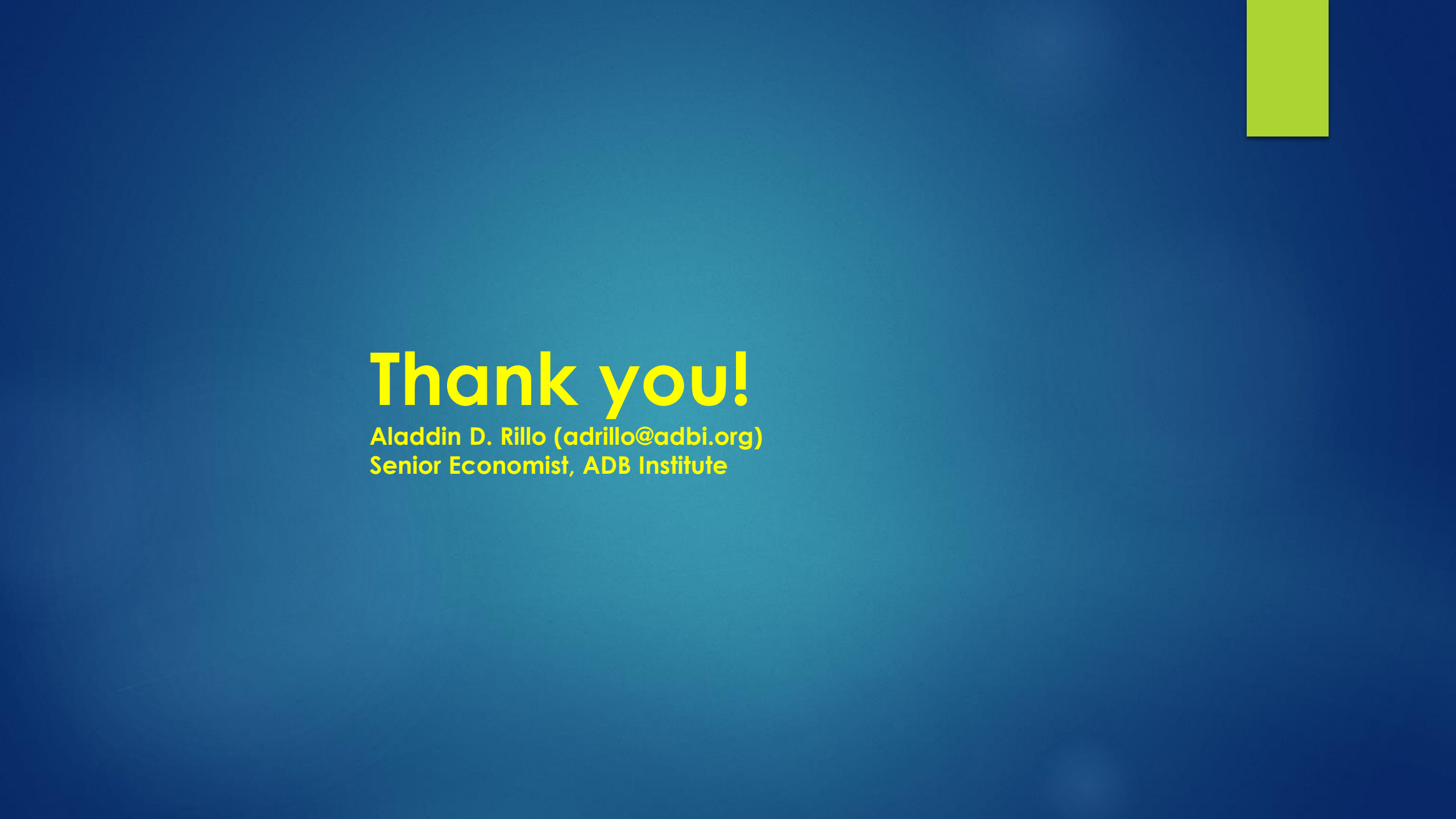
- Institutional connectivity refers to **effective policies and institutions** to enhance seamless connections, as critical as physical infrastructure
- Strengthen **domestic capacity and governance** to implement successful infrastructure projects:
 - legal frameworks
 - regulatory policies
 - policy environment
 - coordination among agencies/authorities
 - engagement with private sector to boost efficiency of infrastructure services
- Ability to **address border and behind-the-border barriers** to enhance cross-border collaboration infrastructure (e.g., harmonization of regulatory standards)



Source: *Meeting Asia's Infrastructure Needs*, ADB, 2017

Conclusion

- Despite progress in infrastructure provision in the last decade, developing Asia needs \$26 trillion (in 2015 prices), or **\$1.7 trillion per year**, for infrastructure investment in 2016-2030
- The aggregate figures mask **wide variations in infrastructure investment gap** across Asia, and actual needs are likely to be higher than these estimates as more comprehensive infrastructure investment data is produced
- **Innovative solutions and reforms**, involving both public and private sectors, are needed to effectively utilize Asia's large savings for infrastructure development and bridge financing gaps
- But **to sustain infrastructure development, need to overcome obstacles**, including governance, capacity, and institutional issues in developing Asia



Thank you!

Aladdin D. Rillo (adrillo@adbi.org)
Senior Economist, ADB Institute

Trade and Development Regional Forum 2017

@ Pullman King Power Hotel, Bangkok, Thailand

Linking Trade & Development for Inclusive & Sustainable Growth

Wednesday, 19th July 2017

Session III

“Building the Digital Economy: A Digital Trade Imperative”

Speaker:

1. **Richard Bolwijn, Enterprise & Innovation Division, UNCTAD**
2. Jonathan Wong, Investment & Innovative Division, UNESCAP
(Biodata)
3. Joseph Meltzer, Brooking Institution and E15 Initiative
4. Wisit Atipayakoon, ITU APAC Regional Office for Asia and
the Pacific (Biodata & Powerpoint)
5. **GSMA – Mobile Money Initiative Team**



Digital Economy and Inclusive Trade

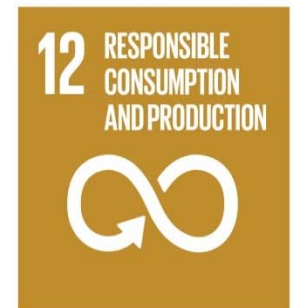
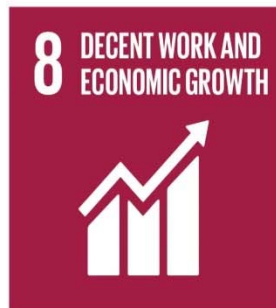
Government policy imperatives for the SDGs

Jonathan Wong
Chief of Technology and Innovation
Twitter: @UN_JonathanWong

Context



SUSTAINABLE DEVELOPMENT GOALS



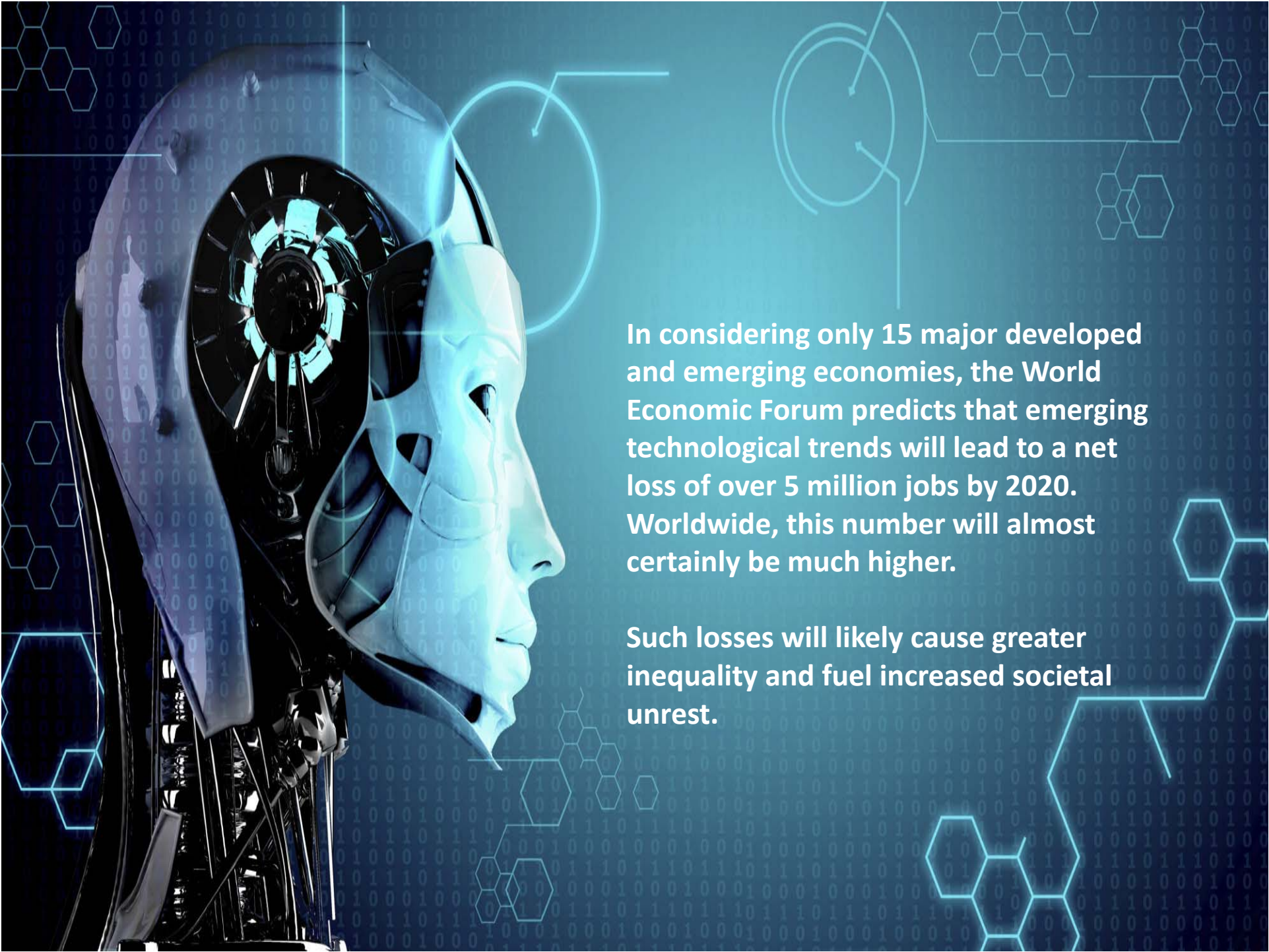


This revolution had been defined by emerging technologies such as artificial intelligence, robotics, 3D printing and quantum computing amongst others.

THE FOURTH INDUSTRIAL REVOLUTION

Digital Economy

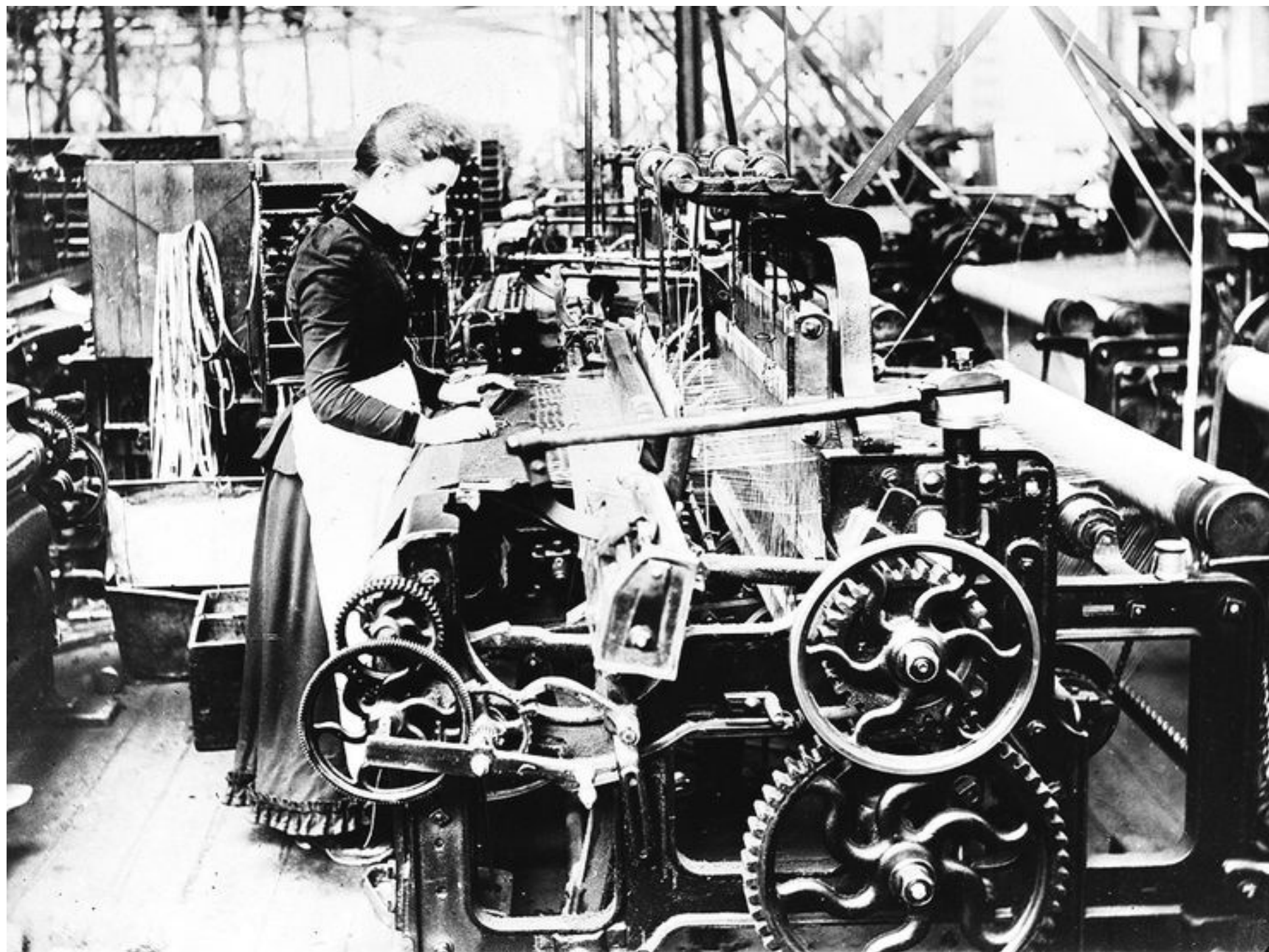
Digital Economy: An economy which functions primarily by means of digital technology, especially electronic transactions made using the Internet.



In considering only 15 major developed and emerging economies, the World Economic Forum predicts that emerging technological trends will lead to a net loss of over 5 million jobs by 2020. Worldwide, this number will almost certainly be much higher.

Such losses will likely cause greater inequality and fuel increased societal unrest.

**But digital tech can also be a good thing
for the economy, society and the
environment!**



Fourth Industrial Revolution technologies have the potential to make logistics more efficient

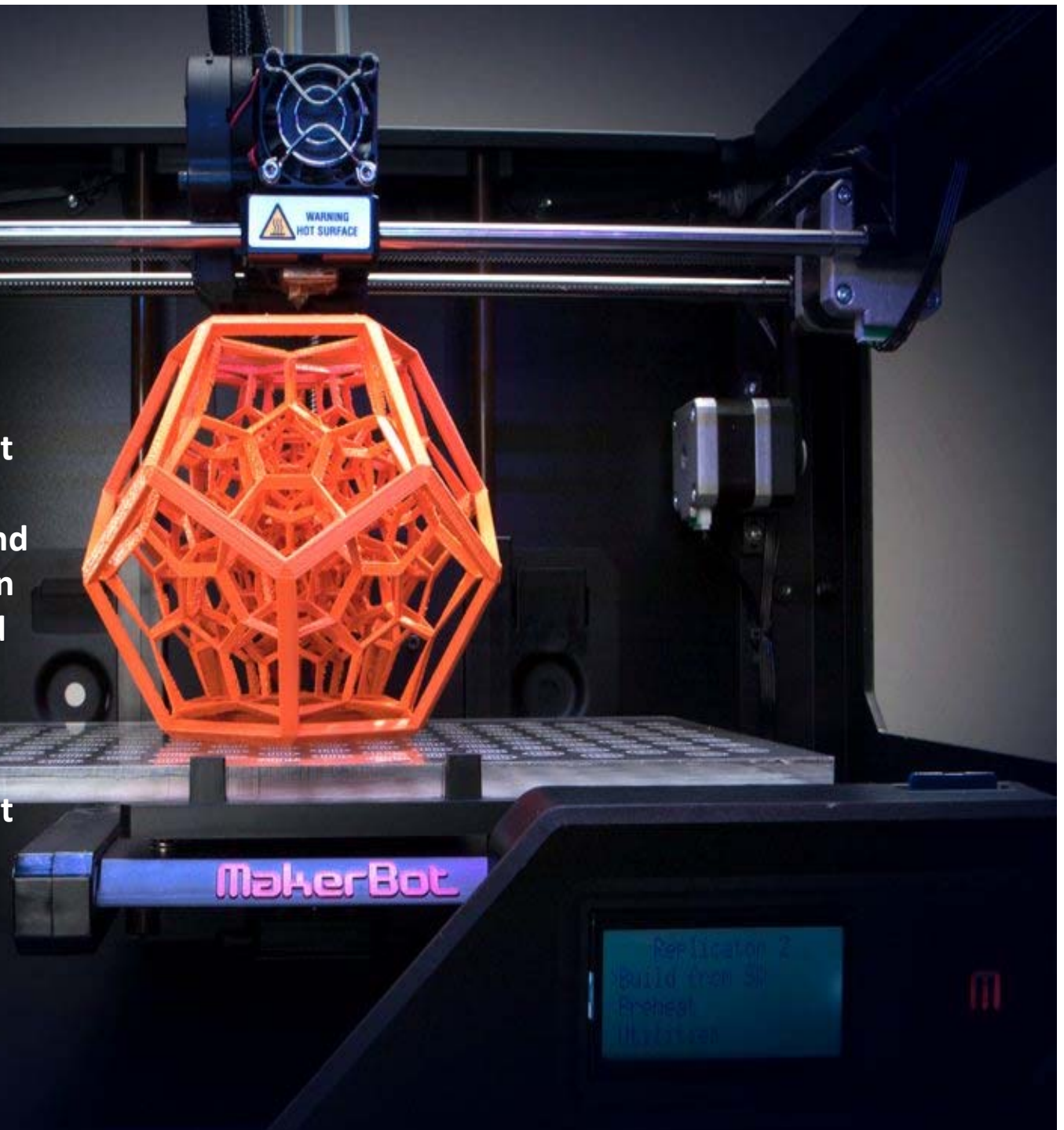
This is how robots help sort parcels for quicker delivery at a Chinese firm

临沂申通项目



Emerging technologies could have significant positive impact on the environment. Data suggest that improved application of ICT to transportation and logistics will reduce carbon emissions by an estimated 4.5 billion tons by 2020.

Technologies such as 3D printing could also support more inclusive trade.



**The key will be to minimize the
downsides while maximizing the benefits
of Fourth Industrial Revolution
technologies**

This will require innovative policies

One such policy in Singapore offers adults personal accounts which they can use to buy training, and another uses tax incentives to encourage firms to invest more in their lower paid workers.





The Financial Services Authority in the UK has experimented with innovative regulations. For example, in the field of financial technology (FinTech) their Sandbox policy allows businesses to test out innovative financial services without incurring all the normal regulatory consequences.

Effective regulation should allow innovation to flourish while still safeguarding society and the environment.

Balancing these demands will be an important government agenda as frontier tech evolves, and one that will require sharing effective practices and innovative approaches between governments.

Inclusive Trade

Inclusive Trade: Trade is inclusive if all people can contribute to and benefit from international trade, equality of opportunities as precondition.

Inclusive Businesses expand access to goods, services, and livelihood opportunities for low-income communities in commercially viable ways.



Mitticool was founded by a potter living in rural Gujarat who lacked formal education.

The company has grown nationally as well as internationally and is now trading in UK, US, Singapore and across Africa.



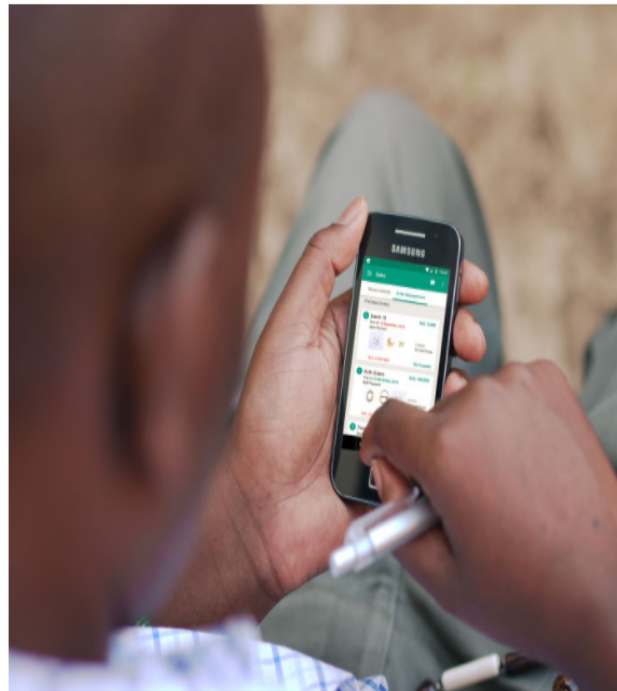


INNOVATION

Soko employs technology to empower and provide equal access to opportunity for marginalized artisans.

Our supply chain innovation uses the mobile phone to connect independent artisan entrepreneurs to Soko in an ethical and transparent "virtual factory".

With Soko's mobile tools, artisans have access to an entire world of consumers, expanding their business horizons and entrepreneurial prospects.



TOP

THE GIFT OF

SIGHT

Your TOMS Eyewear purchase helps restore sight to an individual through sight-saving surgery, prescription glasses or medical treatment.

[LEARN HOW SAVING SIGHT HELPS](#)



THE GIFT OF

WATER

More than 780 million people don't have access to safe water. TOMS Roasting Co. purchases support water systems in seven countries - in the same regions where we source our coffee beans.

[LEARN HOW SAFE WATER HELPS](#)



**Inclusive trade will require policies that
foster inclusive businesses**



In Asia, small and medium-sized enterprises comprise 96% of all enterprises, employ 62% of the national labor force and contribute 42% of gross domestic product.

Policy Focus

Support for grassroots innovators:

The National Innovation Foundation under the auspices of the Ministry of Science and Technology – India, was pivotal in supporting Mitticool to grow and trade in new markets. The Foundation provides support to grassroots innovators to protect intellectual property, develop the business, scale nationally and trade internationally.

Incentivize more social forms of enterprise:

- Thailand Social Enterprise Promotion Act.
- Viet Nam's enterprise Law revised in 2014 to provide legal recognition of social enterprise.
- Republic of Korea Social Enterprise Promotion Act.
- Malaysia Social Enterprise Blueprint.

Incentivize inclusive trade that benefits economy, society and environment:

- The 2001 Doha Ministerial Declaration instructs members to negotiate on the reduction or, as appropriate, elimination of tariff and non-tariff barriers on environmental goods and services.
- Similar arrangement for social enterprises?
- How could government policy incentivize more inclusive ecommerce platforms?

Key messages

- Digital Economy and Inclusive Trade are inherently linked.
- They are cross-government agendas spanning multiple line ministries so will require policy co-ordination.
- Policies that develop a workforce for the future and focus on life-long learning will be critical to manage the downsides of the Digital Economy.
- Enabling regulation will be critical to catalyze, not stifle, frontier technology development.
- Fostering more social forms of enterprise and inclusive businesses will be critical to fuel inclusive trade.

ESCAP's Work

- Cross-border paperless trade.
- We will be releasing policy papers on digital economy and inclusive trade for sustainable development in the near future.
- We have a major program to support policy makers to foster more social forms of enterprise and inclusive businesses – if this is of interest do let me know!
- We will be actively contributing to the UN “eTrade for All” agenda.



Thank You

Email: jwong@un.org

Twitter: @UN_JonathanWong

TRADE AND DEVELOPMENT REGIONAL FORUM 2017

19-20 July 2017

Building the Digital Economy: A Digital Trade Imperative

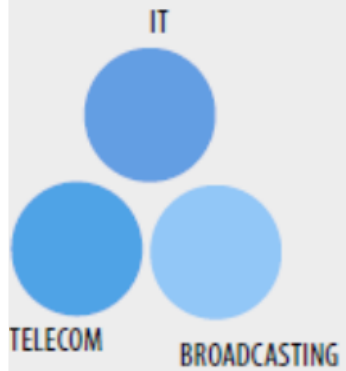


Wisit Atipayakoon
ITU Regional Office for Asia and the Pacific



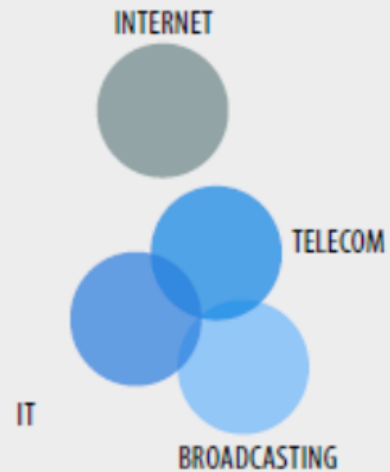
Infographic Timeline: New Convergence

ANALOGUE ERA



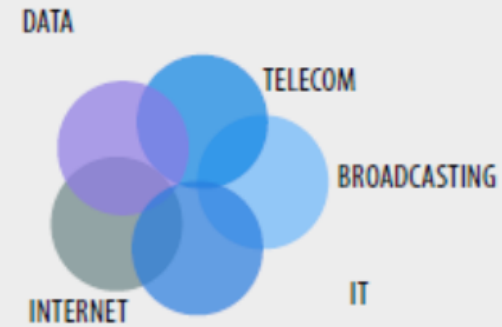
1970

EMERGING CONVERGENCE



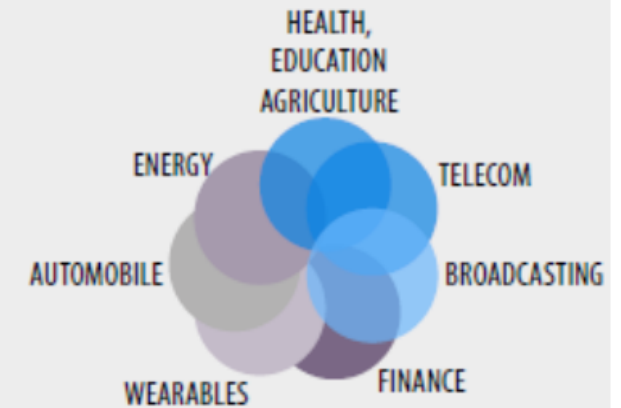
2000

DIGITAL TRANSFORMATION



2010

SMART SOCIETY



2030

1970

2000

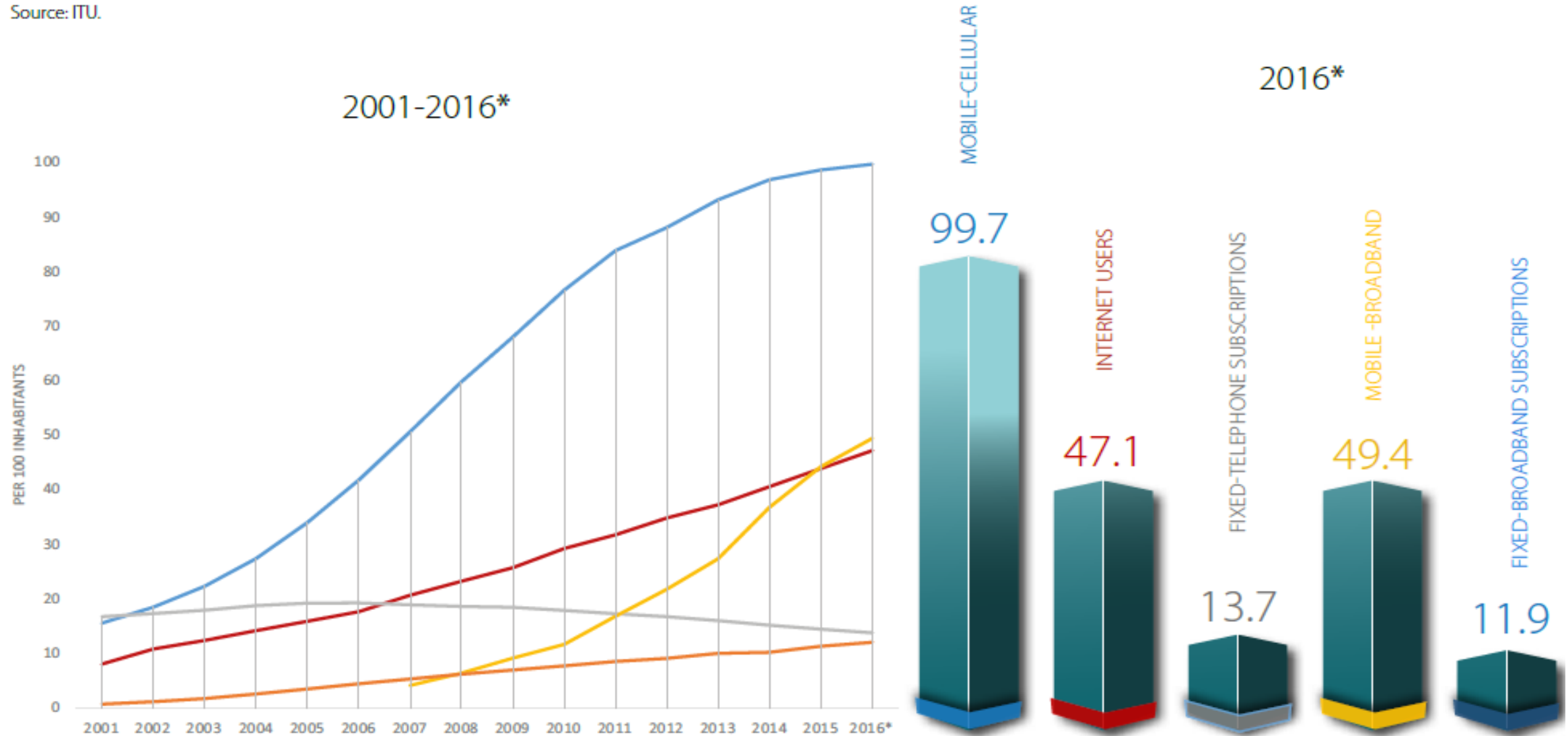
2010



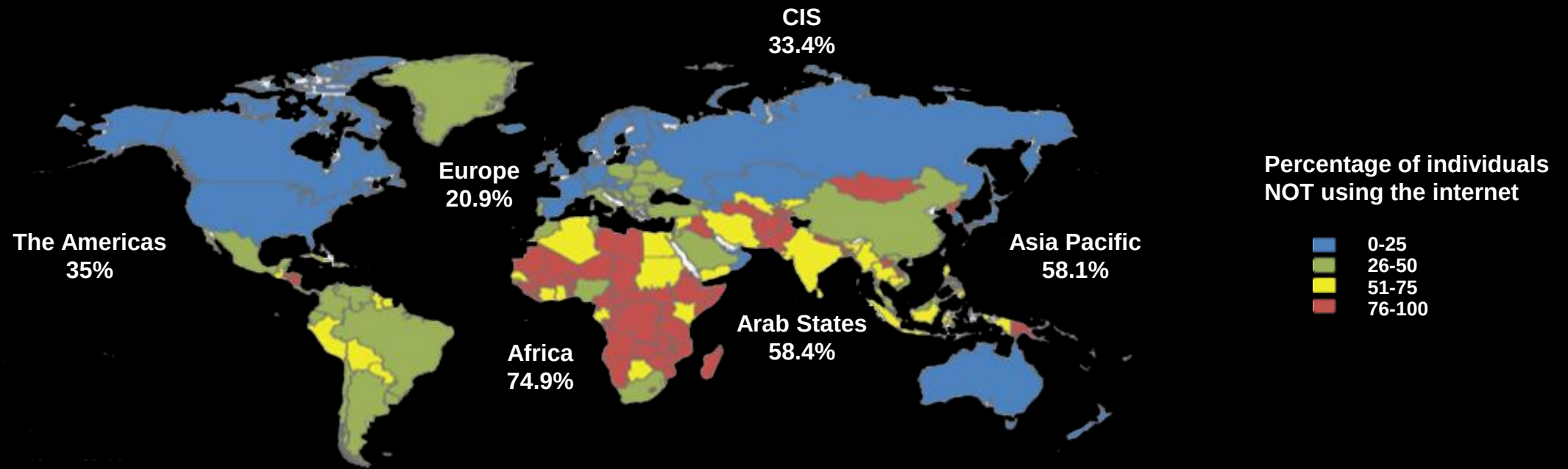
Global ICT Developments Worldwide

Note: *Estimates.

Source: ITU.



More than half the world's population is not using the Internet



- By the end 2016, 3.9 billion people – 53% of the world's population is not using the internet
- In the Americas and the CIS regions, about one third of the population is offline
- While almost 75% of people in Africa are non-users, only 21% of Europeans are offline
- In Asia and the Pacific and the Arab States, the percentage of the population that is not using the internet is very similar, 58.1% and 58.4% respectively.

ITU Connect 2020 Vision



Connect
2020

55%

Worldwide household
access to the Internet

60%

Rural individuals using
the Internet

90%

Rural population covered
by broadband

5% GNI

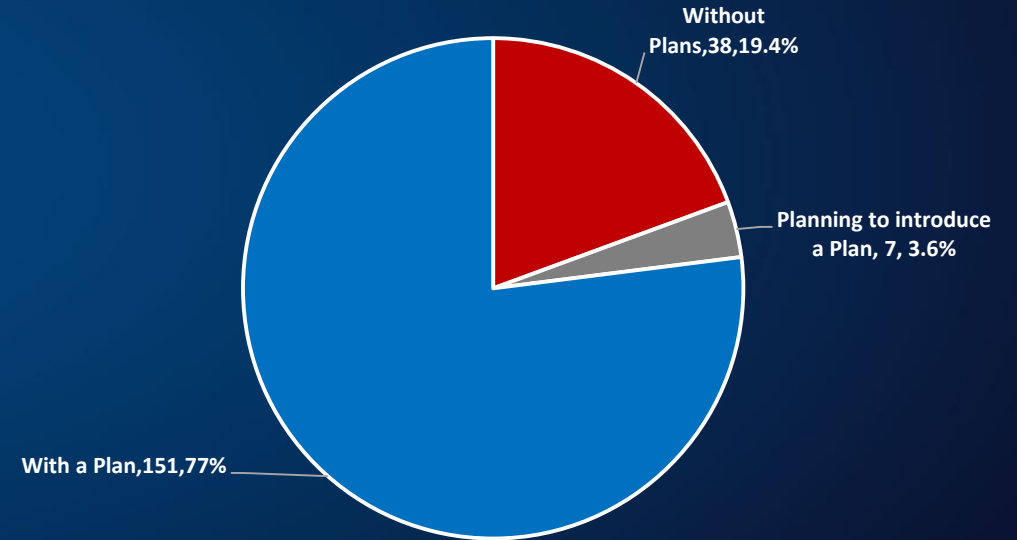
Broadband tariff threshold

ITU's broadband targets supporting the UN's SDGs have been conducted successfully

Number of Countries with Broadband Plans, 2006-2016



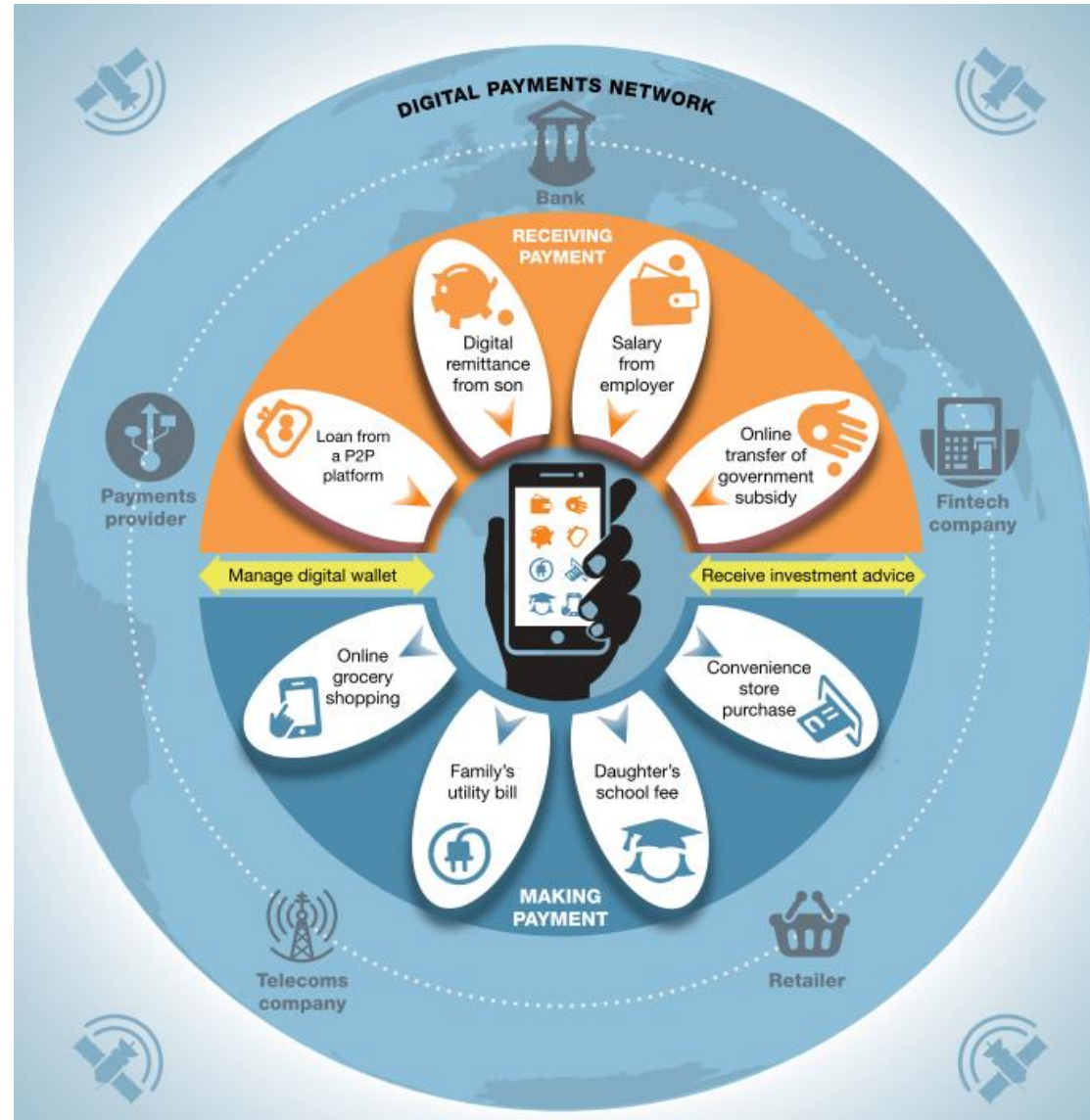
Number of countries that have adopted a plan or strategy to adopt or without broadband plans



Source: ITU, State of Broadband 2016. Note: Bottom chart based on data for 196 countries. National Broadband Plan or strategy includes: a plan, strategy or policy specific to broadband; digital plan, agenda, strategy or policy; ICT plan, strategy, or policy; or a communication plan, strategy, or policy.

There are still **38** countries without NBPs, of which **6** in APAC

Building the Digital Economy



Source: McKinsey Global Institute

Digital Financial Services

the future **at hand**
innovation in digital financial services

In the Fast Lane: Innovations in Digital Finance



“Financial Inclusion” targets poor and unbanked people.

“Digital financial inclusion” can be defined broadly as digital access to and use of formal financial services by excluded and underserved populations. Such services should be suited to customers’ needs, and delivered responsibly, at a cost both affordable to customers and sustainable for providers.

“Digital Financial Services” is broadly encompassing electronic payments, including retail payments by card or mobile phone. Digital financial services have significant potential to provide a range of affordable, convenient and secure banking services to poor people in developing countries.

“Mobile financial services” can be described as the use of a mobile phone to access financial services and execute financial transactions. This includes both transactional and non-transactional services, such as viewing financial information on a user’s mobile phone. Mobile Financial Services (MFS) in general encompasses m-Banking, m-Payments, and mobile money transfer.

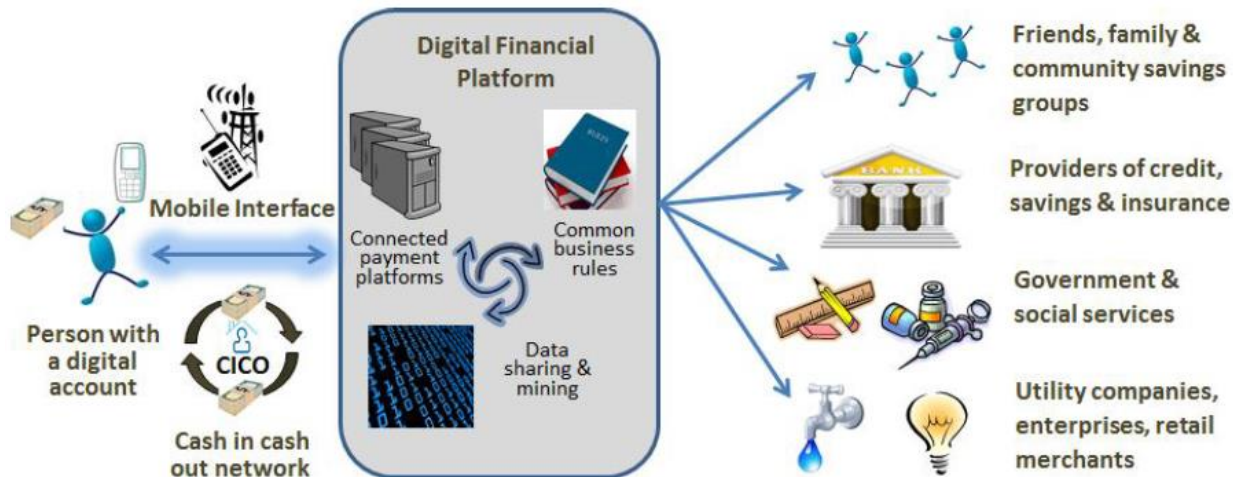
DFS as a platform for achieving the SDGs

- access to financial services (SDG 8.10 & 9.3)
- poverty reduction (SDG 1)
- business opportunities for small and medium enterprises (SDG 9)
- increase employment (SDG 8)
- funding sustainable agriculture (SDG 15)
- improved food security and nutrition, and hunger reduction (SDG 2)
- borrowing for and insuring health (SDG 3)
- financing investment in education (SDG 4)
- spreading risk to improve security during natural disasters and man-made crises (SDG 10)
- gender equality (SDG 5)

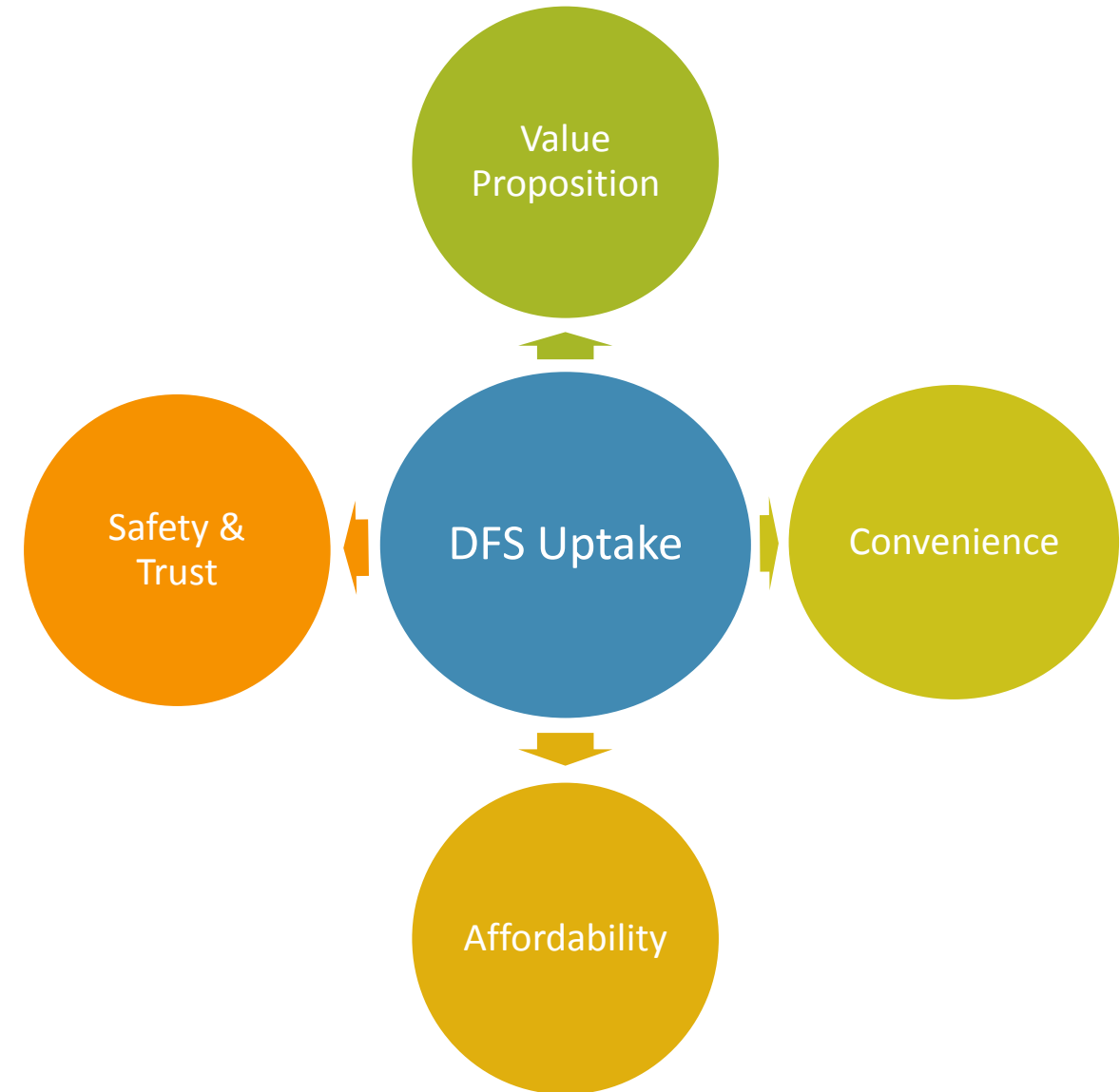


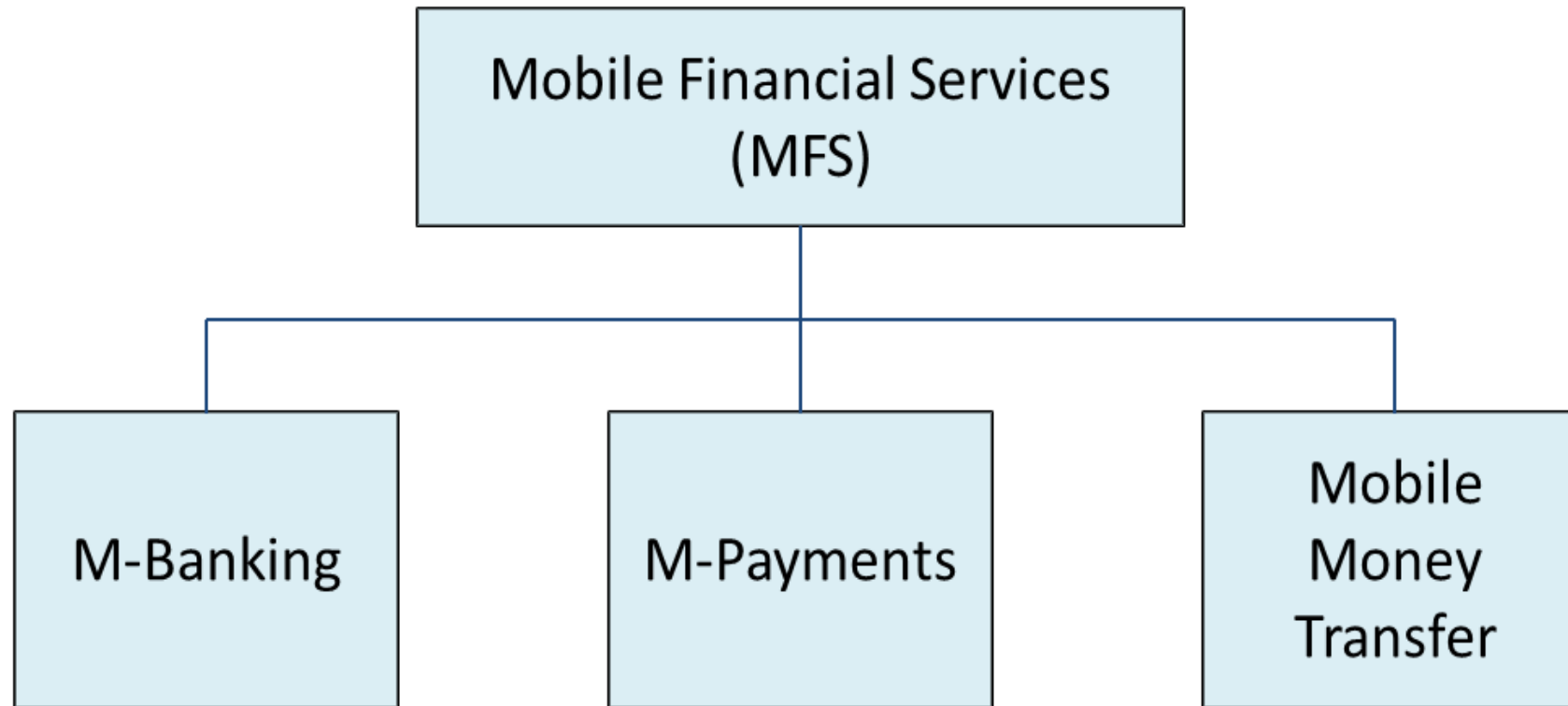
Key Components of DFS

- ❑ **Digital transactional platform**, enables a customer to make or receive payments and transfers and to store value electronically through a device that transmits and receives transaction data and connects to a bank or nonbank permitted to store electronic value.
- ❑ **Retail agents**, armed with a digital device that is connected to communications infrastructure to transmit and receive transaction details enable customers to convert cash into electronically stored value and to transform stored value back into cash.
- ❑ **Device**, such as a mobile phone or an instrument, such as a payment card that connects to a digital device (e.g., POS terminal).

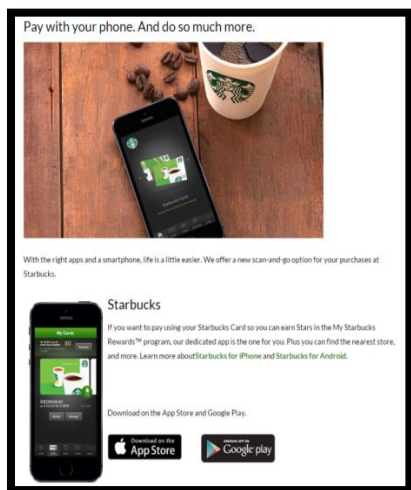


DFS Critical Success Factors





Mobile Payment

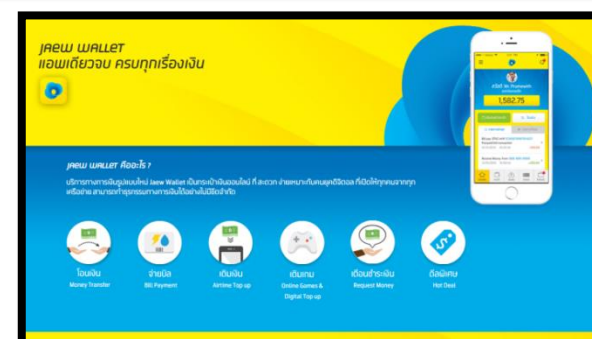
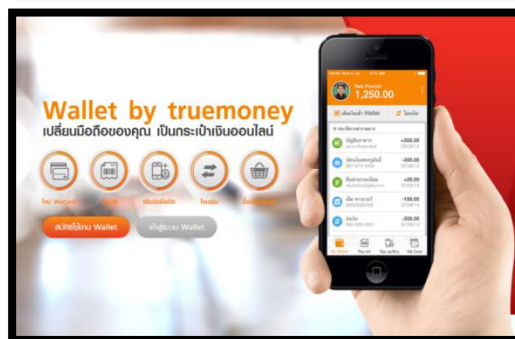


← **Mobile Banking**

AIS + CIMB BANK

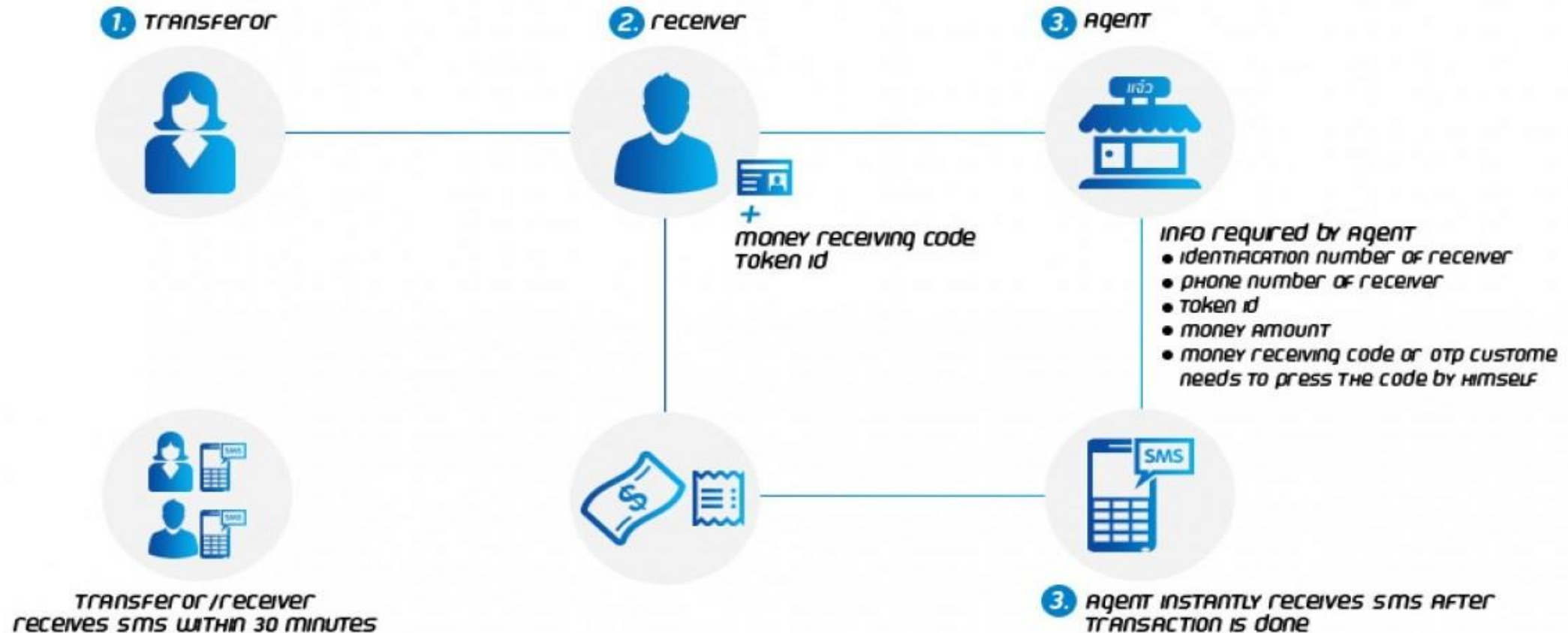


← **Mobile Money Transfer**

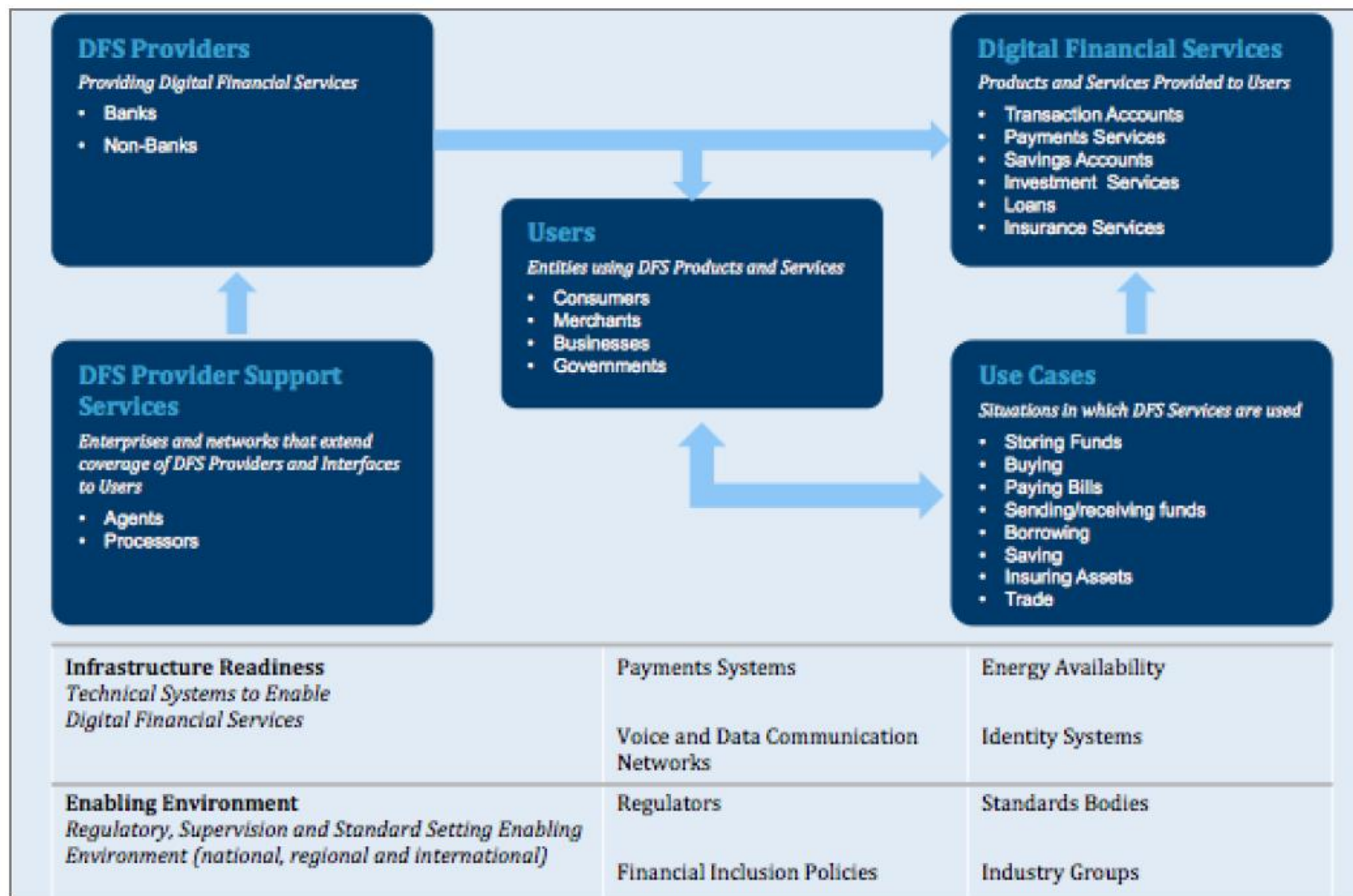


← **Mobile Money (e-wallet)**

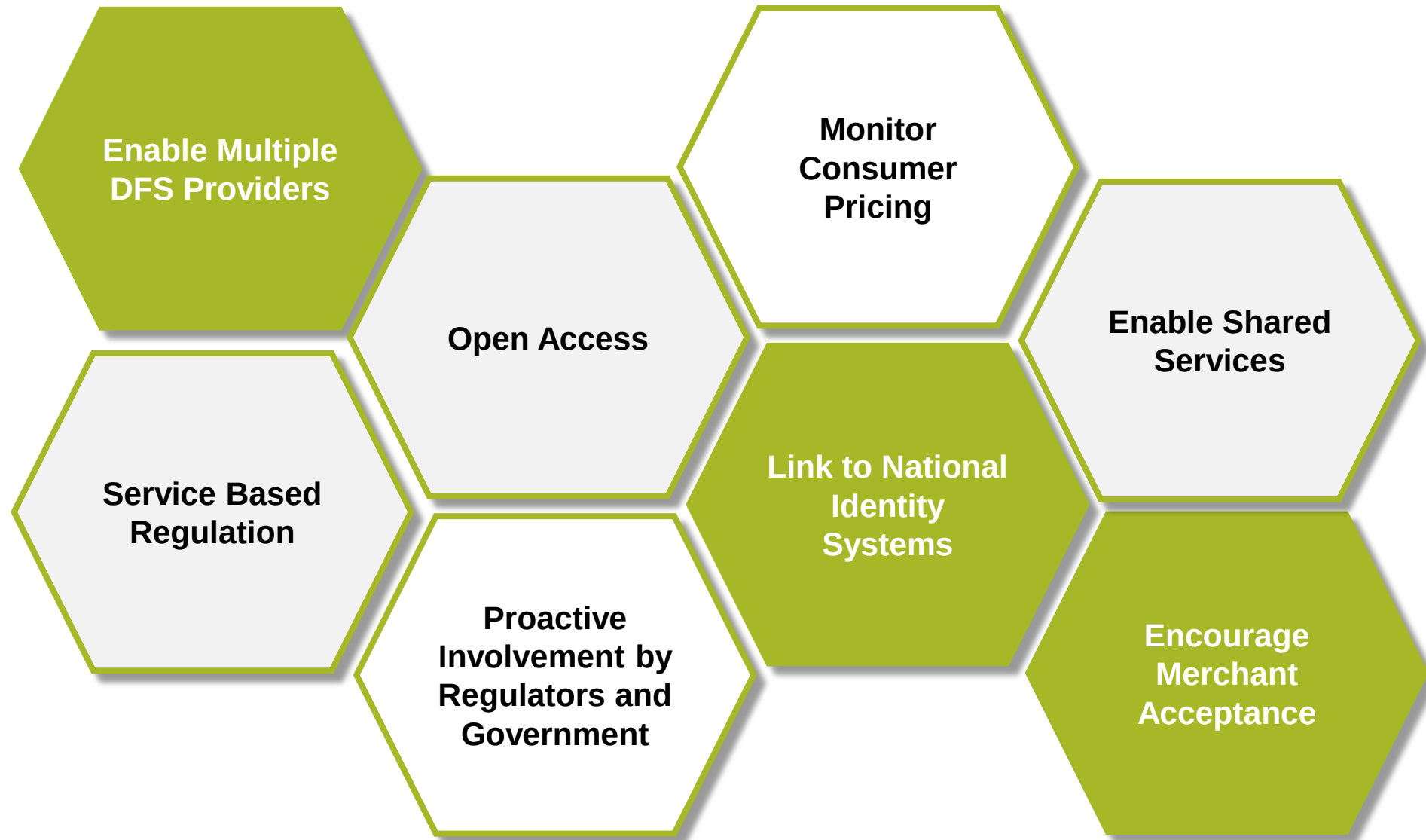
• money Transfer procedures & info prepared by Transferor



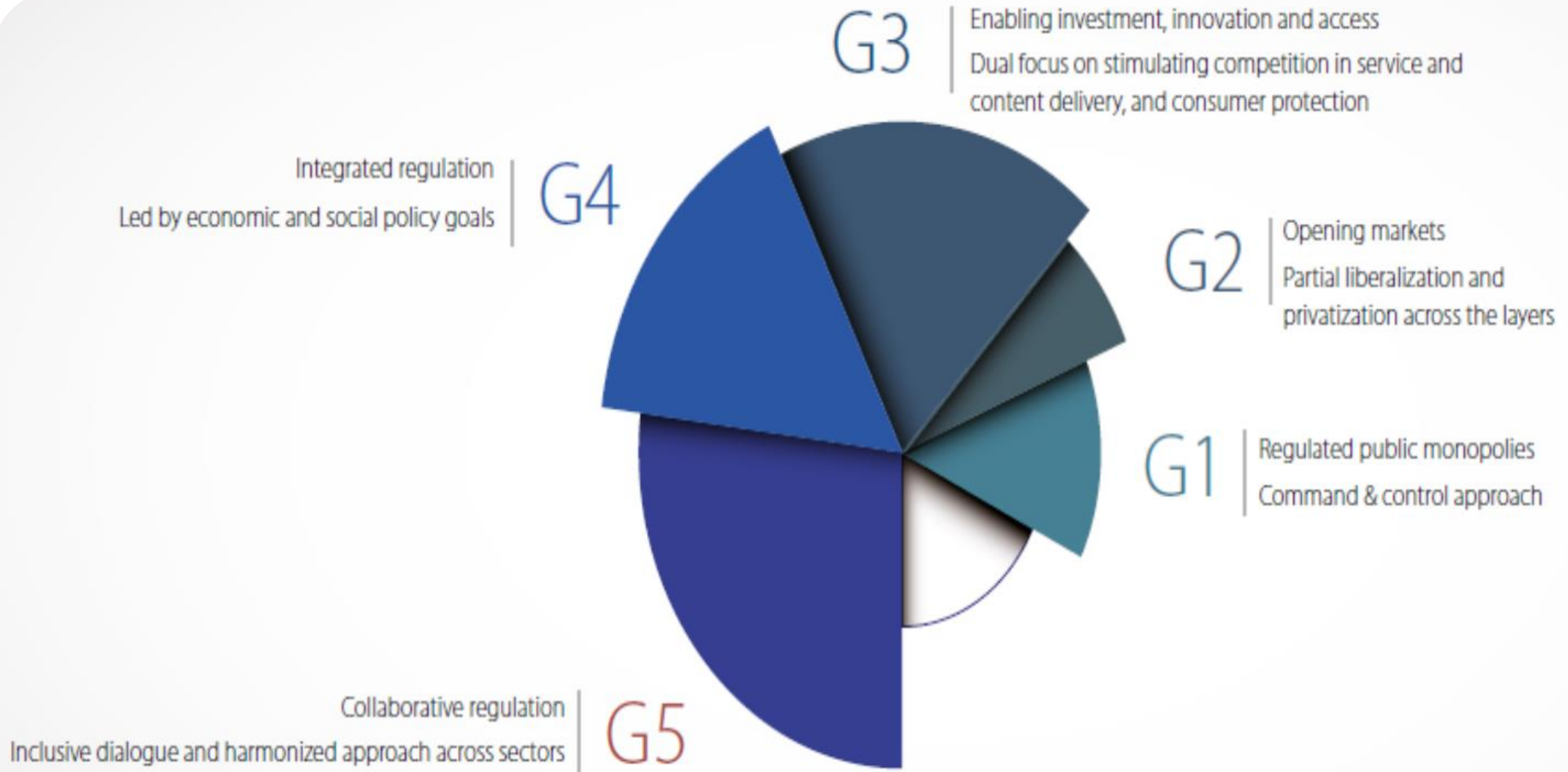
Digital Financial Services Ecosystem



DFS Ecosystem Recommendations



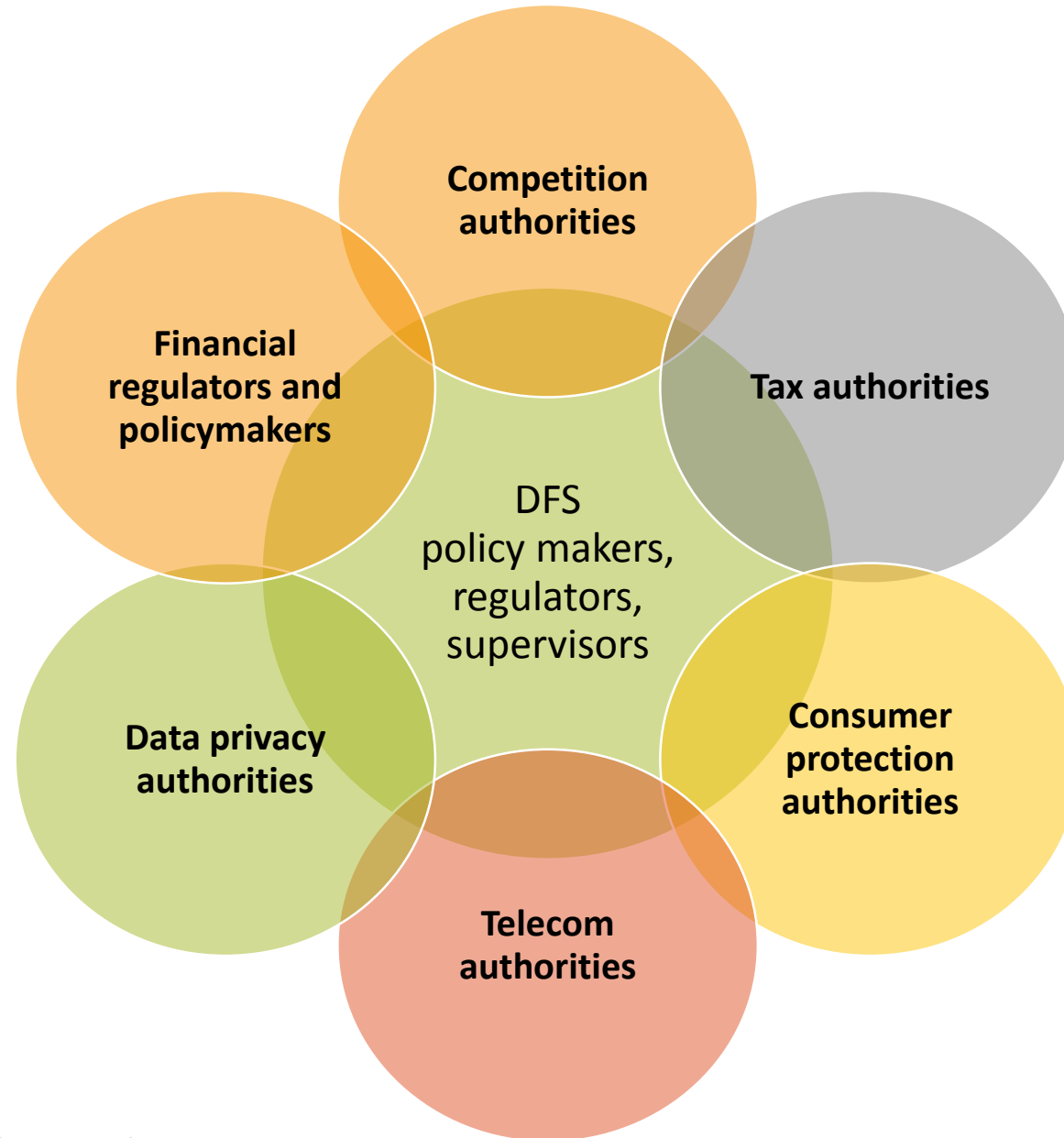
Generations of Regulation



DFS Enabling Environment: Oversight and Supervision (examples)



DFS Enabling Environment



Trade and Development Regional Forum 2017

@ Pullman King Power Hotel, Bangkok, Thailand

Linking Trade & Development for Inclusive & Sustainable Growth

Thursday, 20th July 2017

Session IV

“One Belt, One Road Initiative: Outlooks on Future Trade and Investment in the Region South”

Speaker:

1. Chinese Government Representative
2. Professor Emeritus Suthiphand Chirathivat, Ph.D., ASEAN Studies Center, Chulalongkorn University, ITD (Board of Director)
(Biodata)
3. Oliver Redrup, Price Waterhouse Cooper Services Ltd., Singapore
(Biodata)
4. Dr. Krisda Piampongsanti, Permanent Representative of Thailand to the WTO Trade, ITD (Board of Director)
(Biodata)

Trade and Development Regional Forum 2017

@ Pullman King Power Hotel, Bangkok, Thailand

Linking Trade & Development for Inclusive & Sustainable Growth

Thursday, 20th July 2017

Session V

“Enriching Global Value Chain (GVCs) through the Circular Economy”

Speaker:

1. Dr. Uwe Weber, SWITCH-Asia Network
(Biodata & Powerpoint)
2. Karishma Banga, Global International Institute, Geneva
(Biodata)
3. Dr. Chaiyod Bunyagidj, United Analyst and Engineering Consultant Co. Ltd., Thailand
(Biodata & Powerpoint)
4. Ernesto Hartikainen, SITRA - Finnish Innovation Fund
(Biodata)

TRADE AND DEVELOPMENT REGIONAL FORUM 2017

Linking Trade & Development for Inclusive & Sustainable Growth

19 & 20 July 2017, Bangkok

Dr. Uwe Weber, SWITCH-Asia Network Facility

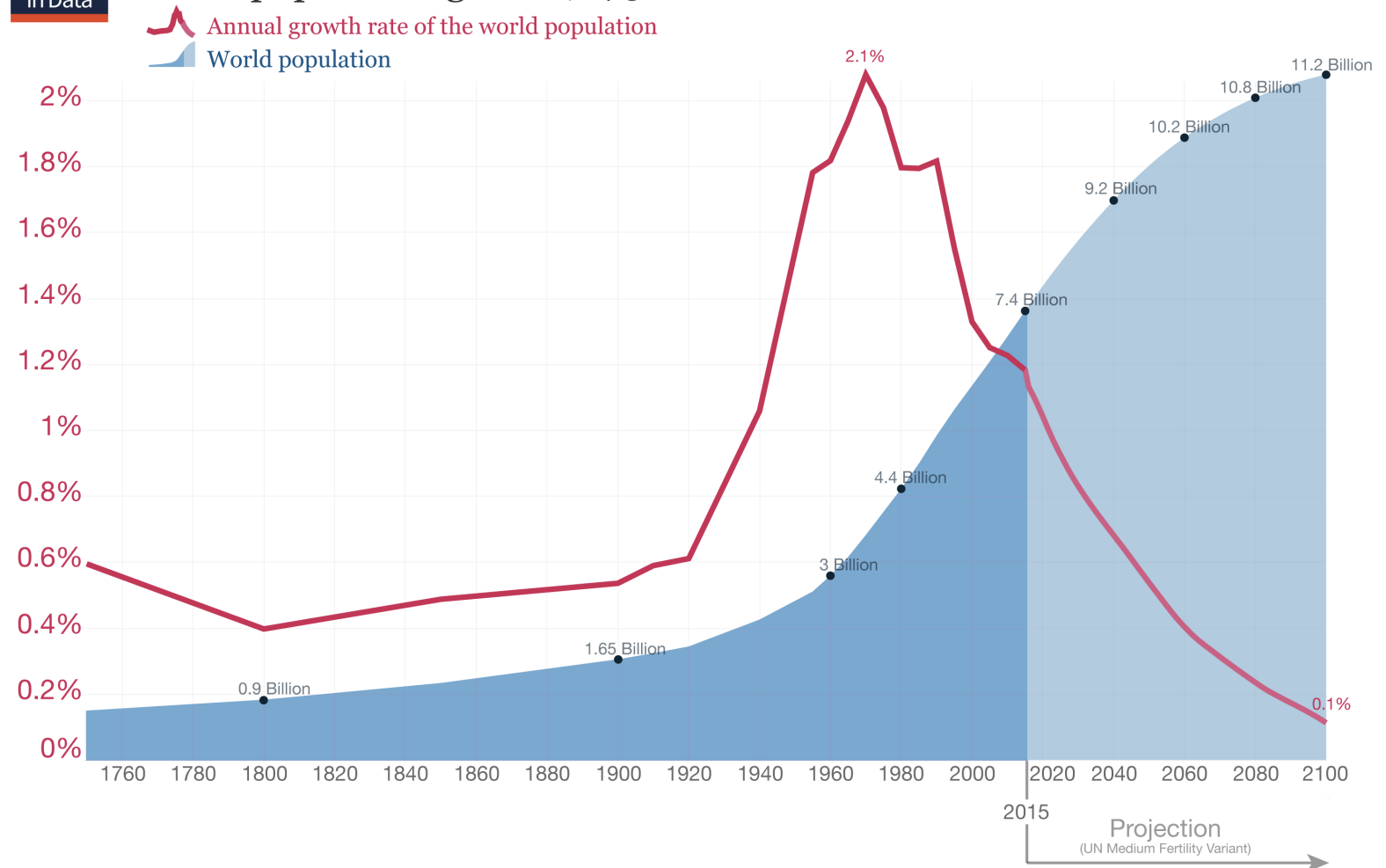
The SWITCH-Asia Network Facility is funded
by the European Union



Circular Economy - increasing demand

Our World
in Data

World population growth, 1750-2100



Data sources: Up to 2015 OurWorldInData series based on UN and HYDE. Projections for 2015 to 2100: UN Population Division (2015) – Medium Variant. The data visualization is taken from [OurWorldInData.org](https://ourworldindata.org). There you find the raw data and more visualizations on this topic.

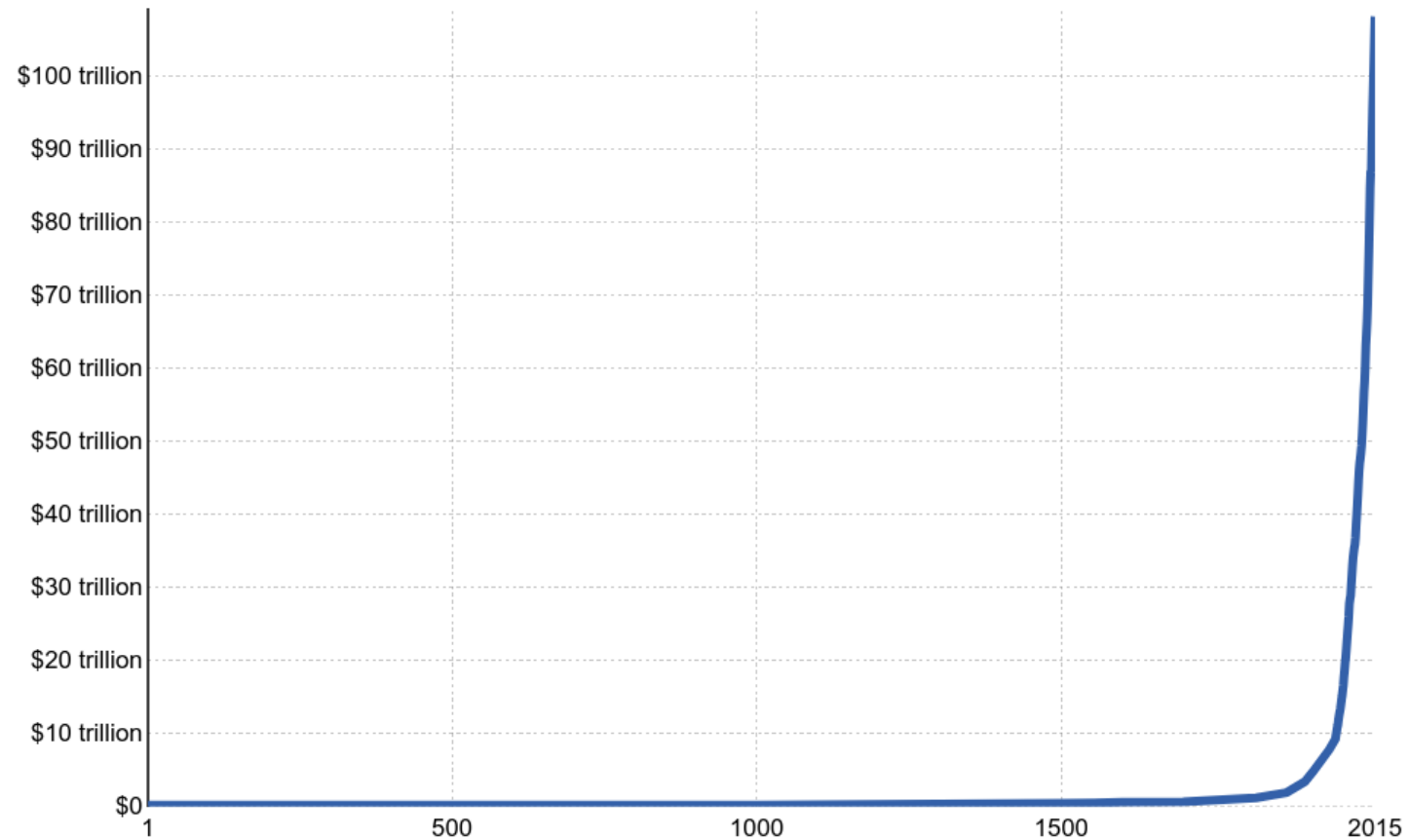
Licensed under CC-BY-SA by the author Max Roser.

Circular Economy – larger economy

World GDP over the last two millennia

Total output of the world economy; adjusted for inflation and expressed in 2011 international dollars.

Our World
in Data



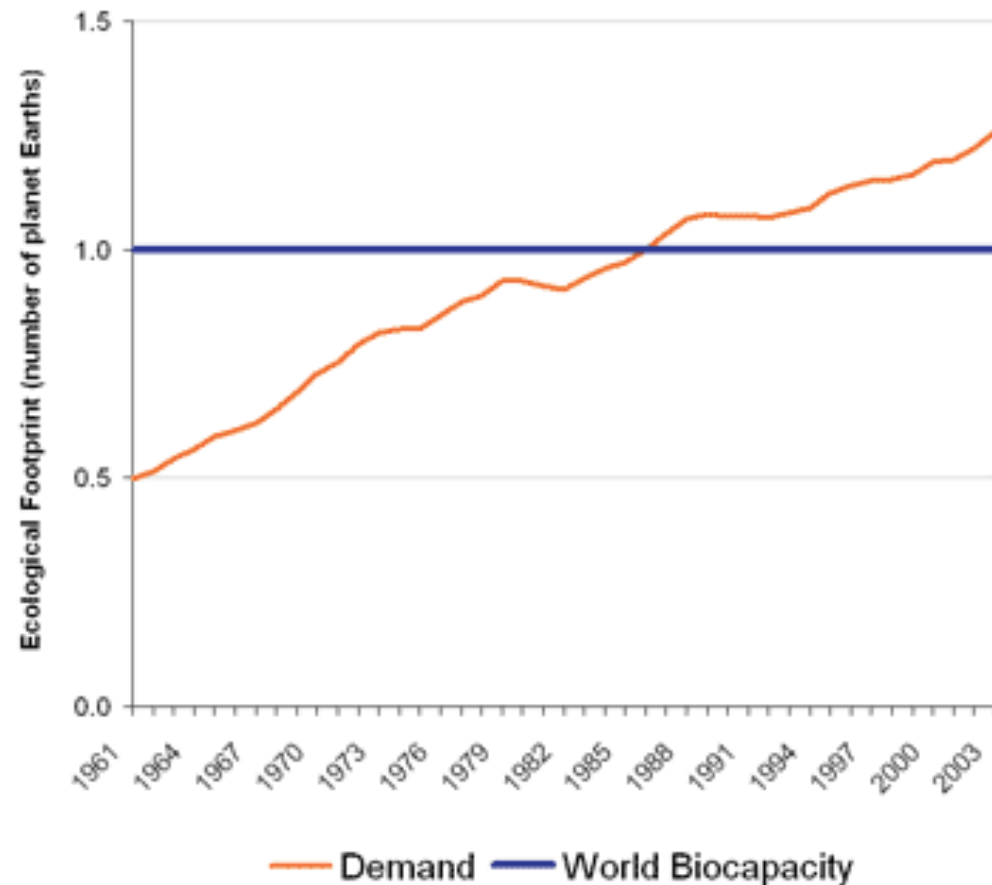
Source: World GDP (Our World In Data based on World Bank & Maddison)

OurWorldInData.org/economic-growth • CC BY-SA

Circular Economy – limited ,carrying' capacity

“We developed from a small population with limited economy to a large population with a huge, globalised Economy”

Demand vs. Biocapacity

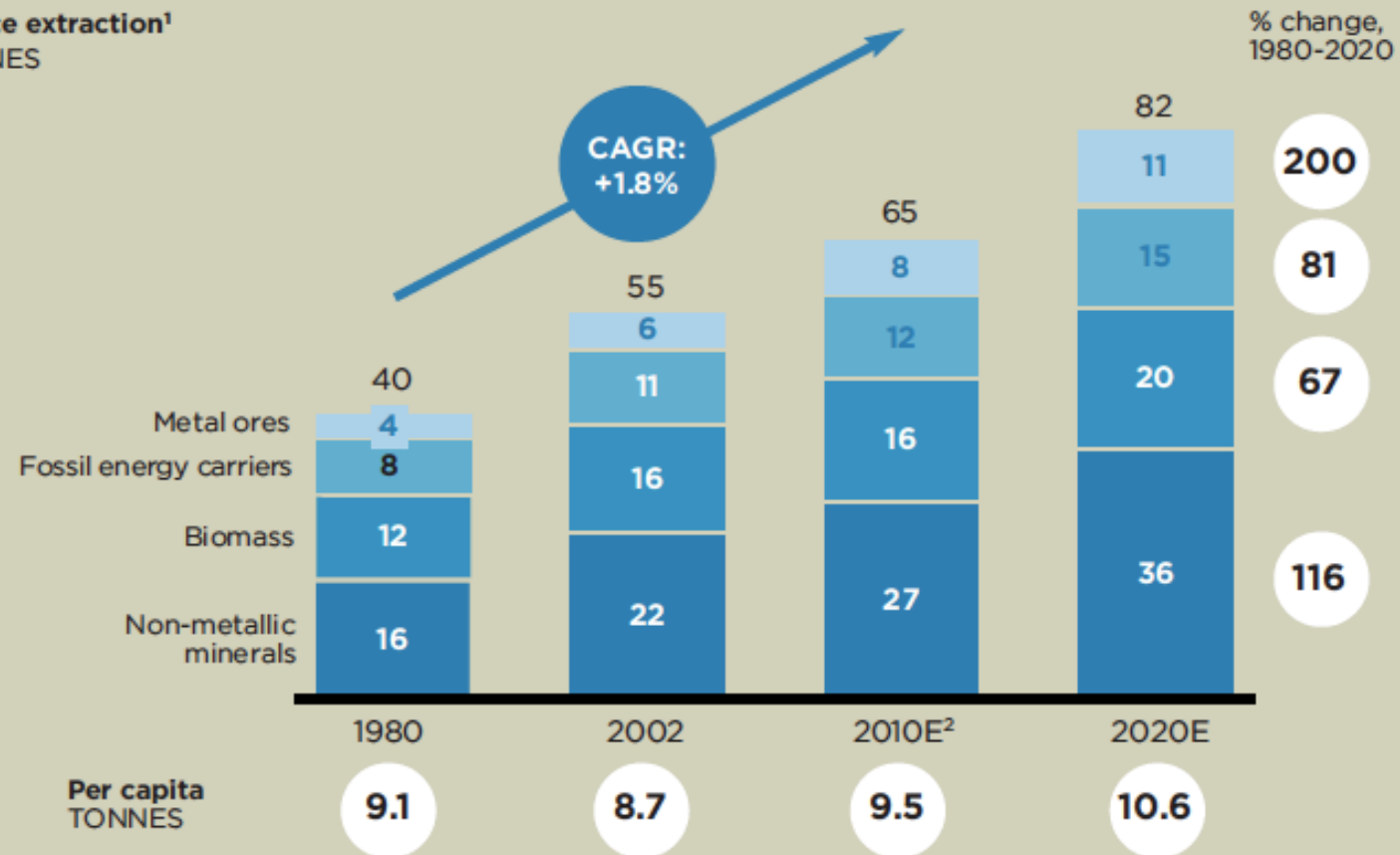


http://paddleways.com/blog/gypsyrose/2006/12/how_many_earth_s_do_we_need.html

Circular Economy – increasing resource extraction

Global resource extraction is expected to grow to 82 billion tonnes in 2020

Global resource extraction¹
BILLION TONNES



¹ Resource used: amount of extracted resources that enters the economic system for further processing or direct consumption. All materials used are transformed within the economic system, incl. material used to generate energy and other material used in the production process

² Forecasted from 2002 OECD figures and OECD extraction scenario for 2020

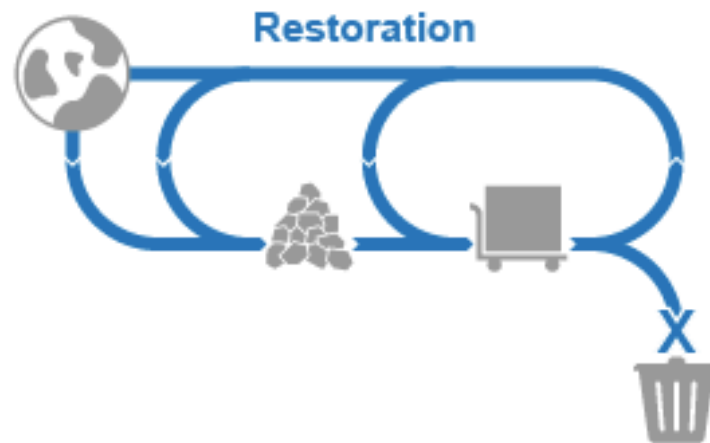
SOURCE: OECD; Behrens (2007); WMM Global Insight; Ellen MacArthur Foundation circular economy team

Circular Economy – closing the loops

The linear economy



The circular economy



“... is restorative by design, and which aims to keep products, components and materials at their highest utility and value, at all times.”

Ellen MacArthur Foundation

<https://spenditrightubc.wordpress.com/2014/12/29/what-is-happening-corporate-sustainability-in-2014/>

Circular Economy – Responsible Production and Consumption

substantially reduce waste generation
through prevention, reduction,
recycling and reuse



while ensuring

environmentally sound management of
chemicals and all wastes ...
significantly reduce their release to air,
water and soil ...

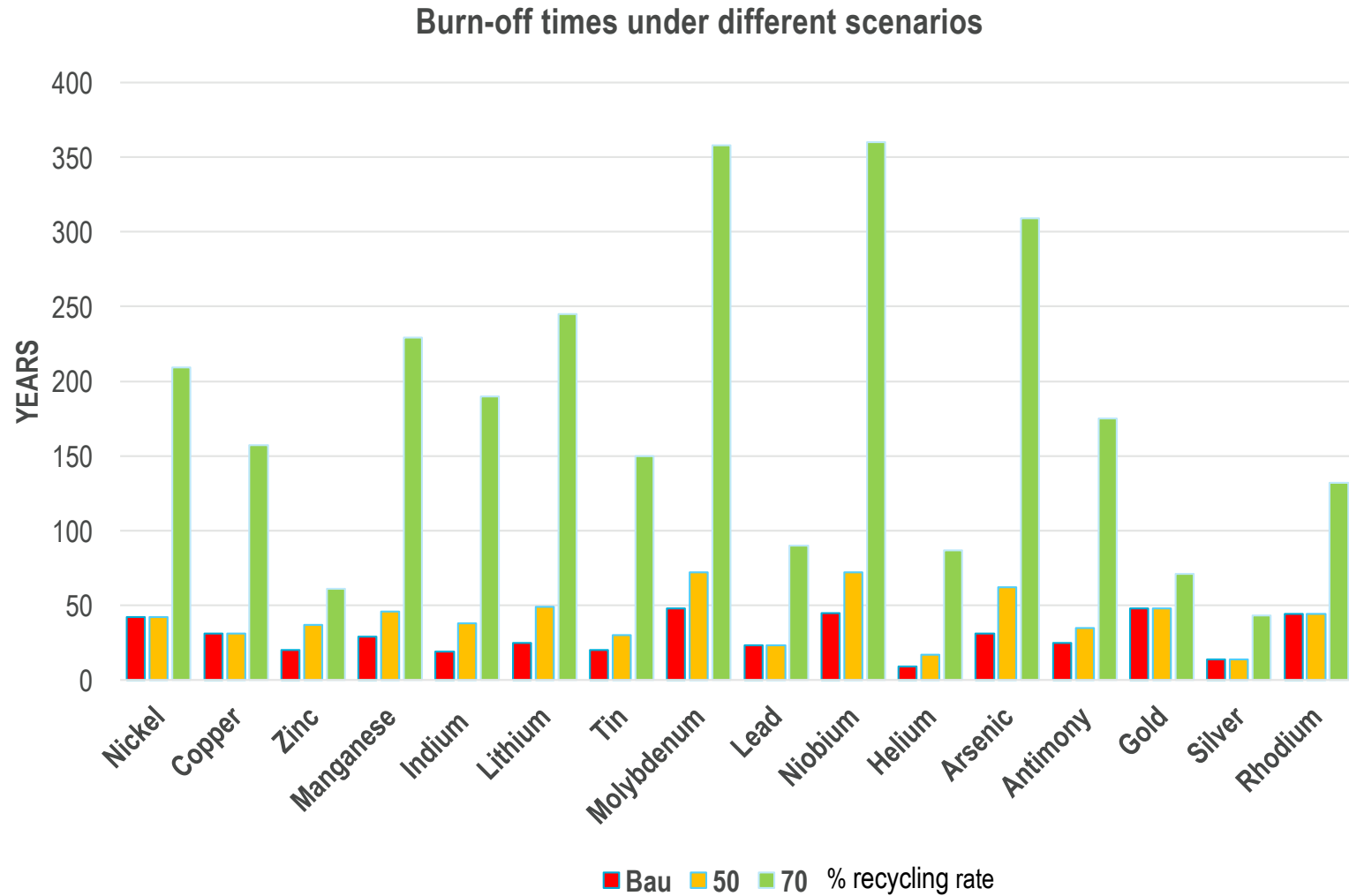


contributes to

sustainable management and efficient
use of natural resources

**SDG Goal 12
targets**

Circular Economy – business opportunities



Data from Sverdrup et al., 2013

SWITCH-Asia Programme - objectives

The goal of the European Commission's SWITCH-Asia programme is to promote economic prosperity and help reduce poverty in Asia by encouraging a sustainable growth with low environmental impact from industries and consumers, in line with international environmental agreements and processes.

Specifically SWITCH-Asia aims to promote sustainable products, processes, services and consumption patterns in Asia by improving cooperation with European retailers, producer and consumer organizations and the public sector.

SWITCH-Asia Programme – target countries

Afghanistan

Bangladesh

Bhutan

Cambodia

China

DPR Korea

India

Indonesia

Laos

Malaysia

Mongolia

Myanmar

Nepal

Pakistan

Philippines

Sri Lanka

Thailand

Vietnam



SWITCH-Asia Programme - performance

Up to € 300 Million have been invested into national and regional policy support, grant supported SCP demonstration activities and the Network Facility.

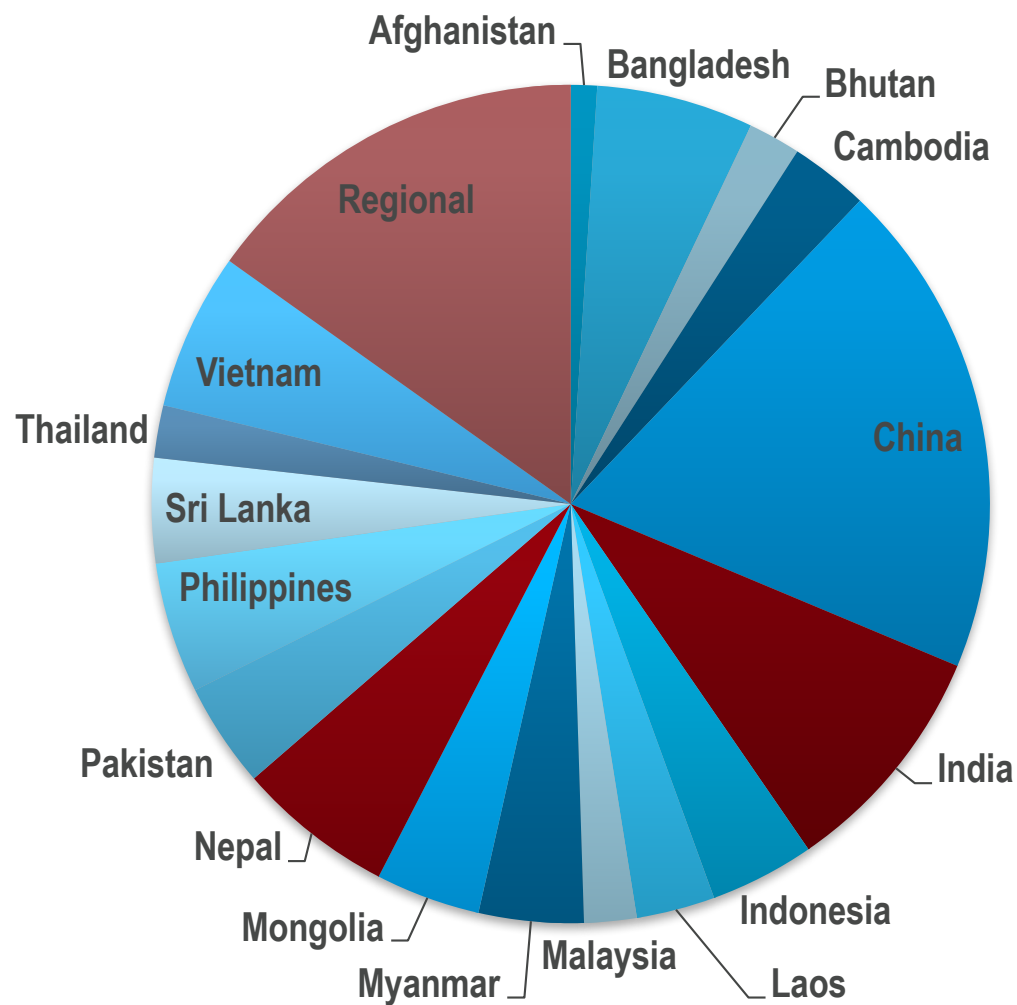
Granted co-financing rates are typically around 80%, up to 90% in least developed countries.

Currently a call for proposals valued about € 20 million is under evaluation and will add up to 15 new grant projects by the end of 2017

New call for proposals will be launched 2018

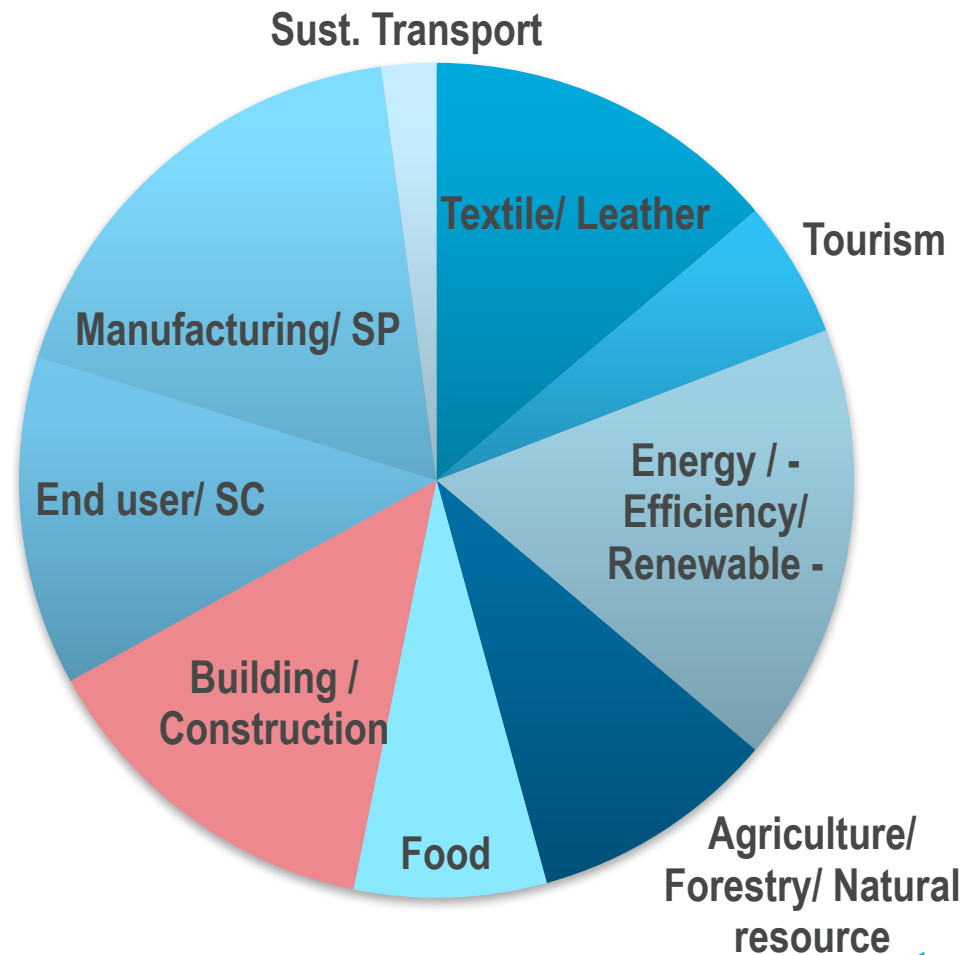
SWITCH-Asia Programme 2008-2017

Regional distribution of SWITCH-Asia projects



SWITCH-Asia Programme 2008-2017

Sectors of SWITCH-Asia projects



SWITCH-Asia: catalogue of grant projects



<http://www.switch-asia.eu/projects/>

SWITCH-Asia - newsletter



Editorial

19.12.2016

Dear readers,

This year ends with a **new SWITCH-Asia call for proposals** fresh from the press. You can find all related details, including the info session in Brussels, in this issue of the SWITCH-Asia newsletter. Further we are delighted to bring you a wide range of **new publications** addressing SCP and the circular economy in several Asian countries. With meanwhile 40 products featured, the **SWITCH-Asia Products** marketplace is progressing well and still growing. If your project has not yet joined it, contact us to have your items included.

Last but not least, in thanking you for your kind cooperation in 2016, we would like to send you our best wishes for the upcoming festivities and look forward to continue working with you in the New Year!

The SWITCH-Asia Network Facility

Contents

- Programme news
- Upcoming events
- Network Facility news
- Publications
- Projects news
- SWITCH-Asia in the media
- Policy Support Components news

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PRODUCTS

SWITCH-Asia newsletter

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Sign up
with your
Email to
receive
our
Newsletter

SWITCH-Asia - videos

More videos on the dedicated YouTube channel !

Click here to watch
SWITCH-Asia's
achievements



switchasia
NETWORK FACILITY

presents

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SWITCH-Asia Network Facility

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Facebook: SWITCH-Asia

Twitter: @NetworkFacility

Enriching Global Value Chain (GVCs) through the Circular Economy

Trade and Development Regional Forum 2017

Dr. Chaigyod Bunyagidj
chaigyod.b@gmail.com

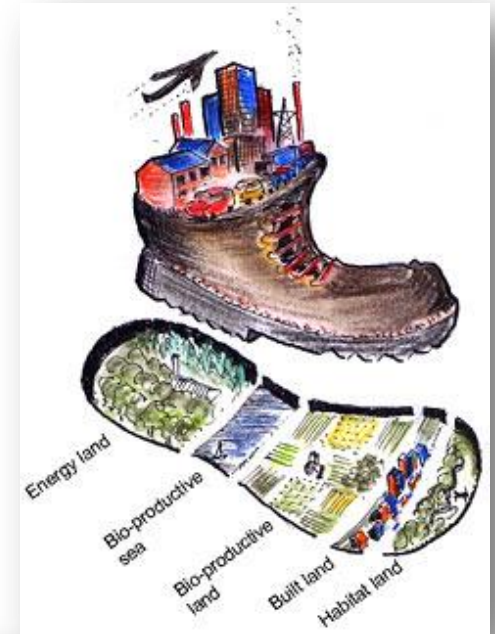
20th July 2017 @ Pullman King Power Hotel, Bangkok



World Sustainability ???

ECOLOGICAL FOOTPRINT —

A measure of how much biologically productive land and sea area an individual, population or activity requires to produce all the resources it consumes and to absorb its waste.



BIOCAPACITY —

Biological capacity, the ability of an ecosystem to regenerate useful biological resources and absorb wastes generated by humans such as carbon dioxide emissions from fossil fuel.

What does Ecological Footprint calculate ?

Consumption

- Food
- House, Building
- Transportation
- Goods and Services



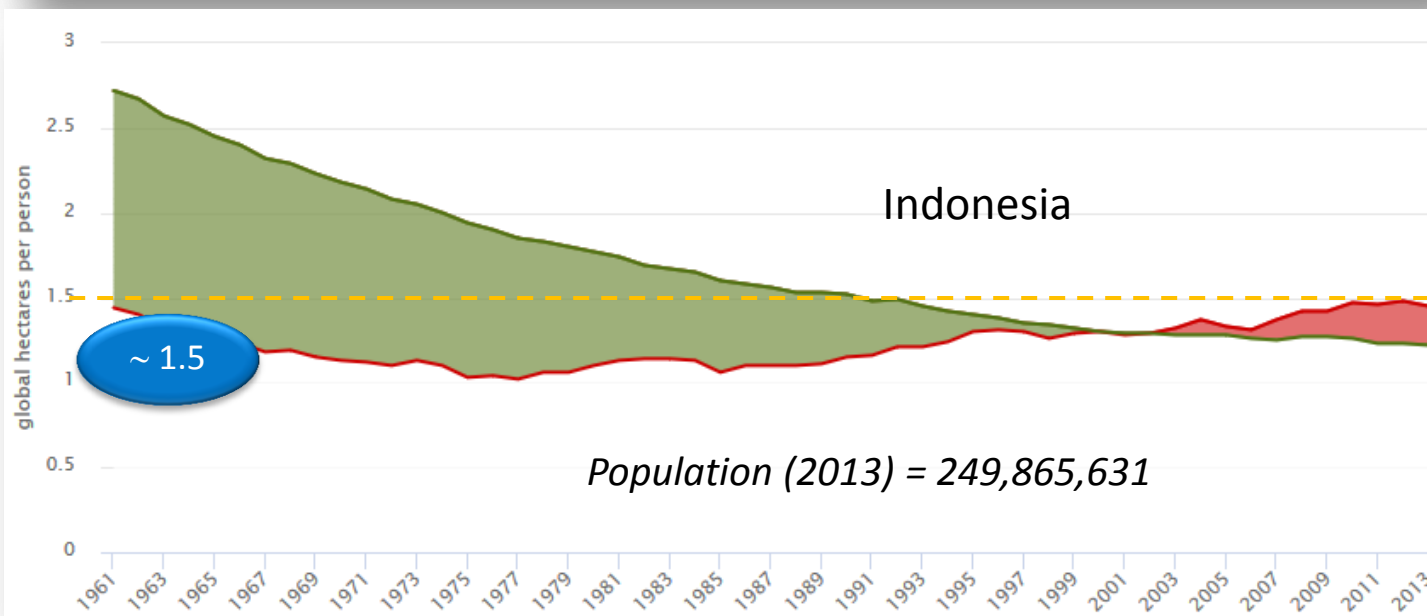
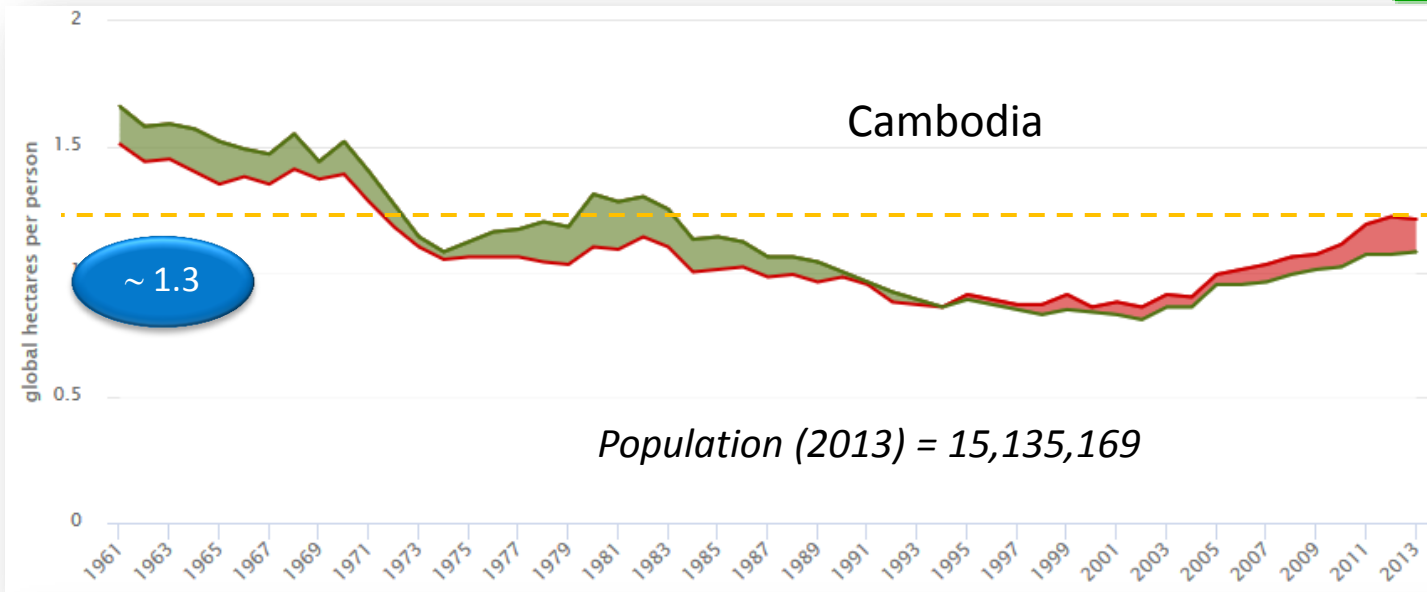
Emission

- Waste
- Carbon dioxide

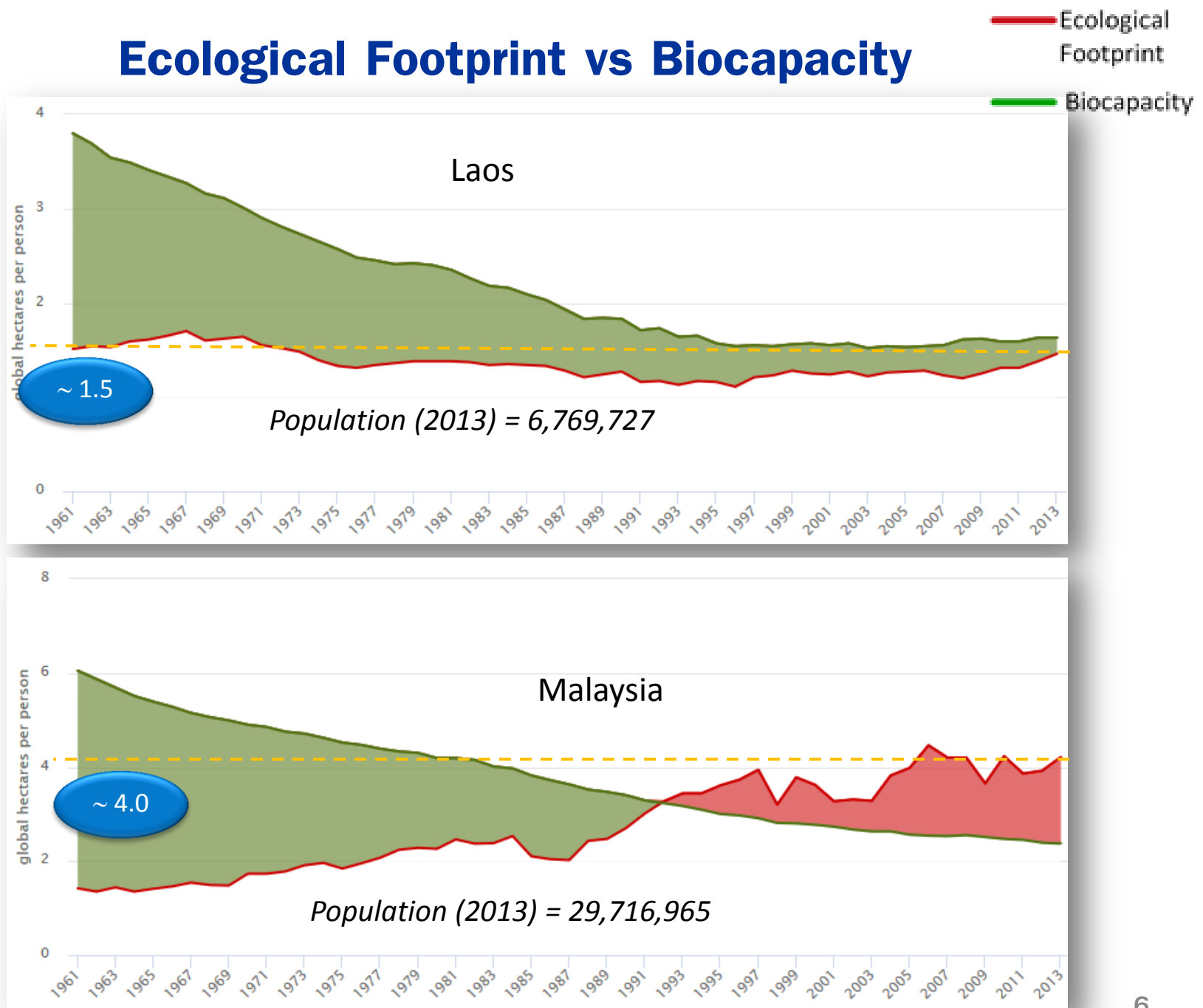


Ecological Footprint vs Biocapacity

Ecological Footprint
Biocapacity

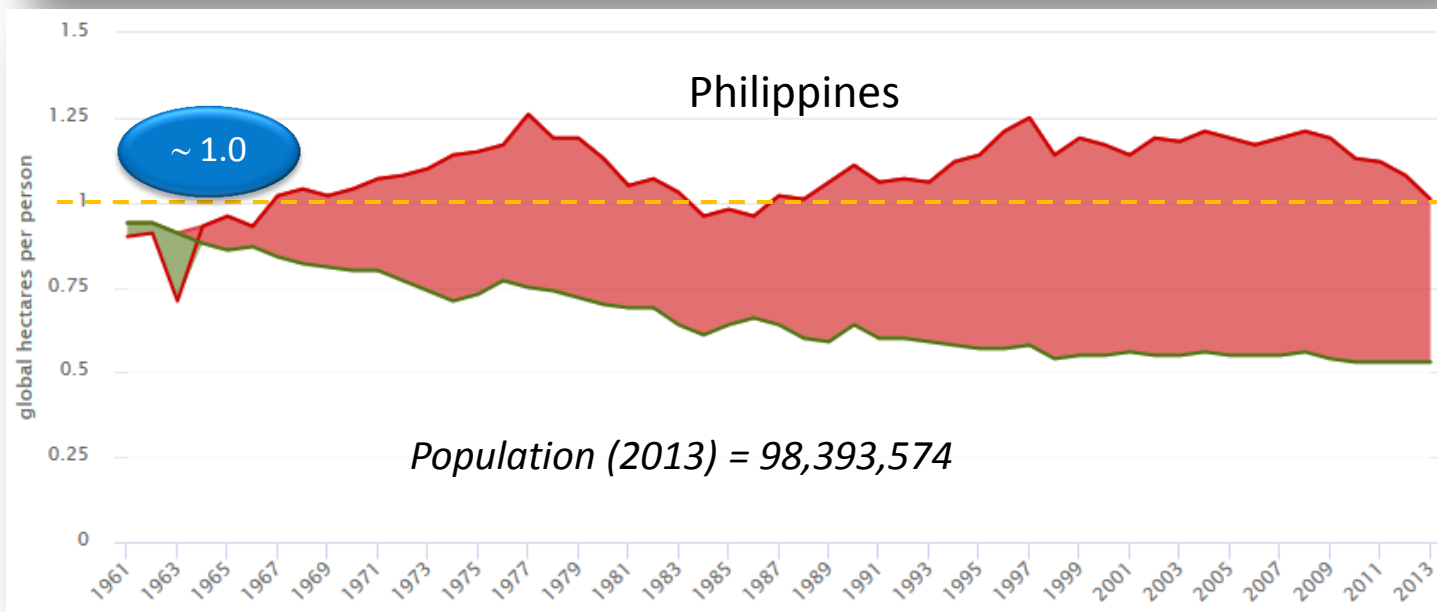
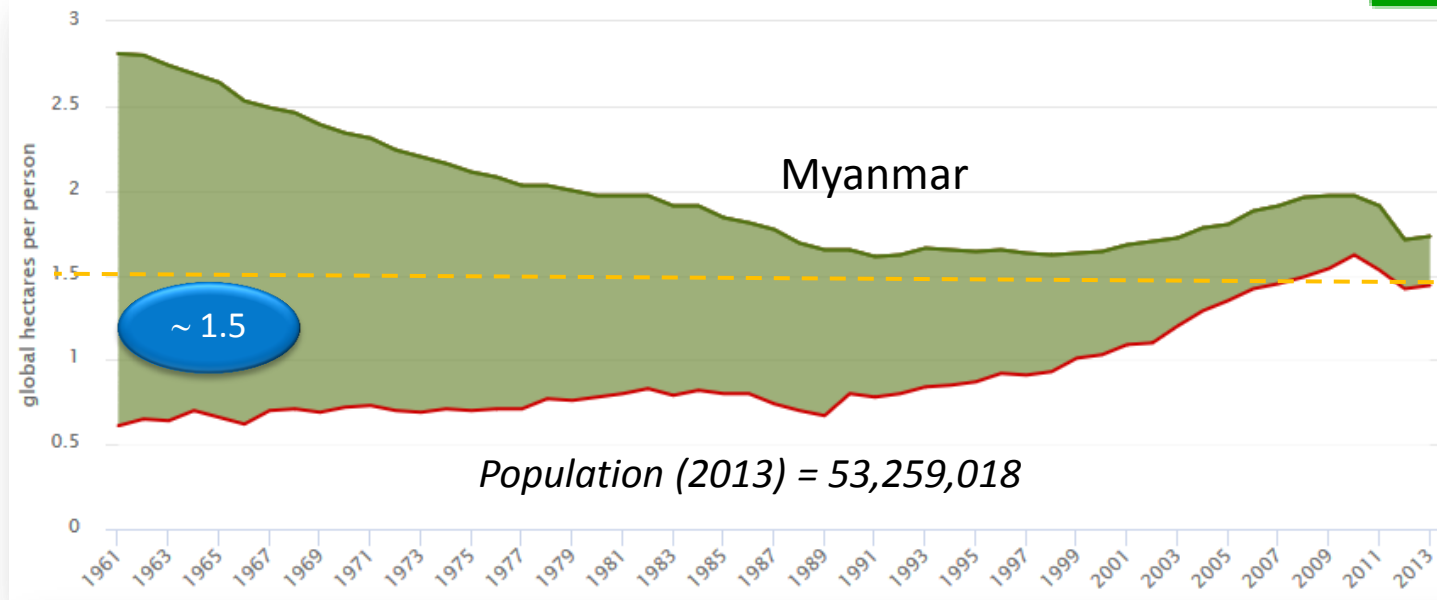


Ecological Footprint vs Biocapacity



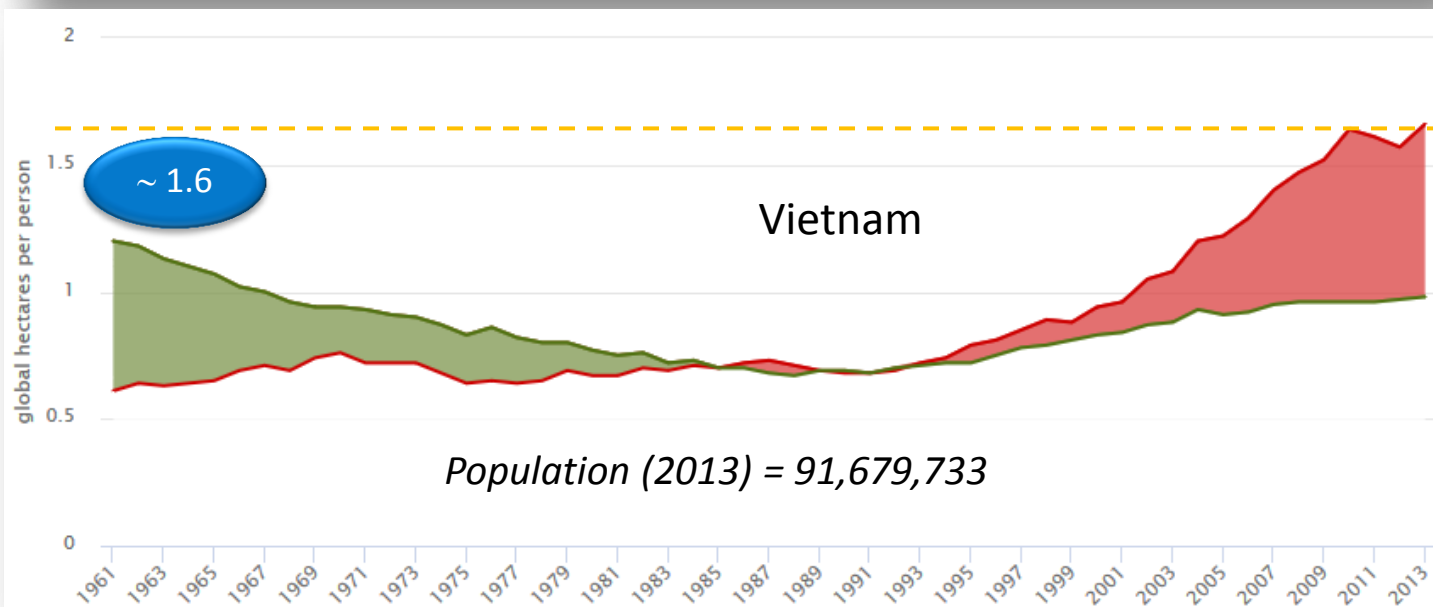
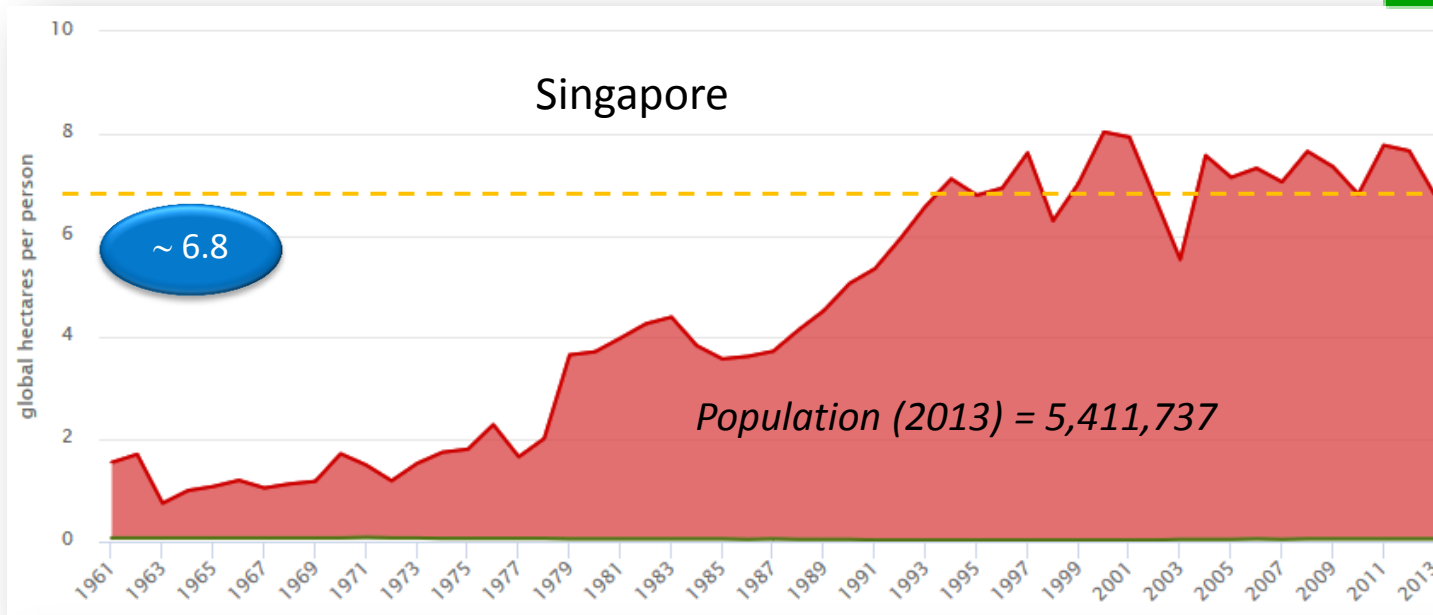
Ecological Footprint vs Biocapacity

Ecological Footprint
Biocapacity



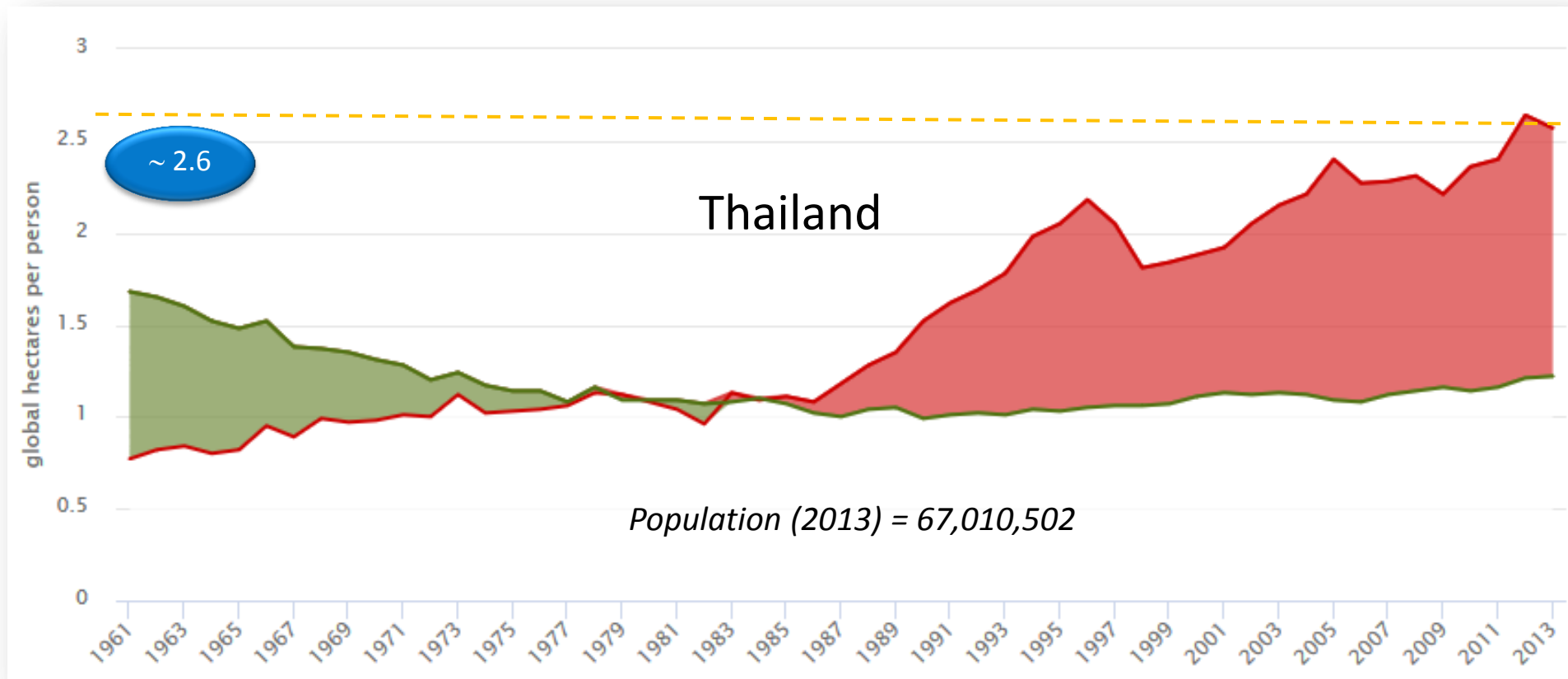
Ecological Footprint vs Biocapacity

— Ecological Footprint
— Biocapacity



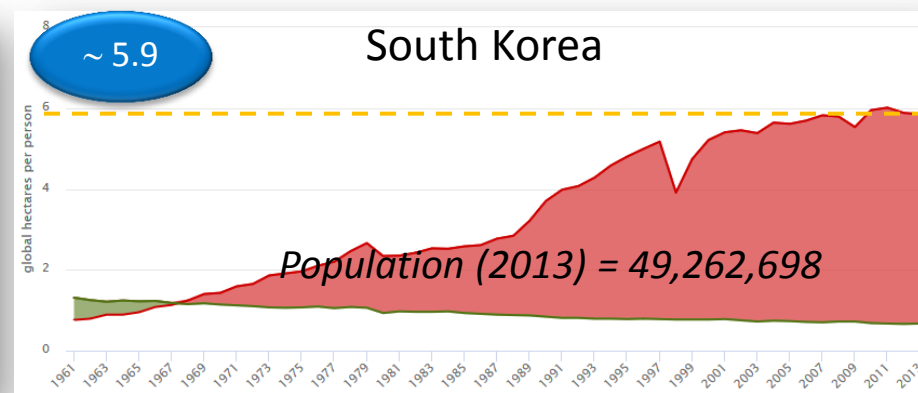
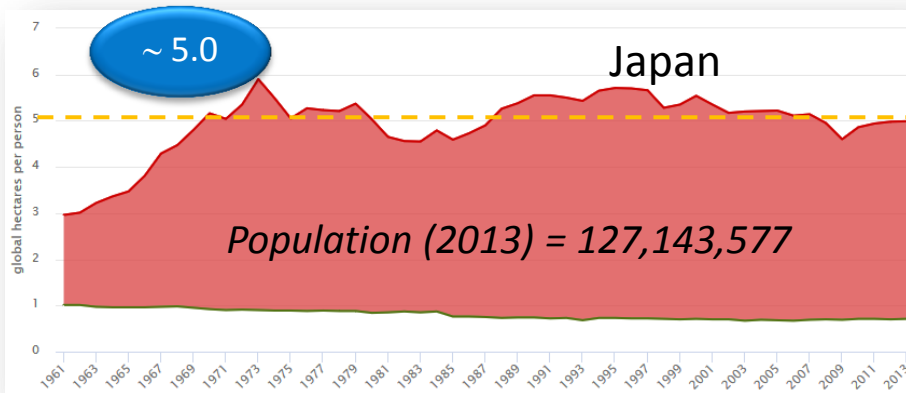
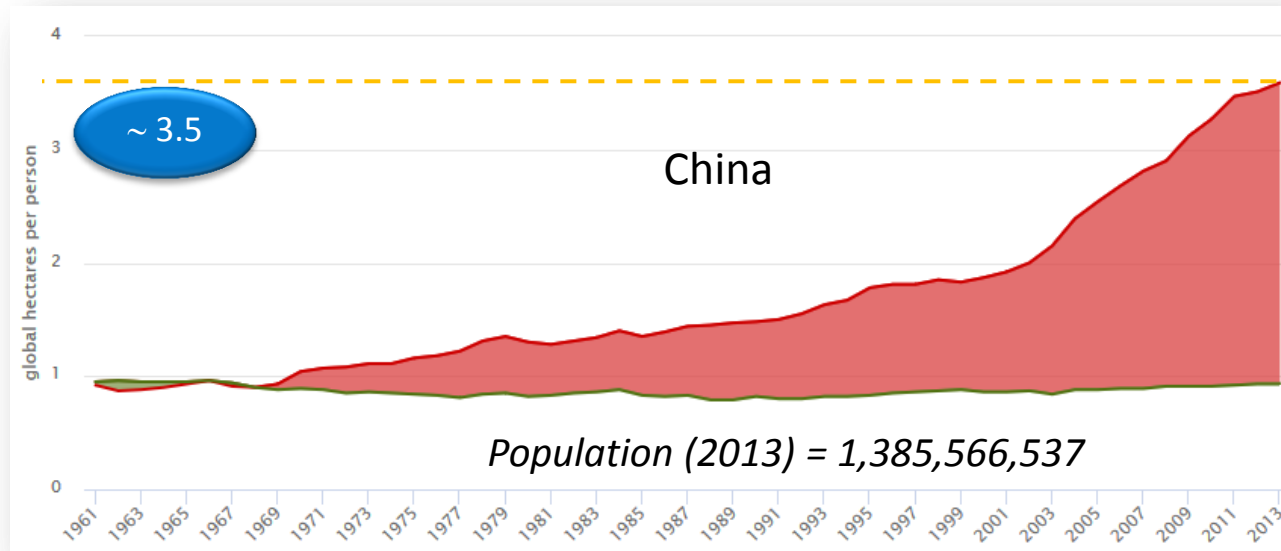
Ecological Footprint vs Biocapacity

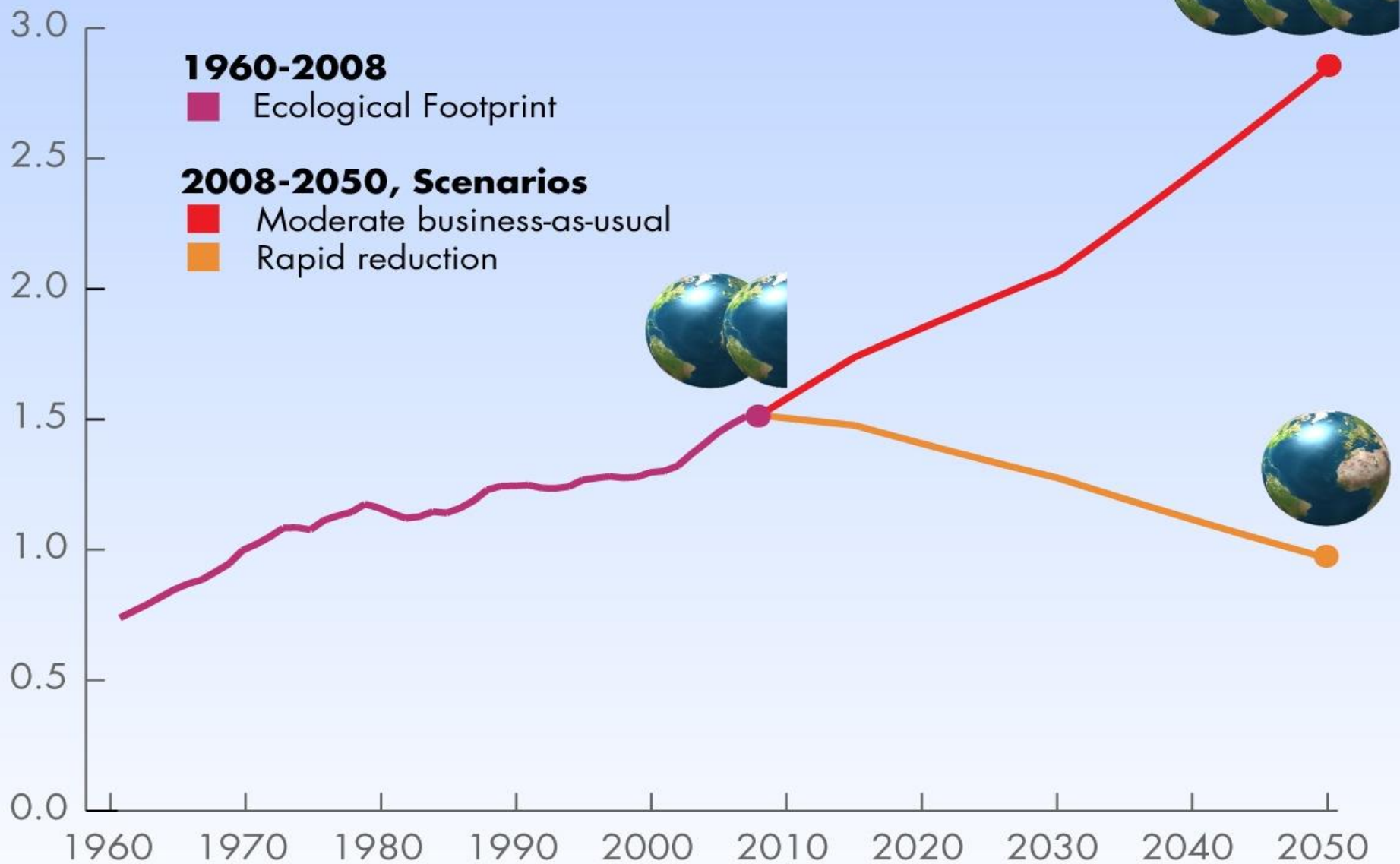
Ecological Footprint
Biocapacity



Ecological Footprint vs Biocapacity

— Ecological Footprint
— Biocapacity





y-axis: number of planet earths, x-axis: years

What have we done ???



Rio de Janeiro 2012 (Rio + 20)



Green Economy, SDGs, 10 YFP

Rio+20

Participants : 50,000

Governments : 193

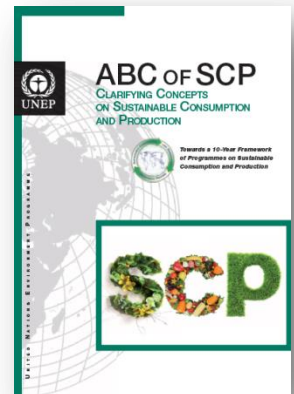
Business Leaders : 1,800

Declaration include Key issues ;

- Green Economy
- Development of SD Goals
- UNEP SCP 10 Years Framework
- Sustainability Reporting : Country, Company

Sustainable Consumption and Production; SCP

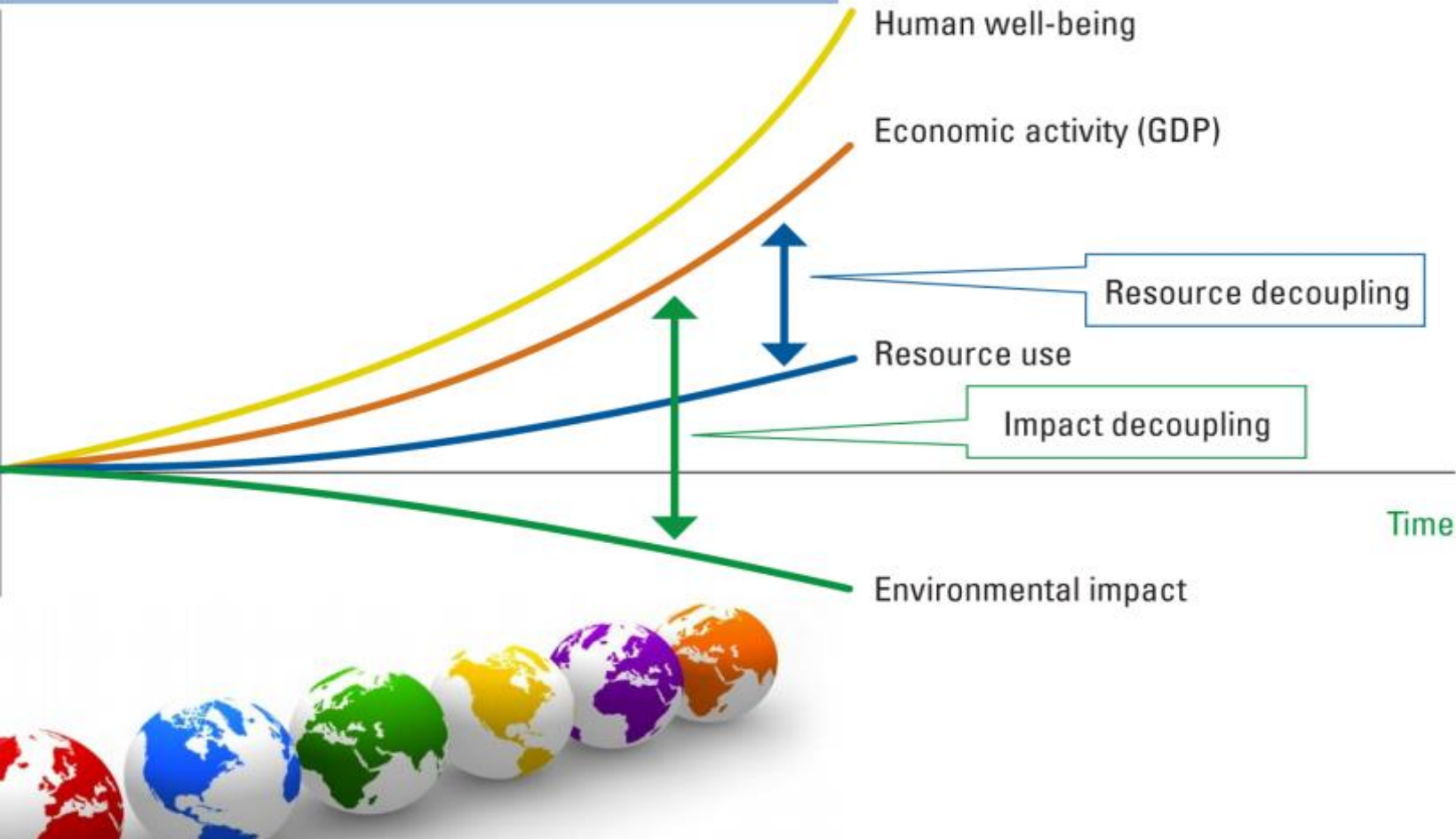
“The use of services and related products, which respond to **basic Consumption and needs** and bring a better quality of life while **minimising** the use of Production natural resources and toxic materials as well as the emissions of waste and pollutants **over the life cycle** of the service or product so as not to jeopardise the needs of future generations”



How to shift toward SCP?

Decoupling

Doing more and better with less



SCP Policy tools

Economic Instruments

- Environmental Taxes
- Fees and User Charges
- Certificate trading
- Environmental Financing

❖ Green Public

Procurement

- Subsidies

Regulatory Instruments

- Norms and Standards
- Environmental Liability
- Environmental Control and Enforcement

Cooperation Instruments

- Technology Transfer
- Voluntary agreements

Informational Instruments

❖ Eco-labelling

- Sustainability Reporting
- Information Centres
- Consumer Advice Services
- Environmental Quality Targets and Monitoring

Eco-Labelelling



Types of Environmental Labelling

- **Type I** (ISO 14024): Voluntary, multiple criteria-based, practitioner programs, based on life cycle considerations
- **Type II** (ISO 14021): Informative environmental self-declaration claims made by manufacturers, importers, distributors or retailers
- **Type III** (ISO 14025): Quantified product information label based upon independent verification using preset indices (life cycle assessment)

Life Cycle Assessment (LCA)

A life-cycle assessment (LCA) is a tool that can be used to evaluate the potential environmental impacts of a product, material, process, or activity. An LCA is a comprehensive method for assessing a range of environmental impacts across the full life cycle of a product system, from materials acquisition to manufacturing, use, and final disposition.

Life Cycle Thinking Approach (Envi. and Envi.Health)



Type I Logos (27 Schemes)



Germany



Canada



Japan



Nordic



ROC



USA



Brazil



China



Korea



EU



Singapore



Thailand



HKFEP



Philippines



SSNC



Indonesia



NZ



Australia



India



Sweden



Russia



Croatia



Czech



HK



Ukraine



Malaysia



THE STANDARDS INSTITUTION OF ISRAEL
Israel

Examples of Eco Label (1)

Indonesia



Ramah Lingkungan

Ekolabel

Type 1



Lembaga



M-BRIO Organic &
Food Labeling

Malaysia



SIRIM QAS International

Type 1

Singapore



Singapore Green Label
Type 1



Energy Label



BCA GREEN MARK

Building &
Construction
Authority



Singapore
Green
Building
Product

Philippines



Green Choice
Type 1

Examples of Eco Label (2)

China



China Environmental

Label
Type 1



China Energy
Conservation
Certification



China Water
Conservation
Certification



China Energy
Label



China Organic
Food
Certification



Organic Food
China

Japan



Eco Mark
Type 1



Comprehensive
Assessment
System for Built
Environment
Efficiency



Eco-Rail Mark



Energy Saving
Labeling
Program



Japanese
Agricultural Organic
Standard

Examples of Eco Label (3)

Republic of Korea



Korean Eco-label

Type 1



Environmental
Declaration of
Products
Type III



Good Recycled



Energy
Efficiency
Label



High Energy
Efficiency Label



Global Ecolabelling Network (GEN)

- The Global Ecolabelling Network (GEN) is a non-profit association of third-party, environmental performance recognition, certification and labelling organisations founded in 1994 to **improve, promote, and develop the ecolabelling of products and services.**
- Only environmentally friendly products and services proven to have lower environmental impact may carry a GEN member ecolabel .

<http://www.globalecolabelling.net/>

A large, white, sans-serif "GEN" logo is superimposed on a background image. The background shows a close-up of a globe with green grass in the foreground, slightly out of focus.

GEN

Members List in 2015



Country	Program Name		Valid Standards	Certified Products
Australia	Environmental Choice Australia		22	2,000
Brazil	ABNT- Environmental Quality		35	751
Brazil ASSOCIATE MEMBER	Falcao Bauer Ecolabel Brasil		5	14
China (CEC)	China Environmental Labelling		98	178,895
China (CQC)	China Environmentally Friendly Certification		34	2000
Chinese Taipei	Green Mark Program		150	5048
EU	EU Ecolabel		35	43,160
Germany	The Blue Angel		120	12,000
Germany ASSOCIATE MEMBER	TÜV Rheinland		10	400
Hong Kong (GC)	Hong Kong Green Label Scheme		60	83
Hong Kong (HKFEP)	Hong Kong Ecolabelling			
Indonesia	Ekolabel Indonesia			
Israel	Israeli Green Label		85	450
Japan	Eco Mark Program		62	5,597

Country	Program Name		Valid Standards	Certified Products
Korea	Korea Eco-Labeling Program		162	17,324
Malaysia	SIRIM Eco-Labeling Scheme		51	353
New Zealand	Environmental Choice New Zealand		37	1600
Nordic Countries	Nordic Swan Ecolabel		58	12,000
North America	UL ECOLOGO		60	7,000
Philippines	National Ecolabelling Program - Green Choice Philippines		39	48
Russia	Vitality Leaf		23	129
Singapore	Singapore Green Labelling Scheme		73	3,300
Sweden	TCO Certified		8	900
Sweden	Good Environmental Choice		10	669
Thailand	Thai Green Label Scheme		117	481
Ukraine	Living Planet		54	312
United States	Green Seal		31	4,400
Vietnam ASSOCIATE MEMBER	Vietnam Green Label		14	53



GENICES

GEN Internationally Coordinated Ecolabelling System

	Country / Region	Member
1	Australia	Good Environmental Choice Australia
2	Brazil	Associacao Brasileira de Normas Tecnicas
3	China (CEC)	China Environmental United Certification Center
4	China (CQC)	Chaina Quality Certification Center (CQC)
5	Chinese Taipei	Environment and Development Foundation
6	Germany	German Federal Environment Agency
7	Germany (TUV)	TÜV Rheinland
8	Hong Kong (GC)	Green Council
9	Israel	The Standards Institution of Israel
10	Japan	Japan Environment Association (JEA)
11	Korea	Korea Environmental Industry & Technology Institute



GENICES

GEN Internationally Coordinated Ecolabelling System

	Country / Region	Member
12	New Zealand	The New Zealand Ecolabelling Trust
13	Nordic Countries	Nordic Ecolabelling Board
14	North America	UL Environment
15	North America (U.S.A)	Green Seal Inc.
16	Russia	Ecological Union
17	Singapore	Singapore Environment Council
18	Sweden (SSNC)	The Swedish Society for Nature Conservation
19	Sweden	TCO Development
20	Thailand	Thailand Environment Institute
21	Ukraine	All Ukrainian NGO Living Planet

Global Review for Sustainable / Green Public Procurement

No. from reviewing
are 62 countries

European Region

- 1) Austria
- 2) Belgium
- 3) Czech Republic
- 4) Denmark
- 5) Estonia
- 6) Finland
- 7) France
- 8) Greece
- 9) Iceland
- 10) Ireland
- 11) Italy
- 12) Germany
- 13) Hungary
- 14) Latvia
- 15) Luxembourg
- 16) Netherlands
- 17) Norway
- 18) Poland
- 19) Portugal
- 20) Romania
- 21) Slovak Republic
- 22) Spain
- 23) Sweden
- 24) Switzerland
- 25) The United Kingdom
- 26) Turkey

Asia-Pacific Region

- 1) Australia
- 2) Canada
- 3) Chile
- 4) China
- 5) Chinese Taipei
- 6) Hong Kong, China
- 7) India
- 8) Indonesia
- 9) Israel
- 10) Japan
- 11) Malaysia
- 12) Mexico
- 13) New Zealand
- 14) Peru
- 15) Republic of Korea
- 16) Russia
- 17) Singapore
- 18) Thailand
- 19) The Philippines
- 20) The United States
- 21) Vietnam

America Region

- 1) Brazil (South)
- 2) Uruguay (South)
- 3) Colombia (South)
- 4) Costa Rica (North)

South Africa Region

- 1) Bulgaria
- 2) Chile
- 3) Costa Rica
- 4) Colombia
- 5) Ghana
- 6) Israel
- 7) Lebanon
- 8) Mauritius
- 9) Romania
- 10) Tunisia
- 11) Slovenia



Source: UNEP, 2013, Sustainable Public Procurement: A Global Review.

APEC, 2013, Green Public Procurement in the Asia Pacific Region: Challenges and Opportunities for Green Growth and Trade

OECD, 2015, Government at a Glance, 2015

SDGs & Global Trends



Sustainable Development Goals



15 Years, 17 Goals, 169 Targets, 230 indicators

The SDGs: Goal 12 – Ensure sustainable consumption and production patterns

8 Targets

- 12.1 Implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries
- 12.2 By 2030, achieve the sustainable management and efficient use of natural resources
- 12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses
- 12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their **life cycle**, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
- 12.5 By 2030, substantially reduce waste generation through **prevention, reduction, recycling and reuse**

The SDGs: Goal 12 – Ensure sustainable consumption and production patterns

8 Targets (cont.)

- 12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle
- 12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities
- 12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

Global Market Trend

The study of Organisation for Economic Co-operation and Development (OECD)

Value of Global Eco-Product

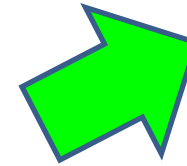
3 hundred billion USD in 2000



5.5 hundred billion USD in 2010



3.8 trillion USD in 2020



**Increase
10 times
within 20
years**

Eco-Product Market in EU

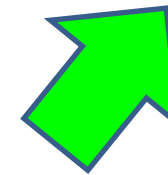
10.3 billion Euro in 2000



56 billion Euro in 2009



114 billion Euro in 2015



**Increase
10 times
within 15
years**



The study of World Business Council for Sustainable Development: WBCSD

“Building the Single Market for Green Products by 2050”

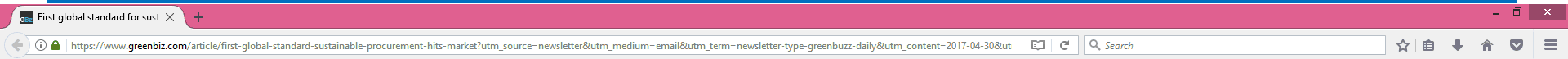
Global Market Trend

The Sustainability Consortium (TSC) of “**Walmart+Partners**”

LCI–Green data: supply chain



New Standard : ISO 20400



First global standard for sustainable procurement hits the market

share this article



Madeleine Cuff

Monday, May 1, 2017 - 2:22am



Madeleine Cuff

Senior Reporter
BusinessGreen



Shutterstock / Lightspring

After four years of development, the first international standard for sustainable procurement was launched late last week by the International Standards Organisation (ISO).

The first standard of its kind in the world, **ISO 20400** aims to help companies make better purchasing choices throughout their supply chains by establishing guidelines for companies to judge suppliers on ethical and sustainability issues.

Jacques Schramm, chair of ISO/PC 277, the committee which developed the standard, said it would help organizations avoid the financial, environmental and reputational risks associated with poor supply chain management.

"The risks of not understanding and managing practices throughout the whole supply chain are great," he said in a statement. "At best, poor quality products or ruptures of stock can result. At worst, disasters like the [Rana Plaza](#) in Bangladesh in 2013 can happen. Sustainable procurement helps to minimize risks such as these by encouraging buyers and suppliers to work closely

Trending



How to be a trusted messenger on climate change



7 companies steering the self-driving car craze



Are we experiencing a Groundhog Day of ESG information?



15 finalists announced for Hawaii startup pitch competition



More big investors are taking action on climate risks



[https://www.greenbiz.com/article/first-global-standard-sustainable-procurement-hits-market?utm_source=newsletter&utm_medium=email&utm_term=newsletter-type-greenbuzz-daily&utm_content=2017-04-30&utm_campaign=newsletter-type-greenbuzz-daily-107725&mkt_tok=eyJpIjoiTXpVM01HVXlOR0U1Tm...pNeSlSnQiOiJEMUIlYXBmWmFCWFNtcVZHSjZzMGViUFV2V1VpS1NZSctGQk5FeFVxREcwNUt6K2htZlplnStNRctUQXRfYWp5YVZQMkhTU1NObk1Pajl0cXN3ZDJIS0Z5djZ2RIZUVTVNK1NSUFVJVXBwNTFiUXgxREISWkvTr1wwVG02NDR5TnQifQ%3D%3D](https://www.greenbiz.com/article/first-global-standard-sustainable-procurement-hits-market?utm_source=newsletter&utm_medium=email&utm_term=newsletter-type-greenbuzz-daily&utm_content=2017-04-30&utm_campaign=newsletter-type-greenbuzz-daily-107725&mkt_tok=eyJpIjoiTXpVM01HVXlOR0U1Tm...)

New Standard : ISO 20400

“ISO 20400 aims to help companies make better purchasing choices throughout their supply chains by establishing guidelines for companies to judge suppliers on ethical and sustainability issues.”

ISO 20400 boasts 38 participating countries and 14 observing nations, together representing 65 percent of the world's population, 85 percent of global GDP and 73 percent of carbon emissions.

As well as environmental considerations, it also takes account of social and economic sustainability when judging what sustainable purchasing looks like.

"It is no longer enough for businesses to rely on suppliers to provide them with what they want, no questions asked," Schramm said. "Organizations benefit greatly from getting to know their suppliers — understanding what their requirements are as well — to ensure their demands are not unrealistic and that the suppliers they work with have good, ethical practices."

Unlike many other ISO standards, ISO 20400 is a guidance standard rather than a certification standard. As such, companies cannot become ISO 20400 certified, and instead the aim is to build a global consensus around the key terms and expectations for responsible procurement.

ISO said it will complement the existing ISO 26000 standard on social responsibility.

Upcoming Regional Activities



13th APRSCP,

24-26 October 2017

Melaka, Malaysia

Theme:

***“Enabling SCP
towards Achieving
Green Growth”***



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**Environmental Management and
Research Association of
Malaysia**



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Trade and Development Regional Forum 2017

@ Pullman King Power Hotel, Bangkok, Thailand

Linking Trade & Development for Inclusive & Sustainable Growth

Thursday, 20th July 2017

Session VI

“Obstacles & Opportunities for Asia’s Sustainable Growth”

Speaker:

1. Dr. Aladdin D. Rillo / Dr. Naoyuki Yoshino, ADBI
(Biodata)
2. Daisuke Hiratsuka, JETRO Thailand
(Biodata & Powerpoint)
3. Piyabutr Cholvijarn, Kenan Institute Asia, Board of Trade of Thailand
(Biodata & Powerpoint)
4. Rolf-Dieter Daniel, EU Chambers of Commerce (EABC)
5. Dr. Alisa Di-Caprio, ADBI-Aid for Trade

ITD's Annual Regional Trade and Development Forum 2017 "Linking Trade and Development for Inclusive and Sustainable Growth," 19-20 July, 2017, Pullman King Power Hotel, Bangkok, Thailand

Session VI: Obstacles & Opportunities for Asia's Sustainable Growth

Trade and Transport Facilitation Measures and the Landscape of Thailand

Daisuke Hiratsuka

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IDE-JETRO

Institute of Developing Economies, JETRO

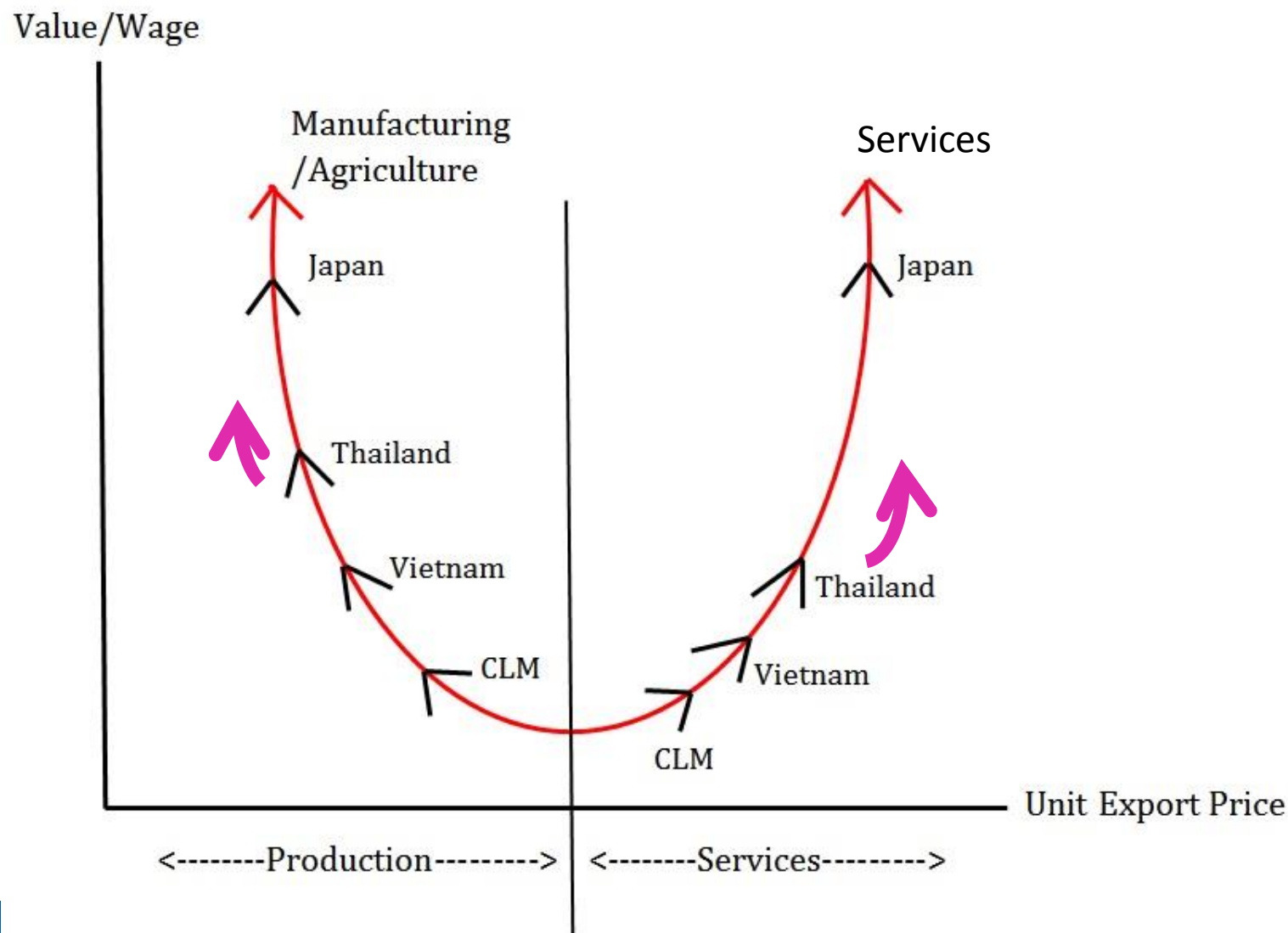
Session VI: Obstacles & Opportunities for Asia's Sustainable Growth

1. Do tax incentives regimes promote FDI and growth in the current TF/IF environment? Can evidence-based policy approach address this gap?
2. What are the alternative tools for governments to promote growth and sustainable development?

Tasks

1. Current trends in attracting sustainable foreign direct investment (FDI) in Thailand and the ASEAN region
2. Current challenges to attract development funding in APEC region given the slowdown in global economic growth and recommendation for Asian government
3. Comment on how government can align investment promotion with UN SDG 2030 goals and alternative tools for more effective investment promotion

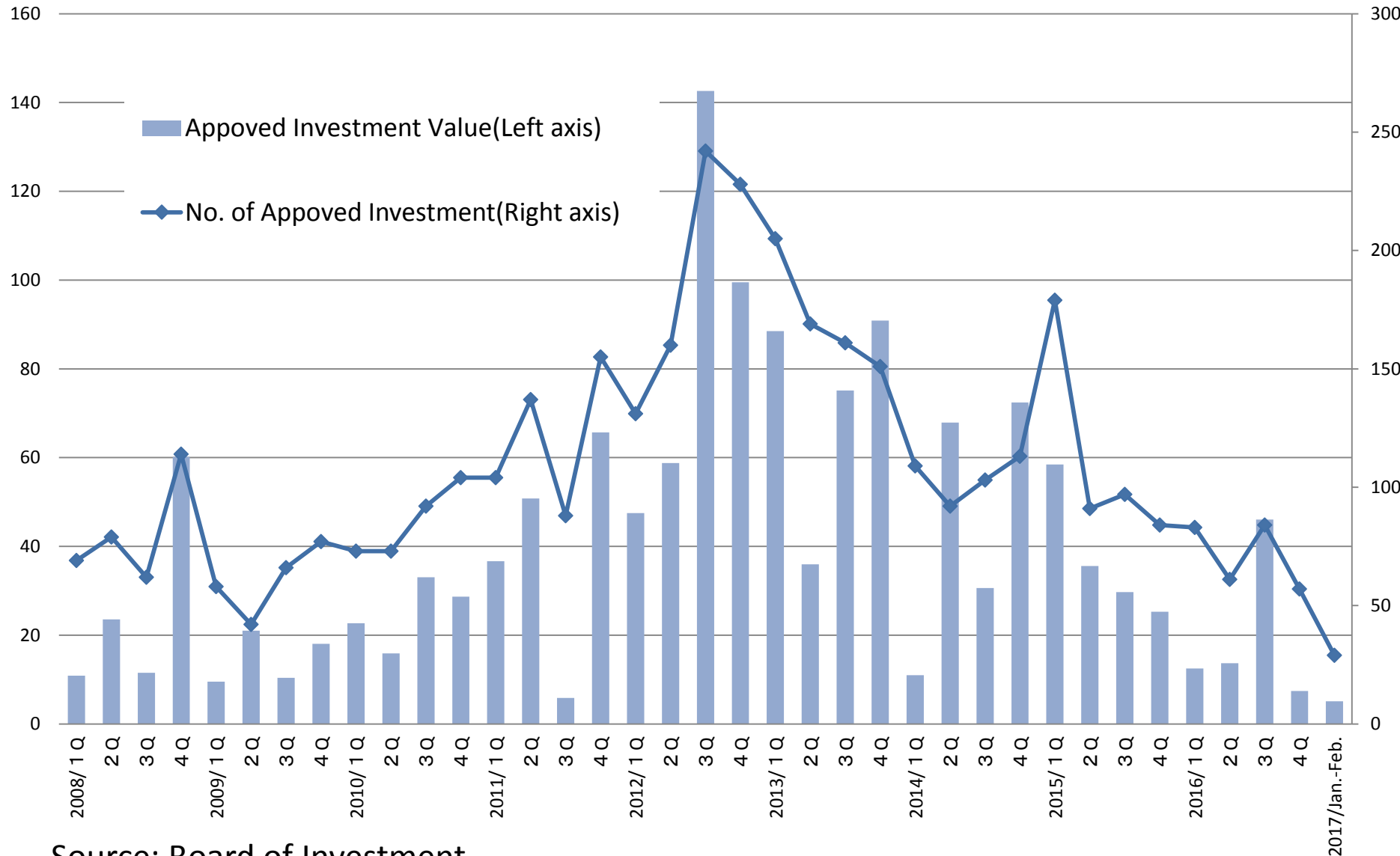
How can Thailand access higher value chains?



BOI Investment from Japan

Unit: Billion Baht

Unit: number

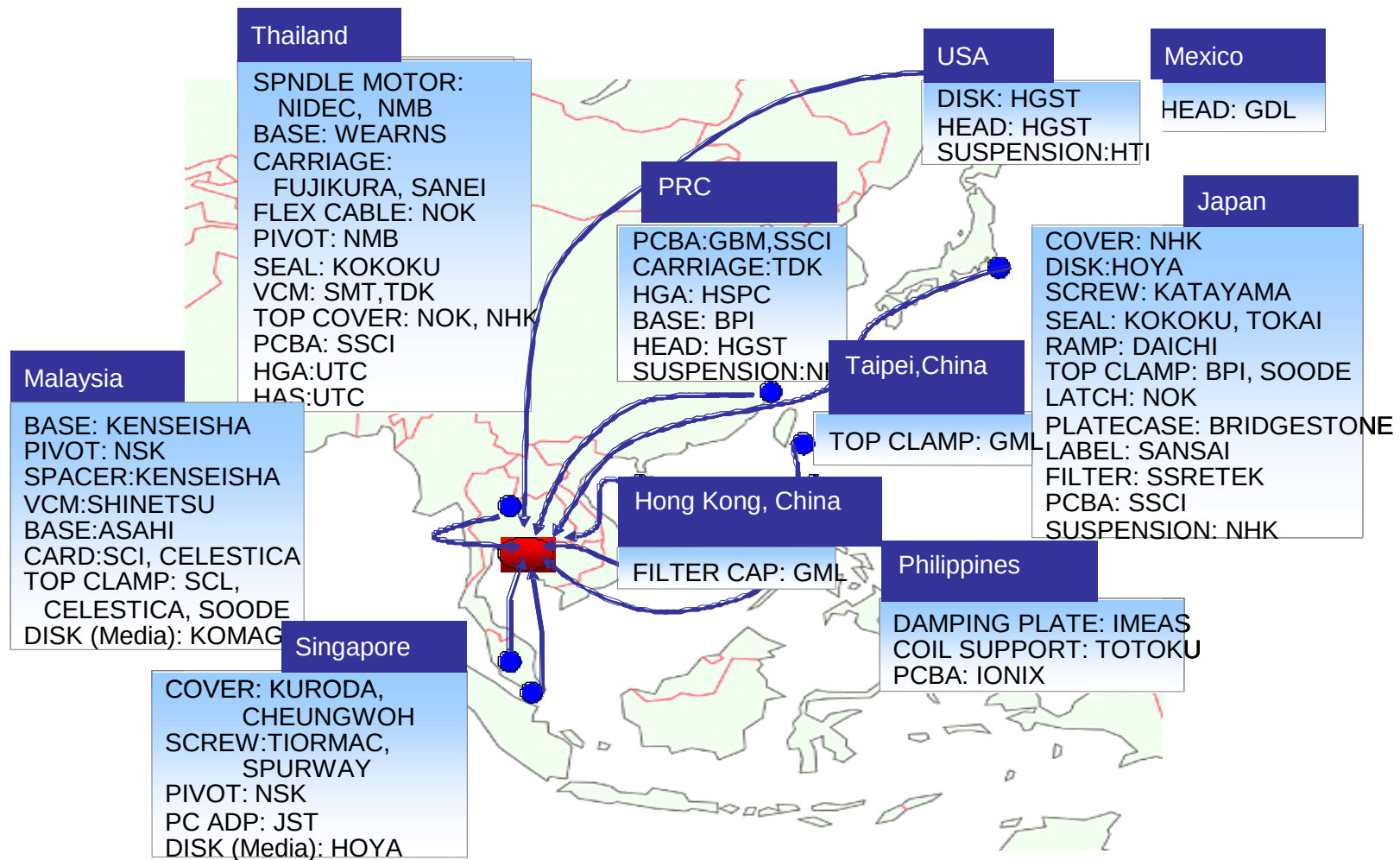


Source: Board of Investment

Outward FDI from Japan (Mil. US\$)

	2010	2011	2012	2013	2014	2015	2016
Asia	22,131	39,492	33,477	40,470	43,409	34,477	10,886
China	7,252	12,649	13,479	9,104	10,889	10,077	8,634
Singapore	3,845	4,492	1,566	3,545	8,144	6,779	△ 18,955
Thailand	2,248	7,133	547	10,174	5,567	3,926	4,064
Indonesia	490	3,611	3,810	3,907	4,834	3,306	2,924
Malaysia	1,058	1,441	1,308	1,265	1,292	2,893	1,409
Philippines	514	1,019	731	1,242	902	1,520	2,312
Vietnam	748	1,859	2,570	3,266	1,652	1,439	1,854
India	2,864	2,326	2,802	2,155	2,408	△ 1,176	3,690
North America	9,016	15,166	35,768	46,505	51,349	50,630	53,086
Middle&South America	5,346	11,287	10,454	10,197	6,266	5,953	25,565
Cayman Islands	△ 1,848	223	2,276	437	799	3,674	19,220
Pacific region	6,407	8,767	11,075	6,098	6,030	6,917	5,953
Europe	15,043	39,841	31,017	32,227	28,447	36,109	73,548
Middle East	△ 348	716	447	91	1,007	973	969
Africa	△ 372	464	116	△ 537	1,511	1,367	△ 431
World	57,223	108,808	122,355	135,049	138,017	136,423	169,582

FIGURE 1: Production Fragmentation: A HDD Assembler in Thailand in 2005



Source: Hiratsuka, Daisuke (2006). Vertical Intra-Regional Production Networks in East Asia: Case of the Hard Disk Drive Industry in East Asia. (Chapter 6.) In *East Asia's De Facto Economic Integration*, edited by Hiratsuka.

Why has the South-South trade developed in ASEAN?

1. Production fragmentation in East Asia has most developed in the world (Ando and Kimura, 2005).
2. If transportation costs fall enough disadvantage of being away from suppliers and markets, manufacturing will disperse from a higher-wage country to a lower wage country (Krugman and Venables, 1995)
 - ✓ Agglomeration and dispersion (international income gaps)
 - ✓ border procedures
 - ✓ AEC has advanced

Tax incentives and alternative policy tools

1. a subsidy that reduces MNCs' variable costs of production (such as corporate tax rate cuts or job-creation subsidies) (Chor, 2009)
2. a subsidy that reduces MNCs' fixed costs of production (such as infrastructure and industrial parks) (Melitz, Helpman, and Yeaple, 2004)

characteristics of knowledge intensive activities (Mattijs van 't Hoff and Ronald Wall, 2014)

- sales and marketing services (SMS),
- business services (BS),
- headquarters (HQ),
- design and testing (DDT),
- research and development (R&D),
- information services (ICT).
- education and training (E&T)

Average location spatial characteristics of knowledge intensive FDI in Europe

	All knowledge intensive	Sales & marketing services	Business services	Headquarters	Design & testing	Design & testing	Research & development	Education and training
firm activity	All	SMS	BS	HQ	DDT	ICT	R&D	E&T
total number of FDI investments*	1042	402	321	122	117	18	47	15
proximity								
relative distance to airport	1.01	1.04	0.98	0.97	1.03	0.75	1.07	1.01
relative distance to universities	1.74	1.90	2.14	1.19	1.25	0.73	1.01	0.94
relative distance to city center	0.97	0.94	0.70	1.22	1.31	1.45	1.28	1.32
closed to main road	2.32	2.33	2.50	2.33	2.12	1.78	1.81	2.27
number of FDI firms in same cluster	16.67	13.51	23.58	15.72	13.59	11.44	9.64	12.27
centration ratio	0.26	0.21	0.32	0.19	0.24	-	0.29	-
functional characteristic								
commercial area	5.9%	5.5%	6.7%	7.4%	3.4%	11.1%	4.3%	6.7%
green	0.5%	0.5%	0.3%	0.0%	0.9%	0.0%	0.0%	6.7%
industrial estate	10.9%	14.1%	5.4%	14.9%	11.1%	16.7%	10.6%	6.7%
mixed-use	56.0%	55.2%	73.0%	42.1%	44.4%	27.8%	21.3%	60.0%
office location	22.0%	21.5%	13.0%	29.8%	29.9%	38.9%	42.6%	13.3%
techno estate	2.2%	2.1%	1.6%	3.3%	1.7%	5.6%	4.3%	0.0%
complex building area	2.6%	1.0%	0.0%	2.5%	8.5%	0.0%	17.0%	6.7%
characteristics								
urbanity (1-4 highest)	3.03	2.97	3.41	2.79	2.79	2.78	2.34	2.67
number of floors	4.87	4.77	5.55	4.58	4.26	4.42	3.81	4.14
amenitites (yes)	50.2%	47.9%	67.9%	40.5%	39.3%	27.8%	19.1%	26.7%
waterfront (yes)	8.9%	10.3%	7.9%	7.4%	10.3%	16.7%	4.3%	0.0%
spatial quality								
public space design (1-4 highest)	2.75	2.75	2.89	2.66	2.52	2.75	2.53	2.77
green space propotion (1-4 highest)	2.30	2.34	2.23	2.36	2.11	2.22	2.70	2.47
water area (1-4 highest)	1.81	1.91	1.80	1.81	1.47	2.06	1.74	1.60
street parking	26.3%	30.5%	29.8%	17.4%	17.9%	22.2%	6.4%	46.7%
lots parking	31.1%	30.0%	12.7%	45.5%	52.1%	38.9%	72.3%	26.7%
built parking	42.6%	39.4%	57.5%	37.2%	29.9%	38.9%	21.3%	26.7%

Source: Mattijs van 't Hoff and Ronald Wall (2014)

Amenity/attractiveness of a place affects knowledge based industry cluster

the world-class high level amenity (modern living for high talented human resources)

- Transportation networks
- High quality apartment
- Hospitals: (Dusit Medical Services Plc)
- International schools(Apr.11 Cabinet decision)
- Universities
- Modern shopping & restaurant districts
- Amusement parks
- Music halls

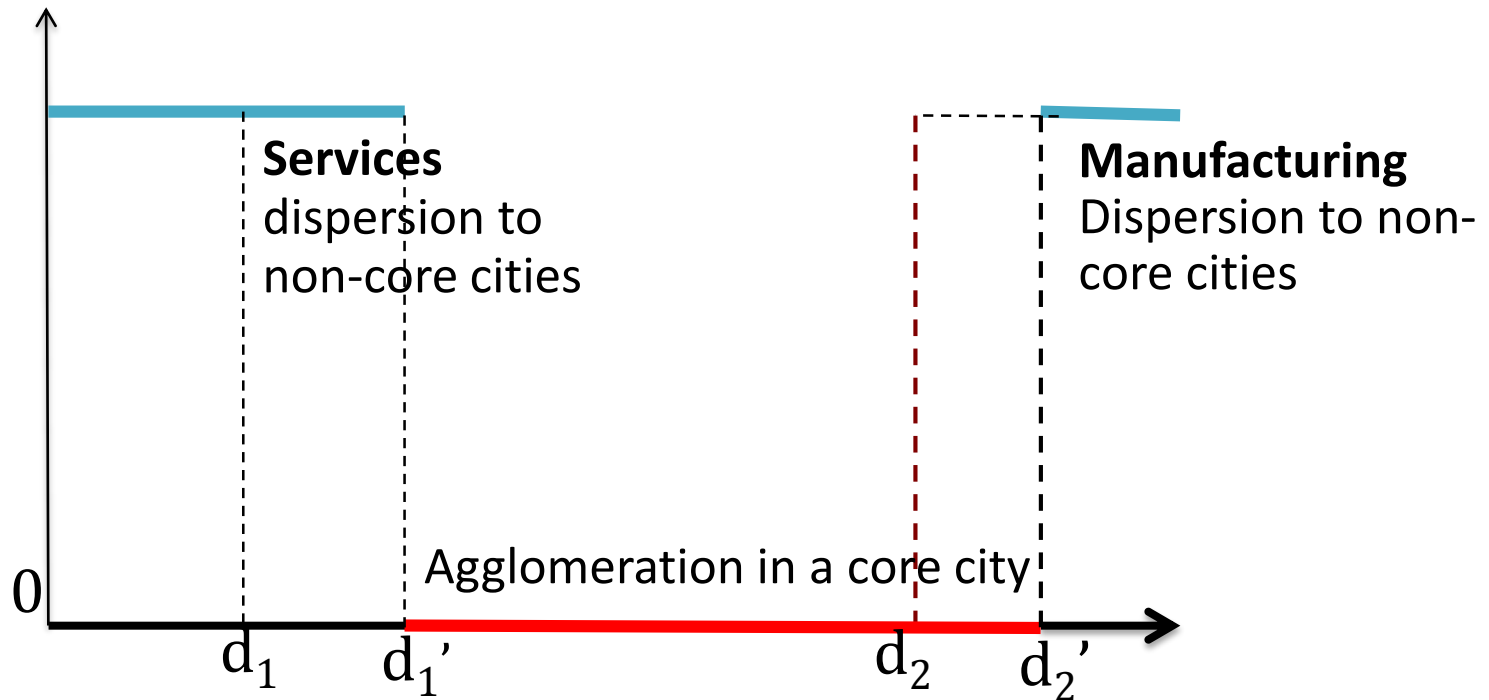
In reality, it is very difficult, but EEC can provide the world-class high quality amenity

1. Bangkok-Rayong HSR will be commercial if it links 3 international air ports of Don Mueang, Suvarnabhumi, and U-Tapao;
2. Bangkok-Rayong HSR will stop at Bang Sue, Chachoengsao, Chonburi, Si Racha, Pattaya, and Rayong;
3. which will transform the HSR station cities into the service industry districts (R&D and knowledge based service industries)

Li and Xu (2006) (HSR shortens travel time)

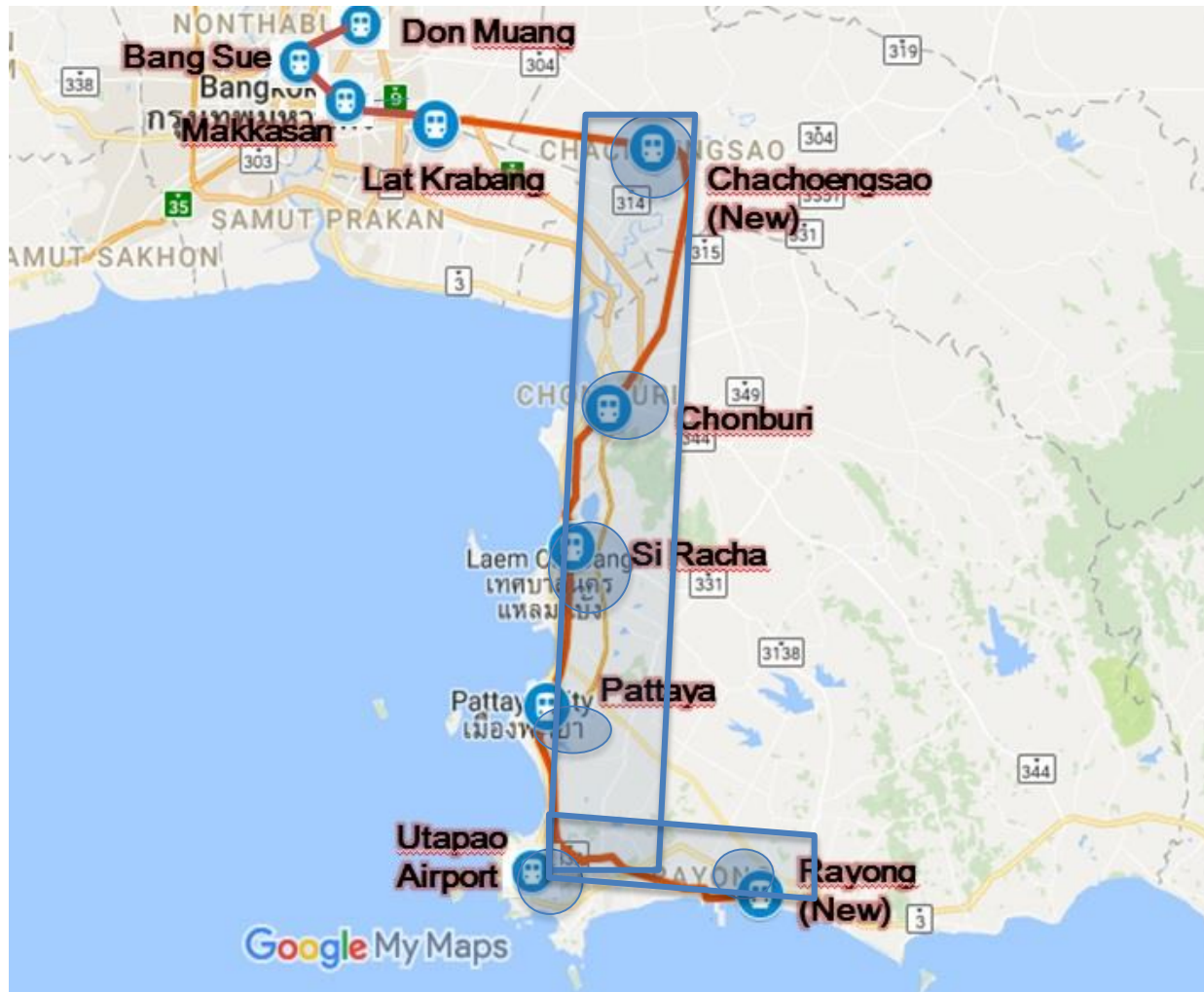
Ottaviano, Tabuchi, and Thisse. (2002)

Employment share
of non-core city



Geographical distance between a core and a non-core city

THE EEC COASTAL BELT



Development gaps between the coastal area and inland areas

- high value-added organic farms
- tourism
 - “Michino-eki” (direct sales shop of agricultural products, with a park)

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Economic Sustainable Growth and Prosperity

by

Piyabutr Cholvijarn

Advisor to Board of Trade of Thailand

ITD Regional Trade and Development Forum 2017

Thursday , July 20, 2017

Pullman King Power Hotel

Economic Sustainable Growth and Prosperity

➤ **Economic Regional Integration and Partnership**

- ❖ Regional FTA/Cooperation: the Benefits
- ❖ AEC, APEC
- ❖ Bilateral FTA/Cooperation

➤ **Interconnectivity**

- ❖ Infrastructure: Road, Marine, Aviation

➤ **Digital Trade: Cross-Border E-Commerce**

- ❖ Infrastructure: Road, Marine, Aviation

➤ **Inclusiveness**

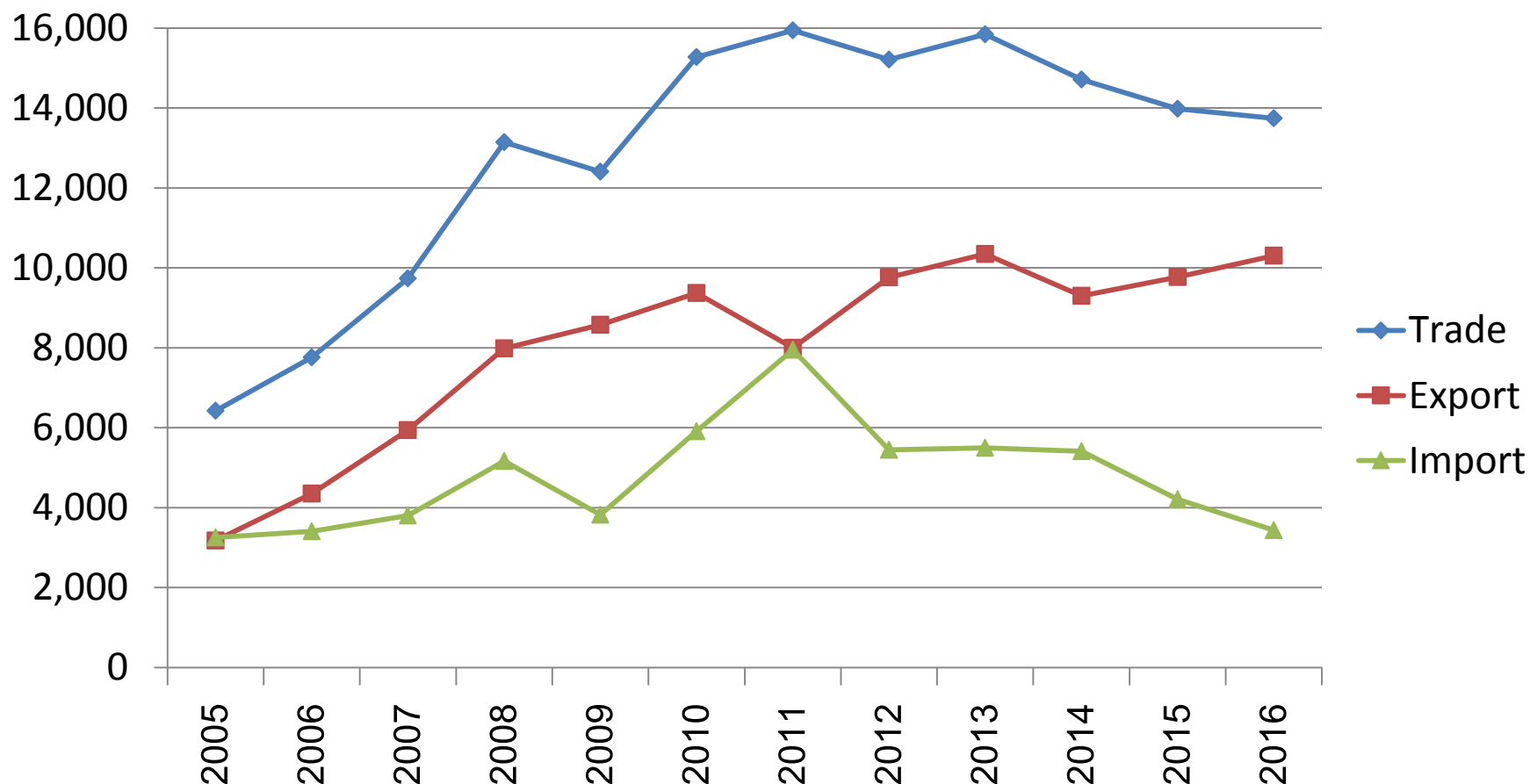
- ❖ Finance: Innovative, Fintech
- ❖ MSME: Global Value Chain, Innovation
- ❖ Women Empowerment
- ❖ Sustainable: UNMSG

Economic Regional Integration and Partnership

Thailand-Australia Free Trade Agreement (TAFTA)

- signed on July 5, 2003 and active on January 1, 2004

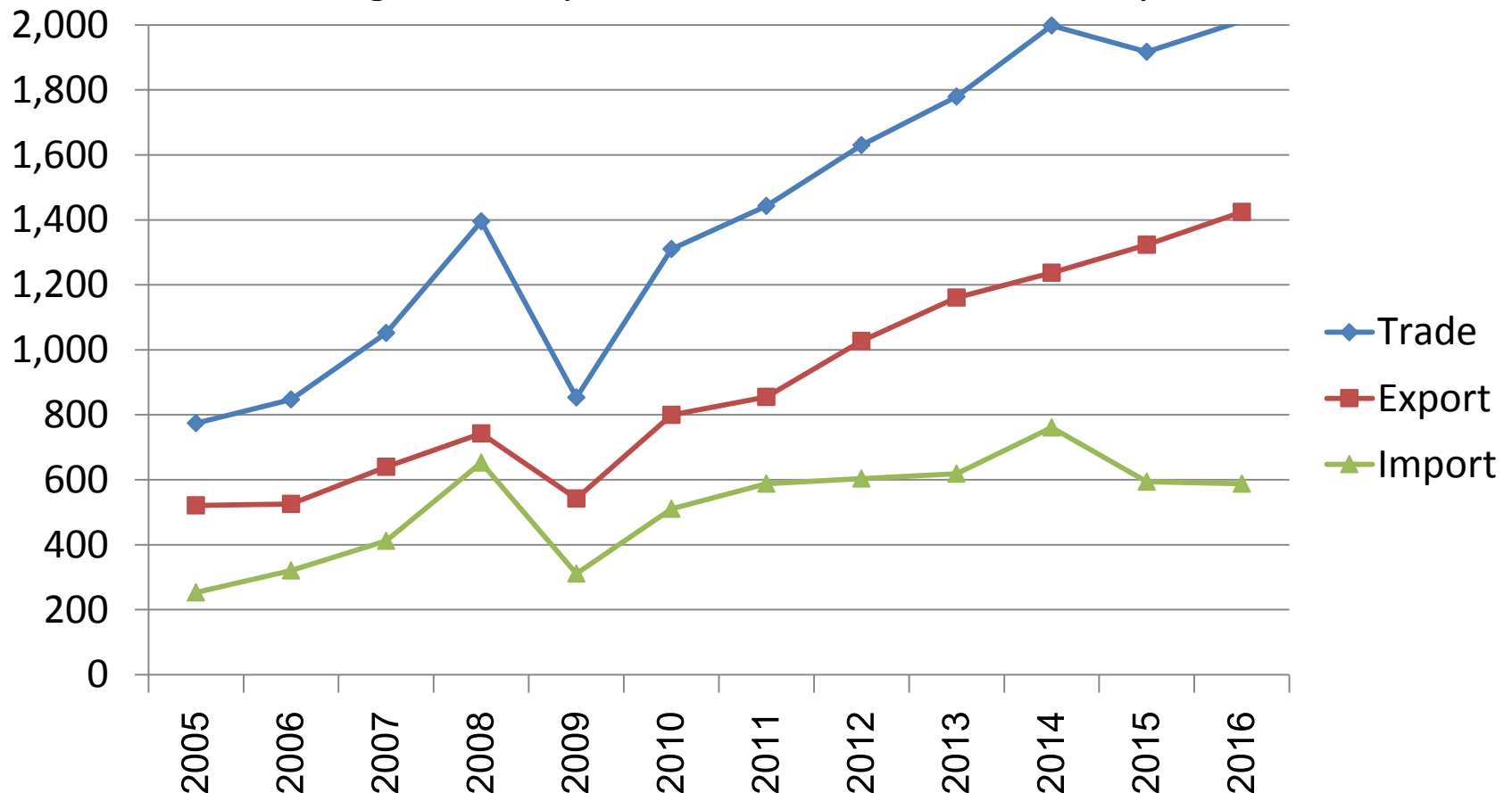
Million US\$



Thailand-New Zealand Closer Economic Partnership Agreement (TNZCEP)

- signed on April 19, 2004 and active on July 1, 2004

Million US\$

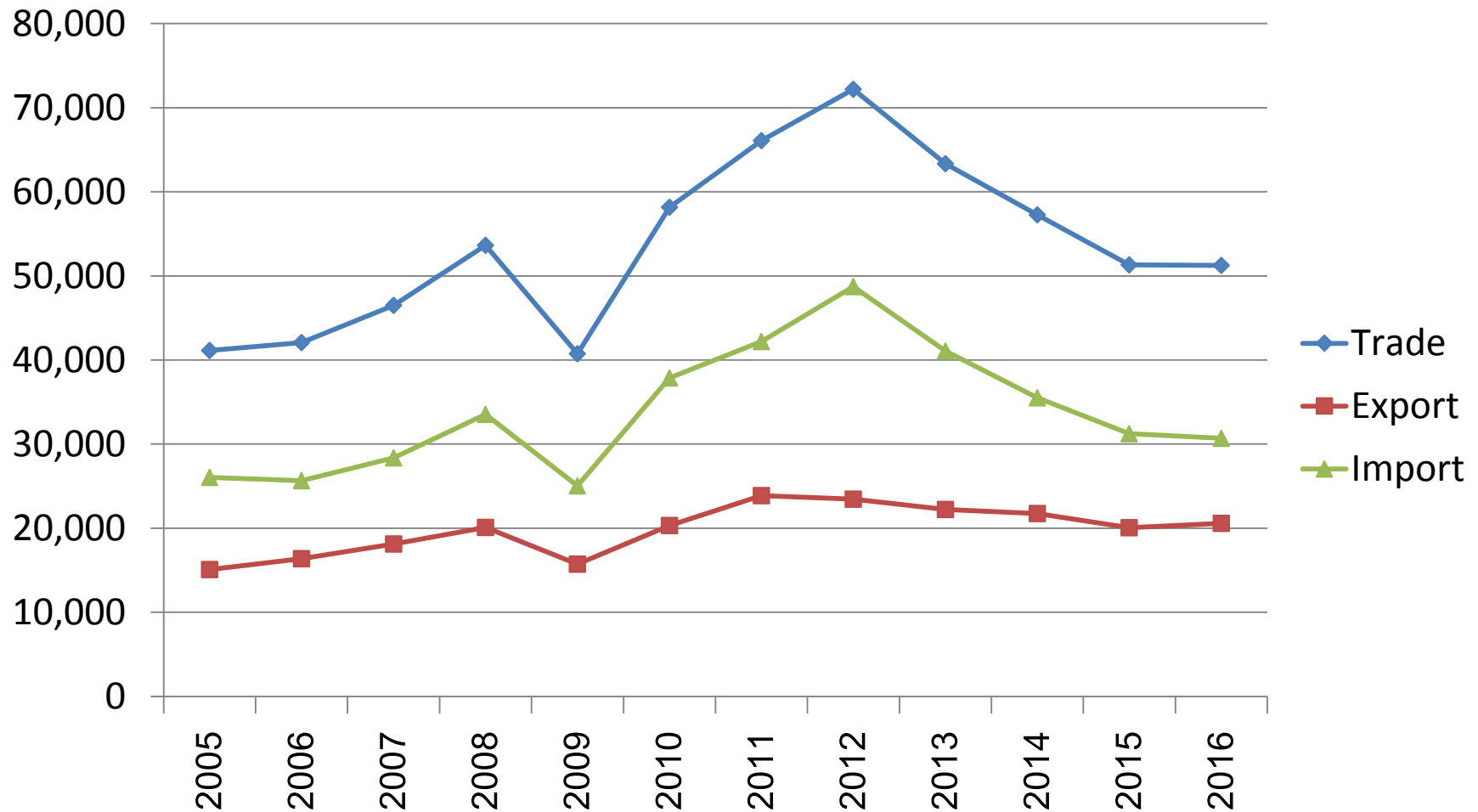


Thai Trade with Japan

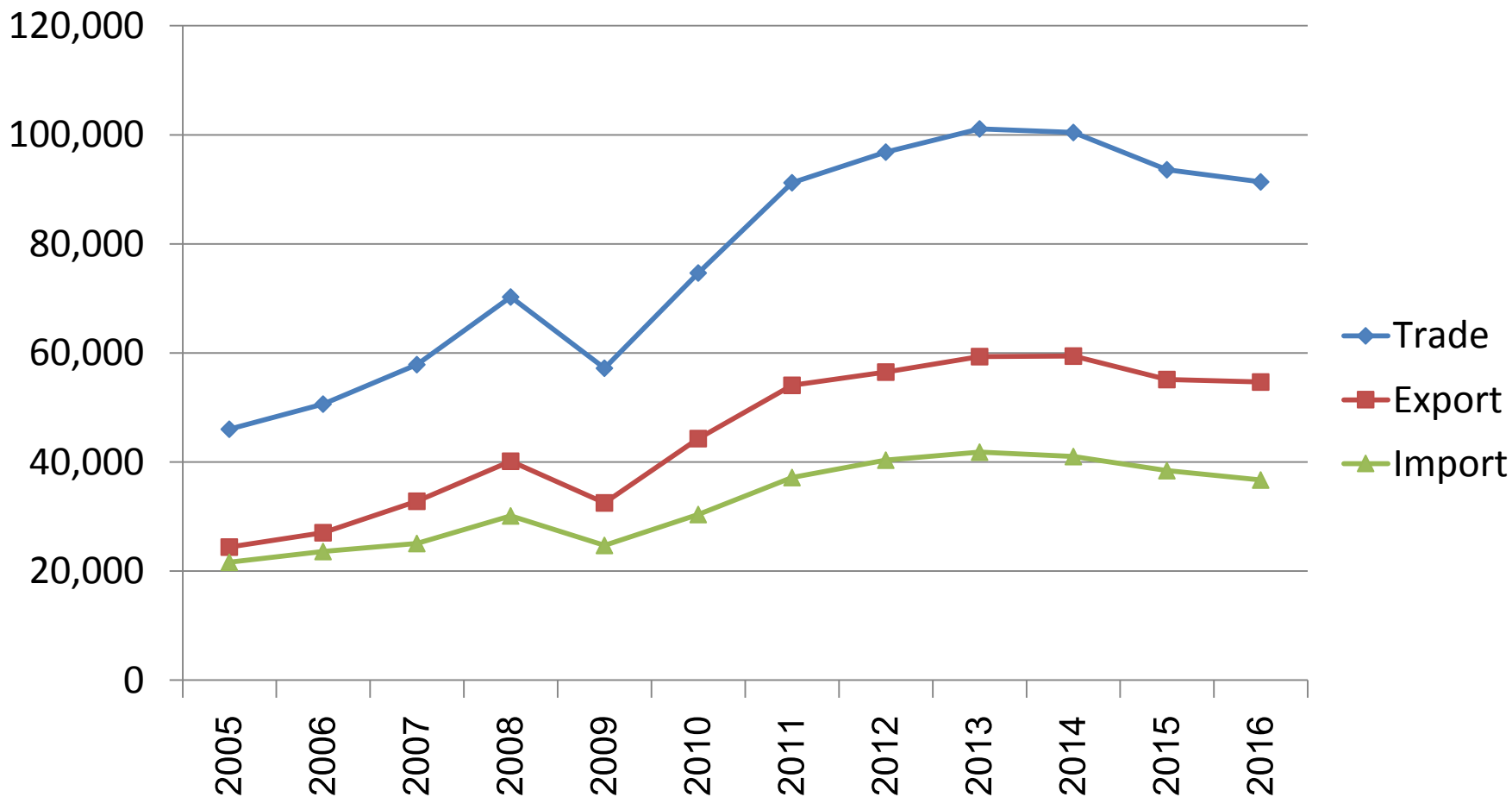
Japan -Thailand Economic Partnership Agreement (JTEPA)

- signed on April 4, 2006 and active on November 1, 2006

Million US\$

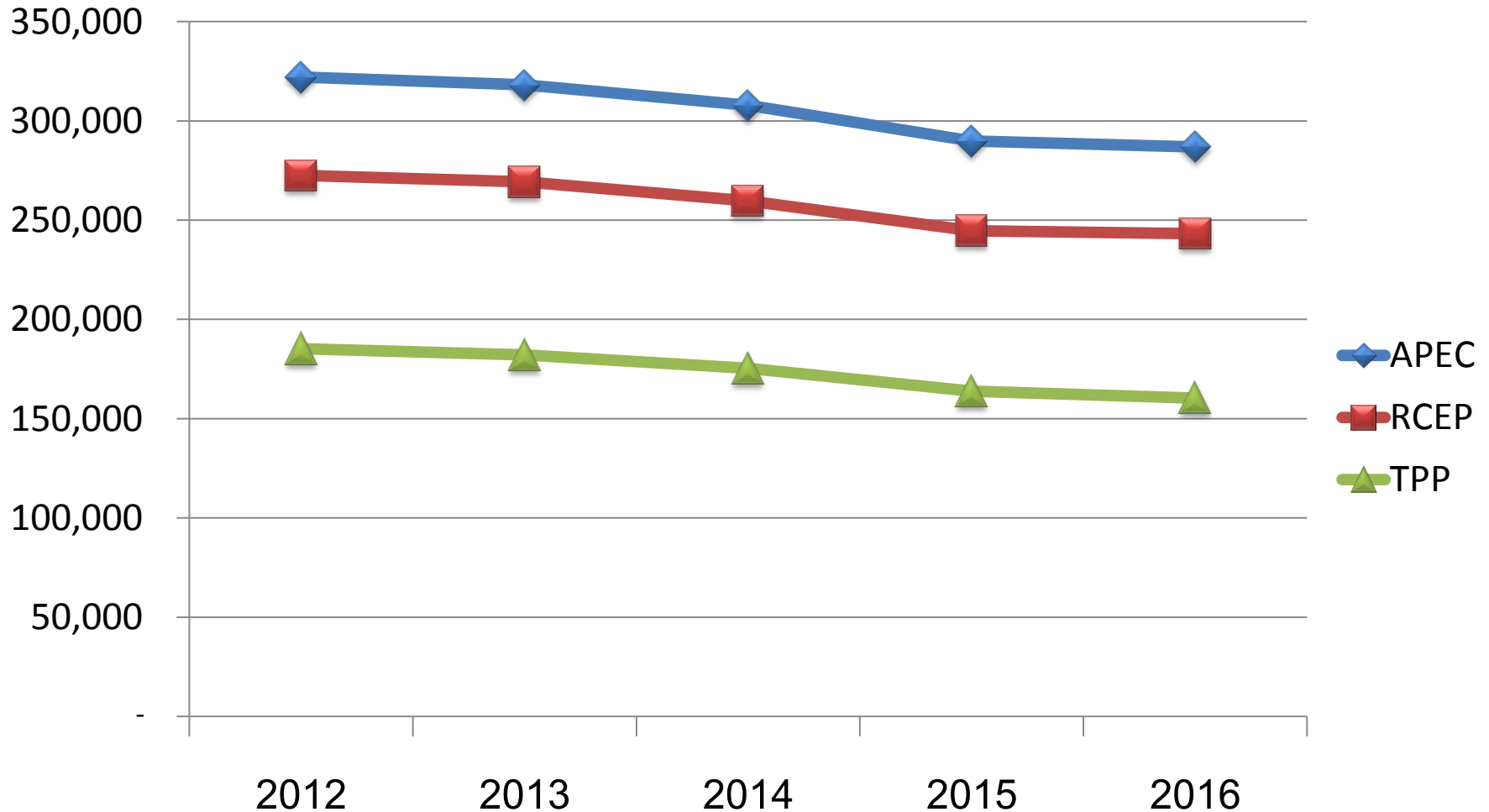


Million US\$



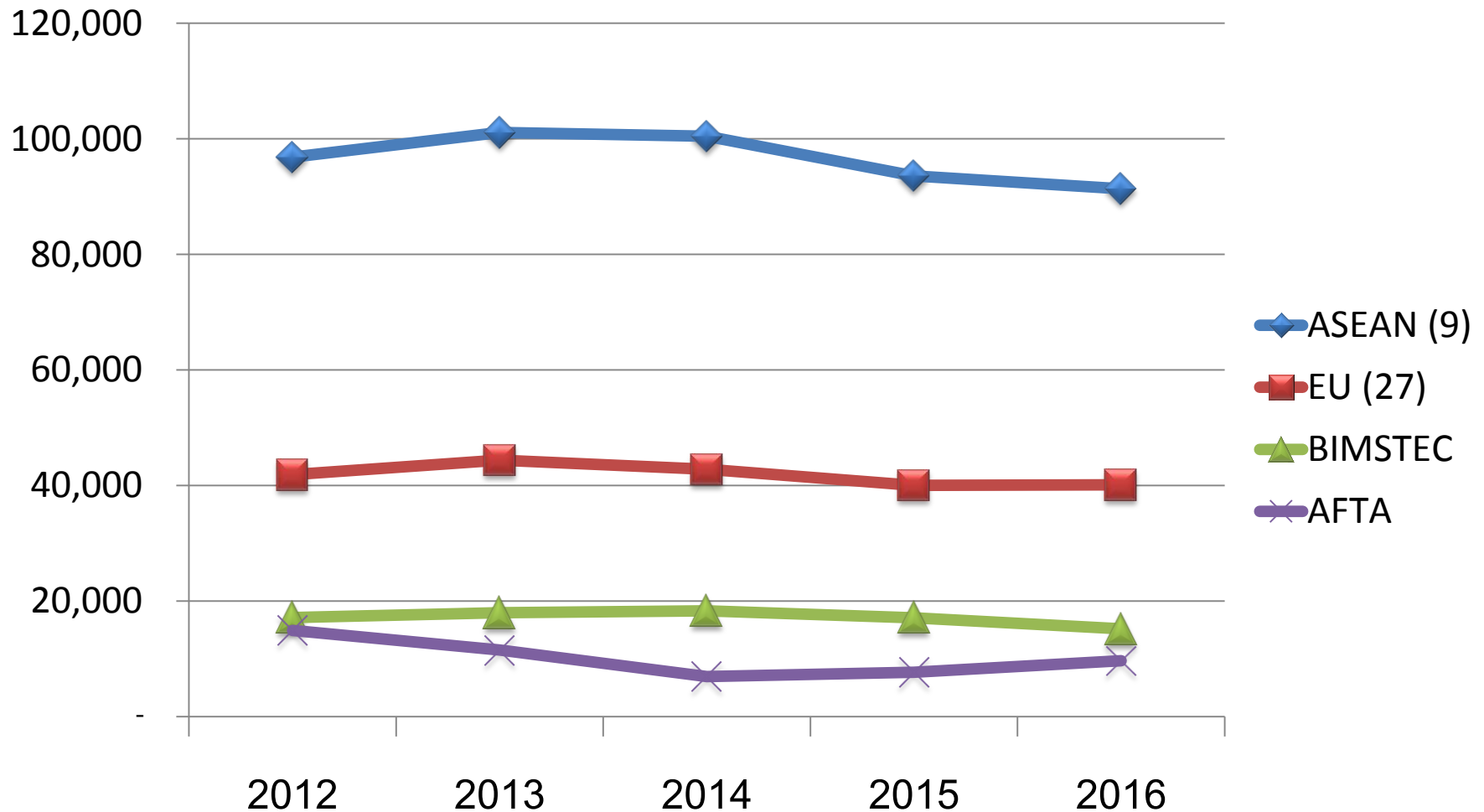
Thai Trade with APEC, RCEP, TPP

Million US\$



Thai Trade with ASEAN, EU, BIMSTEC, AFTA

Million US\$





Asia-Pacific Economic Cooperation

- 59% of world GDP
- 49% of world trade
- GDP ↑ from \$16 trillion to \$20 trillion
- Trade grew by 6.7 times in APEC and 5.6 times with ROW
- 74% rising of per capita income

APEC total trade
(goods & services)
has increase more
than

6.7 TIMES to
\$20 TRILLION



between 1989
and 2015

Trade by the rest
of the world grew
less by

5.6 TIMES

between 1989
and 2015



Bogor Goals 2020: Free and Open trade & investment

Trade Facilitation leads to reduction cost of cross border doing business.

Average tariffs fell from

17%
in 1989



to
5.6%
in 2014

- ❖ Harmonizing Standards and Regulation
- ❖ Streamline Customs Procedures

Lowering trade transaction costs by



5%
(2007-2010 period)



and saving USD
56.7 BILLION

Between 2009 and 2015, member economies improved the ease of doing business in the Asia-Pacific by



across all areas
of the initiative

The time it takes to
issue construction
permits fell from
169.7 days in 2009
to 136.9 days in 2015.



Time to start a
business decreased
from 28.5 days in
2009 to 14.8 in 2015

Cost to start a
business fell from
9.8% of per capita
income in 2009 to
1.6% per capita
income in 2015



APEC launched its Ease of Doing Business Action Plan in 2009, with the goal of making it cheaper, easier and faster to do business in the region.

AT THE BORDER

- ▶ APEC is helping to reduce costs for importers and exporters in the region



- ▶ Customs waiting time reduced by electronic processing



From 6-8 days to 4-5 hours

BEHIND THE BORDER

APEC member economies are implementing reforms to regulatory and government systems



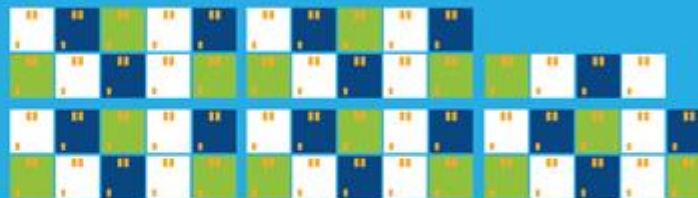
APEC is also improving logistics and transport networks to enable component parts and final goods to travel across multiple borders, contributing to a more efficient regional supply chain.

Promoting global trade in environmental goods



APEC is reducing tariffs to

▼ **5%**



or less on a list of **54**
environment goods by 2015

Breaking down barriers to environmental goods



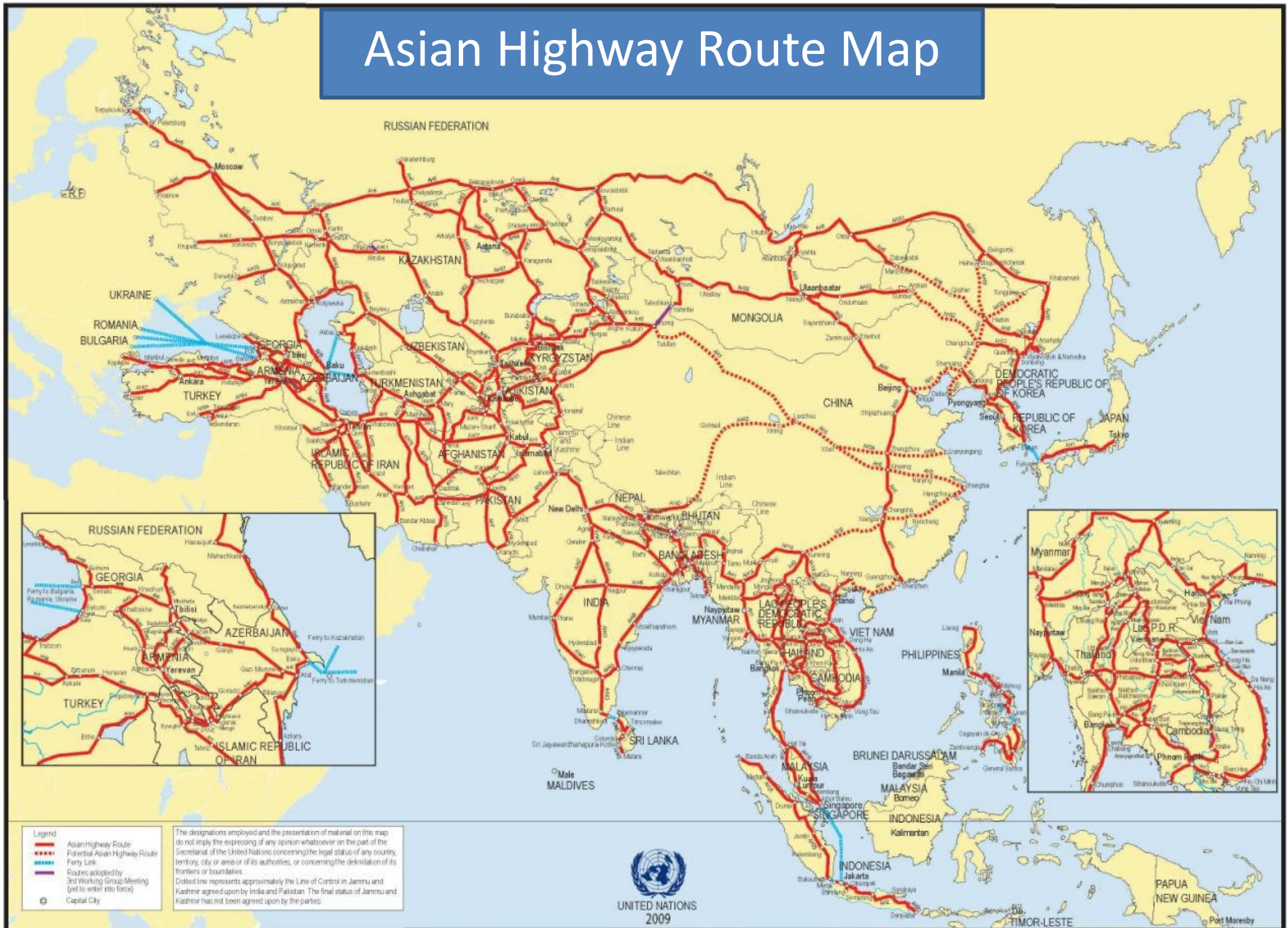
Nearly
US\$600
billion global trade in
environmental goods



Inter-connectivity



Asian Highway Route Map



The reviving of the Silk Road

Infrastructure projects being planned and undertaken as of December 2015 in China's Belt and Road initiative.

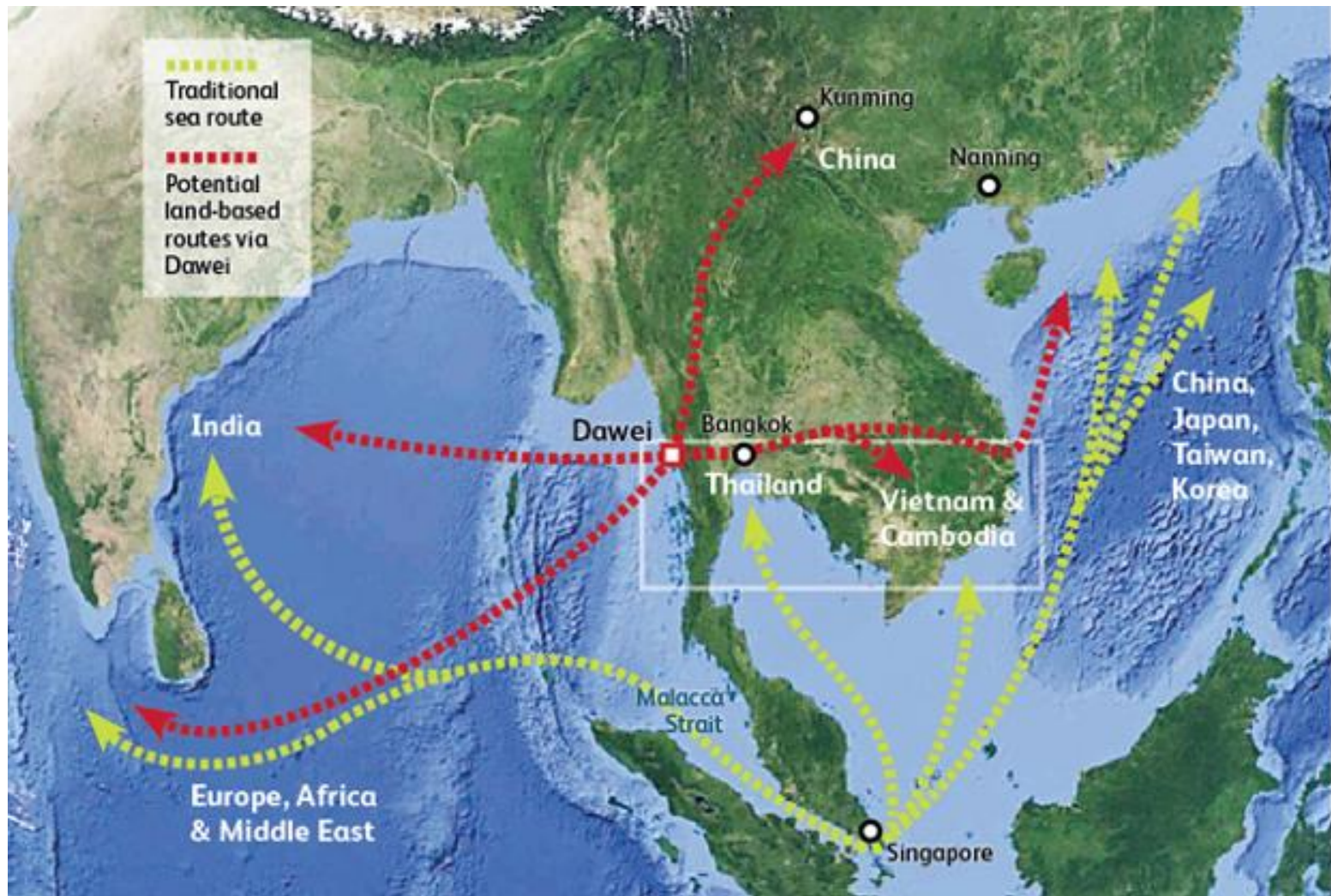


North-South Corridors

The map illustrates the North-South Corridors in Southeast Asia, showing major cities and transportation routes. The cities labeled are Kunming, Mandalay, Chiang Mai, Vientiane, Hanoi, Yangon (Rangoon), Bangkok, Phnom Penh, Ho Chi Minh City, and Singapore. The routes are marked with dashed lines, and arrows indicate the direction of flow, primarily from Kunming towards the south and east.

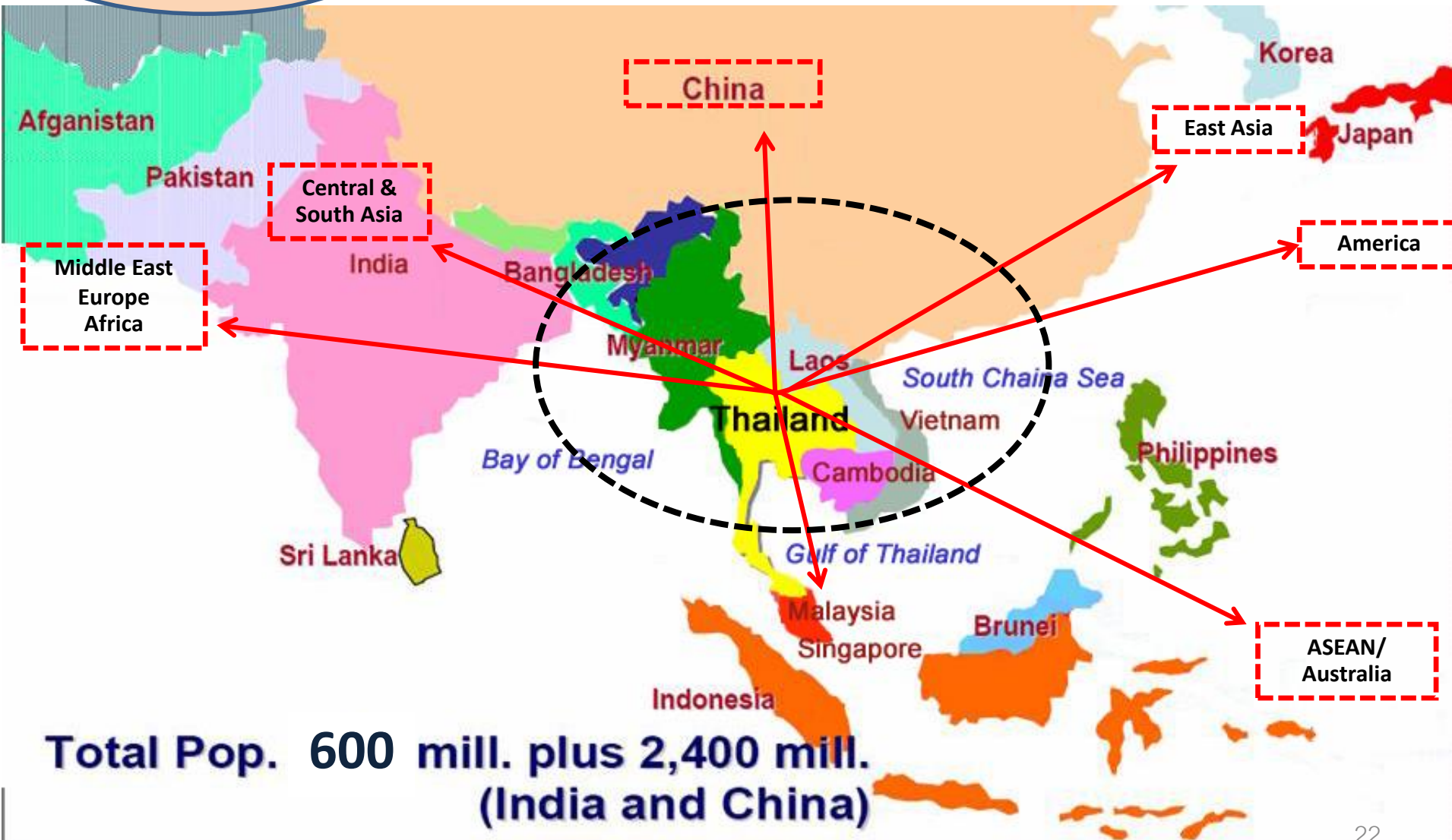


Sea Connectivity



Aviation

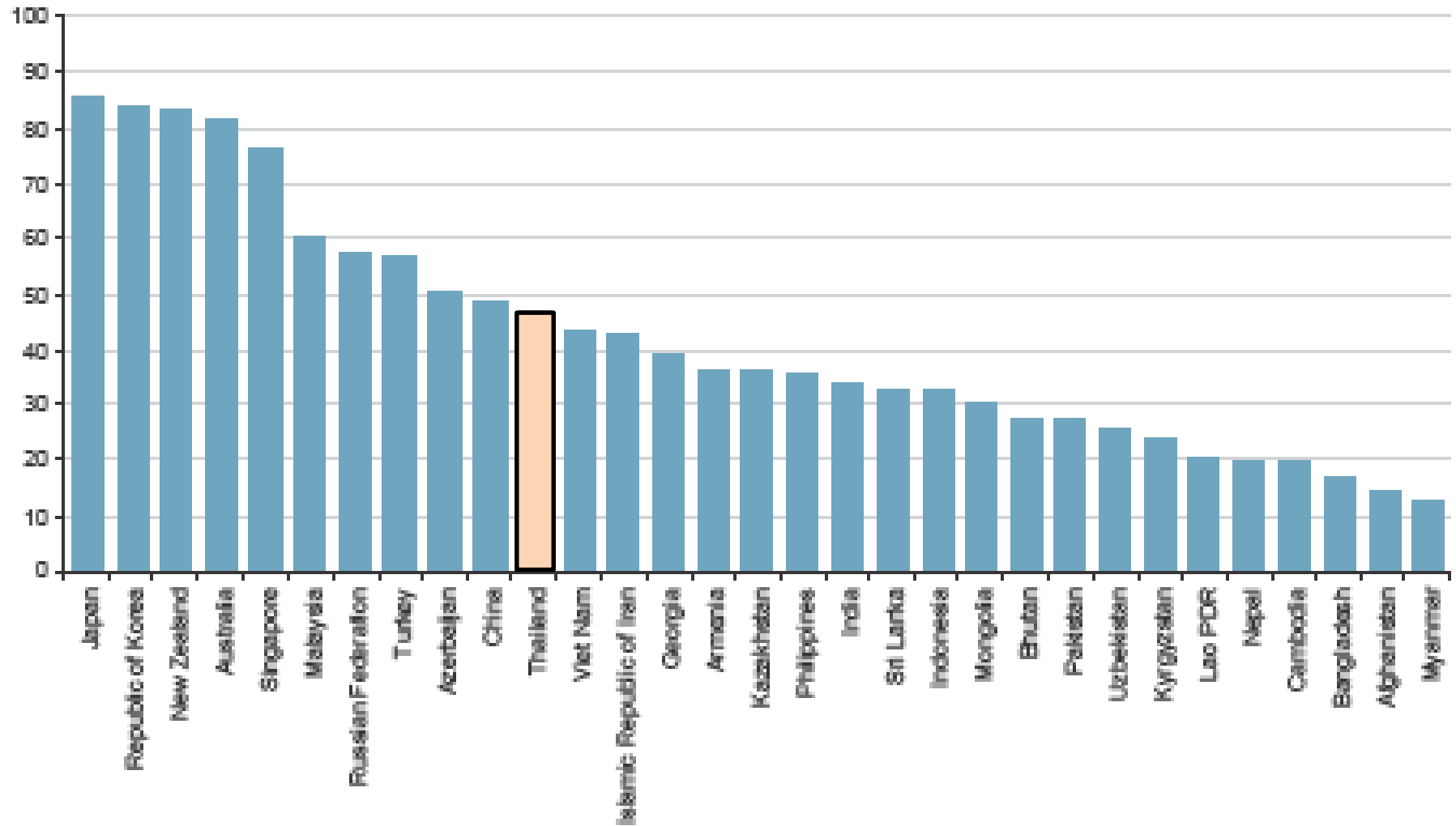
THAILAND: GATEWAY TO ASEAN



Digital Trade:

Cross-Border E-Commerce

UNCTAD B2C E-Commerce Index 2016



Cross-Border E-Commerce Framework

Cross-Border
Transaction
Facilitation

Cross-Border
Trade
Environment

MSME

Payments

Logistics

Platforms &
Marketplaces

Foreign
Market
Access

Customs &
Border
Administration



Customer
(B2B, B2C,
C2B, C2C,
B2B2C)

E-Commerce
Operating
Environment

E-Commerce
Regulatory
Environment

Smartphone &
Internet
Connectivity &
Penetration

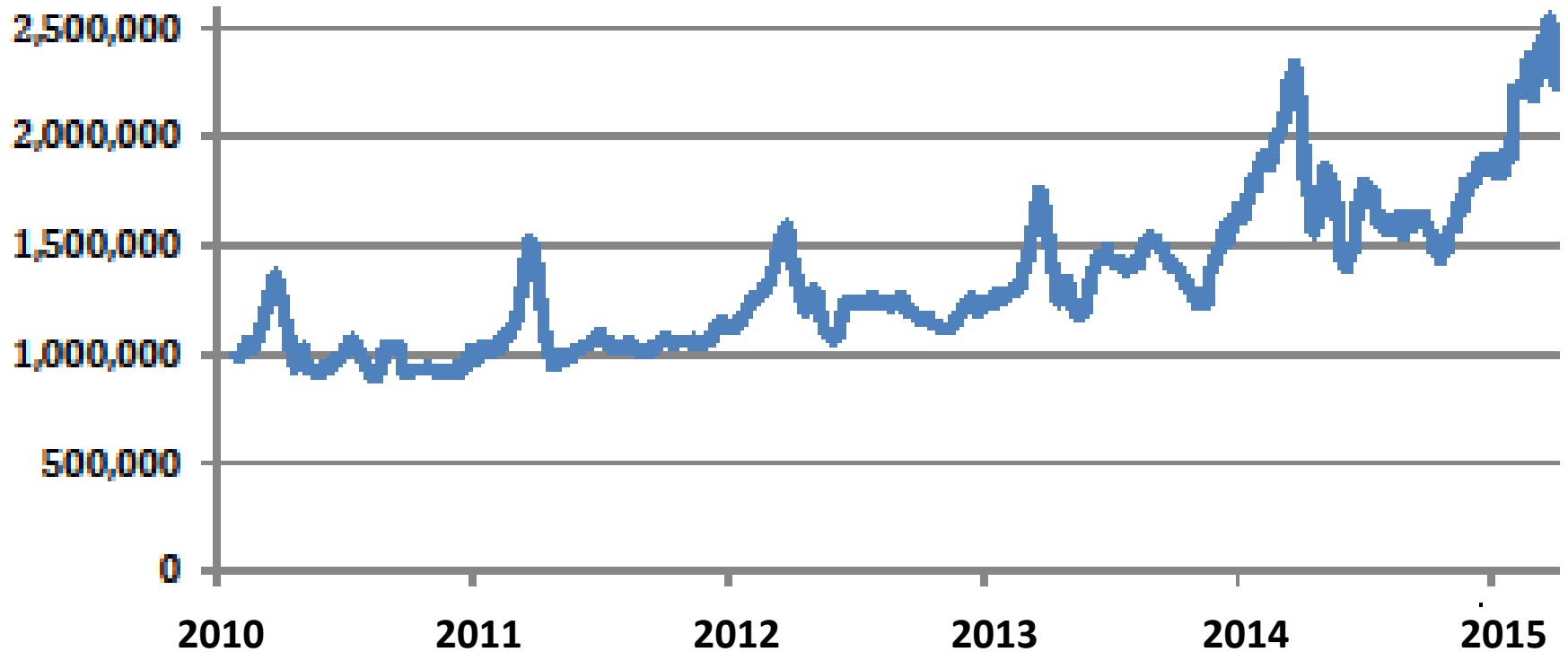
Sophistication
of Domestic
E-Commerce

Financing &
Support for
E-Commerce

E-Commerce
Regulations

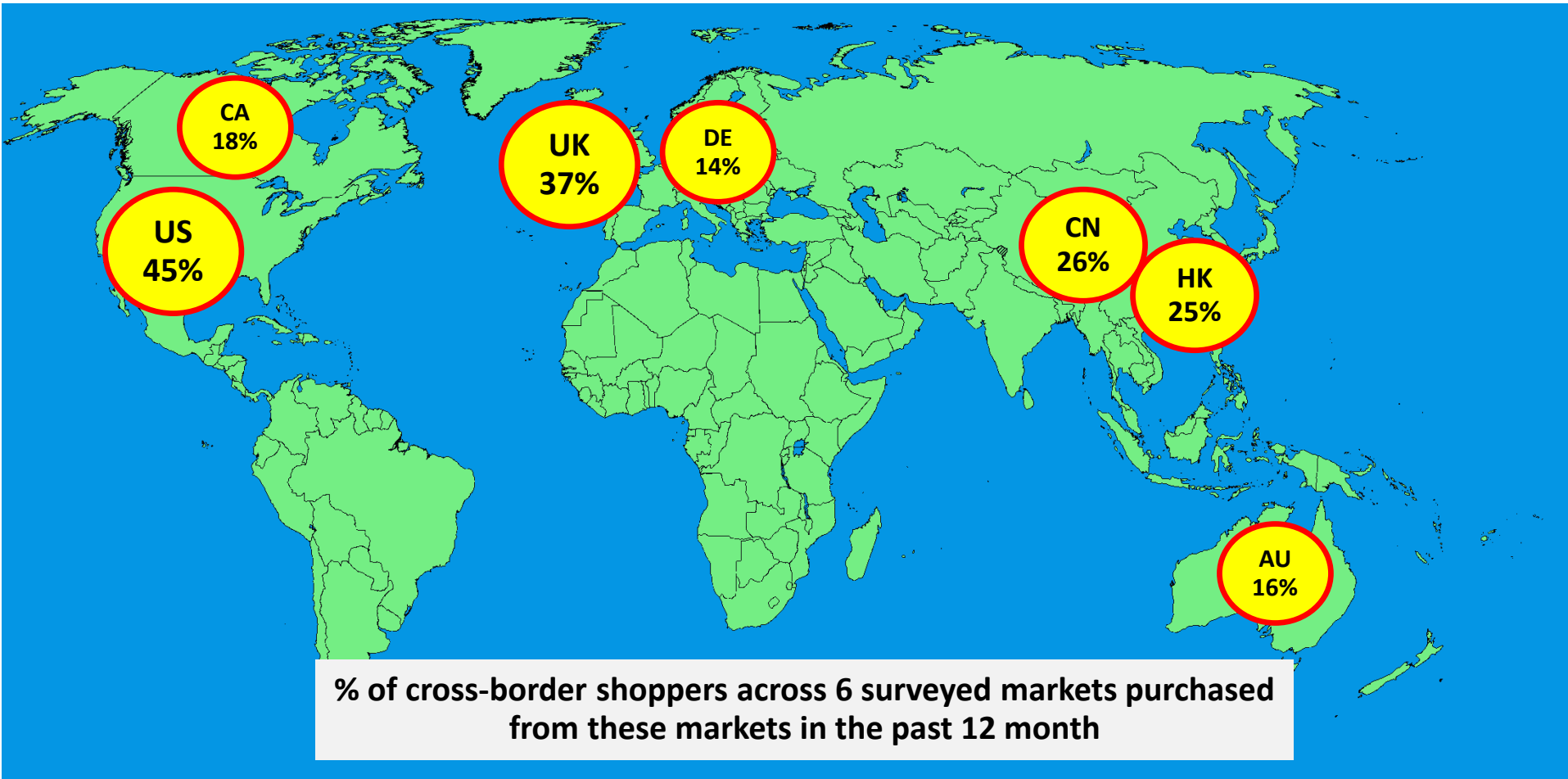
Enforcement &
Protection

Daily parcel tonnage transported through the international postal system (total number of daily kilograms from 1 October 2010 to 31 December 2015)



Source: Universal Postal Union (2010 to 2015).

Most popular overseas online shopping destinations among six countries, 2013



*Note: The six surveyed countries are Australia, Brazil, China, Germany, United Kingdom and United States.
Source: PayPal 2015.*

Industry analysts' estimates of cross-border B2C e-commerce revenues and shoppers

Company	Year	B2C e-commerce sales (US\$ b)			Online Shoppers (m)		
		Total	Cross-border		Total	Cross-border	
				% of total			% of total
Accenture/ AliResearch	2014	1,589	233	15%	1,316	309	23%
Ecommerce Foundation	2014	1,943	328	17%	1,139	309	27%
% OC&C (6 countries)†	2013	313	25	8%			
PayPal (6 countries)‡	2013		105			93.7	
UPS/ ComScore	2014	1,316	80	6%			

Company	Year	B2C e-commerce sales (US\$ b)				Online Shoppers (m)			
		Total	Cross-border			Total	Cross-border		
				% of total	CAGR			% of total	CAGR
Accenture/ AliResearch	2020	3394	994	29%	27%	2114	943	45%	20%
Ecommerce Foundation									
% OC&C (6 countries)†	2020	722	130	18%					
PayPal (6 countries)‡	2018		307		24%		130		7%
UPS/ ComScore	2020	3089	330	11%	27%				

Inclusiveness and Social Equity in terms of:

- innovative financing
- micro-enterprises
- women empowerment

THANK YOU

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Linking Trade & Development for Inclusive & Sustainable Growth

Thursday, 20th July 2017

Session VII

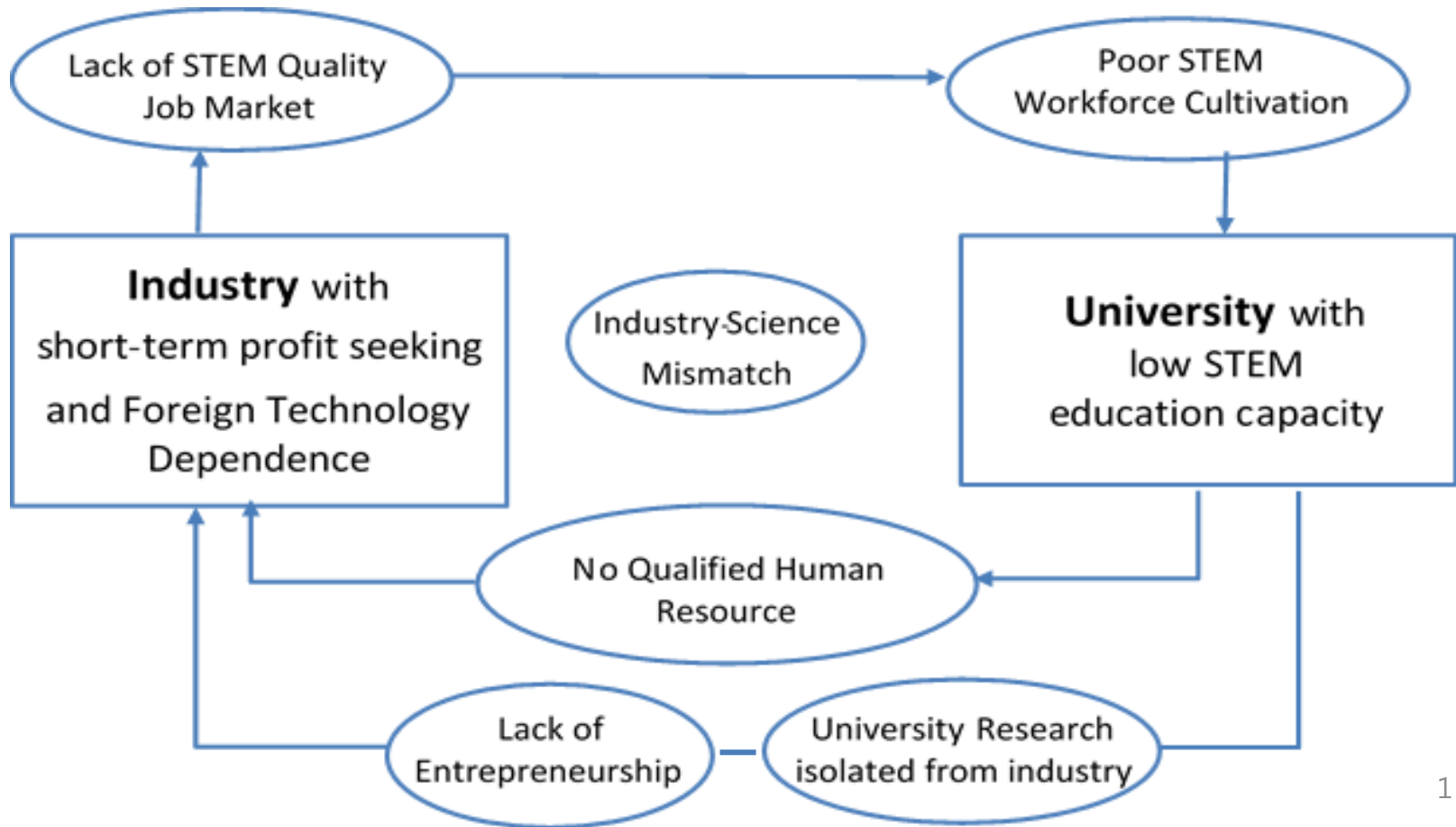
“Future Education for Future Trade and Investment”

Speaker:

1. Dr. Jeong Hyop Lee, Science Technology & Innovation Policy Institute, KMUTT
(Biodata & Powerpoint)
2. Emmanuel A. San Andreas, APEC Policy Support Unit
(Biodata & Powerpoint)
3. Katarina Tapio, Finnish Embassy in Thailand
(Biodata)
4. Dr. D.B. Kwon, Korean University & KRIVET Former President
(Biodata & Powerpoint)

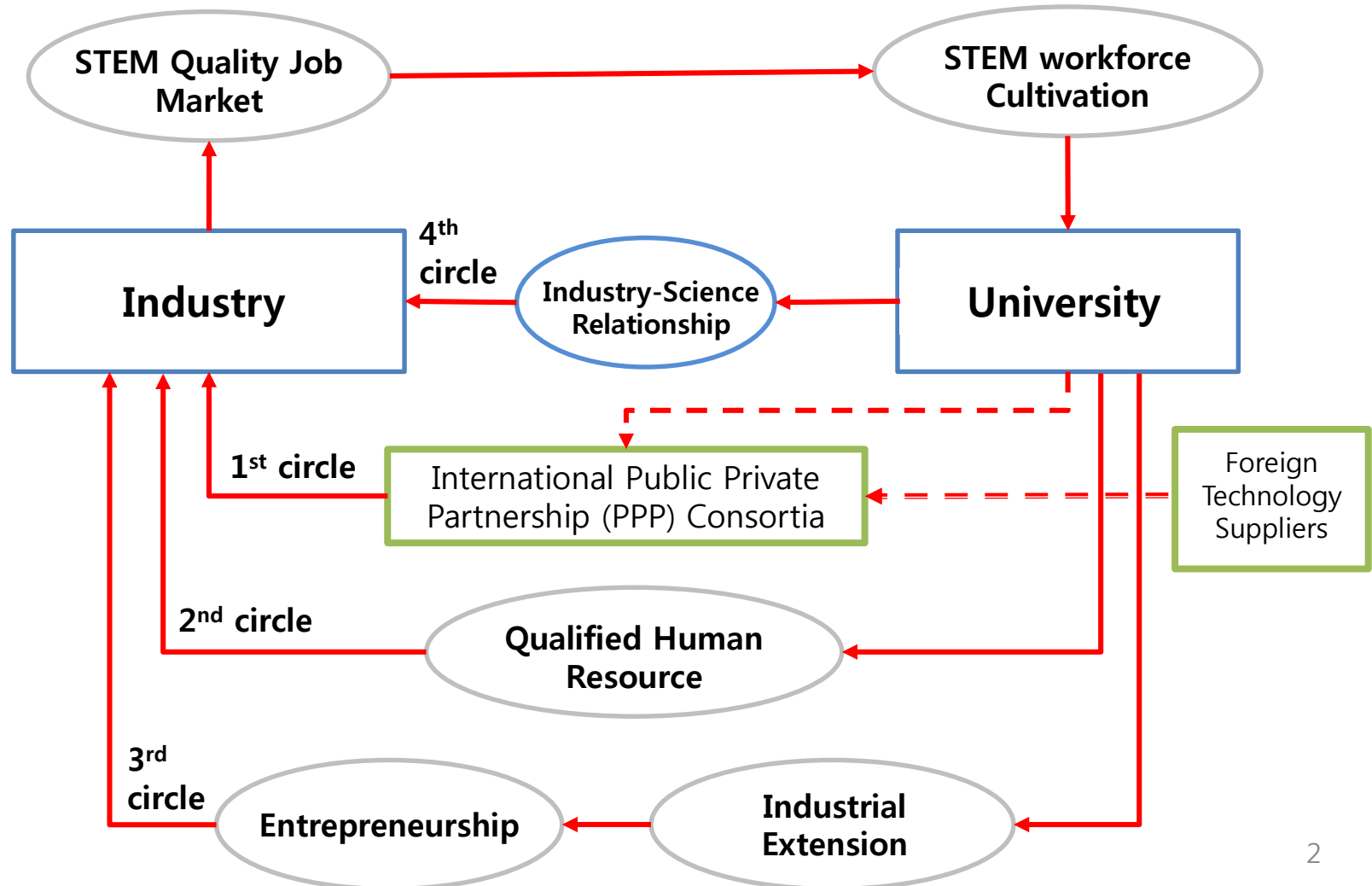
Double vicious circles of industry and university relationship

- Thai industries rely on technology importation for short-term profit seeking; therefore, lack of quality jobs, poor workforce cultivation and lack of education capacity.
- Universities are isolated from industrial demand and lack of entrepreneurship.

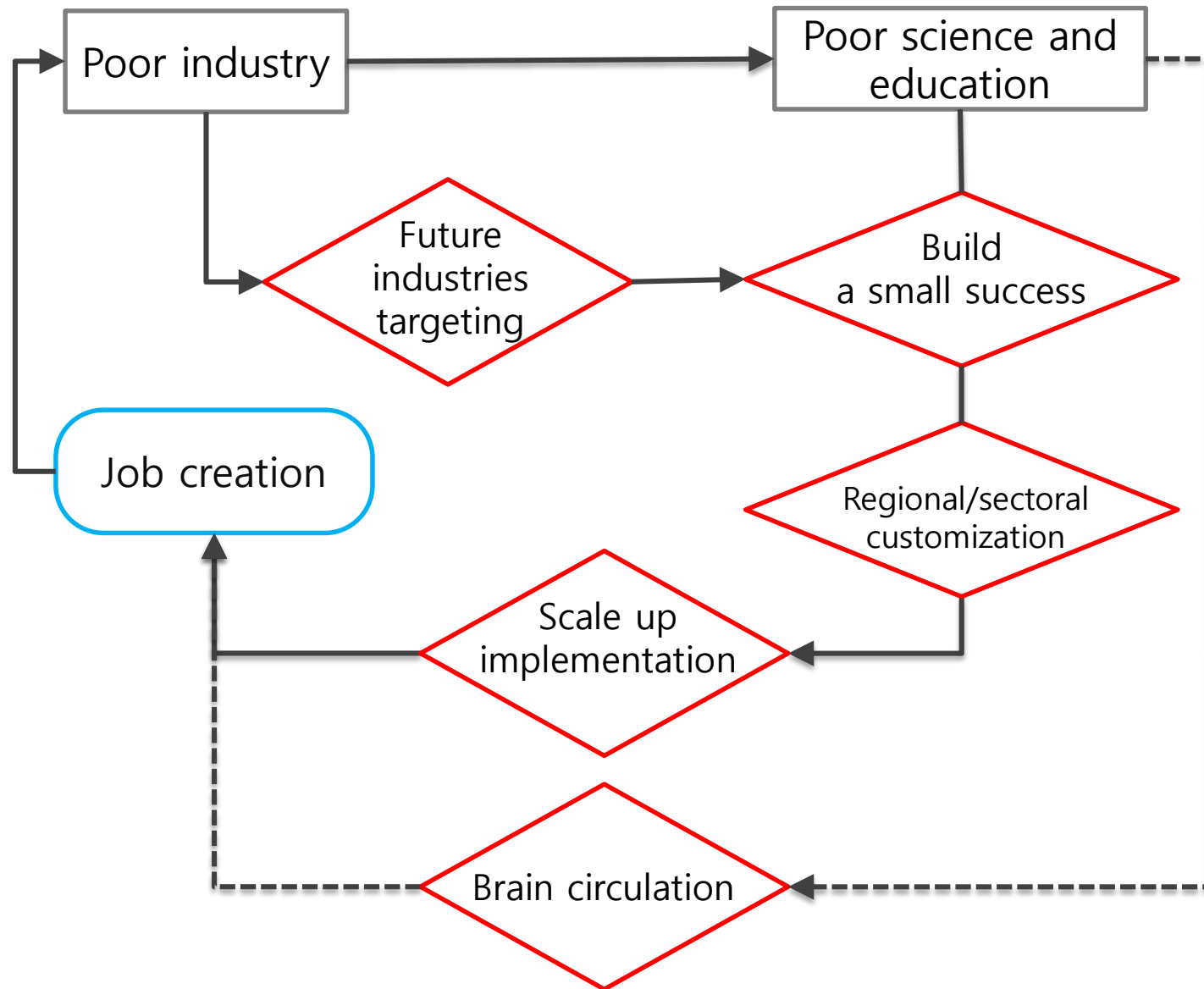


Alternative solution of the Human Resource for STI

- Strategic HRD programs in partnership with foreign stakeholders for future industrial development and job creation to create four spiral virtuous circles to transform the system



Korean experience: Virtuous circle on human resource development for strategic future industries



Policy recommendation 1:

Scenario-based goal and strategy

- Limitation of Methodology: Extrapolation vs. Target industry structure by employment
- Benchmarking Thailand with France STEM workforces: Similar population size and industrial structure that Thailand wants to pursue in terms of agriculture, tourism and creative industry
- De-componentization into five s-curve industries and adjustment of the 4th industrial revolution impact.
- Milestone indicators : 1) comparative income level of STEM, 2) STEM enrollment ratio and 3) the ratio of joint-research between industry-university.

Cluster		Year 5	Year 10	Year 15	Year 20
1	Food, agriculture, and bio technology	19,000	330,000	110,000	240,000
2	Health and medical technology	3,500	16,000	35,000	70,000
3	Robotics, smart devices and mechatronics	18,000	85,000	182,000	375,000
4	Artificial Intelligence and IoT	80,000	260,000	520,000	900,000
5	Creativity, culture and high value services	90,000	880,000	410,000	720,000

Policy recommendation 2:

Strategic on-the-job capacity development program with foreign partnership

- The Ministry of Science and Technology (MOST) should set up the specific initiatives in partnership with few selected Thai universities and foreign technology suppliers to create demonstration successes.
- Priority setting should be aligned with the future strategic industries
- Guidelines for demonstration projects: 1) future industry focus, 2) manageable scale and 3) impact
- Principle for strategic foreign partnership: 1) not the best technology but win-win partnership for technology transfer and capacity building and 2) local universities and research institutes should be the main technological acquisition and knowledge dissemination bodies.
- Government scholarship programs for on-the-job capacity development for future HR and build translational research capacity for strategic industries. Foreign public and private scholarships need be aligned.

Policy recommendation 3:

Institutional arrangement for scale-up implementation

- To achieve critical mass or pass tipping point, on-the-job capacity development program should have 3-5 year cycles; the graduate students should be hired on their third year and the undergraduate should be hired on their fifth year.
- Scale up implementation can be done in two ways:
 - Vertical scale-up in specific sectors
 - Horizontal scale-up to other sectors
- The success demonstration projects will be used as a template to provide legal, financial and organizational arrangements to facilitate the transformation of national education system.
- The successful implementation will attract other universities to follow. However, as the government has limited resources, the transition strategy for scale-up implementation need to be designed.

Policy recommendation 4: mid and long-term capacity building strategies

- The mid and long-term strategy to strengthen their education capacity to be independent from the foreign partnership. Local universities need to evolve and be capable to provide next generation HR in response to the industrial change.
- Government should design research and entrepreneurship programs to continue the tertiary education system capacity development and to align comprehensive and general education.
- Government should provide multi-year research program based on future technological trajectories.



**Asia-Pacific
Economic Cooperation**

Advancing
Free Trade for Asia-Pacific
Prosperity

Rethinking Skills Development in a Digital Age

Trade and Development Regional Forum 2017
20 July 2017 | Bangkok, Thailand

Presented by
Emmanuel A. San Andres, Analyst
APEC Policy Support Unit

Outline



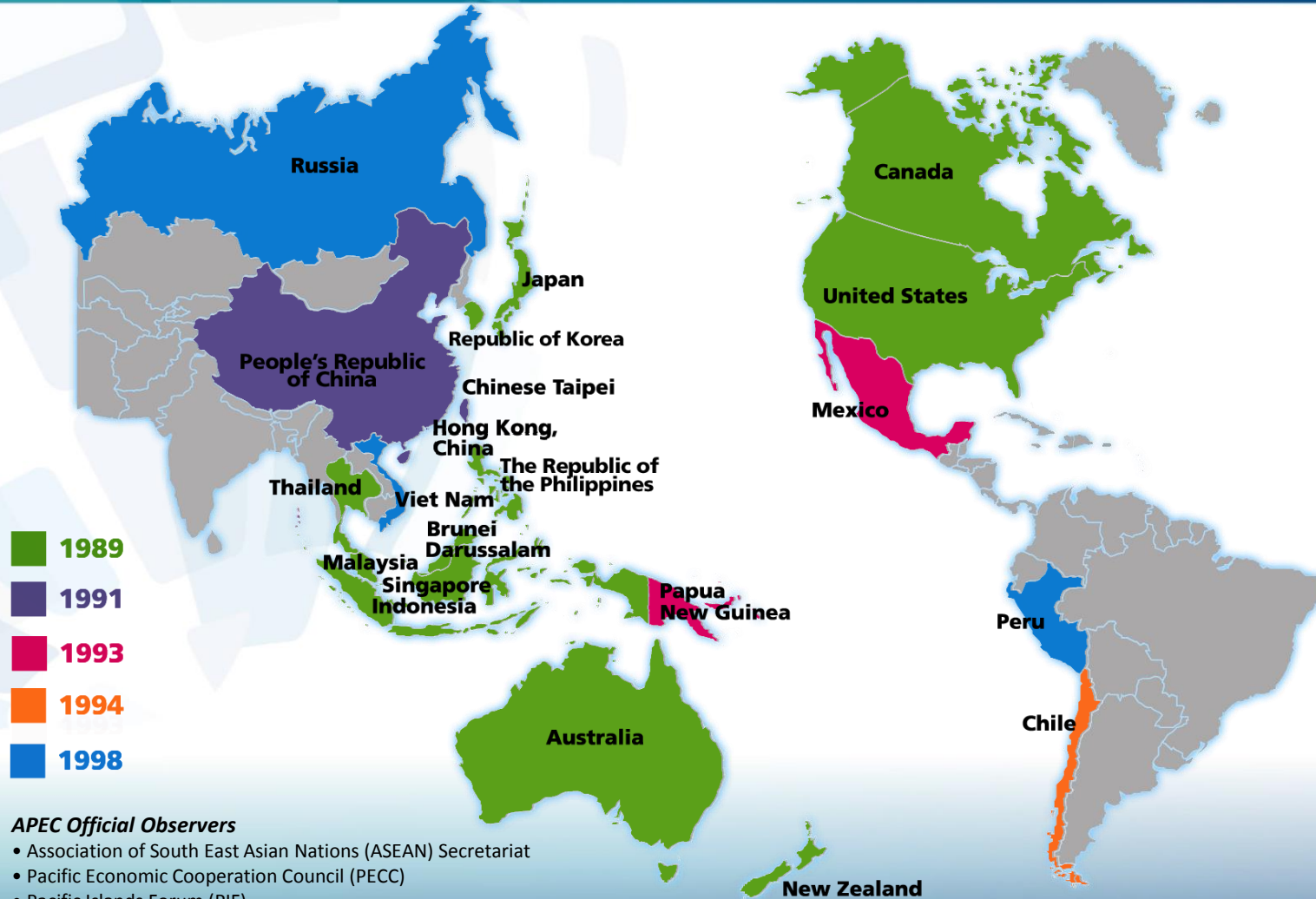
Asia-Pacific
Economic Cooperation

- About APEC
 - APEC Member Economies
 - APEC's Significance
 - APEC Policy Support Unit
- Skills Development in a Digital Age
 - Digital technology and the economy
 - Jobs lost
 - Jobs created
 - Digital skills
 - Policy issues

APEC Member Economies



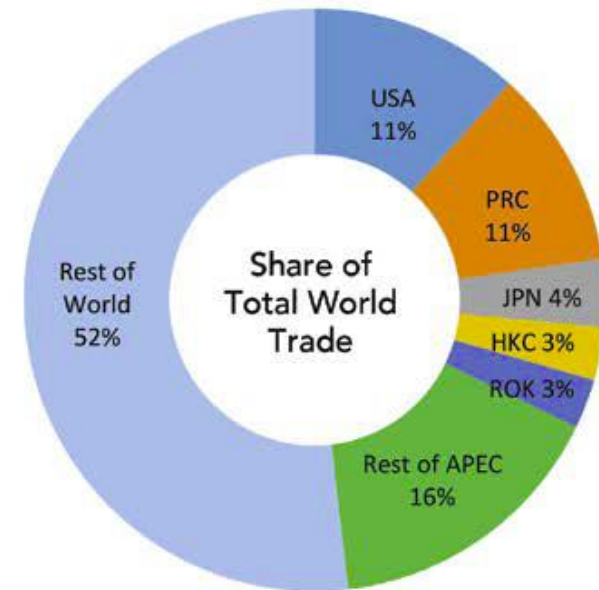
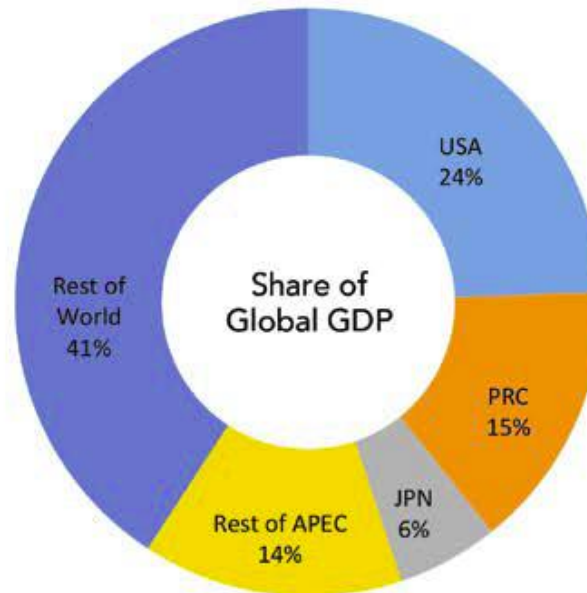
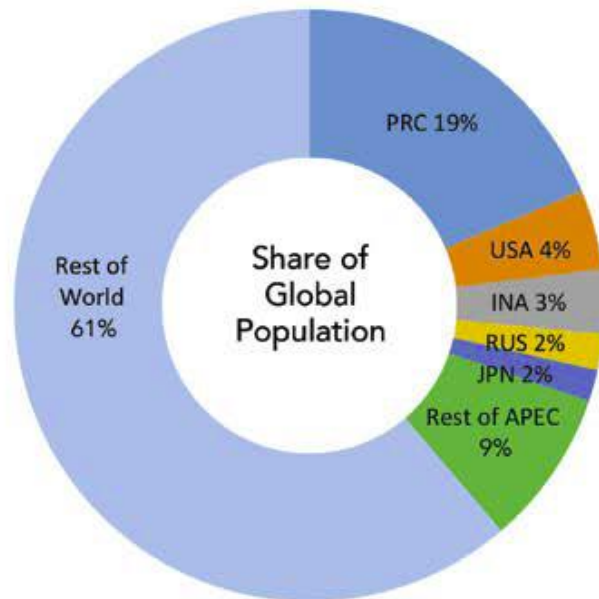
Asia-Pacific
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APEC's Significance



Asia-Pacific
Economic Cooperation



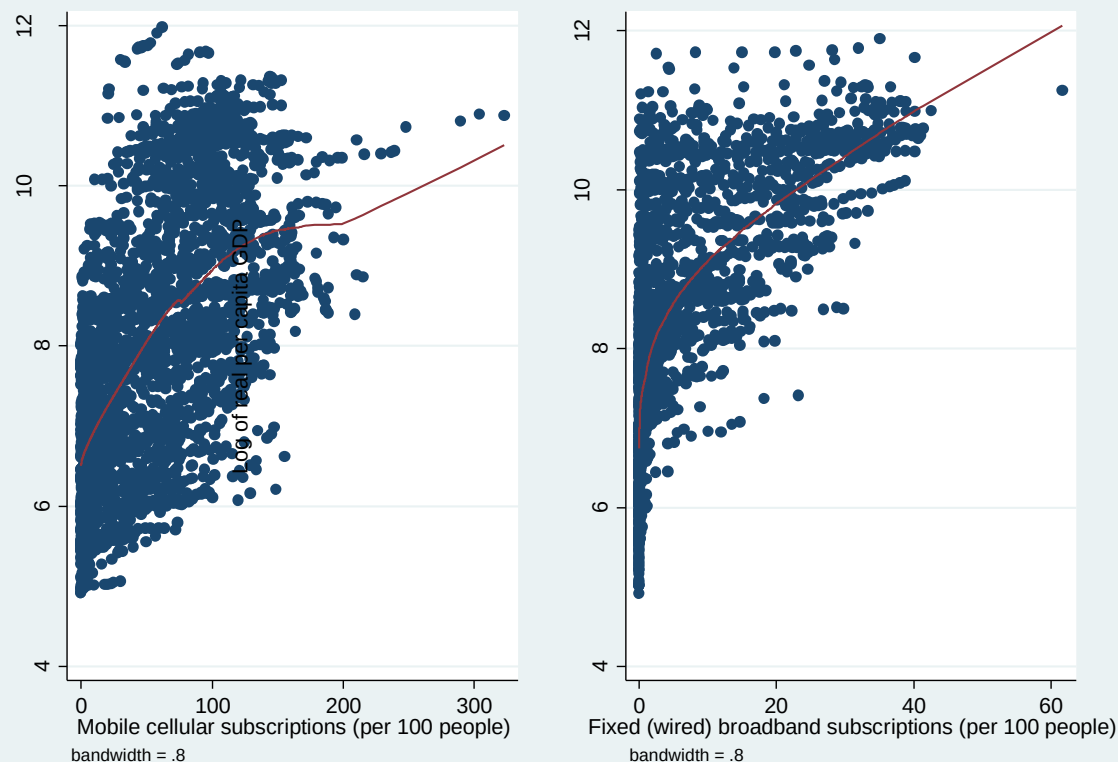
APEC Policy Support Unit



- APEC Policy Support Unit (PSU) is the research and analysis arm of APEC.
 - Conducts independent research in line with APEC's core priorities.
- Mission: To provide rigorous research & analysis needed to improve the quality of APEC's deliberations and decisions.
 - Provide APEC members and fora with professional & tailor-made research, analysis, policy support & evidence-based policy suggestions.
- Five focus areas:
 - Trade & Investment Liberalization & Facilitation
 - Structural Reform
 - Connectivity including Supply Chain Connectivity & Global Supply Chains
 - Economic and Financial Analysis
 - Sustainable Economic Development

Skills development in a Digital Age

Scatterplots of real per capita GDP and digital technology use, 2000-2014



- A higher rate of digital technology use is correlated with per capita GDP.
- A plausible explanation is that digital technology increases GDP through its impact on consumption and production, while a higher income also increases firms' and households' access to digital technology.

Note: Fitted curves are generated using nonparametric locally weighted scatterplot smoothing (LOWESS).

Source: World Bank, World Development Indicators and Directorate-General for Budget, Accounting and Statistics (Chinese Taipei).

Skills development in a Digital Age

- Linkages between digital technology and employment are unclear.
- Correlations between digital use and GDP are positive and significant, while correlations for number of employed workers are insignificant.
- While these findings are preliminary, they could indicate opposing effects.

Correlations between GDP/employment and digital technology use in APEC

	Real GDP		Employed workers	
	(1)	(2)	(3)	(4)
Mobile cellular subscriptions	0.006**		0.018	
Fixed broadband subscriptions		0.005***		0.004
Lagged real GDP	0.936***	0.951***		
Real GDP (in 2005 USD)			0.261*	0.300**
Constant	1.622***	1.284***	9.458***	8.649**
Observations	526	268	454	273
R-squared			0.744	0.695

Source: World Bank, World Development Indicators; Directorate-General for Budget, Accounting and Statistics (Chinese Taipei); and APEC PSU staff calculations.

Skills development in a Digital Age



Jobs Lost

- Automation: jobs that once hired a worker are now done by computers or robots; 47% of US jobs are at risk (Frey and Osborne 2013).
- Vulnerable workers are those who do routine tasks that require simple cognitive and manual activities following explicit rules and codes, such as factory assembly, transcription, or simple accounting or data collection.
- Jobs polarisation: routine mid-skilled work are being lost, while remaining jobs are at low- and high-end of skills spectrum.
- Middle-wage/middle-skill jobs are routine enough to be developed into an algorithm, but valuable enough for firms to invest in their automation.
- Empirical evidence that job polarisation is already happening in Europe and the US (Eurofund 2014; Autor and Dorn 2013).

Skills development in a Digital Age

Jobs Created

- Technology leads to the creation of new jobs and opportunities; many jobs today did not exist 10 years ago (e.g., app developer, social media manager, digital marketing specialist, data scientist).
- WEF (2016):
 - the most in-demand occupations today did not exist five to 10 years ago;
 - predicts that 65% of children joining primary school today would be working in jobs which do not exist yet.
- While automation takes over some jobs, it also frees up labour to focus on other activities, potentially increasing wages and productivity; market expansion could also increase labour demand (e.g., ATMs and demand for bank tellers).
- Digital technology improves coordination, opens up opportunities for freelance work, and creates new markets (e.g., Uber, Go-jek, Upwork, Airbnb).

Skills development in a Digital Age

Skills needed in a modern economy

Cognitive

- literacy, numeracy, and cognitive skills
- Problem-solving ability
- Verbal ability, memory, and mental speed

Social and behavioural

- Socioemotional skills and personality
- Openness to experience, conscientiousness, extraversion, and emotional stability
- Self-regulation, mindset and interpersonal skills

Technical

- Knowledge of methods and tools
- General technical skills from schooling and training
- Occupation-specific skills

Source: World Bank, World Development Report 2016

- Employment in the digital age requires basic cognitive skills, such as literacy and numeracy, while a well-equipped worker needs skills that are easily transferable across jobs and occupations.
- A worker needs to be adaptive and flexible, being quick to learn new skills as they are required by the job market. As the World Bank (2016) put them, workers in the digital age require higher-order cognitive, socioemotional, and technical skills.

Skills development in a Digital Age

Policy will need to address new issues

- Human capital and skills development
 - Need for new pedagogies with dynamic curriculum development
 - Access to retraining, reskilling, and lifelong learning
 - Who would provide training and who should pay?
- Labour markets, wages, and social security
 - Increased casualisation and precarity of work
 - Employment contracts across multiple jurisdictions
 - Inability to collect social security premiums from employers
- Regional cooperation
 - Digital technology disruptions have cross-border impacts
 - Increasing need for policy coordination and cooperation
 - Knowledge and information sharing

Skills development in a Digital Age



“Rethinking Skills Development in a Digital Age”
In *APEC Regional Trends Analysis*
(November 2016)

Available at:

http://publications.apec.org/publication-detail.php?pub_id=1774



Thank You



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Panel Speech

ITD Regional Trade and Development Forum 2017

19-20 July, 2017

Bangkok, Thailand

Economic Development and Human Resource Development in Korea

Prof.Dr. Dae Bong Kwon

Dept. of Education, Korea University

Seoul, Republic of Korea

Korea University Professor Dr. Dae-Bong Kwon



-Professor of LLL & HRD at Korea Univ.

-ASEM LLL Hub RN-3 Member

-International Policy Advisor, SEIP (Skills for Employment Investment Program), Ministry of Finance, Bangladesh

-World Bank Consultant for Sri Lanka Skills Development Project (2013-2014)

-5th President, KRIVET (Korea Research Institute for Vocational Education & Training) (2008-2011)

<http://faculty.korea.ac.kr/hrd>

Note: Contents of my previous speeches as below are updated for this presentation.

- “Building a demand driven skills development system: employers’ involvement”, South Asia Regional Conclave on Skills Development: Building a Demand-Driven Skills Development System organized by the World Bank, June 13-14, 2013, The Taj Mahal Hotel, New Delhi, India
- “Building a demand driven skills development system: Strategies to effective coordination and implementation”, South Asia Regional Conclave on Skills Development: Building a Demand-Driven Skills Development System organized by the World Bank, June 13-14, 2013, The Taj Mahal Hotel, New Delhi, India
- Skill and education to support innovation (Discussant), Conference on East Asian Development by The World Bank, Orchard hotel, Singapore (March 21- March 22, 2011.)
- Preparing for the future: are today’s policies anticipating the future of labor market demand? (DaeBong Kwon, Korea with Peijun Liu, China; Sharda Prasad, India; Frederico Lamego de Teixeira Soares, Brazil; and Jee-Peng Tan, Singapore), HDN(Human Development Network) FORUM, The World Bank, Washington D.C.,USA(Feb 28- March 2, 2011.)



Korea's Economic Development and HRD

Korea's Economic Development

1960 – 70s

- One of the least developed countries in the world
- Strong support for exporting companies
- Promotion of heavy chemical industry (resulted uneven income distribution)

1980s

- Economy structure led by private initiatives (unbalanced investment in selective industries)
- Expansion of the public welfare system

1990s

- Painful experience of the financial crisis
- Advanced system to observe and manage the economy

2000s

- Recovery from the global financial crisis and recession
- Increased relative poverty

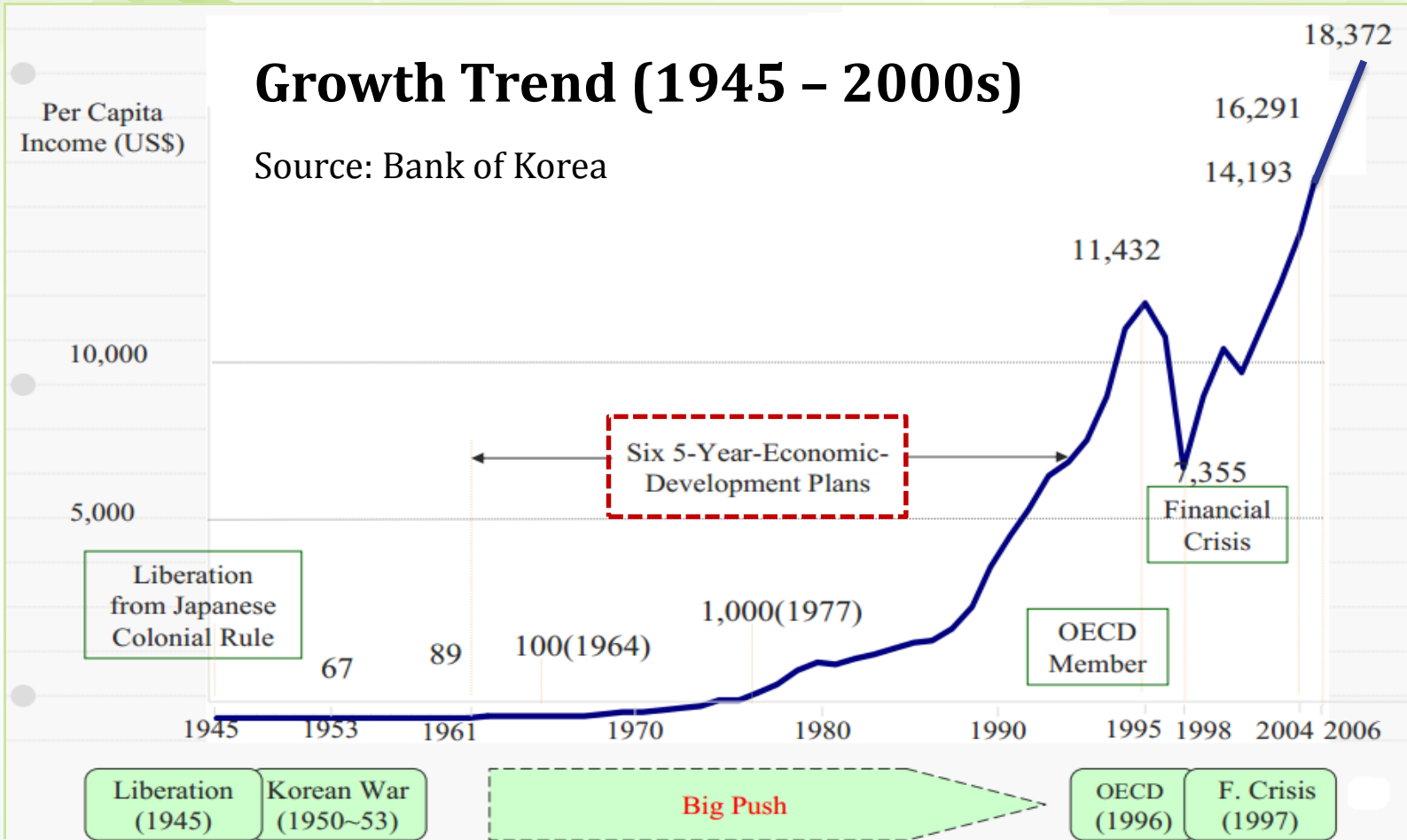
2010s

- Globalization and Informationization
- Increasing gap of poverty and Economic Friction
- The 4th industrial Revolution

Transformation of the Economy

Growth Trend (1945 - 2000s)

Source: Bank of Korea



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Income(US\$)	17,800	18,758	19,417	21,300	22,375	23,100	23,792	24,483	25,617	26,650
Previous years preparation increase quantity(%)	7.5	5.4	3.5	9.7	5	3.3	3	2.9	4.7	4

*Statistics Korea

http://www.index.go.kr/potal/main/EachDtlPageDetail.do?idx_cd=4023

Transformation of the Economy



1950s



Today

Gwanghwamun Square, Central Seoul

Korea's Economic Development and HRD

- Government-led initiatives for economic and social development
- Focus on fostering a few selected industries and state-led HRD
- From elitist to universal higher education

Phase 1 1960~1975

- Unlimited supply of workers
- Labor-intensive industries
- Demand for low-skilled workers

Phase 2 1976~1996

- Emerging worker shortage
- Focus on expanding heavy chemical industries
- Growing emphasis on quality labor force

Phase 3 1997~2000s

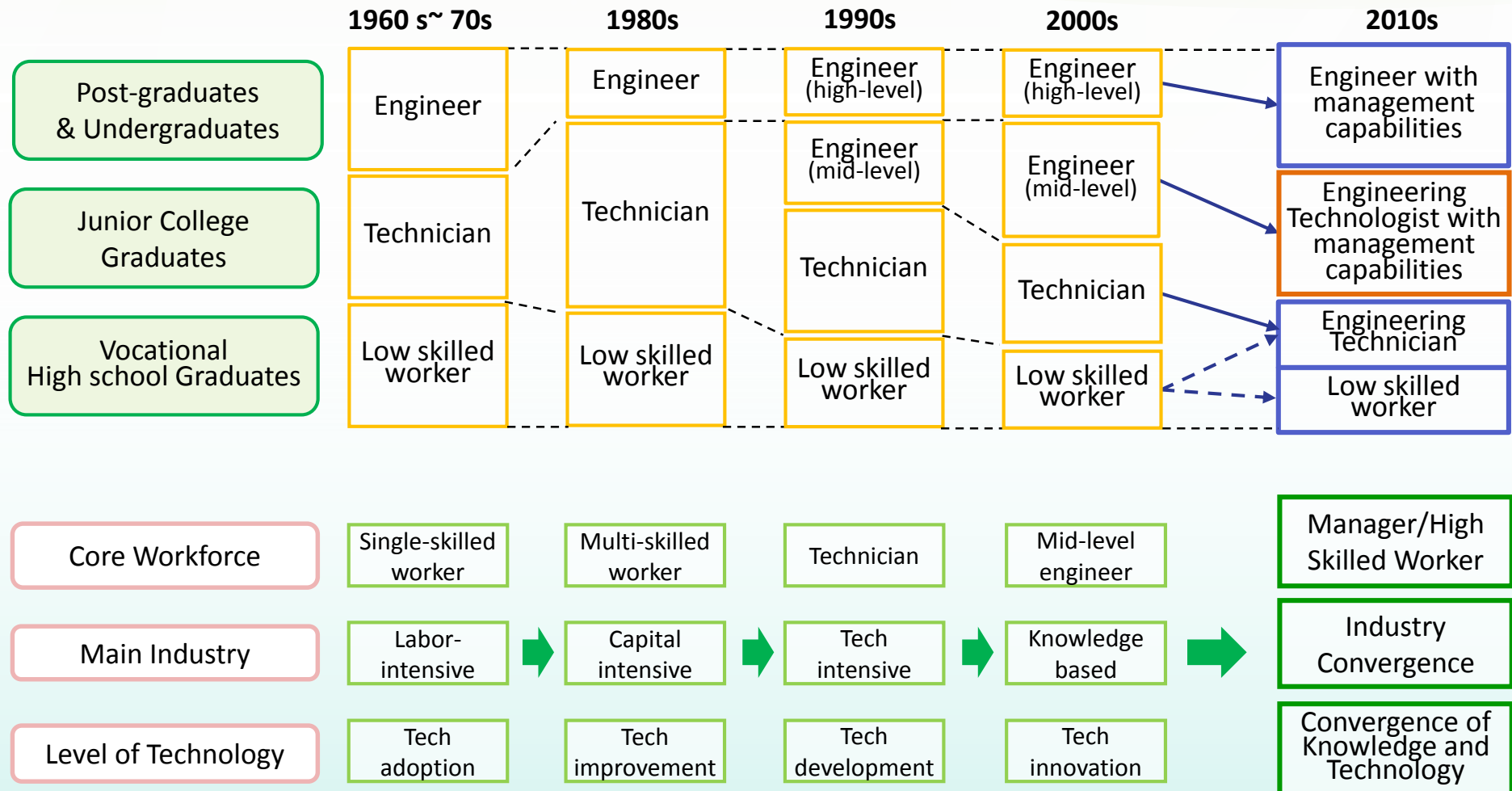
- Rising unemployment since the financial crisis
- Change of the growth paradigm:
quantitative expansion to qualitative deepening

Phase 4 2010s~

- The 4th Industrial Revolution : Hi-Tech, AI, Globalization, Aging Society, Women's economic power
 - New jobs and Changing competencies(transversal skills*)
- *curiosity, problem-solving skills, tolerance, confidence

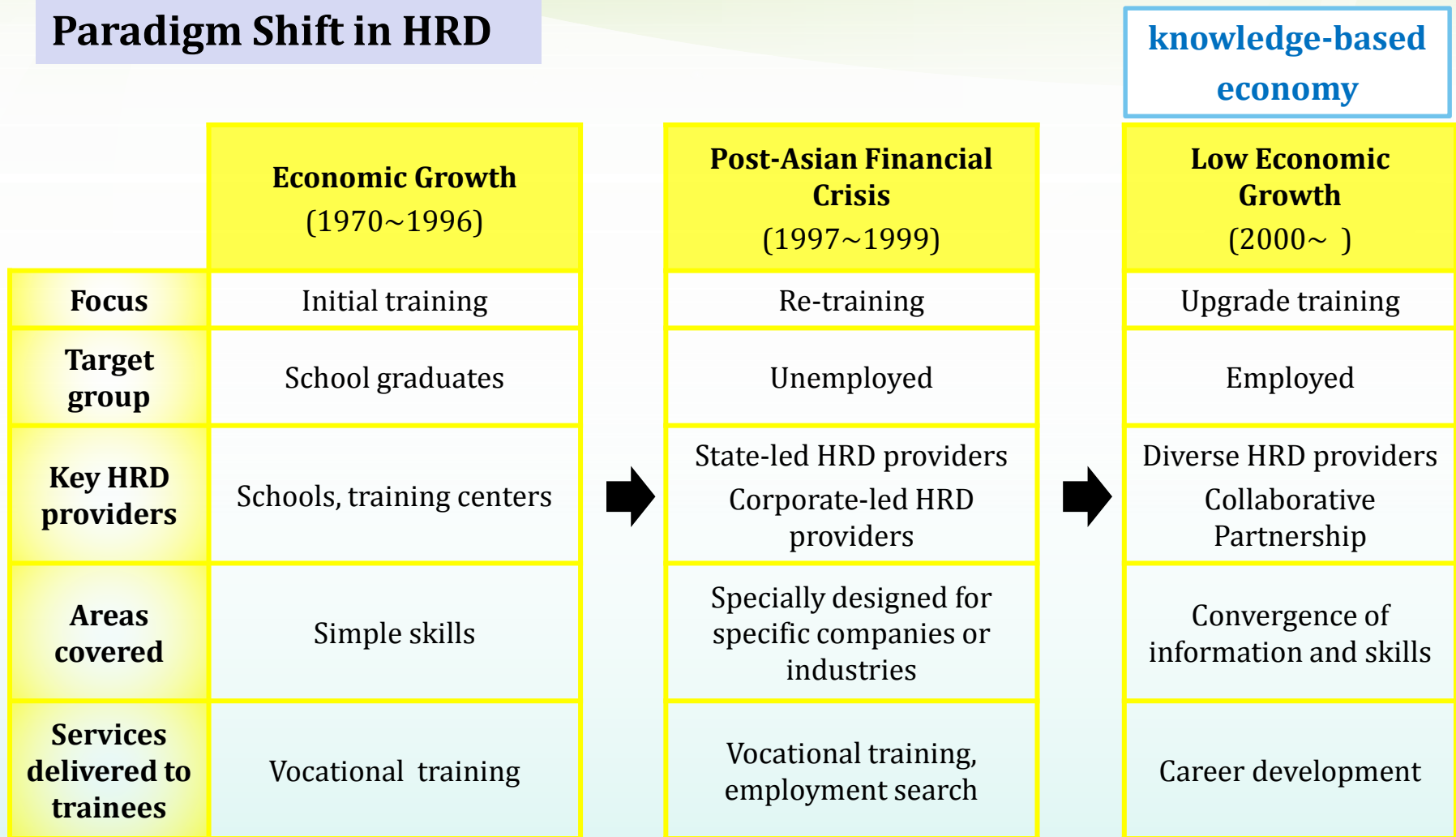
Korea's Economic Development and HRD

Shift in Workforce Structure (caused by technological advances and industrial evolution)



Korea's Economic Development and HRD

Paradigm Shift in HRD





Today's system to respond employers' skills demand:

1. Corporate colleges and In-company colleges

Corporate Colleges (Non-degree Program)

- Introduced to **support the self-development and continuing education** of employees.
- Offered courses focus on **developing the practical abilities** of participants.
- Courses are practice-based and **contents are industry or corporate specific**. (Thus, corporates are given freedom to weight the curricula contents in their favor.)
- More than 80% of tuition fees are subsidized by the government.
- Currently, 17 corporations are under operation with 70 majors.**
- No degree is conferred to students.***

Corporation (start year)	Major (ex.)	Size (person)
LG Electronics (2012)	Digital Home Appliance	395
Hyundai Department Store (2012)	Logistics	83
Hanhwa (2012)	Hotel Management	200
Hyundai Motors (2012)	Molding Technology	80
Lotte Department Store (2012)	Logistics	70
LG Display (2012)	OLED (organic light- emitting diode)	200
Woojin Plaimm (2012)	Injection Molding Technology	15
CJ Foodvill (2013)	Dining Service	76
E-Land (2013)	Shop Master	90
⋮	⋮	⋮
Total, 17	Total, 70 majors	Total, 2,219

In-company Colleges (Degree Program)

New type of the corporate college:

Similar in the purpose and function,

Associate or Bachelor degree is conferred.

Introduced in order to :

- (1) **attract young employees** and relieve the excessive focus on higher education
- (2) active the “**work & study together**” system
- (3) foster the **industry-customized skillful workers**
- (4) thus, **boost the productivity** and vitalize the economy

Corporation (start year)	Major area (course length)	Size (person)
Samsung Electronics (2005)	Semiconductor (4 years)	160
Samsung Heavy Industry (2007)	Marine Shipping (2 years)	80
SPC Food (2011)	Bakery (2 years)	50
Daewoo Marine Shipping (2013)	Marine Shipping Technology (2 years)	200
Hyundai Heavy Industry (2013)	Marine Shipping, Mechatronics (2 years)	120
Korea Land and Housing (2013)	Construction Management (4 years)	160
Korea Development Bank (2013)	Finance (4 years)	480
POSCO (2014)	Steel Fusion (2 years)	200
Total	⋮	1,450
Total, 8		Total, 417



2013 Graduation ceremony of Hyundai Heavy Industry Academy.

Prior to the corporation's renewal of the in-company college which is two-year length, one-year course has been operated since 1999 for its employees.

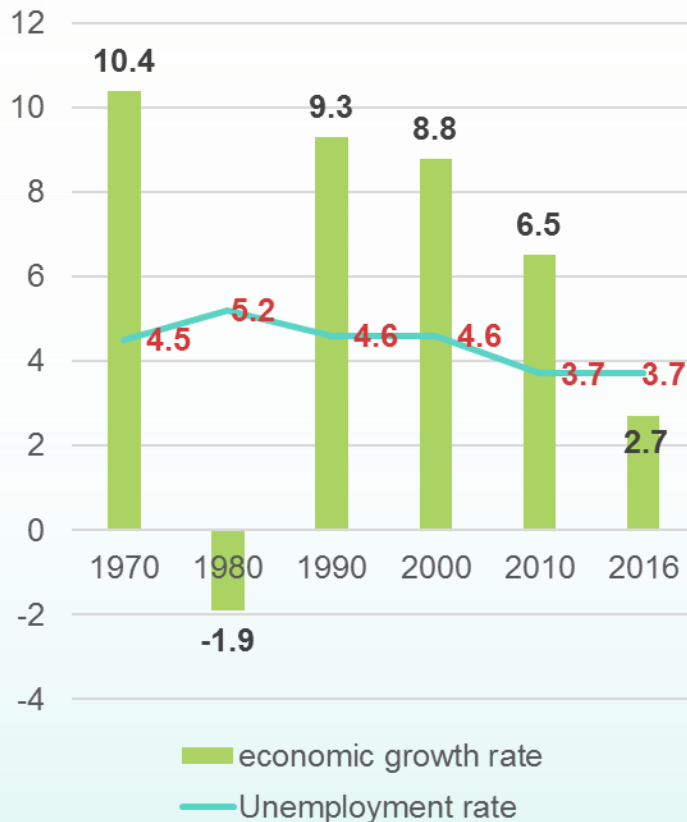


Today's system to respond employers' skills demand:

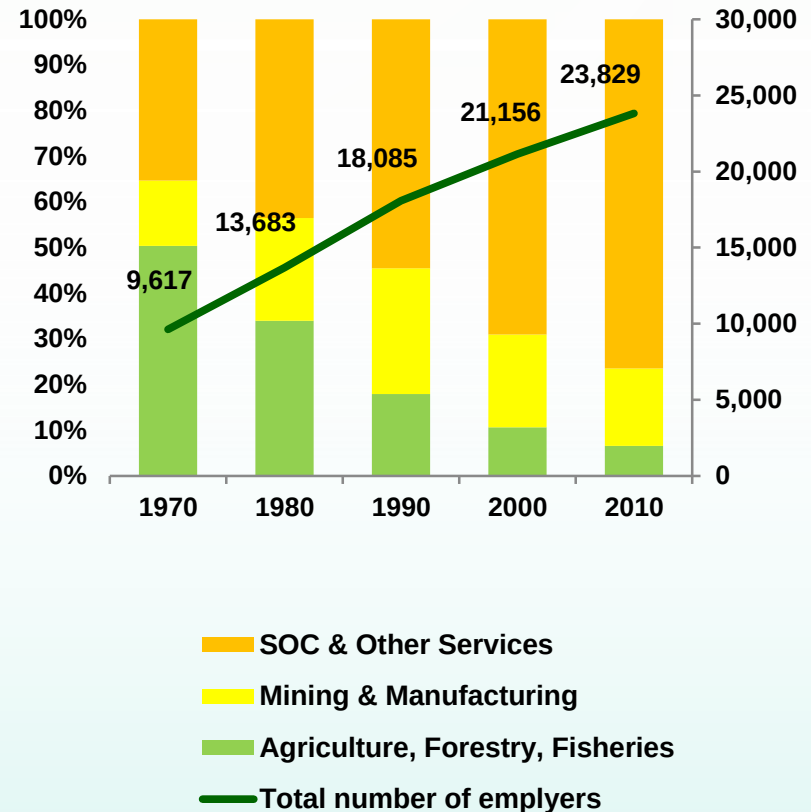
2. Industry & Academia Partnership

Recent Employment Trend

Economic growth rate and unemployment rate (%)*



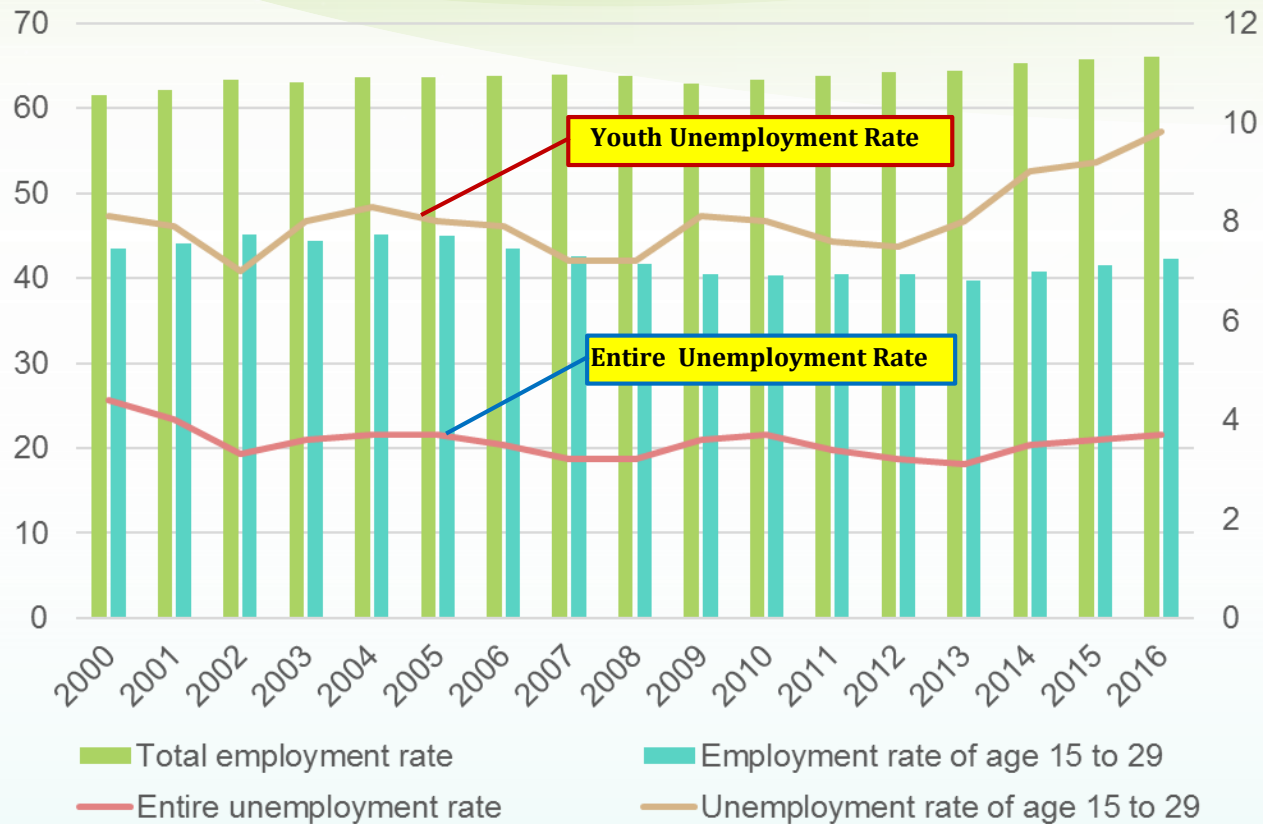
Trends in employment breakdown by industry*



*Statistics Korea

http://www.index.go.kr/potal/main/EachDtlPageDetail.do?idx_cd=4001

Youth Employment Trend*



☞ **Youth unemployment rate (age 15-29) is almost *twice* of the overall unemployment rate.**

*Statistics Korea

http://www.index.go.kr/potal/main/EachDtlPageDetail.do?idx_cd=1495#quick_05

http://www.index.go.kr/potal/main/EachDtlPageDetail.do?idx_cd=1063

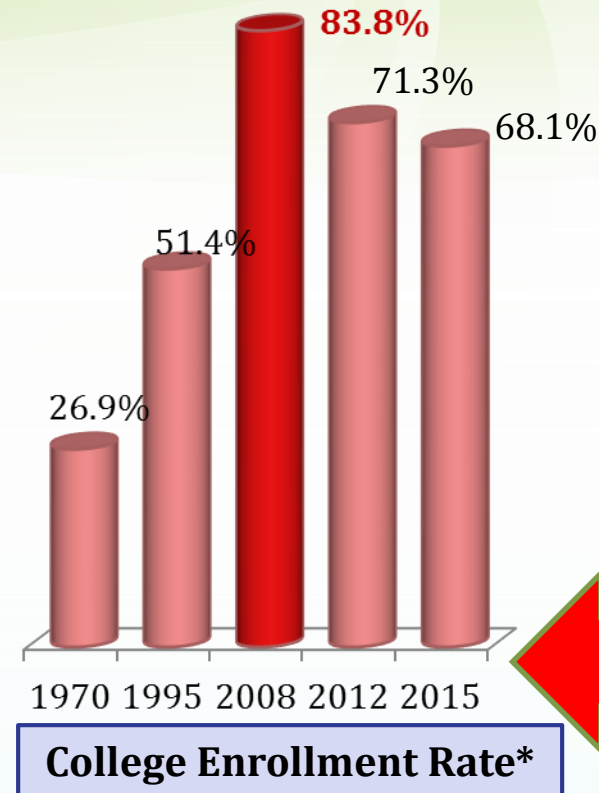
Reasons of Youth Unemployment

- **Strong emphasis on receiving higher education**

- : resulting avoidance of small and medium size enterprises
- : resulting wage differences between high school & university graduates

- **Frequent job turnover**

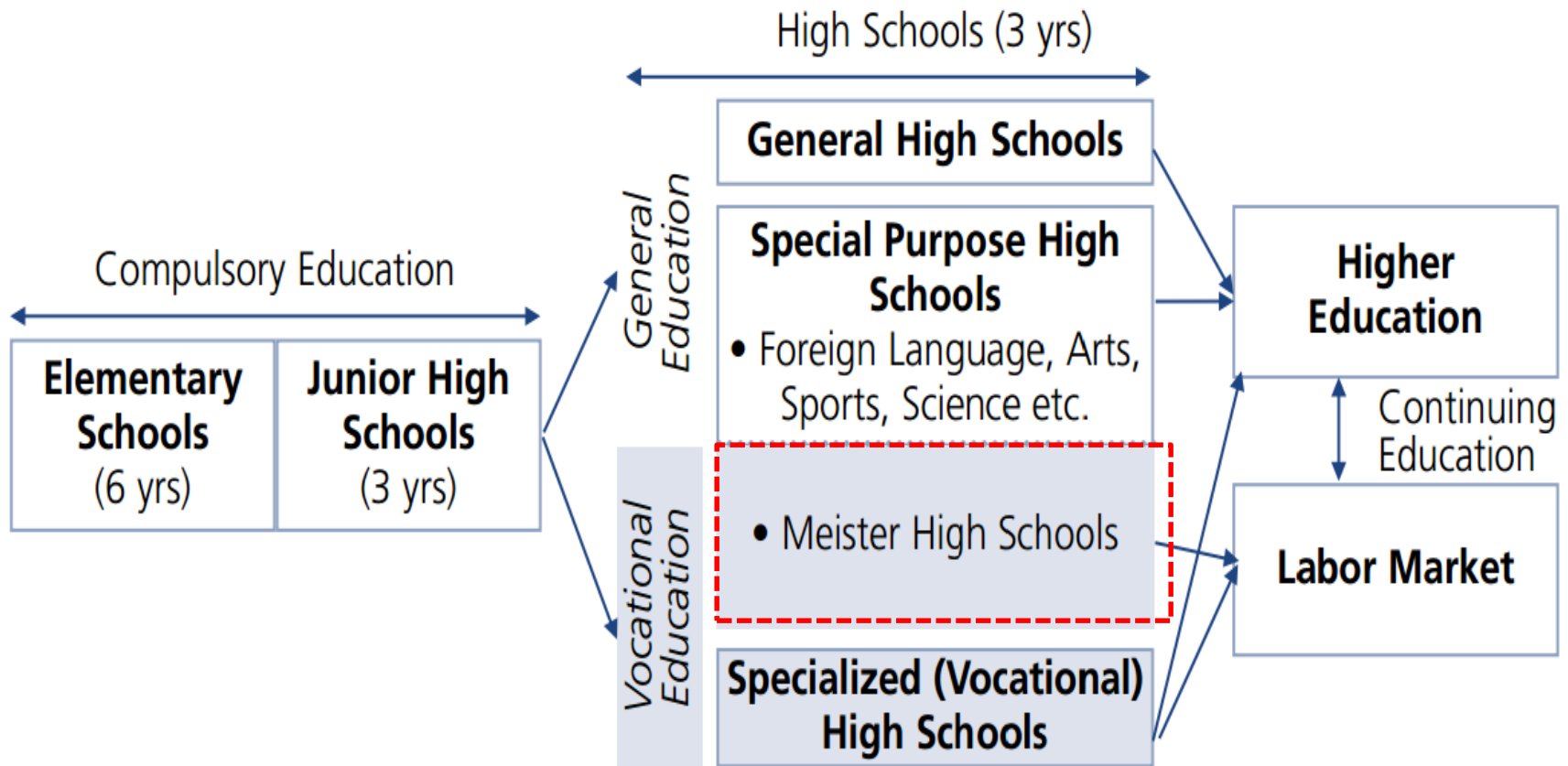
- : 2.5 times higher than core workforce aged 30-54
- : resulting fewer chances to advance the job skills and career (deepens the mismatch between the supply and demand of the required skills)



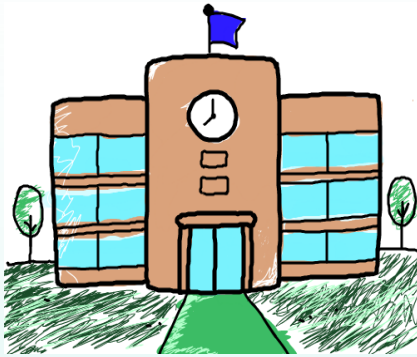
Strengthened Industry-Academia Partnership has been introduced.

Case : Meister High School

Korean Education and Training System



Case : Meister High School



As a premium vocational education school,

- **newly started in 2010**
- focusing on *educating students with aptitudes and abilities to nurture them with talents in specific fields or experience-oriented education*

(including new media contents, machinery, energy, telecommunications, etc.)

- **attracts entering the world of work after graduation**
(so called , “job first, college later”)
- In 2013, 35 Meister High Schools and 5,210 students
(planned to extend in following years)

Case : Meister High School

Active participation of industries

- Based on MOU, diverse companies from industries participate in Meister school education and graduates' employment.
- : reorganize and tailor school curriculum according to industries' demand
- : provide internship programs at partnering companies
- : co-utilize facilities for R&D

Promotion strategies

- Budget support from the central and provincial government
- Liberalized educational curriculum and textbooks
- Open recruitment of school principals (CEOs are preferred than administrators)
- Faculty members both from industry and academia

Case : Meister High School



HYUNDAI

NEW THINKING.
NEW POSSIBILITIES.

Hyundai Motor Company(HMC) has started to operate “**HMC Young Meister Specialized Education**” in 2012 aimed at Meister High School students for the next 10 years to raise 1,000 customized skillful workers. HMC offers scholarship, off-the-job and on-the-job training.

Outcomes of Meister High School

Vocational·Meister High School
Graduates' Employment Rates (%)



Meister High School Graduates' Employment
Rates: 92.3%('13) → 90.6%('14) →
90.4%('15) → 90.3%('16)

Vocational High School Graduates'
Employment Rates: 16.7%('09) →
25.9%('11) → 40.9%('13) → 46.6%('15) →
47.2%('16)

(1) Contributes in **converting the over-education society** (excessive academia degrees) to **skills and performance based society**

(2) Customized education system reflecting the **actual job analysis**, thus satisfying the industrial demands to certain level

(3) Expected to **affect higher education curriculums** to offer practical education which fits better at workplaces

The Role of Industry-Academia Partnership

- Provides information on changing labor market and employment state
- Research and development of difficult skills and technology
- Commissioned education of working staffs and employee to schools and education institutions

it contributes in



- Effective matching between skills supply and demand as customized VET is offered
- Promoting national human resources equipped with advanced skills & knowledge

Challenges of Industry-Academia Partnership

Challenges

- Disparity between industries and VET institutions
- Yet unrecognized disadvantages of in promotion & wage increase between vocational school graduates and university graduates
- Inadequate consideration of learners' aptitudes and skills

for improved management,

- **Establishment of close linkages within the education system**
- **Incentives for youth who pursue the vocational education track**
- **Effective integration of theory-based curriculum and practical training**

Suggestions regarding Industry-Academia Partnership

At the early stage, **government-led plan for Industry-Academia Partnership** is efficient in terms of (1) the budgetary scale and (2) total management.

Incentives for participating industries attracts the strong joint cooperation. On the base, the willingness of the industries is essential.

In planning the partnership, **respond to the regional characteristics**. It may contribute in boosting the local economy and increased reproduction.

Further Suggestions



Aware that the partnership is to benefit the ***demanders*** of education and training

- students equipped with advanced skills and high employability
- industries with labor forces suitable with the jobs, resolving difficult skills and development of new technology



Korea's Governance System in Skills Development

Add your text in here



The Necessity of Governance in Skills Development

- **Efficient resource allocation**

Able to respond the unstable market change and labor demands.

Thus, able to avoid the market failure often caused by unexpected externalities, irrelevant information, and imperfect capital market.

- **Equal resource allocation**

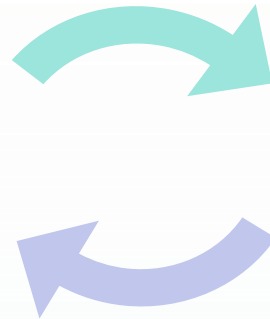
Able to support the different underprivileged groups who are economically disadvantaged; the long-term unemployed, job-seeking youth, career-severed women, low-income workers, and the disabled people.

Training Provision

Vocational Education

- ▶ administered by the Ministry of Education (MOE)

Vocational education, beginning at the upper-secondary education, is primarily offered in dedicated vocational high schools.

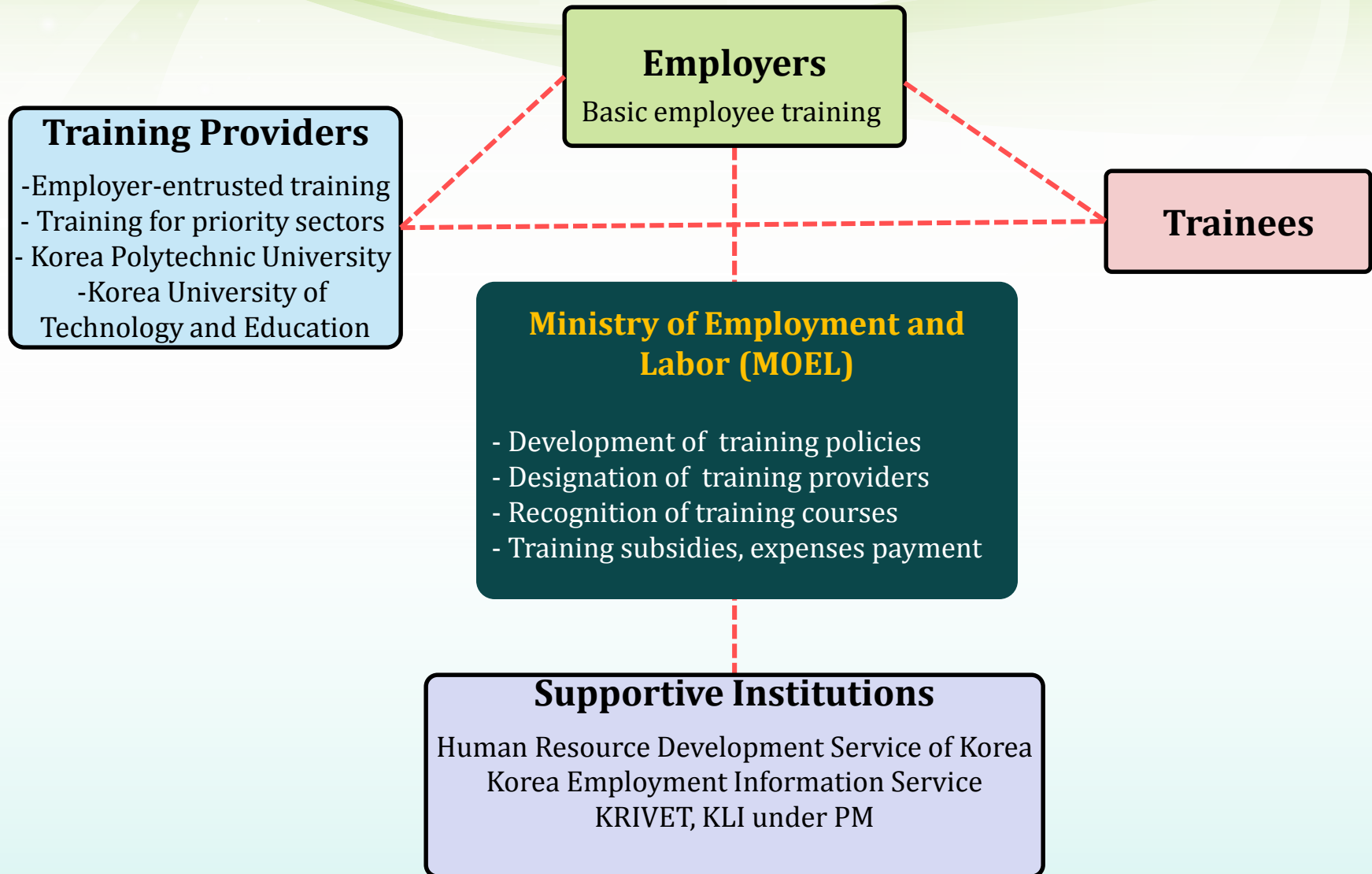


Vocational Training

- ▶ administered by the Ministry of Employment and Labor (MOEL)

Vocational training targets at:
(1) the employed
(2) pre-employment training (including unemployed, polytechnic college students)

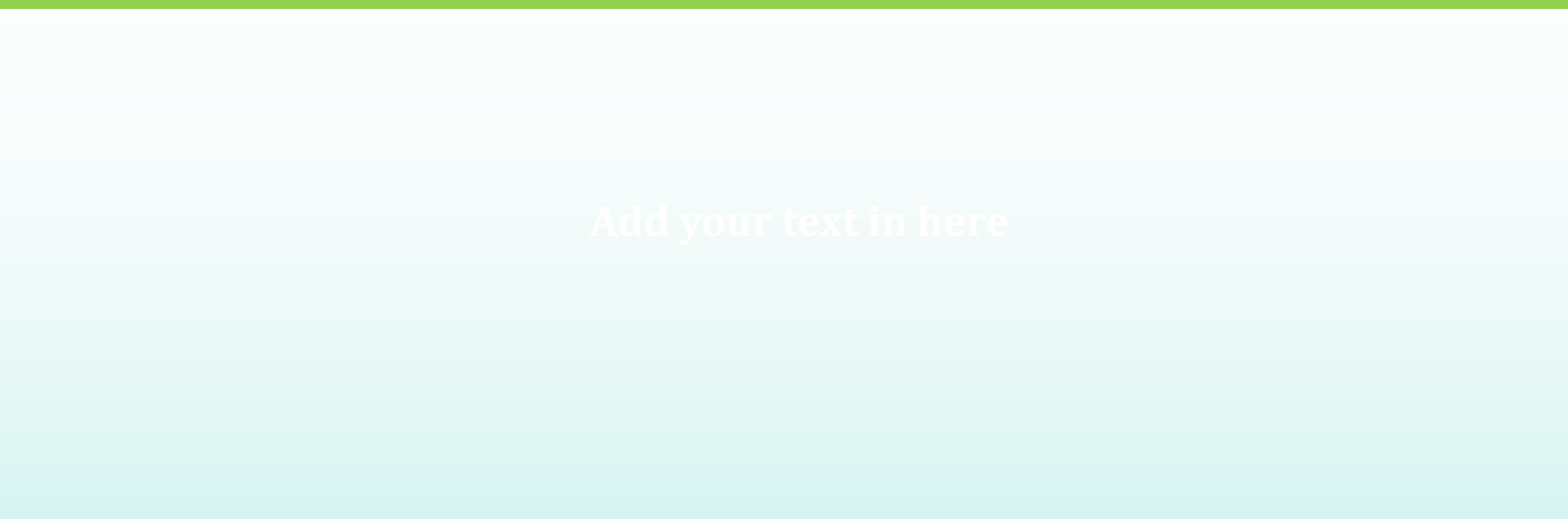
Training Stakeholders





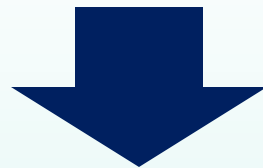
Models to Finance Skills Development

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Compulsory Vocational Training

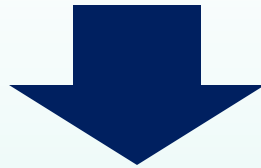
- Period : 1976 ~ 1998
- Number of recipients : about 2,180,000
- Vocational Training Act (1967), Vocational Training Framework Act (1976)
- Companies with a set number of employees or more were obligated to offer employee training
- When an employer fails to comply with the above obligation, the employer was supposed to pay a training levy to the government. Then the levy was reinvested to create a fund for vocational training.



**Government-led, government and employer co-funded
vocational training**

Employment Insurance System

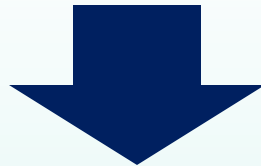
- Period : 1995~ present
- The replacement of the earlier levy-grant system
- Under the Employment Insurance System, every company must pay the training fund and later, be reimbursed if company's employees receive training.
- Includes programs for employment stabilization and skills development in order to minimize unemployment and promote the efficient use of workforce. Also, the unemployed and the public could benefit from the insurance system.



About 80% of public funds for skills development are channeled through the above system.

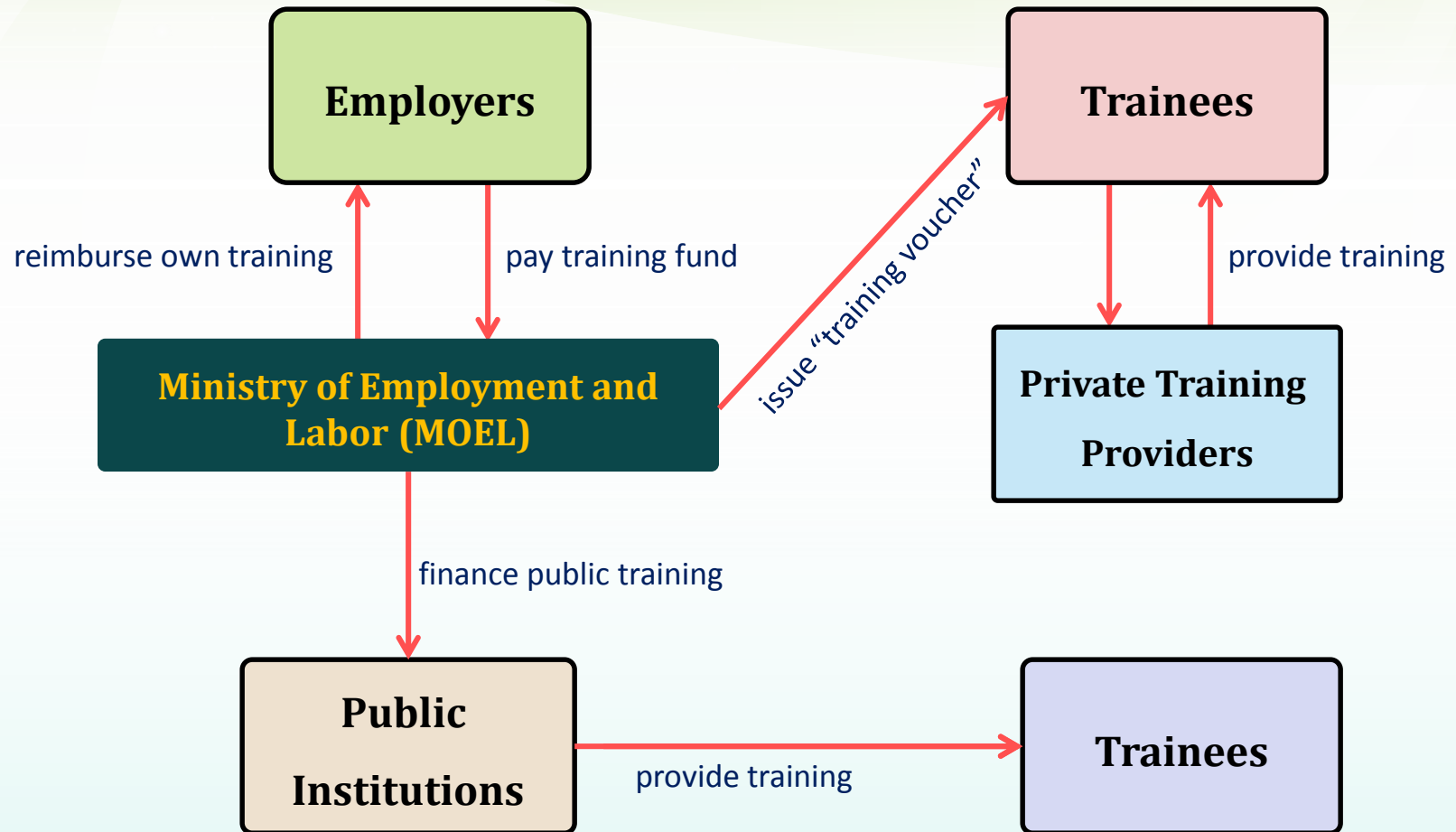
Individual Training Account System

- Period : 2008~ present
- An individual training account is issued to job-seekers with the “*training voucher*” issued by the government. Then the trainees choose the training institution and the training course. Only 20% of the total training costs is paid by trainees.
- This system is to improve the quality of training based on competition between the training institutions and to give more choices in choosing training programs.



**Based on the training market,
instead of the government-led management**

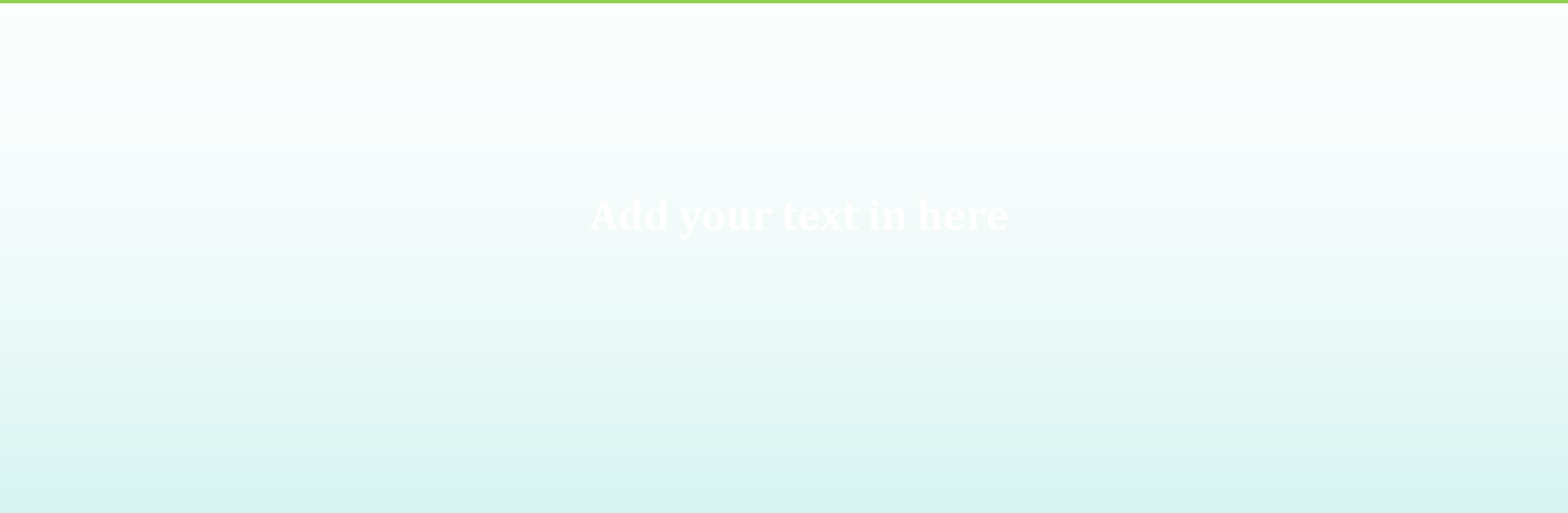
Flow of the Training Fund





Coordination of the Training Providers - public and private

Add your text in here



Public Training Providers

Type	Characteristics
Public organizations	Public organizations operate training institutions: (e.g.) Korea Polytechnic University (40) Korea University of Technology and Education (1) Korea Employment Promotion-Agency for the Disabled (1) Korea Chamber of Commerce and Industry (8)
Local governments	Local governments directly operate training institutions: - 5 in Seoul and Gyeong-gi province - offers the training for jobs preferred by the locals
Government agencies	Government agencies operate training institutions: (e.g.) Ministry of Justice runs 36 institutions to develop the job skills of inmates.

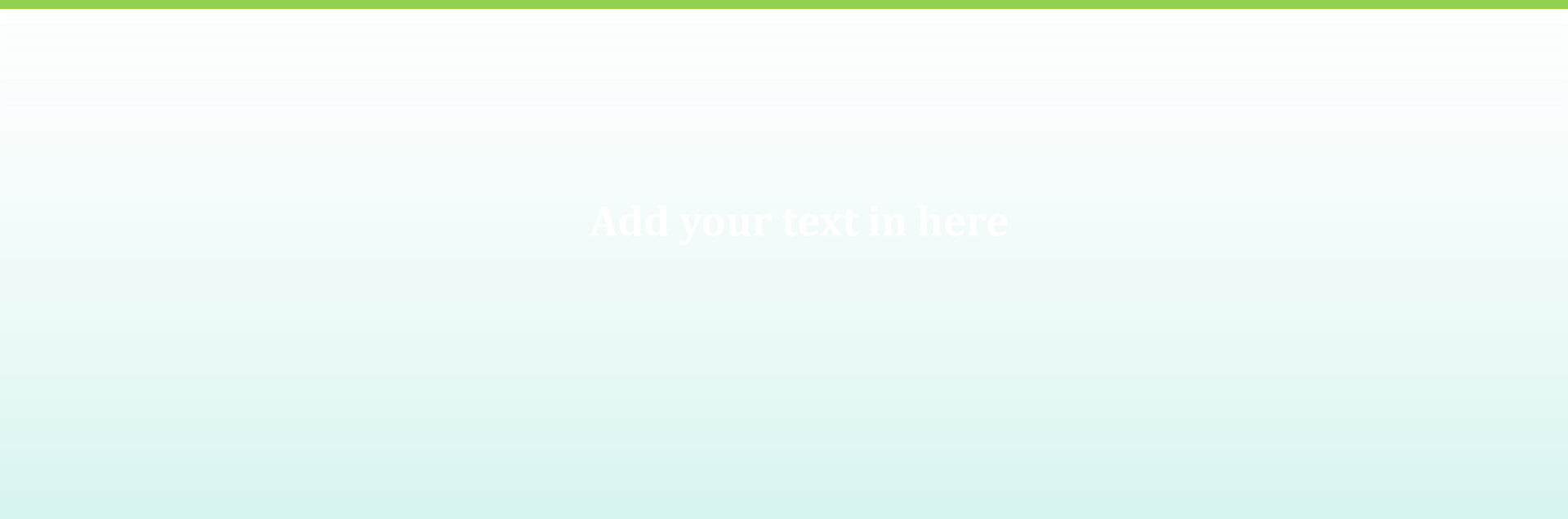
Private Training Providers

Type	Characteristics
Training corporations	Training facilities which are run by corporations under the Minister of Labor's permit in order to run the skills development programs
Women resources development center	Established to facilitate women's vocational competency development.
Providers designated by the Ministry of Employment and Labor (MOEL)	Aimed at employers, employees and individuals who want to improve job competencies by Employment Insurance Act.
Providers undesignated by the Ministry of Employment and Labor (MOEL)	They provide own curricula (based on experiences) for vocational training .



Qualifications

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The National Technical Qualifications Act (1973)

was first established to clarify the standards and to develop the qualification system.

Later, the qualifications were divided into national and private ones.

National Qualifications Framework

A comprehensive system demonstrating the equivalence of education, training, qualifications and work experience based on the amount and level of learning.

National Competency Standards

- A restructuring of the qualification system to strengthen the links between TVET and the labor market.
- Identifies and standardizes knowledge, skills, and attitude at national level that are required to perform tasks in workplaces depending on the field and level of industry.
- HRD Service Korea is in charge of developing NCS
- KRIVET is in charge of developing Learning Module

Industry Sector Skill Councils (ISC)

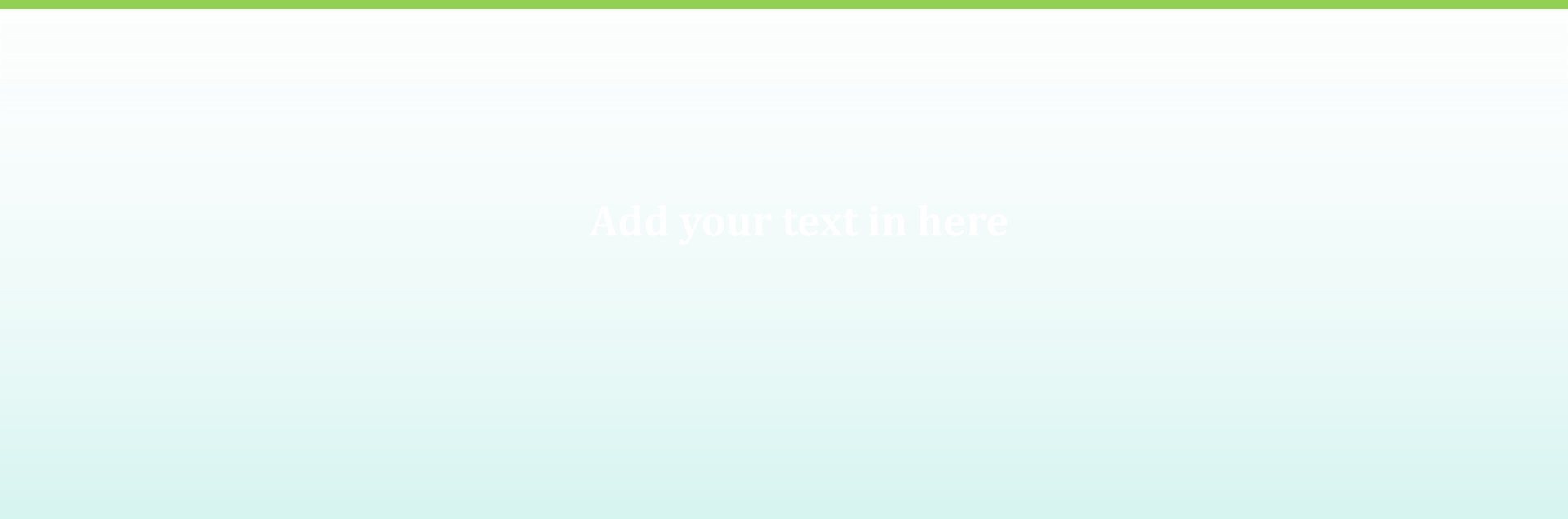
-Industry Skill Sector Councils are needed to be fully functioning in **industry categories**, including agriculture and forestry, textiles, chemicals, machinery, electronics, environment, healthcare, shipbuilding, tourism, culture, etc..

-NCS has been developed by HRD Service of Korea in cooperation with ISCs. Learning module based on NCS has been developed by KRIVET in cooperation with ISCs. They will be **applied in designing customized programs for junior colleges and Meister high schools**. Thus, it is expected to serve as a mechanism reflecting the demands of market.



Lessons Learned

Add your text in here



Adopting appropriate governance and management system according to the policy context

- In a primitive period, government-led centralized system is recommended due to the lack of infrastructure and capacity of local governments

Big plan which provides strategic directions to related sectors' policy making, implementation and management

- (e.g.) In Korea, Economic Planning Board, during the country's developmental period, led developing the national economy development plans, coordinating other sectors' development plans as well.

Effective use of research institutes as think tanks

- KRIVET (Korea Research Institute for Vocational Education & Training) and KLI (Korea Labor Institute) under the Prime Minister : Policy Research
- KEIS (Korea Employment Information Service) under the Ministry of Employment and Labor: Labor Market Forecasts, Employment Survey & Analysis

-

Coordination and collaboration among related ministries by the Policy Coordination Committee in the Prime Minister's Office

- difficulties in overcoming the power struggle and lack of communication among related ministries
 - the need of an authoritative body and considerable flexibility in management
 - specify the roles and responsibilities of each participating actors

Information systems

- Work-Net (work.go.kr) is the major public recruitment portal in Korea which was established in 1998 to provide reliable recruitment, job search and placement, and career information.
- HRD-Network provides support for effective implementation of job competence development projects such as job training programs of Job Center and local governments, registration and management of trainees, and subsidies for job training and provides information on various job training programs, online course registration and counseling, customized information on life-long learning abilities and the history of an individual's job training.



Thank You