

Paper 3A



ASIA-PACIFIC INFRASTRUCTURE PARTNERSHIP (APIP)

Update as of 30 October 2017

A forum¹ convened in 2010 by the APEC Business Advisory Council (ABAC), the Asian Development Bank (ADB) and Japan Bank for International Cooperation (JBIC), in collaboration with the Ministry of Finance of Japan, confirmed that infrastructure finance is a central issue for the region. There is huge demand for infrastructure investment necessary for continued economic growth, which public sector investment alone cannot meet.

The forum concluded that despite recent improvements in infrastructure-related policies, key constraints impeding private investment remain. These include lack of capital market depth, dearth of good quality projects, inadequate regulatory frameworks and need for better understanding of how to allocate various types of risk between public and private sectors.

Given the complexity of infrastructure PPPs, overcoming these constraints requires improved understanding and greater trust among relevant parties involved. Structures enabling parties to frankly and objectively discuss and consider complex matters facing each economy can contribute to better understanding of the issues and risks they face and conducive environments for private financing of infrastructure.

In 2010, ABAC proposed a model for such a regional structure – an Asia-Pacific Infrastructure Partnership (APIP) – bringing together high-level officials, experts and private sector advisory panelists from a wide range of relevant fields. This model, which draws from successful experiences in the region, utilizes ABAC's private sector network.

ABAC invited senior private sector experts selected for their knowledge of and experience and active engagement in infrastructure projects from a wide range of relevant fields, including the asset management, commercial banking, investment banking, engineering, property development, information technology, legal and consulting sectors. To date, the panel has over 100 members, including current and former ABAC members, chief executives and chairmen of major companies, and other senior executives, legal practitioners and consultants with extensive experience in infrastructure. (*See Appendix A.*)

In 2011, ABAC began undertaking activities under the APEC Finance Ministers' Process (FMP) with the collaboration of APEC finance ministries, the Asian Development Bank, the Inter-American Development Bank, the International Finance Corporation and the World Bank. Since then, the APIP has undertaken several high-level dialogues with a number of economies – with Mexico, Peru and the Philippines in 2011, Vietnam and Indonesia in 2012, the Philippines (second dialogue), Thailand, Indonesia (second dialogue) and Malaysia in 2013, Indonesia (third dialogue) in 2014, the Philippines (third dialogue) in 2015, Thailand (second dialogue) in 2016 and Indonesia (fourth dialogue) in 2017.

These dialogues have highlighted several key issues. Among these are:

- lack of capacity to prepare bankable projects that can provide a robust pipeline, as well as capacity for policy reforms and planning;
- the need to better understand risks, which parties are best able to take on which risks in which sectors, and how best to allocate these risks among public, private, multilaterals and other relevant institutions;
- the need to have a transparent and efficient legal and regulatory environment that can reduce risks to the minimum possible;

¹ This was the Private Infrastructure Finance Forum convened on 7 November 2010 in Yokohama, Japan by the APEC Business Advisory Council (ABAC), Asian Development Bank (ADB) and Japan Bank for International Cooperation (JBIC), in collaboration with the Ministry of Finance, Japan.

- need for mechanisms to mitigate risks that the private sector cannot cover;
- lack of long-term local currency finance;
- need for more coordinated and coherent public sector approach to PPPs; and
- importance of having credible and creditworthy public counter parties.

In 2014, the APIP actively collaborated with APEC Finance Ministers, Deputy Finance Ministers and Senior Finance Officials in developing the *Implementation Roadmap to Develop Successful Infrastructure PPP Projects in the APEC Region*, through a series of seminars and discussions hosted by the Chinese Ministry of Finance. Many of the ideas from APIP, which are contained in the 2014 Advisory Group report section on infrastructure (see Appendix B), were adopted and reflected in the Implementation Roadmap that was annexed to the Joint Ministerial Statement of the APEC Finance Ministers in Beijing.

In 2015, the APIP also contributed to the discussions on the Finance Ministers' Cebu Action Plan. These contributions were incorporated in Pillar 4 (infrastructure) of the CAP. In 2017, the APEC Senior Finance Officials held a seminar that focused among others on the issue of risk allocation, which was a central theme in the work and dialogues conducted by APIP. The conclusions of the seminar have been incorporated in the Annex to the Joint Ministerial Statement of the APEC Finance Ministers in Hoi An, entitled *Diversifying Financing Sources and Fostering Private Sector Involvement in Infrastructure Investment in APEC Economies*.

In 2017, the APIP developed action plans for implementation in 2017-2019. First, it will focus on providing feedback on the progress of Pillar 4 of the CAP. Second, it will provide assessments on the delivery of PPP projects in the region and lessons learnt, in collaboration with the Global Infrastructure Hub. Third, it will promote the collaboration of the region's network of PPP centers with multilateral institutions. Fourth, it will continue its dialogues offering targeted assistance for PPP programs in interested economies. Fifth, it will help economies establish PPP project pipelines in specific sectors, starting with waste management projects in Indonesia, the Philippines and Viet Nam.

In addition to the APIP Dialogues, the APIP has also actively collaborated and participated in a number of events organized by APEC economies to discuss infrastructure issues. Among these are the following:

- 9 November 2011, Honolulu, USA: Forum on Promoting Private Financing for Infrastructure in APEC – co-organized by ABAC and the World Bank in conjunction with the APEC Finance and Central Banks Deputies Meeting.
- 2 October 2012, Bali, Indonesia: International Conference on Scaling Up Infrastructure Investment in Asia-Pacific hosted by the Ministry of Finance of the Republic of Indonesia.
- 12-13 October 2012, Moscow, Russian Federation: The Second Asia-Pacific Forum organized by the Russian International Affairs Council and the Russian APEC Study Centre – Collaborated in the sessions on energy cooperation and opportunities for integration of transport, logistics and infrastructure in Northeast Asia.
- 21-22 October 2012, Jakarta, Indonesia: Roundtable and Public Forum on APEC's Regional and Global Opportunities.
- 22-23 April 2013, Makassar, Indonesia: APEC Workshop on Infrastructure: Toward a Common Framework of Project Readiness to Increase Infrastructure Investment in APEC Region.
- 28-29 August 2013, Palembang, Indonesia: The APEC Second Workshop on Infrastructure and Indonesia-OECD International Seminar: Enhancing the Role of Institutional Investors in Infrastructure Financing
- 2 December 2013, Jakarta, Indonesia: Preliminary Meeting on the establishment of the APEC PPP Experts Advisory Panel.
- 17 February 2014, Boao, People's Republic of China: Meeting of the APEC PPP Experts Advisory Panel
- 21-22 May 2014, Fuzhou, People's Republic of China: APEC Seminar on the Public Sector Role in PPP Modality
- 26-27 June 2014, Dalian, People's Republic of China: APEC Seminar on Long-Term Stable Financing for Infrastructure Development and Meeting of the APEC PPP Experts Advisory Panel
- 24 November 2014, Jakarta, Indonesia: Meeting of the APEC PPP Experts Advisory Panel
- 23-24 July 2015, Iloilo City, Philippines: APEC FMP Workshop on Infrastructure Financing and Capital Market Development
- 27 October 2015, Brunei Darussalam: Workshop and Dialogue with Trade and Finance Officials and

Experts on Establishing a Platform for Islamic Infrastructure Investment

- 10 May 2016, Kuala Lumpur, Malaysia: APFF Workshop on Developing an Islamic Infrastructure Investment Platform (I3P)
- 14 September 2016, Sydney, Australia: APIP Outreach Event
- 22 February 2017, Bangkok, Thailand: APFF Breakfast Meeting on Promoting the Islamic Infrastructure Investment Platform (I3P)
- 17 May 2017, Ninh Binh, Viet Nam: APEC FMP Seminar on Long term Investment in Infrastructure
- 10 October 2017, Kuala Lumpur, Malaysia: APFF Conference on Developing a Work Program for the Islamic Infrastructure Investment Platform (I3P)

APPENDIX A

Asia-Pacific Infrastructure Partnership Private Sector and Multilateral/Regional Partners

(As of 30 October 2017)

CHAIR:

1. Gresham Partners Limited - Mr. Mark Johnson (Senior Advisor)

COORDINATOR:

2. Nomura Research Institute Ltd. - Dr. Julius Caesar Parreñas, (Senior Advisor)

PRIVATE SECTOR:

3. AECOM - Dr. Thomas S.K. Tang (Director, Corporate Sustainability, Asia)
4. Amundi - Ms. Vanessa Wang (Managing Director and Head of Institutional Business, North Asia)
5. Ashurst LLP - Mr. Matthew Bubb (Partner)
6. Ashurst LLP - Mr. Richard Guit (Partner, Resources and Infrastructure Group)
7. Ashurst LLP - Mr. Michael Harrison (Partner, Energy, Transport and Infrastructure Group)
8. Asia Securities Industry & Financial Markets Association (ASIFMA) - Mr. Timothée Bihet (Associate, Fixed Income and Compliance)
9. AustralianSuper - Mr. Mark Delaney (Deputy Chief Executive & Chief Investment Officer)
10. Basic Element - Mr. Georgy Oganov (Adviser to the CEO)
11. Berwin Leighton Paisner LLP - Mr. Bob Charlton (Partner, Head of Asia)
12. Berwin Leighton Paisner LLP - Mr. Jim Buchanan (Partner, Projects, Energy & Infrastructure Finance)
13. Berwin Leighton Paisner LLP - Mr. David Robertson (Partner)
14. Blackrock Infrastructure - Mr. Eric Wu (Director)
15. C&M International - Dr. Ryan MacFarlane (Director)
16. Canada Pension Plan Investment Board (CPPIB) - Dr. Michael Goldberg (Director)
17. Chronicled - Prof. J. Ryan Orr (Co-Founder and CEO)
18. Corrs Chambers Westgarth - Mr. John Walter (Partner)
19. Davis LLP - Mr. Donald Campbell (Senior Strategy Advisor)
20. Eastspring Investments (Hong Kong) Limited – Mr. Anthony Adams (CIO, Infrastructure)
21. Emerging Infra-Tech Partners Pte Ltd - Mr. Kamran Khan (CEO and Managing Partner)
22. Ernst & Young Solutions LLP - Ms. Lynn Tho (Partner, Infrastructure Advisory)
23. EY - Mr. Isaac Bromley (Director, Infrastructure Advisory)
24. Foster Infrastructure - Mr. Richard Foster (Director)
25. Gamuda - Mr. Andrew Chan (Director, Business Development and Corporate Finance)
26. GE - Mr. Christian D. Bennett (Vice President Government Affairs & Policy - ASEAN, Australia, New Zealand & PNG)
27. GE Capital - Mr. Thomas Clark (Executive Counsel, Government Affairs and Policy)
28. GE Energy Financial Services - Mr. Leo Kirby (Managing Director, Capital Markets, Asia)
29. Harvard Law School - Mr. Allan Wain (LWP Fellow)
30. Hitachi Zosen Corporation - Mr. Mamoru Kondo (General Manager, Environment Business Headquarters)
31. Hyundai Engineering and Construction Co., Ltd. - Mr. Myung Hyun Cho (Vice President, International Investment and Business Development Group)
32. Independent Consultant - Mr. José San Martín Romero
33. InfraCo Asia Development Pte. Ltd. - Mr. Allard Nooy (Chief Executive Officer)
34. Berwin Leighton Paisner - Mr. Yoshihiro Watanabe (Senior Advisor)
35. Institute of Strategic and International Studies Malaysia - Mr. H.K. Yong (Senior Fellow)
36. International Infrastructure Finance Specialist - Mr. William Streeter
37. J Power - Mr. Seigou Mizunuma (Senior Fellow)
38. J.P. Morgan Asset Management – Global Real Assets - Ms. Asel Umurzakova (Executive Director)
39. Jardine Matheson Limited - Mr. Mark Greenberg (Group Strategy Director)
40. John Grill Centre for Project Leadership - Mr. Garry Bowditch (Executive Director, Better Infrastructure Initiative)
41. JP Morgan - Mr. Vijay Pattabhiraman (Managing Director and Chief Investment Officer, Asian Infrastructure Group)
42. JP Morgan - Mr. Raj Thammineni (Managing Director - Global Real Assets, Asian Infrastructure)
43. Kajima Corporation - Mr. Shuichiro Kato (Manager, Business Development Group, Construction Department, International Division)
44. Lee & Ko - Mr. Nelson Ahn (Senior Partner)
45. Lee & Ko - Mr. Yong-Jae Chang (Partner)
46. Lend Lease Group - Mr. Jason De Sousa (Director, Major Projects)

47. LG International Corporation - Mr. Yong Uk Kye (Senior Managing Director)
48. Macquarie Infrastructure and Real Assets (Singapore) Pte. Ltd. - Mr. Wei Cheong (Managing Director)
49. Manulife Asset Management - Mr. Robin Li CFA, MBA (Chief Investment Officer, Asia Proprietary Accounts)
50. Mitsubishi Heavy Industries Asia Pacific Pte. Ltd. - Mr. Hideaki Shima (Managing Director)
51. Mizuho Bank Ltd. – Mr. Shuhei Ikeda (Deputy General Manager, Global Project Finance Department Infrastructure Team)
52. Mizuho Bank Ltd. – Mr. Masaki Kitoku (Senior Vice President, Strategic Planning Department)
53. Mizuho Bank Ltd. – Mr. Suy Meng Lim (Department Head, Global Project Finance Department Asia Office)
54. Mizuho Bank Ltd. – Mr. Kazuhiro Toyoda (General Manager, Global Project Finance Department Asia Office)
55. Moodys Investors Service - Mr. Patrick C. Mispagel (Managing Director EMEA Ratings & Research Support)
56. Moodys Investors Service - Mr. Arnon Musiker (Senior Vice President)
57. Moodys Investors Service - Mr. Ray Tay (Vice President and Senior Analyst)
58. Nishimura & Asahi - Mr. Hiroshi Maeda (Partner)
59. Nomura Singapore Limited - Mr. Mitsutoshi Murakata (Head of Asia Infrastructure Project Office)
60. NSW Ports - Mr. Adem Long (Logistics Manager)
61. Ocean Conservancy - Ms. Susan Ruffo (Managing Director, International Initiatives)
62. Peregrine Economic Development International Inc. - Mr. Dennis Wright (Chief Executive Officer)
63. PricewaterhouseCoopers LLP - Mr. Kin Chan (Advisor)
64. PricewaterhouseCoopers LLP - Mr. Glenn Hughes (Director, Head of Capital Projects & Infrastructure Advisory and Real Estate Industry Leader, Vietnam)
65. PricewaterhouseCoopers LLP - Mr. Mark Rathbone (Partner, Advisory, Asia-Pacific Capital Projects and Infrastructure Leader)
66. PricewaterhouseCoopers LLP - Mr. Oliver Redrup (Director, Capital Projects and Infrastructure)
67. PricewaterhouseCoopers LLP - Mr. Julian Smith (Global Transport & Logistics Leader)
68. Prudential Corporation Asia - Mr. Donald Kanak (Chairman, Asia Regional Headquarters)
69. PT PLN (Persero) - Mr. Amin Subekti (Director)
70. Russian Direct Investment Fund - Mr. Victor P. Lysechko (Head of International Department)
71. Shin & Kim - Mr. Michael Chang (Senior Foreign Attorney)
72. Sidley Austin LLP - Mr. David Gartside (Partner, Project Finance and Infrastructure)
73. Strategic Program Management LLC - Mr. Robert Prieto (Chairman and CEO)
74. Sustainable Infrastructure Foundation - Mr. Christophe Dossarps (Chief Executive Officer)
75. Tetrapak (Thailand) Ltd. - Mr. Jeffrey Fielkow (Vice President- Sustainability and Recycling in South Asia, East Asia and Oceania)
76. The Bank of Tokyo-Mitsubishi UFJ - Mr. Colin Chen (Executive Vice President and Regional Head of Project Finance, Asia)
77. The Bank of Tokyo-Mitsubishi UFJ - Mr. Penta Junianto (Senior Relationship Manager)
78. The Bank of Tokyo-Mitsubishi UFJ - Mr. Yoshihiko Katsuda (Head of Asian Origination Team, Structured Finance Division)
79. The Bank of Tokyo-Mitsubishi UFJ - Mr. Makoto Kobayashi (Managing Director and Global Head of Structured Finance)
80. The Bank of Tokyo-Mitsubishi UFJ - Mr. Takeshi Masuyama (Deputy General Manager)
81. The Bank of Tokyo-Mitsubishi UFJ - Mr. Hiroshi Matano (General Manager, Structured Finance Division)
82. The Bank of Tokyo-Mitsubishi UFJ - Mr. Makoto Tsukasa (Executive Vice President and Advisor of Investment Banking)
83. The Carlyle Group – Mr. Sunil Kaul (Managing Director and Head of Southeast Asia)
84. Transport Technology Consultants - Mr. Andrew Thomas William Pickford (CEO and Head of Technical Consulting)
85. W2Worth Innovations LLC - Ms. Jill Boughton (President and CEO)
86. White & Case Law Offices - Mr. Arthur M. Mitchell (Senior Counselor)

PUBLIC SECTOR AND INTERNATIONAL ORGANIZATIONS

87. Asian Development Bank - Mr. Atsushi Kaneko (Principal Portfolio Management Specialist)
88. Asian Development Bank - Mr. Pierre Sarrat (PPP/Transport Specialist)
89. Asian Development Bank - Mr. Trevor Lewis (Senior Public Private Partnership Specialist, Office of Public Private Partnership (OPPP))
90. Credit Guarantee and Investment Facility (CGIF) - Mr. Boo-Hock Khoo (Vice President, Operations)
91. Global Infrastructure Hub - Mr. Daniel Fedson (Director)
92. Global Infrastructure Hub - Mr. Jack Handford (Principal Advisor)
93. Global Infrastructure Hub - Mr. Mark Moseley (Chief Operating Officer)
94. Global Infrastructure Hub - Mr. Richard Timbs (Senior Director)
95. Global Infrastructure Hub - Ms. Morag Baird (Senior Manager)
96. International Finance Corporation - Mr. Nonito Bernardo (Senior Investment Officer, PPP Department)

97. International Finance Corporation - Ms. Rachel Freeman (Principal, Advisory Services)
98. Japan International Cooperation Agency (JICA) - Mr. Gen Tsukada (Environmental Policy Adviser for Ministry of Environment and Forestry Indonesia)
99. Japan International Cooperation Agency (JICA) - Mr. Tetsuya Harada (Senior Representative, JICA Indonesia Office)
100. Japan Overseas Infrastructure Investment Corporation for Transport and Urban Development - Mr. Hiroshi Akiyama (Chief Financial Officer)
101. Japan Overseas Infrastructure Investment Corporation for Transport and Urban Development - Ambassador Takuma Hatano (President)
102. Japan Overseas Infrastructure Investment Corporation for Transport and Urban Development - Mr. Makio Shichijo (Senior Director, Project Department)
103. Multilateral Investment Fund - Mr. David Bloomgarden (Unit Chief, Inclusive Cities)
104. OECD - Mr. Raffaele Della Croce (Lead Manager, Institutional Investors and Long Term Investment Project)
105. The World Bank - Dr. Chanin Manopiniwes (Infrastructure Economist, East Asia and Pacific)
106. The World Bank - Mr. Andri Wibisono (Infrastructure Specialist)
107. The World Bank - Mr. Cledan Mandri-Perrott (Head of Infrastructure Finance and PPP, Singapore)
108. The World Bank - Mr. Franz R. Drees-Gross (Country Director for Papua New Guinea, Timor-Leste and the Pacific Islands)
109. The World Bank - Mr. Jordan Schwartz (Director, World Bank Hub for Infrastructure and Urban Development)
110. The World Bank - Ms. Cary Anne Cadman (Environment Sector Coordinator)
111. The World Bank - Ms. Kalpana Seethipalli (Senior Economist)



**THE ASIA-PACIFIC INFRASTRUCTURE PARTNERSHIP
KEY ISSUES FOR THE APEC IMPLEMENTATION ROADMAP TO DEVELOP
INFRASTRUCTURE PPP PROJECTS**

At a 2010 forum convened by ABAC, ADB and Japan Bank for International Cooperation (JBIC), in collaboration with Japan's Ministry of Finance, the Advisory Group and ABAC proposed the establishment of the Asia-Pacific Infrastructure Partnership (APIP). This aims to provide a regional platform for governments, the private sector and relevant international institutions, to frankly and objectively discuss complex matters related to infrastructure facing each economy. Since 2011, when the APEC Finance Ministers adopted it as a policy initiative, APIP has undertaken several dialogues and participated in various regional discussions.² As a follow-up to various dialogues, five studies on various issues were commissioned by ABAC.³

In 2013, the Advisory Group and ABAC recommended that APEC Finance Ministers establish a regional framework under a multi-year initiative to coordinate capacity building and sharing of best practices in infrastructure finance, with the collaboration of APIP. This recommendation became reality with the launch of the APEC Multi-Year Plan on Infrastructure Development and Investment (MYPIDI) and the establishment by Finance Ministers of the APEC PPP Experts Advisory Panel to assist member economies in improving coordination and developing capacity to build bankable project pipelines through PPP Centers. A Pilot PPP Center was set up in Indonesia. Both the MYPIDI and the APEC PPP Experts Advisory Panel designated APIP as the channel for private sector involvement in these activities.

In the course of its dialogues with developing APEC member economies, APIP has identified a number of key issues:

1. Effectively allocating risks between public and private sectors

An important element of successful PPP projects is finding a suitable allocation of risks between the public and private sectors. There is no single formula for risk allocation, and risks vary depending on the economic sector, the size of the project, the project cycle, the business model used and the number of parties that are involved. For example, project risks typically increase during the construction phase where construction and financial risks are dominant considerations, peak during start-up as delay, refinancing and traffic risks increase, and decrease substantially through the

² These included dialogues with the governments of Mexico, Peru and the Philippines in 2011, Vietnam and Indonesia in 2012 and Philippines, Thailand, Indonesia and Malaysia in 2013. APIP also convened a forum with the APEC Finance Deputies in 2011. In addition to these, APIP representatives actively participated in a number of conferences organized by APEC member governments. A number of APIP representatives participated in two workshops organized by the FMP and hosted by the Government of Indonesia in 2013 – the *APEC Workshop on Infrastructure: Toward a Common Framework of Project Readiness to Increase Infrastructure Investment in APEC Region* held on 22-23 April in Makassar and the *APEC Second Workshop on Infrastructure and Indonesia-OECD International Seminar: Enhancing the Role of Institutional Investors in Infrastructure Financing*, held on 28-29 August in Palembang. This year, APIP actively participated in the initial work of the APEC PPP Experts Advisory Panel and provided private sector inputs to discussions convened by the APEC Finance Ministers' Process. These were the *Seminar on Public Sector's Role in PPP Modality* (21-22 May 2014, Fuzhou, China) and the *Seminar on Long-term and Stable Financing for Infrastructure Development* (26-27 June 2014, Dalian, China).

³ These were: (a) comparative study of legal frameworks to protect the long-term interests of pension funds investing in PPPs; (b) comparative study of contractual clauses to provide for the smooth adjustment of physical infrastructure and services through the lifecycle of a PPP project; (c) best practice in design of PPPs for social infrastructure, particularly in health care and education. (d) comparative study of best practice taxation measures to support PPPs and (e) ways to evaluate externalities of PPPs.

operation phase.

Where there is a disconnect between the price the public is willing to pay and the price available in the market, government can provide a solution by either putting money on the table or taking risks off the table. A good understanding of the risks that parties are able to bear is essential for designing well-structured projects. Understanding that the private sector is capable of dealing with pure commercial risks but ill-equipped to deal with others, such as inability of the public sector to comply with obligations due to government or political actions or inaction, for example, is important for designing solutions, such as creating a guarantee fund that can expeditiously provide direct compensation to the private sector in such an event. Introducing incentives for both parties to avoid a default, such as through partial guarantees, can also be helpful.

A deeper understanding of which risks the different parties can more effectively manage, allocating each risk to the party best suited to manage or minimize it, and defining this clearly in agreements can help government attract more private sector participation in infrastructure project. In certain PPP projects, for example, design, construction, performance, operation and management risks may be allocated to the private sector, while demand, off-taker and legislative/regulatory risks would be taken by the public sector and risks arising from interest and currency fluctuations, pricing structure and unforeseen events could be shared by both.

Governments can attract more private investment in infrastructure through measures that help provide funding and address risks that need to be dealt with at the various stages of project preparation, bidding and construction, such as funds to accelerate the land acquisition process during the preparation stage, viability gap funding (VGF) to help achieve financial viability of economically desirable projects and guarantees to cover policy risks during the bidding stage, and funding support during the construction phase where the market is unable to provide for the needs of the private sector (e.g., long term local currency financing). Public subsidies can also be factored into the bidding process.

Among other ways by which projects can be made bankable and risks shared in a balanced manner are: (a) continually re-assessing the risk profile of projects in reference to traditionally acceptable infrastructure risks carried by global banking institutions; (b) continually reviewing risk allocation to ensure risks are carried by entities that are in the best position to manage and mitigate them; (c) formulating clear terms of reference for each project as a basis for further assessment of risks by private sector partners and financial institutions; and (d) reviewing the timetable for the bidding process and benchmarking it to global best practices to ensure these are realistic and workable and to encourage wide participation.

In successfully deploying fiscal and financial support to promote PPPs, it is important for the government to get sufficient inputs from industry, such as by holding pre-proposal, pre-bidding and pre-structuring conferences with the private sector. Where low-cost funding such as those from official development assistance is to be introduced to the project it is important that such funding and its terms is brought to the attention of the private sector early so that complementary terms and structures can be bid by interested private sector parties.

The government could consider different risk allocations for different stages of market development for infrastructure projects, where it takes certain risks, e.g., demand and off-taker risks, when there is a strong social element that may make it difficult to charge market tariffs, during the early stages of market development or in the case of pioneer projects, to attract private sector participation. Government can reduce its role over time as the market develops, more successful projects emerge and the private sector feels more comfortable in assuming these risks. This is particularly important for developing economies and sectors where benchmarks to help the private sector evaluate risks are not yet available or where the private sector does not yet have sufficient understanding of the market. Following are ways in which these may be addressed:

- *Establishing benchmark projects in various sectors:* In sectors where there is significant potential private sector interest but where PPPs are non-existent or are yet to be developed, governments could consider developing a benchmark project for each of them, providing strong government support (for example by assuming ridership risk, which is difficult for the private sector to deal with in markets at early stages of development where experience is still limited). These benchmark transactions could serve as the starting point for subsequent projects, where the private sector can become more comfortable in taking more risks and the government can obtain better terms.
- *Facilitating better understanding of the market by the private sector:* Better understanding of the market increases investor confidence, encourages private sector firms to expand their engagement and facilitates the development of projects where financial institutions and investors are more comfortable in assuming greater portions of risks. This process takes much longer wherever governments follow a policy of allocating the more complex projects to private bidders and the simpler and easier ones to state-owned enterprises. By doing the reverse at the initial stage, i.e., letting the private sector undertake the easier projects, governments can accelerate greater private sector engagement in PPPs and promote better understanding of the market by investors and financial institutions at an earlier point in time.

2. Improving institutional capacity to promote PPPs

The decision by APEC Finance Ministers in 2013 to develop a network of PPP Centers that is supported by the APEC PPP Experts Advisory Panel is an important milestone toward the strengthening of institutional capacity of governments to promote PPPs. As the Panel moves ahead to support the Pilot PPP Center in Indonesia and new or existing PPP Centers that will subsequently join the network, it could consider focusing its efforts on the following key areas that have been identified in APIP dialogues:

- *Coordination across ministries/departments and relevant agencies*

Successfully developing a robust project pipeline depends on the success of efforts to coordinate involvement of multiple line ministries in project preparation. Unless a structure is created that is able to bring all relevant parties together, a significant slowing down of the process leading to financial close of projects will be difficult to avoid. Coordination among government units at different levels is an important pre-requisite of project readiness. One area where this is particularly crucial is in connection with land acquisition, where infrastructure projects could be speeded up through closer collaboration between relevant agencies.

Addressing the complexity of decision structures within government that could hamper expanded private sector engagement in PPP projects requires the creation of institutional arrangements that offer sufficient clarity, authority and predictability. An important element of such arrangements is a strong institutional home for the development of well-structured projects. Establishing a strong PPP unit and identifying a “champion” to lead projects and push things forward are possible ways of achieving this. To effectively bring all relevant parties together, such units need to have sufficient authority, and preferably legal authority.

- *Developing transactional capacity*

Building institutional capacity to deliver well-structured projects is an important key to success in promoting PPPs. Preparing complex infrastructure projects require technical expertise in addition to sufficient budget allocation. It is necessary to further build on existing skills and capacities in public agencies managing these transactions. Many governments in developing economies are very much affected by civil service rules, particularly in relation to compensation limits that make it difficult for them to attract and retain sufficient numbers of technical experts in legal, accounting, engineering and other relevant fields.

Technical assistance and sharing of best practices can enhance the capacity of PPP Centers and line agencies. There is an existing wealth of knowledge and expertise on PPPs within both public and private sectors around the world that can be readily made available. Given its diversity and strong links to the private sector and multilateral institutions, APEC can be an effective platform for the sharing and dissemination of such knowledge and expertise to member economies.

International financial institutions play important roles in balancing the interests of public and private sectors. Voluntary advisory bodies, including the APIP, can be very helpful to governments. Further developing strategies through the APEC PPP Experts Advisory Panel with the participation of the private sector, multilateral institutions and other relevant entities can help governments develop capacity in assessing financial viability to help advance the evaluation and approval processes for projects. Past experiences with successful projects have also demonstrated the usefulness of governments hosting policy dialogues with potential long-term investors that enable participants to identify the appropriate support needed from government to close the viability gap.

On-the-job training is an approach that could be suited for developing transactional capacity, such as in the building up of teams working on selected initial projects in particular sectors, and learning how to replicate successful deals within the same sectors. These efforts can be complemented by learning through seminars on key issues such as risk allocation between public and private sectors that are being made available by private and public institutions.

- *Developing long-term infrastructure planning capacity*

Developing capacity for long-term planning in infrastructure is important to promote private sector participation, given the long-term horizon of infrastructure investment. A key issue is the capacity of government planners to deal with complexity, which legislation cannot capture and must be dealt with during actual planning. In the same way that the fate of a tree is determined at the time of planting, the success of an infrastructure project depends on the clarity of the project's objectives and key performance indicators at the outset.

Examples of areas where government officials could benefit from improved capacity include the following: (a) design of infrastructure to meet changing needs over time; (b) facilitating the transfer of knowledge across projects and the emergence of learning organizations through planning; (c) effective management of time, resources and collaboration of stakeholders in complex environments; (d) leadership in multi-disciplinary infrastructure planning for the whole economy; (e) deeper understanding of how infrastructure systems are affected by such factors as changes in land use and population density; and (f) developing evidence-based approaches in ensuring that infrastructure design meet government objectives.

- *Strengthening the project preparation process*

From investors' and lenders' perspectives, bankability is a pre-requisite for the success of projects. Being vital to demonstrating bankability, robust project preparation prior to bringing each one to the market is important. For markets that are at an early stage of development, a strategy that focuses on bringing well-prepared high-quality deals to the market and that results in the successful financial close of a couple of good projects within a year, rather than one focused on quantity of projects, is seen as the most effective for attracting more investors.

This could also go a long way toward shortening the period of time it takes to complete transactions in the case of complex deals. Although other factors such as political complexities and other limitations on the part of government may contribute to extending the time it takes for the process leading to financial close and commercial operations, bringing well-prepared projects to the market, along with more simplified transactions, can significantly shorten the

gestation period for these projects.

Strengthening this process will require adequate budgetary resources, particularly for line ministries to prepare projects to be market-ready and engage qualified transaction advisors. It may also be useful to develop a checklist and an administrative system that could indicate whether a project is ready to be brought out to the market. Management capacity in the government, particularly in contracting agencies, needs to be further developed to more effectively and efficiently bring projects forward to completion. PPP Centers can also play a role in promoting greater understanding within the public sector of the advantages of harnessing the expertise of outside consultants.

- *Communicating with the private sector*

An effective institutional framework is one that provides adequate and timely information and a straightforward, transparent and efficient approval process for PPPs. Global or regional firms that seek out opportunities across a number of markets can be attracted to an economy that provides adequate and detailed information to facilitate the undertaking of due diligence for bidding on projects. PPP centers can play an important role in meeting these needs of the private sector.

- *Building strong and credible public institutions*

Key to the success of economies in developing well-executed PPP projects in certain sectors has been the credibility of public institutions in these sectors, particularly their creditworthiness, which facilitates the engagement of private sector financial institutions and export credit agencies to provide financing and strong and clear government support for these institutions, preferably enacted into law. While arrangements in one sector cannot simply be replicated in other sectors due to their different characteristics, experiences of PPPs in the region highlight the key features that public utilities must have for successful projects: credibility, good credit, the authority to make decisions and capacity. PPP Centers can play a role in identifying and promoting legislation and policies to strengthen relevant public institutions.

- *Ensuring successful initial projects*

The private sector strongly supports the objective of ensuring the commercial, social and environmental viability of projects before being offered to investors. It is especially important that initial model projects succeed to build public and market confidence and avoid acute political backlash that could harm long-term business opportunities. However, governments must also avoid delays that can dampen initial enthusiasm among investors. It is important for governments that are at the initial stages of developing a project pipeline to strike a healthy balance between speedy roll-out of projects and proper preparation, avoiding the pitfall of over-analysis, and to prioritize doable over transformational projects, building a pipeline to follow the first successful project.

3. Facilitating infrastructure finance, especially long-term and local currency funding

The availability of long-term local currency financing, which is important for infrastructure projects that mostly earn revenues in local currencies, varies across economies in the region. In some economies, insufficient availability of long-term local-currency funding poses a significant obstacle to expanded private sector engagement in infrastructure. The relatively short lending tenors for infrastructure deals available from local banks cannot meet the requirements of financial institutions that are exposed to interest rate fluctuations and need to hedge their cash flows over a longer period of time, typically 20 years or more, when financing infrastructure projects. Local financing is also important for local companies to participate effectively in infrastructure projects.

Developing the long-term local currency market is not only important for bringing down costs by eliminating the need to hedge foreign exchange risks. It is also important to facilitate greater participation of local banks, operators and other market players and the local economy in the growth of infrastructure projects, which is crucial for maintaining continued political support for private sector financing of infrastructure projects and for enabling economies to develop beyond middle-income status. Addressing this issue today will ensure that APEC economies will be prepared for the stage of development when much larger volumes of financing will be required.

There are opportunities for emerging markets to tap capital looking for long-term yields in the region, as the population ages and yields disappear in developed economies. Attracting such funds will require a robust pipeline of projects and secondary markets. The development of capital markets in developing economies can be accelerated through concrete initiatives that are being undertaken under the APFF, including the development of classic repo markets, netting and collateral infrastructure, standardized documentation and risk models for margining of non-cleared swaps as required by regulations, improving availability of information for capital market investors, and an enabling regional securities investment ecosystem, as well as a regional funds passport arrangement. Enabling insurers and pension funds to expand their investment in infrastructure will also require addressing regulatory and accounting constraints, in addition to capital market and operation issues.

Multilateral institutions can work with foreign financial institutions to issue local currency bonds that can help finance investment in long-term assets, and help attract long-term investors to partner with local institutions in funding infrastructure projects. Other ways by which they can play an important role include providing long-term loans with repayment schedules to meet specific requirements and combined with private finance to make projects viable, as well as offering currency swap facilities for financing projects to address currency risks.

Economies can learn from successful experiences within the region in building the domestic investor base, including pension funds, insurers and retail investors, which have led to the development of private domestic infrastructure funds investing in PPP projects. These can be facilitated by an enabling regulatory framework for long-term infrastructure investments and of investment regulations, including rules pertaining to domestic pension funds and life insurance firms and a clearer process for exits through the transfer of shares. These can be complemented by the development through securitization of products that are attractive to long-term institutional investors.

A study of experiences within APEC can provide possible models for a wider application of stronger and more effective tax incentives to offset higher risks at the early stages of infrastructure development and promote the participation of a larger and more diverse set of local and foreign investors from many jurisdictions. These could include tax incentives for investors in infrastructure bonds and infrastructure-related funds, equity investors and corporates (as sponsors for infrastructure projects). As these incentives could be designed to promote investment at an early stage of development to cover higher risks, sunset provisions for such early stage investment may be introduced to distinguish different (and possibly lower) risk allocations for later stages of infrastructure development.

4. Providing an enabling legal, policy and regulatory environment

Consistency of the regulatory environment is a paramount consideration for private sector firms and investors looking to invest in PPPs. The enforceability of long-term contracts is a major concern for the private sector, which expects that covenants in such contracts are honored through leadership transitions at the economy, local and agency levels. Greater regulatory transparency and certainty, such as through minimizing reviews of already approved projects and amendments to already agreed terms and conditions, have important bearings on investors' risk perceptions and the level of

returns they will require.

Features that the private sector considers important include, among others: (a) the ability of government to properly address at the onset project completion risks, right-of-way risks and other political and regulatory risks and to provide ample protection for project finance lenders to mitigate these risks; (b) the provision of clear information on the form of and risks related to government subsidies on projects made available for private sector participation; (c) appropriate protections for private sector proponents in case promised subsidies are withdrawn or when the project fails to gain legislative approval or appropriations; and (d) adequate protections for continuity of contracts over the long term.

A clear master plan based on a coherent vision can help the private sector get a better sense of strengths, viability and potential impact of projects, and to gear up internal resources, including people, research, training and funding. Such a master plan would prioritize and harmonize projects at the economy and local levels, and clearly identify how each project fits into the overall infrastructure plan and how resources will be allocated to each. The private sector will be able to more effectively participate in infrastructure development if it is regularly updated on the projects lined up for PPP and how each project fits into the larger plan and given an updated timetable.

Clear and consistent policies and processes are very important in making the market attractive for the private sector. Past experience of investors, for example, of government deciding to reassign projects to the public sector after private financial institutions and investors have already spent significant time and resources for studies and bid preparation, discourages the private sector from further engagement in the market. This issue can be addressed by improving the infrastructure procurement process to avoid such changes and reduce uncertainties.

The Enablers of Infrastructure Investment Checklist that ABAC developed in 2013 provides a tool to help governments identify critical gaps and develop and implement key actions and monitor progress. This checklist is designed to serve as a self-evaluation tool to help governments assess and determine the extent to which existing policies promote or hinder private sector participation in infrastructure development. Measuring progress can be facilitated by identifying key performance indicators (KPIs) that are most relevant to the private sector. The checklist is structured under four overarching policy categories: (a) augmenting government project planning and coordination mechanisms; (b) building a strong financial and financing environment; (c) developing robust PPP mechanisms and frameworks; and (d) creating and maintaining a strong investment environment to attract foreign direct investment.

5. Promoting public support for PPPs

Continued public support is important for the successful development of a robust PPP project pipeline. APEC can provide a useful platform for governments to learn from experiences within and outside the region in ensuring and promoting public support for PPP. Among issues that governments in the region face are the following:

- In emerging markets where user tariffs have been traditionally low, the underlying economics of infrastructure projects, where cost recovery poses a significant challenge to the commercial viability of PPPs, is a major problem in attracting the private sector to the market. This problem is being addressed in various economies in a number of ways, including guarantees and viability gap funding; however, governments also need to develop effective strategies to deal with political challenges when there is a need to increase user fees.
- The coordination of infrastructure PPP becomes more challenging in economies where political and fiscal power are being devolved from the central government to provincial and local governments, particularly in the implementation of policies and enforcement of judicial decisions. Decentralization has brought new challenges resulting from greater regulatory

complexity that can significantly delay the completion of key infrastructure projects, such as delays related to land acquisition and compensation as well as those related to the process of environmental assessments. Another issue is the capacity of local governments to manage increased infrastructure planning and spending, including ability to maintain local roads and water supply.

- Related to decentralization of public services provision is the growing importance of engaging local communities in the identification, prioritization and planning of infrastructure projects in their respective localities. In addition to facilitating political support for projects, this process can help in evaluating the affordability of projects and facilitate their prioritization based on a better understanding of the needs of local communities.
- The development of more sustainable infrastructure policies and their proper implementation are likely to involve politically sensitive decisions. These may include decisions on tariffs required for the financial viability of public utilities, land acquisition or awarding of contracts. Without political support from highest levels of government, public officials are likely to be hesitant to make decisions that are necessary but can put them at risk. While political backing will need to come from elected officials at the highest levels and their political supporters, a system of continuous monitoring and information gathering at the central level, for example through the PPP Center, can facilitate this process.
- Users of infrastructure services are well-placed to help the government identify and prioritize the economy's infrastructure needs. Unsolicited infrastructure proposals can play an important role in the development of infrastructure projects that effectively facilitate the expansion of private sector activity in the economy. A transparent and robust process will be required to ensure the effectiveness and integrity of unsolicited projects.