



Asia-Pacific Financial Forum (APFF) and Asia Pacific Infrastructure Partnership (APIP) Dialogue with the Government of Indonesia on Waste Management Systems

EXECUTIVE SUMMARY

On March 14 in Jakarta, Indonesia the APFF and APIP, together with the Governments of Japan and Indonesia convened a wide array of senior government officials, senior private sector infrastructure experts and practioners, and representatives from multilateral development banks and other key institutions to discuss challenges in developing public-private partnerships to finance, develop, and operate waste management systems in Indonesia.

Some of the key challenges identified during the dialogue included: 1) streamlining institutional arrangements and clarifying roles and responsibilities; 2) insufficient funding and priority provided for waste management efforts; 3) inadequate collection of waste; 4) insufficient data on waste composition and logistics; 5) legislative and regulatory uncertainty; and 6) limited use of available tools to improve project bankability.

To address these challenges, participants offered the following recommendations:

- 1. Develop a national waste management plan and clearly define objectives and responsibilities. In developing a national waste management plan it was recommended that Indonesia: 1) streamline the decision making process and identify a lead agency for waste management; 2) create a one stop shop for licenses and permits; 3) increase and improve data collection; 4) establish waste management targets and clear objectives; and 5) consult with relevant stakeholders during the development of the plan.
- 2. Prioritize waste management in budget allocations and improve collection rates. The front end (collection and separation) determine the economic viability of all subsequent steps in the waste value chain. Participants noted the need to educate citizens on the importance of waste management and to increase funding for waste management at the national and municipal level to raise collection rates.
- **3.** Establish program of pilot cities for sustainable waste management systems. The benchmark projects in pilot cities could help catalyze additional investment around the country. In developing such an initiative participants encouraged officials to: 1) adopt a technology neutral approach; 2) adhere to internationally accepted environmental standards; 3) provide support for local communities and identify champions; 4) use available tools to improve project preparation; and 5) appropriately assign risk.

The Way Forward

APIP, APFF, JICA, Global Infrastructure Hub, ADB, World Bank and other relevant groups will work with Indonesia on additional capacity building efforts to: 1) develop projects that are attractive to the private sector; 2) consult on forthcoming national plans on waste management and marine litter; 3) develop a one stop shop for licenses and permits; and 4) identify local government champions wishing to develop waste management projects.





Asia-Pacific Financial Forum (APFF) and Asia Pacific Infrastructure Partnership (APIP) Dialogue with the Government of Indonesia on Waste Management Systems

14 March 2017 14:00 – 17:30 Bandung-Surabaya Rooms The Hermitage Hotel, Jakarta Indonesia

APFF/APIP DIALOGUE CONFERENCE REPORT

Introduction

The dialogue brought together senior officials from a range of government agencies including high-level representatives from the governments of Japan and the United States, the ADB, the Global Infrastructure Hub (GIH) and a wide cross section of industry specialists. Mr. Mark Johnson, chair of APIP, chaired the meeting in conjunction with the Indonesian Ministry of Environment and Forestry. The dialogue was coorganized by the APEC Business Advisory Council (ABAC), the Government of Japan (through the Ministry of Environment) and the Government of Indonesia (through the Ministry of Environment and Forestry and the Coordinating Ministry for Maritime Affairs), with the support of the Trash Free Seas Alliance. The dialogue agenda is attached and was structured in a way that facilitated a highly informative exchange of views. The dialogue was preceded by and benefitted from an informal meeting of private sector and MDB participants.

In his opening remarks, the APIP chair noted that the objective of APIP dialogues was to help bridge the asymmetrical gap between the public and private sectors but that need was lessened by the increasing availability of high quality information provided by the MDBs, the GIH and the Sustainable Infrastructure Foundation (SIF). What marked out this dialogue from earlier work was the focus on investment in waste management infrastructure.

Background

The Asia-Pacific Infrastructure Partnership (APIP) was proposed in 2010 by the APEC Business Advisory Council (ABAC) to enable governments and the private sector to frankly and objectively discuss the necessary political, economic, legal, and regulatory conditions to incentivize private sector investment in infrastructure. The initiative was endorsed in 2011 by APEC Finance Officials and dialogues involve Ministers and their key officials, experts from multilateral development banks, and senior private sector infrastructure experts and practitioners. This was the fourth dialogue convened or co-organized by APIP in Indonesia.

The Asia-Pacific Financial Forum (APFF) is a platform for public-private collaboration to accelerate the development of robust and integrated financial markets in the APEC region. The APEC Business Advisory Council (ABAC) proposed the APFF's establishment to the APEC Finance Ministers, who launched the Forum at their 2013 annual meeting in Bali. Over 300 experts and senior representatives from more than 150 institutions collaborate in the APFF's undertakings. These institutions include financial services firms, legal, accounting and related services firms, business and investor information service providers, international financial industry associations, finance, trade and justice ministries, regulatory authorities, multilateral development banks, international organizations and academic and research institutions.

Previous APIP dialogues with Indonesia have identified a number of key challenges to developing infrastructure through Public-Private Partnerships (PPPs) including:

- Creating effective institutional arrangements for internal coordination and creating a pipeline of bankable projects.
- Strengthening the project preparation process.
- Expanding the options for financing Indonesian infrastructure, developing local financing sources, and ensuring availability of long-term local currency funding.
- Improving capacity to mitigate non-commercial risks.
- Developing robust PPP frameworks.

The APIP dialogues have also identified factors that contribute to an enabling environment for infrastructure investment. These include the need for a business environment that is transparent; open to foreign investment; and has a favorable tax environment; clear legal, regulatory, and policy frameworks which specify the rights and obligations for private sector investment and the rights and obligations of government and which welcome and facilitate private sector participation in developing infrastructure assets. The tender process should be transparent and competitive; governments for example should publish their pipelines online as it informs the private sector on government priorities.

It is also important to create the right conditions for capital market transactions for infrastructure. This includes foreign currency convertibility, rights to repatriate capital and currency, and exchange rate stability. Constraints faced by foreign financial institutions include difficulties in obtaining local currency, as well as regulatory and capacity constraints faced by domestic financial institutions which can pose challenges to the financing of large infrastructure projects. These challenges can sometimes be overcome by facilitating collaboration among various institutions that can provide the different portions needed to finance projects (e.g., local currencies through a domestic bank, hard currencies through a foreign bank, and long-term funding through a multilateral or public institution).

Importantly, a PPP contract should establish the amount of government support that will be provided to the project and the roles and responsibilities of each party, incorporate comprehensive oversight and regular review mechanisms, and include performance targets that are easily measurable. Incentives should be meaningful, and rewards and penalties effective. A process for arbitration and remedial actions should be defined and public sector roles for project monitoring and active stakeholder engagement throughout the implementation of the project should be established. Preferably, best international practices recommend the inclusion of an independent regulatory body to monitor project progress. An independent court system where contractual obligations and rights can be protected and enforced will increase certainty and ensure the effectiveness of long-term PPP contracts. For example, because of the capital costs required at the outset for most infrastructure projects offtake agreements will help guarantee a market and revenue source for any products produced and lower the risk associated with the investment. Likewise, regulations or decrees such as feed-in-tariffs will only encourage investment to the extent that investors are convinced that the policies will remain in place across administrations and through the lifetime of the investment. Investors need to know that contracts will be honored and that they have legal recourse if they are not.

Finally, issues around land ownership, should it be restricted solely to citizens, can limit the types of PPP arrangements within the economy. In Indonesia recently modified land acquisition laws are helping to streamline procedures, though it is still an issue for a number of investors.

Indonesia has signaled a clear desire to improve the investment climate to attract private sector investment and encourage development of infrastructure projects to meet the needs of a rapidly growing economy. Indonesia has established Public-Private Partnership (PPP) Centers within the Ministry of Finance, the Ministry of National Development Planning, and the Coordinating Ministry for Economic Affairs with the goal of assessing and preparing infrastructure PPP projects and guiding the successful execution of these projects. Indonesia has also developed regulations to facilitate private sector investment, including Presidential Decree No. 67/2005 and the PPP Operational Guidelines.¹ However, despite these positive steps, significant challenges remain.

Summary of key points of the Dialogue

In their opening remarks, officials noted that budget resources did not align with population increases and waste and the machinery of government to deal with waste was lacking. The potential for converting waste to energy is very high and around 145 cities are converting waste to meet some part of energy requirements. However, for the larger cities there is an urgent need to specify the technology to be used and a major challenge is that of scalability. The public did not appreciate waste management problems and there is an urgent need to socialize and manage risk. A number of MDBs are supporting Indonesia in selecting appropriate technology. Converting waste to energy could contribute to meeting Indonesia's 25% renewable target. Officials thanked the Japanese government and its agencies for organizing and participating in the dialogue.

Representatives of the Japanese government noted a strong interest in waste management in the region. It is a major challenge in Japan and in a recent visit to Indonesia, Prime Minister Abe had identified cooperation with Indonesia on converting waste to energy as a priority. This dialogue would provide for an exchange of views on technology and finance. It was noted that in discussions last year in Tokyo between the US and Japan, maritime pollution had been discussed. The issues identified mainly related to ways to involve the private sector in meeting the challenges of waste management. The APIP is a vehicle to support that cooperation and the APFF is vehicle to support the expansion of long-term finance in infrastructure investment in the waste management sector.

It was noted that around 57% of Japan's budget relating to waste management is provided as subsidies to local governments and councils. A large proportion of Tokyo's metropolitan budget is allocated to waste management; some portion of this is financed by tipping fees and other income and from transfers from the national government. PPP projects involving private sector financing are utilized. Government subsidies are indispensable in meeting financing needs. The Indonesian government ought to allocate significant funding to the Ministry of the Environment to support waste management policies and it is important that Indonesia use the Viability Gap Payment mechanism to support the financing effort. A case study of a waste-to-energy project in Jakarta was presented to highlight some of the specific questions and challenges waste management infrastructure developers currently face in Indonesia.

Key issues raised in the dialogue

Experts noted that poor waste management has significant consequences for our oceans, the environment, public health, and economic growth. For example, in Indonesia, an estimated \$166 million is lost in tourism revenues due to sanitation conditions, including a lack of efficient waste management and other elements.

The public and private sector need to work together through well-structured public-private partnerships (PPPs) to address waste management challenges. Projects should support and be aligned with wider national waste management master plans (if available). When developing national waste management plans economies are encouraged to seek input and feedback from external stakeholders through a transparent and inclusive process. Successful PPP projects in the waste management sector require stakeholders to consider the content and volume of the existing waste stream, the appropriate technologies, the imperative of complying with international environmental standards and community engagement and finally who will pay for what and take which risks.

¹ IEG (Investment Experts' Group). 2015. Guidebook on PPP Frameworks in APEC Region. http://publications.apec.org/publication-detail.php?pub_id=1638.

In 2016 APEC economies endorsed a set of policy and practice recommendations for overcoming barriers to financing waste management systems and reducing marine litter.² The recommendations offer guidance for establishing the political, economic, and legal/regulatory conditions to incentivize investment in waste management solutions in APEC economies by private investors, multilateral development banks, and other sources of capital. Taking into account those recommendations together with previous work conducted through the Asia-Pacific Infrastructure Partnership and APEC Finance Ministers Process the following key challenges and recommendations based on the unique aspects of developing waste management systems in Indonesia through Public-Private Partnerships were proposed during the course of the dialogue.

Key Challenges

Private sector and MDB participants identified some key specific challenges that are of greatest relevance to Indonesia in designing and implementing effective waste management approaches through public private partnerships. They are summarized below:

1. Streamlining institutional arrangements and clarifying roles and responsibilities in promoting PPPs in solid waste management

There are currently 27 government ministries and agencies involved in waste management at the national level including the Ministry of Environment and Forestry, the Ministry of Public Works, the Ministry of Energy and Mineral Resources, the Ministry of Finance, the Coordinating Ministry on Maritime Affairs and others. Planning and decision-making by government bodies can be confounded by overlapping ownership of waste management programs and competing agendas among departments, which can cause confusion within the private sector community. The establishment of a PPP center within the Ministry of Finance in Indonesia was meant to play a key role in inter-agency coordination however unless given sufficient legal authority and political support, it is likely to face challenges in meeting its designed objectives.

2. Insufficient funding and priority provided for waste management efforts

The funding levels for waste management in many developing economies are inadequate. According to the UNEP and ISWA Global Waste Management Outlook report, for economies aiming to increase collection rates to levels of 95% or higher, spending 1% of gross national income (GNI) is considered best practice. In Indonesia, 1% of GNI would translate to about \$70-\$130/metric ton of waste generated. Yet many regions spend far less than 0.5%³. In 2014, the Indonesian Directorate General of Human Settlement's budget for waste management was \$105 million or 0.01% of GNI. In addition, many households either cannot afford collection fees or by virtue of cultural norms do not place enough value on collection to pay a fee for the service, especially when the alternatives of dumping, burning or burying trash is culturally acceptable, poorly regulated and free. However, poorly managed waste often results in higher costs for governments than if the waste was managed properly in the first place⁴.

3. Inadequate collection of waste

In practice, collection levels in Indonesia remain low at 56% in urban areas⁵ and 5% in rural areas. Making a waste management system sustainable will require funding of a collection infrastructure that is locally appropriate, facilitates modern waste treatment and recycling methods as appropriate while allowing for modernization in the future; provides convenient access to aggregated, separated materials; accelerates development and employment of new treatment technologies; provides inclusion opportunities for waste pickers to participate in formal waste management; and steadily increases the proportion of plastic products that are profitably recyclable³.

² APEC Policy and Practice Recommendations

³ Global Waste Management Outlook

⁴ The Next Wave: Investment Strategies for Plastic Free Seas, 2017.

⁵ SMEC and Australian AID, "Journal of the Indonesia Infrastructure Initiative Prakarsa,"

4. Insufficient data on waste composition and logistics

Waste managers in Indonesia are hampered by insufficient or poor quality data on basic waste statistics like waste generation, collection levels, composition, and waste related governance issues. It is inherently difficult to collect data on waste, as it is variable and heterogeneous in composition. Yet good decisions about waste require information and numerical data on which managers can rely. Without proper data, it is difficult to be accountable and transparent, to design sound strategies or to make wise budget decisions.⁶

5. Legislative and regulatory uncertainty

Participants noted various uncertainties were creating additional risks for potential investors. These risks could include off-take security and changes in selling unit price or tipping fees, changes in law and/or regulations, including tariff reductions, adequate environmental regulations and enforcement, and the need to establish appropriate compensation mechanisms in case of any such changes. The issue of land acquisition, how permits and licenses are obtained, and how tenders and technologies are evaluated was also raised as was the question of how waste is defined.

6. Limited use of available tools

Project preparation and credit worthiness was also noted as a limiting factor in developing a pipeline of bankable projects. Indonesia has started to make use of viability gap funds (VGF), infrastructure guarantee funds, and other government guarantees⁷ however to date they have not been used extensively for waste management projects and there were questions as to how these tools could be applied to waste management projects.

Recommendations to meet the challenges

Participants offered the following recommendations during the course of the dialogue:

1. Develop an overall plan for promoting PPPs in solid waste management and clearly define objectives and responsibilities

a. Streamline the decision making process and identify a lead agency for waste management

Streamlining decision making and concentrating the majority of municipal solid waste responsibilities within a single government entity or independent department or agency, while clearly defining the waste-related roles and responsibilities of remaining institutions will help reduce ambiguities which are seen as an investment risk⁸.

b. One stop shop for licenses and permits

While efforts have been made to streamline the acquisition of licenses and permits it was still unclear to many private sector participants as to the best way to acquire the necessary licenses and permits. Identifying a PPP unit with defined roles and the necessary level of authority to implement PPPs can help streamline the PPP process. Such an entity could also be afforded the authority to coordinate with relevant ministries and issue permits and licenses required for waste management systems.

c. Increase and improve data collection

⁶ Guidelines for National Waste Management Strategies: Moving from Challenges to Opportunities, UNITAR

⁷ Economist Intelligence Unit. 2014a. Evaluating the Environment for Public-Private Partnerships in Asia Pacific, the 2014 Infrascope. http://www.eiu.com/public/topical_report.aspx?campaignid=AsiaInfrascope2014.

⁸ Overcoming Barriers to Financing Waste Management Systems and Reducing Marine Litter: APEC Policy and Practice Recommendations

In order to promote PPPs in solid waste management additional information and transparency regarding waste volumes, flows and costs will help relevant stakeholders plan better and reduce the perceived risk of the project.

d. Establish targets and clear objectives

Setting targets and clear objectives and making that information available to the private sector, will help promote private sector engagement. To support targets, consideration should be given to developing key, carefully standardized waste definitions (e.g., definitions of what is recyclable, organic, etc.) and establishing waste statistics (e.g., waste generation, composition, collection rate, recycling rate)⁷.

e. Consult with relevant stakeholders

Public consultation is a critical component of good regulatory practice and an integral part of a wellfunctioning economy. Engaging stakeholders and the general public throughout the lifecycle of a regulation enables policy makers to receive critical feedback about the effects of a particular regulation and helps ensure that regulations perform efficiently in an economy with minimal negative side effects. In following with APEC accepted best practices Indonesia should engage in public consultation regarding the national waste management plan before finalizing any legislation or regulation and take any feedback into account.

2. Prioritize waste management in budget allocations and improve collection rates

a. Increase funding for waste management at the national and municipal level

Increasing investment and governmental financial support in local waste management is essential. In the absence of well-funded collection and sorting systems, these facilities lack the reliable input to generate stable revenue and return on investments. Balanced investment in integrated waste management could enhance the prospects for follow-on investment as sources of investment capital perceive the potential revenue to outweigh the risk.

b. Educate citizens on the importance of waste management

Changing citizen behavior is an important component of establishing an effective collection and separation program. Investments in these education and social marketing campaigns should be considered as an integral part of implementing waste collection. Additionally, any collection scheme must take entrepreneurial waste pickers into account and ensure their interests are protected and project implementation is holistic.

3. Establish program of pilot cities for sustainable waste management systems

While more traditional infrastructure projects such as energy or transportation have been developed through public-private partnerships the Government of Indonesia should consider developing a series of benchmark projects for waste management. The benchmark projects 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. Frontrunner cities which lead in waste management achievements could serve as role models for other cities to learn from and emulate at regional and/or economy-wide levels. Presidential decree 18/2016 was meant to serve this purpose however when revising the decree and in preparing and developing the projects the following aspects should be taken into account:

a. Adopt a technology neutral approach

There is not a one-sized fits all technology and plan that will work in all localities. Waste management planners should adopt a technology neutral approach at the outset and adopt the best technology for the individual situation.

b. Adhere to internationally accepted environmental standards

Enabling innovative treatment technologies is a fundamental part of increasing the value that can be recovered from waste and achieving a sustainable waste management system. However, without the adherence to internationally accepted environmental standards (e.g. ISO and ASTM), there can be environmental and community health risks associated with certain technologies. These risks need to be evaluated to determine whether a specific approach is appropriate.

c. Provide support for local communities and identify champions

Solid waste management is often regarded as the most local of all public utilities and one that is increasingly falling to municipalities as Indonesia decentralizes public services. Given this dynamic it has become more important to engage 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. Additionally, without political encouragement and support from the highest levels of government, public officials at the central, provincial and local levels 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. Finally, as it is difficult for municipalities in developing countries to pay private operators enough to cover the cost of all waste management services, the central government often has to provide additional funding. Participants also noted the importance of having a champion of the project to help guide the project along the necessary approval processes.

d. Use available tools to improve project preparation

Indonesia has made significant efforts to improve project preparation and transparency including the publication of PPP projects by the Ministry of National Development Planning. Tools from the ADB, World Bank, G20 Global Infrastructure Hub, International Infrastructure Support System and others should be used in developing project proposals. Additional information on the use of government guarantees should be provided.

e. Appropriately assign risk

A principal benefit of implementing projects under PPP arrangements is the ability to allocate risks to the party that can best mitigate them. Certain risks such as political risk, land purchase or site risk are often best controlled by the public sector. By assuming certain risks such as resource or input risk (e.g. the contracting authority takes risk on delivery and the characteristics of waste) and providing appropriate compensation for changes in regulations or offtake pricing the government can significantly improve the overall risk profile for investors.

Officials responded to the challenges identified by the private sector and MDBs in the following terms:

- Interested foreign participants in waste management in Indonesia ought to fully understand the laws, regulations and processes already in place.

- Information is available on Indonesia's PPP scheme including guidelines on waste management projects.
- Best practice PPP approaches as outlined by the private sector are applicable in Indonesia.
- Decrees outline the process on which Viability Gap Payments can be made available.
- A newly established joint coordinating office (including MOF, Bappenas, the Procurement Agency) is

unlike the Philippines PPP Centre and will act more as a coordinating role and facilitator to provide onestop advice to interested parties.

- Guarantee processes under the Indonesian Infrastructure Guarantee Fund are not complicated and are there to ensure that government agencies that undertake projects fully understand the risks involved in a contract; guarantees improves the credit worthiness of PPP projects and the Fund provides capacity building to improve project preparation.

- Sarana Multi Infrastuktur (SMI) was established by MOF and acts as a catalyst in the provision of infrastructure funding. The World Bank and the ADB provide loans for infrastructure funding through SMI; its portfolio is dominated by transport finance – toll roads – power plants and it has three projects in the renewable energy sector and none in waste management.

- A waste to energy project had collapsed because it lacked local government support; there is also a lack of understanding of the importance of tipping fees and a failure to commit to projects at local government level and to commit to enforce regulations.

- Indonesia welcomed co-operation with agencies in the Philippines government and with the ADB.

Concluding remarks

The APIP chair noted that the dialogue had been most constructive. He observed the importance of waste as a potential source of renewable energy but that not all cities in Indonesia could benefit. There is important cooperation between Indonesia and Japan and other economies. He noted the fact that in Japan, the Tokyo municipal government relied on central government subsidies and that a key point in Indonesia would be coordination on finance between national, provincial and city governments. A coordinated national master plan seemed to be a fundamental need. The importance of reliable data and information systems is necessary in building a pipe-line of waste management infrastructure projects and the work of GIH and SIF would be most helpful in contributing to project design and preparation. Regulatory issues and links between waste management and other public policies, including importantly health and the maritime environment were extremely important as was the need for effective legislation and enforcement.

In response, the Director for Mining and Energy Infrastructure, Coordinating Ministry for Maritime Affairs thanked the organizing committee and participants for an informative and constructive dialogue. He noted that mayors are the owners of waste management projects and the task of management is mandated to municipalities. The Department leads a coordinating team and it involves other major central agencies. Several mechanisms are in place to fund projects and some constraints exist in relation to land acquisition. Not all cities have master plans and Indonesia welcomed support in developing high quality feasibility plans. An agency is assigned the task of evaluating tender processes but support to accelerate projects would be welcome. He hoped that the dialogue was the start of of a process of cooperation.

Summary of Key Suggestions by APIP and the Conference Participants on the Way Forward

- Develop a consultation plan to aid in the development and implementation of the National Solid Waste Management Plan and National Marine Debris Action Plan.
- Identify champions within the local governments for Indonesian cities wishing to develop waste management projects. Task the Coordinating Ministry of Maritime Affairs at the national government level to help cities in their efforts.
- Develop a one-stop shop for licenses and permits and publicize the process.

• Undertake additional capacity building efforts with JICA, APIP, APFF, GIH, ADB, WBG and other relevant stakeholders to help develop projects that are attractive to private sector and qualify for Indonesian government financial support (e.g. government guarantees).

This note was prepared by Dr. Ryan MacFarlane, Director, C&M International and Ken Waller, Coordinator, APIP.

7th April 2017.

Annex A - Meeting Agenda







Promoting PPPs in Waste Management Projects A Joint APFF/APIP Dialogue with the Government of Indonesia

14 March 2017 14:00 - 17:30

Bandung-Surabaya Rooms (Mezzanine Level), The Hermitage Hotel, Jakarta, Indonesia

<u>AGENDA</u>

- 13:30 14:00 Participants' Registration
- 14:00 14:15 Welcome Remarks
 - Ms. Tuti Hendarawati Mintarsih, Directorate General for Solid Waste, Hazardous Waste and Hazardous Substances Management, Ministry of Environment and Forestry
 - Ms. Mari Takada, Minister for Economic Section, Embassy of Japan in Indonesia
 - Dr. Julius Caesar Parreñas, Coordinator, Asia-Pacific Financial Forum (APFF)

14:15 – 14:20 **Introductory Remarks and Perspectives from the Private Sector** Mr. Mark Johnson, Senior Advisor, Gresham Partners; and APIP Chair

14:20 – 14:35 **Presentation on a Waste-to-Energy Project (WtE) in Indonesia Currently Being** Planned and Discussed: Situation, Challenges and Opportunities

 Waste management and implementation challenges: The case of the Japan Ministry of the Environment's bilateral cooperation project with Indonesia

Presentors:

- Ms. Hiroko Yokota, Sector Chief, Office of Sound Material-Cycle Society, Waste Management and Recycling Department, Ministry of the Environment, Japan – *The bilateral cooperation project*
- Ms. Noriko Otsuki, Waste Management Engineer, Overseas Operations Department, Kokusai Kogyo Co., Ltd. – Implementation challenges
- Sharing Tokyo's experience in fiscal spending for waste management

Presentor:

 Mr. Kentaro Oshima, International Cooperation Division for Waste Management, Clean Authority of Tokyo (CAT23)

14:35 – 15:30 **Discussions on Agenda Items**

Jointly moderated by Ms. Haruki Agustina, Head of Sub-directorate for Specific Waste and Recycling, Directorate for Solid Waste Management, Ministry of Environment and Forestry and Mr. Mark Johnson

 Best practices in construction and operation of waste management projects (waste-to-energy, recycling, collection): project scope/assumptions, term of contract preparation of bidding documents, system design, selection of contractor, selection of appropriate technology, environmental impact, monitoring of facility, etc.

Lead discussants:

- Ms. Cary Ann Cadman, Environment Sector Coordinator, Indonesia, World Bank
- Mr. Pierre Sarrat, PPP/Transport Specialist, Asian Development Bank
- Mr. Kin Chan, Advisor, PwC
 - Mr. Mamoru Kondo, Chairman, Technical Committee, Japanese Environment Facility Manufacture Association (JEFMA)
- Regulatory issues (e.g., legal and regulatory frameworks for municipal solid waste)

Lead discussants:

- Mr. Gen Tsukada, Environmental Policy Adviser, JICA Expert for Ministry of Environment and Forestry Indonesia
- Ms. Susan Ruffo, Managing Director, International Initiatives, Ocean Conservancy
- Dr. Thomas Tang, Director, Corporate Sustainability, Asia, AECOM
- Mr. Jeffrey Fielkow, Vice President Environment, Tetra Pak Asia
- Mr. Michael Harrison, Partner, Energy, Transport and Infrastructure Group, Ashurst

15:30 – 15:45 **Coffee Break**

15:45 – 17:10 Continuation of Discussions on Agenda Items

Inter-agency coordination

Lead discussant:

- Dr. Ryan MacFarlane, Director, C&M International
- Risk allocation among public and private sector stakeholders

Lead discussants:

- Mr. Mark Moseley, Senior Director, Legal Frameworks and Procurement Policies, Global Infrastructure Hub
- Mr. Raj Thammineni, Managing Director, Global Real Assets Asian Infrastructure, JP Morgan Asset Management Real Assets (Asia) Ltd.
- Mr. Jim Buchanan, Partner, Projects, Energy & Infrastructure Finance, Berwin Leighton Paisner
- Mr. Hideaki Shima, Senior Vice President, Mitsubishi Heavy Industries Asia Pacific Pte Ltd (MHI-AP)
- Financing (use of subsidies, feed-in tariffs, guarantees and taxes)

Lead discussants:

- Mr. Tetsuya Harada, Senior Representative, JICA Indonesia Office
- Mr. Allard Nooy, Chief Executive Officer, InfraCo Asia Development Pte. Ltd.
- Mr. Ray Tay, Vice President and Senior Analyst, Moody's Investors Service
- Mr. Timothee Bihet, Associate Fixed Income and Compliance, Asia Securities Industry & Financial Markets Association (ASIFMA)
- 17:10 17:20 Conclusions and Recommendations for Developing Bankable Waste Management Projects in Indonesia and Other Developing APEC Economies Mr. Mark Johnson, Senior Advisor, Gresham Partners; and APIP Chair
- 17:20 17:30 **Closing Remarks** Yohannes Yudi Prabangkara, Director for Mining and Energy Infrastructure, Coordinating Ministry for Maritime Affairs

Promoting PPPs in Waste Management Projects

A Joint APFF/APIP Dialogue with the Government of Indonesia

14 March 2017

Attachments

Presentations

Presentation 1.(to be printed) Ms. Hiroko Yokota, Sector Chief, Office of Sound Material-Cycle Society, Waste Management and Recycling Department, Ministry of the Environment, Japan – <i>The bilateral</i> <i>cooperation project</i>	
Presentation 2.Ms. Noriko Otsuki, Waste Management Engineer, Overseas Operations Department, Kokusai Kogyo Co., Ltd. – <i>Implementation</i> <i>challenges</i>	
Presentation 3.Mr. Kentaro Oshima, International Cooperation Division for Waste Management, Clean Authority of Tokyo (CAT23)	003

Materials for discussion

Material 1.	Mr. Mark Moseley "Extract from GI Hub Report on Allocating Risks in PPP Contracts"	006
Material 2.	Mr. Timothee Bihet, "ASIFMA Infrastructure Project Bonds Factsheet"	018
Material 3a.	Mr. Michael Harrison "Areas for Legislative _ Regulatory Framework"	029
Material 3b.	Mr. Michael Harrison "InfraRead Issue 9_Standalone Waste Article_v6"	030

Materials for reference

Conference Reports of Asia-Pacific Infrastructure Partnership (APIP) Dialogues with the Government of Indonesia	
The Next Wave: Investment Strategies for Plastic Seasprinted separately	Free



Other materials are also available at http://ur0.biz/BMyj.

(You may be warned if you want to be connected to <u>https://1drv.ms/f/s!AgITifVYOFqfhgdA_qE99GO1NsfM</u>. Click this URL.)

Annex B – Meeting Participants







Promoting PPPs in Waste Management Projects A Joint APFF/APIP Dialogue with the Government of Indonesia

14 March 2017 14:00 - 17:30

Bandung-Surabaya Rooms (Mezzanine Level), The Hermitage Hotel, Jakarta, Indonesia

LIST OF PARTICIPATING ORGANIZATIONS

Government of Indonesia

Coordinating Ministry for Economic Affairs

Coordinating Ministry for Maritime Affairs and Natural Resources

Ministry of Energy and Mineral Resources

Ministry of Environment and Forestry

Ministry of Finance

- Indonesia Infrastructure Guarantee Fund

- PT SMI

Ministry of National Development Planning (BAPPENAS)

Agency for the Assessment and Application of Technology (BPPT)*

Ministry of Public Works and Housing (PUPR)*

Ministry of Home Affairs (DAGRI)*

Investment Coordinating Board (BKPM)*

DKI Jakarta / Regional Development Planning Board*

Other Government Participants

Embassy of Japan

Ministry of Environment Japan

Japan International Cooperation Agency

Embassy of the United States of America United States Treasury

Participants from International Organizations

Asian Development Bank World Bank / International Finance Corporation G20 Global Infrastructure Hub

Private Sector Participants

AECOM Ashurst LLP Asia Securities Industry & Financial Markets Association **Berwin Leighton Paisner C&M** International **Gresham Partners** Hitachi Zosen Corporation Japan Waste Management Consultant Association Nippon Koei Co PCKK International Asia Pte Ltd JFE Engineering Corporation Nippon Steel & Sumikin Engineering Co., Ltd. JP Morgan Asset Management Real Assets (Asia) Ltd. Kokusai Kogyo Co Mitsubishi Heavy Industries Asia Pacific Pte. Ltd. Moody's Investors Service Nippon Koei Co., Ltd. Nomura Singapore Limited **Ocean Conservancy** PT. AIA Financial PWC

* Participation to be confirmed

Tetra Pak Asia

The Bank of Tokyo-Mitsubishi UFJ

Other Groups and Associations

Clean Authority of Tokyo (CAT23) Credit Guarantee and Investment Facility Indonesia Infrastructure Initiative Indonesia Waste Management Association InfraCo Asia Development Pte. Ltd. Japan External Trade Organization United Cities and Local Governments – Asia Pacific (UCLG ASPAC)*