



OECD- Workshops

Mainstreaming climate resilience in infrastructure planning and investment in Indonesia

18 & 19 December 2023, 9am-18pm, Jakarta

Agenda

Background

Infrastructure is essential to support Indonesia's rapidly expanding population and economy. Yet, infrastructure assets and operations are highly vulnerable to the impacts of climate change. In 2020, Jakarta experienced some of the worst floods in decades, which displaced more than 30,000 people, cut off electricity and piped water, severed a number of roads, and shut down one of the city's two airports, causing an estimated economic loss of Rp 854 billion in the infrastructure sector, due to physical damage as well as loss of revenue. The cascading impacts of infrastructure failure also jeopardize critical service provision, including health and food.

Given the long lifespan of infrastructure assets, the investment decisions made today will have a major impact on Indonesia's ability to achieve its net-zero goals and resilience objectives laid out in the Long-Term Strategy for Low Carbon and Climate Resilience 2050. For Indonesia, there is a once-in-a-generation opportunity to build back better following the COVID-19 pandemic and tackle the triple challenge of closing the infrastructure investment gap, stimulating a sustainable economic recovery while progressing towards long-term climate resilience and development goals.

The Sustainable Infrastructure Programme in Asia (SIPA) supports BAPPENAS in strengthening climate resilience across all infrastructure. It seeks to help address existing challenges and identifying opportunities and build capacities to integrate climate resilience in infrastructure planning and financing. The project contributes to supporting BAPPENAS in the review and development of its new Long-Term National Development Plan (RPJPN 2025-2045) and Medium-Term National Development Plan (RPJMN 2025 – 2029) that will be aligned with climate, resilience and broader sustainable development goals that also supporting one of the 5 Development Agendas, Socio-Cultural Resilient and Ecological

Workshop Objectives and Expected Outcomes

The workshops seek to bring together senior government officials from the water and transport sectors to discuss the current sectoral awareness, engagement and achievements in mainstreaming climate resilience in infrastructure planning. These workshops will focus specifically on three key thematic areas, namely climate risk assessment, nature-based solutions and support to local governments.

The objectives of these workshops are threefold:

- Building capacity on three thematic areas through peer-learning
- Fostering a dialogue among government officials who create the enabling environment for climate resilience mainstreaming in sectoral infrastructure planning



On behalf of:



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- Identifying barriers in the three thematic areas, considering sectoral differences

The outcomes of these workshops will be the identification of opportunities to strengthen the integration of climate risks and nature-based solutions in water and transport infrastructure planning and investment. Considering the role of local governments in these sectors, these workshops will also address options to support provinces and municipalities in considering climate resilience in infrastructure planning. The outcomes of these workshops will inform an OECD report reflecting this dialogue.

The workshops are designed to provide an opportunity for an interactive – and open – discussion. The workshops discussion and agenda are informed by the OECD-Bappenas survey results on the state-of-play of climate resilience mainstreaming in infrastructure planning, as well as additional background research carried out by the OECD to date.

Agenda

The workshops will begin with a general introduction to climate resilient infrastructure to clarify the concept and give an overview of the enabling environment that national governments can provide to infrastructure stakeholders. This introduction will be followed by a roundtable, gathering the main coordinating and oversight agencies and ministries who can contribute to such environment. All the participants will be able to share their experience on climate resilience mainstreaming and plans for the next years. This roundtable will facilitate a discussion on existing gaps observed by sectoral stakeholders or opportunities identified in the roundtable.

The following sessions of the workshops are thematic ones. For each thematic area:

- A capacity building session will be first organised to provide an opportunity for peer learning. International organisations and representatives from specific countries will provide a brief presentation of their experience. These capacity building sessions will be followed by Q&A sessions and are aimed at providing inspiring examples on what can be done in the different areas.
- A discussion on the state-of-play in Indonesia will then take place for each thematic area. First, the OECD will share a brief assessment of the state-of-play based on desk-based research and the joint OECD-Bappenas survey. Then, selected government officials will have the opportunity to introduce their work on the specific area considered. For instance, the agency in charge of the national climate risk assessment will be able to present its work, the availability of data and existing support for infrastructure stakeholder. This session aims at facilitating a dialogue between sectoral experts and coordinating or oversight agencies
- Each thematic session will then be followed by sectoral break-out groups to delve into the specificities of the sectors and discuss possible avenues to fill the identified gaps.

Workshop set-up & participants

The workshops will be held over two days. The meetings will be attended by around 40 representatives of Bappenas and other selected bodies of the Government of Indonesia as well as the OECD and several international partners (the International Institute for Sustainable Development, IISD; the World Wildlife Fund for Nature, WWF; World Bank; ADB)



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Day 1	
9.00 –9.30am	Welcome participants and coffee.
9.30-9.40 am	<p>Introductory remarks by Ministry of National Development Planning/National Development Planning Agency</p> <p>Dr Sumedi Andono Mulyo, Director for National Priority Infrastructure Projects Development and Planning, Bappenas</p>
9.40 -9.45 am	Introductory remarks by the OECD to present the agenda and objectives of the workshops
9.45-10.10am	<p>Climate resilient infrastructure: the enabling environment</p> <p>In this session, the OECD will provide a brief overview of the rationale for mainstreaming climate resilience in infrastructure planning, illustrating the concept with examples and good practice insights from other countries. This session will be followed by a Q&A session (10’- 15’)</p>
10.10- 10.30 am	Coffee break
10.30 -12.00 pm	<p>Roundtable on the enabling environment in Indonesia</p> <p>In form of a round table, BAPPENAS, the Ministry of Environment and Forestry, the Ministry of Finance and the Ministry of Public Works and Housing will share their experience on specific aspects of climate resilience mainstreaming in infrastructure planning.</p> <ul style="list-style-type: none"> <p>Ministry of National Development Planning/National Development Planning Agency: Key Point to Discuss: Bappenas will detail the existing processes to select and approve infrastructure projects and the consideration given to climate resilience. This will be the opportunity to discuss the criteria to select priority projects, the methods and tools in place to assess if projects are climate resilient or their lack thereof. Bappenas can also explain how they engage with the local governments on infrastructure projects and local level progress in integrating climate resilience in their regional medium-term development and strategic plans.</p> <p>Ministry of Environment and Forestry: Directorate of Climate Change Adaptation). Key Point to Discuss: The Ministry will introduce how climate adaptation policies can support infrastructure planning and the current engagement on climate risk assessment and nature-based solutions. It will also mention possible action and progress (e.g. development of local climate change action plans) and efforts to improve capacity (e.g. support for governments in priority locations) at local level if relevant.</p> <p>Ministry of Finance (budget): Center for Climate Change and Multilateral Financing Policy, BKF.</p> <p>Key Point to Discuss: The ministry will explain how budget is allocated to climate resilience and infrastructure objectives, at national level as well as local level (e.g. what share of infrastructure and resilience financing needs do local governments</p>

	<p>cover through their own sources). It will also elaborate how different funding sources come into play to finance infrastructure and specifically resilience in infrastructure development (e.g. Medium-term development plan, climate resilience policy, different PPP schemes, Indonesia Climate Change Trust Fund, Disaster Pooling Fund). If available, the presentation may reflect on the budget tagging system and observed trends in financing climate resilience in infrastructure development and the sufficiency of allocated budgets and efforts to increase private sector finance.</p> <ul style="list-style-type: none">• Ministry of Public Works and Housing (department in charge of regulations and building codes): Center for National of Regional Infrastructure Development. <i>Key Point to Discuss:</i> This intervention will provide a more practical overview of the environment for climate resilient infrastructure, focusing on building codes and standards, regulations specifying the integration of climate risks in environmental impact assessment or building processes, work at local level and consideration of nature-based solutions as a complement to grey infrastructure.
12 am. – 13.30 am	Lunch
13.30– 14.30	<p>Sharing knowledge on climate risk assessment</p> <p>This session will provide an opportunity to discuss best practices, challenges and the experience of countries to assess climate risk for infrastructure planning. It will be followed by a Q&A session. The participants are:</p> <ul style="list-style-type: none">- Maike Kirsch, OECD- Mabelline Cahulogan, The Department of Science and Technology, Philippines- Joanna M. Mc Millan, Institute of Spatial and Regional Planning, Germany
14.30-15h30	<p>Climate risk assessment in Indonesia – The state of play</p> <p>The OECD will provide a brief overview of the state of play in the water and connectivity sectors in developing robust climate risk assessments (5 min)</p> <p>OECD will then moderate a roundtable to take stock of existing tools in the country and their integration in infrastructure projects. It will be the opportunity to react to the OECD assessment of the state-of-play before delving into sectors’ challenges.</p> <ul style="list-style-type: none">• Ministry of National Development Planning/National Development Planning Agency: Directorate for Environmental Affairs <i>Key Point to discuss:</i> This presentation will introduce the priorities related to climate resilience for the long term and mid-term development plan, how the infrastructure is considered from the directorate’s perspective and how does the directorate coordinate with the P3PN team. In addition, the presentation could reflect on the possible challenges to mainstream climate resilience in planning (for instance, are there criteria to discriminate projects that are not climate resilient, do Environmental Impact Assessments include climate resilience criteria, are there national targets in the mid-term development plan in terms of climate resilient infrastructure...?).• National Disaster Management Authority (BNPD): Directorate of Disaster Management Systems <i>Key Point to discuss:</i> The presentation will present the different climate data that are collected by BNPD with a focus on infrastructure assets. It will introduce briefly InaRisk and explains who can use it, how, and what is maybe missing to

	<p>assess infrastructure exposure and vulnerability. It can also explain how the Satu Data Bencana Indonesia (Indonesia One Disaster Data) comes into play alongside InaRisk. The presentation could also reflect on the challenges to project climate risks on infrastructure. BNPD will explain whether there are any standards or guides to develop climate risk assessment, including at local level. Finally, BNPD can discuss the different vulnerability assessments (Climate resilience policy, SIDIK Vulnerability assessment) and whether they are conflicting in setting priorities.</p> <ul style="list-style-type: none"> Meteorology, Climatology and Geophysical Agency (BMKG), notably the Climate Change Information Centre (ITB): Center for Climate Change Information <i>Key Point to discuss:</i> BMKG will introduce their activities on and climate projections, their availability for the country and regions. It can also reflect on the challenges to provide climate projections at local level that can be used to conduct climate risk assessment and discuss existing tools such as risk maps. It will also discuss future plans to support ministries and local governments to assess climate risks, if relevant. 	
15.30 – 16.00	Coffee break	
16.00-16.45	<p>Climate risk assessment for water infrastructure The break-out group will gather representatives from the water sector and relevant agencies and will aim at facilitating an interactive discussion on ways to improve on the key gaps identified on the integration of climate risks assessment in water infrastructure planning.</p> <p><i>List of participants required:</i> Ministry of Public Works (Department in charge of water infrastructure); Ministry of Agrarian Affairs and Spatial Planning; Ministry of Environment and Forestry;; other water relevant companies and water basin organisations <i>List of optional participants:</i> ITB; BPD; Ministry of Environment and Forestry; University</p>	<p>Climate risk assessment for transport infrastructure The break-out group will gather representatives from the transport sector and relevant agencies and will aim at facilitating an interactive discussion on ways to improve on the key gaps identified on the integration of climate risks assessment in water infrastructure planning.</p> <p><i>List of participants required:</i> Ministry of Transportation; Ministry of Agrarian Affairs and Spatial Planning; Ministry of Environment and Forestry; Ministry of Public Works and Housing; Ministry of Communication and Informatics (Kominfo) <i>List of optional participants:</i> ITB; BPD; Ministry of Environment and Forestry; University</p>
16.45 -17.00	Summary of the break-out group and conclusions for the day	

Day 2	
9.00 – 9.30am	Welcome participants and coffee.
9.30-09.45 am	Introductory remarks by Ministry of National Development Planning/National Development Planning Agency

	<p>Dr Sumedi Andono Mulyo, Director for National Priority Infrastructure Projects Development and Planning, Bappenas</p>	
<p>9.45-10.30 am</p>	<p>Sharing knowledge on supporting local governments in mainstreaming climate resilience in infrastructure planning</p> <p>This session will provide an opportunity to discuss best practices, challenges and the experience of countries to best support local governments in considering climate resilience in infrastructure planning. It will be followed by a Q&A session. The participants are:</p> <ul style="list-style-type: none"> -Shail Joshi, WWF -Department of Interior and Local Governments, Philippines -Dr. Jong-Ho Ahn, Korea Environment Institute, Korea 	
<p>10.30-11.00am</p>	<p>Mainstreaming in climate resilience in infrastructure planning at local level - State-of-play in Indonesia.</p> <p>The OECD will provide a brief overview of the state of play of local government's action in infrastructure planning and financing. (5 min). Then they will moderate a roundtable to take stock of existing policies or incentives to support local governments in mainstreaming climate resilience in infrastructure planning:</p> <ul style="list-style-type: none"> • Ministry of Agrarian Affairs and Spatial Planning: Directorate of National Spatial Planning Key Point to discuss: The directorate will provide information on how climate risks are incorporated in spatial planning (for instance, does spatial planning require the identification of no-build zones due to climate hazards? Are Environmental Impact Assessment and Strategic Environmental Assessment needed for infrastructure projects and do they incorporate climate risks?). It will then discuss whether local governments respect spatial planning requirements and possible challenges for local governments to integrate climate risks in planning of infrastructure. Key Point to discuss: • Ministry of Public Works and Housing: Center for Regional Infrastructure Development Regional II (responsibility for local infrastructure) Key Point to discuss: The Center for regional infrastructure will discuss how they work at regional level with local governments, outlining the various provisions (i.e. <i>infrastructure development and rehabilitation, technical assistance, and technical and service performance standards</i>) and whether these consider or require to build climate resilient infrastructure and consider nature-based solutions. It if does not, it can explain why it is a challenge. The presentation will also explain how the projects are conceived, prioritized and funded and where challenges exist for local governments to integrate climate resilience in infrastructure planning. 	
<p>11.00-12.00 am.</p>	<p>Local governments' role for water infrastructure</p> <p>The break-out group will gather representatives from the water sector and relevant agencies and will aim at facilitating an interactive discussion on ways to improve on the key gaps identified to better support local governments in integrating climate resilience in water infrastructure planning and financing.</p>	<p>Local governments' role for transport infrastructure</p> <p>The break-out group will gather representatives from the transport sector and relevant agencies and will aim at facilitating an interactive discussion on ways to improve on the key gaps identified to better support local governments in integrating climate resilience in transport infrastructure planning and financing.</p>

	<ul style="list-style-type: none"> <i>List of participants required:</i> Ministry of Public Works (Department in charge of water infrastructure); Ministry of Agrarian Affairs and Spatial Planning; Ministry of Environment and Forestry; Local River Basin Organizations (BWS - Badan Wilayah Sungai); representatives from local governments. <p><i>List of optional participants:</i> tbc</p>	<p><i>List of participants required:</i> Ministry of Transportation; Ministry of Agrarian Affairs and Spatial Planning; Ministry of Environment and Forestry; Ministry of Communication and Informatics (Kominfo); Ministry of Public Works and Housing; representatives from local governments or provinces</p> <p><i>List of optional participants:</i> tbc</p>
12.00/12.15	Summary of the break-out group	
12.15-13.30	Lunch	
13.30-14.30	<p>Nature-based solutions for infrastructure in Indonesia – State-of-play</p> <p>The OECD will provide a brief overview of the state of play in the water and transport sectors’ progresses in integrating NbS in infrastructure planning and investment (5min)</p> <p>Then roundtable with Indonesia key stakeholders to present existing tools, their integration in infrastructure projects.</p> <ul style="list-style-type: none"> Ministry of Environment and Forestry (Department in charge of environmental protection): Directorate for Climate Change Mitigation <i>Key Point to discuss:</i> The presentation will introduce its strategy to implement nature-based solutions, how they can contribute to climate resilience of infrastructure in the water and transport sectors, what is currently done in Indonesia to facilitate their use and if there are any guidelines or standards to include nature-based solutions. It will also reflect on the challenges to implement nature-based solutions (for instance: capacity, understanding the benefits, the costs.) Ministry of Public Works and Housing (Department in charge of planning, construction): Secretariat Directorate for Build Construction <i>Key Point to discuss:</i> The presentation will discuss the criteria to make sure that infrastructure can withstand climate impacts, the knowledge of nature-based solutions and what would be needed to consider nature to reinforce the resilience of infrastructure. Wetlands International Indonesia <i>Key point to discuss:</i> The presentation can showcase examples of nature-based solutions if relevant in Indonesia and explain how these solutions have been implemented by insisting on the role of the government to that extent. It can also provide insights on the challenges identified 	
14.30-15.30	<p>Sharing knowledge on Nature-based solutions for infrastructure</p> <p>This session will provide an opportunity to discuss best practices, challenges and the experience of countries to consider and implement nature based solutions to build resilience of the infrastructure assets to climate change. It will be followed by a Q&A session. The participants are:</p> <ul style="list-style-type: none"> -Liesbeth Casier, IISD -Timo Persson, Swedish Environmental Protection Agency, Sweden -Nishchal Sardjoe, Deltares -Maïke Kirsch, OECD 	
15.30 –	Coffee break	

16.00		
16.00-17.00	<p>Nature-based solutions for water infrastructure</p> <p>The break-out group will gather representatives from the water sector and relevant agencies and will aim at facilitating an interactive discussion on ways to improve on the key gaps identified when it comes to considering nature-based solutions to strengthen the resilience of water infrastructure to climate change.</p> <p><i>List of participants required:</i> Ministry of Public Works (Department in charge of water infrastructure); Ministry of Agrarian Affairs and Spatial Planning; Ministry of Environment and Forestry; and relevant water companies and river basin organisations</p> <p><i>List of optional participants:</i> tbc</p>	<p>Nature-based solutions for transport infrastructure</p> <p>The break-out group will gather representatives from the transport sector and relevant agencies and will aim at facilitating an interactive discussion on ways to improve on the key gaps identified when it comes to considering nature-based solutions to strengthen the resilience of transport infrastructure to climate change.</p> <p><i>List of participants required:</i> Ministry of Transportation; Ministry of Agrarian Affairs and Spatial Planning; Ministry of Environment and Forestry.</p> <p><i>List of optional participants:</i> tbc</p>
17.00/17.30	Summary of the break-out group and conclusions of the workshops	