

Summary Record
OECD Southeast Asia Regional Programme (SEARP)
6th OECD Regional Policy Network Meeting on Sustainable Infrastructure
25-26 April 2022, Manila



DAY 1

Welcome and introductory remarks

The Co-Chairs of the 6th Meeting of the Regional Policy Network on Sustainable Infrastructure, Mr. **Roderick M. Planta** (OIC – Undersecretary, Investment Programming Group, National Economic and Development Authority (NEDA) of the Philippines) and Mr. **John Hurley** (Alternate U.S. Executive Director to the Asian Development Bank) delivered opening remarks.

Mr. Planta noted that infrastructure development is a cornerstone of the Philippines’ development strategy, notably through the Philippine Development Plan and the “Build Build Build” initiative. While sustainability criteria are integrated in the government’s policies and strategies, international cooperation can help further align development plans with long-term environmental sustainability and climate goals.

Mr. Hurley highlighted low-carbon and resilient infrastructure as means to achieve net-zero emissions and adapt to climate change, while narrowing the USD 40 trillion infrastructure gap in the developing world, which has been exacerbated by COVID-19. Sound infrastructure governance, as championed by the Asian Development Bank (ADB) and the OECD, is an essential tool to ensure limited public resources are channelled efficiently into projects that ensure long-term, sustainable and inclusive growth.



Mr. Edwin Lau (Head of Infrastructure and Public Procurement Division, Public Governance Directorate, OECD) presented the Regional Policy Network on Sustainable Infrastructure -- a pillar of the OECD Southeast Asia Regional Programme (SEARP) -- to promote dialogue between OECD and Southeast Asian countries. OECD work on the integration of environmental and climate considerations in infrastructure decision making has been reinforced by the G20 workstream on attracting private sector investment in sustainable infrastructure, under the Indonesian Presidency. To help countries benchmark their progress,



the OECD has developed a set of Infrastructure Governance Indicators, which provide the concepts and data for three of the sessions of this meeting (strategic planning, project evaluation, and public procurement). We are now exploring the possibility of extending the indicators to include ASEAN members.

Dr. Hong Tack Chun (Executive Secretary of the OECD-Korea Policy Centre) described the OECD-Korea Policy Centre's role in

disseminating policy advice, including on the topic of good infrastructure governance, with the countries of the Asia-Pacific region through policy dialogues and international fora. The Centre has collaborated with the OECD on indicators included in the OECD Southeast Asia Government at a Glance, a flagship publication on public governance for improved development outcomes. Given the long-lived nature of infrastructure, the impacts of projects on economic, environmental and social outcomes are felt over many years and good governance is of critical importance to ensure sustainability.

[SESSION 1] SUSTAINABLE INFRASTRUCTURE: Principles and standards

This session provided the rationale for mainstreaming sustainability across all stages of infrastructure development and presenting tools designed to support improved infrastructure governance, such as the OECD's [Recommendation on the Governance of Infrastructure](#). The promotion of sustainable infrastructure addresses the 'triple challenge' of a persistent infrastructure investment gap, the need to revitalise economies following the COVID-19 pandemic and the threats posed by climate change and the loss of biodiversity and ecosystem services. The OECD introduced principles on sustainable infrastructure and infrastructure governance, as well as the Sustainable Infrastructure Programme in Asia (SIPA), an OECD-led initiative to put these tools into practice in emerging markets in Central and Southeast Asia.

Ms. Virginie Marchal (Programme Manager, Sustainable Infrastructure Programme in Asia (SIPA), Environment Directorate, OECD) stressed the key role of sustainable infrastructure to achieve both climate and broader development goals. Infrastructure built in the coming years will determine if the Sustainable Development Goals (SDGs) and Paris Agreement objectives remain within reach. On balance, well-planned

low-carbon, resilient infrastructure projects can improve reliable service delivery, improve asset lifespan (avoiding costly retrofits), increase efficiency and deliver important co-benefits contributing to growth and the SDGs. Despite political will, current investments and commitments are insufficient. The OECD, with the United Nations Environment Programme (UNEP) and the World Bank Group, has identified the levers for change necessary to align financial flows



with the low-emission, resilient transition ([Financing Climate Futures: Rethinking Infrastructure](#)). In late 2021, the OECD launched [SIPA](#) to apply these principles and international best practices to select countries in Southeast and Central Asia.

[Mr. Edwin Lau \(OECD\)](#) highlighted the role of good infrastructure governance, including strong institutions and coherent, transparent decision-making processes, to direct limited resources to impactful projects and attract private-sector investment. As evidenced by the COVID-19 pandemic, it is crucial that processes are flexible and adaptable to react to unforeseen shocks. The [OECD Recommendation on the Governance of Infrastructure](#) provides practical guidance covering the entire lifecycle of infrastructure projects and emphasising regional, social, gender and environmental considerations. OECD resources include the Infrastructure Governance Indicators and Toolkit, the [Public Procurement Toolbox](#) and a substantial catalogue of reports and country reviews on various [infrastructure governance](#) topics.

[SESSION 2] STRATEGIC PLANNING: Develop a long-term strategic vision for infrastructure

This session focused on how long-term, low-emission development strategies can help align infrastructure plans with Paris Agreement objectives, drawing on emerging tools, such as the OECD Infrastructure Governance Indicators on strategic planning and WWF’s geospatial analysis methodology. Representatives of Indonesia, the Philippines and Thailand shared their experiences on developing long-term plans and integrating climate change considerations into planning processes. The OECD outlined Italian efforts to integrate green infrastructure approaches, and the use of foresight methodology to stress-test infrastructure decisions against potential future scenarios. The 2050 Pathways Platform identified factors that improve the elaboration of long-term low-emission development strategies.

[Ms. Erika Bozzay \(Senior Advisor, Infrastructure and Public Procurement Division, Public Governance Directorate, OECD\)](#) explained the strategic planning pillar of the OECD Infrastructure Governance Indicators, including methodology and preliminary data. Effective long-term planning is essential to prioritise infrastructure projects that support sustainability and efficiently allocate resources. Preliminary figures for OECD countries indicate relative strength in infrastructure plan and project prioritisation as well



as monitoring, planning coordination and stakeholder participation, but weaker alignment of plans with budget allocations. 75% of OECD countries align infrastructure strategic visions with environmental or climate plans, but lack comparable alignment with social considerations, e.g. inclusion, gender mainstreaming and human right commitments. The [2020 survey](#) also revealed that most OECD countries recognise the importance of investment in suitable infrastructure

projects to promote sustainability (69%), the value of cross-sector synergies to avoid inefficiencies (59%) and the need to adapt existing infrastructure to improve environmental importance (56%), perform less well in terms of focus on resource efficiency (41%) and research and development (R&D) to promote sustainable infrastructure (34%).

[Mr. Ryan Bartlett \(Director, Climate Risk Management and Resilience, World Wildlife Fund for Nature \(WWF\)\)](#) and [Ms. Angela Consuelo “Gia” Ibay \(Head, Climate Change and Energy Programme, WWF Philippines\)](#) emphasised the rapid



pace of infrastructure construction planned by 2050, particularly in tropical, biodiverse-rich countries. 25 million km of new paved roads are slated for construction by 2050, threatening biodiversity through habitat degradation and human encroachment. If unjudiciously

planned and managed, such projects could deplete natural infrastructure services offered by nature, e.g. sediment control, flood risk reduction and water quality improvement. Current project development processes consider ecosystem factors after key decisions have already been made, limiting flexibility to address risks and impacts. Instead, upstream planning should consider ecosystem services, climate risks and development needs at the beginning of the process, feeding these inputs into the concept and design of the project. This facilitates the anticipation and avoidance of projects’ negative consequences. WWF has used geospatial tools to overlay natural capital and climate risk assessments, including in Myanmar, to evaluate and minimise risks and maximise benefits early in the planning process.

Under SIPA, WWF will carry out similar analysis in Mindanao (the Philippines) and Sumatra (Indonesia) and support mapping, analysis and capacity building to better account for natural capital and consider nature-based solutions in infrastructure planning.

[Mr. Yusuf Suryanto \(Director of Electricity, Directorate of Electricity, Telecommunications and Informatics, Ministry of National Development Planning/National Development Planning Agency \(Bappenas\), Indonesia\)](#)

explained the development of mid-term and long-term strategies in Indonesia, particularly in the power sector. To achieve its goal of becoming a high-income economy, growth of GDP per capita must remain at 5% on



average between 2015 and 2045 while promoting industry, tourism and the digital economy. Under Indonesia's current National Development Planning System (adopted in 2004), 20-year National Long-Term Development Plans (most recently for 2005-2025) cascade down to 5-year National Medium-Term Development Plans (currently 2020-2024) and annual Government Working Plans. In the power sector, Indonesia enjoys vast potential for renewable energy generation, which can turn the challenge of electrifying an archipelagic country of over 17 thousand islands into an opportunity for smaller-scale renewable deployment. Indonesia's key challenges to achieve sustainable economic growth are existing regulations, which hinder labour, investment and trade, and low-quality institutions hampered by corruption, inefficient bureaucracy and weak inter-policy coordination. Moreover, low tax revenue, inadequate infrastructure, limited connectivity and insufficient human resource capacity are barriers to achieving Indonesia's development goals. To develop the Low-Carbon Development Policy under the 2020-2024 National Medium-Term Development Plan, Bappenas employed a systems-based analysis framework to consider the inter-linkages between different economic sectors and development goals, including the reduction of greenhouse gas emissions and conservation of biodiversity. In the power sector, the trade-offs between economic and sectoral targets on the one hand and air quality, land use and emissions considerations on the other, helped shape plans to reconfigure Indonesia's energy mix.



[Mr. Jerome Ilagan \(Chief of the Policy Research and Development Division, Climate Change Commission, the Philippines\)](#)

presented the Philippines' experience with developing its first Nationally Determined Contribution (NDC), which was communicated to the UNFCCC in 2021. Given the Philippines' vulnerability to the impacts of climate change, the NDC placed particular

emphasis on adaptation. To achieve national economic and social goals, the NDC put sustainable industrial development, poverty eradication by 2040, climate justice and energy security at its core. The Climate Change Commission adopted a whole-of-government and whole-of-society approach in developing the

NDC, ensuring participation from marginalised and underrepresented communities as well as civil society, faith-based organisations, the private sector and indigenous peoples. The Philippines' national circumstances present a number of challenges, including a high incidence of poverty, ageing infrastructure and an unsustainable cost burden from the losses and damages caused by extreme weather events. Due to the country's economic constraints, the Philippines' unconditional mitigation target was set at 2.71% below projected business-as-usual (BAU) levels by 2030, whereas the country pledges to reduce emissions by 72.29% conditional on international support. As laid out in the National Climate Change Action Plan 2011-2028, the Philippines' seven thematic focuses of government climate change action relate to food security, water sufficiency, ecological stability, human security, climate-smart industries and services, sustainable energy, and capacity development. It aims to increase ambition and reflect evolving needs in the next iteration of its NDC.

Mr. Punnaluk Suraswadi (Policy and Plan Analyst, Head of Transportation Infrastructure Development, Infrastructure Strategy Department, National Economic and Social Development Council (NESDC), Thailand)

shared Thailand's experience with long-term development planning. Like other countries, Thailand's greenhouse gas emissions derive primarily from infrastructure



sectors targeted by SIPA, namely the power generation sector (about a quarter of Thailand's emissions), transport (about a fifth) and industrial systems. The Ministry of Natural Resources and Environment developed Thailand's Nationally Appropriate Mitigation Actions (NAMAs), the mitigation goal (7-20% GHG reduction compared to BAU by 2020) of which was achieved in 2018 (15.76%). The country's NDC sets a more ambitious target of 20-25%. To achieve this, infrastructure is a primary focus with measures planned to improve energy efficiency of housing as well as industrial processes, incentivise the development of renewable energy and a smart grid, promote mass transit systems and increase the share of biofuels used in transportation. NESDC's 12th long-term plan (2017-2022) focused on encouraging a modal shift for freight and passenger transport towards rail and improving air and passenger rail transport services. In terms of energy, the 12th long-term plan aimed to derive 17.34% of Thailand's final energy consumption from renewable energy resources and reduce the country's reliance on natural gas. For the 13th long-term plan (2023-2027), Thailand will focus on improving logistics; planning 'smart', more liveable cities; promoting uptake of electric vehicles (EVs); and encouraging a shift towards a 'zero-carbon society' through rational natural resources use, more efficient industrial processes and rehabilitation of natural capital (e.g. mangroves).



Mr. Raffaele della Croce (Senior Economist, Infrastructure and Public Procurement Division, Public Governance Directorate, OECD)

presented efforts to integrate a green infrastructure approach into the planning of infrastructure in Italy. Based on work by the OECD and the International Transport Forum for the G20, the OECD provided technical support to the Italian Ministry of Sustainable Infrastructure and Transport on infrastructure governance with

the purpose of developing an integrated approach to strengthening the consideration of green infrastructure into planning and decision-making processes over the lifecycle of infrastructure investments. ‘Green infrastructure’ has a broad definition, including assets designed to build with nature and those designed to maintain, enhance or restore ecosystem service (e.g. eco-tunnels, green corridors, bioswales, permeable surfaces for linear infrastructure). The project began in October 2021 and will culminate in a targeted report (2022), capacity building activities (2022) and a final workshop for disseminating the project’s results (2023).

Mr. Duncan Cass-Beggs (Counsellor for Strategic Foresight, OECD) has led work to promote the adoption of futures thinking across the OECD, its Directorates and Committees. He has developed a foresight toolkit

for successful net-zero transitions as part of the OECD Horizontal Project on Building Climate and Economic Resilience, focusing on disruptions in the 2030-2050 period. The toolkit aims to help governments and organisations stress-test their net-zero commitments in a context of high uncertainty and rapidly changing circumstances. Five-day workshops accompany the toolkit process, allowing practitioners to work through a foresight process to develop tailored and country-specific policy recommendations. The toolkit lays out thirty possible “future disruptions” that could impact net-zero transitions, including risks of social upheaval, technology, environmental conditions, the economy and governance. By engaging with these potential disruptions, participants in the workshops develop alternative future scenarios and identify ‘no regrets’ policies and strategies. Foresight approaches have already been adopted by several OECD countries, including Canada, Germany and the United Kingdom, as well as leading international institutions.



Mr. Richard Baron (Executive Director, 2050 Pathways Platform) described work in helping countries elaborate robust, inclusive and ambitious long-term low-emission development strategies (as called for by Article 4.19 of the Paris Agreement) through financial support, provision of knowledge and advisory services, and capacity building activities. Several countries (including Cambodia, Indonesia and Thailand) have communicated long-term low-emission development strategies to the UNFCCC, while others (including the Philippines and Vietnam) have begun elaborating them. From the experiences to date, the international community has learned that: (1) a common socio-economic vision (including the Sustainable

Development Goals) is necessary to identify trade-offs and opportunities for a robust emissions pathways analysis; (2) consistency between national planning exercises, NDC development, National Adaptation Plans and net-zero pledges is essential; (3) stakeholder engagement with the private sector, civil society, regional actors and donors encourages a deeper discussion on domestic challenges and opportunities; (4) countries should seek to identify key indicators for all stakeholders; and (5) the integration of climate vulnerability issues is critical, particularly for countries most exposed to the effects of climate change. Among the long-term low-emission development strategies already elaborated, electricity generation is relatively well covered, but more work is needed to integrate climate resilience, fully cost out the transformation of the transport sector and develop mechanisms to ensure that the long-term vision informs near-term planning exercises.

[SESSION 3] PROJECT EVALUATION: Aligning infrastructure project pipelines with long-term sustainability goals

This session focused on how assessment tools are used in practice and the challenges associated with their uptake and implementation. The OECD presented its Infrastructure Governance indicators related to fiscal sustainability, which governments can use to benchmark their practices. The International Institute for Sustainable Development (IISD) showed how its Sustainable Asset Valuation (SAVi) tool can be used to monetise ESG risks, negative externalities and co-benefits to evaluate projects and compare them under a variety of scenarios. DDA Consulting highlighted how strategic environmental assessment (SEA), thanks to its application in the upstream phases of the planning process, can be an effective tool for aligning programmes and policies related to infrastructure with long-term goals. Representatives of several countries shared their experiences with project evaluation, including Australia (from the perspective of a subnational economic regulator for utility services), Cambodia (in the road sector reacting to the impacts of climate change), Ireland (on the Climate and Social Assessment performed on infrastructure projects to evaluate their alignment with the country's long-term goals), the Philippines (on the institutional set-up and procedures for project appraisal) and the United States of America (on impact assessments, notably the Development Finance Corporation's IQ methodology).

[Ms. Erika Bozzay \(OECD\)](#) provided further details on the set of OECD Infrastructure Governance Indicators related to fiscal sustainability, affordability and value for money as well as their methodology. Through rigorous project appraisal and selection processes, decision-makers can assess infrastructure project costs – social and environmental, as well as economic – across the full asset life cycle, ensuring that projects deliver value for money across a range of dimensions. Preliminary figures for OECD countries indicate relative strength in budgeting for multi-year projects and cost estimations, project appraisal and selection as well as independent assessment, but weaker mechanisms for managing risks and contingent liabilities. The [2020 survey](#) of OECD countries, identified cost-benefit analysis as the most used methodology to assess infrastructure projects (77% of public-private partnership projects and 84% of other projects), while other methodologies, including cash-flow estimates over the project life cycle, cost effectiveness analysis, multi-criteria analysis and business case methodology, were used in a minority of cases.

Ms. Liesbeth Casier (Senior Policy Advisor, Economic Law and Policy Programme, International Institute for Sustainable Development (IISD)) presented IISD’s Sustainable Asset Valuation (SAVi) tool, which is



customised to specific infrastructure assets to monetise ESG risks, negative externalities and co-benefits. In so doing, it allows decision-makers to compare projects under a variety of scenarios. The tool is based on

systems thinking, systems dynamics simulation as well as spatial and financial models and co-created through multi-stakeholder engagement. IISD has used SAVi across all infrastructure sectors (e.g. energy, transport, buildings, water, waste) and in dozens of countries, including Morocco (Rabat bypass road), Senegal (bus rapid transit system in Dakar) and South Africa (storm water infrastructure in Johannesburg).

Mr. David Annandale (Senior Partner, DDA Consulting) highlighted the role of

strategic environmental assessment (SEA) in infrastructure planning. SEAs are undertaken at the level of a policy or programme rather than at the level of an individual project (where environmental impact assessments, or EIAs, are used). Given their use in upstream planning, SEAs provide an opportunity to avoid risks, consider a variety of alternatives and support evidence-based decision-making downstream. SEAs are also cheaper and more cost-effective than EIAs. Three factors are essential for effective SEAs: (1) information, i.e. a solid assessment of environmental and other issues; (2) process, i.e. a well-structured public and government debate; and (3) procedure for influence, i.e. a mechanism to take the results of the assessment and debates into account. SEAs can be applied to plans and policies at all levels of jurisdiction (national, regional, local) and can be sector-specific (e.g. energy or agricultural development plans), multi-sectoral (e.g. economic corridors, water strategies) and holistic (e.g. national development plans, climate change action plans). SEA has been used by ASEAN countries, including Cambodia, Indonesia, Lao PDR, the Philippines, Thailand and Vietnam, but these efforts have focused mostly on sector-specific plans.





Mr. Adam Wilson (Chief Executive Officer, Essential Services Commission of South Australia)

presented his experience as an economic regulator for energy efficiency and electricity and gas provision in a sub-national government. Service providers should have a long-term plan with a credible vision in place, projecting what conditions should be achieved by 2050 to minimise their long-term cost while delivering high-quality services.

Stakeholder engagement is essential in this process to develop cycles of feedback and improvement into planning. The regulatory process is intended to drive long-term prudence and efficiency of costs by means of periodic checks and detailed analysis (including determination of allowable revenues and standards required in the short term) within a longer-term strategic context. Ordinarily, providers must produce short-term, periodic business plans for the economic regulator’s scrutiny and approval. Critically, those should not be stand-alone – they should be drawn directly from (and be clearly referable to) the long-term plans. This periodic regulatory process does not stand separate from the longer-term process, but will instead focus attention in a more granular way on actual planning, delivery and service costs. This will include considering financing costs, standards, obligations (including sustainability) and expenditure for the short term. Those plans should identify the priority actions required in the short- to medium-term, but within the context of the long-term plan for those assets, and ensuring long-term prudence and efficiency.

Mr. Sovanneth Nut (Deputy Chief of Road Inventory and Ferry Management Office, Road Infrastructure Department, Ministry of Public Works and Transport, Cambodia)

described the challenges of addressing climate impacts on infrastructure resilience, such as the cracking of



national roads, buckling from heat expansion and the impact of water run-off on embankment erosion and scouring. Cambodia is exploring the use of innovative materials to improve the resistance of transport infrastructure to such impacts, including the use of recycled plastic in road construction, concrete pavement in flooding areas and the introduction of gabion for road protection and scouring prevention.



[Mr. Ken Cleary \(Principal Officer, Department of Public Expenditure and Reform, Ireland\)](#) described the role project assessment has played in Ireland’s implementation of its National Development Plan 2021-2030. The plan details the capital investments necessary to promote economic recovery and provide infrastructure for a growing population while transitioning the country onto a more environmentally sustainable path compatible with the government’s

legally-binding commitments under the Paris Agreement (net-zero emissions by 2050, 51% of greenhouse gas emissions by 2030 compared to 2018 levels). Ireland is undertaking a Climate and Environmental Assessment to demonstrate that public investment is aligned with the government’s goals. The qualitative assessment is used to determine the impacts that every spending proposal could have on seven different dimensions: climate mitigation, climate adaptation, water quality, air quality, waste and circular economy, nature and biodiversity, and the just transition. On the basis of the assessment, the government ranks measures using a set methodology capturing potential impacts. The assessment determined that 67% of the 128 measures under analysis were deemed likely to have a net favourable impact on climate and environmental incomes (Category A), while 17% would have no significant impact (Category B) and 16% may have a net negative impact (Category C). Category A measures are likely to be positive on balance, but it is possible for unfavourable impacts in one dimension to be compensated with positive outcomes elsewhere. Category C, while unfavourable, does not imply that it is incompatible with the country’s objectives (since certain environmentally harmful capital investments will be needed to meet infrastructure needs), but it does require increased focus to minimise impacts once identified.

[Ms. Kathleen Mangune \(Director IV, Infrastructure Staff, NEDA, the Philippines\)](#) detailed NEDA’s role in evaluating infrastructure projects. NEDA, which acts as the Secretariat and technical arm of the NEDA Board and Investment Coordination Committee (ICC), engages in a five-step process to assess and approve projects. First, projects are submitted by implementing agencies, after which they are appraised by the NEDA Secretariat and deliberated on and improved through recommendations from the ICC Technical Board. The final two steps are approval by the ICC Cabinet Committee and the NEDA Board. The ICC investment appraisal covers six aspects: technical soundness and appropriateness compared to alternatives, environmental, social (including job creation),



institutional (i.e. whether there are appropriate institutional arrangements and capacity in the implementing agency), financial (i.e. financial net-present value and sustainability assessments) and economic (i.e. desirability as a contribution to socioeconomic welfare). The environmental appraisal assesses the impact of the project on the environment, puts a monetary value on the use of natural resources and impact of human activities, and aids the project evaluator to identify trade-offs in rational decision-making. The ICC requires submission of the environmental compliance certificate or certificate of non-coverage. The challenges related to project evaluation include availability for data through the life of a project, the lack of technical capacity if implementing agencies on project development and preparation, and a lack of infrastructure sector masters plans that could serve as the basis for coordinated and integrated action. Upcoming initiatives include the integration of climate change mitigation and adaptation into the ICC project evaluation process.



[Mr. Geoffrey Tan \(Managing Director for Asia-Pacific, United States International Development Finance Corporation \(DFC\)\)](#)

presented the DFC’s social and environmental screening process. DFC catalyses private sector investment by providing tools to commercially viable investments when the private sector is unwilling or unable to do so. Its services include debt financing,

political risk insurance, investment funds, equity investment and technical assistance to promote viability and impact. DFC’s Office of Development Policy strives to produce positive development impacts and apply best practices in terms of environmental and social safeguards. The Office of Development Policy carries out environmental and social risk assessments as well as evaluations of international development and US domestic economic impacts. Each project passes through a screening, application from the project sponsor, review of environmental, social and economic dimensions and due diligence checks. Approved projects are then monitored and evaluated in a transparent fashion through DFC’s annual Development Outcome Survey. To measure impact, DFC uses “IQ”, its development impact management system. An IQ score is calculated based on a project’s projected and actual contribution to economic growth, inclusion and innovation.

Discussion

Participants inquired about how countries can build capacity for evaluation and face the difficulty of accounting for changing technological conditions in the decision-making. Discussants insisted on the need to mainstream review mechanisms in decision making and to support countries in adopting indicators on

infrastructure governance like those presented by the OECD. Discussants concluded that, given the wide range of available tools, the most important task is ensuring coherence between public policies, programmes and infrastructure projects. To do so effectively, the collection and publication of high-quality data is essential.

DAY 2

[SESSION 4] PUBLIC PROCUREMENT AND FISCAL SUSTAINABILITY: Ensure efficient and effective procurement of sustainable infrastructure projects

This session presented emerging good practices in public procurement for the promotion of sustainable infrastructure. Given public authorities' role as major consumers with sizeable purchasing power, public procurement can be an important lever for incentivising innovation, the adoption of new technologies and the transition towards sustainable infrastructure systems. The OECD presented tools available to governments to benchmark their procurement practices, including its set of Infrastructure Governance indicators related to public procurement and the [Methodology for Assessing Procurement Systems \(MAPS\)](#). The Asian Development Bank (ADB) detailed its sustainable public procurement system (SPP) and presented the ADB Guidance Note on SPP, which helps countries mainstream sustainability into the whole procurement process. Country experiences from Hungary, Malaysia, the United States of America and Vietnam were shared. The OECD has been supporting Hungary's efforts to introduce life cycle costing (LCC) into procurement practices as part of a broader review of LCC tools and methodologies across OECD countries. Malaysia described the development of its public-private partnership (PPP) implementation system and its plans to more effectively take climate and environmental considerations into account and improve the collection of indicators. The United States listed common reasons for project failure and described methods of better integrating due diligence and political considerations into project design by vetting private partners and clearly defining the role of public-sector champions. Vietnam described its legal framework for public procurement and identified potential areas for reform, including the unification of existing legal acts into a Law on Public Procurement.



[Mr. Edwin Lau \(OECD\)](#) provided further details on the set of OECD Infrastructure Governance Indicators related to public procurement and fiscal sustainability as well as their methodology. Procurement strategies influence the strategic choices around infrastructure development, aiming to maximise the value generated for society. Procurement processes should be directed towards generating economic,

environmental and social benefits. Given public authorities' role as major consumers with sizeable purchasing power (on average 12% of GDP in OECD countries), public procurement can be an important lever for incentivising innovation, the adoption of new technologies and the transition towards sustainable infrastructure systems. According to the [2020 OECD survey](#), 71% have integrated the promotion of environmental protection into infrastructure procurement practices, while 29% have not. To support governments at national, subnational and local levels, the OECD, the World Bank, MDBs and bilateral donors have developed the [Methodology for Assessing Procurement Systems \(MAPS\)](#), which assesses the overall quality of procurement systems, as well as special topics such as e-procurement and sustainable procurement.

[Ms. Jenny Yan Yee Chu \(Procurement Specialist, Procurement, Portfolio and Financial Management Department, Asian Development Bank\)](#) explained how ADB defines sustainable public procurement (SPP) in contrast to 'normal' procurement procedures. SPP is a purchasing and investment process that integrates considerations to achieve national development goals and sustainability priorities (not only environmental concerns related to climate action and resource efficiency / circular economy, but also social and governance goals related to equity, diversity, inclusion, indigenous reconciliation, fair labour practices and human rights) into decision-making processes. [ADB's Guidance Note on SPP](#) aims to support countries in mainstreaming sustainability in the whole procurement process, including upstream strategic planning for infrastructure development. The note defines different ways to integrate SPP into projects and contracts including life cycle costing (LCC), minimum standards (e.g. environmental, social and health-related), work services sustainability requirements (mandatory or required) and supplier leadership practices. LCC can be used throughout the public procurement cycle, notably through the tender phase as an award criterion, but also through the pre-tender phase to determine preferred product or technologies to compare different solutions and determine cost drivers and effects. In the post-tender phase, LCC is important to monitor performance, ensure compliance and communicate the results. ADB is conducting training and developing case studies to support the guidance note and other ADB sector-specific SPP initiatives, including the [ADB Screening Tool for Energy Evaluation in Projects \(STEEP\) for Water and Wastewater Systems](#).

Ms. Erika Bozzay (OECD)

presented OECD support to the government of Hungary to introduce life cycle costing (LCC) into public procurement practices as a tool for mainstreaming green public procurement. LCC looks beyond the initial purchase price and tries to evaluate all other significant costs over the entire life period, such as acquisition, operation, maintenance and end of life cost. Contracting authorities



usually rely only on the initial price, and not necessarily on other elements such as the impacts of quality and other factors that can influence the full cost of the project over its lifetime. LCC approaches also provide an opportunity to integrate environmental and social cost considerations, strengthening the role of green public procurement. The OECD is currently working with Hungary to assess the current practices in terms of LCC, including capacity in public procurement agencies. Main challenges include the strict focus on legal compliance and the lack of available tools and training. The OECD is mapping existing LCC tools in OECD countries to identify factors that facilitate the uptake of LCC tools and opportunities for capacity building exercises. Overall, the infrastructure and construction sectors are more advanced in their LCC practices and total cost ownership than other sectors, as evidenced by tools used in Austria, Belgium and the Netherlands.



Mr. Khairus Masnan Bin Abdul Khalid (Deputy Director General of Policy, Public Private Partnership Unit, Prime Minister's Department, Malaysia)

outlined Malaysia's experience and institutional set-up for the implementation of public-private partnerships (PPPs). Malaysia uses PPPs to transfer a portion of the project's risk from the public to the private sector, but only on relatively large projects (over MYR 25 million, or approximately USD 5.7 million) with a

contract longer than 7 years. Malaysia's development plan, the Tenth Malaysia Plan, aimed to achieve USD 36 billion per year in private investment to 2020 in order to achieve annual GDP growth of 4.5-5.5%. Over successive administrations, Malaysia has refined its PPP system, establishing the Public Private Partnership

Unit under the Prime Minister’s Department in 2009 and setting up an Infrastructure Facilitation Fund in 2022 to support the next phase of PPP development (called “PPP 3.0”). Various models of PPPs (e.g. build-operate-transfer, build-operate-own, build-lease-transfer) have been implemented in Malaysia to fund projects in various sectors, including energy, transport and the construction of public buildings. Malaysia strives to integrate environmental and social considerations into the design of PPPs. PPPs in Malaysia require an environmental impact assessment (EIA), a social impact assessment report, approval from relevant environmental authorities, consultation across the government (including with the Ministry of Work and the Ministry of Finance) and coordination with relevant national- and subnational-level authorities. Malaysia has identified several shortcomings for the integration of climate and environmental considerations in PPPs that it plans to address in the coming years, namely through the development and collection of meaningful indicators and the benchmarking of projects against international standards.

[Ms. Lindsey Scannell \(Senior Counsel, Commercial Law Development Program \(CLDP\), Department of Commerce Office of the General Counsel, United States of America\)](#)

described common reasons for project failure and methods to integrate due diligence and political considerations into project design. Projects fail due to lack of government expertise,



experience and capacity, poor communication during project development and procurement, insufficient project risk assessments and instability resulting from changes in governments. To mitigate these risks, project due diligence should begin in the early stages of project identification and selection, with feasibility studies and value for money analysis as an integral part of the process. Assessments should vet the private partner to avoid conflicts of interest, mitigate risks of ethical and legal issues and ensure financial stability and compliance with reporting laws. Political considerations, including the existence of a project champion to advocate on behalf of the project without direct influence over the choice of the private partner, are essential for a project’s success.



Ms. Hoang Thi Binh (Public Procurement Agency, Ministry of Planning and Investment, Vietnam) presented the legal framework for sustainable procurement in Vietnam. Public procurement accounted for 48% of total budget revenue in 2020 and created business opportunities for 650 000 enterprises. The legal framework includes the 2013 Law on Public Procurement, governmental and prime ministerial decrees on

special cases and e-procurement development, and circulars published by the Ministry of Planning and Investment and other ministries to guide public procurement practices. In terms of sustainable public procurement, the concept was promoted through the Sustainable Development Strategy (2011-2020), the National Green Growth Strategy (2011-2020) and the National Action Plans on Green Growth Strategy (2014) and on Sustainable Consumption and Production (2015). Vietnam has developed a 3-tier eco-label system at the national level to certify environmental compliance. Vietnam's next steps to refine its legal framework for sustainable public procurement include the unification of legal acts into, for example, a Law on Public Procurement, and the assignment of a focal point within the government to implement sustainable public procurement.

[SESSION 5] FINANCING INFRASTRUCTURE: Innovative solutions to mobilise private finance

This session focused on how the private sector can contribute to the development of sustainable infrastructure and the public sector's role in unlocking and directing private capital. The OECD framed the discussion by outlining how ESG factors can be applied to sustainable infrastructure and identifying shortcomings in definitions of sustainable infrastructure and data availability. The OECD also mapped out the different sources for infrastructure finance and their roles in promoting low-carbon technologies at different stages of market readiness. Representatives of Indonesia, Singapore and the United States of America shared their countries' experiences with innovative financing solutions. Indonesia outlined its plans to finance its USD 148-264 billion infrastructure gap to 2060 as defined in its Long-Term Strategy for Low Carbon and Climate Resilience, including its creation of a new blended finance platform, SDG Indonesia One. Singapore presented its Significant Infrastructure Government Loan Act (SINGA), which aims to finance infrastructure projects with long-term benefits following stringent project appraisal by tapping into the debt market. The United States described the role of the Blue Dot Network (BDN), a multi-stakeholder network spearheaded by Australia, Japan and the United States, in unifying existing standards of sustainable infrastructure and certifying projects through a points-based scoring system.

[Mr. Slamet Rona Ircham and Ms. Herlina Oktavianti \(Public Private Partnership Unit, Ministry of Finance, Indonesia\)](#)

outlined Indonesia's plans to employ innovative financing solutions to promote sustainable infrastructure. Indonesia faces a significant financing gap of approximately USD 148-263 billion to achieve net-zero emissions by 2060 as outlined in the Long-Term Strategy for Low Carbon and



Climate Resilience 2060. Through its COVID-19 pandemic policies and recovery plans, Indonesia has managed to keep its debt risks and government deficit within manageable bounds. In this context, Indonesia plans to fulfil its infrastructure financing needs through its government budget (USD 163 billion, or 37%), financing from state-owned enterprises (USD 93 billion) and private sources (USD 185 billion, or 42%). To attract private finance, the government is promoting public-private partnerships (PPPs), blended finance schemes and a new blended finance platform managed by the PT Sarana Multi Infrastruktur (PT SMI, a national body designed to accelerate national infrastructure development in Indonesia) called SDG Indonesia One. SDG Indonesia One, launched in 2018, draws financing from philanthropists, international donors, climate finance institutions, green investors, commercial banks and multilateral development banks (MDBs) among others. The Ministry of Finance is also implementing an ESG framework into PPP and non-PPP projects.



[Mr. Glenn Cai \(Senior Associate, Fiscal Policy Directorate, Green Bonds Programme Office, Ministry of Finance, Singapore\)](#)

presented Singapore's Significant Infrastructure Government Loan Act (SINGA). SINGA is designed to support major, long-term infrastructure projects that will benefit Singaporeans across generations rather than routine infrastructure projects and recurrent spending. After several decades of development expenditures funded by

operating surpluses, Singapore is entering a new phase of infrastructure development characterised by borrowing-financed projects to update Singapore's major, long-term infrastructure and adapt to emerging circumstances, including climate change. This plan is a continuation of historical phases where

infrastructure investment enabled the economic transformation of Singapore. Borrowing allows infrastructure projects' heavy upfront costs to be spread out across current and future generations, promoting inter-generational equity, and Singapore, with its AAA credit rating and current market environment, is ideally placed to tap into the debt market at favourable interest rates. To ensure prudent borrowing, the government has put rigorous safeguards in place to prevent excessive borrowing and target high-impact projects. Finally, government leadership in infrastructure investment helps to shape the direction of Singapore's green transformation and to crowd in private investment of sustainable infrastructure. Singapore plans to issue green bonds under SINGA, as part of the SGD 35 billion of public sector green bond issuance targeted by 2030. Such efforts aim to support the implementation of the Singapore Green Plan 2030, Singapore's net-zero ambitions and the Green Finance Action Plan.

Mr. Peter Thorin (Senior Advisor – Blue Dot Network, Department of State, United States)

presented the Blue Dot Network (BDN), a multi-stakeholder network spearheaded by Australia, Japan and the United States. To address the massive infrastructure demand in the next decade (USD 1.5 trillion in Latin America, USD 1.1 trillion in Africa and USD 1.7 in Asia), the BDN aims to deliver market-driven, transparent solutions with an emphasis on fiscal sustainability and social and environmental responsibility.



Rather than establishing a new set of infrastructure principles, the BDN seeks to unify existing standards and put them into practice. The BDN's certification framework defines a set of essential requirements with which projects must demonstrate alignment and establishes a point-based scoring system that will recognise progressively higher levels of quality infrastructure standards. Projects will receive one of three levels of certification indicating if a project satisfied essential requirements (level 1), exceeded requirements (level 2) or exceeded requirements while incorporating innovative practices that generate a strong positive impact (level 3). In its next steps of development, the BDN will carry out pilot projects, collect input from stakeholders in developing countries and emerging markets and seek to address capacity-building needs.

Ms. Mamiko Yokoi-Arai (Deputy Head, Financial Markets Division, Directorate of Financial Affairs, OECD)

outlined the landscape of ESG factors in the field of sustainable infrastructure. There is no commonly agreed-upon definition of infrastructure for data collection purposes, but infrastructure can be broadly categorised as economic infrastructure (including assets related to



transportation, utilities, flood protection, water management, IT and communications) and social infrastructure (including assets related to education, health, public order, safety, culture and recreation). 21 widely recognised initiatives in sustainable finance and infrastructure have developed along with their own sets of definitions, and there has been some convergence in the development of approaches to assess environmental, social and governance (ESG) factors. However, major data gaps in infrastructure and ESG-related data remain. Efforts should be strengthened to improve definitions, achieve further convergence on agreed areas of ESG approaches and assessments, ensure regular provision of high-quality data and build partnerships between governments, project managers, fund managers and data vendors.

Ms. Cecilia Tam (Team Lead, Clean Energy Finance and Investment Mobilisation (CEFIM) Programme, Environment Directorate, OECD)



Environment Directorate, OECD) presented some of the innovative tools to scale up sustainable finance in clean infrastructure. Countries will need to quickly reorient finance away from business-as-usual projects and massively scale up finance from all sources towards low-carbon technologies in order to meet

the Paris goals. To stay on track for the International Energy Agency (IEA)'s Net-Zero Emissions Scenario, annual clean energy investments must quadruple from USD 1 trillion (2016-2020) to nearly USD 4 trillion (2026-2030). The majority of this increase will need to come from the private sector. Depending on the region, the project's attributes and development stage of the technology in question, different sources of capital will be required (e.g. concessionary public and philanthropical capital for early-stage technologies,

capital from multilateral development banks and development finance institutions for pilot projects, and equity, debt and capital markets for technologies approaching and having achieved commercial deployment). Climate finance has an important role to play in creating the conditions for the mobilisation of wider resources. To crowd in commercial finance, governments must make concerted efforts to de-risk and direct investments while removing barriers to investment in infrastructure. Blended finance is an important tool to leverage greater quantities of private capital, and the OECD has developed targeted guidance, [The OECD DAC Blended Finance Guidance](#), to support the scaling of instruments.

Closing Remarks

Co-Chairs **Mr. John Hurley** and **Mr. Roderick Planta** summarised the discussions over the course of the Regional Policy Network on Sustainable Infrastructure. Participants noted that much progress had been made but there are major challenges ahead. **Edwin Lau** and **Virginie Marchal** of the OECD outlined possible next steps. The OECD's Sustainable Infrastructure Programme Asia (SIPA) provides an opportunity to support the mainstreaming of environmental considerations, including climate change mitigation and resilience, into infrastructure planning in the region. Extending the Infrastructure Governance Indicators to ASEAN countries will allow them to better self-assess their infrastructure governance efforts, provide further evidence for decision-making and reform, and to identify which peer countries may have relevant practices for them to learn from. Participants stressed the importance of including not only national but also subnational and local authorities in the process. Adaptation and resilience emerged as areas of particular concern for sustainable infrastructure development in the region. Participants identified greenwashing as a potential risk if the criteria for sustainability and taxonomies are improperly implemented.

