

UNITED NATIONS DEVELOPMENT PROGRAMME

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PROJECT DOCUMENT
[Global Project]

Project Title: Sustainable Infrastructure Programme in Asia (SIPA)**Project Number:** 00143365**Implementing Partner:** UNDP**Start Date:** April 2022**End Date:** September 2025**PAC Meeting date:** March 25, 2022

Brief Description

Human wellbeing and economic welfare rely greatly on the services derived from our built-up infrastructure. The infrastructure systems (including energy, transport and industrial systems) are essential for the future of our increasingly interconnected societies and economies.

As countries in Central Asia and Southeast Asia navigate climate change and the recovery from the COVID pandemic, they must prepare for and minimise the potential negative impacts of future shocks by building decarbonisation and climate resilience into their infrastructure, and making it nature-positive.

Over 60% of global greenhouse gas (GHG) emissions derive from existing infrastructure systems. What is built in the next five years, particularly in fast-growing Asia, will set GHG trajectories for decades to come and, consequently, our collective ability to achieve long-term climate goals. Significant biodiversity assets of southeast Asia, growing biodiversity and nature loss, the loss essentially puts at risk a large share of GDP due to the significant economic contributions from nature-dependent sectors, while infrastructure may be responsible for the most significant business-related pressures to biodiversity, it also offers opportunities for pursuing nature-positive economic growth.

As Central and Southeast Asia design their post-COVID recovery plans, there is a unique opportunity to help direct investments towards energy, transport and industry infrastructure projects that not only support economic growth and job creation in the short term, but are also consistent with the Paris Agreement, the post-2020 Global Biodiversity Framework, and the SDGs in the long term.

The Programme aims to help Central and Southeast Asian countries better reconcile their infrastructure investment decisions with long-term commitments such as the Paris Agreement, the post-2020 Global Biodiversity Framework, and the SDGs. To do so, the overall Project will help countries:

1. Foster sound investment decision-making to prioritise infrastructure projects compatible with a green recovery and long-term low-emission, resilient development pathways;
2. Promote enabling policy frameworks to scale up investment in sustainable, low-emission infrastructure;
3. Promote Responsible Business Conduct and green, inclusive finance and investment principles;
4. Develop capacity, increase the knowledge base and create opportunities for regional and international policy dialogues and peer learning.

Contributing SP Outcomes: 1, 3 Contributing SP Outputs: 1.1, 3.1 GEN	Total resources required:	EUR 4,000,000	
		UNDP TRAC:	n/a
		Donor OECD:	EUR 4,000,000
		Government:	n/a
		In-Kind:	n/a
	Unfunded:	none	

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I. DEVELOPMENT CHALLENGE

A) Overall context: recovery plans, infrastructure investment and the role of China in Central and Southeast Asia

Infrastructure lays the foundation for long-term economic development, but also in many cases for unsustainable greenhouse gas emissions. Infrastructure assets are responsible for about 60% of all emissions globally, and reducing their carbon footprint is an essential component of any pathway consistent with the Paris Agreement's targets.¹ Since the availability of transport, energy, industry and other infrastructure services is a precondition for inclusive economic growth, quality of life and well-being, countries need to plan for and deliver on climate action and infrastructure development in a coordinated manner. Many leading economies have announced more ambitious political commitments to the low-carbon transition (e.g. pledges to achieve net-zero emissions by mid-century by the EU, China, Japan, Korea). Furthermore, policy signals have been sent, including to Southeast and Central Asian countries, by the announcements to curb financing for coal power by Japan, Korea as well as several Multilateral Development Banks.

Prior to the COVID-19 crisis, all countries in Central and Southeast Asia were facing a significant infrastructure investment gap despite their different resource endowments, economic structures and institutional capacities. Since 2013, Chinese sources have emerged as one of the 'new' forms of capital to fill the gap as part of President Xi Jinping Belt and Road Initiative (BRI). This has led to some major infrastructural investments in the two regions connected to the BRI's two main components: the Silk Road Economic Belt (primarily land-based corridors crossing Central Asia between Europe and China) and the 21st Century Maritime Silk Road (mostly maritime routes, including several across Southeast Asia). Between 2008 and 2018, total Chinese investment (in all sectors) reached about USD 38 billion in Indonesia, about USD 12 billion in the Philippines and about USD 9 billion in Thailand.²

As many countries are designing ambitious recovery plans to address the social and economic impacts of the COVID crisis, there is a unique opportunity for Central and Southeast Asian governments to shift those investments to sustainable infrastructure projects that support the climate and development agenda. The multiplier effect of infrastructure investments is particularly important now, as the Central and Southeast Asian governments could turn to infrastructure investment to stimulate economic growth and job creation. But the decisions that are made today regarding new investments as part of stimulus packages could lock recipient countries into carbon-intensive development pathways while also in some cases driving debt to unsustainable levels. Therefore, there is a once-in-a-generation opportunity to build back better, and tackle the triple challenge of closing the infrastructure gap, stimulating a resilient economic recovery while reaching long-term climate and development goals.

The following sections provide an overview of the challenges and opportunities for the target countries and regions to further green their recovery packages and scale up and shift investments in infrastructure projects that support a low-emission, resilient and inclusive development.

B) Starting position in Southeast Asia

An infrastructure gap in fast-growing countries highly vulnerable to climate change

Over the past decade, the region of Southeast Asia has been a key contributor to global economic growth. The region has experienced an unprecedented level of urbanisation and economic growth and has pulled

¹ OECD (2017), *Investing in Climate, Investing in Growth*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264273528-en>

² Knight Frank (2019), *New Frontiers: Prospects for Real Estate Along the Belt and Road Initiative*, <https://content.knightfrank.com/research/1438/documents/en/new-frontiers-2019-6335.pdf>

millions of people out of poverty across the member states of the Association of Southeast Asian Nations (ASEAN). This economic development had been enabled by sustained investment in infrastructure systems and urban building stock.

Despite continued investment in infrastructure, there is still an important gap in infrastructure investment across the region to improve connectivity, support economic and regional development and provide access to basic services for all. The Asian Development Bank estimates that the 10 members of ASEAN require a collective USD 2.76 trillion in infrastructure spending between 2016 and 2030, which amounts to about 5.7% of gross domestic product. Given that ASEAN countries currently invest about 2.3% of GDP on infrastructure, they are falling far short of their needs. How these rapidly growing economies choose to meet increasing energy demand while striving to achieve the Sustainable Development Goals will have major implications for global efforts to tackle climate change.

Infrastructure development is taking centre stage on the political agenda across Southeast Asia. Indonesia, the Philippines and Thailand are all embarking on expansive infrastructure development plans to address the infrastructure gap. Infrastructure development is one of the economic priorities of the administration of President Joko Widodo (“Jokowi”) in Indonesia to support regional development, improve connectivity and strengthen infrastructure, which is a major barrier to doing business in Indonesia: the country ranks 72nd overall out of 141 countries in infrastructure quality according to the 2019 World Economic Forum Competitiveness Index,³ and significant investments are needed to sustain a rapidly growing and urbanising economy as well as to strengthen local economies through the decentralisation programmes. The Government has planned more than USD 400 billion of infrastructure investments focused on transport infrastructure and inter-island connectivity from 2020 to 2024.

Cumulative infrastructure investment needs for Thailand are estimated at USD 494 billion between 2016 and 2040, and considering current investment levels, Thailand will fall USD 100 billion short of this investment goal.⁴ Over the last 5 years, Thailand allocated on average 3% of its GDP to infrastructure investment, compared to an average 4.3% for other emerging economies.⁵ The government is undertaking an ambitious infrastructure investment programme, exemplified by the Eastern Economic Corridor project, a special economic zone of three provinces in eastern Thailand. Prior to the pandemic, Thailand had developed plans to transition towards an innovation- and technology-driven ‘Thailand 4.0’ in its 20-year National Strategy 2018-2037. Thailand aims to achieve this transition through its ‘bio, circular and green (BCG)’ economy model, but it will not be achievable without significant progress towards green growth and underpinning infrastructure.⁶

In the Philippines, infrastructure investment has been a priority of the Duterte administration since it came to power in 2016, notably through the “Build Build Build” (BBB) investment programme. The BBB programme consists of about 20 000 projects with an allocated budget of USD 164.7 billion over 2017-2022. It has led to a marked increase in infrastructure investment, from 3% of GDP over the years 2011-2016 to 4.4% of GDP in 2017 and over 5% in 2018-2020. However, the Philippines have been hit hard by several typhoons and COVID-19, putting significant strain on the country and making economic rescue a national priority. The government has focused on the post pandemic economic recovery, through the ARISE (Accelerated Recovery and Investments Stimulus for the Economy of the Philippines) stimulus package. It intends to accelerate the recovery by injecting PHL 1.3 trillion (USD 26 billion) into the economy.

³ World Economic Forum (2019), The Global Competitiveness Report 2019
http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf

⁴ Global Infrastructure Hub and Oxford Economics (2020), Country Profile Thailand (accessed on 3 April 2020), https://cdn.gihub.org/outlook/live/countrypages/GIH_Outlook+Flyer_Thailand.pdf.

⁵ Total economic infrastructure expenditure as a % of GDP (5 year average) based on government and multi-lateral development agency estimates. Data provided January 2017. Source: InfraCompass/Oxford Economics (2017), Thailand country profile based on the “Global Infrastructure Outlook”, https://infracompass.gihub.org/ind_country_profile/TH.

⁶ Ibid.

A climate ambition gap

Rapid economic development has come at a very high environmental cost. Many of the growth success stories across Asia have relied on abundant coal supplies and energy-intensive heavy industry to develop new urban building stock and infrastructure. Southeast Asia, due to its increasing population, rapid industrialisation and urbanisation, has undergone among the fastest growth rates in greenhouse emissions in the world, and its emissions are set to continue growing. Moreover, the region is particularly vulnerable to the effects of climate change. Ambition to mitigate the impacts of climate change through the abatement of greenhouse gas emissions and adapt to its effects has not yet risen to the level of the risks at hand.

A key issue for climate ambition in Southeast Asia is its continued reliance on coal-fired power generation. While coal power capacity is declining worldwide, Asia remains the centre for global coal demand and supply. Following the announcements by other major Asian economies, some Southeast Asian countries have sent strong signals to phase out coal use. For instance, in November 2020, the PHL Department of Energy reversed its position on coal, declaring a moratorium on new construction and cancelling most planned coal projects between (8-10 GW out of 12 GW).⁷ On the other hand, Indonesia and Thailand still rely heavily on coal, imposing a very high environmental cost, locally and globally. If Indonesia is to reach its goals of decarbonisation, shifting investments away from coal expansion towards renewables and other net-zero carbon solutions is crucial for Indonesia to get onto a sustainable development pathway compatible with the Paris Agreement.

All countries have developed and communicated greenhouse gas emission abatement targets in their Nationally Determined Contributions (NDCs).⁸ But NDCs are often insufficient to put their economies on track to a net zero emissions trajectory. Table 1 gives an overview of the different sectors covered in the NDCs of the countries of implementation.

In Indonesia, the largest emitter in the region, the Updated Nationally Determined Contribution (NDC) aims to reduce emissions by 29% (unconditional target) and 41% (conditional target) compared to the business as usual (BAU) scenario until 2030, but Indonesia's emissions are still on an upward trend. Indonesia's energy mix still relies heavily on fossil fuels (particularly coal, with the world's fourth-largest planned coal-fired expansion of 30 GW⁹), which account for more than two-thirds of the country's total primary energy supply.¹⁰ Renewables account for only 9.6%, and to reach 23-25% by 2025 a step change in investment is required.¹¹ Thailand's updated NDC targets GHG emissions reductions of 20% from projected BAU levels by 2030, and of 25% conditional on international support. These targets remain unchanged from its (I)NDC submitted in 2015.

In the Philippines, coal's share in the country's power sector increased between 2000 and 2016 from 37% to 48%, while renewable energy sources' share decreased from 26% in 2000 to 15% in 2015.¹² As one of the most vulnerable countries in the world to the impacts of climate change, the Philippines' pivot on energy policy could correct a major misalignment between the country's planned investments and stated

⁷ Farand, Chloé (2020), "Philippines declares moratorium on new coal power plants", *Climate Home News*, 28 October 2020, <https://www.climatechangenews.com/2020/10/28/philippines-declares-moratorium-new-coal-power-plants/>

⁸ Unlike all other ASEAN member states, the Republic of the Philippines has not submitted its first NDC to the UNFCCC. Upon its ratification of the Paris Agreement in 2017, its INDC automatically became its NDC.

⁹ <https://climateactiontracker.org/countries/indonesia/>

¹⁰ OECD (2019), *OECD Green Growth Policy Review of Indonesia 2019*, OECD Environmental Performance Reviews, OECD Publishing, Paris, <https://doi.org/10.1787/1eee39bc-en>.

¹¹ Ibid.

¹² Climate Analytics (2019), *Country Profile: Philippines*, *Decarbonising South and South East Asia*, <https://climateanalytics.org/media/decarbonisingasia2019-profile-philippines-climateanalytics.pdf>

conditional climate goals in its (I)NDC¹³ (70% reduction in GHG emissions by 2030 compared to BAU – a target judged to be compatible with a 2 degree scenario by the Climate Action Tracker).¹⁴

Table 1: Overview of NDCs coverage, main sectors¹⁵

Countries	Sectors covered in NDC	Sectors covered by the consortium activities
Indonesia	<i>(Updated first NDC submitted 22/07/2021)</i> Mitigation: energy, agriculture, forestry, land-use, Waste, IPPU (cement, steel aluminium explicitly mentioned) Adaptation: agriculture, water, energy security, forestry, maritime and fisheries, health, public service, infrastructure, and urban system	Mitigation: Energy, transport and industry (IPPU) Adaptation: infrastructure
Kazakhstan	<i>(First NDC submitted 06/12/2016)</i> Energy, agriculture, waste, LULUCF	Mitigation: Energy, transport (freight), industry/ mining
Mongolia	<i>(Updated first NDC submitted 13/10/2020)</i> Mitigation: Energy (RE, energy efficiency, fuel standards), agriculture, industry (cement production, coal bed methane), waste Adaptation: agriculture (animal husbandry and pastureland), water resources, forestry, biodiversity	Mitigation: Energy, transport (freight and urban transport), industry/ mining Adaptation: infrastructure
Philippines	<i>(First NDC submitted 15/05/2021)</i>	Mitigation: Energy, transport (freight, passenger cars)

¹³ Unlike all other ASEAN member states, the Republic of the Philippines has not submitted its first NDC to the UNFCCC. Upon its ratification of the Paris Agreement in 2017, its INDC automatically became its NDC.

¹⁴ Climate Analytics (2019), Country Profile: Philippines, *Decarbonising South and South East Asia*, <https://climateanalytics.org/media/decarbonisingasia2019-profile-philippines-climateanalytics.pdf>

¹⁵ Additional linkages include the important linkages between water management and climate change mitigation: If mitigation in the area of energy relates to increasing the proportion of hydroelectric power in the energy mix, then it may be wise to also consider overall water needs and the potential for multipurpose infrastructure. If mitigation in the area of transport relates to increasing the use of natural and constructed waterways – since shipping (because of larger quantities) may present a lower carbon imprint than road transport – then water availability in canals, rivers and lakes may need to be considered in conjunction with overall water needs of society. Finally, the energy used to power the systems of water supply, distribution, water and wastewater treatment, and, increasingly, for desalination, accounts for some 3-7% of global greenhouse gas (GHG) emissions. Electricity use by the water sector is mainly for the abstraction (40%), conveyance (25%) and treatment (20%) of water and wastewater, amounting to some 4% of global electricity production (data from <https://www.iea.org/reports/world-energy-outlook-2018>, contained in Water Interactions to Consider for NDC Enhancement and Implementation). To reduce the energy demand from the water sector – the *operations* of water and sewerage infrastructure needs to improve, e.g. by way of prioritizing leakage detection and repair.

	Energy, transport, waste, forestry, industry	Adaptation: infrastructure
Thailand	<i>(Updated first NDC submitted 26/10/2020)</i> Mitigation: “Economy-wide” excluding LULUCF (all measures listed in the NDC relate to energy, transport electrification and waste) Adaptation: water resources management, agriculture and food sector, tourism, natural resource management (and biodiversity)	Mitigation: Transport (freight), industry Adaptation: infrastructure
Uzbekistan	<i>(Updated 1st NDC submitted 30/10/2021)</i> Mitigation: Primarily energy (renewable energy, energy efficiency, decreasing natural gas losses), transport and logistics Adaptation: agriculture and waste management, biodiversity and ecosystems, “strategic infrastructure and production facilities”	Mitigation: Energy, transport (freight and passenger cars), industry Adaptation: infrastructure

Source: UNFCCC, accessed in March 2022

A need to mainstream climate considerations in infrastructure projects

With the majority of the infrastructure built worldwide over the next decade expected to be located in Asia, infrastructure development choices made in the next few years will determine how emissions-intensive or sustainable the region’s growth path will be. By 2050, ASEAN countries will have to decarbonise their energy systems by reversing the current trend of expanding coal-fired power generation capacity and rapidly increasing renewable energy capacity. They also need to decarbonise the industry and transport sectors, in part through increased energy efficiency across all end-use sectors. To do so, Southeast Asian countries need to better integrate environmental and climate considerations into their economic development planning processes.

Now political announcements have to translate into action as countries design their post-COVID recovery plans. However, current recovery plans fall short on climate ambition. For instance, the Indonesia government’s National Recovery Programme of IDR 720 trillion (USD 48 billion) is an opportunity to increase investment in low-carbon development, but the current plans do not seem to set the country on a low-emissions pathway, as a large proportion of this recovery plan is allocated to the state electricity utility company (PLN), without assigning conditions to such a bailout.¹⁶ Going forward, countries need to be encouraged to consider net-zero carbon emissions to serve as a guiding principle for policymaking and investment decision-making at the project level. This will require developing capacity at all levels of governments to mainstream climate concerns across the life-cycle of infrastructure projects; in the planning, financing, design and delivery of projects. Improving the evaluation of environmental and social impacts of individual projects and enhanced strategic environmental and social assessments of broader policies and strategies are important aspects of mainstreaming sustainability concerns, including climate considerations, into infrastructure development planning.

¹⁶ Ibid.

- Key figures in Southeast Asia –

	IDN	KHM	LAO	MMR	PHL	THA	VNM
Population (million)	270.6	16.5	7.2	54.0	108.1	69.6	96.5
GDP (2020, USD)	1058 bn	25.8 bn	19.1 bn	79.9 bn	361.5 bn	501.6 bn	271.2 bn
GDP growth actual and forecast (2021, 2022, 2023, %)	+3.2%, +5.9% +6.3%	+1.9%, +5.7% +6.4%	+2.1%, +4.2% +4.5%	-17.9%, -0.1% +2.5%	+3.2%, +6.3% +7%	+1%, +4.5% +4%	+3.8%, +6.6% +6.8%
tCO ₂ /capita (2016)	2.2	0.6	2.6	0.5	1.2	4.1	2.1
Unconditional NDC Mitigation Target by 2030	-29% compared to BAU	-41.7% compared to BAU	-34% compared to baseline scenario	No target	N/A	-20% compared to BAU	-9% compared to BAU
Conditional NDC Mitigation Target by 2030	-41% compared to BAU		Increase forest cover to 70% of land area	No target	-70% compared to BAU	-25% compared to BAU	-27% compared to BAU
Total Energy Supply by source	Oil, 33%; coal, 24%; gas, 17%; biofuels and waste, 15%; RES, 10%; hydro, 1%	Biofuels and waste 58%; oil, 31%; hydro, 5%; coal, 6%	Coal, 43%; hydro, 24%; biofuels and waste, 20%; oil, 14%	Biofuels and waste, 46%; oil, 29%; natural gas, 17%; hydro, 5%; coal, 4%	Oil, 33%; coal, 30%; RES, 15%; biofuels and waste, 14%; gas, 6%; hydro, 1%	Oil, 41%; gas, 27%; biofuels and waste, 19%; coal, 12%; hydro + RES, <1%	Coal, 44%; oil, 27%; biofuels and waste, 11%; gas, 10%; hydro, 9%; RES, <1%
Quality of Infrastructure: Global ranking of 141 countries (score out of 100), WEF 2019	72 nd (68)	N/A	93 rd (59)	N/A	96 th (58)	71 st (68)	77 th (66)
General government debt (% of GDP)	30.1%	33.1%	68.3%	49.1%	38.9%	34.1%	55.6%

Source: IEA (2020), IMF (2022), UNFCCC (2020), WEF (2019), World Bank (2022).

C) Starting position in the Central Asia Region

Operationalising an increasing interest to join a global coalition for net-zero

While Central Asia as a region is still a relatively small contributor to global CO₂ emissions,¹⁷ countries of the region have high emissions per unit of GDP and per capita.

¹⁷ Kazakhstan is the largest emitter in the region - emitting 0.68% of total global greenhouse gas emissions. Other countries in the region such as Kyrgyzstan, Mongolia, and Tajikistan emit a very small share of total global GHG. The lowest is Tajikistan at 0.026%, as it relies mainly on hydropower for its energy supply.

Most importantly, Central Asia is particularly vulnerable to climate change. According to some estimates, average temperatures could rise by up to 6 degrees Celsius in the coming decades, leading to the disappearance of more than one-third of the glaciers from the region's mountains by 2050.¹⁸

The energy sector is responsible for the majority of greenhouse gas emissions in the region (73%), followed by land use, land-use change and forestry (LULUCF; excluding removals, 8%) and the agricultural sector (7%).¹⁹ Coal accounts for nearly half of Kazakhstan's primary energy supply²⁰ and 70% in Mongolia.²¹

Most recently, governments in the region have committed to transition towards a greener growth model, notably underpinned by greater integration of renewable energy into the energy mix in the region. Kazakhstan and Uzbekistan have pledged to reach carbon neutrality by 2060 and 2050 respectively, creating a unique momentum. However, even this transition might not be fast enough. The recent *EBRD Transition Report 2020-21* indicates that GHG emissions are expected to increase between 2010 and 2030 in Kazakhstan, Mongolia, Tajikistan, Turkmenistan and Uzbekistan, well above 2010. Only, Kyrgyzstan's emissions are expected to decrease below their 2010 levels.²²

An infrastructure gap in land-locked countries

The effects are being compounded by the existing infrastructure systems that, due to decades of underinvestment, are inadequate to support connectivity and inclusive economic development. Central Asia is one of the least integrated regions in international trade, in part due to the inherent challenges of being land-locked. The International Transport Forum classified all Central Asian countries as having a large connectivity gap in their Connectivity Index.²³ To integrate more fully into global trade flows and take advantage of its strategic geographical position between Europe and the large emerging markets in Asia, the region would require USD 492 billion of infrastructure investment (or 565 billion including climate-related needs representing 6.8% of GDP compared to the current spending levels at 4%), or USD 33 billion annually until 2030.²⁴

The need to address infrastructure bottlenecks and to enhance connectivity is acknowledged in the development of regional strategies.²⁵ A number of sub-regional projects, programmes and strategies intend to increase connectivity and spur competitiveness. This is exemplified by Transport Strategy 2030 of the Central Asian Regional Economic Cooperation (or CAREC) Programme. This will be underpinned by modal shift, energy efficiency, and fuel switching (e.g. from diesel to electricity).²⁶

¹⁸ World Bank (2018), *Forecasting for Resilience: Central Asia Strengthens Climate and Weather Services*.

¹⁹ FAO (2018), *Regional Analysis of the Nationally Determined Contributions of Countries in Southern-Eastern Europe and Central Asia*, FAO, Rome, <http://www.fao.org/3/CA2518EN/ca2518en.pdf>.

²⁰ EU4Energy (2015), <https://www.eu4energy.iea.org/Documents/Kazakhstan-Info-FINAL.pdf>.

²¹ IEA (2018), *Mongolia Key energy statistics, 2018*, <https://www.iea.org/countries/Mongolia>.

²² EBRD Transition Report 2020-21, based on NDC Registry, EU (2018), CAIT, GDP growth forecasts (produced by the EBRD, the IMF and the OECD) and EBRD's calculations, <https://2020.tr-ebd.com/the-state-and-the-green-economy/>.

²³ ITF (2019), "Enhancing Connectivity and Freight in Central Asia", *International Transport Forum Policy Papers*, No. 71, OECD Publishing, Paris.

²⁴ ADB (2017), *Meeting Asia's Infrastructure Needs*, Asian Development Bank, Manila, <https://www.adb.org/sites/default/files/publication/227496/special-report-infrastructure.pdf>.

²⁵ ADB (2017), *Meeting Asia's Infrastructure Needs*, Asian Development Bank, Manila, <https://www.adb.org/sites/default/files/publication/227496/special-report-infrastructure.pdf>.

²⁶ CAREC (2020), *CAREC Transport Strategy 2030*; <https://www.adb.org/sites/default/files/institutional-document/559456/carec-transport-strategy-2030.pdf>.

The countries of Central Asia are also participants in China's Belt and Road Initiative, and Chinese investment in the region is on the rise. China has become a major source of foreign direct investment (FDI) in all Central Asian countries. China accounts for 43% of total FDI stocks in Tajikistan, 27% in Mongolia and Kyrgyzstan, 15% in Uzbekistan and 7% in Kazakhstan. Most investments in the region focus on the energy sector, accounting for over 68% (or USD 41 billion) of total investments, followed by the transport sector (11%), metals (10%) and chemicals (7%).²⁷ In this respect, some countries in the region are extremely dependent on China. China's Export-Import Bank holds 40% of Kyrgyzstan's total external debt. China provides more than 45% of the country's imports (mainly textiles and refined petroleum). Kyrgyzstan is at moderate risk of distress regarding its debt levels, but extremely vulnerable to exchange rate shocks.

- Key figures in Central Asia-

	KAZ	KGZ	MNG	TJK	TKM	UZB
Population (million)	18.2	6.3	3.2	9.1	5.9	33.0
GDP (2020, USD)	171.1 bn	7.7 bn	13.3 bn	8.2 bn	45.2* bn *2019 data	59.9 bn
GDP growth actual and forecast (2021, 2022, 2023, %)	+3.3%, +3.9% +5.8%	+2.1%, +5.6% +4.6%	+5.2%, +7.5% +6.6%	+5.0%, +4.5% +4.0%	+4.5%, +1.7% +1.7%	+6.1%, +5.4% +5.5%
tCO ₂ /capita (2016)	13.8	1.61	8.30	0.62	12.48	2.89
Unconditional NDC Mitigation Target by 2030	-15% compared to 1990	-11.49-13.75% compared to BAU	-22.7% compared to BAU	80-90% of 1990 levels	Reduce emissions intensity of economy	Decrease GHG intensity of economy by 10% compared to 2010
Conditional NDC Mitigation Target by 2030	-25% compared to 1990	-29.00-15.69% compared to BAU	-27.2% compared to BAU	65-75% of 1990 levels	Zero growth and possible reduction	
Total Energy Supply by source	Coal, 49%; oil, 25%; gas, 24%; hydro, 1%	Oil, 45%; hydro, 27%; coal, 22%	Coal, 72%; oil, 25%; biofuels, 3%; RES, 1%	Hydro, 52%; coal, 37%; oil, 9%; gas, 2%	Gas, 69%; oil, 31%	Gas, 85%; oil, 9%; coal, 5%; hydro, 1%
Quality of Infrastructure: Global ranking of 141 countries (score out of 100), WEF 2019	103 rd (56)	67 th (68)	101 st (57)	91 st (61)	<i>No data</i>	<i>No data</i>

²⁷ American Enterprise Institute (2021), China Global Investment Tracker, <https://www.aei.org/china-global-investment-tracker/>

General government debt (% of GDP)	21.0%	56.0%	81.6%	47.9%	29.1%	20.7%
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Source: IEA (2020), IMF (2022), UNFCCC (2020), WEF (2019), World Bank (2022), EBRD Transition Report 2020-21.

II. STRATEGY

More than 60% of global GHG emissions are embedded in existing infrastructure systems. The infrastructure that will be built in the next five years, particularly in fast-growing Asia, will determine GHG trajectories for decades to come and, consequently, our collective ability to achieve long-term climate goals. As countries design their post-COVID recovery plans, there is a unique opportunity to help them orient their investments into infrastructure projects that are consistent with long-term climate targets, while supporting economic growth and job creation in the short term. The overall Project's main desired long-term impact is to encourage governments in Central and Southeast Asia to develop and adopt infrastructure investment plans and pipelines of projects that are compatible with 1.5 degree trajectories and resilient to climate change, in line with the Paris Agreement or net-zero targets set out by 2050 or 2060. In the short-term, technical assistance on project level evaluation could also help countries green their recovery plans, through ex-ante evaluations of the environmental and social impact of the projects enclosed in their post-COVID rescue and recovery plans.

To do so, the overall Project (which is a consortium partnership led by OECD)²⁸ will help countries plan, assess, finance and implement nature-positive, low-emission and climate resilient infrastructure projects in the three most emission-intensive infrastructure sectors: energy, transport and heavy industries (however, as explained below, the UNDP component of the project will contribute to this work through capacity building workshops, policy dialogues and conferences, training, designing feasibility studies, and contributing to the development of a pipeline of infrastructure projects). Beyond climate mitigation and adaptation concerns, the partnership will also help countries mainstream broader economic, environmental and social objectives in infrastructure planning, to protect natural capital, ecosystem services and biodiversity, deliver on infrastructure assets that support a more inclusive growth and encourage businesses operating along infrastructure value chains to champion high environmental, social and governance (ESG) standards, in line with the OECD Due Diligence Guidance for Responsible Business Conduct as well as the OECD Compendium of Policy Good Practices for Quality Infrastructure Investment.

In addition to bringing infrastructure investments in line with long-term climate, biodiversity conservation and sustainable development goals, the partnership will help focus countries improve their citizens' wellbeing through high-quality infrastructure service delivery. First, it will help close the infrastructure gap by promoting investment in sustainable infrastructure projects. Second, it will promote socioeconomic development and support more inclusive growth by integrating social sustainability metrics into project assessments and opening economic opportunities for citizens through improved infrastructure service delivery. Lastly, it will improve regional connectivity in Central and Southeast Asia, which will facilitate intraregional and international trade and economic co-operation. To this end, the partnership will help countries adopt integrated investment strategies and whole-of-government planning processes to situate infrastructure projects within broader investment pathways compatible with long-term sustainability.

The objectives of the partnership include increasing capacity in three critical aspects:

Encourage the greening of post-COVID recovery plans through delivering a pipeline of infrastructure projects that support growth, job creation and long-term climate targets,

Increase long-term ambition on climate, biodiversity, and SDG targets, with increased capacity to strategically plan sustainable infrastructure investment (incorporating low-carbon, nature-positive and climate resilience goals),

²⁸ For clarity, the overall Project will be referred to as "Consortium partnership" throughout the rest of the document.

Improve consistency between short-term investment decisions and long-term goals, with increased capacity to assess and monetise multiple benefits of sustainable infrastructure planning (environmental, social, economic) and (see particularly Output I.).

High-level political representatives of target authorities/ministries/agencies will take part in the annual high-level policy dialogues and events on sustainable infrastructure, while technical-level civil servants will participate in numerous trainings and capacity development activities, at the country or regional level, and technical assistance on project-level evaluation. The partnership will also target practitioners in the areas of planning, developing and financing infrastructure investment projects.

These practitioners will come from different communities (e.g. engineers, economists, planners, financiers) and from sectors that are key contributors to greenhouse gas emissions (heavy industry such as steel, cement; transport, energy).

These practitioners will take part in the national policy dialogues and trainings organised on the latest international standards, approaches and tools on sustainable infrastructure and green and inclusive finance (see Output I, II and III).

It is expected that the partnership will support these practitioners in delivering on the implementation of long term environmental and social objectives (e.g. SDGs, NDCs, post-2020 Global Biodiversity Framework mid-century net-zero emission targets).

The partnership will also foster two regional networks of knowledge institutions, local experts/consultants, and civil society organisations facilitated by the University of Central Asia (UCA) in Central Asia and UNDP Bangkok Regional Hub in Southeast Asia.

These regional networks will serve as centres of excellence under Output IV and repository/broker of knowledge generated under Outputs I, II, and III.

The local experts/consultants will join the regional technical workshops and capacity development events (regional scale, Output IV) organised jointly by Consortium Partners, as well as specific training events which will build on the materials developed and activities implemented by the other Consortium Partners.

These networks will support the creation of a long-lasting community of experts on sustainable infrastructure by outreaching to other countries in the two regions and disseminating the knowledge created with the partnership's activities in the countries of bilateral implementation.

The project is fully aligned with UNDP Strategic Plan for 2022-2025 as it contributes to two strategic directions of change on structural transformation towards green, inclusive and digital transitions and on building resilience. The project adapts UNDP's Signature Solutions on energy, environment and resilience.

III. RESULTS AND PARTNERSHIPS

Expected Results for Overall Consortium Partnership

In order to achieve internationally agreed, long-term climate, biodiversity and development goals in Central and Southeast Asia while improving economic growth, well-being and regional connectivity (Impact), infrastructure investment in energy, transport and industry in the target countries and regions has to be aligned with low-emission, nature-positive development pathways compatible with the climate goals of the Paris Agreement (both mitigation and adaptation), the post-2020 Global Biodiversity Framework and support the 2030 Agenda for Sustainable Development (Outcome). To do so, the overall consortium partnership aims at supporting governments, businesses and financiers to adopt new or improved institutional processes and methodologies to mainstream natural capital and climate goals into long-term strategic planning and short-term project-level evaluation; and new or improved policies in key sectors to address remaining misalignments and biased incentives to scale up and shift investments in low-emission, nature-positive sustainable infrastructure through the following outputs:

1. **Strategic infrastructure planning and project evaluation (Output I):** The Consortium will provide partner governments policy reviews, training programmes and assessments methodologies aimed at improving their capacity in aligning strategic infrastructure planning and project-level assessment with long-term low-carbon, resilient and inclusive development pathways (Output I). More specifically, the OECD and the IDDRI will organise cross-sectoral/ cross-ministerial and multi-stakeholder workshops and provide guidance to help governments develop scenarios and elaborate and implement long-term low-emission development and infrastructure strategies consistent with full decarbonisation. In consultation with partner governments, they will draft or strengthen long-term economy-wide infrastructure plans and strategies aligned with long-term climate mitigation and development goals, through adopting cross-sectoral, whole-of-government approaches. OECD and UNDP will review current frameworks and provide recommendations on how to better mainstream resilience in infrastructure plans, and provide selected governments with methods and tools to mainstream natural capital in infrastructure decision making (WWF). Finally, together with partner governments, IISD and OECD will select key strategic infrastructure investment projects to review and assess their economic, environmental and social sustainability (including reduction of GHG and environmental impacts) with the aim of adjusting the design of those infrastructure investment projects to account for sustainability criteria, or work out alternative options to better align short-term decision making with those long-term goals.

2. **National framework conditions (Output II):** Consortium Partners will develop, in consultation with partner governments and other key affected stakeholders, roadmaps and strategies for low-emission energy, transport and industry sectors aimed at enhancing national policy framework (Output II). The partnership aims at identifying policy barriers to scaling up and shifting finance and investment in low-emission energy, transport and industry projects in specific countries and provide recommendations to improve the overall policy framework and unlock private sector investment in sectors critical to the low-carbon transition. In the energy sector, OECD will provide recommendations to incentivise and mobilise investment in clean energy and energy efficiency, and/or build capacity in governments and international finance institutions to attract finance and investment. The OECD and the IISD will also organise multi-stakeholder policy dialogues to reform fossil fuel subsidies that are hampering investment in low-carbon alternatives to raise awareness and meaningfully engage with stakeholders. In the transport sector, ITF will develop, in consultation with governments and other key stakeholders, strategies and roadmaps for decarbonised transport systems (e.g. freight, passenger vehicles, electrification). For infrastructure-related energy intensive industries such as cement, steel and extractive industries where emissions are particularly hard to abate, OECD will develop consultations and provide policy advice, with the aim to develop decarbonisation roadmaps and strategies.

3. **Mobilising financiers and businesses (output III):** The Consortium will propose capacity building activities, organise policy dialogues and provide country reviews and recommendations aimed at promoting Sustainable finance and Responsible Business Conduct (RBC) principles²⁹ within governments, financiers and relevant business sectors operating in the regions (Output III). One of the key barriers for sustainable infrastructure financing and delivery is the capacity gap amongst businesses and financiers to assess and integrate environmental and social risks and opportunities in project design and delivery. The OECD will work with governments and other key stakeholders to review and assess the overall policy framework for responsible business conduct in infrastructure. The OECD will also propose capacity development activities for companies, workers and civil society representatives of targeted countries and sectors to implement economic, social and environmental due diligence for responsible business and adopt international sustainability standards, and develop case studies and organise policy dialogues work with governments, national and international

²⁹ <https://mneguidelines.oecd.org/rbc-financial-sector.htm>

financiers and development finance institutions to foster the adoption of internationally recognised sustainable finance principles. As China is one of the key sources of financing of infrastructure in the region as part of the Belt and Road initiative, the partnership will specifically work with Chinese financial institutions operating overseas and Chinese businesses in the construction and transport sector to increase awareness on sustainable and green finance principles and Responsible Business Conduct (UNDP in partnership with the BIFS and OECD).

4. **Regional peer-learning and knowledge management (output IV):** OECD with the support of UNDP and UCA will establish regional peer-learning networks and training programmes on sustainable infrastructure planning and financing in the regions of Central Asia, Southeast Asia and beyond. While some activities focus on specific countries, it is essential that lessons learned disseminate beyond the countries of implementation and benefit all countries in the regions. The OECD will organise regional-level policy dialogues to exchange lessons learned among countries and ensure that knowledge is spread to other countries within the regions of Central Asia and Southeast Asia and beyond. To ensure the sustainability of the partnership, UCA and the UNDP will foster two regional knowledge networks in each of the SEA and CA regions linking up all relevant quasi-public analytical centres reporting to ministries, universities and research institutes, private think tanks/NGO/consulting companies and animated by two of the Consortium Partners. The network will help countries exchange lessons learned from in-country bilateral work and also share them with “other countries” from the region, all of which will participate in regional capacity building activities.

Expected Results for UNDP Project:

The UNDP-specific results of the UNDP component of the project include the following:

The UNDP-specific component will focus its results in six countries (“countries of implementation”): Kazakhstan, Uzbekistan, Mongolia, Philippines, Thailand and Indonesia. In addition, the project will work with stakeholders in China. The remaining countries in Central Asia (Kyrgyzstan, Tajikistan, and Turkmenistan) as well as Southeast Asia (Vietnam, Laos, Cambodia, Myanmar) will be included into regional outreach activities under Output IV. In addition, the countries Armenia, Azerbaijan and Georgia will also be involved in Output IV activities of regional outreach if deemed relevant.

UNDP has a direct role in implementation in the following countries: Thailand, Indonesia, and Mongolia. In these countries the UNDP CO will operationalize the project and work with key national counterparts. In addition, as stated above, the UNDP Bangkok Regional Hub will coordinate activities for the Southeast Asia Regional Knowledge Network on Sustainable Infrastructure, and UNDP HQ in NY will liaise with the Beijing Institute of Finance for the China components of the project. There will be dedicated operations staff in the COs working on this project, and there will be shared operations staff at UNDP HQ in NY to manage the project.

Resources Required to Achieve the Expected Results

To achieve the expected results, UNDP will receive 2.5 million USD over four years from OECD for implementation. UNDP’s country offices in Mongolia, Indonesia and Thailand will leverage its convening power as well as its political and expert contacts to facilitate the Consortium’s connections to government bodies, civil society organisations and other experts in the focus countries. The UNDP Regional Hub for the Asia-Pacific Region in Bangkok will facilitate the Network of Knowledge Institutions for Sustainable Infrastructure also to other countries in Southeast Asia. Country offices in selected countries will also help develop project specific activities and participate to substantive activities of the consortium (please see below for further details).

In addition, UNDP will receive an additional 1.5 million USD over four years for implementation in China (please see Partnerships section below for further details on this arrangement). To deliver the outputs

described above, the following inputs and activities are planned in each country, with budget amounts specified in the workplan/budget table:

- **UNDP Mongolia Country Office** will coordinate the implementation of Project activities under output I in Mongolia and ensure the coherence between the activities and national policies (related events in Mongolia). UNDP Mongolia Country Office will particularly support OECD and IDDRI in the delivery of activities A.I.1.1. and A.I.1.2. (WPI.1, see below), with the organisation of cross-ministerial workshops and capacity development activities as part of the development of long-term low-emission development strategies. UNDP Mongolia office will also support the development of a pipeline of strategic infrastructure projects as part of WP I.3. A.I.1.1. OECD to organise regional cross-sectoral/ cross-ministerial and multi-stakeholders strategic foresight workshops and provide guidance to help governments develop scenarios for sustainable low-emission infrastructure planning. A.I.1.2. IDDRI to assess and review, with feedback and input of country stakeholders, existing low-emission development strategies, develop recommendations on the elaboration and implementation of long-term low-emission nature positive development and infrastructure strategies consistent with full decarbonisation and develop capacities for local experts and policy-makers to evaluate, assess and increase the ambition of existing strategies.
- **UNDP Thailand Country Office** will lead the delivery of Activity A.I.2.2. in Thailand, with a specific focus on building a resilient, nature-positive transport sector (related events in Thailand, and elaboration of the reports)
- **UNDP Indonesia Country Office** will support the delivery of this activity in Indonesia through the delivery of at least four feasibility studies of sustainable, nature-positive and low carbon infrastructure projects conducted and utilized by the government (or other stakeholders) to mobilize investment in the region. These initial assessments and feasibility studies will inform identification of potential sustainable infrastructure projects, including early stakeholder consultation and consideration of potential environmental and social impacts. UNDP Indonesia Office will also ensure the complementarity of Project's activities with UN-PAGE's on-going technical assistance and provide end-to-end support from planning to implementation.
- **UNDP HQ will work with the Beijing Institute of Finance and Sustainability (BIFS) in China** to assess the status quo of green and responsible finance principles in China and in other countries; and carry out capacity development activities on green finance with a particular focus on climate risk analysis/management for Chinese financial institutions and investors.
- **UNDP Bangkok Regional Hub will work with the Asian Institute of Technology (AIT)** to anchor a Southeast Asia Regional Knowledge Network on Sustainable Infrastructure in Southeast Asia to support the implementation of regionally tailored activities with Consortium partners.

Partnerships

As a consortium partnership led by OECD, the partnership will work with many other partners to achieve results. The other partners involved in implementation are the following: Institut du développement durable et des relations internationales (IDDRI); International Institute for Sustainable Development (IISD); International Transport Forum (ITF); University of Central Asia (UCA); World Wildlife Fund for Nature (WWF)

. A short summary of each partners' role is below:

- Institut du développement durable et des relations internationales (IDDRI): IDDRI will provide capacity development on the rationale for the development of long-term strategies in the two regions and apply its Deep Decarbonisation Pathways Programme methodology in Central Asia. They will also contribute their expertise to capacity development activities.
- International Institute for Sustainable Development (IISD): IISD will support countries to measure the impact of energy subsidies and facilitate policy dialogues for reform, building on their Global

Subsidies Initiative. It will also test their Sustainable Asset Valuation (SAVi) tool on selected key infrastructure investment projects in Southeast Asia and Central Asia.

- International Transport Forum (ITF): ITF will develop recommendations for the prioritisation of transport projects in Central Asia and Southeast Asia and assist selected countries develop scenarios for future transport demand (freight) and policy frameworks conducive to improved connectivity and decarbonisation of their transport systems.
- University of Central Asia (UCA): UCA will deliver capacity development and training exercises to focus countries in Central Asia and will anchor a knowledge network in Central Asia to support the implementation of regionally tailored activities with consortium partners. The network will be in charge of knowledge management and dissemination for the partnership, share lessons from the partnership's activities from focus countries by outreaching beyond focus-countries within each region.
- World Wildlife Fund for Nature (WWF): WWF will carry out technical assessments on building resilience into infrastructure development and support government-led spatial planning, economic trade-off optimisation and prioritisation for infrastructure investment in selected countries.

In addition, as mentioned above, UNDP will sub-contract through the Beijing Institute of Finance Sustainability (BIFS) for implementation of the project in China. The aims of the Beijing IFS activities under the Project are to enhance capacity for green investments by financial sector players and other stakeholders in China and encourage the adoption of international standards on responsible business conduct, including but not limited to the Green Investment Principles, Equator Principles, Principles for Responsible Investment the Task Force on Climate-related Financial Disclosures, and the Taskforce on Nature-related Financial Disclosures. Financial institutions, financial regulators and other stakeholders in Southeast Asia will benefit from the activities through capacity development to enhance awareness of environmental and social risks and opportunities, facilitating knowledge exchange in green finance. Programme delivery and capacity building work are supported by the responsible party: BIFS - this is specifically for BIFS to implement a 1.5 million USD project for capacity building and research related to sustainable infrastructure investing, as stated in the completed micro-assessment (attached for reference, please see annex 4).

Furthermore, as mentioned above, UNDP will sub-contract through the Asian Institute of Technology (AIT) to coordinate a Southeast Asia Regional Knowledge Network on Sustainable Infrastructure in Southeast Asia. This will support the implementation of regionally tailored activities with Consortium partners. Programme delivery and knowledge exchange activities will be supported by the responsible party: AIT – this is specifically for AIT to implement a 400,000 USD project to promote knowledge exchange, peer learning, and the development of knowledge products and reports with Consortium partners, as stated in the completed PCAT assessment (attached for reference, please see annex 4).

Risks and Assumptions

One risk the partnership faces is changing policy priorities of the countries where the partnership is being implemented. For example, countries' policy priorities could change due to unforeseen circumstances or changes in administration. While recent momentum towards reform in Uzbekistan and Kazakhstan could create opportunities for enhanced cooperation, political instability remains a possibility. Recent and planned elections in several target countries (Indonesia, 2024; Mongolia, 2020 and 2024; Philippines, 2022) could lead to changes in national priorities. Elections in Thailand must take place no later than 2023, and there have been growing anti-government protests over the past several years. Changing political priorities are a risk in Central Asia and Southeast Asia, like anywhere else, but measures have been taken to mitigate the risk effectively.

The risk mitigation strategy is that the partnership focuses on countries that seemed to be the most willing to collaborate in the partnership, and selected political partners strategically to mitigate this political instability risk: in the presidential administration in some Central Asian countries, and in planning agencies in SEA, mostly at levels that should not be subject to changes in administration. In addition, political and

economic developments will be continuously monitored. The OECD-led Consortium will continue to closely engage with each political partner and will maintain a constant flow of communications to be updated with the latest political priorities in each country and in the regions of implementation. In consultation with BMU, the scope of the partnership could be adjusted. It may require an amendment and the re-assessment of the budget.

Another key risk is that travel restrictions due to unpredictable shocks (e.g. the COVID-19 pandemic) may disrupt implementation. For example, the ongoing COVID-19 crisis presents significant uncertainty and serves as a reminder of the challenges and risks associated in-person events, even if this specific pandemic recedes once partnership activities begin. The prospects and conditions of international travel remain slightly unclear, and there is always a small risk that an unforeseen event or circumstance makes travel to one or several target countries impractical.

The risk mitigation strategy is that risk assessments will be enacted before delivering any in-person event as part of the partnership. The OECD-led Consortium will continue to closely engage with each political partner and will maintain a constant flow of communications to be updated on the best engagement model. These could include using hybrid formats with in-person participation coupled with selected remote interventions by international experts. In consultation with BMU, the engagement model could be promptly adjusted. The OECD and its Consortium Partners have already demonstrated their adaptability to this risk during the preparation phase.

Another risk is the political and institutional constraints that may hinder the partnership's implementation. For example, due to changes in administration and government priorities, the institutional set-up and assigned responsibilities of political partners may change and may no longer match the partnership objectives.

The risk mitigation strategy is that OECD and the Consortium Partners will work closely with the countries of implementation throughout the partnership to continue to deepen the understanding of any possible political and institutional constraints. The lead political partners identified in each country of focus have the political will to coordinate across ministries and agencies (e.g. economy, transport, energy, environment) and will support the partnership's activities involving training and capacity development. Further political support will be ensured by linking the partnership policy dialogue with other high-level political platforms which the OECD is operating in the selected regions (Eurasia Week, the Annual Meeting of the GREEN Action Task Force and the meetings of the Southeast Asia Regional Programme's Regional Policy Network on Sustainable Infrastructure).

Finally, the last key risk identified with this partnership is a lack of data availability. The data availability in each country will determine the quality of the partnership's quantitative outputs, and every country may not have high quality, readily available data (e.g. to support government-led geographic information system (GIS)-spatial planning, or data for project level assessments).

The risk mitigation strategy to deal with the variance in data is that during the first months of the launch of the partnership, the OECD-led Consortium will prepare an overview of existing data types and sources and will work in close coordination efforts with local partners and international stakeholders. It will draw on the existing and privileged relations already established with the governments of the partnership's countries and regions over the years. The Consortium Partners will also collect and use proxy data or indicators where necessary.

There are also key social and environmental risks, which are specific to the UNDP component of the project. For example, one risk is that the project's commitment to inclusion and meaningful stakeholder engagement will not be conducted at all levels and affected populations or marginalized groups, including women, may be excluded. There's also the risk that the development of a pipeline of strategic infrastructure projects and the development of feasibility studies for sustainable and low carbon infrastructure projects may present potential downstream social and environmental risk. Furthermore, activities implemented by consortium partners could result in social and environmental impacts that may affect UNDP's project and reputation.

The risk mitigation strategy for these key social and environmental risks includes oversight by the project management team to ensure inclusive stakeholder engagement plans are in place when funds are transferred to responsible parties, Country Offices, and Regional Hubs. In addition, when funds are transferred to responsible parties, Country Offices, and Regional Hubs, the global project and relevant existing project SESP will be reviewed and updated as needed. For funds that will supplement existing projects (e.g COs), relevant project-level SESP and risk logs will be shared with the global project team to ensure sufficient risk management measures are in place. If risks are considered substantial, COs will undertake environmental impact assessments. Overall, the project will not fund High Risk activities identified through the SESP. If further moderate Risks are identified, the SESP risk categorization will be updated to reflect the additional Moderate Risk categorization and appropriate risk management measures will be identified. Lastly, to minimize risk from other partners, UNDP will discuss with OECD and other partners about social and environmental risks throughout the project to ensure relevant safeguards are in place for the overall consortium partnership. UNDP will discuss and share risk management plans with partners and update the risk log as the project evolves.

Overall, the results of the SESP categorize the project as moderate risk. All risks are clearly documented in the project SESP, and the risk log and will be continually monitored and assessed as the project evolves. The risk log and subsequent management actions will be updated accordingly with new risks that emerge, and there are management actions in place to address all risks currently identified.

Stakeholder Engagement

The partnership targets different groups of stakeholders involved in upstream strategic planning, investment project evaluation and financing and delivery: policy makers and civil servants involved in infrastructure planning and evaluation; infrastructure practitioners from the private sector (e.g. construction or transport companies) and financing community (e.g. international finance institutions, national development banks); local knowledge organisations to foster a long-lasting community of sustainable infrastructure experts (e.g. local universities, local experts/consultants, and civil society organisations).

In governments, the partnership is directed towards policy makers coming from different authorities/ministries/agencies (e.g. prime minister offices, presidential administration, ministries of planning/economy/finance, environmental/climate/ecology and sectoral ministries– industry, infrastructure/transport, energy).

The ultimate target group is the wider population, which should benefit in the long term from improved well-being. On the environment side, sustainable infrastructure planning will bring reduced climate change impacts, pollution and congestion with a transition towards low-carbon and climate-resilient energy, transport and industrial systems. The partnership will also indirectly contribute to building the basis of a more inclusive society, with more responsible business practices and improved conditions for workers, while securing opportunities for strong and resilient economic growth.

Furthermore, to ensure holistic stakeholder engagement, UNDP will ensure inclusive stakeholder engagement plans are in place when funds are transferred to responsible parties, Country Offices, and Regional Hubs during the project. This will ensure an inclusive process that engages project beneficiaries and affected people, fully applying the Leave No One Behind and gender equality principles. UNDP also has SES requirements in place around meaningful stakeholder engagement, and all stakeholder engagement requirements will be fully applied in further project design and throughout project implementation.

In addition, the project is grounded in the SDGs and fully aligned with UNDP's Strategic Plan, with human rights as a key underpinning principle to all sustainable development work. The focus is on nationally-owned capacity development approaches that address sustainable infrastructure, and adhere to the principle of Leaving No One Behind and a human rights-based approach. A key part of how the project has mainstreamed the HRBA is by including stakeholder workshops and stakeholder involvement in all aspects

of the project. Opportunities to strengthen capacities around linkages between human rights and sustainable infrastructure issues is an important component of the project to help drive integrated solutions and approaches. In addition, the project prioritizes the inclusion of women through stakeholder engagement workshops, where the voices of women and girls will be prioritized. In addition, the regional capacity development and peer to peer learning exchange components of the project will focus on lessons learned and best practices for advancing gender equality and women's empowerment in sustainable infrastructure projects and climate resilience across all outputs of the project. In addition, UNDP Country Offices will undertake the necessary gender analyses at the country level before beginning implementation of the project activities, where relevant. These efforts will help ensure that gender equality gaps and the needs and knowledge of women and men, girls and boys, are fully addressed across all initiatives.

South-South and Triangular Cooperation (SSC/TrC)

The partnership will promote south-south and triangular cooperation through the two regional networks of knowledge institutions, one in SEA and one in CA, that will nurture a knowledge community of sustainable infrastructure experts and practitioners in the countries of and also share lessons from the partnership activities with countries beyond the focus countries in each region. In particular, the UNDP Bangkok Regional Hub will lead this work in SEA by focusing on knowledge management and dissemination of lessons from the Project's activities. The Regional Hub will organise 4 annual regional knowledge sharing seminars with targeted stakeholders for this purpose. This will be complemented by The University of Central Asia, which will organise 3 summer school programmes with targeted policy makers, national institutions and Consortium Partners.

Digital Solutions

As mentioned, the partnership will focus on digital solutions for data collection in each country of implementation. While the data availability in each country will determine the quality of the partnership's quantitative outputs, and every country may not have high quality, readily available data, the partnership will focus on data collection to enhance results. For example, this will be done by working with government-led geographic information system (GIS)-spatial planning or collecting data for project level assessments.

To deal with the variance in data, the OECD-led Consortium will prepare an overview of existing data types and sources and will work in close coordination efforts with local partners and international stakeholders on this issue, as well as working with UNDP and UNDP's Digital Team, where necessary. It will draw on the existing and privileged relations already established with the governments of the partnership's countries and regions over the years to enhance digital data collection. The Consortium Partners will also collect and use proxy data or indicators, if necessary.

Knowledge

As described above, the project will nurture a knowledge community of sustainable infrastructure experts and practitioners in the countries and also share lessons from the project activities with countries beyond the focus countries in each region. This will be done through the UNDP Bangkok Regional Hub, which will anchor the Southeast Asia Regional Knowledge Network on Sustainable Infrastructure in Southeast Asia to support the implementation of regionally tailored activities with Consortium partners and knowledge exchange across SEA and CA region. In particular, the following activities will be undertaken: 4 annual regional knowledge sharing seminars along with 4 reports/ knowledge products produced each year of the project; 2 knowledge stock-taking conferences – mid-project and end of the project (2023-2025) and 2 reports for knowledge dissemination. Before the end of 2023, the UNDP Bangkok Regional Hub will submit to OECD a detailed proposal for an exit strategy for the Southeast Asia Regional Knowledge Network on

Sustainable Infrastructure created under this Activity, with which its sustainability and knowledge exchange is to be ensured beyond the duration of the Project.

Sustainability and Scaling Up

Since the partnership will be implemented by a Consortium of well-established international organisations as well as respected international knowledge institutions and established national and regional knowledge institutions, all of these Consortium Partners have been and will continue to be active in the area of sustainable infrastructure promotion beyond the life of the partnership. The partnership intends to empower governments and influence infrastructure decision-making for the long term by developing capacity, improving institutional processes and encouraging policy reforms in the investment framework. The Consortium Partners have existing, ongoing, and likely continued working relationships with these government institutions that participate in the partnership, beyond the implementation period, thus the knowledge and experience gained during the implementation will be passed on to possible future initiatives to build on. For example, the OECD's regional political networks (e.g. the Eurasia Competitiveness Programme, the Southeast Asia Regional Programme and its Regional Policy Network on Sustainable Infrastructure, the GREEN Action Task Force) with key policy makers of target regions will continue and the partnership's outcomes and will be usefully be disseminated and built on in its future work.

Regional networks of knowledge institutions shall be established in each region to combine country-specific/regional knowledge and analytical capacities. The regional networks would ideally become permanent and continue after the partnership ends (ideally absorbed by the host institutions, University of Central Asia and UNDP Bangkok Regional Hub, which will exist beyond the partnership implementation period). In China, the Beijing Institute of Finance and Sustainability and the Green Finance Leadership Programme will serve this purpose, and will likely continue their activities in this area beyond the implementation period. The partnership's results and lessons learned will also circulate in existing Partners' regional networks beyond the partnership period.

IV. PROJECT MANAGEMENT

Cost Efficiency and Effectiveness

The strategy for this project is expected to deliver maximum results with the available resources because of the joint operations to be undertaken with other partners. As mentioned, the overall project is set up as a consortium partnership with a range of partners with differing types of expertise as explained in sections above. This means that each partner can use its comparative advantage in the country of implementation to focus in on the sustainable infrastructure activities they are best placed to implement. This selected pathway is the most efficient and effective of available options because it allows responsible parties and other partners to work to their comparative advantages, while drawing on the expertise of other partners in the sustainable infrastructure space who can complement and build on the activities under implementation.

In addition, having joint operations means that partners can do joint monitoring of the partnership together to make the monitoring costs more efficient. This can also increase the effectiveness of the partnership because it will involve multiple consortium partners undertaking monitoring activities and looking at quality. Finally, the UNDP project is cost efficient and effective, as it builds on lessons learned from UNDP's decades of experience implementing sustainable infrastructure and climate resilience projects in the region. Using lessons learned from past experiences, the project is designed to build on UNDP's comparative advantage of working with government counterparts so that project activities are aligned with the Paris Agreement and SDGs, and it builds on UNDP's comparative advantage as a partner with the convening power in this space to bring actors together and exchange knowledge and best practices. This will help UNDP deliver its part of the consortium partnership with maximum results using the resources available.

Project Management

The UNDP project will work with other projects in the region because the project will build on UNDP's prominent presence in SEA and CA by supporting priority areas of governments and partner agencies. This will link to UNDP's vertically funded projects (Global Environment Facility and Green Climate Fund), which cover several climate change mitigation sectors such as energy efficiency, renewable energy, sustainable transport, and low-carbon interventions in cities, which contribute to Paris goals and SDGs. These projects also ensure coordination with the NDC Partnership and the support that UNDP is currently rolling out as part of UNDP's Climate Promise, which is an integrated framework to provide support to 100+ countries to raise ambition on NDCs.

In the focus countries in SEA, UNDP has projects related to sustainable infrastructure and transportation, including the Achieving Low Carbon Growth in Cities through Sustainable Urban Systems Management project under implementation in Thailand, and the Enhancing Readiness for the Transition to Electric Vehicles project under development in Indonesia. Additionally, UNDP's work in the focus countries in SEA spans a range of mitigation sectors that support increased NDC ambition and the achievement of Paris goals and the SDGs, including projects in Viet Nam on energy efficiency, LED technologies for advanced lighting, and the increased promotion of non-fired brick production, as well as projects in Indonesia centered around market transformation in the energy sector, high efficiency technologies for lighting, and the development of Indonesia's Fourth National Communication to the UNFCCC.

In addition, UNDP is partnering with GEF and UNEP on a Global Programme to Support Countries with the Shift to Electric Mobility as part of an overall shift towards a sustainable, low carbon transportation sector. Currently, UNDP has projects in Peru, Jamaica, and Uzbekistan, among others, including a planned project in Indonesia which is expected to be operational by 2021.

Other UNDP projects in the region particularly relevant to sustainable infrastructure include UNDP-GEF's ongoing project with the Philippines' Department of Transportation to promote the commercialization of low carbon urban transport systems (e.g., electric and hybrid vehicles) through effective enforcement of policies on low-carbon mobility, low-carbon transport plans for showcasing low carbon interventions in major cities and increased private sector participation and investment in low carbon transport systems, and UNDP-GEF's partnership with the Government of Malaysia's Ministry of Energy, Science, Technology, Environment & Climate Change (MESTECC) that supports a project on the implementation of low carbon initiatives in at least five cities linked to the broader enabling policy and regulatory framework and capacity development to increase investment in low carbon technologies and projects.

V. RESULTS FRAMEWORK

Intended Outcome as stated in the Global/Regional Programme Results and Resource Framework:										
Outcome 1: Structural transformation accelerated, particularly green, inclusive and digital transitions.										
Outcome 3: Resilience built to respond to systemic uncertainty and risk										
Outcome indicators as stated in the Strategic Plan:										
1.1 International financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems										
3.2 Number of countries whose vulnerability to crisis and disaster risk has improved										
Applicable Output(s) from the UNDP Strategic Plan:										
1.1 The 2030 Agenda, Paris Agreement and other intergovernmentally-agreed frameworks integrated in national and local development plans, measures to accelerate progress in place, and budgets and progress assessed using data-driven solutions										
3.1 Institutional systems to manage multi-dimensional risks and shocks strengthened at regional, national and sub-national levels										
5.2 Transition to renewable energy accelerated capitalizing on technological gains, clean energy innovations and new financing mechanisms to support green recovery										
Project title and Atlas Project Number: Sustainable Infrastructure Programme in Asia (SIPA)										
EXPECTED OUTPUTS	OUTPUT INDICATORS ³⁰	DATA SOURCE	BASELINE		TARGETS (by frequency of data collection)					DATA COLLECTION METHODS & RISKS
			Value	Year	Year 1	Year 2	Year 3	Year 4	FINAL	
Output 1 Support strategic infrastructure planning and project evaluation for long-term, low-emission, nature positive development strategies	1.1 Number of stakeholders consulted (disaggregated by type of stakeholder and gender in reporting) through workshops or other stakeholder engagement events (virtual or in-person), which are conducted to facilitate infrastructure programme development	<i>Mongolia CO reporting</i>	0	2021	<i>30 (50% women)</i>	<i>15 (50% women)</i>	0	<i>15 (50% women)</i>	<i>60 (50% women)</i>	<i>Collect data through regular reporting from the Mongolia CO to UNDP HQ.</i> <i>Risk: Difficulty in bringing stakeholders together for workshops due to COVID-19 pandemic and/or other unforeseen disruptions that can make travel or gathering more difficult.</i>

³⁰ It is recommended that projects use output indicators from the Strategic Plan IRRF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant.

	<p>1.2 Report developed for a short list of strategic infrastructure projects that would be eligible for asset-level assessments within the first twelve months of the project to contribute to low-emission development strategies in Mongolia</p>	Mongolia CO reporting	N	2021	Y	N	N	N	Y	<p>Collect data through regular reporting from the Mongolia CO to UNDP HQ.</p> <p><i>Risk: Difficulty in collecting reliable data on infrastructure projects that would be eligible for asset-level assessments and/or difficulty in obtaining this type of information from government counterparts.</i></p>
	<p>1.3 Capacity development and support provided for the creation of a pipeline of strategic infrastructure projects in Mongolia in line with government priorities</p>	Mongolia CO reporting	N	2021	Y	Y	Y	Y	Y	<p>Collect data through regular reporting from the Mongolia CO to UNDP HQ.</p> <p><i>Risk: Identification of the pipeline of strategic infrastructure projects is delayed due to COVID-19 pandemic, political instability, and/or other disruptions, which will delay the capacity development support to be provided.</i></p>

Output 2 Strengthen the resilience of infrastructure against climate change risks with a focus on building resilience in the transport sector	2.1 Number of stakeholders trained (disaggregated by type of stakeholder and gender in reporting) through workshops conducted to develop policy guidance with recommendations on improving strategic planning processes, institutions and instruments for resilience strengthening of infrastructure against climate change risk	<i>Thailand CO reporting</i>	0	2021	15 (50% women)	15 (50% women)	15 (50% women)	15 (50% women)	60 (50% women)	Collect data through regular reporting from the Thailand CO to UNDP HQ. <i>Risk: Difficulty in bringing stakeholders together for workshops due to COVID-19 pandemic and/or other unforeseen disruptions, which can make the development of inclusive policy guidance and recommendations harder to achieve.</i>
	2.2 Number of reports developed which apply the policy guidance from the workshops in a pilot project to demonstrate results under implementation, including results on gender and the inclusion of women and girls, and broader efforts at stakeholder engagement	<i>Thailand CO reporting</i>	0	2021	0	0	1	0	1	Collect data through regular reporting from the Thailand CO to UNDP HQ. <i>Risk: Difficulty in applying the policy guidance in a pilot project due to differing contexts than the context where the policy guidance and recommendations were developed.</i>

	2.3 Number of reports developed on Sound Climate Investment for Sustainable Infrastructure with a specific focus on resilient transport (including impacts on women and girls in the resilient transport sector)	<i>Thailand CO reporting</i>	0	2021	0	1	0	0	1	<p>Collect data through regular reporting from the Thailand CO to UNDP HQ.</p> <p><i>Risk: Difficulty in collecting reliable data on climate investment for sustainable infrastructure in the transport sector</i></p>
Output 3 Mobilize investment and promote long-term, low-carbon, nature positive development strategies	3.1 Number of detailed feasibility studies of sustainable and low carbon infrastructure projects prepared which are utilized by the Government of Indonesia (GoI) or other stakeholders to mobilize investment for infrastructure projects	<i>Indonesia CO reporting</i>	0	2021	1	1	1	1	4	<p>Collect data through regular reporting from the Indonesia CO to UNDP HQ.</p> <p><i>Risk: Difficulty in collecting reliable data for the feasibility studies</i></p>
	3.2 Number of stakeholders consulted (disaggregated by gender and type of stakeholder) through workshops conducted to advance long-term, low-carbon, nature-positive development strategies	<i>Indonesia CO reporting</i>	0	2021	15 (50% women)	15 (50% women)	15 (50% women)	15 (50% women)	60 (50% women)	<p>Collect data through regular reporting from the Indonesia CO to UNDP HQ.</p> <p><i>Risk: Difficulty in bringing stakeholders together for workshops due to COVID-19 pandemic and/or other unforeseen disruptions.</i></p>

	3.3 Women stakeholders are included in the design and implementation of low-carbon, nature positive development strategies in Indonesia, in particular when it comes to designing feasibility studies for infrastructure projects prepared by Gol	<i>Indonesia CO reporting</i>	N	2021	Y	Y	Y	Y	Y	<p>Collect data through regular reporting from the Indonesia CO to UNDP HQ.</p> <p>Risk: Difficulty in bringing in women stakeholders due to male-dominated workspaces and gender norms which may exclude women's participation in project design.</p>
Output 4 Promote green and responsible finance principles in China and in other countries	4.1 Number of conferences held in China to promote global knowledge exchange on green finance	<i>Reporting from BIFS</i>	0	2021	1	1	1	1	4	<p>Collect data through regular reporting from BIFS</p> <p>Risk: Difficulty in bringing stakeholders together for workshops due to COVID-19 pandemic and/or other unforeseen disruptions.</p>
	4.2 Number of stakeholders (disaggregated by gender) participating in capacity building events targeting domestic financial institutions in China and other stakeholders in the region	<i>Reporting from BIFS</i>	0	2021	15 (50% women)	15 (50% women)	15 (50% women)	30 (50% women)	75 (50% women)	<p>Collect data through regular reporting from BIFS</p> <p>Risk: Difficulty in bringing stakeholders together for capacity building events due to COVID-19 pandemic and/or other unforeseen disruptions.</p>

	4.3 Number of reports developed and shared with relevant stakeholders on the state of play of green finance	<i>Reporting from BIFS</i>	0	2021	1	1	1	1	4	<p>Collect data through regular reporting from BIFS</p> <p><i>Risk: Difficulty in gathering reliable data on green finance to develop reports</i></p>
Output 5 Promote capacity development, knowledge exchange, and peer learning among consortium partners	5.1 Number of participants (disaggregated by gender) who attend annual regional knowledge sharing seminars and webinars held throughout the project	<i>Reporting from AIT</i>	0	2021	100 (50% women)	100 (50% women)	100 (50% women)	100 (50% women)	400 (50% women)	<p>Collect data through regular reporting from AIT</p> <p><i>Risk: Difficulty in bringing stakeholders together for seminars and conferences due to COVID-19 pandemic and/or other unforeseen disruptions.</i></p>
	5.2 Number of reports/knowledge products developed from annual seminars (including lessons learned and best practices for advancing gender equality and women's empowerment in sustainable infrastructure projects)	<i>Reporting from AIT</i>	0	2021	1	2	1	2	6	<p>Collect data through regular reporting from AIT</p> <p><i>Risk: Difficulty in collecting data from annual seminars to write reports and promote peer learning across contexts and regions.</i></p>

	5.3 Detailed proposal developed for an exit strategy for the Southeast Asia Regional Knowledge Network, which ensures its sustainability continues beyond the duration of the Project.	<i>Reporting from AIT</i>	<i>N</i>	<i>2021</i>	<i>N</i>	<i>N</i>	<i>N</i>	<i>Y</i>	<i>Y</i>	<p><i>Collect data through regular reporting from AIT</i></p> <p><i>Risk: Exit strategy does not ensure sustainability beyond the life of the project and regional knowledge sharing and peer learning does not continue.</i></p>
Output 6: Strengthen programmatic coherence, oversight, and coordination across project outputs	6.1 Project is on track, milestones are met, and annual reporting to OECD is submitted on time	<i>Annual report</i>	<i>N</i>	<i>2021</i>	<i>Y</i>	<i>Y</i>	<i>Y</i>	<i>Y</i>	<i>Y</i>	<p><i>Collect data through regular annual reporting</i></p> <p><i>Risk: Delays in project results and/or receiving funds from OECD reduce programmatic coherence and delay project milestones</i></p>

VI. MONITORING AND EVALUATION

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans: *[Note: monitoring and evaluation plans should be adapted to project context, as needed]*

Monitoring Plan

Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any)
Track results progress	Progress data against the results indicators in the RRF will be collected and analysed to assess the progress of the project in achieving the agreed outputs.	Quarterly, or in the frequency required for each indicator.	Slower than expected progress will be addressed by project management.		
Monitor and Manage Risk	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards.	Quarterly	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.		
Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	At least annually	Relevant lessons are captured by the project team and used to inform management decisions.		
Annual Project Quality Assurance	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project.	Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.		
Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	At least annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections.		
Project Report	A progress report will be presented to the Project Board and key stakeholders,	Annually, and at the end of the			

	consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk long with mitigation measures, and any evaluation or review reports prepared over the period.	project (final report)			
Project Review (Project Board)	The project's governance mechanism (i.e., project board) will hold regular project reviews to assess the performance of the project and review the Multi-Year Work Plan to ensure realistic budgeting over the life of the project. In the project's final year, the Project Board shall hold an end-of project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences.	Specify frequency (i.e., at least annually)	Any quality concerns or slower than expected progress should be discussed by the project board and management actions agreed to address the issues identified.		

Evaluation Plan³¹

Evaluation Title	Partners (if joint)	Related Strategic Plan Output	UNDAF/CPD Outcome	Planned Completion Date	Key Evaluation Stakeholders	Cost and Source of Funding
e.g., Final Evaluation		1.1 The 2030 Agenda, Paris Agreement and other intergovernmentally-agreed frameworks integrated in national and local development plans,	n/a (global project)	December 31, 2025	UNDP, project partners, country offices, governments, other stakeholders, etc.	\$20,000 for two-month evaluation (funds from project)

³¹ Optional, if needed

		<p>measures to accelerate progress in place, and budgets and progress assessed using data-driven solutions</p> <p>3.1 Institutional systems to manage multi-dimensional risks and shocks strengthened at regional, national and sub-national levels</p> <p>5.2 Transition to renewable energy accelerated capitalizing on technological gains, clean energy innovations and new financing mechanisms to support green recovery</p>				
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VII. MULTI-YEAR WORK PLAN

All anticipated programmatic and operational costs to support the project, including development effectiveness and implementation support arrangements, need to be identified, estimated and fully costed in the project budget under the relevant output(s). This includes activities that directly support the project, such as communication, human resources, procurement, finance, audit, policy advisory, quality assurance, reporting, management, etc. All services which are directly related to the project need to be disclosed transparently in the project document.

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year				RESPONSIBLE PARTY	PLANNED BUDGET		
		Y1	Y2	Y3	Y4		Funding Source	Budget Description	Amount
Output 1: Coordinate the implementation of project activities related to strategic infrastructure planning and project evaluation in Mongolia, and ensure the coherence between the activities and national policies (and related events in Mongolia). <i>Gender marker:</i> GEN2	1.1 Support the organisation of cross-ministerial workshops and multi-stakeholder workshops and provide guidance to help Mongolia develop scenarios for low-emission infrastructure planning.	33,333	33,333	33,333	33,334	UNDP	OECD	Staff, Consultants Contracts, Workshops, KM, Comms, Gender, Travel	133,333
	1.2 Support capacity development activities as part of the development of long-term low-emission development strategies	33,333	33,333	33,333	33,334	UNDP	OECD	Staff, Consultants Contracts, Workshops, KM, Comms, Gender, Travel	133,333
	1.3 Support the development of a pipeline of strategic infrastructure projects	33,333	33,333	33,333	33,335	UNDP	OECD	Staff, Consultants, Contracts, Workshops, KM, Comms, Gender, Travel	133,334

	MONITORING	In-kind	In-kind	In-kind	In-kind	UNDP			
Sub-Total for Output 1: 400,000									
Output 2: Improve strategic planning processes, institutions and instruments to strengthen the resilience of infrastructure against climate change risks in Thailand. <i>Gender marker:</i> GEN2	2.1 Organise policy dialogues to promote good practices and build a resilient transport sector	100,000	100,000	100,000	100,000	UNDP	OECD	Staff, Consultants, Contracts, Workshops, KM, Comms, Gender, Travel	400,000
	MONITORING	In-kind	In-kind	In-kind	In-kind	UNDP			
	Sub-Total for Output 2: 400,000								
Output 3: Identify critical infrastructure projects and undertake asset-level sustainability assessments to promote long-term, low-carbon development strategies in Indonesia. <i>Gender marker:</i> GEN2	3.1 Conduct feasibility studies of sustainable and low carbon infrastructure projects conducted and utilized by the government (or other stakeholders) to mobilize investment.	100,000	100,000	100,000	100,000	UNDP	OECD	Staff, Consultants, Contracts, Workshops, KM, Comms, Gender, Travel	400,000
	MONITORING	In-kind	In-kind	In-kind	In-kind	UNDP			
	Sub-Total for Output 3: 400,000								
Output 4: Assess the status quo of green and responsible finance principles in China and in other countries <i>Gender marker:</i> GEN2	4.1 Conduct capacity development activities for green finance	289,201.50	185,959.50	183,481	91,358	BIFS	OECD	Staff, Consultants, Contracts, Workshops, KM, Comms, Gender, Travel	750,000

	4.2 Assess climate risk analysis of Chinese financial institutions and investors.	289,201.50	185,959.50	183,481	91,358	BIFS	OECD	Staff, Consultants, Contracts, Workshops, KM, Comms, Gender, Travel	750,000
	MONITORING	In-kind	In-kind	In-kind	In-kind	UNDP			
	Sub-Total for Output 4: 1,500,000								
Output 5: Promote regional capacity development and peer learning among Consortium partners and participating countries. <i>Gender marker: GEN2</i>	5.1 Support the implementation of regionally tailored activities with Consortium partners.	31,250	31,250	31,250	31,250	AIT	OECD	Staff, Consultants, Contracts, Workshops, KM, Comms, Gender, Travel	125,000
	5.2 Support knowledge exchange across SEA and CA region by conducting knowledge sharing seminars and online webinars.	68,750	68,750	68,750	68,750	AIT	OECD	Staff, Consultants, Contracts, Workshops, KM, Comms, Gender, Travel	275,000

	5.3 Provide operational support and oversight for knowledge exchange activities.	25,000	25,000	25,000	25,000	UNDP	OECD MU	Staff, Consultants, Contracts, Workshops, KM, Comms, Gender , Travel	100,000
	MONITORING	In-kind	In-kind	In-kind	In-kind	UNDP			
Sub-Total for Output 5: 500,000									
Output 6: Coordinate across outputs to ensure programmatic coherence, oversight, and management of SIPA project <i>Gender marker: GEN2</i>	6.1 Provide support and oversight for the project to ensure that all activities remain on track and to ensure programme milestones are met	120,000	120,000	107,033	100,000	UNDP	OECD	Staff, Consultants, Contracts	447,033
	6.2 Conduct final evaluation and draft final evaluation report				20,000		OECD	Staff, Consultants, Contracts	20,000
Sub-Total for Output 6: 467,033									
General Management Support	8%								293,363
UN coordination Levy	1%								39,604
TOTAL	4,000,000								

VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

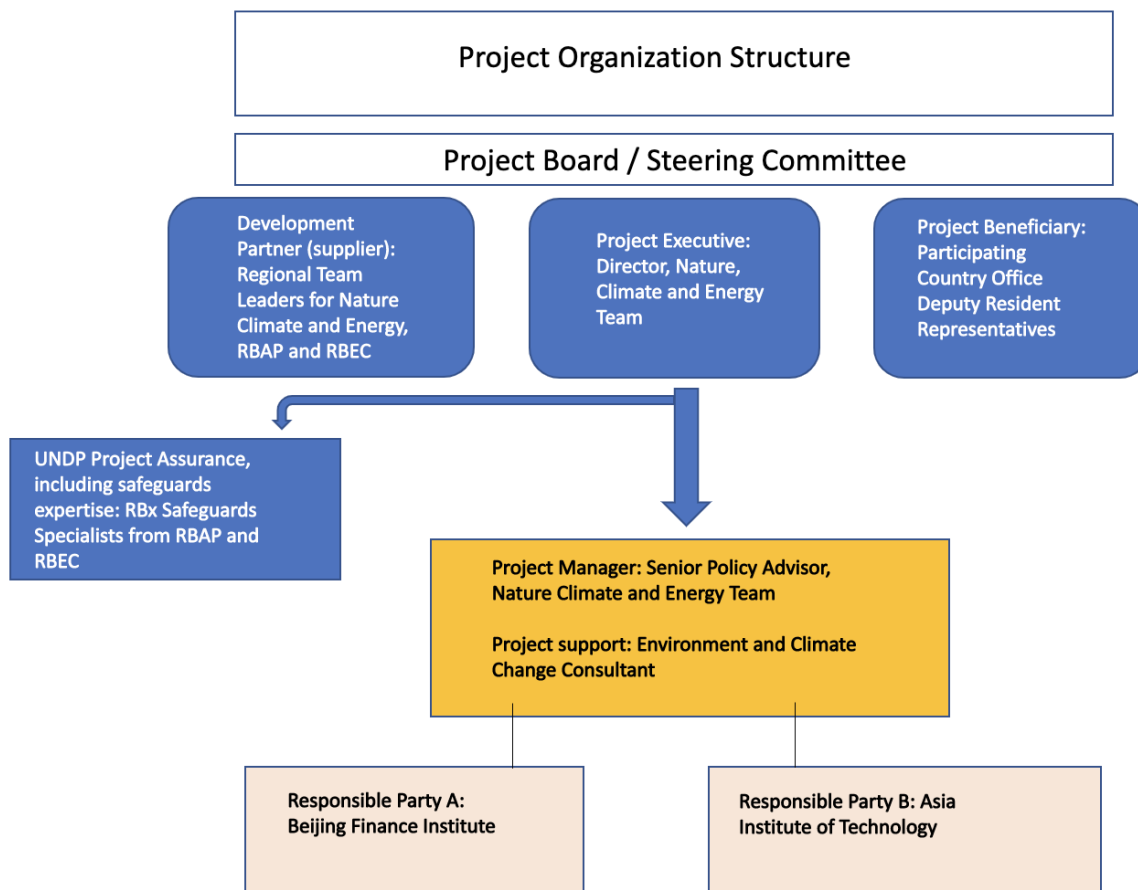
The overall partnership will be coordinated by a **Partners Coordination Board (PCB)** in accordance with the terms of the Cooperation Partnership Agreement (CPA). The OECD and all Consortium Partners shall participate in the PCB through a representative. The PCB will agree on the strategic direction, and the modalities of cooperation and coordination during the partnership implementation. The PCB will meet at least once a year. The OECD will invite the BMU and the IKI Secretariat as guests to these meetings, to advise and consult on the partnership. The PCB will ensure that individual components and activities contribute to the partnership objectives as defined in the results chain and that synergies are utilised. At its initial meeting, the Board will decide on rules and procedures for decision-making, including a suitable conflict resolution mechanism.

The OECD, as Lead Partner, shall act as **Partnership Coordinator** and will be in charge of the overall coordination and monitoring of the partnership implementation, in accordance with the terms of the CPA. However, each Partner remains fully responsible for its individual activities under the partnership as described in the individual partnership descriptions of their respective Sub-grant agreements with the OECD. The Partnership Coordinator will be the direct contact to relevant departments of BMU and ZUG and will be responsible for the overall monitoring of the partnership implementation and for reporting periodically on the progress of the partnership implementation to the BMU, in accordance with the terms of the Grant Agreement between the OECD and the BMU.

The PCB will appoint one **Country Coordination Group** for each of the focus countries (i.e. Indonesia, the Philippines, Thailand in Southeast Asia, and Kazakhstan, Mongolia, Uzbekistan) as well as working groups stated under Art.3.2 (3) of the CPA for activities of a cross-border or regional character (e.g. cross-border assessments of cross-border infrastructure projects) in Central Asia with representatives of other countries in the region (i.e. Kyrgyzstan, Tajikistan, Turkmenistan).

Each **Consortium Partner** with activities in the respective country shall appoint one representative in the Country Coordination Group. The OECD representative in each Country Coordination Group shall be the Country Focal Point for the Consortium as a whole. The **Country Focal Point** (OECD) will organise quarterly coordination meetings for each Country Coordination Group, including other relevant Consortium Partners active in the relevant country.

In line with UNDP requirements, the UNDP-specific project board will consist of the following (please see graphic below). The UNDP-specific project board will meet on the same schedule as the overall consortium board in order to stay in sync with the partnership board, report on progress, and discuss adjustments to programming, as needed. The board will also take the necessary corrective measures to manage and mitigate risks as the UNDP project is implemented. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk.



IX. LEGAL CONTEXT

Option c. For Global and Regional Projects

This project forms part of an overall programmatic framework under which several separate associated country level activities will be implemented. When assistance and support services are provided from this Project to the associated country level activities, this document shall be the “Project Document” instrument referred to in: (i) the respective signed SBAA for the specific countries; or (ii) in the [Supplemental Provisions to the Project Document](#) attached to the Project Document in cases where the recipient country has not signed an SBAA with UNDP, attached hereto and forming an integral part hereof. All references in the SBAA to “Executing Agency” shall be deemed to refer to “Implementing Partner.”

This project will be implemented by UNDP (“Implementing Partner”) in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

X. RISK MANAGEMENT

Option b. UNDP (DIM)

1. UNDP as the Implementing Partner will comply with the policies, procedures and practices of the United Nations Security Management System (UNSMS.)

2. UNDP as the Implementing Partner will undertake all reasonable efforts to ensure that none of the [project funds]¹¹ [UNDP funds received pursuant to the Project Document]¹² are used to provide support to individuals or entities associated with terrorism, that the recipients of any amounts provided by UNDP hereunder do not appear on the United Nations Security Council Consolidated Sanctions List, and that no UNDP funds received pursuant to the Project Document are used for money laundering activities. The United Nations Security Council Consolidated Sanctions List can be accessed via <https://www.un.org/securitycouncil/content/un-sc-consolidated-list>. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.
3. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).
4. UNDP as the Implementing Partner will: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
5. In the implementation of the activities under this Project Document, UNDP as the Implementing Partner will handle any sexual exploitation and abuse ("SEA") and sexual harassment ("SH") allegations in accordance with its regulations, rules, policies and procedures.
6. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.
7. UNDP as the Implementing Partner will ensure that the following obligations are binding on each responsible party, subcontractor and sub-recipient:
 - a. Consistent with the Article III of the SBAA [*or the Supplemental Provisions to the Project Document*], the responsibility for the safety and security of each responsible party, subcontractor and sub-recipient and its personnel and property, and of UNDP's property in such responsible party's, subcontractor's and sub-recipient's custody, rests with such responsible party, subcontractor and sub-recipient. To this end, each responsible party, subcontractor and sub-recipient shall:
 - i. put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
 - ii. assume all risks and liabilities related to such responsible party's, subcontractor's and sub-recipient's security, and the full implementation of the security plan.
 - b. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the responsible party's, subcontractor's and sub-recipient's obligations under this Project Document.
 - c. In the performance of the activities under this Project, UNDP as the Implementing Partner shall ensure, with respect to the activities of any of its responsible parties, sub-recipients and other entities engaged under the Project, either as contractors or subcontractors, their personnel and any individuals performing services for them, that those entities have in place adequate and proper procedures, processes and policies to prevent and/or address SEA and SH.
 - i. In the implementation of the activities under this Project Document, each sub-party shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").
 - ii. Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, each sub-party, shall not

engage in any form of sexual harassment (“SH”). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment. SH may occur in the workplace or in connection with work. While typically involving a pattern of conduct, SH may take the form of a single incident. In assessing the reasonableness of expectations or perceptions, the perspective of the person who is the target of the conduct shall be considered.

- d. In the performance of the activities under this Project Document, each sub-party shall (with respect to its own activities), and shall require from its sub-parties (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, sub-parties will and will require that their respective sub-parties will take all appropriate measures to:
 - i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;
 - ii. Offer employees and associated personnel training on prevention and response to SH and SEA, where sub-parties have not put in place its own training regarding the prevention of SH and SEA, sub-parties may use the training material available at UNDP;
 - iii. Report and monitor allegations of SH and SEA of which any of the sub-parties have been informed or have otherwise become aware, and status thereof;
 - iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and
 - v. Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. Each sub-party shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the relevant sub-party shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.
- e. Each sub-party shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the relevant sub-party to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.
- f. Each responsible party, subcontractor and sub-recipient will ensure that any project activities undertaken by them will be implemented in a manner consistent with the UNDP Social and Environmental Standards and shall ensure that any incidents or issues of non-compliance shall be reported to UNDP in accordance with UNDP Social and Environmental Standards.
- g. Each responsible party, subcontractor and sub-recipient will take appropriate steps to prevent misuse of funds, fraud, corruption or other financial irregularities, by its officials, consultants, subcontractors and subrecipients in implementing the project or programme or using the UNDP funds. It will ensure that its financial management, anti-corruption, anti-fraud and anti money laundering and countering the financing of terrorism policies are in place and enforced for all funding received from or through UNDP.

- h. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to each responsible party, subcontractor and sub-recipient: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Anti-Money Laundering and Countering the Financing of Terrorism Policy and (c) UNDP Office of Audit and Investigations Investigation Guidelines. Each responsible party, subcontractor and sub-recipient agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.
- i. In the event that an investigation is required, UNDP will conduct investigations relating to any aspect of UNDP programmes and projects. Each responsible party, subcontractor and sub-recipient will provide its full cooperation, including making available personnel, relevant documentation, and granting access to its (and its consultants', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with it to find a solution.
- j. Each responsible party, subcontractor and sub-recipient will promptly inform UNDP as the Implementing Partner in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where it becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, each responsible party, subcontractor and sub-recipient will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). It will provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

- k. *Choose one of the three following options:*

UNDP will be entitled to a refund from the responsible party, subcontractor or sub-recipient of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of this Project Document. Such amount may be deducted by UNDP from any payment due to the responsible party, subcontractor or sub-recipient under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail any responsible party's, subcontractor's or sub-recipient's obligations under this Project Document.

Where such funds have not been refunded to UNDP, the responsible party, subcontractor or sub-recipient agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to such responsible party, subcontractor or sub-recipient for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

- l. Each contract issued by the responsible party, subcontractor or sub-recipient in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from it shall cooperate with any and all investigations and post-payment audits.
- m. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project or programme, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

- n. Each responsible party, subcontractor and sub-recipient shall ensure that all of its obligations set forth under this section entitled “Risk Management” are passed on to its subcontractors and sub-recipients and that all the clauses under this section entitled “Risk Management Standard Clauses” are adequately reflected, *mutatis mutandis*, in all its sub-contracts or sub-agreements entered into further to this Project Document.

XI. ANNEXES

1. [Project Quality Assurance Report](#)
2. [Social and Environmental Screening Template](#) English][French][Spanish], including additional Social and Environmental Assessments or Management Plans as relevant.
(NOTE: The SES Screening is not required for projects in which UNDP is Administrative Agent only and/or projects comprised solely of reports, coordination of events, trainings, workshops, meetings, conferences, preparation of communication materials, strengthening capacities of partners to participate in international negotiations and conferences, partnership coordination and management of networks, or global/regional projects with no country level activities).
3. [Risk Analysis](#)
4. **Capacity Assessments:** Results of capacity assessments of Implementing Partners (including HACT Micro Assessment for BIFS and PCAT for AIT)