## **Project Objectives:**

A network of modern, safe, and efficient ports is crucial for international trade, cooperation, and security. Programs with this thematic focus will increase participants' understanding of "smart ports," which leverage appropriate policies, tools, and emerging technologies to operate efficiently, sustainably, and safely. This project examines international port management, security (including cybersecurity), sovereignty, capacity, supply-chain management, technology, and related best practices. Meetings and program activities will showcase U.S. practices pertaining to secure management of ports, investment screening and national security ramifications, regional investment trends and screening best practices, tools to protect critical infrastructure, and anti-corruption and good governance mechanisms.

This initiative should focus on sustainable infrastructure training and projects that do one or more of the following: advance gender equality and equity; raise labor and environmental standards; and promote transparency, governance, and anticorruption measures.

## Participant Backgrounds:

The eight participants in this cohort represent sectors including government (2), Port Authorities (3), and foundations, centers, or community coalitions (3). The participants in this cohort are from Bangladesh, India, Indonesia, Philippines, Sri Lanka, and Vietnam.

## **Country and Regional Backgrounds:**

As focus areas of the Quad Infrastructure Working Group, clean energy and ports are crucial components of an Indo-Pacific Strategy that prioritizes environmental sustainability, reliable supply chains, and free and open trade. The four countries that comprise the Quad – Australia, India, Japan, and the United States - have collectively provided more than \$48 billion in official finance for infrastructure in the Indo-Pacific since 2015. This investment requires a cadre of professionals and informed policymakers with the skills and knowledge to implement and support modern, advanced, and resilient ports that utilize clean energy technologies. With dynamic economies and large and rapidly growing populations, South Asian countries face acute challenges related to energy production and maritime port modernization. These countries are also among the most susceptible to the effects of climate change.

95 percent of **Bangladesh's** energy comes from fossil fuel sources, primarily from liquified natural gas (LNG). U.S. companies play a leading role in Bangladesh's natural gas extraction and distribution. Bangladesh faces an acute need for increased energy supply due to a growing population and urbanization. Through USAID and ENR programming, the United States supports Bangladesh in growing its share of clean energy, which currently represents approximately four percent of Bangladesh's total energy mix. Bangladesh's land scarcity and population-to-land density are challenges to utility-scale renewable energy installations. Bangladesh faces rolling blackouts due to fuel import limitations from decreasing foreign reserves and steadily growing energy needs. Mission goal 1 of the Integrated Country Strategy is "a more peaceful and stable Bangladesh, better able to provide for its own security, counter threats to U.S. interests, and

serve as a growing security contributor in the Indo-Pacific and globally." With improved capacity, Bangladesh has the potential to be a more significant security partner fostering greater regional stability and helping sustain global peace. Improved security at Bangladeshi air and seaports will reduce the country's vulnerability to terrorist and criminal activity as well as provide greater stability for international trade.

**India** set an ambitious goal of installing 500 GW of non-fossil fuel energy by 2030 and is proactive in seeking to deploy renewable energy initiatives to meet that target. The country's transition plan includes a strong emphasis on solar and wind power, in addition to energy storage and hydrogen, and encompasses advancements in technology, innovative financing models, and international collaborations to tap into its abundant renewable resources. The Integrated Country Strategy for India emphasizes a shared and sustainable economic prosperity for the United States and India by promoting trade and economic reforms that encourage innovation and provide a fair and transparent framework. The U.S. is focused on strategic partnership in which the U.S. and India work together through regional groupings to promote stability in South Asia; collaborate in new domains, including cyber space; deepen our economic and technology cooperation; and contribute to a free and open Indo-Pacific.

Indonesia plays an important role in regional and global economic and trade fora. As the largest economy in ASEAN, Indonesia supports increased economic integration and sustainable economic growth. Indonesia is the world's eighth-largest emitter of greenhouse gases and a priority country in the global push to reduce emissions. It intends to reach carbon net zero by 2060 or earlier. Indonesia's coastal ecosystems represent around 17 percent of the world's blue carbon reservoir and are home to the world's largest mangrove carbon stocks. At the G20 Leaders' Summit in 2022, President Biden and President Joko "Jokowi" Widodo announced a \$20 billion Indonesia Just Energy Transition Partnership (JETP) and a \$649 million MCC Compact. The JETP is a long-term partnership to accelerate Indonesia's power sector transition away from fossil fuels to clean sustainable energy sources. President Widodo is also focused on developing Indonesia's infrastructure to boost foreign investment and create jobs. However, despite being a major priority for the U.S. and Indonesia, investment in the energy sector remains stagnant. Over half of Indonesia's planned 440.6 gigawatts of new power generation by 2030 is expected to come from renewable energy, representing a \$21 billion investment opportunity. However, inconsistent regulations, uncompetitive renewable energy tariffs, outdated procurement practices, and the ensuing lack of access to financing stifle investment in climate in this sector.

**The Philippines** is highly vulnerable to the effects of climate change, suffering increased storm frequency and intensity. It faces a looming energy crisis as major gas field Malampaya, which supplies 30 percent of energy generation for main island Luzon, is set to be depleted by 2027, with no immediate indigenous energy generation source available to replace it. As global energy prices rise, the Philippines will need to increase its domestic clean energy infrastructure or face higher imported energy prices and more blackouts and brownouts. The Government of the Philippines introduced two long-term targets in 2021: increasing the share of renewable

energy to 35% of the power generation mix by 2030 and 50% by 2050 and reducing greenhouse gas emissions 75 percent by 2030. The Philippines has tremendous renewable energy potential, particularly for offshore wind, but needs to accelerate the development of grid transmission and policies to facilitate renewable projects. The Philippines is also in need of vastly upgraded critical infrastructure and a natural environment more capable of weathering the frequent climate-induced disasters which impact the archipelago. Ensuring high-quality and sustainable infrastructure development, particularly in the critical sectors of energy and information/communication technology, will lead to increased growth and productivity, better mobility and connectivity of people and goods, greater trade and investment, more resilient supply chains, reduced greenhouse gas emissions, and more job opportunities contributing to sustainable growth.

**Sri Lanka** is among the most climate vulnerable countries in the world. President Wickremesinghe announced goals of 70 percent renewable energy by 2030, carbon neutrality by 2050, and no new coal power plants effective immediately. While hydropower provides more than 40 percent of Sri Lanka's electricity, extremely dirty diesel oil and coal are responsible for more than half. Adoption of renewable energy solutions at scale will require major reform of the energy sector dominated by monopoly service provider the Ceylon Electricity Board.

**Vietnam** is a burgeoning global trade player but also faces significant threats from rising sea levels and other climate effects that threaten its population and economic growth potential. The country has prioritized climate in its energy strategy, seeking to become a Net Zero carbon emissions nation by 2050. It needs considerable help, however, on development of his clean energy sources to meet this goal, including battery storage, transmission, and creating the regulatory and investment environment necessary to stimulate growth in this sector. Vietnam's vulnerability to natural disasters and climate change, coupled with a developing economy and infrastructure, also mean insufficient disaster response capability can have destabilizing effects on the country and region if not strengthened. In order to prevent cyber threats and transnational crime, more robust defense, detection, and law enforcement mechanisms that also respect the rule of law and human rights are required. U.S. Mission Vietnam aims to accelerate Vietnam's clean energy transition to achieve net zero emissions by 2050; enhance Vietnam's infrastructure to build diverse and secure global supply chains; unlock its potential for digital transformation by promoting a free and open digital economy, and strengthen its health and education systems to promote inclusive growth and socio-economic development.