

Project Objectives:

Climate is an existential issue for many Indo-Pacific countries. Programs with this thematic focus will examine transparency and resiliency of supply chains necessary for clean energy infrastructure, and best practices for structuring, procurement, and execution of clean energy infrastructure projects. Meetings and program activities will showcase how developing and innovating clean energy technologies drives economic prosperity, energy matrix modernization, and environmental sustainability. Discussions will focus on renewable energy diversification, which supports energy independence, thus increasing geopolitical stability. Participants will explore U.S. policies; public-private partnership programs at the federal, state, and city levels; incubators and innovation hubs that support renewable energy and grid infrastructure sectors; cybersecurity strategies and approaches to safeguard critical infrastructure; and how energy innovation can strengthen local and regional economies.

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 nine participants in this cohort represent sectors including government (5), business (1), and government-owned enterprises (3). They are engaged in fields including land transport systems, cyber security, solar power, policy design, power grids, legal and regulatory practices, and sustainable energy development. The participants in this cohort are from Bangladesh, India, Maldives, the 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.

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 growth that is equitable; human development that is inclusive; investment 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.

Climate change is an existential threat to **Maldives** with its 530,000 inhabitants living on 200 inhabited islands - most no more than two meters above sea level. Maldives has gained international attention as an advocate for ambitious emissions cuts and climate finance reform. Maldives currently relies on standalone diesel generators on each island for power generation and a significant portion of its budget goes to diesel fuel. The Solih administration has increased investment in renewable energy particularly in solar, and the country plans to develop the world's largest floating solar array (10 MW) by 2023. While the market is small, U.S. investment in microgrids and low carbon technologies would be welcome and could serve as a test-case for other Indo-Pacific partners.

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.

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.