# The United States, partner countries and philanthropies are joining forces to accelerate the transition to clean, secure energy systems and build a **Net Zero World**

The Net Zero World Initiative leverages expertise across U.S. government agencies and Department of Energy (DOE) national laboratories, in partnership with other governments and philanthropies, to accelerate the **decarbonization of global energy systems.** 

This whole-of-government approach supports countries committed to raising their climate ambitions by creating and implementing highly tailored, actionable technical and investment strategies that put net zero within reach. The Net Zero World Initiative enables country partners to harness the power and technical expertise of U.S. and international industry, think tanks, and universities.

### Strategic objectives

- Develop and support ambitious technical, market and investment strategies for clean energy transformation—The Initiative collaborates with partners to develop country-specific technical and investment plans detailing the cross-cutting planning and deployment strategies needed at national, regional, and local levels.
- Deliver holistic support for immediate and sustained transformative projects that maximize overall impact for the region—The Initiative supports, for example, the development of cross-sector project pipelines and infrastructure modernization plans for partnering with the private sector and developing robust research, development, demonstration, and deployment partnerships to quickly advance technologies from research to implementation.
- Foster exchanges between U.S. leaders and among countries to support peer-to-peer learning and confidence building—The Initiative supports exchanges between U.S. states and cities, business leaders, and across countries to inform technical and investment plans and key design and implementation measures to enable peer-to-peer learning, tailored replication of successes, and confidence building. The Initiative also provides implementation support for workforce development programs, with particular emphasis on gender equity and the inclusion of under-represented groups.

The Net Zero World Initiative signals the commitment of the United States to a global transition to net zero emission, inclusive, equitable, and resilient energy systems.

### Resources

By joining the Net Zero World Initiative, partners gain access to:

- Immediate and sustained access to expert technical, deployment, and investment analysis and facilitation from the U.S. government, including the U.S. DOE's world-class national laboratories.
- Targeted support for in-country technical institutions to build long-term, self-sustaining technical capacity.
- Deep collaboration to develop technical and investment plans and support implementation for technology project design and testing, infrastructure modernization, enabling policies and measures, investment analysis and facilitation, capacity building and workforce development, and other critical actions needed to achieve near- and long-term energy system decarbonization.

The Net Zero World Initiative addresses energy-system wide and specific decarbonization measures and approaches for the following sectors: **buildings**, **transport**, **power**, **industry**, **storage**, **nuclear**, **carbon capture** and **geologic storage**, and **energy use** in agriculture.

# 1. Ambitious country-led visions, support for, and confidence in net zero energy transitions 2. Accelerated progress in decarbonizing energy systems 3. Mobilized investment to accelerate national and global economic recovery from the COVID-19 pandemic—building back better.

### **Net Zero World Partners**

U.S. Federal Agencies: The Export Import Bank of the U.S. (EXIM), The Millennium Challenge Corporation (MCC), U.S. Department of Commerce, U.S. Department of Energy (DOE), U.S. Department of State, U.S. Agency for International Development (USAID), U.S. Department of the Treasury, U.S. Trade and Development Agency (USTDA), U.S. International Development Finance Corporation (DFC)

**Philanthropies:** Breakthrough Energy, Lynne and Marc Benioff, Bloomberg Philanthropies, Global Energy Alliance for People and Planet **Governments:** Argentina, Chile, Egypt, Indonesia, Nigeria, Ukraine

DOE National Laboratories: Argonne National Laboratory, Brookhaven National Laboratory, Idaho National Laboratory, Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory, National Energy Technology Laboratory, National Renewable Energy Laboratory, Oak Ridge National Laboratory, Pacific Northwest National Laboratory, Sandia National Laboratories

### The Net Zero World Initiative aims to achieve the following milestones

**BY 2022** 

Assist with net zero energy technical and investment plans and support quick win measures **BY 2023** 

Provide deep cooperation to support priority policies and programs for countries to achieve net zero transitions **BY 2024** 

Continue implementation support, expand clean energy economies and jobs, and mobilize at least \$10 billion in clean energy infrastructure and project investment

### **Example Technical Cooperation Areas**

### **Transportation**



Policies supporting public-fleet procurement and sustainable fuel adoption

> Low-carbon fuel standards to drive deployment of zeroemissions vehicles

Modeling and analysis of low and zero carbon options

### Industry



Policies and standards for energy and material efficiency

Modeling and analysis to determine decarbonization opportunities

Programs to support clean energy entrepreneurship and energy justice

### **Buildings**



Policies to attract finance

Codes and standards for building and appliance efficiency

Technology demonstration at building/community-level

Workforce development for operators of net-zero buildings at scale

Modeling and analysis of decarbonization options

# Carbon Capture & Geologic Storage



Country-level assessments to identify opportunities and technical assistance

Regulatory assistance and best practices for community engagement

Clean energy pathways that link CCS and renewables

Assessment capacity building

### Power & Storage



Grid modernization infrastructure and operational tools

High penetration renewables deployment options

Analysis and road mapping to evaluate storage technologies

Policies and regulations for grid planning, energy storage business models and market development

## **Energy System-Wide** & Crosscutting Topics



Energy system-wide analysis to inform accelerated net zero technical and investment plans

Just transition and energy equity

Energy investment and finance mobilization

Energy use for agriculture

Hydrogen production, use in transportation, industry, etc.

Nuclear energy for baseload electricity



















