

Charting an Ambitious U.S. NDC

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■Abstract

2021 is a critical year for climate ambition and action in the United States. After four years without federal engagement, the Biden-Harris Administration has made climate a centerpiece of its policy agenda. President Biden campaigned on a commitment to achieve economy-wide decarbonization by 2050 and 100% clean electricity by 2035. Having recently formally re-joined the Paris Agreement, the administration has announced its intent to deliver a new national climate target to the international community by April 22nd. This new U.S. nationally determined contribution (NDC) will be critically important. The U.S. remains the world's second largest greenhouse gas emitter and is therefore essential to limiting climate change. The NDC will set the bar for domestic action, influencing federal and subnational policymaking. The NDC also has the potential to spur significant additional global action by sending a clear signal about the U.S. commitment to climate action. A successful NDC will need to balance ambition with what's possible in the next 9 years, taking into account political realities and evolving market dynamics. Too ambitious an agenda risks setting the U.S. up for failure and loss of credibility; too little ambition risks communicating only lukewarm support for climate with profound implications for global efforts. The U.S. remains deeply polarized on the topic of climate change, yet increasingly ambitious action by cities, states, and businesses across the U.S. are driving momentum around climate, and emerging technological trends that were largely unanticipated a decade ago are driving changes in the U.S. energy sector. This presentation will discuss the issues surrounding the U.S. NDC, and it will discuss recent research that has explored potential pathways to an ambitious U.S. NDC.

■ Biography

Dr. Clarke is the Research Director for the Center for Global Sustainability (CGS) and a Research Professor in the School of Public Policy. Dr. Clarke is an expert in energy and environmental issues, with a focus on climate change, climate change mitigation strategies, energy technology options, and integrated assessment modeling. At CGS, Dr. Clarke focuses on the use of quantitative methods and modeling in support of policy and other decisions. Current activities include low-emissions development strategies in China, India, and Latin America, energy-water-land planning in Latin America, and climate mitigation by U.S. cities, states and businesses.

Dr. Clarke formerly led the Integrated Human Earth System Science Group and directed a range of integrated assessment modeling activities at the Joint Global Change Research Institute, a collaboration between the Pacific Northwest National Laboratory and the University of Maryland. Dr. Clarke has served as an author and coordinating lead author for the Intergovernmental Panel on Climate Change (IPCC), the National Climate Assessment, and the National Research Council. He is currently a coordinating lead author in the IPCC's 6th Assessment Report. He has also led a number of multi-institution modeling studies on climate mitigation. He is the Co-Editor and Chief of the Energy and Climate Change. Dr. Clarke's has worked at two U.S. national laboratories, in energy consulting, and at an electric and gas utility. He holds a Ph.D. in Management Science and Engineering from Stanford University and a Masters degree in Mechanical Engineering from the University of California at Berkeley.