

A large, blue-tinted image of the White House, showing its iconic portico with columns and pediment, occupies the upper half of the page.

BUILDING A SECURE AND SUSTAINABLE 21ST CENTURY

Opportunities for the Biden Administration



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Building a Secure and Sustainable 21st Century: Opportunities for the Biden Administration

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INTRODUCTION

The Biden administration has an opportunity to implement policies to bring about sustainable development in realistic, actionable ways. Sustainable development enables access to resources in a way that is more equitable and healthier for the planet. When people's basic needs such as food, water, shelter, and energy are met, the whole of society becomes more resilient, conflicts are less likely and the impacts of disasters are mitigated. Peoples' security depends on sustainability. Through pursuing sustainable development objectives, the incoming administration has an opportunity to bolster security in an era of unprecedented change.

We at the [Center for Development and Strategy](#) propose a series of recommendations the new administration can take to support sustainable development and create a more secure future both at home and abroad. The U.S. has an unparalleled ability to tackle the complex and multifaceted challenges of today. From pandemics to ecological collapse to climate change, the U.S. is well positioned to confront these issues. However, the U.S. will not be able to solve climate change and raise environmental security on its own. The U.S. needs to reassert its global leadership through the multilateral institutions it played a central role in creating following World War II. Through that leadership the U.S. can help to secure sustainable solutions for the 21st century.

SUSTAINABILITY AT ALL LEVELS

Carrying out sustainable development initiatives will require integrated approaches that are both

top-down and bottom-up. Within the Federal Government, the Biden administration will have some ability to reach compromise on Capitol Hill and institute policy reforms. The administration will also have opportunities to restructure and guide federal departments and agencies through executive orders, aligning them to bolster both the mitigation and adaptation of climate change. We strongly believe that the creation of a White House Office on Climate Change would be an effective way to coordinate these tasks. Furthermore, [Climate 21's recommendation](#) to embed climate action throughout all levels of the Federal Government would help ensure the wide-ranging accelerating threats of climate change are addressed.

At the grassroots level, the administration should work across a wide range of stakeholders to form coalitions that can advance sustainable development outcomes. Cities and states act as America's laboratories for sustainability planning and policy and have continued to advance sustainability outcomes over the past four years. A common lesson learned from their experimentation is that public-private partnerships can provide effective mechanisms for implementing holistic climate change solutions. The Biden administration should therefore double down on the Federal Government's partnership with not only state and local authorities, but also private and civil society sectors in implementing local sustainable development projects. The private sector, in particular, has a fundamental role to play in achieving the U.S.' climate objectives. The Biden administration has opportunities to work with

them through public-private partnerships and science-based regulatory actions.

DOMESTIC POLICY RECOMMENDATIONS

The following recommendations are intended to further sustainable development in the U.S.

SECURE A HIGH-QUALITY ENVIRONMENT

The Biden administration has an opportunity to rebuild and revamp foundational policies that protect the environment. In just four years, the Trump administration rolled back dozens of climate and environmental regulations. The administration's first step should be to undo the damage done to the Environmental Protection Agency (EPA) under Trump and provide the agency with stability, resources, and direction. Strengthening regulations on air and water pollutants, from methane leakage to waste management, is vital for ensuring ecological stability across the country and realigning the U.S. with international climate goals. Protecting federal and American Indian lands is also important to conserve remaining wilderness areas in the U.S. Significant initiatives could include banning oil and gas exploration and development in ecologically significant areas such as the Arctic National Wildlife Refuge and expanding Bears Ears and Grand Staircase-Escalante National Monuments. Critical for a clean future, the administration should enhance regulations that increase the environmental safety of fracking, oil rigs, pipelines, and similar extractive infrastructure. It is also important to return the National Environmental Policy Act (NEPA) to its pre-Trump state. Fully reinstating NEPA is key toward developing environmental progress.

Clean Water for All

Clean water is vital for healthy ecosystems, food production, and human consumption. Biden's

campaign platform includes a promise to "tackle water pollution in a science-based manner." The Biden administration could begin to act on this promise by reinstating the Stream Protection Rule and the Great Lakes Restoration initiatives rolled back by the Trump administration. These regulations are important to reduce water pollution and protect the freshwater ecosystems. Water-use policies should be reviewed to address water scarcity concerns, particularly in the agriculture sector.

Biden's platform highlighted his intent to include PFAS (polyfluoroalkyl substances) limits in the Safe Drinking Water Act. While this step is welcome, more action will be required to ensure secure water resources. The Biden administration should take steps to enhance water quality standards through the enforcement of the Safe Drinking Water Act. Other initiatives can be introduced to improve drinking water infrastructure as well as water quality monitoring systems for underserved communities.

EFFECTIVELY REDUCE GREENHOUSE GAS EMISSIONS

The Biden Campaign promised to [sign executive orders](#) on day one so that the U.S. "achieves a 100% clean energy economy and reaches net-zero emissions no later than 2050." The Biden administration should set firm and quantifiable targets for their clean energy and emission reduction goals. The targets should incorporate both long-term and interim science-based emissions reductions, aligned with the objectives of the Paris Agreement in order to limit global temperature rise to well below 2 degrees centigrade by the end of the century. This will allow for the tracking of energy and emission goals over time, which will bolster accountability.

Biden has stated that he will set a greenhouse gas emissions reduction target for 2025, the end

of his first term as president. Further milestones should include setting target dates every four years to coincide with future presidential terms. The Biden administration's goals are ambitious given the current state of high partisan division in the country. However, any strategy employed must support critical economic sectors, such as energy, transportation and agriculture to transition toward a low-carbon future. Net zero emissions by 2050 can be achieved through a combination of policies and initiatives such as investments in renewable energy, implementing a carbon tax, creating energy efficiency standards for buildings and automobiles, and retrofitting energy inefficient buildings and infrastructure.

Price on Carbon

Last December, the International Monetary Fund (IMF) [stated](#) that the world would need to reach a global price on carbon of \$75 per ton by 2030 in order to meet the goals of the Paris Agreement. The likelihood Capitol Hill could put a price on carbon emissions is increasing. A growing bipartisan movement to enact basic action on climate is the main driver for such hopes. Accounting for the negative externalities of climate change through either a carbon tax or cap and trade system provides a cost-effective, market-based solution. While a high price on carbon would be most preferable, a low \$40 tax per ton tax of carbon dioxide equivalents, which is [proposed by a group of conservatives](#) at the Climate Leadership Council, would be a reasonable base for the new administration to negotiate from. However, the Biden administration should stipulate increases to a carbon tax that meets or exceeds the \$75 per ton requirement the IMF recommends by 2030.

Revenues from such taxes could be used to fund further sustainable development initiatives across the country, including funding renewable energy projects or public transportation initiatives that bridge divides between urban and

rural America. The U.S. can follow Canada's carbon tax model, which is focused on passing the revenues back to individuals via rebates as a way of limiting the tax's impact on taxpayers and securing political buy-in.

BUILD RESILIENT INFRASTRUCTURE FOR THE 21ST CENTURY

Physical infrastructure such as electricity grids, bridges, dams, and highway systems throughout the U.S. are in dire need of updates and repairs. U.S. infrastructure received a D+ in the American Society of Civil Engineer's 2017 Infrastructure [Report Card](#), the same as in 2013. The new administration has an opportunity to repair existing infrastructure to be better prepared for worsening weather events and sea level rise. Consistent with its "build back better" motto, the Biden administration should develop resilient infrastructure to face climate change threats.

Sustainable infrastructure needs to address both climate mitigation and adaptation. Using sustainable materials and construction techniques can reduce industrial and embedded carbon emissions and help the Biden administration progress toward other environmentally related goals. The Biden administration must also prepare for the increasing severity and frequency of physical climate risks. The U.S. has [one of the highest exposures](#) to climate risk globally. Resilience measures are critical to lessen the impacts from physical climate risks moving forward.

Building flood barriers that apply ecological-based solutions, such as planting mangroves, can protect against sea level rise. Offering incentives for using [fireproof and sustainable](#) materials for construction could reduce vulnerability to increasing wildfires throughout the Pacific and Mountain West regions. The Biden administration should develop resilient infrastructure in a sustainable manner, which would help mitigate the

long-term impacts climate change has on the U.S.

FOSTER SUSTAINABLE AGRICULTURE

The Biden administration should encourage agricultural practices that reduce environmental impact and greenhouse gas emissions. Agriculture accounts for [ten percent](#) of greenhouse gas emissions in the U.S., but its large role in land management also provides it enormous potential for [carbon sequestration](#) and the deployment of renewable energy. Farmers in the U.S. and around the world are therefore uniquely positioned to mitigate the effects of climate change through practices that sequester carbon and reduce GHG emissions.

The Biden administration can incentivize farmers to adopt environment-friendly practices and strategies that improve farming resilience to extreme weather events by providing a ranking of best practices for sustainability in agriculture, as well as support, recognition, and payment for their implementation. To make this possible, the administration should build up USDA's capacity to coordinate climate and conservation research, as well as increase their capacity to bridge the gap between research and practice. The adoption and thorough implementation of the Agriculture Resilience Act (H.R. 5861) is highly encouraged.

Initiatives to further reduce pathways whereby pollutants can enter oceans and rivers should also be proposed. Overuse of fertilizers in the Mississippi River basin, Lake Erie, and elsewhere harm underwater ecosystems as well as public health. The Biden administration should consider passing new federal laws that limit the use of nitrogen and phosphorus in overly abundant quantities, especially near major bodies of water and their tributaries. Additionally, as animal agriculture manure is a [primary source](#) of nitrogen and phosphorus to surface and groundwater, efforts to reduce meat

consumption will also help reduce marine and freshwater pollution.

PROTECT COASTLINE, MARINE, AND FRESHWATER HABITATS

Our oceans and waterways are vital for the global carbon cycle and regulating climate. They also ensure food and water security for billions of people around the globe. However, marine ecosystems and coastal populations face heightened risk from climate change, ocean acidification, and pollution. Global efforts to protect coastline, marine, and freshwater habitats are necessary to safeguard these life-sustaining services.

The Biden administration's strategy to reduce GHG emissions will be essential toward long-term marine protection and to avoid increased [ocean acidification](#), which is particularly detrimental to communities that rely on fisheries. Remediating these effects starts with limiting pollutants at their source: GHG emissions produced from fossil fuels.

Scientific studies [prove the success](#) marine protected areas bring to both fisheries and aquatic ecosystems. Following President Obama's example, the Biden administration should put forward a call to nominate new National Marine Sanctuaries that will protect a greater acreage of oceanic, freshwater, and estuarine habitat. Protecting fragile marine ecosystems that contain corals is especially important given the ongoing collapse of coral reefs due to warming oceans. Thus, the Biden administration should also bolster government initiatives and partnerships that support the assessment, conservation, incubation, and recovery of these fragile yet necessary marine invertebrates. In support of these initiatives, the Biden administration could pledge alongside the [United Kingdom, Canada, and the European Union](#) to declare 30 percent of land and sea as protected areas by 2030 .

The Biden administration should also propose new laws that reduce the [millions of tons of plastic](#) that end up in the ocean globally each year. Implementing a national ban or tax on single-use plastics would be an effective step. Currently, [eight states](#) have implemented some form of a ban on single-use plastics, primarily single-use plastic bags, but this could be extended to other single-use plastics and states.

FOREIGN POLICY RECOMMENDATIONS

The following recommendations will further global stability through sustainable development.

ACCELERATE ENVIRONMENTAL INTELLIGENCE TECHNOLOGIES

The incoming administration should improve prediction and quick-reaction capabilities through investments in cutting-edge technologies that utilize quantum computing, remote sensing, artificial intelligence, and machine learning.

New computing technologies, sensors, artificial intelligence, and space launch innovations have enabled scientists and policymakers to more accurately predict and prepare society for short and long-term environmental threats. Regional and country-specific resource insecurity can now be forecasted through early warning models that integrate meteorological, economic, and social resilience conditions. Artificial intelligence and machine learning [can assist](#) these models in data processing to make sense of the enormous amount of imagery and data being captured by Earth observation satellites.

The U.S. must continue to share Earth science data with allies through the State Department and international affairs offices within the Department of Defense and scientific agencies such as the National Aeronautics and Space

Administration, the National Oceanic and Atmospheric Administration, the Department of Agriculture, and the U.S. Geological Survey. Gathering proper environmental intelligence is a bi-partisan mission that has a history of strong support from both sides of the aisle.

SECURE FOOD AND WATER AVAILABILITY

As climate change compounds environmental degradation, the Biden administration has an opportunity to demonstrate U.S. commitment to global environmental security. Food and water security worldwide are threatened by aggravated droughts, fires, hurricanes, and floods. Through USAID's Bureau for Resilience and Food Security, the Biden administration can work at the nexus of food security and environmental change to secure effective adaptations to the expected changes in climate.

Leveraging existing food security programs, the administration should expand USAID's Feed the Future program and require emphasizing the growing challenges that climate change will add, so that sustainable and adaptive measures may be further incorporated. The Biden administration should consider growing the program past the current 12 partner nations and including smaller nations like the Marshall Islands, where sea level rise has [altered](#) the ability of locals to grow crops. Increased aid to developing nations' environments can also be delivered by greater contributions to the Global Environment Facility, to which the Biden administration will have the ability to increase the U.S.' pledge in 2022.

Promote Sustainable Diets

Consumer food demand is a primary driver of overly exploitative agricultural practices around the world. These damage ecosystems, erode soils, reduce biodiversity, and contribute to greenhouse gas emissions. By 2050, the world will have to feed ten billion people, while per-person consumer demand is [expected to](#)

[increase](#). However, food consumption habits today are already beyond the planet's sustainable capacity. The biodiversity loss potential is exceptionally high, though it is difficult to state in monetary terms.

In order to feed ten billion people and prevent damage to ecosystems, the world will need to adopt sustainable diets, reduce food waste, and intensify sustainable agricultural production. This food transformation needs to start now. The Biden administration should facilitate international coordination efforts to promote sustainable diets, and nations around the world can do this by adding climate-driven ambitions to their national dietary guidelines and by incorporating changing food consumption patterns into the Paris Agreement's nationally determined contributions. On this topic, we recommend the strategic guidelines of the [EAT-Lancet Commission](#), calling for shifts toward healthy and sustainable diets, reducing food waste, and intensifying sustainable production of healthy food.

REJOIN THE PARIS ACCORD

The international community has shown robust support for the Paris Climate Agreement and fighting climate change. Rejoining the Paris Climate Agreement with bold commitments can help restore international confidence in the U.S. and encourage a wave of bold climate action from other nations and civil society. As the world's largest economy and second highest greenhouse gas emitter, the U.S. has a responsibility to meaningfully slow down climate change by reducing emissions, investing in carbon sink technologies, and accelerating the transition to renewable energy. Not only will rejoining the Paris Climate Agreement bode well for U.S. foreign relations, but it will also create millions of high-paying jobs for Americans in the clean energy industry and increase the health of both the U.S. and global populations by reducing air pollution.

CONCLUSION

While not intended to be comprehensive and complete in scope, this brief outlines key areas the Biden administration should focus their domestic and foreign policy efforts on in order to help ensure a sustainable and secure future. Given the increase in American political polarization in recent years, we advocate for realistic sustainable development initiatives. There is far more to be done. If implemented, these recommendations would remediate the damages of climate change and biodiversity collapse that threaten global security.



The Center for Development and Strategy 501(c)(3) is exploring the nexus of global development, sustainability, and security in an era of unprecedented change. Led by a younger generation, CDS has a unique perspective on the dynamic and complex state of environmental security in the 21st century.