

SOLVING THE CLIMATE CRISIS

*The Congressional Action Plan for a Clean Energy
Economy and a Healthy, Resilient, and Just America*

The United States must harness the technological innovation of the moonshot, the creativity of our entrepreneurs, the strength of our workers, and the moral force of a nation endeavoring to establish justice for all to solve the climate crisis and avoid the devastating consequences of climate change. The Climate Crisis Action Plan provides a roadmap for Congress to build a clean energy economy that values workers, advances environmental justice, and meets the challenges of the climate crisis.

AMBITIOUS EMISSIONS GOAL: NET ZERO BY 2050, NET NEGATIVE THEREAFTER

To limit warming to 1.5°C, global net anthropogenic carbon dioxide emissions must fall by about 45% from 2010 levels by 2030 and reach net-zero by 2050. The Climate Crisis Action Plan calls for:

Reaching net-zero emissions economywide in the United States by no later than 2050, with ambitious interim goals set by a new president • Assessing progress in achieving this goal & reducing pollution in environmental justice (EJ) communities • Achieving net-negative emissions during the 2nd half of century

The Climate Crisis Action Plan lays out hundreds of policy recommendations for congressional action and centers on 12 key pillars. The non-partisan think tank Energy Innovation modeled a subset of these recommendations and found the Climate Crisis Action Plan would:

Reduce net U.S. greenhouse gas emissions by at least 37% below 2010 levels in 2030 & 88% below 2010 levels in 2050; the remaining 12% of emissions are from the hardest-to-decarbonize sectors (heavy-duty & off-road transportation, industry, & agriculture) • Reach net-zero carbon dioxide emissions before 2050, in line with the IPCC recommendations for limiting warming to 1.5°C • Provide almost \$8 trillion (real 2018 U.S. dollars) in cumulative climate & health benefits through 2050

PILLAR 1: INVEST IN INFRASTRUCTURE TO BUILD A JUST, EQUITABLE, & RESILIENT CLEAN ENERGY ECONOMY

Build a cleaner and more resilient electricity sector

Enact a Clean Energy Standard to achieve net-zero emissions in the electricity sector by no later than 2040, creating roughly 530,000 jobs annually • Set an Energy Efficiency Resource Standard • Expand tax incentives & grant programs to deploy more clean energy & efficiency technologies, with a focus on EJ communities most in need • Invest in R&D across clean technologies, especially energy storage • Ensure equitable access to clean energy in EJ communities • Site & construct more interstate transmission lines • Remove roadblocks in power markets for clean energy • Prepare the electricity grid for climate impacts

Build a cleaner and more resilient transportation sector

Set strong greenhouse gas emissions standards for cars & heavy-duty trucks • Achieve 100% sales of zero-emissions vehicles by 2035 & heavy-duty trucks by 2040 • Implement ambitious policy for more domestic manufacturing of zero-emission cars & trucks • Build out zero-emission fueling infrastructure • Enact a Low Carbon Fuel Standard • Double funding for public transit • Incentivize affordable housing near transit • Invest in R&D for long-haul trucking, aviation, & shipping • Offer incentives & grants for sustainable aviation fuels • Clean up air pollution at ports • Upgrade and expand the nation's rail system • Ensure all transportation systems are designed and maintained to withstand climate impacts

Build and upgrade homes & businesses to maximize energy efficiency and eliminate emissions

Incentivize states & cities to adopt updated model building codes, with the goal of making all new residential & commercial buildings net-zero emissions by 2030 • Require new federal buildings to achieve net-zero emissions by 2030 • Set benchmarking requirements for commercial buildings • Incentivize energy efficiency, on-site renewable energy generation, & electrification of end uses in buildings • Invest in large-scale weatherization & efficiency in low-income & frontline communities

Invest in water systems to provide clean water and prevent catastrophic flooding

Establish new standards for infrastructure resilience that account for climate impacts • Integrate nature-based solutions & innovative finance approaches to ensure safe, clean water supplies, efficient wastewater treatment, & dams and levees that are sited, designed, & maintained for climate resilience.

Prepare the nation's telecommunications networks for climate impacts

Invest in Next Generation 9-1-1 • Direct the Federal Communications Commission to ensure the reliability of wireless communications networks during disasters • Expand broadband networks to achieve reliable & universal access & provide continuity of internet services for essential needs during disasters.

Plug leaks and cut pollution from America's oil and gas infrastructure

Set ambitious national goals & standards to reduce methane emissions from the oil & gas sector and phase out routine flaring • Set new standards for pipeline operators to detect & repair methane leaks • Support cities & states to eliminate methane leaks from natural gas distribution lines within 10 years • Ensure FERC considers climate science & public input when siting new natural gas infrastructure • Close exemptions for the oil & gas industry in the Clean Air Act, Clean Water Act, & Resource Recovery and Conservation Act.

PILLAR 2: DRIVE INNOVATION AND DEPLOYMENT OF CLEAN ENERGY AND DEEP DECARBONIZATION TECHNOLOGIES

Prioritize climate in Department of Energy (DOE's) mission & reorganize DOE to meet this goal • Recommit to Mission Innovation & boost funding for federal clean energy RDD&D • Facilitate technology transfer & commercialization • Launch a national climate bank • Expand the DOE loan guarantee program to leverage private investment • Create a DOE Energy Justice & Democracy Program • Require corporate disclosure & federal analysis of climate-related financial risks.

PILLAR 3: TRANSFORM U.S. INDUSTRY AND EXPAND DOMESTIC MANUFACTURING OF CLEAN ENERGY AND ZERO-EMISSION TECHNOLOGIES

Rebuild U.S. industry for global climate leadership

Establish performance standards for industrial facilities & pair them with a border adjustment • Support RDD&D of technologies for industrial decarbonization, including carbon capture, utilization, & storage • Provide industrial sector firms with access to revolving loan funds, grants, & tax incentives for efficiency upgrades, process changes, & retooling • Develop infrastructure for key technologies, including low- & zero-carbon hydrogen • Create markets for low-emission goods through a federal Buy Clean program • Facilitate the transition to a circular economy that eliminates waste & pollution.

Invest in domestic manufacturing of clean energy, clean vehicle, and zero-emission technologies

Revive the 48C tax credit to retool, expand, or establish domestic clean energy & grid technology manufacturing facilities • Reinstate & expand the 45M production tax credit for clean energy, energy efficiency, & decarbonization technologies • Expand DOE grant programs & loan guarantees to construct or retool facilities to manufacture zero-emission vehicles • Tie federal funding for innovation to domestic manufacturing of new technologies • Leverage federal procurement policies to build demand for domestic clean energy & zero-emission technologies & products.

Develop, manufacture, and deploy cutting-edge carbon removal technology

Dramatically increase federal investment in carbon removal RDD&D • Improve financial incentives for direct air capture technology • Expand demonstration projects to safely store carbon below ground • Create markets for fuels made from captured carbon.

PILLAR 4: BREAK DOWN BARRIERS FOR CLEAN ENERGY TECHNOLOGIES

Align the tax code with a net-zero emissions goal & eliminate unnecessary tax breaks for oil & gas companies • Put a price on carbon • Pair a carbon price with policies to achieve measurable pollution reductions from industrial facilities in EJ communities • Pair a carbon price with policies to ensure that energy-intensive, trade-exposed domestic industries that are working to reduce pollution remain on a level playing field with foreign competitors that use dirtier technologies.

PILLAR 5: INVEST IN AMERICA'S WORKERS AND BUILD A FAIRER ECONOMY

Secure workers' right to organize a union & negotiate for higher wages, safer working conditions, & better benefits ▪ Commit federal funding only to projects that meet strong labor standards ▪ Consider new clean energy & vehicle tax policy designs to support strong labor standards ▪ Establish a National Economic Transition Office to coordinate, scale up, & target federal economic & workforce development assistance to communities & workers ▪ Support the health care needs of coal industry veterans ▪ Create jobs through conservation and reclamation & restoration of coal mines & abandoned wells.

PILLAR 6: INVEST IN DISPROPORTIONATELY EXPOSED COMMUNITIES TO CUT POLLUTION AND ADVANCE ENVIRONMENTAL JUSTICE

Put EJ at the center of federal climate & environmental policy ▪ Direct EPA to consider the cumulative pollution impacts of industrial facilities in EJ communities ▪ Strengthen enforcement of environmental laws ▪ Support federal & academic research of the cumulative & distributional impacts of federal policies on EJ communities ▪ Prioritize EJ communities for new federal spending & projects to deploy clean energy & infrastructure ▪ Ensure meaningful federal engagement & consultation with EJ communities ▪ Increase the capacity of EJ communities to participate in the policymaking process.

PILLAR 7: IMPROVE PUBLIC HEALTH AND MANAGE CLIMATE RISKS TO HEALTH INFRASTRUCTURE

Develop a national strategic action plan to help communities & health departments prepare for & respond to climate-related health risks, including disproportionate harms to EJ communities ▪ Increase U.S. support for global surveillance & response to potential health threats ▪ Strengthen supply chains for health commodities ▪ Expand the CDC's capacity to support state, local, tribal, & territorial health departments in their climate-related work ▪ Increase funding for programs to make hospitals more resilient to climate impacts ▪ Increase support to address the mental & emotional health effects of climate impacts.

PILLAR 8: INVEST IN AMERICAN AGRICULTURE FOR CLIMATE SOLUTIONS

Increase investments to support the voluntary efforts of America's farmers & ranchers to employ climate stewardship practices ▪ Set climate stewardship practice goals across all U.S. farmland ▪ Incorporate climate mitigation & adaptation into programs for new, beginning, & socially disadvantaged farmers & ranchers ▪ Incentivize farmers & ranchers to incorporate energy efficiency & renewable energy on-farm ▪ Incentivize farmers & ranchers to protect their farmland from development & other non-agricultural uses ▪ Support local & regional food systems & develop initiatives to combat food waste.

PILLAR 9: MAKE U.S. COMMUNITIES MORE RESILIENT TO THE IMPACTS OF CLIMATE CHANGE

Support community leadership in climate resilience and equity

Establish a National Climate Adaptation Program to deliver technical assistance, support planning, & invest in community adaptation & resilience projects ▪ Establish a Tribal Government Task Force to augment tribal technical capability & ensure equitable funding ▪ Ensure investments for climate resilience build local workforce capabilities & provide good jobs for vibrant regional economies.

Build - and rebuild - based on actionable science, codes, and standards

Establish a Climate Risk Information Service to develop localized climate risk projections for community planning & resilience codes, specifications, & standards ▪ Establish federal flood & wildfire resilience standards ☒ Revise the federal tax code to incentivize state, local, & private investments in resilience.

Reduce climate disaster risks and accelerate disaster recovery

Increase & provide stable federal investment in pre-disaster mitigation & resilient disaster recovery ▪ Support community-led voluntary, just & planned transitions from the riskiest areas ▪ Reform federal flood mapping & insurance programs to deliver forward-looking projections, help low-income households afford flood insurance, & reduce uninsured flood losses ▪ Develop a national wildfire mitigation strategy & increase federal investment in wildfire resilience ▪ Prioritize investments to eliminate repetitive climate change impacts.

Make climate resilience planning an essential element of federal agency operations

Require climate adaptation planning & coordination in federal agencies • Ensure federal agency adaptation plans address climate impacts on EJ communities & vulnerable populations • Require major suppliers to disclose greenhouse gas emissions & climate risks to their supply chains & operations as prerequisite for federal contracts.

PILLAR 10: PROTECT AND RESTORE AMERICA'S LANDS, WATERS, OCEAN, AND WILDLIFE

Capture the full potential of natural climate solutions

Protect at least 30% of all U.S. lands & ocean areas by 2030 • Protect mature & old growth forests • Invest in forest restoration, reforestation & afforestation on public & private lands • Protect & restore native grasslands • Re-establish the Civilian Conservation Corps • Protect & restore ocean, wetland & riverine ecosystems • Expand responsibly-sited ocean-based renewable energy while minimizing impacts on fisheries & wildlife • Increase federal research, monitoring, & adaptation funding for ocean acidification & other coastal climate impacts • Create wildlife corridors to facilitate species migration & mating • Develop a landscape scale strategy to help species adapt to climate change • Support efforts by private landowners to protect wildlife habitat.

Make public lands and waters a part of the climate solution

Develop a comprehensive strategy to achieve net-zero emissions on public lands & waters by 2040 at the latest • Impose a moratorium on new fossil fuel leases on public lands & prohibit new offshore leasing; ensure robust economic development & worker transition assistance for communities dependent on fossil fuel extraction • Reduce methane pollution from oil & gas extraction • Increase renewable energy production on public lands • Protect wild & special places from drilling & mining • End subsidies & handouts for oil & gas drilling • Strengthen bonding requirements for fossil fuel extraction • Reclaim & restore orphaned wells.

PILLAR 11: CONFRONT CLIMATE RISKS TO AMERICA'S NATIONAL SECURITY AND RESTORE AMERICA'S LEADERSHIP ON THE INTERNATIONAL STAGE

Require consideration of climate risks in defense procurement, logistics, & supply chains • Ensure resilience planning collaboration among military installations & neighboring communities • Direct federal agencies to safeguard critical infrastructure & prepare for climate-driven internal & cross-border migration • Deliver on U.S. commitments to the Green Climate Fund • Advance clean energy & climate resilience in international missions & aid • Expand support for stopping deforestation & reducing black carbon pollution • Improve Arctic engagement & diplomacy.

PILLAR 12: STRENGTHEN AMERICA'S CORE INSTITUTIONS TO FACILITATE CLIMATE ACTION

Strengthen climate science

Strengthen & sustain federal support for climate science research & assessments • Consider governance for atmospheric climate intervention • Safeguard scientific integrity & science-informed policy • Invest in climate literacy & STEM education • Revive the congressional Office of Technology Assessment.

Assess the true value of federal climate action

Develop methodologies to consider the fiscal & economic effects of climate risk impacts expected from proposed legislation • Establish a working group to update the "Social Cost of Carbon" • Direct OMB to work with the National Academies to improve agencies' cost-benefit analysis of climate resilience projects.

Strengthen the country's democratic institutions

Build a healthier, more responsive democracy to facilitate ambitious climate action with a focus on enacting campaign finance reform, protecting & expanding voting rights, & strengthening federal ethics laws.