The Role of Climate Mitigation in Solving the Climate Crisis

Majority Report from the House Select Committee on the Climate Crisis



Rachel Cleetus July 14, 2020 EESI Congressional Briefing "The Climate Crisis Report in Focus"

Concerned Scientists

Concerned Scientists Science for a and safer world.

Latest science underscores urgency

U.S. Global Change Research Program

Fourth National Climate Assessment



Volume II Impacts, Risks, and Adaptation in the United States

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE

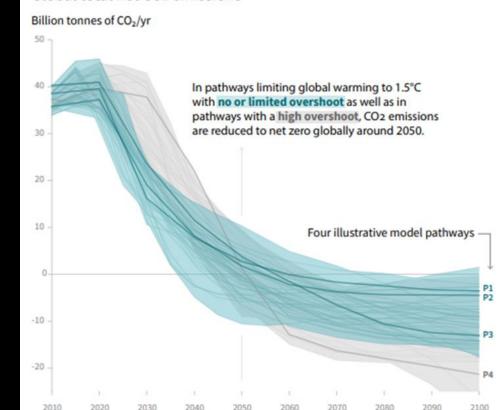
Global Warming of 1.5°C

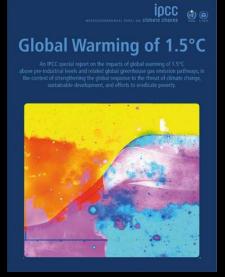
An IPCC special report on the impacts of global warming of 1.5°C bove pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.



IPCC 1.5°C-compatible illustrative emissions pathways

Global total net CO2 emissions





Overall Goals: Mitigation

- Reaching a 100% clean, net zero emissions economy-wide in the U.S. by no later than 2050, net negative emissions during the 2nd half of the century.
- Establishing ambitious interim targets to assess progress and reduce pollution in environmental justice(EJ) communities.
- Investing in job creation and worker rights

Drive a Transition away from fossil fuels



Benefits of the Climate Action Plan

- Avoid an estimated 62,000 premature deaths annually by 2050, primarily by reducing fine particulate matter pollution
- By 2050, cumulative net present value of the estimated monetized annual health and climate benefits equal to almost \$8 trillion (real 2018 U.S. dollars) at a 3% discount rate.
- In 2050 alone, the estimated monetized annual health and climate benefits of the policies exceed \$1 trillion (real 2018 U.S. dollars).
- Create roughly 530,000 jobs annually through the CES

The Pillars of Economywide Deep Decarbonization

- Energy Efficiency
- Decarbonizing electricity by switching to renewable, zero-carbon electricity
- Electrification of energy end-uses economywide (Transportation, Buildings, Industry)



- + Carbon capture and storage
- + Carbon dioxide removal (natural and technological)

Energy Efficiency



- Energy Efficiency Resource Standard
- Tax incentives and grants for EE investments, with a focus on EJ communities
- Robust EE appliance and equipment standards

Clean Energy Standard





- Net zero power sector by 2040
- Maximize near-term emissions reductions.
- Include zero-emission technologies (wind, solar, energy storage, nuclear, hydropower, fossil energy with CCS)
- Consider upstream emissions
- No preemption of state, tribal authorities
- Address potential and risks of nuclear power

Expand and Modernize Transmission

- National transmission policy
- Direct FERC, working with DOE and the National Labs, to develop a comprehensive, long-range electric infrastructure strategy that would achieve 100% clean electricity generation by 2040
- Federal funding and technical assistance for state, local, and tribal authorities for transmission planning and siting
- Improve transmission planning and cost allocation
- Create a high voltage DC backbone

Clean Transportation





- National sales standard to achieve 100% sales of zero emission cars by 2035 and heavy-duty trucks by 2040
- Strong GHG standards for cars and trucks
- Cut emissions from buses, planes, ships
- Low carbon fuel standard
- Invest in mass transit, rail and smart growth
- Spur domestic manufacturing of ZEVs
- Invest in electrification infrastructure and climate-resilient transportation infrastructure
- Clean up pollution at ports

Buildings and Industry



- Goal of making all new residential, commercial and federal buildings net-zero emissions by 2030
- Investments in weatherization and efficiency for low income and EJ communities
- Incentives for energy benchmarking and performance standards for existing commercial and residential buildings
- Drive electrification and efficiency in industrial processes
- RD&D in CCS for industrial applications

Climate-smart Agriculture

- Increase funding for climate-smart agricultural activities in working lands programs, including the Conservation Stewardship Program, the Environmental Quality Incentives Program, and the Regional Conservation Partnership Program
- Financial and technical resources for climate-smart agriculture and agroforestry
- National goals for soil health and farmland preservation practices, restoration of lost soil carbon, and reduction of farmland and grassland conversion
 - Support organic farming
 - Invest in climate resilience
 - Reduce GHG emissions from the agricultural sector and increase carbon sequestration

Equitable Clean Energy Investments

- Help rural, tribal and EJ communities to access, and directly benefit from, clean energy
- Expand low-income and community solar programs
- New Solar Communities Initiative with a national goal of generating 10% of electricity through distributed solar energy by 2040
- Expand on-bill financing for clean energy and clean vehicles technology
- Investments in EE in low-income and frontline communities

Fair Workforce Investments

- Secure workers' rights to form unions and secure good paying jobs, safe working conditions, and fair benefits.
- Guarantee strong labor standards for federal investments
- High road labor standards for clean energy and clean vehicles tax incentives
 - Establish a National Economic Transition Office to help coordinate community-driven, place-based solutions for workers and communities in transition
 - Strengthen and diversify the clean energy economy workforce
- Support health care needs of coal miners
- Create jobs through deen-up and remediation of legacy pollution sites

Climate-resilient Energy Infrastructure

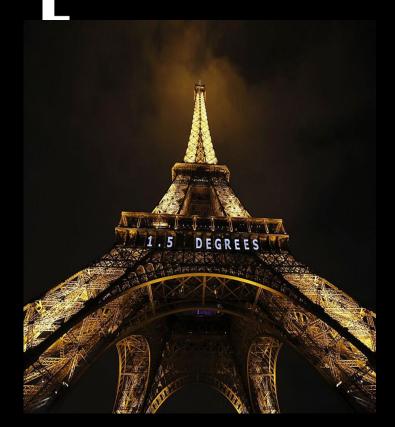


- Invest in a climate-resilient electric grid
- Establish federal resilience standards for federally funded and permitted energy infrastructure
- Expand deployment of distributed energy resources
- Allow disaster aid funds to be used for clean, resilient energy resources

Additional Recommendations

- R&D investments in zero carbon technologies
- National goals and standards to reduce methane emissions from the oil and gas sector
- Tax incentives for domestic manufacturing of clean energy technologies
- Robust investments in federal climate science

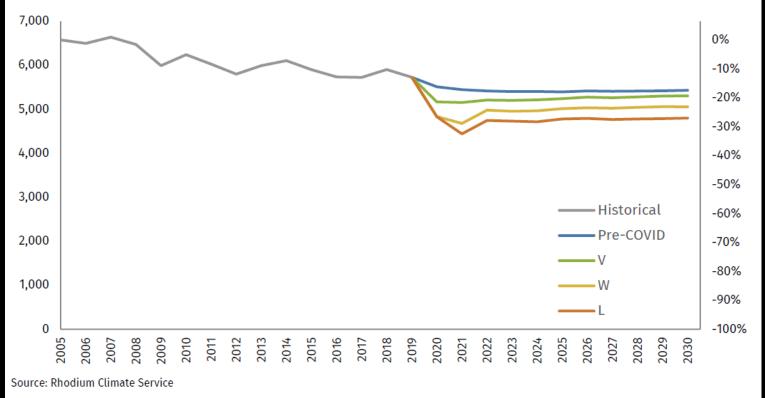
International Climate Action



- Bolster U.S. contributions to the Green Climate Fund
- International opportunities to reduce black carbon
- Increased funding to stop international deforestation
- Improve Arctic diplomacy

FIGURE 1 US greenhouse gas emissions under current federal and state policy

Net million metric tons CO₂e (left), % change from 2005 (right)



Source: Rhodium Group, Taking Stock 2020—The COVID-19 Edition. https://rhg.com/research/taking-stock-2020/

Our Choices and Challenges: What Should a Post-Pandemic Economy Look Like?



Will Congress invest in economic recovery plans that prioritize clean energy, climate-resilience and a just and equitable recovery?

OR

Will Congress default to business-asusual thinking that reinforces fossil fuel dependence, current racial and socioeconomic inequities, and threatens our children's future well-being?

Intersectional solutions for compound crises

- Climate resilience
- Clean Energy
- Good paying jobs
- Universal Healthcare Access
- Affordable Housing
- Adequate Nutrition
- Anti-poverty measures
- Addressing the cumulative burden of legacy pollution
- Addressing long-standing racial and socioeconomic inequities





 Thank you. Any questions? rcleetus@ucsusa.org

 Concerned Scientists