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Climate Change Proposals of the 2020 Democratic Candidates for President

For the most part, Democrats agree that climate change is a major concern in great part caused by human activities and that the United States needs to zero out its greenhouse gas emissions by the middle of the century. The Intergovernmental Panel on Climate Change last year reported that if countries want to limit global warming to 1.5 degrees Celsius this century, they need to halve global emissions by 2030, become carbon-neutral by 2050, and then go carbon-negative thereafter. The Democratic presidential candidates also agree that significant efforts to attack climate change will result in major opportunities for increasing jobs.

Bernie Sanders

- Sanders supports the concepts embodied in the “Green New Deal.”
- Sanders’s plan calls for an intermediate goal of decarbonizing transportation and power generation, the two largest sources of emissions in the United States, by 2030, which would lower US emissions by 71 percent. The plan also calls for the US to help developing countries curb their emissions 36 percent by 2030.
- Sanders’ plan calls more money than any of the other candidates — \$16.3 trillion in total — and the entire investment budget would come from federal dollars.
- The plan generates money from various sources, including \$6.4 trillion in revenue from selling energy via power marketing authorities, \$2.3 trillion from income taxes from the new jobs created under the plan, and \$1.2 trillion from reducing military expenses related to protecting oil shipping routes.
- That money would then be spent across many different clean energy and climate adaptation programs:
 - \$40 billion for a climate justice resiliency fund for under-resourced groups like Native Americans, people with disabilities, and the elderly to prepare for climate change.
 - \$200 billion for the United Nations Green Climate Fund to help other countries reduce their emissions
 - \$1.52 trillion to deploy renewable energy and \$852 billion for energy storage
 - \$526 billion for an underground high-voltage direct current power transmission network
- Sanders has staked out the most aggressive position against coal, oil, and natural gas producers: he would direct his Department of Justice to pursue criminal prosecution of fossil fuel companies. This is in addition to Sanders’s calls for civil litigation, increasing pollution penalties, raising taxes on emitters, and requiring fossil fuel producers to pay for disaster risk bonds.
- Sanders plan would create 20 million jobs and “end unemployment.” Jobs would include:
 - Manufacturing, to build energy-efficient cars and boats
 - Energy efficiency retrofitting of homes

- Renewable power plants to expand wind and solar power
- Sustainable agriculture
- Engineering, research, and development.
- The plan calls for a new version of the Civilian Conservation Corps (a Franklin D. Roosevelt-era public works program) and also allocates \$1.3 trillion for workers currently in the fossil fuel and carbon intensive industries to find work with strong benefits and a living wage.
- The plan targets job training and local hiring, and through investments aimed specifically at underrepresented groups — like supporting women-owned businesses, women farmers, as well as low-income and disadvantaged communities.

Elizabeth Warren

- Warren’s plan explicitly adopts ideas from Gov. Jay Inslee of Washington and proposes spending \$3 trillion over a decade.
- Her plan proposes eliminating planet-warming emissions from power plants, vehicles and buildings over 10 years, and adds an additional \$1 trillion in spending to subsidize that transition. The spending would be paid for, she says, by reversing the Trump tax cuts for wealthy individuals and corporations.
- Warren’s plan would set regulations aimed at retiring coal-fired electricity within a decade, but also fund health care and pensions for coal miners. It would create new federal regulations on vehicle tailpipe emissions with the goal of achieving zero emissions from new light-duty passenger vehicles, medium-duty trucks and buses by 2030.
- Her plan will ban fossil fuel leasing on public lands.
- Warren also calls for \$2 trillion in spending on “green manufacturing,”
- Her plan would include \$1.5 trillion for American-made clean energy products, \$400 billion in funding for green research and development and \$100 billion in foreign assistance to purchase emissions-free American energy technology. In her plan for environmental justice, Warren said she would direct one-third of her proposed climate investments or "at least \$1 trillion" to vulnerable communities most impacted by climate change.
- Warren's agriculture plan aims to incentivize farmers to invest in sustainable farming practices that reduce carbon emissions. It calls for expanding the voluntary Conservation Stewardship Program, which compensates farmers for implementing more sustainable practices, from \$1 billion to \$15 billion annually. Her platform also takes aim at breaking up the mega-mergers of agricultural corporations.

Joe Biden

- Citing explicitly to the “Green New Deal,” Biden’s plan calls for \$1.7 trillion in spending over 10 years and a tax or fee on planet-warming pollution with the aim of eliminating the nation’s net carbon emissions by 2050, paid for by rolling back

Trump's tax breaks for corporations. It also proposes leveraging state, private and local funds, for a total expenditure of \$5 trillion over a decade.

- It pledges support for environmental justice programs, designed to help minorities and poor people disproportionately harmed by pollution, and urges an end to new permits for oil and gas exploration on public lands.
- The plan also proposes retraining programs and new economic opportunities for coal workers and others displaced by the decline of the fossil fuel economy.
- Biden proposes establishing a cross-agency climate research program called ARPA-C, modeled after the Advanced Research Projects Agency-Energy at the Energy Department. It would focus on lowering the cost for grid-scale power storage, achieving zero-net energy buildings, reducing the cost of next-generation nuclear power generators and decarbonizing industrial heat needed to make steel, concrete and chemicals, among other things.
- Infrastructure would also be a focus, and Biden's plan called for encouraging work on regional climate resiliency plans and ensuring the electric grid, roads and bridges are designed to withstand the effects of climate change. He also set a target of reducing emissions from the nation's buildings 50 percent by 2035, adding 500,000 electric vehicle charging outlets by 2030 and expanding and improving train and freight travel.
- The campaign also said it would require public companies to share the risks climate change poses to supply chains and operations; enforce tougher appliance standards; move toward decarbonizing the transportation sector, which is responsible for the largest amount of U.S. emissions; develop new fuels to reduce emissions from aviation; and set "aggressive" limits on methane, a potent greenhouse gas, for new and existing oil and gas operations.

Pete Buttigieg

- Buttigieg sets some aggressive benchmarks: doubling clean electricity in the US by 2025, zero emissions in electricity generation by 2035, net-zero emissions from industrial vehicles by 2040, and a net-zero emissions by 2050 (when he's 68).
- The plan would cost between \$1.5 and \$2 trillion and create instruments to limit greenhouse gases like a clean energy bank, tax credits for carbon capture, a transition fund for workers who might see their jobs disappear and ending subsidies for fossil fuels. The proposal also calls for a carbon tax with revenues distributed back to low- and middle-income Americans as a rebate.
- He calls for equitable disaster relief funding, national extreme weather insurance, climate-smart agriculture, and regional hubs to increase resilience to local climate-related risks.

Amy Klobuchar

- Klobuchar's plan begins with executive actions to rejoin the Paris climate agreement, restore the Clean Power Plan, and sign legislation to reach net zero

emissions by 2050. She estimated the cost of her proposal to be between \$2 and \$3 trillion, funded in large part by pricing carbon emissions.

- Her tactics include a \$1 trillion infrastructure package to modernize the power grid with union labor, retrofit buildings for energy efficiency, and implement new zoning policies with federal housing grants.
- Klobuchar was skeptical about some of the elements of the Green New Deal, like reducing air travel, but she ultimately cosponsored the resolution. She also says that she will not ban fracking and is open to carbon capture for fossil fuels as well as nuclear energy

Tom Steyer

- Steyer’s plan to combat climate change centers on justice, for marginalized communities and globally stating that “The United States must recognize both our historic responsibility for producing the bulk of planet-heating pollution *and* the great opportunity to lead the world by responding to this crisis.”
- It calls for \$2 trillion in federal investment over 10 years and net-zero emissions by 2045. That money would be spent on programs including \$250 billion on community climate bonds and creating a civilian climate corps. The proposal also calls for a cabinet-level position to coordinate a national climate change response effort.

Andrew Yang

- Yang’s plan is a technology-centered approach that pursues energy sources like thorium-based nuclear energy. He aims to power the US completely by renewable energy by 2035 (it’s unclear if nuclear, a clean but not renewable energy source, would be used toward that goal).
- The proposal also calls for research into some of the more controversial climate change mitigation approaches like geoengineering. This can include mirrors in space to reflect sunlight away or spraying particles into the air to cool the planet.
- Yang is frank that there will be unavoidable consequences from climate change and that people will have to move as a result. His plan allocates \$40 billion in grants for people in coastal areas to move inland, \$30 billion for infrastructure like seawalls, and \$25 billion for disaster planning.

Michael Bloomberg

- Bloomberg’s plan and associated costs is still under development. It would cut carbon emissions across the U.S. economy by 50% over the first 10 years with an overarching goal of moving the nation toward phasing out fossil fuels completely “as soon as humanly possible” — ideally before 2050.
- It stops well short of the goals of the “Green New Deal.” Bloomberg’s plan envisions “phasing out of all carbon and health-threatening pollution in the electricity sector” to ensure 80% clean electricity by the end of his second term.

- Bloomberg’s specific goals include closing the nation’s remaining 251 coal power plants with clean energy by 2030. It would end all taxpayer subsidies for fossil fuel companies, establish a moratorium on new fossil fuel leases on federal lands, and quadruple the amount of federal dollars dedicated to research and development in clean energy and a clean grid to at least \$25 billion each year.
- The plan promises to reverse the Trump administration’s rollbacks of clean air, water, health and safety, and waste rules. It also says Bloomberg would prioritize “environmental justice” and “environmental racism” by instructing federal agencies to consider environmental impacts in all actions and creating environmental justice offices in every agency, among other changes.

Selected sources:

<https://www.vox.com/2019/8/22/20827396/bernie-sanders-2020-climate-policy-green-new-deal>

<https://www.vox.com/2019/9/10/20851109/2020-democrats-climate-change-plan-president>

<https://eelp.law.harvard.edu/2019/09/in-which-we-compare-democratic-presidential-candidates-climate-plans/https://www.latimes.com/politics/story/2019-12-13/bloomberg-releases-climate-policy>

<https://www.curbed.com/2019/6/26/18758856/democratic-primary-climate-change-policy-2020-president>

<https://www.theguardian.com/us-news/2019/sep/04/five-things-to-know-how-the-2020-democrats-stack-up-on-climate>