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Bernie Sanders' new climate plan asks Democrats: Do you want a revolution or not?

Analysis by Ronald Brownstein

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(CNN)The massive scope and cost of Bernie Sanders' new "Green New Deal" plan to confront climate change encapsulates both the potential appeal and limits of the Vermont senator's uncompromising presidential campaign.

The \$16.3 trillion, 10-year climate plan he released last week envisions a rapid and comprehensive transformation of a key economic sector -- in this case both the auto and utility industries -- through a huge increase in federal authority and spending.

When combined with "Medicare for All" and other proposals Sanders has already released, his climate proposal would temporarily push federal spending, as a share of the economy, to a level matched in the past century only at the height of World War II. And it would reshape daily life for virtually all Americans by banning the sale of vehicles powered by the internal combustion engine -- which account for nearly all vehicles on the road -- in little over a decade.

Sanders is betting that voters will find a vision of such transformative change inspiring, especially when aimed at the mounting threat of global climate disruption. Many climate activists have cheered his proposal as the first blueprint fully commensurate with the challenge. After Sanders released the plan, the prominent climate activist Bill McKibben tweeted that his blueprint "is remarkable -- it shows what simply must be done to meet the challenge physics has laid out."

But even some who agree with Sanders' goals believe that many will find the notion of such seismic change intimidating and unrealistic. Rather than catalyzing Americans to action, these critics worry that proposals like Sanders' will paralyze them by making the climate challenge look too big to confront without unacceptable disruption to daily life.

Paul Starr, a Princeton University sociologist and co-founder of The American Prospect, a leading liberal magazine, is one of those who think Sanders' proposal may set back the cause of climate action.

"This is not what the country needs or is likely to support," he says. "On the climate issue, the first job of Democrats is to convince people that they have an achievable and realistic plan. The Sanders proposal won't do that."

Either way, analysts at both ends of the ideological spectrum agree that Sanders' ambitions, when viewed in full, would shift responsibility and authority from the private to public sector at a level that would reconfigure the US into something much closer to a European social democracy.

"The Sanders climate plan is similar to his Medicare for All proposal," said Starr. "He's more of a socialist in the old-fashioned, central-planning sense than many people have realized."

Jeff Weaver, a senior adviser to the Sanders campaign, counters that the savings to Americans from fewer out-of-pocket health care expenses, reduced electricity rates and lower costs for driving as the automotive fleet shifts toward electric vehicles, will offset any increased taxes they could face to implement Sanders' plans.

"Overall people will be paying less," Weaver says. And that, he insists, is even before accounting for the damage that will come from failing to address climate change. "All of the economic and personal harm that is going to come from climate change is going to outweigh the cost of doing something about it," he says.

Focusing on remaking the power grid and transportation

Like the congressional Green New Deal championed by freshman Democratic New York Rep. Alexandria Ocasio-Cortez, Sanders' climate plan sets a wide range of goals only tangentially (at most) related to the climate crisis, such as promoting unions, constructing affordable housing and rebuilding roads and water systems.

But two interlocked mandates provide the plan's environmental core. Sanders would require all electrical power to be generated from renewable fuel sources, such as solar and wind, by 2030. By that same year, he would ban the sale of new vehicles powered by the internal combustion engine and allow only the manufacture and purchase of zero-emission cars and trucks, principally electric vehicles. This mandate would apply not only to cars and light trucks, but also to buses and long-distance heavy trucks. Sanders aides say he has not set a deadline to require the removal of all internal combustion cars from the road, but the plan budgets about \$3 trillion in spending to encourage consumers to trade in their existing cars for new electric vehicles.

These are, to put it mildly, extremely ambitious goals.

All renewable energy sources now account for only about one-sixth of total US electricity generation, according to federal statistics. That includes wind and hydropower, both at around 7%, and solar, now at about 1.6%.

Twenty-nine states have established binding goals for increasing the share of renewable power in their electricity mix. As renewable energy's cost has fallen, a procession of Democratic-leaning states in recent years have set the goal of generating all of their power from renewable sources. But none is trying to do it as fast as Sanders would mandate. California, Hawaii, Washington and New Mexico have all established a 2045 deadline for relying entirely on renewables. New York is aiming for 2040, Maine and Nevada for 2050. Maryland is seeking 50% by 2030 and studying 2040 for 100%. Colorado's newly elected Democratic Gov. Jared Polis is also pushing for a completely renewable power system by 2040.

For zero-emission electric vehicles, Sanders envisions even more of a great leap forward. Electric vehicles account for 1.4% of the new cars and trucks sold in the current model year, according to data provided by the market research firm IHS Markit. That's a solid increase from a little more than half of 1% as recently as 2017, and IHS Markit projects that electric vehicles will increase their share of the total market to about 7% in 2025. But the firm calculates that all of the electric vehicles now on the road account for only one-fifth of 1% of America's total vehicle fleet. That's about 661,000 electric vehicles out of 275.4 million total vehicles in circulation.

Even the most ambitious local goals don't envision change in the transportation fleet at Sanders' pace. Los Angeles Mayor Eric Garcetti, for instance, has put forward his own local "green new deal." He has required that all city buses be electrified by 2030. But for passenger cars, where electric vehicles now account for 5% of the local market, he calls for an increase to 80% by 2035 and 100% not until 2050.

Is 2030 too soon?

Given the distance between the current landscape and the mandates that Sanders would establish, environmentalists are divided on whether these are realistic goals. Washington Gov. Jay Inslee, who received widespread praise for highlighting the climate issue after he quit the Democratic presidential race last week, would have also required new cars to electrify by 2030, though he would have given the utility sector until 2035 to completely transition to renewable sources.

Carl Pope, a former long-time executive director of the Sierra Club who now consults for foundations on climate issues, believes that technologically Sanders' goals are largely achievable on both the power generation and transportation fronts. "I don't think any part of it is particularly hard," he says.

Pope says states haven't set a 2030 goal for completely relying on renewable electricity largely because they are uncertain they can build the transmission capacity to ship power to population centers from the generally remote areas where wind and solar is produced. But Sanders plan, he notes, envisions investing over \$500 billion to massively expand and modernize the nation's electrical grid. Reaching 100% renewable power by 2030 might be prohibitively expensive, Pope says, but it would be possible to come close to that without big cost increases or significant disruptions in the system's reliability.

"My goal would be to move as fast as possible without raising consumer electricity costs," he says. "They are the right goals, but for 2035 say. We are not talking about a big difference."

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Other prominent environmentalists I spoke with are even more skeptical of Sanders' plan and its aggressive deadlines. Without exception these critics did not want to be identified by name because they did not want to engage in a public spat with the Sanders campaign and in particular his legions of combative defenders on social media.

But these people see an array of problems with the Sanders plan. One is that it could threaten the reliability of power by banning not only power generated from fossil fuels such as coal and natural gas, but also nuclear power. Those fuels provide the so-called baseload power available at all times; the availability of renewable sources like solar and wind vary depending on the time of day or time of year.

Advocates of the Sanders plan believe that renewables could provide baseload power by 2030 both through advances in storage and also by improvements in the national transmission grid -- that would allow abundant solar power from, say, Arizona to be shipped to Chicago or Detroit in the winter. But it's unclear the technology can advance that fast, especially at affordable costs.

Storage remains an issue also for electrified vehicles. More consumers, especially in urban centers, have grown comfortable with the distance an electrified passenger vehicle can travel on a single charge, but battery life isn't yet great enough to meet the huge demands of heavy trucks and other big vehicles without requiring charges more frequently than consumers will accept, even some environmentalists acknowledge. Pope is optimistic that problem will be solved well before 2030, but not everyone agrees.

The cost of shifting control away from the private sector

The most fundamental question the Sanders plan poses, though, may not be technological. Instead the key question is a political one: Will Americans accept as large a role for the federal government as he envisions?

Sanders' plan calls for the federal government itself to build and own new solar and wind generation facilities that would provide the vast majority of the new renewable power that his mandate would require. He envisions the government largely bypassing the existing investor-owned utilities that now supply about two-thirds of America's electricity to sell that new power, as the plan says, "to distribution utilities with a preference for public power districts, municipally -- and cooperatively -- owned utilities with democratic, public ownership, and other existing utilities that demonstrate a commitment to the public interest." Since private utilities control most of the street wiring that now connect consumers to the utility grid, the Sanders plan could require municipalities to buy out those facilities.

Sanders also envisions the federal government building and owning many of the vehicle recharging stations around the country that he proposes spending another \$86 billion to construct.

In both those respects, Sanders' energy plan parallels his health care proposal, which would largely eliminate private health insurers and replace them with a government program. This plan would marginalize or eliminate private electric utilities. In each case, the federal government would essentially assume their responsibilities.

That would come at a formidable cost in increased government spending, at least over a transition period.

In 2020, the federal government will spend about \$4.6 trillion on all programs, from the national parks and national defense to Social Security and Medicare, according to the Congressional Budget Office. That amount equals roughly 21% of the nation's total economic output.

Just three of Sanders' big plans could add over \$3 trillion in annual spending to that total over the first years of his presidency. Government sources now pay for about half of the nation's total \$3.5 trillion health care bill; Sanders' single payer plan would require government to assume responsibility for the other half. Even if his plan cuts total health care spending by as much as 10%, as a study by supportive academics has projected, that would require the federal government to fund about another \$1.5 trillion or so in annual health care costs.

The climate plan would require about \$16 trillion over its first decade, though Sanders advisers note that spending would be heavily front-loaded on building the infrastructure it requires -- federal wind and solar farms, a modernized electrical grid and charging stations along highways. That means the plan's costs could decline substantially over time and would be increasingly offset by revenue from sales of federally-generated electricity to localities or power to drivers at recharging stations. But in its first years, the plan would consume at least \$1.6 trillion annually, likely more.

Sanders' plan to cancel all federally-held student debt and then provide states grants to allow for tuition-free attendance at state public colleges and universities would also have big front-loaded costs: about \$1.5 trillion in debt forgiveness up front, and then about \$70 billion in annual grants to states.

Taken together, these three ideas alone would increase annual federal spending at least in the early years of a Sanders presidency by over \$3 trillion annually and perhaps more than \$3.5 trillion. Even if Sanders' plan accelerated federal growth, as he believes, just these proposals would swell federal spending as a share of the economy probably well past 30%. That would be the highest level since the height of World War II, when spending reached about 43% of total economic output from 1943-1944. Since the mid-1970s, federal spending has usually hovered around 20% of GDP, reaching a high point of 24.4% in 2009.

Sanders has not fully specified how he would raise the revenue to fund these new initiatives. But for perspective, the total amount raised by the federal income tax now is \$1.7 trillion annually. That means each of Sanders' two cornerstone plans -- single payer health care and the initial years of the Green New Deal proposal -- could require him to raise an amount comparable to all the money now raised by the personal income tax.

Former Congressional Budget Office director Douglas Holtz-Eakin, founder and president of the right-leaning American Action Forum, says the cumulative cost of these initiatives would

fundamentally change the role of Washington in American life. "It is hard to imagine that would not deeply change the relationship between the government and the private sector," he said in an email. "I don't think people have wrapped their heads around the nature of what he is proposing."

Sanders' camp says these direct federal costs would be offset by huge benefits to individual consumers and the economy overall: the elimination of health insurance premiums and lower national health care spending; lower costs for operating a vehicle and generating electricity; averting disruptive and expensive damages from climate change; and more jobs and faster economic growth.

Weaver analogizes Sanders' plan to build massive federal capacity to produce renewable electricity and electrify the automotive fleet to the decision to construct a nationwide network of highways starting in the 1950s: "It was a huge investment up front but the economic benefits are incalculable."

But to reach the benefits Sanders says his plans will provide, Americans would need to embrace a level of authority, responsibility and taxation for the federal government that the nation has accepted only at the peak of World War II. Sanders explicitly argues that the climate threat requires a mobilization of federal power comparable to the nation's effort in those years. With the ambitious reach of his panoramic agenda, he's now testing whether enough voters agree.

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