Obama orders stronger limits on power-plant emissions

The White House's latest action on climate change will cut greenhouse-gas output from the US electricity sector.

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Regulations to reduce greenhouse-gas emissions from power plants face legal and political challenges.

US President Barack Obama released landmark regulations on 3 August to curb greenhouse-gas emissions from the power sector over the next 15 years. The move could anchor his environmental legacy, but it is certain to provoke opposition and legal challenges from industry groups and some state governments.

The regulations, developed by the US Environmental Protection Agency (EPA), call for a 32% reduction in carbon dioxide emissions from electricity generation by 2030, compared to 2005 levels. That is a stricter target than the agency sought in a draft proposal released in June 2014, which laid out a 30% reduction in emissions by 2030.

Speaking at a press conference, Obama called the regulations "the single most important step America has ever taken in the fight against global climate change". He added, "We can solve this thing — but we have to get going."

The plan assumes a greater reliance on renewable energy to help to meet its tougher goal. But it also delays an initial 25% cut in emissions by two years, to 2022. These modifications are the product of a long and often-contentious review that generated 4.3 million public comments.

State by state

Many specialists say that the Obama administration could have set more-aggressive goals to cut emissions. Still, environmentalists see the regulations overall as a significant step forward — and one that should help the United States to meet its pledge to sharply reduce its greenhouse-gas output. The country will be a key player at a United Nations meeting in December, when nations will gather in Paris to negotiate a global agreement to fight climate change.

The latest act sends "a really strong and powerful signal in the run up to the Paris talks", says Will Gartshore, senior policy officer for the World Wildlife Fund, an environmental-advocacy group in Washington DC.

The power-plant regulations set emission-reduction targets for each state, using a series of calculations that take into consideration

what is technically feasible. States must now develop their own plans and submit them to the EPA by 2016, although the agency says that states can request an extension of up to two years. The plan also allows for interstate emissions trading, in which a state that cannot meet its obligations could pay for emissions reductions elsewhere.

The EPA's decision to delay the initial compliance date and revise the targets for some states came as no surprise, given complaints from many states and utility companies, who argued that the 2014 draft was too aggressive.

That proposal would have required Arizona, for instance, to reduce its emissions by 52% below 2012 levels by 2030. The EPA argued that Arizona could generate more electricity from natural-gas power plants that often sit idle. But the revised regulations would relax Arizona's 2030 target emissions rate from 318.4 kilograms of CO2 per megawatt hour — as proposed last year — to 467.6.

Dallas Burtraw, who specializes in electricity regulation at a think tank called Resources for the Future in Washington DC, says that the revision makes sense, because Arizona's pipelines cannot deliver enough fuel to its power plants to enable the state to achieve the higher target.

A rocky path

The core of the act will not take effect until after Obama leaves office in January 2017. But the plan is expected to face significant legal and political opposition well before then. Republican politicians in Washington DC are considering legislation to block the regulations, and Senate Majority Leader Mitch McConnell (Republican — Kentucky) has even urged states not to comply with the EPA rules.

But the bigger risk will come from the courts, with industry groups and several states expected to file legal challenges. Although the US Supreme Court ruled in 2007 that the EPA has the authority to regulate greenhouse-gas emissions, their decisions invariably draw legal protests on a range of technicalities.

Scott Segal, director of the Electric Reliability Coordinating Council in Washington DC, says that the regulations will force some companies to shutter coal-fired power plants because there is no economically viable way to reduce their emissions.

"Every other time they have sought to regulate the electric sector, there has at least been some indication of off-the-shelf technology that can be used to eliminate pollution," he says. "But in this case, the only off-the-shelf technology is to close the plant down."

Despite such complaints, Burtraw says that the vast majority of state environmental agencies are already preparing to comply. The EPA has effectively pushed the conversation about climate policy out of Washington DC and into individual states, where politics are less divisive, he adds.

"It's something that is really engaging industry and people throughout the nation in serious conversations," Burtraw says. "And I think it's affecting the social consensus about what can be done."

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Updates

Updated: Update (10:45 p.m. BST, 3 August): Added comments from Segal and Burtraw, and more information on the Arizona emissions target.