Minnesota has had climate change legislation on the books since 2007, when the Next Generation Energy Act was signed by Republican Governor Tim Pawlenty. The 2007 law called for the state to reduce its emissions 15 percent by 2015 and 80 percent by 2050. At the time, Pawlenty saluted the bill, <u>saying</u>,"The nation has been asleep at the switch, but here in Minnesota we are kick-starting the future by increasing our nation-leading per capita renewable fuel use, boosting cost-saving measures and tackling greenhouse gas emissions." Pawlenty dropped that position quickly when he started to have national political ambitions, but his willingness to sign the bill in the first place was noteworthy. Of course, this was before GOP backlash to the Obama presidency made it unthinkable for most Republicans to acknowledge the need to address climate change.

The 2007 <u>statute</u> sets ambitious goals for reducing greenhouse gases, but its operative provisions seem to focus almost entirely on increasing energy efficiency and the use of renewable energy in the electricity sector, including the use of a carbon price in resource planning decisions. Provisions dealing more generally with climate change are limited. The statute calls for creation of a state climate change plan, mandates cooperation with other states to the extent possible, and directs the government to explore interest in a regional cap-and-trade system by other states. It also bans construction of new coal-fired plants in the state and attempts to limit purchases of electricity from such plants outside the state. The provisions dealing with out-of-state sources were struck down in a poorly reasoned opinion by the Eighth Circuit. But none of the provisions about new coal plants turned out to have much significance since none have been built or seem likely to be built anyway, due to the falling price of natural gas and renewable energy.

The state has been fairly successful in dealing with the electricity sector. According to a <u>state report</u>:

"Renewable energy now accounts for 21% of the Minnesota's in-state electricity generation, up from 4% in 2000. Wind energy alone provides over 17% of our state's electricity- equal to the total electricity use in one in six homes, businesses, and community institutions."

Emissions have plateaued a bit below their 2005 level. But this is below what the state was hoping for. It recently reported that it had badly missed its 2015 target fro greenhouse gases, cutting 2005 emissions by only 4% rather than the 15% target.

Further progress does seem likely, even without a big push from regulators. According to

<u>Minnesota Public Radio</u>, the changing economics of the energy industry are pushing utilities away from coal and toward natural gas and wind power:

"The plans of Minnesota Power, Otter Tail Power and Xcel Energy — the state's three investor-owned utilities — to embrace more wind energy will mean less coal arriving on trains from Wyoming and Montana. . . .Minnesota Power aims to generate a third of its energy from coal, a third from renewables and a third from natural gas by 2030. As recently as two years ago, coal was generating 75 percent of the utility's power."

As a result, MPR says, the state will meet its targets under Obama's Clean Power Plan even if the Plan itself is rescinded by Trump.

Transportation emissions seem to be a more difficult problem than power plant emissions. As I noted earlier, the 2007 Act doesn't provide tools for dealing with transportation emissions, so perhaps it's not surprising that so little progress has been made. The Twin Cities are great places to live in part because there's so much nice, near-in single-family housing. But this also translates into a lot of sprawl, because the low density in the core cities pushes development out further. So the state's greatest need is to bring down its transportation emissions. The government is looking to the same regulatory toolkit as other states: policies to increase housing density, expand mass transit, and promote electric vehicles. The state might also do well to consider adopting the California standards for tailpipe emissions, as have around a dozen other states. But existing legislation doesn't mandate these policies, so agencies would have to use existing discretionary authority.

As always, politics will have a major impact on future climate policy. The governor is a Democrat. Republicans have only a one-vote margin in the state senate, but they control the state house 77-57. Minnesota has been a Democratic stronghold in presidential elections, but Clinton carried it by under 2%. (Interestingly, Green Party candidate Jill Stein wasn't much of a factor. She came in below the Libertarian candidate and independent Evan McMullin, which might be a sign of Republican defections.) The upcoming midterm election may be a different matter, depending on whether Democrats turn out in substantially greater numbers than Republicans. The current Democratic governor isn't running again, but his 62% approval rating may be a good sign for the party. (As I recall from my years living there, he isn't exactly a charismatic personality.) If the Dems do take control of state government, there may be a chance for further legislation on climate change.

The state does have some strong motivations to take further action. According to the report quoted earlier:

"We have experienced four 1,000-year rainfalls since 2002 .We have watched our spruce, fir, aspen, and birch forests retreat northward . And air pollution related to greenhouse gas emissions annually costs us more than \$800 million in increased health care costs."

It remains to be seen, as with so many things, which direction politics drives climate policy in Minnesota in the next few years.