Last week, New York Governor Andrew Cuomo signed a breakthrough climate change law, the "New York State Climate Leadership and Community Protection Act." What every state does to address climate change is worthwhile, of course, but New York is particularly significant in terms of the national picture. It's the nation's third-most populous state and also third economically, with a GDP about the same size as South Korea's. It's also one of the top ten carbon emitters in the country. So there's additional reason for applauding the New York legislation.

The Climate Leadership Act sets ambitious goals. By 2030, utilities will have to get 70% of their power from zero-carbon sources, up from about 25% today. In a big step toward that goal, Cuomo announced two new offshore wind projects near Long Island and Manhattan that will produce 1.5 gigawatts of power. (A gigawatt is a million kilowatts.) But there's much more to do, if the state is to meet a second-target of 100% carbon-free energy in 2040. Interim targets will require 9 gigawatts of offshore wind energy by 2035, 23 gigawatts of solar energy, and a 23% increase in energy efficiency.

The long-term target is even more ambitious: The state will have to reduce its economy-wide emissions 85% by 2050 and offset the remaining 15% through green projects such as reforestation. The law also has a strong environmental justice component, with a target of 40% and a minimum of 35% of project benefits to go to disadvantaged communities, taking into account pollution reduction, spending, and new jobs in those communities.

The New York law creates a Climate Action Council to create a roadmap to achieve these goals. The one part of the scheme that worries me is the size of the Council. It will have 22 members, with a combination of agency heads and gubernatorial and legislative appointees. Contrast that with California, where a single agency, the Air Resources Board, was assigned to produce the scoping plan. I worry that the New York Council will prove too unwieldy, though it does have the advantage of achieving broad buy-in for whatever plan it comes up with.

Achieving all these goals will be a heavy lift. But it should be doable, and it will be a major step forward. As Governor Cuomo said in signing the law, "cries for a new green movement are hollow political rhetoric if not combined with aggressive goals and a realistic plan on how to achieve them." Kudos to him and the state legislature for making this major first step toward a more sustainable future.