

Regulation and reality in reducing global warming

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While Donald Trump's functionaries continue to deny the science of climate change, American states are setting ambitious greenhouse gas reduction targets and nations all over the world are struggling to deal

with the difficulty of growing their economies while reducing pollution. Although American leadership could help the world address this existential threat, the short-sighted short-term perspective of too many American business and political elites threatens our ability to provide leadership. Former NYC Mayor Michael Bloomberg is the major exception to this American abdication—he is devoting his brainpower, money and management skill to the struggle against global warming.

There are several factors in the battle against [greenhouse gas pollution](#) that need to be considered if we are to reach consensus and address this critical issue:

- The science of climate change: the models and observed data make clear the connection between human technology and global warming. The predictions of climate impacts from models developed at the turn of the 21st century have generally been correct nearly two decades into this century. The predictions of extreme weather, [sea-level rise](#), droughts, and forest fires have all come true.
- Political stability requires economic development and most people are unwilling to sacrifice material well-being to protect the environment. Nevertheless, most people support environmental protection.
- New and enhanced technologies are needed to reduce greenhouse gas pollution.
- Businesses need incentives to motivate compliance with new emission targets and resist the temptation to avoid targets by moving or closing.
- Governments and businesses are already adapting to climate change.

New York state recently enacted ambitious greenhouse gas reduction targets in its Climate Leadership and Community Protection Act, which

by 2050 requires the state to reduce greenhouse gasses by 85 percent from 1990 emission levels. Businesses in New York state are concerned about the targets, but as Tyler Blint-Welsh reported in last week's [Wall Street Journal](#):

"Manufacturing executives have said that they were pleased by last-minute amendments to the bill that will give them an increased say in its implementation. A great deal of uncertainty, however, remains... For all its sweeping changes, the legislation is light on details. It doesn't specify how reductions will be tracked or what potential penalties noncompliant companies face... The details will be hammered out over the next few years as the state creates committees and advisory boards to help implement the law. In the meantime, the state's manufacturing industry is left in a holding pattern that has companies pondering worst-case scenarios. Across the state, more than 400,000 people are employed by the manufacturing industry."

What Blint-Welsh terms the "holding pattern" focused on worst-case scenarios is a typical [business](#) response that must be addressed by government regulators. Businesses worry that their competition will not be encumbered by the same regulations they operate under and they will be beaten on price. This very real fear influences their willingness to invest and expand. The committees and boards required by the bill will provide a real opportunity to influence its implementation. While the formality of this arrangement is unusual, extensive consultation with regulated parties is typical in American regulation. Despite all the anti-regulation rhetoric you hear from businesses, the style of American regulation has always been gradual accommodation. New York's Governor and legislature do not want to drive businesses from New York, but they recognize the importance of a modern energy and manufacturing system to enhance the state's long-term competitiveness. This requires working with businesses and not against them as they develop and adapt technologies to reduce their greenhouse gas emissions.

As Tyler Blint-Welsh noted in the same *Wall Street Journal* piece:

"In such states as California, which has pledged to reduce emissions by 80% compared with 1990 levels, manufacturers have begun to work with companies such as Canada-based CarbonCure Technologies to help make progress in reducing emissions. CarbonCure, which licenses carbon-capture technology to cement companies for a monthly fee, has developed a method to capture emissions from factory smokestacks and inject them into cement mixes, which strengthens the concrete while also trapping the emissions from being released into the atmosphere. In 2018, Central Concrete, a northern California company that helps build infrastructure including roads, worked with CarbonCure to install the technology at seven of its plants."

Businesses mistrust government regulators and so they resist new rules reflexively. Additionally, there are interest groups that make their living off of fighting government regulation and work to stoke the flames of these fears. Too much of the discussion of climate change has been over symbols and climate has somehow turned into a wedge issue in culture wars. But the future really belongs to those places that are able to problem-solve and reduce pollution while maintaining production. The argument that combating climate change requires sacrifice and doing without is a political loser. But pretending that [climate change](#) doesn't exist is a time-wasting fantasy. The longer it takes to frame a consensus response to the climate crisis, the more difficult it will be to implement that response. A gradual reduction of greenhouse gasses over a quarter-century will be easier to accomplish than a rapid reduction completed in less than a decade.

Gradual change works better in a complex system with many poorly understood elements that interact with each other. You set a target and then work with the parties who are being asked to change their behavior. Regulators will need a tool-box of incentives and disincentives to work

with each organization being asked to modify their operations. Regulation that adheres to a philosophy of command and control is doomed to failure. Corporations operate in a global world economy that is often beyond the reach of government regulators seeking to command their behavior. On the other hand, the leaders of America's corporations understand the importance of environmental pollution. If they forget, their children are there to remind them.

Production, transportation, and the energy system itself all benefit from the development and use of new technologies. Regulation that sets ambitious standards, if implemented correctly can spur technological innovation that makes businesses more competitive. Businesses are able to improve performance and reduce costs by updating a system that is wasteful, inefficient and riddled with pollution. Pollution is a form of waste and any production system that reduces waste will be more cost-effective than one that increases waste.

The greatest danger posed by regulation is its tendency to be implemented inflexibly. Since laws and regulations are written by lawyers who value precedent and specificity, very often they have difficulty keeping up with new technologies and new conditions. Some rules are hard and fast and cannot permit compromise and accommodation. A company poisoning a city's water supply must be stopped at once. But most problems and most rules allow for flexibility and gradual progress. The issue then becomes one of [good faith](#) and intent: Is the business serious about complying or are they just playing a game to buy time? On the other side of the fence, we see environmental advocates who may mistrust government and business and raise their funds by drawing lines in the sand and shouting when the line is breached. In my view, symbolic battles and polarization needs to be replaced by a search for compromise and consensus. Interest groups on both sides live off of polarization and are an obstacle to the search for consensus.

The reality of regulation is that we need rules and order to operate on a complex, crowded planet. The rules need to provide protection and certainty and need to evolve as we do. Somehow, we need to purge them of ideological content. In the long run, environmental regulation needs to be as routine and non-controversial as traffic regulation. No one thinks it's a good idea to ignore red lights or drive at twice the posted speed limit. In order to reduce greenhouse gas pollution, we need to work together with businesses and communities to help develop the capacity to reduce emissions. We are all in this together. If the storm surge floods our community, we all end up paying.

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