Guest Column
Mark Alan Hughes

The Penn professor explains why, instead of focusing on "80 by 50" goals, cities should identify the energy, land use, and transportation options that maximize long-term employment, public health, and resilience net benefits for their local constituencies

Cities often have a "Charge of the Light Brigade" attitude on green policy goals. This comes from a well-intentioned place: there is overwhelming scientific evidence that the risks of devastating climate change warrant very large and very rapid reductions in the greenhouse gas emissions generated by our energy system. No contest.

But with our rising sense of urgency, one of our many challenges will be making these reductions in smart, fair, and effective ways.

The current rallying cry for many cities is "80 by 50"—a call for an 80% reduction (from a 2005 baseline) in carbon emissions by the year 2050. This target comes from a very well-grounded source. Since 2007, the scientific community has estimated that a reduction at that scale is needed to provide a 50-50 chance of limiting global warming to 3.6 degrees Fahrenheit, which is the standard threshold after which we can expect greater and greater impacts from climate change. (And trust me, all these numbers err on the side of caution and most people who study these issues would say they understate the risks and costs.)

In the decade since this target was adopted by every major scientific institution in the US and around the world, it has also been adopted around the world by many governments, including at least 16 US states and 35 US cities, including New York, Chicago, and Seattle. Philadelphia is considering it.

But there are three basic flaws with using a planetary target as a fundamental driver and organizer for local policy development and implementation.

First, it is unlikely that the efficient way to meet any national or global target is for every state, city, block, and building to meet the exact same numerical target. Different local conditions will always mean the efficient policy strategy will allow for variation in the targets, some higher and some lower.

Second, the brutal logic of climate policy is that almost all of the benefits of emissions reduction will accrue to those outside the city or region that creates those benefits. We share an atmosphere with the entire population of the world. And this is exactly what makes the logic so brutal: local effort on emissions reduction receives only small fraction of the total return on that effort, most of which is "external," in the language of economists. So, an emissions goal provides too little value for local leaders to mobilize local interests. It's a recipe for under-investing and under-performing.

Third, the cruel irony of this collective action problem is that cities and regions may well generate more emissions reductions from programs driven by other policy goals than by explicit emissions goals themselves. The green building sector provides a useful example of this. The sector would surely have more motivation for complying with disclosure programs and energy codes on the basis of avoided costs in energy and/or resilience than on the basis of emissions reductions and climate change mitigation. Emissions reductions would be co-benefits of disclosure and codes, but not the goal.

So what's the alternative to "80 by 50"? Instead of commissioning feasibility studies of whether they can achieve "80 by 50," cities should instead be identifying the energy, land use, and transportation options that maximize long-term employment, public health, and resilience net benefits for their local constituencies. That is the best way to prepare cities for a future that is already unavoidable. At the same time, it is probably the most effective way for cities to do their share for the rest of the world. **gb&d**

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