



Regional Greenhouse Gas Initiative is wrong for Pa.

Summary: Gov. Tom Wolf has announced plans to have Pennsylvania join the Regional Greenhouse Gas Initiative (RGGI). He wants to use the proceeds from its cap-and-trade program to fund his \$4.5 billion “Restore Pennsylvania Infrastructure” initiative. But Wolf’s desire to join RGGI seems to be more about imposing a carbon tax and little to do with actual environmental concerns. A closer look at RGGI reveals that the cooperative is more of a taxing entity and less of the environmental proponent it claims to be.

The RGGI is the first mandatory “market-based” program in the United States to implement a cap-and-trade regimen aimed at decreasing greenhouse gas emissions. Initially 10 states—Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, Vermont and New Jersey—joined in January 2009. New Jersey left the cooperative in 2011 but will rejoin in 2020. The RGGI sets the emissions cap for all states within the cooperative.

RGGI rules require fossil-fueled electric power generators with a capacity of 25 megawatts (MW) or greater to buy allowances equal to their carbon dioxide emission caps. RGGI Inc., the group responsible for overseeing the program, determines the cap and each plant must purchase allowances to equal its carbon dioxide emissions over a three-year compliance period. Each state sells the emissions allowances via auctions and is supposed to invest the proceeds in energy efficiency, renewable energy and other consumer-benefit programs. Currently, 165 facilities are governed by RGGI emissions allowance rules.

RGGI has several key features: three-year compliance periods, emission allowances, emissions auctions and cost-containment procedures. Each state is responsible for ensuring compliance. RGGI Inc. has no enforcement powers.

The specific carbon dioxide cap is in place for a three-year period. The goal is to offset price fluctuations caused by short-term market volatility. RGGI distributes 80 percent of allowances at quarterly auctions. Each state is responsible for implementing these auctions.

RGGI mandates a price floor for the emissions allowances. It determines the lowest price that an allowance can be sold for (i.e. in 2008 the price floor was \$1.86 per allowance; in 2019 the price floor was \$2.26 per allowance). RGGI permits emission allowance banking,

allowing facilities to save allowances for future use in order to prevent potential allowance price volatility. Facilities are also able to sell their unused allowances on secondary markets.

However, in 2014 a cost-containment program was established so that reserve allowances can only be sold if the prices exceed the predefined price levels. In effect, the facilities are only able to sell if emission reduction costs are higher than projected. Each year the cost-containment reserve price will increase by 2.5 percent through 2020.

This is anti-market at best.

In 2017, seven RGGI states (Maine and New Hampshire declined to participate) added an emissions containment reserve (ECR) program. Beginning in 2021 the RGGI will use a trigger price of \$6/ton (to rise 7 percent per year after) as a mechanism to manipulate the secondary market. It will force states to withhold emission allowances to keep them from being resold, unless the secondary market price is greater than the trigger price, thus, effectively lowering the cap.

RGGI maintains that its cap-and-trade program is market-based. But the mechanisms it uses—such as setting a minimum price called the “reserve price” and other market interventions like “cost containment reserve” and “emissions containment reserve”—are not characteristic of free-market mechanisms. Given the complexities of the program, one wonders—why not tax electricity use to deter consumption rather than going through the elaborate auction and cap-setting process?

RGGI’s success and effectiveness are questionable. A very conspicuous failure of the program occurred in 2009 when RGGI’s cap exceeded actual emissions. In 2009 actual emissions were 44 percent below cap emissions. Which meant RGGI effectively did nothing to decrease emissions, only taxing them. The first emissions cap from 2009 to 2014 used assumptions based on 2005 emissions levels under the erroneous assumption that emissions would rise from that level and, as a result, set the cap far above actual emissions.

During the 2009 to 2014 period, carbon dioxide emissions decreased in large part due to a move to less-carbon-intensive fuels (i.e. natural gas replacing coal) and the economic downturn. In 2012 the program was amended; a revised lower cap was established in order to be more effective following the “failure” of the first cap. The new cap—which went into effect in 2014—was 45 percent lower than the original level in order to match actual emissions.

The second review in 2017 required the 2012 cap to be reduced by 2.5 percent per year through 2030. Note that from 2009 to 2016 (the most recent data available) emissions in the RGGI states stay below the emission cap. During 2009, RGGI’s first year of implementation, emissions were 44 percent below the cap. In 2012 the cap was lowered but emissions were still 44 percent below the cap. In 2014 after the cap was decreased by more than 50 percent from the original level, emissions were still 5 percent below the cap. In 2016, the most current data available on emissions, emissions in the RGGI states were 8 percent below the 2016 cap.

Only by setting an artificial price floor could the system work in a situation where supply exceeds demand. Moreover, the scheme is little more than a tax-revenue generator as

emissions have fallen below the cap-constrained market. So much for having an impact on the environment.

In a news release this year announcing New Jersey has rejoined the program, RGGI Inc. also touted the public health benefits of the program. It claims avoided asthma attacks and lives saved. But according to the Center for Disease Control and Prevention (CDC), Pennsylvania's percentage of adults with asthma (10.1 percent) is lower than all the current RGGI states except New York (9.2 percent). Pennsylvania's death rate of 8.7 deaths per million persons from asthma is lower than the four RGGI states with data reported on these deaths (New York, Maryland, Connecticut and Massachusetts).

That same news release also noted that "net benefits to the RGGI states' economies (are) on the order of \$4 billion." The nine states currently in the program had a combined GDP of \$3,250 billion (\$3.25 trillion) in 2018 (quarterly average). Thus \$4 billion represents a mere 0.12 percent of that total—hardly a statistically reliable benefit.

To date there have been 43 state auctions totaling \$3.2 billion in proceeds. From 2008 to 2016 states used auction revenues for the following purposes: 50 percent to energy efficiency; 19 percent to energy bill-assistance; 7 percent to greenhouse gas abatement; 4 percent to renewable energy projects; 6 percent to state budget reduction; 4 percent to state administration costs; and one percent to RGGI Inc. for program implementation.

However, there is no explanation for the remaining 9 percent (of the \$3.2 billion). Where does that 9 percent go?

The 19 percent allocated to bill-assistance reflects the need to provide "rebates" for the increased cost of electricity due to the requirement of electricity generators to buy emission allowances. Proponents of RGGI argue bill-assistance programs are needed to offset increased costs. But even if it is distributed to customers, it is only for those with incomes low enough to qualify. The rest of the customer base is left with increased energy bills, including businesses.

While RGGI maintains that auction proceeds should be used to promote energy efficiency, bill-assistance and renewable energy projects, the reality is very different. Both New York and New Jersey used RGGI proceeds to help pay down state deficits. This underscores the point that environmental concerns can be, and are being, used as pretext to garner support for taxation and government revenue.

By levying an additional cost on electric power generation, the price of electricity is artificially driven up and passed on to consumers, *especially* businesses. Consumers face increased utility costs and additional costs due to secondary effects of higher energy prices.

Business growth, especially in the manufacturing sector, which relies on large amounts of energy, will be hampered by increased energy prices resulting in job losses. In "A Review of RGGI" by David T. Stevenson, of the CATO Institute, concluded that RGGI state electric rates created a 35 percent reduction in energy-intensive industries (primary metals, food processing, paper products, petroleum refining and chemicals) and a 13 percent decrease in the overall goods-production sector. For comparison, Stevenson looked at five non-RGGI states (Illinois, Ohio, Oregon, *Pennsylvania* and Texas) and found that they had only a 4

percent decrease in energy-intensive industries and a 15 percent *increase* in goods production.

The CATO report also found increased electric rates in RGGI states. Using the weighted average nominal electricity revenue for multi-state groups, Stevenson found that from 2007 to 2015 electricity prices in RGGI states increased by 64 percent more than in the non-RGGI sample states. The review also found RGGI's mandated allowances added \$11 million a year to Delaware's electric bills and \$28.5 million for indirect costs due to RGGI rules.

Pennsylvania has experienced an impressive reduction in carbon dioxide emissions in recent years without joining RGGI. Natural gas, which emits less carbon dioxide than coal, has largely replaced coal as the leading fuel for electricity generation in the state. The EPA's data for Carbon Dioxide Emissions in Pennsylvania showcases the extraordinary results: carbon dioxide emissions in the state from 2000 to 2016 fell by 26 percent.

Keep in mind the emissions data includes all emissions from fossil fuel combustion statewide and not just the electric power generators that RGGI would affect. Pennsylvania has reduced carbon dioxide emissions through *market solutions* and without the tax burden that RGGI would levy.

The increased energy prices for taxpayers, loss of jobs due to mounting energy costs and second-order effects resulting from higher electricity costs are strong arguments *against* joining RGGI.

Joining RGGI would be an ill-advised decision that would undermine much of the economic and environmental success the state has enjoyed in the last decade thanks to natural gas production in the electricity market.

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