

## Industrial Energy Consumers of Pennsylvania

## **RGGI Background**

The Regional Greenhouse Gas Initiative (RGGI) is an effort among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont to cap and reduce power sector CO2 emissions. RGGI is composed of individual CO2 Budget Trading Programs in each participating state. Through independent regulations, based on the RGGI Model Rule, each state's CO2 Budget Trading Program limits emissions of CO2 from electric power plants, issues CO2 allowances and establishes participation in regional CO2 allowance auctions.

## **Cost to Pennsylvania**

Looking at the annual amount of RGGI auction revenues collected in each state spread over the Electric Power sector CO2 emissions in those states results in \$3.35 per metric ton. When applied to 82.1 metric tons of Electric Power sector CO2 emissions in Pennsylvania, the minimal financial impact of RGGI on PA is approx.. \$275 million per year additional cost to electric generators.

However this does not take into account additional secondary market CO2 allowances that generators may need to purchase or the increased cost to electric generators to reduce CO2 emissions to comply with RGGI.

#### THE PROBLEM

Although the RGGI is referred to as a cap-and-trade program, its effect is the same as a direct tax or fee on carbon dioxide emissions because RGGI allowance costs are passed on from electric generators to consumers. "For example, according to the study [from the Cato Institute], RGGI allowances added \$11 million a year to Delaware's electric bills. The impact of the higher electricity prices in the RGGI states resulted in a 13-percent drop in goods production and a 35-percent drop in the production of energy intensive goods. The non-RGGI states increased goods production by 15 percent and only lost 4 percent of energy intensive manufacturing." 1

The RGGI cost imposed on electric generators in Pennsylvania will increase the cost of electricity to Pennsylvania residents, commercial businesses and large energy intensive, trade exposed industrial manufacturers. For these large industrial manufacturers, this places them at a competitive disadvantage to facilities in others states and countries that do not incur the cost of a RGGI like program.

RGGI compliance obligations apply to fossil-fuel power plants 25 megawatts and larger located within the 9 states.

According to the initiative, which was originally adopted on January 1, 2009, the revenue that the states obtain from the cap-and-trade program is used to improve energy efficiency, modernize the electric grid and purchase more wind and solar power. However, a study funded by the Cato Institute finds that 1) there were no added emissions reductions or associated health benefits from the program (the reduction in these states is consistent with the reduction in other states that are not members of the initiative)<sup>2</sup> and 2) the RGGI allowance costs increased already high regional electricity prices.



### Pennsylvania should use caution in considering participation in RGGI.

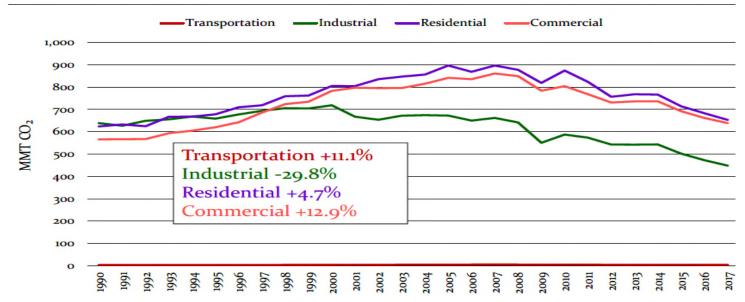
The impact to electricity prices and energy intensive manufacturing should be studied and fully understood before moving forward with RGGI along with the development of statutory protections for those large energy consumers.

<sup>&</sup>lt;sup>1</sup> "Is the Regional Greenhouse Gas Initiative Having an Impact?" by Institute for Energy Research, September 19, 2017 <a href="https://www.instituteforenergyresearch.org/uncategorized/regional-greenhouse-gas-initiative-impact/">https://www.instituteforenergyresearch.org/uncategorized/regional-greenhouse-gas-initiative-impact/</a>

<sup>&</sup>lt;sup>2</sup> To determine the impact that the RGGI has on carbon dioxide emissions reductions, the author compared the RGGI states' emissions reductions and renewable capacity to that of non-RGGI states. The five non-RGGI states selected (Illinois, Oregon, Ohio, Pennsylvania, and Texas) have all deregulated their generating supply sectors as have the RGGI states. The five non-RGGI states also have renewable portfolio standards (RPS), requiring a certain amount of renewable generation by specified dates.

Industrial / manufacturing customers have achieved the greatest reduction of their CO2 emissions associated with energy usage through their commitment to energy efficiency!

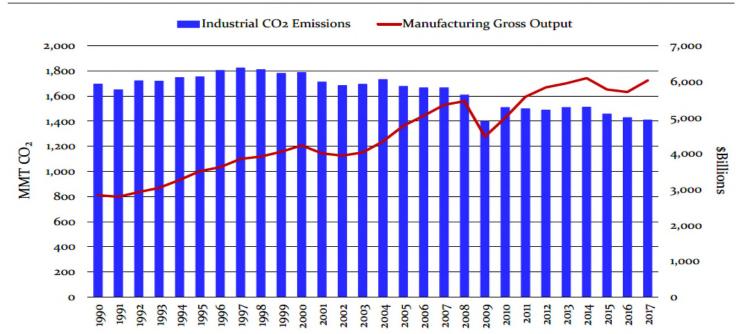
## CO<sub>2</sub> <u>Indirect</u> Emissions by Sector: Industrial sector emissions are 30% below 1990



Source: Total Energy, U.S. Energy Information Administration (EIA)



# Since 1990, Total Industrial <u>Carbon Emissions</u> Decreased 17%, while Manufacturing Gross Output went up 113%



Source: Total Energy, U.S. Energy Information Administration (EIA) and U.S. Bureau of Economic Analysis (BEA)

