

## Public Policies Affecting CHP

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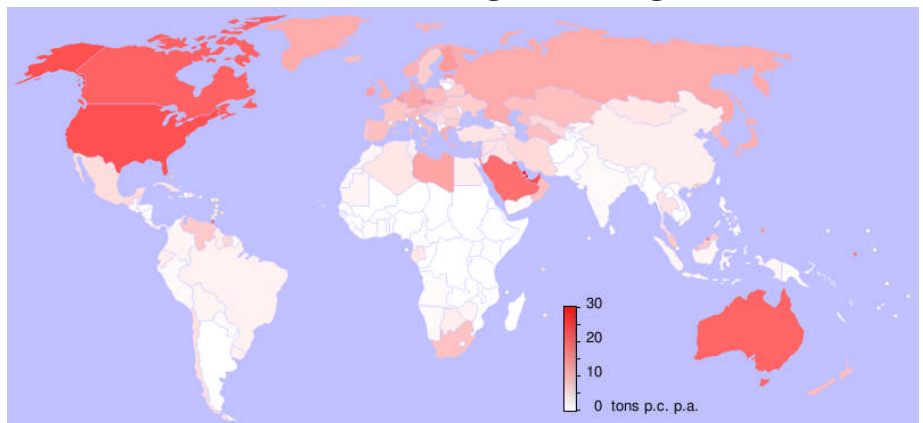
There are several public policies that affect the construction and usage of CHP. These policies are worthy of academic research because they have major implications for the potential implementation of a designed system. The most significant and relevant policies are outlined below.

**Regional Greenhouse Gas Initiative (REGGI)**- REGGI is an initiative developed by states in the Northeastern U.S. to reduce greenhouse gas emissions. Ten states currently participate in REGGI, including Maryland. The initiative called for participating states to cap carbon dioxide emissions from the power sector, and then reduce such omissions by 10% by 2018. REGGI is based on a cap-and-trade system, which utilizes the open market to make reducing carbon emissions economically feasible by selling Carbon Dioxide credits. Research into cost-effective methods for reducing carbon emissions is also one of the major goals and receives a large proportion of the funding.

**Kyoto Protocol**- The Kyoto Protocol is a worldwide agreement among many countries to reduce their greenhouse gas emissions to very specific standards within a certain time frame. The document was created at a United Nations Conference on Environment and Development in 1992 with the goal of stabilizing the level of greenhouse gas in our atmosphere to protect our climate system. The protocol called for industrialized member countries to reduce their collective greenhouse gas

emissions by 5.2% relative to their 1995 totals. A system of carbon credits has been established to help those countries that are unable to reverse the trend of their emissions by such a significant margin. Additionally, certain percentages were given to different countries based on their current emissions and predicted difficulties. However, the Kyoto Protocol is legally binding, and

while over 180 countries have ratified it, the U.S. has yet to ratify it, though they did sign it. Nonetheless, in a recent initiative, about 850 U.S. cities have agreed to follow the guidelines of the protocol, even though it is not federally ratified. Among these cities are Baltimore and Washington, D.C.



### Carbon dioxide emissions per capita by country

Although China emits the largest amount of carbon dioxide, the United States produces the largest amount per person.



U.S. DEPARTMENT OF  
**ENERGY**

**United States Department of Energy-** The U.S. DOE has become especially active in the past couple decades in creating programs to drastically reduce greenhouse emissions. Some of the specific, relevant goals for the DOE are to eliminate our current imports from the Middle East and Venezuela; to create millions of new green jobs; to reduce our greenhouse gas emissions by 80% by 2050. CHP provides a crucial intermediate solution to help the U.S. achieve these goals in an economically-feasible manner in the short term.

**Energy Independence and Security Act of 2007-** Signed into law by President Bush in December of 2007, this act lists chief among its goals to increase production of renewable energy, increase efficiency of energy production, promote research on effective methods of controlling greenhouse gas emissions, and increasing the energy efficiency of the Federal Government, among others. Specifically, the act aims to reduce fossil fuel usage in federal buildings by over 50%, relative to usage in 2003. Additionally, by 2030, all new federal buildings must be “carbon neutral.” Short-term goals such as these may only be feasible through increase usage of and improved performance by CHP systems.

While there are certainly more public policies that attempt to improve emissions in the U.S., those listed above are some of the most significant and relevant to our project. While not one of them is individually going to make us reduce emissions enough, as a whole they express the fact that policy makers have recognized the need to improve to significantly reduce our emissions in the short term, and CHP may be the best solution for that.