On Aug 10, 2020,  Middletown for Clean Energy issued [Middletown Energy Plan v2](http://climate.smiller.org/energy-plan/Middletown-2020-Energy-Plan/MiddletownEnergyPlan-V2-2020-8-8.pdf) detailing a cost-effective path to lower GHG (Green House Gas) emissions by residents & businesses of Middletown, NJ.  The Energy Plan defines scenarios achieving 40% GHG reduction by 2030 and 90% GHG reduction by 2050 – consistent with heading off the worst of our coming Climate Crisis. See page 8 for 2030 and 2050 results at a glance. Calculations are [here](http://climate.smiller.org/energy-plan/Middletown-2020-Energy-Plan/ClimateAction-8-1-20.xlsx).
 Although specific to Middletown, we believe our organization's Energy Plan can be adapted to many cities.  Contact me for further details to adapt a similar plan to lead the way in YOUR city. Click for [background](http://climate.smiller.org/energy-plan/Middletown-2020-Energy-Plan/EnergyPlanLongDescription.docx)

ABOUT MIDDLETOWN FOR CLEAN ENERGY

       Pat and Steve Miller are Climate Reality Leaders (Denver, 2017). We co-founded Middletown for Clean Energy - a non-partisan organization of volunteers in Middletown, NJ.
A team, with principal writer Bob Erickson, started with  NJ GHG emissions (found on page 22 of the 2020 [NJ Energy Master Plan](https://www.nj.gov/emp/docs/pdf/2020_NJBPU_EMP.pdf)   and the sector emissions [pie chart](http://climate.smiller.org/energy-plan/Middletown-2020-Energy-Plan/emission-sources-rutgers.jpg) in Rutgers University Jan, 2018 brochure "Reducing NJ Greenhouse Gas Emissions").

The basis of our calculations is Middletown's per person share of NJ average emissions per sector. In parallel, we are developing a Middletown-specific carbon footprint in order to track emission reductions. We are getting a bit closer to measured data. However, until the state and utilities have systems in place to track and report certain details, we will continue to require our own estimates for some data.

HOW TO CREATE AN ENERGY PLAN FOR YOUR TOWN:

It may be as simple as entering your own city population, in place of Middletown's population in the associated [spreadsheet](http://http:/climate.smiller.org/energy-plan/Middletown-2020-Energy-Plan/ClimateAction-8-1-20.xlsx). Then you would refine each scenario for your town (we will supply a DOCx format energy plan that you edit for your own town).  We would be happy to help further if you are serious about applying the principles to your town.

Towns in NJ share many characteristics with Middletown.  For example, the Green Teams, found in Middletown and most NJ towns, can readily adopt the "Going for Gold" actions, which [nicely map to most of the GHG reduction scenarios](http://climate.smiller.org/energy-plan/Middletown-2020-Energy-Plan/going-for-gold-GHG.jpg) in the Middletown Energy Plan.
 We leverage NJ commitment to move to 100% renewable electricity (heavily relying on offshore wind generation).  NJ  provides incentives for transportation (the largest source of GHG emissions in NJ): EV Charging stations and rebates for EVs, and trucks. NJ also provides funds for energy efficiency improvements (building audits, remedial programs, appliance rebates,...) through a societal benefit tax on utility bills.

DETAILS OF SCENARIOS:

GHG reduction "scenarios" reduce GHG by improving energy efficiency, and converting from fossil fuel to renewable electricity. These changes have minimal impact on lifestyle, and with small cost to the city.  The city government sets the example and provides continuous guidance for residents and businesses, to take advantage of present and future state and federal incentives.

Most NJ heating & hot water is natural gas that will gradually be replaced by electric heat pumps. With current NJ utility prices, [a calculation shows](http://climate.smiller.org/SLV/2020-1-26cost-heatpump.doc) electric heat pumps presently cost about 20% more to operate than a gas furnace. This will quickly change to advantage heat pumps if/when a U.S. carbon fee/dividend is implemented

Steve Miller 8/13/2020

stevemiller@comcast.net

<http://climate.smiller.org>

<http://electric.smiller.org>

<https://www.facebook.com/groups/MiddletownForCleanEnergy>

KEY HYPERLINKS:

 <http://climate.smiller.org/energy-plan/Middletown-2020-Energy-Plan/MiddletownEnergyPlan-V2-2020-8-8.pdf>
<http://climate.smiller.org/energy-plan/Middletown-2020-Energy-Plan/ClimateAction-8-1-20.xlsx>