

Town of Washington Grove Sustainability Committee

First-Year Summary of the Renewable Energy Conversion Incentives Pilot

February 18, 2025

The Town approved the incentive program that encourages conversion of fossil fuel heating systems to electric heat pumps, gasoline vehicles to electric, and residential power to renewable sources approximately a year ago. The purpose of the pilot is to maximize the rate which the community is reducing its greenhouse gas emissions. This is a summary of the progress toward the long-term goal of reducing the overall greenhouse gas emissions of the Town.

- We are currently tracking 19 potential and completed conversions. Of these, five are EVs and 14 are heat pumps.
 - Of the five **EV conversions** we are tracking, four have been approved for the incentive with one application in review.
 - Of the 14 **heat pump conversions** we are tracking, we have approved incentives for only three, denied one, with one application in review.
 - There are two more that have converted and are in the process of applying and two more considering converting but yet to proceed.
 - There have been five that have converted who either did not fully qualify and/or decided not to apply.
 - Of these five, all were high efficiency heat pumps that would have qualified
 - Three were done without permits
 - Two retained primary fossil fuel backup
 - One was unable to contract renewable power because it had a short-term tenant
 - At least four of them have used the MoCo selected contractor Elysian Energy
 - All but one of them have signed up for renewable power
- We have funds allocated for approximately 13 conversions.
- To match the State target of 60% GHG emissions reduction by 2030, the Town would need to enable 20 heat pump and 60 EV conversions **per year**.

From the above, you can see we may be close to the annual target for heat pumps for this year, but only half of them will be due to the incentive. The program (and the county) requires mechanical permits to make sure the installation meets trade and performance standards, but this requirement is not well enforced. Thus, many contractors forego getting a permit unless the owner requests it, and we estimate (and have also been told by Elysian Energy) that the effective additional cost is about the same as the value of the incentive. Nervousness about the county inspectors discovering violations in our old houses is also a concern of some. The other concern is whether the heat pump will provide a similar level of heating as an existing fossil fuel system, so some have kept the legacy fossil fuel system for backup. We are of the opinion that the legacy system does not have to be removed as long as the replacement system can handle the entire load with a cold climate heat pump and/or an electrical backup. This gives the owner the opportunity of removing the legacy system in

the future without having to augment it. Even without the incentives, these homeowners have greatly advanced the goal of reducing the Town's emissions.

The incentive played a part in the EV conversions, but many more of them are needed to meet the State target. As the auto industry converts more models and the prices become more reasonable, the rate of uptake should increase. And as the charging infrastructure is rolled out and becomes ubiquitous, there will be less hesitancy to adopt EVs.

With both the EV and HP conversions, it is necessary to also convert to renewable electricity to get the incentive. We have seen the subscription list for renewable electricity grow as well over the year, largely due to conversion to community solar. We now have 61 houses that either use rooftop solar, community solar or MD Energy Choice, which is approximately 28% of the houses. This alone represents 5% of the community GHG emissions.

We can provide the tables of EV, HP and renewable electricity conversions to councilmembers by request.

If we assume the applications in progress are approved and include the conversions that did not seek the incentive, the overall reduction in the Town's 6000 T community GHG inventory due to the 17 conversions to date is on the order of 156 less tons of CO2 emissions this year. Of these, the 5 vehicle conversions reduced our footprint by roughly 42 tons of CO2 this year, and the 13 HP conversions reduced it by roughly 114 tons. The total amount of reduction due directly to conversions receiving the incentives is about 100 tons. The largest component of the reduction in each case has been the conversion to renewable electricity.

We feel that the program has been somewhat slow to produce results mainly due to the complexity of the heat pump conversion process and due to the novelty of the EV market. It is also not clear whether the incentives actually induced the conversion or whether it was incidental to the decision. This year's conversions represent the early adopters which should inform the path going forward, as well as the fact that the federal incentives will likely be removed during the year. It would be advantageous that the pilot be extended for another year so we can get a better assessment of its success by the spring.

With the Town's Representative (Liz Gillanders) we are considering several important possible modifications that the SC and TC should consider going forward, in particular, whether to:

1. Make the incentive a fixed percentage of the cost of the HP or EV up to a maximum (e.g. of \$1500) - this could address the varying costs of the systems/vehicles and the desire to keep the security of fossil fuel backups;
2. Require that applications be submitted within a certain timeframe (e.g. one year) of the first date at which a household is eligible to submit an application for a given HP or EV;
3. Clarify certain definitions, such as the purchase date of a vehicle as distinguished from the pre-order date.
4. Clarify that there must be a MoCo mechanical inspection to qualify.
5. Consider extending the deadline for application to one year from installation.