

**Testimony of Viral Amin
Vice President, Commercial Development & Strategy
DTE Power & Industrial Group**

U.S. House of Representatives Select Committee on the Climate Crisis

Hearing entitled “Solving the Climate Crisis: Opportunities in Agriculture”

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Chairwoman Castor, Ranking Member Graves, and members of the Select Committee, thank you for the opportunity to testify before you today. My name is Viral Amin, and I am the Vice President for Commercial Development & Strategy for DTE Energy’s Power and Industrial Group based in Ann Arbor, Michigan. DTE Energy is a diversified energy company with two utility businesses serving Michigan and various non-utility businesses with investments throughout the United States. The Power and Industrial group of DTE Energy focuses primarily on developing renewable energy and industrial energy services projects. At DTE Energy, we believe that climate change is one of the defining public policy issues of our time. We applaud this committee for taking the initiative to understand what can be done.

We are proud to say that DTE Electric, a regulated utility with 2.2 million customers and DTE Gas, a regulated utility with 1.3 million customers have made commitments to customers to reduce carbon and methane emissions, respectively, by more than 80% by 2040, and our goal is to achieve net zero emissions from electric generation by 2050!

Today, I’d like to introduce you to Renewable Natural Gas, a product made entirely from waste with the potential to deliver significant reductions in greenhouse gases, improve air and water quality, and create well-paying jobs.

Renewable Natural Gas, or RNG, is exactly what it sounds like – it is natural gas made from renewable resources. RNG is chemically identical to the natural gas that most of us use every day, except that it is derived from methane created by the decomposition of organic matter, rather than being extracted from fossil-based resources.

Manure management practices are a significant source of greenhouse gas emissions in this country. Manure from livestock operations, such as dairy and hog farms, is often stored in uncovered lagoons leading to the release of methane into the atmosphere. And, as I am sure this committee is aware, methane has a global warming potential that is 25 times more potent than carbon dioxide¹. Agricultural waste accounts for over 9% of anthropogenic methane emissions in the U.S., according to a 2017 EPA report.²

¹ Global Warming Potential for 100-yr time horizon. Table TS.2. Technical Summary in climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.

² USEPA’s Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2017. In 2017, manure management represented 9.4% of anthropogenic methane emissions; landfills accounted for 16.4%.

RNG projects capture methane by diverting manure to large, enclosed tanks, called anaerobic digesters. The captured methane is then processed to remove impurities and produce a product that can be transported and delivered anywhere in this country through our existing natural gas pipeline infrastructure and can be utilized by end-customers without any limitations or changes to their equipment. This is the product we refer to as Renewable Natural Gas, or RNG.

While today's hearing is particularly concerned with the role of agriculture in addressing climate, it's important to note that the transportation sector is now the leading sector source of CO₂ emissions in the United States and the use of RNG in alternative fuel vehicles provides a proven cost-effective option for reducing the emissions from the heavy-duty transportation fleet. According to Natural Gas Vehicles for America, 32 percent of all on-road fuel used in natural gas vehicles in calendar year 2018 was renewable natural gas (RNG).

DTE and other developers produce RNG from dairy farms for use as a fuel replacement in trucks, buses and cars that are otherwise powered by traditional fossil-based natural gas. The resulting carbon footprint is lower than even electric vehicles! When compared to diesel fuel, these vehicles have significantly fewer emissions of other air pollutants like sulfur dioxide, nitrogen oxides and particulates. DTE has already committed \$140 million to develop ten RNG projects at large dairy farms in Wisconsin which can power approximately 2,000 alternative-fuel trucks every year. Five of these projects are in operation, while the other five are under construction.

The financial challenges currently faced by dairy farms due to low milk prices, combined with the additional pressure from local communities to improve water quality and reduce odor can be partially mitigated by RNG projects in several ways. First, DTE pays dairy farmers a share of the revenues earned from the sale of RNG, allowing these primarily family owned businesses to realize value from a waste byproduct. Second, we create new, well-paying construction and full-time jobs in order to develop, operate, maintain, and support the complex systems required to produce RNG. Third, the process used to produce RNG can reduce the number of pathogens within the manure and thereby lower the risk of groundwater contamination.³ And last, but not of least importance to dairy communities, many of the volatile compounds that contribute to odor are destroyed in the RNG production process.

RNG is a unique solution in the battle against climate change. Harmful methane emissions are captured to fuel vehicles or other beneficial uses, American farmers benefit financially, well-paying jobs are created, and both air and water quality in rural communities can be improved.

In order to encourage investment and expand access to RNG, project developers require stable and transparent policy mechanisms that promote the use of low carbon fuels and clean energy. We ask this committee to understand, support, and help stabilize existing policies that have driven investment to date and to develop new and additional frameworks that enable the market to realize the full potential of RNG. These additional mechanisms could include the allocation of funds for R&D to drive technology advancement, tax incentives that are at parity to

³ <https://farm-energy.extension.org/pathogen-reduction-in-anaerobic-digestion-of-manure/>

those for renewable energy sources, and sensible stimulus designed to promote the development of natural gas-powered vehicles and other RNG uses.

RNG is a prime opportunity – available today, using today’s technology – to reduce methane emissions economically, decrease reliance on fossil fuels, and support American farmers. I appreciate your attention, and I look forward to answering any questions you may have. Thank you.