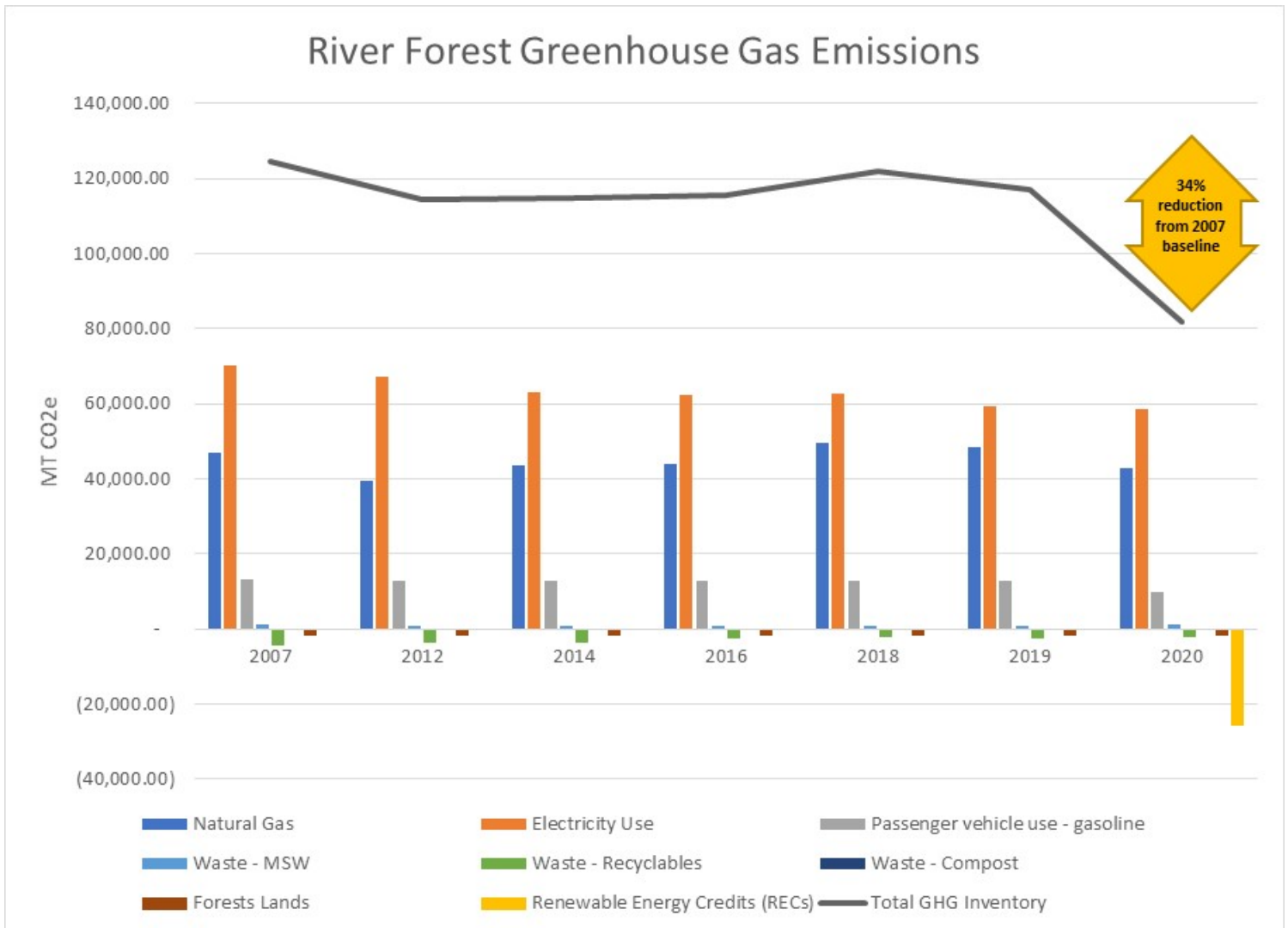


The Village of River Forest has reduced its Greenhouse Gas (GHG) emissions by 34% since 2007, upholding its commitments to mitigate the impacts of climate change.



Have you ever thought about what role River Forest, and you as an individual, can play in reducing the impact of climate change?

First, what are our village's sustainability goals? The Village of River Forest has signed the Greenest Region Compact 2 (GRC2)¹ and Chicago Climate Charter² and has also adopted the local PlanItGreen Environmental Sustainability goal of reducing its GHG emissions by 30% from 2007 levels by 2020. The Village's Sustainability Commission has adopted a strategic plan to minimize our village's environmental impacts with a focus on GHGs and waste.

GHGs are gases such as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (NO₂) and fluorinated gases³

¹ <http://mayorscaucus.org/initiatives/environment/rec/>

² <https://northamericanclimatesummit.splashthat.com/>

³ <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>

that trap heat in the atmosphere. Human activities are responsible for almost all of the increase in greenhouse gases in the atmosphere over the last 150 years⁴, with the largest source in the United States being the burning of fossil fuels for electricity, heat, and transportation.

But how do those lofty goals get translated into action, and what role can you as an individual play in reducing the impact of climate change? It begins with understanding the amounts and sources of our village's and residents' GHG emissions, and how our individual actions can affect those emissions. The Sustainability Commission has completed an analysis of the village's GHG Inventory to quantify total emissions from resident, commercial, industry and Village service activities. The Inventory was quantified using U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions developed by ICLEI – Local Governments for Sustainability USA using best available source data and methods for calculation. Major sources of GHGs from our community include the use of electricity, use of fuel (i.e., natural gas) in residential and commercial stationary combustion equipment (e.g., boilers and furnaces), on-road passenger vehicles operating within the community boundary, and solid waste generation and disposal.⁵ GHG offsets include forest and lands carbon sequestration, recycled waste, and compost waste.

What did we learn from our GHG Inventory analysis? The Village of River Forest has reduced its gross GHG emissions by 34% from the 2007 baseline of 125,000 metric tons of carbon dioxide (MT CO₂e) to 82,000 MT CO₂e in 2020. Our biggest sources of GHGs are from energy usage -- electricity and natural gas combustion, respectively. Our overall consumption of these fuels has decreased since 2007, but the most significant reduction came as a result of offsets through our two-year Green Electric Aggregation Program with MC Squared Energy Services, LLC. It provided ~26,000 MT CO₂e worth of Renewable Energy Certificates (RECs) that supported clean, renewable energy development on wind farms in the Midwest (see Sustainability Commission website [here](#) for more information). Programs such as recycling, composting and maintaining our trees are also important ways of offsetting our GHGs.

What's next? To continue our progress with controlling GHG emissions, we need to:

- Focus on energy usage and clean energy options by:
 - Encouraging residents to [sign up for the new Community Solar Program](#) which enables residents to obtain solar power for their electricity needs from a large scale solar generation site in Illinois while saving money on electricity costs.
 - Continuing to obtain Renewable Energy Credits by extending the Green Electric Aggregation program.
- Increase participation in green living activities that offset GHG emissions such as composting and tree protection.
- Continue to develop the GHG inventory as an informed decision-making tool for the village.
- Use the Sustainability Commission strategic plan as a foundation for a formal climate action plan that informs residents about climate change risks, and actions that will reduce emissions and mitigate the effects of GHG emissions.

⁴ <https://www.ipcc.ch/report/ar4/wg1/>

⁵ Additional sources that are applicable but not included for now due to lack of data include transportation and other mobile sources (on-road freight and service vehicles , on-road transit vehicles , transit rail vehicles, inter-city passenger rail vehicles, and freight rail vehicles operating within the community boundary), as well as wastewater and water (operation of water delivery facilities, process emissions from operation of wastewater treatment facilities).