

# Considering Environmental Justice When Designing and Implementing a Renewable Natural Gas Project

Renewable natural gas (RNG) project developers should incorporate environmental justice considerations into the siting, design, and implementation of RNG projects. Here are a few tips.



## What is Environmental Justice?

- Environmental justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.<sup>i</sup>

## What is RNG?

- EPA's methane partnership programs define RNG as anaerobically generated biogas that has been refined for use in place of fossil natural gas.<sup>ii</sup>
- The biogas used to produce RNG can be sourced from one or more of the following: municipal solid waste (MSW) landfills, wastewater facilities, stand-alone organic waste management operations, or livestock farms.<sup>ii</sup>

## What are the benefits of considering EJ implications when developing an RNG project?

- By considering RNG projects through an EJ lens, project developers can ensure that everyone, including communities with EJ concerns, benefit from:
  - » The same degree of protection from environmental and health hazards,
  - » Equal access for everyone to the approval process that governs RNG projects, and
  - » The same level of understanding regarding possible RNG projects.

## How to include EJ consideration in RNG project development:

- **Identify vulnerable populations**
  - » Consider the communities located near the facility, including people of color, low-income, Tribal, or Indigenous communities.
  - » EPA's [Environmental Justice Screening and Mapping Tool](#) (EJSCREEN) can be used as a resource to identify affected communities.
- **Engage with the community during siting, operation, and closure of the facility**
  - » Consult the International Association for Public Participation's [Spectrum of Public Participation](#) to determine the level of involvement most appropriate for each level of community engagement.
  - » Understand that the community most directly affected by an environmental problem or a planned or proposed project is inherently qualified to participate in the decision-making process.
  - » Listen more than you speak when engaging to understand local community issues or concerns.
- **Evaluate impacts**
  - » Understand and identify who is underrepresented at your meeting or events and try to engage them. Work with organizations in the area to ensure the right community members are included in conversations.
  - » Address language barriers. Dedicate funds in your project budget for interpretation and translation services.
  - » Minimize use of technical and scientific jargon and acronyms during meetings to promote broader understanding about the project.

- **Develop strategies to avoid disproportionate impacts on the vulnerable populations identified above**
  - » Create strategies based on community engagement for equitable design and implementation (e.g., ensure waste and project pollution does not reach and is protected from surface waters or wetlands, or other water sources).
  - » Design, construct, operate, and maintain facilities to contain all wastes and runoffs in a way that will have a minimal effect on the surrounding community and all members that are employed on site.

## Example of an RNG Project that Incorporated EJ Concerns in the Project Design



- [Green Era Sustainability](#) is a partnership among the University of Illinois in Chicago, Green Era, and the Urban Grower's Collective, a nonprofit organization led by Black, Indigenous, and People of Color who have a long-standing relationship with the community and work to create sustainable communities through better food production in Chicago.
- The partnership is constructing a 2-acre clean energy facility, urban farm, greenhouse, an outdoor fresh produce market, a visitors' center, and a STEM education center in the Auburn Gresham neighborhood of Chicago.
- The Auburn Gresham neighborhood is 95.4% Black and 2.2% Latino. Only 14.7% of neighborhood residents have a bachelor's degree or higher, compared to 39.5% for the entire City of Chicago. Nearly 65% of households within the neighborhood have incomes less than \$50,000 per year.<sup>iv</sup>
- Green Era engaged with the community for five years before initiating construction. During this time, the Urban Growers Collective attended monthly Town Hall meetings to engage residents. The Greater Auburn Gresham Development Corporation, a Green Era partner, led a planning process with more than 1,500 residents to develop a 5-year community plan. The plan includes comprehensive strategies to ensure that residents of the neighborhood have high quality of life.<sup>v,vi</sup>
- Green Era continues to engage regularly with the community through Aldermanic town halls, community meetings, community charrettes, and other meetings.<sup>vii</sup>
- Nearly 55 million pounds of food waste is produced in Chicago each month. The project's goal is to divert organic waste from landfills, while harnessing clean energy and compost for local, urban farms. The energy facility's anaerobic digester is expected to process 85,000 tons of food waste and organic matter each year.
- The urban farm, which is located within a food desert, will grow 26,000 pounds of food per year to help improve access to fresh produce.
- The project was funded through a \$10 million Chicago Prize from the Pritzker Traubert Foundation.<sup>viii</sup>

## Resources:

- For more information on Environmental Justice, see [EPA's Office for Environmental Justice and External Civil Rights](#).
- For information on mapping and screening environmental and demographic indicators, please see [EPA's EJSCREEN](#).
- For more information on Public and Community Outreach see [Chapter 10 of the AgSTAR Project Development Handbook](#).
- For more information on EJ and AD, please contact EPA's [AgSTAR Program](#).
- For more information on EJ and Landfills, please contact EPA's [LMOP Program](#).

<sup>i</sup> EPA's Office of Environmental Justice and External Civil Rights, "Environmental Justice", <https://www.epa.gov/environmentaljustice>

<sup>ii</sup> EPA, "An Overview of Renewable Natural Gas from Biogas, January 2021"  
[https://www.epa.gov/sites/default/files/2021-02/documents/lmop\\_rmg\\_document.pdf](https://www.epa.gov/sites/default/files/2021-02/documents/lmop_rmg_document.pdf)

<sup>iii</sup> EPA, "An Overview of Renewable Natural Gas from Biogas, January 2021"  
[https://www.epa.gov/sites/default/files/2021-02/documents/lmop\\_rmg\\_document.pdf](https://www.epa.gov/sites/default/files/2021-02/documents/lmop_rmg_document.pdf)

<sup>iv</sup> Chicago Metropolitan Agency for Planning, "Auburn Gresham: Community Data Snapshot Chicago Community Area Series, August 2021 Release", <https://www.cmap.illinois.gov/documents/10180/126764/Auburn+Gresham.pdf>

<sup>v</sup> Green Era Chicago, "FAQs: How does the Green Era Campus collaborate with the community and fit into other community developments?"  
<https://www.greenerachicago.org/about/faq>

<sup>vi</sup> Greater Auburn-Gresham Development Corporation, "Auburn Gresham: Your Voice Matters: Quality of Life Plan",  
<http://www.gagdc.org/Our-community/About-Auburn-Gresham/Auburn-Gresham-Your-Voice-Matters-Quality-of-Life-Plan-2016.html>

<sup>vii</sup> Green Era Chicago, "FAQs: How does the Green Era Campus collaborate with the community and fit into other community developments?"  
<https://www.greenerachicago.org/about/faq>

<sup>viii</sup> Green Era Chicago, "Auburn Gresham Project Wins \$10 million Prize from Charitable Foundation"  
<https://www.greenerachicago.org/news/auburn-gresham-project-wins-10-million-prize-from-charitable-foundation>