Biomethane Geospatial Dataset

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***Note: GIS Software such as QGIS will be required to open and use this dataset.***

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# Abstract

This dataset contains estimates of the methane generation potential by county from the following biogas sources: landfills, animal manure; wastewater treatment; and industrial, institutional, and commercial organic waste (IIC).

# Purpose

The purpose of this dataset is to illustrate the methane potential from biogas sources in the United States by county.

# Extent

Contiguous United States, Alaska and Hawaii

# Use Constraints

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# Attribute Definitions

## OWCH4t

Methane generation potential from industrial, institutional, and commercial organic waste (in metric tons/year). This analysis estimates the methane generation potential from food manufacturing and wholesalers (e.g. fruit and vegetable canneries, dairy creameries, meat packing and processors, etc.), as well as institutional facilities such as hospitals, nursing homes, educational and correctional facilities. It uses data from the U.S. Census Bureau's County Business Patterns 2012, and the Homeland Security Infrastructure Program (HSIP) 2012 which is further processed to estimate the amount of these resources by county.

## AMCH4t

Methane generation potential from animal manure (in metric tons/year). The following animal types were included in this analysis: dairy cows, hogs, and chickens (broilers). The methane generation potential was calculated by animal type and manure management system at county level using data from the USDA, National Agricultural Statistics Service, 2007 Census.

## WWTPCH4t

Methane generation potential from wastewater treatment (in metric tons/year). This analysis estimates the methane generation potential of wastewater treatment plants using methodology from the EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2011 and data from the EPA Clean Watersheds Needs Survey (2008). The results were further aggregated to county level.

## LFGCH4t

Methane emissions from landfills (in metric tons/year). The methane emissions are estimated at each landfill considering total waste in place, status (open or closed), and waste acceptance rate using data from EPA's EMOP database (as of April 2013), and then aggregated to county level. Note: this analysis includes "candidate" landfills only. EPA's Landfill Methane Outreach Program (LMOP) defines a candidate landfill as one that is accepting waste or has been closed for five years or less, has at least one million tons of waste, and does not have an operational or under-construction project; candidate landfills are also designated based on actual interest or planning.

## TotalCH4t

Total methane generation potential by county from the following biogas sources: landfills, animal manure; wastewater treatment; and industrial, institutional, and commercial organic waste. Data in metric tons/year.