



PROJECT DETAILS

LOCATION

Village of Woodridge

ISSUE

Biogas generation and flaring at wastewater treatment plant.

SOLUTION

Utilize biogas within the treatment plant.

BENEFIT

Reduce pollution, foster energy independence by replacing fuel with Renewable Natural Gas.

COST ESTIMATE

\$1,675,000

DISTRICTS REPRESENTED

US Senate - Illinois

US Representative District 11

IL Senate District 41

IL Representative District 81

County Board District 3

WASTEWATER TREATMENT PLANT BIOGAS REUSE



PROJECT HISTORY & INFORMATION

DuPage County owns and operates the Woodridge Greene Valley Wastewater Treatment Plant that provides service to the Villages of Lisle, Woodridge, Downers Grove and portions of the City of Wheaton. The plant's processes generate digester gas that is currently flared.

The County has had the plant assessed for alternatives including reuse of the biogas within the plant. This option includes the replacement of three existing boilers with a dual-fuel boiler that would utilize the gas within the plant.

Other alternatives were investigated including treating gas for conversion to electricity and for pipeline injection and compression for use in vehicles. A 2020 study details each option and found utilizing the gas within the plant boilers was the most efficient and effective option without gas conditioning technology.

Boiler replacement with digester gas reuse has an estimated return on investment of 15 years with the reduction in natural gas consumption.