



SusGlobal Energy[®]
Caring for Earth's Journey™

SusGlobal: Getting WWTP to Net-Zero with Source-Separated Organics

Historically, activated sludge wastewater treatment has been a costly process because of the high electricity consumption. And as we know, electricity is not getting any cheaper. Fortunately, technologies have been developing that allow plants to generate some of that electricity from the energy embedded in the organic waste they process. In the best cases, WWTPs can now be net-zero energy consumers with significant resulting cost savings.

SusGlobal has developed a technology and process which brings net zero energy within the reach of many WWTPs in Ontario if they have anaerobic digestion capability. Our technology can substantially increase the biogas yield of an existing WWTP digester to generate needed electricity and even fuel some municipal fleet vehicles and equipment. This is done by importing additional organic waste materials (SSO) from commercial and residential municipal collection which have been pre-processed by SusGlobal's technology.

This process works best where municipalities have multiple digesters at their WWTP and can dedicate one WWTP digester for the processing of organic wastes for this purpose. This has two advantages. First of all, operationally, it is easier to optimize a digester when it's possible to control the quantity and quality of the organic feed. Secondly, it gives reassurance to the plant operator that the operator will always have control and capacity for his/her biosolids digestion, since the organic stream is treated separately from the WWTP biosolids.

In summary, by introducing energy-rich SSO into the WWTP AD process, SusGlobal can increase the methane-rich biogas yield of the WWTP and thus produce more electricity and heat, getting to net-zero and saving money.

To find out more contact Gerry Hamaliuk at [**ghamaliuk@susglobalenergy.com**](mailto:ghamaliuk@susglobalenergy.com)