



## CHP UNIT INSTALLATION at Township of Centre Wellington

“Selecting a co-generation energy solution, rather than a traditional diesel generator, will provide our community with an emergency power back-up system and energy producing system for the daily operation of the Sportsplex. It is incredible that this green energy solution is expected to produce operational savings of \$1 million over 10 years.”  
Kelly Linton, Mayor of the Township

The Combined Heat and Power System produces up to 250 kW of power for the Sportsplex which is approximately 80 % of the daily demand in the summer and approximately 60 % of the demand over the winter months. Over the year it off sets the energy currently provided from the grid by approximately 2,000,000 kWh (kilowatt hours) roughly equivalent to the amount of energy used in 160 homes per year.

By generating power locally, the heat created by converting gas to electricity can be purposely used for environmental heating, pool heating, dehumidification, and in some cases cooling. By installing this equipment, the Township is capable of fully using the Sportsplex in an emergency situation as a shelter for the residents of Centre Wellington.

<b>CHP unit type</b>	TEDOM Cento 285
<b>Fuel</b>	Natural Gas
<b>Electrical Output</b>	285 kW
<b>Heat Output</b>	419 kW
<b>Total Efficiency (LHV)</b>	91,4 %
<b>Commissioning Date</b>	August 2018
<b>Place of installation</b>	Ontario, Canada



Combined heat and power production, also known as cogeneration, is an electricity production method that utilizes the heat released by the electricity production process in a useful manner. In doing so, a high utilisation efficiency of the energy from fuel is attained when the fuel is mostly a natural gas, LPG or biogas. Cogeneration pays off where demands for higher supplies of heat or cold exist. The power generated in the CHP unit can be utilised for the plant's own consumption or it can be distributed to the power grid.