

City Council

Notice of Motion

MM47.61	ACTION			Ward: All
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Toronto's First Wastewater Energy Project - Largest in the World - by Councillor Jennifer McKelvie, seconded by Mayor John Tory

** Notice of this Motion has been given.*

** This Motion is subject to referral to the Infrastructure and Environment Committee. A two-thirds vote is required to waive referral.*

Recommendations

Councillor Jennifer McKelvie, seconded by Mayor John Tory, recommends that:

1. City Council authorize:

- a. the General Manager, Toronto Water to review and approve up to nine additional wastewater energy projects as proposed by Noventa Energy Partners, or an affiliate thereof, provided the projects generate benefits to the City and do not create inefficiencies or complications in the operation and maintenance of the City's sewer collection and wastewater treatment systems; and
- b. the General Manager, Toronto Water and the Executive Director, Environment and Energy to negotiate, enter into and execute Water/Wastewater Thermal Energy Agreements and any other agreements required to give effect thereto, with Noventa, for up to nine additional wastewater energy projects approved by the General Manager, Toronto Water, upon such terms and conditions satisfactory to the Deputy City Manager, Corporate Services, and in a form satisfactory to the City Solicitor.

2. City Council authorize the General Manager, Transportation Services or designate, to negotiate, enter into, and execute any necessary agreements with Noventa, to permit access to and occupation of the City's public highway that may be impacted by any of the proposed nine wastewater energy projects approved by the General Manager, Toronto Water, on terms and conditions satisfactory to the General Manager, Transportation Services, and in a form satisfactory to the City Solicitor.

3. City Council request the Chief Planner and Executive Director, City Planning to initiate Official Plan amendments, if required in respect of any of the wastewater energy projects proposed by Noventa and approved by the General Manager, Toronto Water, to permit a disposal in excess of 21 years within lands designated Parks and Open Space, and to consult with the appropriate City divisions and local Councillor.

4. City Council direct the Deputy City Manager, Corporate Services or designate, in consultation with the General Manager, Toronto Water, to provide a progress update on these

wastewater energy projects in the periodic reporting to City Council on TransformTO with respect to the impact on emissions reductions.

Summary

Noventa uses Wastewater Energy Transfer™ to exchange the thermal energy between a thermal load and a municipal wastewater system, where the load (e.g. a building or a district energy system) can take heat from, and/or reject heat (cooling) to the municipal wastewater system. This exchange can occur in-building, with the sewer network, and at wastewater treatment plants. In Canada, several wastewater energy projects are either operating, under construction, or planned, including: Vancouver's False Creek Neighbourhood Energy Utility; Halifax's Cogswell Redevelopment Area; and Mississauga's Lakeview Village. Notable wastewater energy programs are operating in Metro Vancouver Regional District and in King County, Washington.

Noventa's Wastewater Energy Transfer project currently under construction at Toronto Western Hospital. It is Toronto's first wastewater energy project, and the largest in the world to date. By recovering heat from the City's sewer network this 19 megawatts (MW) renewable energy project will reduce natural gas use at Toronto Western Hospital by 90 percent, and eliminate 10,000 tonnes of carbone dioxide (CO2) annually. By rejecting heat to the Mid Toronto Interceptor, this project will reduce peak electricity demand at the hospital by approximately 5 megawatts (MW), which will take pressure off the Toronto Hydro distribution system and leave capacity to support electrification.

Toronto is well positioned to become a world leader in water/wastewater energy projects to decarbonize large community/institutional buildings across the City and accelerate City Council adopted TransformTO climate goals.

Background Information (City Council)

Member Motion MM47.61