



**STAFF REPORT
ACTION REQUIRED**

**Proposal from Toronto Zoo for an on site Biogas
Co-generation Facility – Supplementary Report**

Date:	February 19, 2010
To:	City Council
From:	Joseph P. Pennachetti, City Manager
Wards:	All
Reference Number:	P:\2010\Internal Services\Fac\Cc10004Fac- (AFS 11449)

SUMMARY

The goal of the proposed project is to generate clean renewable energy from organic “waste” (e.g. fuel), in order to meet the Toronto Zoo’s aggressive goal of becoming carbon neutral and maintaining its position as a globally recognized conservation organization, and to demonstrate the benefits of biogas technology to Zoo visitors and citizens of the City of Toronto.

The Executive Committee recommended that City Council give consideration to a forthcoming report from the City Manager respecting the proposed Biogas Facility at the Toronto Zoo.

RECOMMENDATIONS

The City Manager recommends that:

1. Council approve the construction of a Biogas Facility at the Toronto Zoo, pending the decision by the Board of Management of the Toronto Zoo to award the project to a successful proponent, following completion of the Request For Proposals process and after consultation with the Deputy City Manager and Chief Financial Officer and the City Solicitor.
2. The Acting Chief Executive Officer of the Toronto Zoo, in conjunction with City staff involved in evaluating the Biogas Facility Request For Proposals, report to the Executive Committee prior to making a commitment to a successful proponent, if any unfavourable impacts to future Capital or Operating Budgets or material concerns arise from the Request For Proposal process.

Financial Impact

It is intended that this project will not require any additional capital or operating funds from the City. However, there are risks involved and the ultimate financial relationship arising from the provision of energy to the Toronto Zoo can only be determined as the Request for Proposals process moves forward and a commitment is made to a successful proponent. The financial impact of this project on the City will be identified in the staff report on the results of the Request for Proposal to the Toronto Zoo Board of Management. Any unfavourable impacts on future Operating and Capital Budgets will be reported to the Executive Committee prior to entering into an agreement with a successful proponent.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

At its meeting of October 28, 2008, the Board of Management of the Toronto Zoo approved, in principle, a staff report entitled “Towards a Carbon Neutral Zoo”, and directed staff to prepare a Request For Proposals for a large-scale Biogas Facility on the Zoo site. This approval was the culmination of Toronto Zoo staff assessments, external feasibility studies and analyses dating back to 2003, regarding a biogas generation project at the Toronto Zoo. Most recently, Zoo staff updated the board on the proposed Request For Proposals via a report entitled “Renewable Energy Generation and Demonstration”.

<http://www.toronto.ca/legdocs/2009/agendas/committees/zb/zb091029/it003.pdf>

The Executive Committee referred the January 9, 2010 staff report from the Acting Chief Executive Officer, Toronto Zoo, to the City Manager with a request that a report be submitted directly to City Council on the Proposed Biogas Facility at the Toronto Zoo in consultation with Toronto Zoo staff.

<http://www.toronto.ca/legdocs/mmis/2010/ex/bgrd/backgroundfile-26733.pdf>

ISSUE BACKGROUND

The Acting Chief Executive Officer of the Toronto Zoo’s January 9, 2010 report to Executive Committee set out that a large-scale (3-5MW) Biogas Facility (based on the principles of anaerobic digestion) be built on a 5.5 hectare parcel of Zoo land by a third party on a design/build/own/operate basis. At a minimum, the Biogas Facility will generate enough electricity to offset all facilities and operations on-site, and all CO₂ emissions (~7500 tonnes annually) of all Zoo operations and processes. Electricity generated from the Biogas Facility will be sold to the Ontario Power Authority through the Feed-In-Tariff Program. Co-generated thermal energy (heat) from the facility will be

used for the operating needs of the facility and excess heat will be directed to the Rouge Valley Foundation offices and the Toronto Zoo site proper. The biogas plant will include a visitor education area, accessible during regular Zoo operating hours.

City of Toronto Building Division has provided a Permitted Use Letter that confirms the zoning designation, including site-specific by-laws, and the permitted use of the property for a biogas co-generation facility. Zoo staff hired energy and waste management consultants to assist with the preparation of a Request For Proposals. The Legal Services Division has also reviewed the draft Request For Proposals.

COMMENTS

City staff met with the Acting Chief Executive Officer and other Toronto Zoo staff on February 9, 2010 to review the Proposed Biogas Facility. Toronto Zoo staff provided City staff with the Request For Proposals documents, all Board reports, internal Division Head reports, updates, external feasibility studies and analyses related to this project, as well as a timeline of significant project events and meetings with City staff since July 2009. This meeting was also attended by the appropriate City staff from Facilities Management Division, Toronto Environment Office, Special Projects Division and Legal Services Division. Considering the complexity of this project City staff was invited by Toronto Zoo staff to participate on the Request For Proposals evaluation team.

An important aspect of the review of the project included a discussion regarding the timelines planned by the Toronto Zoo for the issuing of a Request For Proposals, the review of submissions in response to the Request For Proposals and subsequent implementation of the Biogas Facility.

There is consensus among Toronto Zoo and City staff that the proposed Biogas Facility provides excellent opportunities for the City to remain a leader in renewable energy development and to achieve the goals of the recently adopted Power to Live Green: Toronto's Sustainable Energy Strategy. The City respects and supports the Toronto Zoo as a global leader in the conservation of nature and sees the proposed biogas project as an excellent demonstration tool of Education for Sustainable Development.

The Board of Management of the Toronto Zoo is seeking approval, in accordance with the Tripartite Agreement dated April 28, 1978 (Article 9(1)), for the construction of permanent facilities to house the biogas electrical generation plant operations.

Toronto Zoo Staff and City staff will jointly evaluate the Biogas Request For Proposals submissions. Areas that will be covered by the Toronto Zoo and City staff in the evaluation of the Request For Proposals submissions include: permitted use and zoning, legal issues, environmental impact, provision of non-zoo fuel sources, technical and financial assessments, Feed-In Tariff rules, thermal heat distribution and other Request For Proposals content.

In considering the foregoing, the Acting Chief Executive Officer of the Toronto Zoo, in conjunction with City staff involved in evaluating the Biogas Facility Request for Proposals, will report to the Executive Committee prior to making a commitment to a successful proponent, if any unfavourable impacts to future Capital or Operating Budgets or material concerns arise from the Request For Proposal process. A material concern may include environmental, financial and/or liability matters.

It is intended that this project will not require any additional capital or operating funds from the City. However, there are risks involved and the ultimate financial relationship arising from the provision of energy to the Toronto Zoo can only be determined as the Request for Proposals process moves forward and a commitment is made to a successful proponent. The financial impact of this project on the City will be identified in the staff report on the results of the Request For Proposal to the Toronto Zoo Board of Management. Any unfavourable impacts on future Operating and Capital Budgets will be reported to the Executive Committee prior to entering into an agreement with a successful proponent.

This report was prepared in consultation with the Toronto Zoo, Financial Planning Division, Legal Services Division, Special Projects Division and the Toronto Environment Office.

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SIGNATURE

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