City of Toronto Policy – Offset Credits

Interpretation Note:

This policy does not prohibit Solid Waste Management Service (SWMS) from selling the energy produced by its renewable natural gas projects. If SWMS opts to sell the energy produced from these projects externally, it is permitted to sell the offset credits and any other related environmental attributes along with it because this requires no corresponding adjustment to the accounting of Corporate emission sources. If the energy produced is consumed by the City, however, SWMS is not permitted to sell offset credits related to that usage externally because this requires a corresponding adjustment to the accounting of Corporate emission sources.

Preamble

Whereas City Council has adopted the target of reducing greenhouse gas emissions for the City of Toronto and the Corporation of the City of Toronto to *net zero emissions* by 2040 and endorsed the TransformTO Net Zero Strategy;

Whereas the TransformTO Net Zero Strategy states that offset credits shall only be used to neutralize residual emissions after the City exhausts all opportunities to reduce human caused greenhouse gas pollution as fast as possible;

Whereas the City of Toronto is an official partner of the United Nations Race to Zero initiative through its membership of the Cities Race to Zero initiative, and therefore must meet the Race to Zero minimum criteria required for participation in Race to Zero, and further strives to meet the leadership criteria, taking into account the Interpretation Guide and Lexicon as published and amended from time to time by the Race to Zero Expert Peer Review Group;

Having regard to the Oxford Principles for Net Zero Aligned Carbon Offsetting, the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, the report of the United Nations High Level Expert Group on Net-Zero Emissions Commitments, and the ISO Net Zero Guidelines, which are recognized as leading sources of scientific guidance for cities and other non-state actors on the role that offset credits may validly play in achieving net zero emissions; and

City Council adopts the following policy regarding *offset credits* as binding on the Corporation of the City of Toronto and any person who acts on behalf of the Corporation of the City of Toronto;

Definitions

- 1. In this policy the following definitions apply:
 - a. *Absolute zero emissions* means the state whereby an organization or jurisdiction has achieved zero greenhouse gas emissions from sources attributable to that organization or jurisdiction in a given year (i.e. no *residual emissions*);
 - b. Additional or additionality means that an offset credit represents an emission reduction or carbon removal that would not have taken place without the activity that generates the offset credit (i.e. the activity would not have occurred under current laws and regulations, current industry practices, or in the absence of marketability of the offset credit). For greater certainty a "clean energy credit" or "renewable energy credit" does not generally purport to satisfy the additionality criterion and is not considered an offset credit under this policy;
 - c. *Carbon attributes* means the environmental rights and benefits that can be used to generate an *offset credit* for *emission reduction* or *carbon removal*;
 - d. *Carbon neutrality* means the state whereby carbon dioxide emissions attributable to an organization or jurisdiction over a given period are fully balanced by *offset credits* for *emission reduction* or *carbon removal* applied to that period, but irrespective of whether this balancing is like-for-like in terms of warming impact and timescale, as determined by Global Warming Potentials, and storage durability;
 - e. *Carbon removal* means a human activity that removes carbon dioxide from the atmosphere, coupled with *short-term carbon storage* (e.g. storage of carbon in a biological system like a forest or soils) or *long-term carbon storage* (e.g. storage of carbon within a geological system like an underground saline formation or mineralization of carbon dioxide into solid carbonate);
 - f. *Community emission sources* means all sources of greenhouse gas emissions that are included in the City of Toronto Sector-based Greenhouse Gas Emissions Inventory, excluding *Corporate emission sources*;
 - g. *Corporate emission sources* means all sources of greenhouse gas emissions attributable to the *Corporation* that are included in the City of Toronto Sector-based Greenhouse Gas Emissions Inventory;
 - h. *Corporation* means the Corporation of the City of Toronto including all Agencies, Boards and Corporations;
 - i. *Emission reduction* means a reduction in the amount of greenhouse gas entering the atmosphere because of activities that avoid or reduce emissions without storage (e.g. a renewable energy project that displaces a fossil fuel energy source; methane flaring) and activities that reduce emissions with *short-term carbon storage* (e.g.

changes to agricultural practices that retains already stored carbon in the soils) or *long-term carbon storage* (e.g. carbon dioxide capture at an industrial facility followed by injection of carbon dioxide into an underground saline formation);

- j. *Exclusive* means the *emission reduction* or *carbon removal* used to generate an *offset credit* can be claimed only by a single entity and not double counted by any other entity;
- k. *Greenhouse Gas* or *GHG* means carbon dioxide, methane, and nitrous oxide;
- Long-term carbon storage means the retention of carbon within geological systems (e.g. an underground saline formation or mineralization of carbon dioxide into solid carbonate) except for the purpose of enhanced oil recovery, oceans, or products, whereby carbon is prevented from entering the atmosphere for periods on the order of centuries or millennia;
- m. *Net zero emissions* means the state whereby the *Corporation* has: (i) exhausted all feasible opportunities to reduce its emissions and achieve *absolute zero emissions*, and (ii) fully balanced any *residual emissions* with *offset credits* for *carbon removal*, or internal *carbon removal* activities, where this balancing is like-for-like in terms of warming impact and timescale, as determined by Global Warming Potentials, and storage durability.
- Offset credit or offset or carbon credit or carbon offset credit means a credit equaling one metric tonne of carbon dioxide-equivalent (CO₂e) of emission reduction or carbon removal that can be transacted between two parties, whether or not the credit is registered on a registry;
- o. *Residual emissions* means the *greenhouse gas* emissions from sources attributable to an organization or jurisdiction that remain on an annual basis after all feasible means to reduce those emissions have been exhausted before the target date for achieving *net zero emissions*;
- p. Reversal means the release of stored carbon dioxide into the atmosphere from short-term carbon storage or long-term carbon storage before the expected end of the storage period (e.g. release of carbon dioxide from a forest due to logging, pestilence or wildfire; release of carbon dioxide from an underground saline formation due to leaks);
- q. Scope 1 emissions means GHG emissions from sources located within the City of Toronto boundary as that boundary is defined in the City of Toronto Sector-based Greenhouse Gas Emissions Inventory;
- r. *Scope 2 emissions* means GHG emissions occurring as a consequence of the use of grid-supplied electricity, heat, steam and/or cooling within the City of Toronto

boundary as that boundary is defined in the City of Toronto Sector-based Greenhouse Gas Emissions Inventory;

- s. *Short-term carbon storage* means the retention of carbon within land-based biological systems (e.g. forests or soils), whereby carbon is prevented from entering the atmosphere for periods on the order of decades;
- t. *Verifiable* means there is sufficient and accessible data to assess the integrity of an *offset.*

Part I – Requirements of net zero emissions

Primary objective

2. The primary objective of the *Corporation* in pursuing its commitment to achieving *net zero emissions* from *Corporate emission sources* is to reduce emissions from *Corporate emission sources* to 65% below 2008 levels by 2030 and as close to *absolute zero emissions* as feasible by 2040.

Net zero emissions

- 3. If any *residual emissions* remain after the *Corporation* has exhausted all feasible opportunities to reduce emissions from *Corporate emission sources*, the *Corporation* shall balance those *residual emissions* in 2040 and subsequent years using *offset credits* for *carbon removal* that are exclusively claimed by the *Corporation* or internal *carbon removal* activities.
- 4. To achieve *net zero emissions* in 2040 or any given year where there are *residual emissions* from *Corporate emission sources*, the *Corporation* shall balance annual *residual emissions* with *offset credits* for *carbon removal* that correspond like-for-like in terms of warming impact and timescale, as determined by Global Warming Potentials, and storage durability.
- 5. For greater certainty, *residual emissions* of carbon dioxide from the combustion of fossil fuels shall be balanced out only by *offset credits* for *carbon removal* that include *long-term carbon storage*.
- 6. If any *residual emissions* remain from *Community emission sources* in 2040, the *Corporation* may, if specifically directed by City Council, balance all or a portion of those *residual emissions* in 2040 and subsequent years using *offset credits* for *carbon removal* that are exclusively claimed by the *Corporation*, provided those *offset credits* for *carbon removal* are not needed to neutralize any *residual emissions* from *Corporate emission sources*.

Part II – Acquiring Offset Credits

7. The *Corporation* cannot acquire *offset credits* to achieve any interim emission reduction goal prior to 2040, including the goal of reducing emissions from *Corporate emission sources* 65% below 2008 levels by 2030.

- 8. *Residual emissions* cannot be balanced for the purpose of achieving *net zero emissions* using *offset credits* for *emission reduction*.
- 9. The *Corporation* may acquire *offset credits* for *carbon removal* at any time prior to 2040 and bank them for the purpose of using them in 2040 or any subsequent year to achieve *net zero emissions*.
- 10. Only the Executive Director of the Environment & Climate Division, or designate, may act to acquire *offset credits* for *carbon removal* by or on behalf of the *Corporation* for the purpose of achieving *net zero emissions* from *Corporate emission sources*.
- 11. Nothing in this policy prevents the *Corporation* from balancing *residual emissions* from *Corporate emission sources* in any year by internal *carbon removal* activities that achieve like-for-like balancing of *residual emissions*.
- 12. Nothing in this policy prevents the *Corporation* from purchasing or otherwise acquiring *offset credits* for *emission reduction* for purposes other than achieving *net zero emissions* (e.g. achieving *carbon neutrality* in any year prior to 2040 if directed by City Council to do so).

Integrity of offset credits

13. The *Corporation* shall not acquire any *offset credit* for any purpose unless it represents an *exclusive, additional,* quantifiable, and *verifiable* unit of *emission reduction* or *carbon removal*, with a low risk of *reversal* or negative social and environmental consequences.

Monitoring and reporting

- 14. Upon acquisition of any *offset credits* by or on behalf of the *Corporation*, relevant information about the *offset credit* must be recorded in a publicly accessible register by the Executive Director, Environment & Climate.
- 15. For the purposes of section 14, relevant information includes:
 - a. The name of the entity that created the offset credits;
 - b. Whether an offset credits are for emission reduction or carbon removal;
 - c. The quantity of *emission reduction* represented by the *offset credits* or the quantity of *carbon removal* represented by the *offset credits*;
 - d. The registry on which the *offset credits* are registered, if any;
 - e. A copy of the agreement between the *Corporation* and counterparty, if any;
 - f. Whether offset credits for carbon removal include short-term carbon storage or long-term carbon storage; and

- g. A description of the controls used to mitigate the risk of *reversal* or negative social and environmental consequences.
- 16. Each year, *offset credits* acquired and held by the *Corporation* shall be reported as part of the City of Toronto Sector-based Greenhouse Gas Emissions Inventory, separately from emissions reporting, in accordance with the *Global Protocol for Community-Scale Greenhouse Gas Inventories*.
- 17. Within one year of adoption of this policy by City Council, and at minimum every five years thereafter, the Executive Director, Environment & Climate, shall report the following to City Council:
 - a. an estimate of the expected *residual emissions* from *Corporate emission sources* in 2040 and subsequent years broken into three components: (i) *Scope 1*; (ii) *Scope 2* excluding grid-supplied electricity; and (iii) grid-supplied electricity;
 - b. the amount of *offset credits* for *carbon removal* currently held by the *Corporation* for the purpose of achieving *net zero emissions* in 2040 and maintaining *net zero emissions* in subsequent years; and
 - c. an estimate of the costs of purchasing or otherwise acquiring further offset credits for carbon removal necessary for the Corporation to achieve net zero emissions in 2040, and maintain net zero emissions in subsequent years, based on the estimate of expected residual emissions and the amount of offset credits for carbon removal currently held by the Corporation.

Part II – Disposing of Offset Credits

18. The *Corporation* claims ownership of all *carbon attributes* as a general provision in its procurement processes and documents. Additionally, staff shall take all reasonable steps consistent with the primary objective in pursuing the target of *net zero emissions* to safeguard claimed ownership by the *Corporation* of *carbon attributes* in any agreement outside the procurement process, except where the *Corporation* is providing a grant that seeks to achieve an environmental benefit in Toronto.

No sale, transfer or disposition of offset credits

19. Considering the primary objective of the *Corporation* in pursuing its commitment to achieving *net zero emissions* from *Corporate emission sources* as set out in section 2, and considering the City's target of *net zero emissions* from *Community emission sources* by 2040, the *Corporation* shall not use the *carbon attributes* for *emission reduction* from any project over which it has a full or partial claim to create *offset credits* for sale, transfer or disposition to any counterparty, however so made, except in accordance with section 20.

Where sale, transfer or disposition of offset credits is permitted

20. The sole exception to section 19 is where the sale, transfer or disposition of *offset credits* does not require, by agreement or law, a corresponding adjustment to the accounting of *Corporate emission sources*.

Part III - Periodic review based on science and guidance

- 21. This policy will be reviewed periodically by the Executive Director, Environment & Climate, or designate, for conformity with the best available science, guidance and standards for achieving *net zero emissions* at the city level, including from bodies that the *Corporation* has committed to aligning with (e.g. United Nations' *Race to Zero* initiative).
- 22. If the Executive Director, Environment & Climate, or designate, is of the opinion that revisions to this policy are warranted based on a review under section 21, revisions will be proposed to City Council forthwith.

Part IV - Exemptions

- 23. Exemptions from the Carbon Credit Policy in force prior to adoption of this policy do not provide exemption from this policy.
- 24. Environmental attributes that are not *carbon attributes* are not affected by this policy.
- 25. Exemptions to this policy may only be granted expressly by City Council, having regard to the primary objective under section 2.
- 26. Any Division, Agency or Corporation seeking an exemption to this policy from City Council must give prior notice to the Executive Director, Environment & Climate.