

Terms of Reference: Mayor's Task Force on Clean Technology

Version 2.

Introduction

The establishment of the Mayor's Task Force on Clean Technology has been prioritized by the current Mayor, Municipal Councillors, and the Community and Economic Development Advisory Committee as a means of identifying the ways in which advancing Clean Tech and Clean Technologies can be promoted as options for residents and businesses in North Grenville - Definitions of Clean Tech, Clean Technologies and Nature Based solutions are appended to this document as per a submission by Nadia Diakun-Thibault who is a member of the Environmental Action Advisory Committee and Housing Advisory Committee. The submission reflects the widely accepted industry definitions of these concepts, as well as key indicators.

The Committee shall have regard to the shared priorities of the Community Strategic Plan, Committee Handbook, and Procedural By-Law.

Mandate

The Task Force will examine the current status of Clean Tech and Clean Technologies in Canada, and identify opportunities for North Grenville to pursue and potentially adopt strategies and opportunities to expand access to these technologies.

Any recommendations made to Council by the Taskforce should include:

- Proposed actions that may be taken by the Municipality to investigate and/or increase Clean Technologies, Green Technologies, create potential Clean Tech job opportunities, and foster a thriving Clean Tech industry in North Grenville.

Recommendations will take into account the needs of a broad range of residents, and businesses, and could include the possibility of applying for grant opportunities as well as forging partnerships within the community to leverage existing assets to investigate approaches and practices that advance Clean Tech, Clean Technologies, and Nature Based Solutions.

Scope of Work

- Identify and map current Clean Tech/Clean Technologies by sector already in use in North Grenville

- Explore potential partners and partnership strategies with the private, non-profit and government sectors to assist in pursuing Clean Tech, Clean Technologies and Nature Based solutions
- Identify opportunities to create the conditions for conversion to clean technologies for residents and businesses in the municipality, including external government grants and other sources of funding
- Identify opportunities to pursue external funding for new initiatives related to Clean Tech, Clean Technologies and Nature Based solutions
- Assess and analyze current and projected needs for Clean Tech and Clean Technologies within the Municipality
- Identify enablers and inhibitors in the current municipal by-laws, policies, procedures and those at the provincial and federal levels related to increasing Clean Tech, Clean Technologies and Nature Based solutions
- Leverage pre-existing forums for the sharing of best practices which promote Clean Tech, Clean Technologies, and Nature Based solutions in other Municipalities

Membership

The Task Force shall be comprised of the following;

- The Mayor
- One (1) Municipal Council Member
- Five (5) to nine (9) community members with a range of knowledge, skills, and experience relevant to the work of the task force

The community membership will include:

- Four (4) members from the Community and Economic Development Advisory Committee,
- One (1) representative from the Environmental Action Advisory Committee,
- One (1) representative from the Agricultural and Rural Affairs Advisory Committee, AND
- Three (3) additional community members The Committee will not meet until all members have been appointed.

The Task Force will invite additional academics, sectoral leaders, and practitioners to present to the Task Force as required.

The Task Force will receive administrative support from Municipal staff.

The Municipality of North Grenville is committed to advancing equity, diversity, and inclusion in every aspect of its work, including appointments to advisory committees. An increase in diversity can assist in promoting equal opportunities and memberships with

a diversity of lived experiences. A more diverse membership will contribute to the work of each advisory committee.

Each advisory committee shall endeavour to have balanced representation from various equity- and inclusion-seeking groups including, but not limited to, people with disabilities, francophones, Indigenous people, newcomers, older adults, racialized community members, rural residents, 2SLGBTQIA+, those facing socioeconomic disadvantage, women, minority faith-based and spiritual group members, and youth.

The Committee, by a majority vote of its members, may recommend to Council to remove any member of the Committee who does not fulfil their obligations under their appointment.

Meetings

The Task Force will meet at a minimum ten times per year, and twenty times over the course of its mandate, averaging one meeting per month less summer and winter breaks. Additional meetings may be held at the call of the Chair and as indicated to ensure that the work of the Task Force is completed within the established timelines.

Agenda packages will be sent out the week prior to the meetings and published on the Municipality's website. Draft minutes will be distributed by email to each Committee member within one (1) week following the meeting.

Quorum

Quorum of the Committee shall be a majority of the members.

Decision making of the group shall be by majority vote.

Timelines

The Task Force will complete its current mandate and author an interim report and final report.

The interim report will be completed by January 31, 2025. The Task Force will author its final report by December 31, 2025 with a presentation to Council to follow.

Budget

The Committee will prepare an annual work plan including any budget requests ahead of the budget cycle. The Municipality's Economic Development Manager, Matt Gilmer,

shall bring forward budget requests of the Task Force as part of the Municipal budget process.

APPENDIX 1

Definitions:

Clean Tech also known as Clean Technology, refers to technologies and innovations developed with the primary aim of minimizing environmental impact or promoting sustainability. These technologies encompass a wide range of fields, including renewable energy, energy efficiency, sustainable transportation, waste management, and water conservation.

Examples of green tech include:

- Biofuels derived from renewable biomass sources like algae, corn, or sugarcane as alternatives to fossil fuels.
- Advanced recycling technologies for processing and repurposing waste materials into new products or energy sources.
- Green building techniques and materials, such as eco-friendly insulation, passive solar design, and sustainable construction practices.
- Carbon capture and storage (CCS) technologies that capture carbon dioxide emissions from industrial processes and store them underground to prevent their release into the atmosphere.
- Smart grid systems that optimize energy distribution and consumption, integrating renewable energy sources and improving overall grid efficiency.
- Nature-Based Solutions- Nature-based solutions (NBS) involve utilizing the inherent qualities of natural ecosystems to address environmental challenges and promote sustainability. Examples of nature-based solutions include:
 - o Reforestation and afforestation projects to restore degraded forests and sequester carbon dioxide from the atmosphere.
 - o Green infrastructure initiatives such as constructed wetlands, vegetated swales, and permeable pavements to manage stormwater runoff and reduce urban flooding.
 - o Coastal restoration efforts like mangrove reforestation and oyster reef restoration to protect shorelines from erosion and storm damage while providing habitat for marine species.
 - o Sustainable agriculture practices such as agroforestry, cover cropping, and rotational grazing that enhance soil health, biodiversity, and carbon sequestration.
 - o Urban green spaces and biodiversity corridors that improve air quality, regulate temperatures and provide habitat for wildlife while enhancing community well-being.

(N.B. The terms often are used interchangeably: Clean Tech/Green Tech and Clean Technology/Green Technology. The above definitions are select examples. The Task

Force Terms of Reference should posit definitions for clarity when referring to the terminology.)

Sectors:

Agriculture & Food

- Plant-based foods, regenerative agriculture, biofertilizers, soil carbon measurement

Energy & Power

- Innovative renewables, long-duration energy storage, grid flexibility, green hydrogen

Materials & Chemicals

- Biochemicals, advanced materials, carbon to fuels

Transport & Logistics

- Electric vehicles, sustainable aviation fuels, clean shipping

Resources & Environment

- Carbon capture and utilisation, water efficiency, automated waste sorting, circular construction

Enabling Technologies

- Geospatial, quantum computing, artificial intelligence applied to cleantech

The Mayor's Task Force on Clean Technology should set out as a first task acceptance of canonical definitions that reflect accepted government and industry standards and reference the baseline standards for each.

ADDITIONAL CONSIDERATIONS

To further the discussion on the Terms of Reference for the Task Force, an anonymized summary and query were prepared to review the draft Terms of Reference and comment using OpenAI GPT 4.0 as an assistant.

QUERY

Act like a technology analyst with the goal of helping a Council understand the SUMMARY and consider the key takeaways and implications for their Task Force STRATEGY. Specifically: 1. Reinforcement: Identify elements or insights from the SUMMARY that directly relate or support the current STRATEGY as related to Clean Tech and Clean Technologies. How could these elements be used to further reinforce the STRATEGY? 2. Challenge: Identify ideas or perspectives in the SUMMARY that contradict or question aspects of the current STRATEGY. What implications do these insights have for the organization? How could your strategy adapt or respond to these challenges? 3. Innovation: Identify any novel concepts or approaches discussed in the SUMMARY that aren't currently incorporated in the STRATEGY. How might these new ideas influence or transform your STRATEGY? What would be the potential benefits and risks of incorporating these insights into your STRATEGY? 4. Technology: Identify which technologies have been incorporated into the STRATEGY and if they reflect current science and technology advances in Clean Tech and Clean Technologies, as well as Green Tech and Green Technologies.

ChatGPT RESPONSE

Without a specific summary provided to directly analyze, I will proceed based on general knowledge and principles related to clean technology and strategies for municipal development in this area. This approach will allow us to discuss how reinforcement, challenge, innovation, and technology can play roles in enhancing the Mayor's Task Force on Clean Technology strategy as described.

1. Reinforcement:

The Task Force's emphasis on identifying short-term and long-term objectives, leveraging partnerships, and fostering a clean tech industry aligns well with current trends and recommendations in clean technology. To further reinforce the strategy, elements such as the focus on equity, diversity, and inclusion can be highlighted. These elements support the creation of a more resilient and innovative clean tech sector by ensuring a wide range of perspectives and ideas are considered. Emphasizing and expanding partnerships with academic institutions for research and development could also reinforce the strategy by ensuring it remains at the forefront of clean tech advances.

2. Challenge:

A potential challenge to the current strategy might be the rapid pace of technological advancement in clean tech, which can render specific technologies or approaches obsolete quickly. Additionally, reliance on grant funding and external partnerships might pose sustainability and autonomy risks. To adapt, the strategy could incorporate a more agile framework that allows for the rapid adoption of new technologies and methodologies. This might involve creating a dedicated team or process within the Task Force for scanning and evaluating emerging technologies and industry trends regularly.

3. Innovation:

The strategy could benefit from incorporating novel concepts such as circular economy principles, which are not explicitly mentioned. Circular economy approaches focus on minimizing waste and making the most of resources, which can transform the strategy by embedding sustainability into the core of clean tech initiatives. This could involve developing programs that encourage product life extension, reuse, and recycling within the clean tech industry. Another innovative approach could be the utilization of smart city technologies to optimize resource use and reduce emissions. Incorporating these concepts could lead to enhanced environmental benefits and economic opportunities but would require careful planning to manage the complexities and investments needed.

4. Technology:

The Task Force strategy mentions clean and green technologies but does not specify which technologies are being considered. Reflecting current science and advances involves assessing and potentially incorporating technologies such as renewable energy (solar, wind, hydroelectric), energy storage solutions (battery technologies), smart grids, electric vehicles, and advanced recycling technologies. Assessing if these technologies align with the municipality's needs and capabilities is crucial. It's also important to stay updated on emerging technologies like carbon capture and utilization, advanced biofuels, and green hydrogen to ensure the strategy remains relevant and effective.

In conclusion, by addressing these four areas, the Council can ensure their strategy is robust, adaptive, and capable of positioning the municipality as a leader in clean technology. The balance between leveraging current strengths, adapting to challenges, incorporating innovative approaches, and staying abreast of technological advancements will be key to the success of the Mayor's Task Force on Clean Technology.

