

## Triple Bottom Line implications – Renewable and Low-emissions Energy Implementation Plan

### Process and Methodology

Administration used the City of Saskatoon's Triple Bottom Line (TBL) Improvement Tool to comply with *Council Policy C08-001 - Triple Bottom Line*.

In conducting the analysis, the Administration relied on the expertise of the project team and subject matter experts from Sustainability, as well as conducted research on industry's best practices.

This review is meant to be a high-level way to identify the Implementation Plan's environmental, social, economic, and governance outcomes, as well as to identify opportunities to achieve even greater sustainability benefits. The results are meant to support ongoing decision making, rather than be relied upon as a fixed sustainability evaluation.

### Results & Findings

- Overall, the results of the review indicate that the Implementation Plan aligns with the City's environmental, social, economic, and governance priorities
- TBL implications for renewable and low-emissions energy initiatives will be reviewed as each initiative is developed.

A summary of results for each TBL principle and indicator are included in the subsequent section of this document.

### **Principle: Environmental Health and Integrity**

Indicator	TBL outcomes
Renewable Energy	<ul style="list-style-type: none"> <li>• Primary purpose of the Plan is to recommend actions within the scope of the City's role to transition to renewable and low-emission energy</li> </ul>
Conservation of Resources	<ul style="list-style-type: none"> <li>• Plan follows the LEC, which recommends to first reduce, then switch, energy sources</li> <li>• Efficiency and conservation will first be considered prior to switching for all initiatives</li> </ul>
Climate Change Mitigation and Adaptation	<ul style="list-style-type: none"> <li>• Emission reductions through transitioning to renewable energy</li> <li>• Investing in renewable energy increases energy resiliency and sovereignty</li> </ul>
Green Buildings and Sustainable Land Use	<ul style="list-style-type: none"> <li>• Renewable energy is often the ultimate step in efficient buildings but building efficiency design and retrofits are outside of the scope of the Implementation Plan.</li> <li>• When siting renewable energy generating developments, "best purpose" uses, and co-benefits will be considered.</li> <li>• Electrifying building heat will have a benefit to indoor air quality.</li> </ul>

Sustainable Transportation	<ul style="list-style-type: none"> <li>• Noting the synergy between EV users potentially preferring to use renewable energy to charge their EVs, and the use of EVs as portable energy storage</li> </ul>
Healthy Ecosystems	<ul style="list-style-type: none"> <li>• Future decision-making for all initiatives will prioritize the protection and promotion of natural areas, in alignment with the Green Infrastructure Strategy. For example, when siting renewable and low-emission energy generating facilities, sites with minimized impacts to natural areas will be preferred, and an agri-voltaics farm will be piloted.</li> <li>• Procurement to specify minimizing environmental impact.</li> <li>• Ensure proper feasibility studies are performed.</li> </ul>
Clean Air, Water, and Land	<ul style="list-style-type: none"> <li>• Displacing coal and natural gas power with renewable and low-emission sources.</li> <li>• Siting renewable energy generation projects on brownfields (like the Dundonald Solar Farm) that won't be further impacted and can be remediated</li> </ul>
Waste Reduction and Diversion	<ul style="list-style-type: none"> <li>• Regular policies and bylaws for disposal will be enforced, recycling opportunities will be encouraged, panels could be considered with a recycling partner at Recovery Park (this is an initiative in the Implementation Plan)</li> </ul>
Storm Water Management	<ul style="list-style-type: none"> <li>• Any energy production development is required to manage storm water on site</li> </ul>
Sustainable Food System	<ul style="list-style-type: none"> <li>• Potentially in conflict with garden spaces or larger agriculture lands. Can be compatible with Agri-voltaics.</li> <li>• Initiatives will look for co-benefits if siting in competition</li> </ul>

**Principle: Social Equity and Cultural Wellbeing**

Indicator	TBL Outcomes
Equity and Opportunity	<ul style="list-style-type: none"> <li>• Consulted with First Nations Power Authority; Indigenous Initiatives Division.</li> <li>• Initiatives will consider engagement, procurement, and partnerships with Indigenous stakeholders on a per-project basis.</li> <li>• Energy efficiency is prioritized first to affordable housing groups</li> <li>• Equity Toolkit has been included in plan development</li> <li>• Initiative communications materials should be accessible to everyone - languages</li> <li>• Initiatives to be developed in consideration for impacts to vulnerable groups (e.g., subsidies for solar panels would need to be equitable and accessible)</li> </ul>
Diversity and Inclusion	<ul style="list-style-type: none"> <li>• Renewable energy has a lot of employment opportunities associated with it. Opportunity to celebrate diversity through projects led or partnered with diverse groups.</li> </ul>

	<ul style="list-style-type: none"> <li>• Demographic changes in income, health, values, etc. will impact the adoption and response to renewable energy initiatives. Considerations to make renewables available and affordable to everyone.</li> </ul>
Heritage, Arts, and Culture	<ul style="list-style-type: none"> <li>• Heritage properties have procedures in place to maintain them, not needed in considerations for siting.</li> <li>• Arts could be easily incorporated into energy generation sites</li> <li>• Hydropower facility at the weir initiatives could celebrate history, recreation, many other co-benefits.</li> </ul>
Self Sufficiency and Living with Dignity	<ul style="list-style-type: none"> <li>• Prioritizing energy efficiency first for affordable housing and low-income homes as because efficiency improvement has the greater impact on quality of life and affordability.</li> <li>• Always to be considered for initiatives</li> </ul>
Health and Wellbeing	<ul style="list-style-type: none"> <li>• Renewable energy generation is linked with a higher quality of life</li> </ul>
Safety and Resiliency	<ul style="list-style-type: none"> <li>• Service disruptions could be mitigated through energy storage projects.</li> <li>• Renewable energy does require grid connection to ensure consistent electricity access</li> <li>• Privacy Impact Assessments and CPTED may be required on a per-project basis.</li> </ul>
Civic Participation	<ul style="list-style-type: none"> <li>• Active community subject matter experts have been consulted, SES Solar Co-op is being highlighted in Implementation Plan, Energy Coaching program is being procured. Topic inspires passionate civic participation.</li> <li>• Further partnerships within community will be considered as opportunities arise</li> </ul>
Recreation	<ul style="list-style-type: none"> <li>• Hydropower at the weir could include a wave park.</li> <li>• To be considered when siting renewable energy generating facilities</li> </ul>

**Principle: Economic Prosperity and Fiscal Responsibility**

<b>Indicator</b>	<b>TBL outcomes</b>
Innovation	<ul style="list-style-type: none"> <li>Renewable energy is new-to-us and there are local opportunities for growth. Renewable energy is an important factor in attracting sustainable-minded businesses.</li> </ul>
Sustainable Procurement	<ul style="list-style-type: none"> <li>Incorporated already into procurement criteria for planned initiatives.</li> </ul>
Financial Planning and Resourcing	<ul style="list-style-type: none"> <li>Life-cycle and carbon pricing part of standard decision-making and initiative development</li> <li>Grants are actively pursued – there are numerous funding opportunities that help progress renewable and low-emissions energy, so the City is well-positioned to receive funding through the initiatives listed in the implementation plan</li> </ul>
Affordability for Users	<ul style="list-style-type: none"> <li>Largely dependant on market/utility, but part of Implementation Plan to help support users</li> </ul>
Support the Local Economy	<ul style="list-style-type: none"> <li>Large generation sites can provide opportunity for conference and tour hosting.</li> <li>City is always receiving unsolicited proposals for low-emissions energy generation that are assessed internally and will be presented if appropriate.</li> <li>Initiatives for supporting solar co-ops and ICI</li> </ul>
Asset Management	<ul style="list-style-type: none"> <li>Rooftop solar is a great co-benefit for an otherwise unused space.</li> <li>Renewable energy integration (combined with sufficient energy storage) may support peak load demand on the centralized power grid.</li> <li>Ensure rooftop solar initiatives include roof replacement considerations when scheduling installations</li> </ul>
Skills and Training	<ul style="list-style-type: none"> <li>Potential for install training, or other new technology training.</li> </ul>
Labour Rights and Employment	<ul style="list-style-type: none"> <li>Part of procurement standard.</li> </ul>

**Principle: Good Governance**

<b>Indicator</b>	<b>TBL outcomes</b>
Ethical and Democratic Governance	<ul style="list-style-type: none"> <li>Implementation Plan incorporates current City goals and initiatives, and feedback from internal working group. Reporting on findings will be public and presented to council.</li> </ul>
Effective Service Delivery	<ul style="list-style-type: none"> <li>Implementation Plan discusses how we manage the risk of not meeting LEC targets</li> </ul>
Education, Communication,	<ul style="list-style-type: none"> <li>Engagement has been conducted, Implementation Plan recommends further education and incorporates education materials to be accessible to public.</li> </ul>

Engagement, Capacity Building	
Monitoring, Reporting and Compliance	<ul style="list-style-type: none"> <li>• Project follows City's PMI standards, Implementation Plan informed by reputable sources relevant to our local context</li> <li>• Monitoring will be done through Climate Action Progress reporting and the revisiting of the Low Emissions Community Plan</li> </ul>
Agility and Adaptiveness	<ul style="list-style-type: none"> <li>• Implementation Plan has been adapting throughout its development as new information and opportunities have been presented. This field is ever evolving, and the Implementation Plan attempts to remain relevant at the point of being made public.</li> </ul>
Roles, Responsibilities and Rewards	<ul style="list-style-type: none"> <li>• Following LEC plan and highlighting current successes.</li> </ul>