Business case

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Community & UN SDG(s):	**Individual participation/Serving a context community:** Members of residences in Canada who wish to track and manage their household energy consumption to adopt sustainable practices. Goal(s) 7 and 11
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Proposed Project	EconergyCalc
Date Produced	October 15, 2023
Background	In line with UN Sustainable Development Goals 7 (Affordable and Clean Energy) and 11 (Sustainable Cities and Communities), this project addresses the pressing global challenge of household energy consumption. As urbanization continues to rise, energy consumption in residential areas is a critical concern. Also, traditional energy sources are often non-renewable and contribute to environmental degradation and climate change, many individuals need more awareness of their energy usage patterns and the ecological impact of their appliances.
Business Need/ Opportunity	The goal of this project is to create an innovative web application that empowers individuals to make informed decisions about their energy use, ultimately contributing to reduced carbon emissions and more sustainable living. Also, the project aims to empower individuals to make informed choices about their energy consumption, promoting sustainable living and, as a result, contributing to the reduction of greenhouse gas emissions and environmental impact.
Options	1. Build an interactive web application where users can add or log the electrical appliances they use regularly in their household and receive their total energy consumption. 2. Use available online energy calculator tools. 3. Do nothing

Cost-Benefit Analysis

1. Build an interactive web application.

Cost	Benefit
☐ Will require development costs such as Software development tools and licenses, cloud services and API subscription costs. ☐ Will require training and knowledge on MERN technology stack	☐ Users will receive estimated energy consumption. ☐ User will receive recommendations and tips to reduce energy consumption and adopt sustainable practices. ☐ Application will keep a log of the user's appliances and provide consumption trends. ☐ Use a community forum to share tips and recommendation about energy saving

2. Use available online energy calculator tools

Cost/Disadvantages	Benefit
☐ No log can be kept user's appliances. ☐ Cannot perform consumption trends specific to the user. ☐ Give generalized tips to reduce energy consumption instead of personalized recommendations.	☐ Free of cost

3. Do nothing

Recommendation
Option 1 is recommended