

Peaks Island Branch Library and Community Center Renovation Plan

Let's improve the **LIBRARY and COMMUNITY CENTER**

Our building is outdated and outmoded, so we planned a creative design to improve it.

How can we improve our building's environmental impact?

We hired an **ENERGY CONSULTANT** to conduct an **ENERGY MODEL** to highlight the benefits and costs of alternative solutions.

REASONABLE INITIAL COSTS
low upfront investment in energy conservation measures and new equipment

We need a **SUSTAINABLE BALANCE** that takes into account:

LOW OPERATING COSTS
low energy usage, low maintenance costs, and durable equipment

ENVIRONMENTAL IMPACT
with special attention to the effect on greenhouse gas emissions

COMFORT
good temperatures and good ventilation in all seasons

Alternative solutions to consider and their advantages to our sustainable balance

INSULATION
Improving insulation maintains a comfortable building while using less energy.



REPLACEMENT WINDOWS
Better glass can let in light without losing as much energy.



SOUTH-FACING "PORCH" WINDOWS
Big windows let in more daytime light, but increase the need for heat or AC.



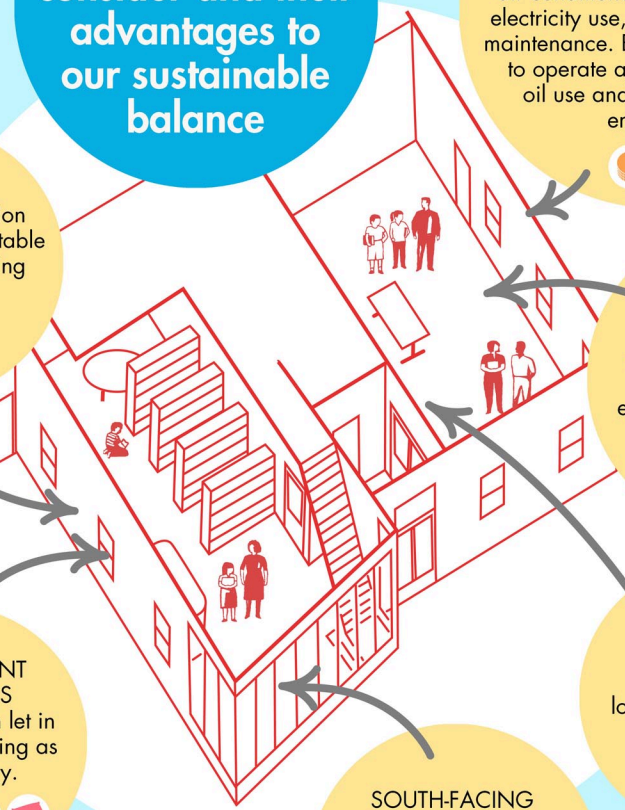
HEAT RECOVERY VENTILATORS
HRVs provide fresh air and improve climate control by efficiently exchanging heat between incoming and outgoing air.



LED LIGHTING
LED lighting costs more upfront, but lowers operating costs year after year.



HEAT PUMPS
Heat pumps manage heating and cooling, and reduce energy use. They cost more upfront than furnace heat and air conditioners, slightly increase electricity use, and require regular maintenance. But, they are cheaper to operate and will reduce fuel oil use and greenhouse gas emissions.



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