



A. Descriptive Details

PROJECT TITLE: CAMOSUN ENERGY MANAGEMENT PROGRAM

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- In a larger sense, successes in mitigating Climate Change and meeting one's social obligations and responsibilities can increase pride of association for faculty, staff and students, while helping to overcome what many believe to be the greatest challenge facing humanity.
2. Issues or problems the proposed project is designed to address:
- Escalation of energy prices has been greater than general inflation, and is subject to influences which raise concerns about cost stability and proposed savings.
 - Energy intensity (the need for more energy) also continues to increase at the College due to:
 - > longer hours of operation,
 - > additional computers & equipment, expanding floor areas, etc.
 - The work is intended to contribute to the abatement of Climate Change.
 - Sub-optimal performance from outdated building systems, resulting in reduced quality of indoor environmental conditions (indoor air, lighting & noise).
3. Opportunities and/or benefits for the organization, department, School, or to others:
- Long term cost avoidance relating to energy use and maintenance,
 - Increased awareness, measurement and management of rising energy intensity,
 - College infrastructure upgrade (a bi-product of energy retrofits),
 - Improved Indoor Air Quality and student/staff comfort leading to reduced absenteeism and a better learning environment,
 - Improved Light Quality for better learning outcomes,
 - Noise reductions for a better learning environment,
 - Improved documentation of systems and buildings,
 - Reduced Greenhouse Gas emissions (10% = 235 Tonnes / yr CO₂),
 - Lower demands on the community energy and water infrastructure,
 - Less need of land and public expense for new dams, power plants and transmission lines to Vancouver Island,
 - Increased local economic activity (contractors and suppliers working on energy upgrades),
 - Improved image as responsible member of community.
4. How does this project support or link to the goals of the 2006-2008 Strategic Plan?

This work would be in direct support of Issue 7 of the Strategic Plan: Sustainability, Productivity & Accountability.

C. Goals and Objectives

Objectives:

Camosun College will develop and implement an Energy Management Program that will

E. Project Risks, Constraints & Assumptions

1. Risks:

Risk	Probability	Impact	Risk Rating
Return-on-investment lower than anticipated	Medium	Medium	Medium
Risks common to all construction projects	Medium	Medium	Medium
Removal of support by BC Hydro Power Smart	Low	High	Low
Camosun ACA/Operating funding reduced/capped	Low	Extreme	Medium

2. **Constraints:** The project must deliver savings to maintain ongoing support and resources from BC Hydro (funding of Energy Manager, Energy Studies, Awareness Campaign and equipment upgrades), and to continue to motivate participants.

3. **Assumptions:** Preliminary estimates indicate that there is at least \$1 million that could be applied to energy saving projects which have good returns on investment. Accordingly, under a 5 year plan, **\$200,000** would be budgeted for energy saving upgrade work in 2007/2008 from Camosun College's Annual Capital Allowance. The target is a total savings/net reduction of \$80,000 per year. With BC Hydro and other anticipated incentives, the payback period for the

G. Communication

- Project Manager to publicize the Energy Plan to in

The process:

Leadership

1.1 Demonstrated Corporate commitment

Understanding

2.1 Understanding of performance & opportunities

Planning

3.1 Targets, performance indicators (KPI) & motivation

3.2 Plans

People

4.1 Accountabilities

4.2 Awareness & training

4.3 Resourcing

Financial Management

5.1 Criteria/budgets for capital expenditure (CAPEX)

5.2 Energy operating budgets

Supply Management

6.1 Purchasing procedures & alternative energy options

6.2 Quality and reliability of supply

6.3 Optimizing purchasing with supply agreement

Operations & Maintenance

7.1 Operating procedures

7.2 Maintenance procedures

Plant & Equipment

8.1 Procedures for new facilities design

8.2 Procedures for equipment selection

8.3 Innovation & new technology

Monitoring & Reporting

9.1 Metering & monitoring

9.2 Reporting, feedback & control systems

9.3 Documentation & records

Achievement

10.1 Energy cost performance in the past 12 months

10.2 Auditing progress

The energy management plan identified the five most critical areas for Camosun College to focus on in the first year of implementation of the plan. The five focus areas are:

1.1 Demonstrated Corporate Commitment

2.1 Understanding Performance & Opportunities

3.1 Targets, Performance Indicators (KPI) & Motivation

4.2 Awareness & Training

4.3 Resourcing People

I. Resource Requirements

To achieve the goals and objectives Camosun College will form the following Energy

Specific Actions	Who	Completed By
C. Project Conduct (Kick-off)		
Set Key Actions & Milestones	BL, IT	May/07
Communication Plan	BL, IT	Jul/07
Energy Study Interurban	BL	Oct/07