

Kwantlen Polytechnic University - 2009 Carbon Neutral Action Report

Executive Summary

Kwantlen Polytechnic University (KPU) has a long standing commitment to environmental sustainability. Over the past 10 years, the institution has made significant investments in reducing its energy consumption and its greenhouse gas emissions. Many of these investments have now recouped their initial cost and are generating ongoing savings to KPU. As well, with the support of the Government of British Columbia, the University has added new buildings at our Surrey and Cloverdale campuses that were designed to LEED Gold standards. Furthermore, KPU has developed, and this year expanded, its geothermal field at its Surrey campus. This field now provides heating and cooling to recently constructed buildings and to the wing of the Library that was built in 1989.

KPU is in the process of developing a number of new degree programs focusing on sustainability. These include offerings in science and in urban agriculture/horticulture. As well, the University has undertaken initiatives to develop its research infrastructure with the support of Canadian Foundation for Innovation and BCKDF. These include a geothermally heated and cooled greenhouse that will act as a test site for a sustainable production greenhouse industry in British Columbia.

Finally, in the future, KPU has much work to do to educate employees and students to work with the University in its goal to become carbon neutral. To date much of the work has been undertaken by Facilities, Information and Education Technology (IET) and Supply and Business Services.

Overviews

Actions Taken to Reduce Greenhouse Gas Emissions in 2009

KPU continues to develop and implement plans to move incrementally towards carbon neutrality in the future. Current initiatives include a phased replacement of desktop computers with thin clients that use much less energy and can be used for 8-10 years. With the support of the Government of the British Columbia and the Government of Canada, the University is repairing/replacing building envelopes at its Surrey campus. This will reduce building heating and cooling costs. Also, KPU, with PSECA funding, has installed new energy efficient condensing boilers at Langley and Surrey campuses. Finally, as a multi-campus university, KPU is working to reduce travel costs between campuses incurred for meetings and for instruction. Over the next two years the University will increase its investment in video conferencing in meeting rooms, to the desktop and for external meetings.

Operational Changes in 2009

In 2009, the University tracked energy use and energy intensity per square meter. This data was benchmarked to historical energy consumption. As well, major renovations were built to LEED silver standard and designed using an integrated design process. In addition, all PC desktops are shut down automatically outside regular business hours and all PC monitors, Thin Clients and multifunction devices automatically have sleep settings applied. Multifunction devices were set for automatic double-sided printing. As well, lighting upgrades and occupancy sensors were installed in a number of buildings.

Plans to Continue Reducing Greenhouse Gas Emissions 2010 – 2012

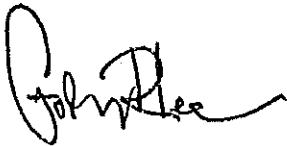
Over the next few years, KPU will focus on the following key areas to reduce greenhouse gas emissions.

- Replacing staff, faculty and student PC desktops with Thin Clients

- Virtualization of servers
- Implementing 2010 "Energy Management Action Plan"
- Roll out of SharePoint Intranet to 100% of staff computers
- Providing video conferencing to the Desktop for both internal and external web conferencing
- Beginning retrofit of washroom faucets
- Ensuring that new construction incorporates storm water management
- Enhancing program for the reduction and diversion of building occupant waste
- Re-use building materials in major renovations
- Installing shower facilities at campus locations to encourage commuting by foot and bicycle

As in the past, the University expects that its investments in reducing greenhouse gas emissions will generate a return on investment to KPU and will contribute to our goal of achieving carbon neutrality. You will find more information about KPU's plans and current initiatives in energy and environmental management at this URL:

<http://www.kwantlen.ca/facilities/sustainability.html>



Gordon Lee
Vice President Finance and Administration
Kwantlen Polytechnic University

