**Green Airports**

By Daniel-Robert Gooch

Nearly all new construction these days at Canada’s airports are done through an environmental lens. Sustainable development is incorporated in planning processes in every day activities.

For example, the Quebec City Jean Lesage International Airport (YQB) recently invested $277 million to revamp its airport to respond to passenger growth, as well as to find ways to make the airport as energy efficient as possible. Geothermal energy is now the main energy source for the terminal building, helping it to avoid using over 200,000 cubic metres of natural gas each year.

The lighting system for the new international terminal is equipped with light intensity sensors, ensuring the lighting adapts to the level of natural light available. Heat is also being recovered, and controls are in place to optimize fresh air intake. These measures along with others is expected to result in a reduction of 5,583 metric tonnes of greenhouse gas emissions a year.

The airport’s ongoing efforts to reduce emissions resulted in the airport being awarded Level 2 Airport Carbon Accreditation (ACA).

“Like other airports across Canada, Québec City Jean Lesage International Airport started the ACA process in the fall of 2017 with the intention of being recognized for environmentally sound management,” said Gaëtan Gagné, president and chief executive officer of the airport. “This accreditation shows our continued commitment to limiting emissions related to our own energy consumption. We intend to position ourselves among the leading Canadian airports in the fight against climate change.”

ACA is a program developed by Airports Council International (ACI) Europe that provides a standardized, independent method for airports to define and promote their CO2 emissions management and reduction efforts. Accreditation recognizes efforts made towards control and reduction of an airport’s carbon footprint. There are four levels of certification: mapping (Level 1), reduction (Level 2), optimization (Level 3) and neutrality (Level 3+).

Ten airports in Canada have achieved certification so far. The Montreal-Pierre Elliot Trudeau International Airport, for example, has reached Level 3. The airport is using more energy-efficient equipment by airlines, such as preconditioned-air (PCA) and ground power units (GUP). The airport also greened 70 per cent of its taxi fleet, added charging stations for electric vehicles, and introduced an electric-taxi service.

“As a socially responsible business, Aéroports de Montréal strives to minimize the impact of its activities on the environment,” said Philippe Rainville, president and chief executive officer of Aéroports de Montréal.  All expansion and modernization projects include an energy-efficiency improvement component. It’s important to balance development of services, and the protection of the environment.”

Most airports in Canada have integrated Environmental Management Systems (EMS) or Environmental Management Programs (EMP) in place that address aeronautical noise, air and water quality, emissions, hazardous materials and recycling which endorses carbon management and the reduction of emissions.

The Vancouver International Airport’s EMP presents four strategic priorities that contain ambitous goals to reduce emissions by 33 per cent from 2012 levels. As of 2016, the airport reduced its emissions by 20 per cent. The airport has promoted alternative forms of transportation and upgraded its fleet, and improved airport infrastructure, reducing fossil fuel consumption.

“Greenhouse gas emissions is a key criteria when evaluating major projects,” says Craig Richmond, president and chief executive officer of the Vancouver Airport Authority. “We always seek to improve our performance because we care about the environment and our place in it.”

The airport recently won the Environmental Management Award at ACI-NA’s Airports@Work conference in New Orleans in March. As part of the airport’s 2015-2019 EMP, a strategic goal was identified to divert 50 per cent of total waste from the landfill by 2020. The airport supplemented long-standing recycling programs with community engagement initiatives, and installed a centralized food court sorting station. This organic waste recycling program dramatically increased their waste diversion, resulting in 51 per cent waste diversion by the end of 2016.

Canada’s airports are leaders in sustainability and sound environmental management. The Vancouver International Airport, among other airports across this country, will continue reduce waste, potable water consumption, greenhouse gas emissions and improve ecosystem health, because it is the right thing to do.