



# **GREEN PLAN**

Gander International Airport Authority



June 5, 2008

## 1.0 Executive Summary

Aviation is responsible for an estimated 2% of global carbon dioxide emissions. The best estimate of aviation's climate change impact is about 3.5% of the total contribution by human activities.

In early 2008, the Gander International Airport Authority engaged InterVISTAS Consulting to quantify its annual greenhouse gas (GHG) emissions. For 2007, the airport produced 2366.9 metric tonnes of carbon dioxide emissions.

As a goal, the airport has set a target to become **carbon neutral** in 2008 and eventually **reduce its emissions** through the adoption of green practices and technology. The airport aims to reduce GHG emissions by 33% by 2020.

The airport has implemented a comprehensive carbon emissions reduction program that involves a number of infrastructure and employee initiatives. The remaining emissions have been reduced through the purchase of carbon offsets.

### Why go green?

There are a number of factors driving the airport's goal of becoming carbon neutral, namely:

- There is a cost savings motive to reduce the airport's dependence on fossil fuels by moving toward renewable energies;
- The airport has a corporate responsibility to be a steward for the environment;
- The airport needs to position itself to meet incoming environmental regulatory policy surrounding emissions control;
- Stakeholders in the aviation industry are concerned about their impact on the environment; customers want to do business with a vendor who shares their green values;

## 2.0 Our Green Partners

For purposes of its emissions audit, the authority adopted a common Greenhouse Gas standard of assessing only those assets and facilities in its operational responsibility.

Our Green Partners will involve groups external to the airport authority itself. These include:

- Vendors and airport suppliers

- Passengers traveling through CYQX
- Tenant companies operating at the airport
- Patron airlines

Engaging partners will involve a broad-based education campaign to create buy-in and feedback for the airport's Green Plan.

The airport will form a Green Committee to meet regularly. Green Committee members will be asked to contribute to the airport's Green Plan and also serve as liaisons/ambassadors with their respective organizations. The Green Committee will draw on representation from:

- Airport authority management – Darren Dalton, GHG Champion
- Airport authority ground staff
- Department of National Defence
- Thomas Howe Demonstration Forest
- Allied Aviation
- NavCanada
- A designate from a FBO
- A designate from a federal interest, either CBSA or Environment Canada
- Other interested tenants

To begin, the airport will present the results of its Carbon Emissions Audit to both its employees and the Green Committee to stimulate a dialogue around next steps.

### 3.0 Green Energy

The greatest challenge will be to reduce the airport's dependence on fossil fuels for its stationary and mobile fleet needs. This represents almost 95 per cent of the airport's annual GHG emissions.

The authority has engaged an energy consultant to review various renewable energy sources for CYQX to replace or supplement fossil fuels usage. This could take several forms, including biomass, wind power, geothermal, solar or a combination of several. The airport aims to get a public sector partner to share investment and offset capital cost.

## 4.0 Green Practices and Policies

### In the office ...

- Set all printers to double-sided outputs
- Reduce paper mail-outs of invoices and statements; focus on email compatibility in the future with a billing software upgrade
- Recycled paper for all promotional collateral, letterhead, etc.
- Assess electronic document interchange (EDI) technology to pay our suppliers thereby reducing paper consumption in house
- Print e-mails only where necessary
- Work with our tenants so they can develop their own carbon footprint and work with the GIAA to achieve overall reductions
- Purchase carbon offsets for all business travel
- Turn off lights and non-essential computers at day's end
- Encourage carpooling among employees, as well as the use of more environmentally friendly modes of transportation
- Purchases of new general purpose equipment must be Energy Star compliant
- Recycling all office paper no longer used in our operation
- Replace all CRT monitors with LCD technology
- Develop a green procurement policy
- Where possible, source products from the closest proximity to minimize transportation costs

### In Our Operation ...

- Implement "closed door policy," especially in fire hall and maintenance garage, to retain heat
- Investigate the use of Ethanol based fuel for light duty vehicles
- Encourage use of the hydrant refueling system to limit fuel equipment usage
- Implement anti-idling policy for light duty vehicles
- Upgrade mobile fleet, most equipment is in the 15 to 25 year age class; upgrading will improve fuel consumption by an estimated 30%
- Upgrade light duty fleet to "flex fuel" vehicles and vehicles with fuel management systems

- Investigate diesel fuel additives for our mobile equipment

### **In the terminal ...**

- Motion sensor lighting for all new capital additions
- Make available more comprehensive recycling facilities
- Assess means to access more natural light
- Assess viability of installing a Grass Roof to improve heating retention
- Commit to pesticide-free landscaping practices
- Encourage concessionaires to recycle waste, compost where possible and capture vegetable oils
- Install water efficient fixtures
- Work with car rental providers to make available hybrid vehicles

### **On the airfield ...**

- LED lighting alternatives for apron and taxiway lighting
- In conjunction with NavCanada and users, optimize opportunities to reduce airfield lighting
- Work with airlines to adopt fuel-reduction operational strategies such as Continuous Descent Approach procedures, taxiing on one engine, shortest direct routes to the button

### **In the community ...**

- Work with the Boy Scouts of Canada/Thomas Howe Demonstration Forest to accelerate replanting of “old growth” harvested areas on airport land
- Work with passengers to instill a culture of flying green

## **6.0 Communication**

Any significant shift in practices will require a broad-based, effective and consistent communications strategy to ensure stakeholders have an understanding of how they can reduce carbon emissions. This will involve signage, circulation of a monthly e-newsletter and other communications initiatives. The airport authority will sponsor a monthly award for a deserving Green Champion, an individual who demonstrates leadership and vision in GHG reduction. The

airport will be asking tenant companies to become signatories to the Greener Gander GHG Reduction Declaration.

## 7.0 Toward A Greener Gander Airport: Our Commitment

What is the Gander International Airport Authority's Green Commitment? Quite simply:

*Concern for the environment, and progressive practices to protect the planet, will become an intrinsic part of our workplace culture, operations and planning. We commit to ongoing investment and auditing of our Greenhouse Gas Emissions with the aim of maintaining carbon neutrality.*