PEARSON AIRPORT SEES GREENHOUSE GAS EMISSIONS DROP ALMOST BY HALF

News / Airports / Routes

Leaping ahead of a potential carbon tax, airport makes environmental headway but most of achievement came from greener grid.

Toronto Pearson International Airport's greenhouse gas (GHG) emissions have dropped nearly by half since 2006, a feat it claims is equivalent to 44,800 tonnes worth of carbon dioxide.

That fact, nine years in the making, means Toronto Pearson has joined an elite league of only 10 airports in North America to be accredited as environmentally friendly by Airports Council International.

© 2015-2026 50SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.

The announcement arrives just as UN climate change talks kicked off in Paris. More than 100 world leaders, including Prime Minister Justin Trudeau, are expected to negotiate plans to reduce global greenhouse gas emissions.

Pearson touted its own efforts but credited the greening of the province's electrical grid for most of the reduction.

"The electricity that we get today is cleaner than it was in the past, with the closing of the coal-fired power plants," said Todd Ernst, the Greater Toronto Airports Authority's director of aviation infrastructure, energy and environment.

Reducing the airport's carbon footprint is particularly notable, he added, because aviation demand continues to rise. The country's busiest airport predicts it will surpass 40 million annual passengers before the end of this year, the first Canadian airport to do so.

According to the Canadian Airports Council, aviation accounts for two per cent of worldwide CO2 emissions from fossil-fuel use. It estimates that will rise to three per cent by 2050.

But the environmental cost of flying extends far beyond jet fuel, which is where airport efforts can make a difference. Ernst said Toronto Pearson has initiated several energy-efficiency programs, including modernizing its buildings.

"The airport is a small city here," Ernst said, adding that heating, cooling and lighting all of the terminals is especially taxing on the system. Some upgrades will be noticeable right away, such as replacing metal halide lights with LEDs, but most will take place behind the scenes.

In the past, the motors powering the airport's massive baggage systems would run constantly. Thanks to the installation of energy-efficient variable speed drives, the motors consume less power when not in use.

Because aircraft require power while gated at the airport, planes can now plug into Toronto Pearson's auxiliary power supply instead of running their own engines and burning jet fuel. Some airport employees now shuttle around in a small fleet of electric cars.

New additions to the airport, Ernst added, have been designed from the ground up with energy-consciousness and sustainability in mind.

The airport opened its first LEED-certified building in 2007, housing the Fire and Emergency Services Training Institute. The building's in-slab air distribution system reduces peak energy use by storing excess heat in concrete slabs for later use.

Toronto Pearson will continue to focus on reducing emissions through low-carbon technologies and adaptation measures. The plan is cut down on the use of fuels such as natural gas.

"Our biggest impact now and going forward will be natural gas reductions," Ernst said. "GHG reductions from a unit of electricity saved are much less than a unit of natural gas burned."

Ernst suggested the GTAA may also start collecting and examining aircraft data gathered during taxiing and queuing for takeoffs. This could lead to improvements that would minimize the distance and number of movements an airplane needs to make on the runway.

Aside from the environmental benefits, the transition to a low-carbon diet is, in itself, a good

© 2015-2026 50SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.

business decision, Ernst said.

“We do not want to wait for a GHG cap to be imposed on us, or a carbon tax,” he said. “We want to do our part now and be able to benefit from that foresight when these things come into effect.

“Doing our best to reduce the total tonnage of CO2 is the right thing to do.”

GTAA’s vice-president of airport planning and technical services, Pat Neville, acknowledged the role the airport must play in a global effort to address the aviation industry’s environmental challenges.

“There is no question as to whether or not (Toronto Pearson) has an environmental impact,” he said. “We do create a footprint, whether it’s noise, greenhouse gas emissions, storm water or waste.

“And fundamentally, we want to be a good neighbour. It is a really important part of our DNA that we do our part.”

The fight against pollution doesn’t necessarily rest solely on cutting greenhouse gas emissions. Here is a look at some of the other eco-friendly initiatives at Canada’s busiest airport.

YYbeeZ Honey bee Apiary

A party was recently held for the one million bees who call Pearson’s YYbeeZ apiary home. The pollinators were celebrating the hive’s first honey harvest after a year of hard work. Fifteen hives had been established to support the dwindling honey bee population and spread some love among the airfield’s wildflowers.

© 2015-2026 50SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.

Bee keeper Kuldip Jassal pulls bee out of hive at YYBeez honeybee apiary at Pearson Airport.
ANDREW FRANCIS WALLACE

Bee keeper Kuldip Jassal pulls bee out of hive at YYBeez honeybee apiary at Pearson Airport.

Stormwater management

The GTAA has invested more than $120 million in stormwater management since assuming operation of Toronto Pearson. The funding has led to construction of airport-wide facilities that trap contaminated liquids, such as de-icing fluid, from flowing off the runway. Instead, the water is redirected to waste-treatment.

Stormwater management at Toronto Pearson.
ANDREW H. CLINE

Stormwater management at Toronto Pearson.

Partners in Project Green

In an effort to preserve the airport's grassland and creek valleys, volunteers from Pearson's Partners in Project Green team planted nearly 800 trees and shrubs along Etobicoke Creek this May. Participating businesses have pledged to green their bottom line to protect the 12,000 hectares worth of green space surrounding the airport's property.

Image not found or type unknown

Image not found or type unknown

© 2015-2026 50SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.

Partners in Project Green volunteers help restore Etobicoke Creek by planting nearly native trees and shru
ALEX DUMESLE

Partners in Project Green volunteers help restore Etobicoke Creek by planting nearly native trees and shrubs.

03 DECEMBER 2015

SOURCE: THE STAR
ARTICLE LINK:
https://mfa.50skyshades.com/news/airports-routes/pearson-airport-sees-greenhouse-gas-emissions-drop-almost-by-half

Image not found or type unknown

© 2015-2026 50SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.