

The world's only hydrogen bus fleet

Whistler is home to the world's largest fleet of hydrogen fuel cell buses, which literally only leave water in their wake.

The 20 emission free buses make up the bulk of the Whistler bus system in a project that will provide a northern terminus for a "hydrogen highway" up the west coast of North America. The Province of British Columbia invested in the world's first hydrogen bus fleet and fueling stations for use in Whistler and Victoria.

The new buses were needed and appreciated. Whistler Transit has the highest riders per capita in British Columbia with almost three million rides last year. Many buses in the old fleet have been on the road since 1991 and had fallen into disrepair after heavy usage, long hours and tough conditions.

"Public transit demonstrates value to our community's sustainability goals. These new buses will not only reduce maintenance costs, but provide a reliable and fully accessible service to our residents and visitors," said Mayor Ken Melamed.

The new hydrogen fuel cell buses- The buses – each with 37 seats, a 60-person standing capacity, and a top speed of 90 km per hour – are twice as efficient as internal combustion engines and produce no smog-creating emissions. The buses are also more easily accessible by wheelchairs and strollers with wider doors, extendible ramps and hydraulics that allow the bus to lower nine inches.

B.C. Transit spokesperson Joanna Morton said the buses were made possible by a \$45 million grant from the B.C. government, with help from the Government of Canada, the buses were built by a consortium that includes Burnaby-based Ballard Power Systems, Winnipeg-based New Flyer Industries, California-based ISE Corp. and Calgary-based Dynateck.

They look very much like other buses, except for the fact that the hydrogen fuel will be stored in cylinders above the passengers, Morton said.

The buses may look similar but they are very different than your average bus. They simply don't emit exhaust. By combining hydrogen and oxygen (air), the fuel cell motor converts chemical energy directly into electricity to power the bus. The only byproducts of the reaction are heat and water. The cell itself requires no recharging as long as hydrogen and oxygen are present.

According to the BC Ministry of Transport, the buses will have a range of 310 miles, a top speed of 56 mph, and an estimated life of 20 years. They will also make less noise than traditional buses.

After being showcased in Whistler during the Olympic and Paralympic Games, the buses will remain as part of the regular Whistler Transit fleet until approximately 2017. Mayor Ken Melamed predicts the new buses will increase transit use in Whistler.

“People ride transit more when they know it’s reliable,” Melamed said. “The buses can run on time and they’re comfortable and clean.”