



# VANCOUVER CONVENTION CENTRE

## EXPANDING THE CONVENTION CENTRE AND ADDING A NEW, ENERGY-EFFICIENT ICON TO VANCOUVER'S WATERFRONT

The effect was immediate: as soon as the Vancouver Convention Centre opened in 1987, its five-sail design came to symbolize Vancouver as a vital, attractive and exciting waterfront city.

This April, the centre is poised to add a new element to its iconic status: a 1.1 million square foot expansion – 40 per cent of it built out over the water and all of it covered by a stunning six-acre green roof – developed to the highest possible standards of energy efficiency.

“Five years ago, the first concern of convention planners was security,” says Warren Buckley, President and CEO of BC Pavilion Corporation (PavCo), the Crown Corporation that manages both the Vancouver Convention Centre and BC Place Stadium. “Now, that’s dropped to number two. Today, they say tell us about your sustainability – they want to know how green we are, and it’s absolutely vital for us to be able to offer a sustainable facility.”

Planning began for the convention centre’s expansion many years ago, as soon as demand for conference space began to far outstrip what the existing centre could supply. But sustainability, says Project Manager Dave Walker, was always an essential part of the planning process. “From the beginning, we knew we wanted to build a sustainable building and to achieve LEED® Gold standard” – which is why the planners signed up for BC Hydro’s New Construction Program at the very start of the design process.

“My advice to any designer or developer,” says Warren Buckley, President and CEO of BC Pavilion Corporation, “is to get BC Hydro involved from the beginning. They have expertise and resources you can rely on. We could have done it by ourselves, but not as well.”

## MORE ABOUT THE EXPANSION

The new space:

- covers approximately four city blocks
- connects to the original centre by a 200-foot glass-enclosed walkway
- includes a six-acre green roof with over 400,000 indigenous plants, more than 200,000 square feet of exhibition space and 52 break-out meeting rooms
- an on site black water treatment facility that will produce enough water to irrigate the roof and flush toilets, and
- is expected to generate an additional \$107 million a year in delegate spending

## BUILT-IN ENERGY EFFICIENCY

The New Construction Program provides financial incentives, resources and technical assistance to help developers of new commercial and multi-residential building projects build-in energy efficiency where it can make the most difference: from the ground up.

“Nothing beats having energy efficiency built-in from the outset,” says Dave Walker. “It’s a lot less expensive than having to re-design your whole project later because you suddenly realize you should have done it in the first place. Also, through the BC Hydro program, we received more than \$200,000 in financial incentives – and every dollar helps, of course – but more than that, Hydro also brought us their knowledge and expertise in identifying and evaluating design options.”

## HIGH PERFORMANCE INSIDE AND OUT

Energy-saving measures completed as part of the Vancouver Convention Centre expansion project with the help of the New Construction Program include:

- upgraded (R18) roof insulation
- variable speed drives on pumps, so they don’t run at 100 per cent when they don’t need to
- high efficiency lighting
- premium efficiency transformers
- daylight sensors applied on all perimeter spaces
- heat-recovery chillers, recovering waste heat that provide significant steam energy savings, and
- demand-control ventilation, where spaces are ventilated only when they are occupied.

“We anticipate that we will save a total of 2.2 million kilowatt hours of energy a year,” – equivalent of providing electricity to 220 homes for a full year- says Dave. “We will also produce about 750 to 800 tonnes less carbon dioxide each year – equal to removing 146 average cars from the road – than a conventionally designed centre.”

## IF YOU BUILD IT, WILL THEY COME?

But all that fabulous energy efficiency could go to waste if the expanded conference centre does not attract people and conventions in large numbers.

“I know that people will want to come and be a part of something that’s this sustainable, this green,” says Warren Buckley. “People are more and more mindful and sensitive now to what large centres have to offer, and particularly what they have to offer with regard to sustainability.”

While bookings are already solid, a little additional high-profile exposure probably won’t hurt either: people around the world will get a close look at the centre’s new space when it will serve as the International Broadcast Centre for the 2010 Olympic and Paralympic Winter Games.



For more information on BC Hydro’s New Construction Program, please visit [bchydro.com/construction](http://bchydro.com/construction) or call 604 522 4713 in the Lower Mainland or 1 866 522 4713 elsewhere in BC.