

Solutions

Summer 2008
Energy services for commercial customers

Britco proves it's a model of efficiency

It was late 2007, when Britco Structures of Langley, BC, first approached Terasen Gas about conducting energy audits of their manufacturing facilities. The company, founded 30 years ago by Rick McClymont and David Taft, is one of Canada's leading suppliers of workforce accommodations.

With over 300 employees, and manufacturing facilities in



Britco founders Rick McClymont (left) and David Taft

Agassiz and Penticton, Britco is the largest modular design/build manufacturer in the Pacific Northwest. Britco also has the largest lease fleet of temporary buildings, office complexes and storage containers in the province. Chances are you have seen Britco trailers at construction

sites across BC. However, you may not have noticed that certain luxurious homes, including the 2008 PNE Prize Home, are also designed and built by Britco.

In discussions with Terasen Gas, Britco's motivation for an energy audit turned out to be rather unique. Britco had been speaking to the Vancouver Olympic Organizing Committee (VANOC) about becoming an official sponsor for the 2010 Winter Olympics. In addition, the company was bidding to construct accommodation for the Whistler Athletes Village. Rather than build the athletes' accommodation on site, Britco's proposal was to build all the accommodations piece by piece in their factory. In their submission to VANOC officials, Britco argued that modular construction has several environmental and sustainable characteristics:

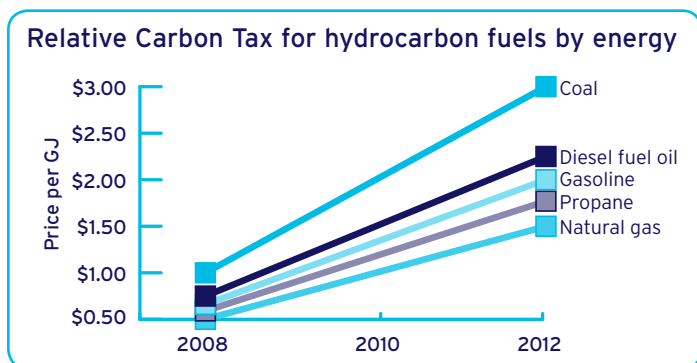
- it reduces the amount of input energy required during manufacturing
- it produces less material waste because of the way buildings are designed and assembled in the factory
- it makes it easier to incorporate new technologies and improved methodologies within a factory environment

In the spirit of VANOC's pledge to make the 2010 games the most sustainable ever, the VANOC panel awarded Britco the coveted contract.

...Cont'd on reverse

Carbon Tax arrives in British Columbia

As announced by the BC provincial government in February, the revenue-neutral Carbon Tax kicked in on July 1, 2008. The progressive tax has begun at a rate of \$10 per tonne of carbon dioxide equivalent (CO₂e) emissions released from the burning of each particular fossil fuel.



What does this mean to you as a natural gas consumer? A tax of approximately \$0.50 per gigajoule will be added to your bill. This represents an increase in costs of around four per cent based on today's small commercial rates. The Carbon Tax is set to increase annually until 2012, at which time the tax will be \$30 per tonne of CO₂. That will translate to an extra \$1.50 per gigajoule on your gas bill.

The good news

The Carbon Tax on natural gas is the lowest for any hydrocarbon fuel. That's because gas is the cleanest burning fossil fuel. The chart on the left shows the relative Carbon Tax for other hydrocarbon fuels by energy.

...Britco cont'd from cover

Immediately after winning the bid, Britco wanted to make sure they were truly living up to their 2010 corporate mandate to be as sustainable as possible. That's when they contacted Terasen Gas to conduct a series of energy efficiency audits at their head offices in Langley, as well as their plants in Penticton and Agassiz.

Terasen performed separate gas audits at the three locations, and enlisted the help of sister company FortisBC for the electricity audits. Overall the combined Terasen Gas/ FortisBC audit found many areas where Britco could improve efficiency such as:

- building envelope repair and insulation
- upgrading to high efficiency heating units
- changing the heating requirements for individual areas of the factories
- replacing lighting fixtures

Achieving measurable improvements

As with most thorough energy assessments, Britco now has a before and after scenario to consider. The "after" offers a holistic solution for all the key elements that contribute to energy consumption or energy loss. And it allows Britco to make an accurate forecast of efficiency gains and savings.

When Britco has completed the equipment upgrades and structural improvements, they will increase their energy efficiency by 20-25% at the two plants, and 5-10% at the head office in Langley.

In the quest for greater energy efficiency and long-term economies, Britco sets a fine example. On the one hand they're already pioneering energy efficient, modular construction techniques in the building industry. On the other, they're finding new ways to reduce operating costs at each of their locations.

Are you comfortable with your annual energy use?

Terasen Gas conducts over 100 energy audits for commercial customers every year. To be eligible for an energy audit, your business must use \$20,000, approximately 2000 GJ of gas or more in a calendar year. If you qualify, Terasen Gas will visit your business premises and conduct a high level audit to determine if there are any opportunities to increase the energy efficiency of your appliances and ultimately use less gas.

To find out more about a free energy assessment for your business, call 1-888-477-0777 to discuss in person or visit www.terasengas.com

Changing our ways can counter climate change

In matters of climate change, carbon dioxide (CO₂) and energy choices, it's worth noting that almost everything we do results in some energy usage. Take eating an apple for example. The apple has to be grown and harvested and transported to the store you likely drive to in order to buy it. Similarly, heating your premises or your own home is going to require gas, electricity, oil, or wood. Every incident of energy use therefore has an impact on the environment in which we live.

Producing energy uses energy too

In the case of natural gas, the gas itself must be produced (drilled for) and transported through pipelines to your home or business. Similarly, electricity must be produced (through coal or gas fired generation, or hydroelectric dams) and then transported to your home or business. In either case, due to inefficiencies for every unit of energy produced, only a portion of the energy arrives at the point of end use.

Right now, there's not enough electricity in BC to meet demand. Over the past six years, BC Hydro has had to import between 10 and 15 per cent additional electricity annually. Much of that comes from burning coal or natural gas in generating plants that are limited to efficiency levels of between 30 and 60 per cent. Yet there are modern, natural gas heating systems available that offer efficiencies as high as 97 per cent.

Use fuel wisely to counter climate change

Changing our ways means using less energy. But part of the solution is also to use each energy resource wisely and for what it does best. This means using electricity for powering our refrigerators, lights, TVs and computers. And using natural gas for central heating, fireplaces, water heating and cooking.

Using the right energy, in the right place, at the right time allows us all to be more energy efficient, reduce greenhouse gas emissions, combat climate change and support BC's energy future.

Terasen Gas is the common name of Terasen Gas Inc., Terasen Gas (Vancouver Island) Inc., and Terasen Gas (Whistler) Inc. The companies are indirect, wholly owned subsidiaries of Fortis Inc. Terasen Gas uses the Terasen Gas name and logo, "Get comfortable.", and "Burn blue. Save green." under license from Terasen Inc.