



COUNTY GOING GREEN



SHERWOOD PARK & DISTRICT CHAMBER OF COMMERCE PROMOTES A GREEN ECONOMY



GREG DOUGLAS - DOUGLAS ENVIRONMENTAL

Committed to providing a healthier, safer indoor environment for home and business owners, Douglas Environmental specializes in water treatments, air quality testing, septic tank remediation and mold inspection. Established in 2004, one of the company's focuses is consulting with homeowners to recommend and install cost-effective, energy-saving products that will improve the health of the indoor environment. "If you switch from regular hard city water to conditioned water, you will notice an immediate 25% reduction in hot water heating energy consumption," says owner Greg Douglas. With hot water heating being the second largest user of energy in the home, the economic savings and health benefits of installing a water treatment system are often apparent within the first few months. The air quality products are highly effective for customers with allergies, asthma or weakened immune systems, as they significantly decrease the amount of toxins and allergens in the home.

Douglas illustrates the environmental and economic benefits associated with each product. "Our 'Pirana' solution, for example, remediates and restores septic system function rather than replacing the existing field once it's near the end of its life cycle. Since the field is not replaced, beyond the significant cost savings there are considerable environmental benefits in that you decrease soil contamination, there's no need to disturb the landscaping, and no heavy equipment or hauling means a much smaller carbon footprint." The environmental footprint is also reduced with water quality products such as bottle-less water coolers and high-efficiency water softeners. Despite the challenges of raising environmental awareness in the product-saturated retail market, Douglas Environmental continues to expand on an annual basis due to referrals and word-of-mouth recommendations. "We frequently find that once we do work at one house in a particular area, we attract business from other neighbors in the subdivision who have heard about our products and services." With consultation and product installation work across the province, Douglas is optimistic about the company's role as a prominent member of the environmental industry.



MIKE ROPPELT – GSS GEOTHERMAL SYSTEMS

At the forefront of alternate energy systems technology, Ground Source Solutions Geothermal (known as GSS Geothermal) focuses on sustainable development and strives to minimize an energy system's impact on the environment. "Looking at any particular development as a sustainable development, you have to visualize it from more than one dimension," says Mike Roppelt, President of GSS Geothermal. "We look at it in terms of all aspects of energy entering that particular location and then work with a comprehensive team of people specializing in (these aspects)." Established in 2007, GSS Geothermal initially concentrated on drilling work and conducting preliminary research in the field of geothermal systems. Today, the company has completed several successful residential installations across the province and works with developers to showcase the economic viability of the technologies. "It's not just developing a new technology; you have to make an economic argument... although there is sometimes a higher initial cost, these systems show that over time they are more affordable and have a significant effect on the reduction of greenhouse gas." The company is in close collaboration with homeowners throughout each stage of the design and installation process, whether the project involves a residential retrofit or a new building.

As GSS Geothermal expands in the alternate energy sector, the company is transitioning into district energy systems – which provide energy for multi-family units and subdivisions. Despite the increased number of people, these systems consume less energy and are designed to reduce the amount of water consumption from the site and reduce infrastructure stress. The carbon neutral design of the systems strives to achieve a balance between energy consumed and energy used, as well as water used and water collected. Roppelt is quick to point out the benefits of working in close collaboration with other companies in the green technologies industry. "Even though our technologies are slightly different, we are faced with the same challenges and can come up with similar solutions. Although each company has its own identity and product line, we are working towards common objectives."



DEAN TURGEON – VITAL ENGINEERING

"The company name stems from the word vitality," says Dean Turgeon, CEO of Vital Engineering. "Vitality and sustainability go hand-in-hand in terms of buildings, communities and society as a whole. These concepts have changed the way people think in terms of access to renewables and economics; it becomes a matter of looking at how the technology is applied to a structure." Vital Engineering was established in 2002 as a design services company, but began to work on their brand in 2005 with the addition of a chief engineer to the team. Determined to come up with a more creative, sustainable and cost-effective approach to the industry, the team received formal commercial geothermal training. Vital Engineering's knowledge of geothermal processes along with their experience in the industry allows the company to demonstrate the environmental and economic advantages of each project. "We are able to work with the business side of companies, not just their building side; this is unique in that companies know they are making an investment."

The company is currently committed to commercial and large residential projects involving district energy systems, geothermal technologies, and sustainable retrofits for older buildings; the projects serve a province-wide clientele base. Vital Engineering is engaged in a Renewable Energy Integration Strategy for one aging Alberta Infrastructure facility with a hope that it may become a model of how these durable buildings can be retrofitted. The project looks at older buildings whose systems are at the life cycle replacement stage and determines how renewable energy systems can be applied to the building's retrofit process. Although the processes to achieve the end result for a project are quite lengthy, each project is a learning experience due to the calculations and science behind the design. "After our jobs are done and the clients have had the opportunity to look at the economics and business side, they see the project in terms of a value standpoint and a social investment."



Environment Committee write-ups provided by:
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