

## The Green Journey

Welcome to **The Green Journey**, a new site dedicated to profiling projects and initiatives that demonstrate SaskEnergy and TransGas leadership in environmental action.

SaskEnergy and TransGas operate in the natural gas industry. Natural gas is the cleanest burning fossil fuel and produces fewer emissions than many other fuel sources. It is, therefore, part of the answer to the challenge of climate change in that it displaces more environmentally harmful energy sources. As we continue to provide service to new customers throughout Saskatchewan, we are decreasing the number of residents who might choose to rely on electricity or fuel oil - options that are more detrimental to the environment and more costly to consumers.

Although natural gas is an environmentally preferred choice, it is 95 per cent methane, which is, in fact, a powerful greenhouse gas (GHG) that contributes to climate change. Therefore, we are committed to doing all that we can to reduce our emissions as much as possible. In fact, we have already implemented a number of initiatives, such as valve maintenance, the use of draw-down compressors and "no-blow" tools, to reduce overall emissions.

Furthermore, in order to operate our equipment and ensure reliable service, we use large amounts of natural gas and consume other energy resources that release carbon dioxide into the atmosphere. To manage this, we have, among other things, adopted high-efficiency line heater technology at our regulator stations, and added to our vehicle fleet a number of dual-fuel vehicles, which run on natural gas and gasoline.

Following the United Nation's Copenhagen Climate Change Conference in December, 2009, Canada submitted its goal to reduce GHG emissions by 17 percent of 2005 levels, by the year 2020, a target to which Corporations like SaskEnergy will be required to adhere.

Given that North America accounts for just five per cent of the world's population but 25 per cent of its GHG emissions, national emission reduction commitments will only mark the beginning of a far more stringent emissions reduction campaign. In fact, experts assert that the world will need to reduce baseline emission levels by 70 per cent or more by 2050 in order to avoid catastrophic effects related to climate change.

SaskEnergy/TransGas have long recognized that we have a responsibility to minimize the impact of our operations on the environment. While the provincial and federal governments work toward new emission-reduction legislation, SaskEnergy/TransGas is already doing its part. We have consistently set very clear and challenging goals, which have yielded considerable reductions in GHG emissions and energy consumption throughout all areas of our Corporation, and we continue to explore options that would generate further reductions.

Because of programs and technology already implemented or planned for future execution, we are well positioned to meet the 17 per cent GHG reduction target in advance of the 2020 regulatory timeline.

In terms of GHG emissions, there are two main categories that SaskEnergy actively addresses: combustion emissions, such as the CO<sub>2</sub> released by the fuel burned at compressor stations and vented emissions, which include natural gas released into the atmosphere through facility design and regular operations.

Our efforts to reduce vented emissions have yielded improved maintenance procedures, as well as capital investments and innovations that help us minimize loss of gas through our operational processes.

To meet the 17 per cent GHG emission reduction target, SaskEnergy must reduce its GHG emissions to 290,000 tonnes per year, a 60,000 tonne decrease from 2005 levels. However, as of 2009, we had already brought our emissions down to just over 300,000 tonnes per year, making early compliance for our Corporation possible.

SaskEnergy/TransGas is committed to reducing emissions by 5,000 tonnes per year - about as much as 385 average households produce over the same duration. SaskEnergy achieved a substantial reduction in GHG emissions over the past three years, and projects are planned for 2010 and beyond to ensure our continued success.

In terms of energy consumption, SaskEnergy/TransGas has also committed to reducing overall energy usage by one per cent per year to begin, ramping up to an ultimate goal of six per cent or more by 2020. Furthermore, SaskEnergy has, through its various customer-based programs, become a national leader in promoting energy efficiency at the residential level. We have also implemented measures within our office buildings, such as energy efficient lighting and an energy saving light switch campaign that encourages employees to turn off the lights whenever they leave their offices.

To accomplish our goals for lower GHG emissions and improved energy efficiency, SaskEnergy/TransGas has also identified a number of large-scale projects that hold great potential for success. Some of those projects include:

- Bayhurst Field Modernization Completion
- Unity Methanol Pump Upgrades
- Transmission Bleed Devices
- Gas to Air Starter Conversions
- System wide Compression and Gas Flow Optimization, include the Hatton Low-Pressure Service Project
- Customer Energy Efficiency Promotions
- Waste heat Recovery and Electrical Self Sufficiency

This is not the beginning, nor is it the end. It is the continuation of our corporate efforts to reduce our impact on the environment, efforts that began many years ago and will continue into the future, well beyond the initial target date of 2020.

So stay tuned for updates on our **Green Journey**, which will profile these and other projects we're implementing internally and externally to ensure that SaskEnergy and TransGas are leaders in resource conservation and the global fight against climate change.

