



## Making a positive environmental, social and economic impact

We are committed to the responsible development of the oil sands resource, and addressing the climate change challenge is important to us. As Canada's leading integrated energy company and one of the largest electricity generators in the province, we are continually looking at ways to lower the environmental impact of our operations. One opportunity we are currently examining is replacing the coke boilers at Suncor's Base Plant with natural gas cogeneration units.

### Exploring the option of cogeneration

The power plant at Suncor's Base Plant supplies steam, electricity, boiler feed water, and hot water to run the operations. Energy comes from the combustion of petroleum coke-fired and natural gas-fired boilers, and two natural gas turbines with heat recovery steam generators.

Suncor is evaluating and advancing an option to replace these coke-fired boilers with more thermally efficient, natural gas-fired cogeneration technology.

### What is cogeneration technology?

Natural gas-fired cogeneration, (or combined heat and power), involves burning natural gas to generate electricity and useful heat at the same time, creating two products from burning one molecule of natural gas.



Using the waste heat from the generation of electricity to create steam, which Suncor's Oil Sands plant requires, makes cogeneration the most efficient and environmentally-friendly option available. Once Suncor's onsite electricity requirements are met, any excess electricity will be able to be sold into the Alberta grid.

### **Looking at the bigger environmental picture**

Suncor believes our energy system is in an era of change - globally, we're moving towards a lower carbon economy. We will be part of the solution by continuing to invest in best in class assets (i.e. cogeneration) and continuing to address the environmental impacts of our operations, improve environmental performance and invest in technology and innovation.

### **Project benefits**

Suncor's proposed coke boiler replacement project will produce a number of benefits including:

#### *Support our emissions reduction plan*

The coke boiler replacement project could have the ability to make a measurable environmental contribution in support of the provincial and national climate change strategy. The project is also expected to reduce our air emissions, including sulphur dioxide, nitrogen oxides and particulate matter, because natural gas is a cleaner burning fuel source than petroleum coke.

#### *Reliable electricity for the province*

The project is expected to provide a reliable and stable power source because of the 24/7 nature of our Base Plant operations. Currently, Base Plant produces sufficient electricity to reliably run our operations and export power to the grid on a regular basis.

#### *No additional disturbance*

The proposed coke boiler replacement project will also re-use our existing operating footprint to minimize additional land disturbance.

### **Contact information**

For more information, please contact:  
Stakeholder and Aboriginal Relations – Wood Buffalo Team  
Tel: 1-855-600-5561  
Email: Stakeholder.RelationsRMWB@Suncor.com

### **Responsible development means community involvement**

As Suncor prepares for the future, community input continues to be an important part of responsible development. We will continue to work with Aboriginal groups and interested community members with respect to the proposed coke boiler replacement project. Feedback will be used to refine our plan and the values and principles we use to guide our planning efforts.



### **Next steps**

Suncor is continuing to evaluate the project with the final sanction decision expected to be made later in 2019.

There are several aspects of the project which are being reviewed including how this project will align with upcoming changes to the Alberta power market design. We will continue sustaining existing assets until a decision is made on a path forward.

This fact sheet contains forward looking information in relation to the Coke Boiler Replacement Project and its expected benefits. Actual results may vary. Please see legal advisories at [www.suncor.com/legal-and-privacy](http://www.suncor.com/legal-and-privacy) for more information.

