Outline

- Who is EnCana
- EnCana’s Energy Efficiency Initiative
  - In Operations
  - For Employees
  - In Communities
- Energy Efficiency Projects
- GHG Reductions
- 12 key resource plays across North America.
- Long term investments and continuous improvements
Our Mission:
Energy for People

Our Vision:
EnCana will be the world’s High Performance Benchmark independent oil and gas company focusing on:
- Unconventional natural gas
- Integrated in-situ oil

Our Corporate Constitution:
EnCana is a company where shared principles guide our behavior and merit determines our reward.

Our EHS Management System
Environmental practices exist to safeguard the environment and ensure environmentally sound performance throughout the lifecycle of the asset or operation.
Energy Efficiency Initiative

- A way of doing business
- Create measurable reductions in energy use and related air emissions by:
  - developing cooperative working relationships across all levels of the company as well as with outside organizations to seek opportunities for energy efficiency
  - researching new technology that can have significant, value-added impact on energy/conservation and related reductions in greenhouse gas emissions
  - working with our staff and the communities in which we operate to incorporate energy efficient changes into their lives
Corporate Initiative Began in April 2007 with a $10MM budget

Three pillars of program: Operations, Employees, Communities

Administered at a Corporate Level with Divisional representation

Budget expanded to $50MM in 2008

Continued Success of program drives expansion to $100MM in 2009
Project Camplight

- goal is to switch incandescent bulbs with energy efficient compact fluorescent light (CFL) bulbs in our field locations including camps, wellsites and compressor station offices

- The Energy Efficiency group pays for the first set of CFL bulbs

- CFL bulbs use 75 percent less energy and last 10 times longer than standard bulbs

- Changing 50 100-watt bulbs = removing 4.5 cars from the road in one year
Energy Efficiency in Operations – Projects

• 35 projects approved to date
• $22 MM capital to date
• 4 MMscfd saved
• CO2 emissions reduced at a cost of < $10/Tonne
Energy Efficiency Process – US Division

- Engineering
- Emissions

Prepare Project Documentation

- Planning Cost
- Economics

Project Review & Approval

Implement Project

Prepare Project Report & Emissions/Economic Verification

Verification

Report Submittal & Data Sharing
Highlighted Operations Projects

- Conversion of diesel fired drilling rigs to natural gas
- Vent reductions using infrared technology
- Solar chemical pump installations
- Production separator modifications
- Engine rod packing replacements
Energy Efficiency Opportunities

Fuel Substitution:
natural gas vs diesel fuel
- 80% of the CO2E
- 1/3 the fuel cost
- Reduced NOx

Projects:
- Jonah rigs ~ 10 running
- Average fuel savings $45M/Well Drilled
- 63% Lower NOx rating than Tier II rig engines

*courtesy Jeff Johnson
Vent Reductions

- **Reduce fugitives leaks:**

  **Project: DI&M Program**
  - Cameras being used in all Divisions
  - Total Cost ~ $700,000
  - Estimated benefit: ~ 1 MMscfd
  - Estimated CO2E benefit ~ 150,500 T
Solar Powered Chemical Pumps

Projects underway in:
- Midcontinent
- DJ Basin
- Piceance Basin
- Fort Nelson

Typical cost ~ $6000/unit
Benefit ~ .25-.5 mcfd/unit
Chemical Injection Pumps

- Over 100 installations

- 16 MMscf of gas saved and sold per year

- 6.6 $\text{CO}_2$ Equivalent tonnes saved per year

- 5-10% reduction of chemical usage expected

- SCADA data reduces number of visits per year
Production Separator Modifications

Hi-Flow Sampler used
To quantify volume

Mizer pilot replacements
Reduced leakage
~150 Mcf/yr/valve

FLIR Camera used
For visual inspection
Replace Engine Rod Packing

- 25 compressors total
- Estimated gas savings of 24.45 MMscf/yr
- 8,542 Tonnes/yr CO2 Equivalent
- Use high flow sampler to measure leak rate before and after replacement
- Project anticipated to be completed early 2009
Rod Packing Replacement – Initial Results

Rod Packing Replacement Initial Results

Gas Saved (MMSCF/yr)

- 1.00
- 2.00
- 3.00
- 4.00
- 5.00
- 6.00
- 7.00
- 8.00
- 9.00
- 10.00
- 11.00
- 12.00
- 13.00

Rifle Booster #1
Rifle Booster #3
Rifle Booster #5
Pumba #1
Pumba #3
Pumba #4
Rod Packing Replacement – Initial Results

Money Saved ($/yr)

- $10,000.00
- $20,000.00
- $30,000.00
- $40,000.00
- $50,000.00
- $60,000.00
- $70,000.00
- $80,000.00

- Rifle Booster #1
- Rifle Booster #3
- Rifle Booster #5
- Pumba #1
- Pumba #3
- Pumba #4
Project Rebate

- Internal program to encourage energy efficiency improvements in employees homes
- Up to $600 annual rebate for purchasing eligible energy star home appliances

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<th>Approximate Energy Savings</th>
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Conclusions

- Energy Efficiency Initiative is supported at the top levels of the company.
- The initiative raises awareness and provides incentive for all levels of the organization to get involved in reducing energy and GHG emissions.
- There are lots of good projects that can lower costs, reduce fuel use and emissions, and improve operations.