



Energy  
Efficiency  
Alberta

# Custom Energy Solutions (CES) & Methane Emissions Reduction (MER)

*Improving performance in facilities with high energy needs.*

**Petroleum Technology Alliance Canada**  
*2018 Methane Emissions Reduction Forum*

*Presented by: Babar Moghal, P.Eng, CEM (Senior Program Manager – CLEAResult)*  
*November 28, 2018*

# Custom Energy Solutions Overview

- Incentives designed to assist in driving long term reductions in GHG emissions through the implementation of custom energy savings projects.
- Create market awareness and GHG savings momentum while helping build local market capacity to deliver energy- and GHG-savings services in the long run.

# Eligibility & Incentives

## Eligibility

- Facilities shall be located in Alberta
- Footprint < 100,000 tCO<sub>2</sub>e/yr (non-LFE's)

## Incentive Levels

- Up to \$1MM per project/year for facilities with 10,000 tCO<sub>2</sub>e/yr or more annual GHG emissions (\$250k for facilities < 10,000tCO<sub>2</sub>e/yr)
- Up to \$2MM per project/year per parent company with multiple sites with 10,000 tCO<sub>2</sub>e/yr annual GHG emissions (\$500k for facilities < 10,000tCO<sub>2</sub>e/yr)
- Incentives inclusive of Scoping Audit, Engineering Studies & Retro/Re-Commissioning
- Incentive paid based on verified GHG reductions to lesser of the following:
  - \$175 per tonne GHG reduction
  - Simple payback down to 1 year
  - 50% of Capital Cost

# Custom Energy Solutions Program - Implementation & Offerings

Custom Project Implementation Incentive (\$/tonne of first year GHG reductions).

Incentive Rates	Program Year 1 Rate	Driver	Payment Trigger
<b>Base</b>	\$175.00	per tonne GHG reduction	GHG reduction verified and approved by CESP
<b>Schedule Bonus Multiplier 1 (+10% of Base)</b>	+\$17.50		Projects are verified by March 31 of their applying fiscal year
<b>Schedule Bonus Multiplier 2 (+10% of Base)</b>	+\$17.50		Projects are verified by December 31, 2018
<b>EUL Bonus Multiplier (+10% of Base)</b>	+\$17.50		Projects are determined to have more than a 12-year Effective Useful Life (EUL)

Offer	Incentive Target	Caps, Limitations & Requirements
<b>Scoping Audit</b>	Up to 100% of Scoping Audit cost	<b>10,000 tonnes or more in annual GHG emissions in subject facilities:</b> <ul style="list-style-type: none"> <li>Up to \$8,000 of eligible costs</li> </ul>
		<b>Less than 10,000 tonnes in annual GHG emissions in subject facilities:</b> <ul style="list-style-type: none"> <li>Up to \$4,000 of eligible costs</li> </ul>
<b>Engineering Study</b>	100% of Engineering Study cost	<b>Subject facilities with 10,000 tonnes or more in annual GHG emissions:</b> <ul style="list-style-type: none"> <li>Up to \$40,000</li> <li>Must implement measures with a minimum of 450 tonnes in GHG reductions and a simple payback of 5 years or less, with incentives.</li> </ul>
		<b>Subject facilities with less than 10,000 tonnes in annual GHG emissions:</b> <ul style="list-style-type: none"> <li>Up to \$20,000</li> <li>Must implement measures with a minimum of 225 tonnes in GHG reductions and a simple payback of 5 years or less, with incentives.</li> </ul>
<b>RCx Investigation</b>	100% of RCx Investigation cost	<b>Subject facilities with 10,000 tonnes or more of annual GHG emissions:</b> <ul style="list-style-type: none"> <li>Up to \$60,000 non-measure-related expenses</li> </ul>
		<b>Subject facilities with less than 10,000 tonnes of annual GHG emissions:</b> <ul style="list-style-type: none"> <li>Up to \$30,000 non-measure-related expenses</li> <li>Must implement all measures with a minimum of 375 tonnes GHG in total reduction</li> </ul>
<b>Energy Manager</b>	90% of the energy manager's 1st year salary  50% of the energy manager's 2nd year salary	<ul style="list-style-type: none"> <li>For the 1st year, 90% of an annual salary of up to \$100,000 is covered for a maximum of \$90,000.</li> <li>For the 2nd year, 50% of an annual salary of up to \$100,000 is covered, for a maximum of \$50,000</li> <li>Each year, the customer must deliver total GHG reduction that is the higher of 1,250 tonnes or 5% of previous year's emissions</li> </ul>

# Methane Emissions Reduction Overview

- Methane Emissions Reduction Initiative designed to assist Oil and Gas facilities in Alberta identify, reduce, improve, or eliminate methane waste through a collection of quick implementation measures and equipment upgrades.
- Provide incentives to Facility Owners that implement capital-based projects that reduce methane emissions and associated CO<sub>2</sub>e.
- Support Alberta Energy Regulator (AER) mandate to reduce emissions from upstream oil & gas operations.
- Measurement, monitoring and reporting are important elements to improve emission quantification and reduction.



# Eligibility & Incentives

## Eligibility

- Oil and gas facility owners with production for all facilities operating within the Province of Alberta and not exceeding 40,000 BOE/day.

## Incentive Levels

- Up to \$250,000 per project/Facility Owner.
- Incentives inclusive of BOA & LDAR study and DTC applications
- Incentive paid based on 50% of Capital Cost

# Methane Emissions Reduction Program - Implementation & Offerings

Offer	Incentive Target	Scope & Requirements													
<b>Baseline Opportunity Assessment (BOA) and Leak Detection &amp; Repair (LDAR) Study</b>	Up to 100% of study cost	<b>Scope:</b> <ul style="list-style-type: none"> <li>• Conduct Leak Detection and Repair (LDAR)</li> <li>• Complete detailed equipment inventory count</li> <li>• No limit on BOA and LDAR study applications</li> </ul>													
		<table border="1"> <thead> <tr> <th data-bbox="759 496 1058 558"><b>BOA and LDAR Study Cost Incentive</b></th> <th data-bbox="1062 496 1340 558"></th> </tr> <tr> <th data-bbox="759 561 1058 622"><u>Facility Type/Category</u></th> <th data-bbox="1062 561 1340 622"><u>Per Site BOA and LDAR Study Incentive</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="759 625 1058 654">Single Well Site</td> <td data-bbox="1062 625 1340 654">\$600</td> </tr> <tr> <td data-bbox="759 656 1058 685">Multi-Well Site</td> <td data-bbox="1062 656 1340 685">\$1,200</td> </tr> <tr> <td data-bbox="759 688 1058 716">Battery Site</td> <td data-bbox="1062 688 1340 716">\$1,800</td> </tr> <tr> <td data-bbox="759 719 1058 748">Gathering Site</td> <td data-bbox="1062 719 1340 748">\$2,300</td> </tr> <tr> <td data-bbox="759 751 1058 779">Processing Plant</td> <td data-bbox="1062 751 1340 779">\$5,000</td> </tr> </tbody> </table>		<b>BOA and LDAR Study Cost Incentive</b>		<u>Facility Type/Category</u>	<u>Per Site BOA and LDAR Study Incentive</u>	Single Well Site	\$600	Multi-Well Site	\$1,200	Battery Site	\$1,800	Gathering Site	\$2,300
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<b>Direct to Capital (DTC)</b>	\$8,000 for DTC study	<b>Scope:</b> <ul style="list-style-type: none"> <li>• Facilities with known potential measures can proceed with submission of DTC application.</li> <li>• Application includes submission of a DTC Study and Project</li> <li>• A minimum of 500 tCO<sub>2</sub>e/yr GHG reduction required</li> <li>• Study Incentive payment made to PA or Facility Owner.</li> <li>• 50% of Study incentive paid out upon final Study approval &amp; remaining 50% of the approved incentive paid out upon completion, submittal and acceptance of post install verification report.</li> </ul>													
	50% of Capital Cost	<ul style="list-style-type: none"> <li>• 50% of DTC Project incentive paid upfront upon final project approval &amp; remaining 50% of the approved incentive paid out upon completion, submittal and acceptance of post install verification report.</li> </ul>													



## Next Steps:

Bring your project to Ade Okusanya

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# Thank you

- Any questions?