

Canada Energy Subsidies Review Report

For Resource Municipalities Coalition

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Prepared for: Mike Whalley
Executive Director
Resource Municipalities Coalition
ed@rmcoalition.com

Prepared by: Danish Khaliq
Senior Manager, Energy and Utilities Advisory
MNP
Danish.Khaliq@mnp.ca

MNP

10611
102nd Street
Fort St. John, BC
V1J 5L3

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PROJECT INTRODUCTION

Comprised of four (4) municipalities, five (5) chamber of commerce, three (3) associates, and an honorary member, the Resources Municipalities Coalition protects and enhances the sustainable development of resource communities. Headquartered in British Columbia, the RMC is an association who's goal is to advance the common interests through education, research and analysis and monitoring industrial development and associated impacts to municipalities.

In achieving this goal, the RMC has engaged with MNP to assist in the research and develop an information report on the current subsidies available for organizations working in the energy sectors namely, oil and gas, conventional power (fossil fuels) as well as the renewable energy sector.

Leveraging MNP's significant knowledge in the energy sector along with its extensive experience working with multiple levels of government, the team has compiled a report outlining the project's scope, the approach taken, a summary of the observations, as well as details on each subsidy found. Ultimately, this information report provides an overview of the subsidies offered by multiple levels of government across Canada.

PROJECT SCOPE

The scope of the project focused on the following:

Type of subsidies:

- Tax breaks
- Grants
- Long term loans
- Sovereign guarantees by government(s) to support financing
- Special programs administered by government agencies covering the sectors in focus (for example Northern Ontario Heritage Fund)
- Other applicable incentives

Organizations eligible for subsidies

- Power producers
 - o Fossil fuels including coal
 - o Renewable energy (hydro, solar, wind, biomass and other applicable technologies)
- Petroleum producers
 - o Developers and exploration firms

Limitations

Our research focused on publicly available information under the scope of this engagement.

PROJECT APPROACH

The following graphic summarizes MNP's approach for this project, with additional details outlined below.



Identification of Sources

The team was able to identify appropriate subsidies using news articles, publications from research groups, organizations and government bodies, public accounts, and Statistics Canada.

Desktop Research

The team performed desktop research by first scanning through several documents and sources for meaningful subsidy information. Through this process we developed a working excel sheet to document each subsidy and its critical features. After compiling a list of subsidies which apply to petroleum and power producers collectively and respectively, the team worked to develop and validate total funding values for the respective subsidy.

Validation, Verification, and High-Level Analysis

The team verified each subsidy found in a non-government report using government official websites or publications. Furthermore, total funding amounts were calculated using public accounts or several estimations.

Observations and Reporting

The team summarized their findings in the form of this report.

NOTE: Based on the scope of our analysis, MNP was able to identify several subsidies on the consumer-side of the energy market. While the team acknowledges that these subsidies exist in the energy sector, they were deemed Out-Of-Scope and therefore were noted as additional research.

SUMMARY OF OBSERVATIONS

As a key part of MNP's approach to this engagement, each subsidy has been categorized by industry and governing body. Using this data, MNP was able to build a high-level understanding of each industry, the types of companies using these subsidies, as well as a comparison among the governing bodies providing these programs.

Subsidy Definitions

Tax Credit – A monetary credit which can be used to offset a tax liability

Low-Interest Loan – A sum of money that is expected to be paid back with minimal or no interest

Royalty Credit – A monetary credit which can be used to offset a royalty payment

Grant – A sum of money given for a particular purpose of which no money needs to be repaid

Petroleum Producers

Types of Companies

The companies included in our research are exploration and development firms working in the extraction and sale of fossil fuels. There are some over-arching incentive programs and subsidies that are applicable to companies that operate in the natural resources (fossil fuels being part of it) sector that are also applicable to petroleum producers. The subsidies offered to these organizations all require the recipient to be incorporated in Canada and operate in the province in which the respective provincial incentive is provided.

Subsidies

Sixteen of the nineteen subsidies researched were classified as a tax credit with the remainder classified as a royalty credit, grant, tax deduction, and low-interest loan. Often the value of the subsidies is determined by a percentage of the expenditure required to complete the subsidized activity. Most of the subsidies require the eligible activities to take place in Canada, or the respective province, however, the Foreign Resource Expense is offered exclusively for international operations.

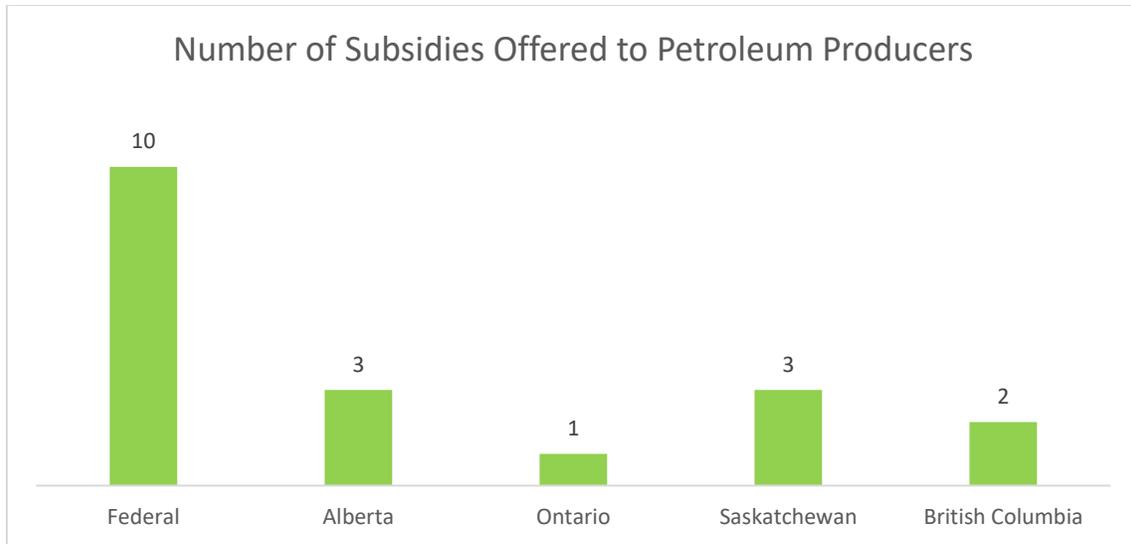
Summary of Findings

The following table summarizes MNP's findings for Petroleum Producers, with additional details about each of the programs outlined in Appendix A and B.

Summary of Petroleum Producers' Subsidies in Canada		
Category	Number of Programs/Subsidies	Subsidies ranges (where applicable)
Total Number of Subsidies Reviewed	19	N/A
Tax Benefits¹	16	
<i>Federal</i>	9	Subsidies range from 10% to 100% of eligible expenses.
<i>Provincial</i>	7	Subsidies range from 10% to 30% of eligible project expenses and hold a maximum value of \$60,000 to \$5,000,000.
Grants²	1	N/A
<i>Federal</i>	0	N/A
<i>Provincial</i>	1	Funding ranges from \$250,000-\$2,000,000 with limitations in regard to a set percentage of project costs.
Low-Interest Loan³	1	N/A
<i>Federal</i>	1	Loan amounts range from 15% to 50% of project costs with a minimum loan amount of \$10,000,000.
<i>Provincial</i>	0	N/A
Royalty Credit⁴	1	N/A
<i>Federal</i>	0	N/A
<i>Provincial</i>	1	Credit value of \$440,000 to \$2,810,000 or a 3% royalty.

1. Includes tax credits for, drilling converting and completing an oil field or sinking a mine shaft; expenses incurred during the exploration of potential mineral locations; the acquisition of an oil or gas well or rights; the purchase of capital assets; the sale of shares to finance a project; expenses involved in scientific research or experimental development; the opening of a new well; the economic development of a community; the performance of manufacturing and processing; the extraction or liquefaction of gas or oil; the expenses allocated to deep drilling oil or gas.
2. Grants fund projects which demonstrate innovative energy technologies tested in new operational environments.
3. Low-interest loans contribute to the research, development, and commercialization of innovative products, processes, and/or services.
4. The royalty credit funds drilling deep wells to produce oil and/or gas.

The following chart summarizes the number of subsidies/incentive programs available for companies identified as power producers across different provinces and those offered by the federal government.



Provincial Comparison

While MNP researched subsidies and incentive programs across all the Canadian provinces, we did not find substantial information on programs directly targeting petroleum producers in provinces outside of the ones summarized in our analysis. Most of the subsidies available in these other provinces were focused on end consumers in the sector. These additional programs, while not part of the scope of this study and hence not included in our high-level analysis and observations, have been summarized under Appendix D- Additional Research for your reference.

Ontario focused on the innovation component of energy offering a fund to organizations incurring innovation costs on marketable products in the province. Alberta offers three distinct subsidies promoting the development of the community and the organizations operating within the province. Saskatchewan also offers three subsidies to petroleum producers, two of which subsidize the cost of manufacturing and processing, and one of which operates as a hiring incentive for international exporters. Finally, the province of BC offers two subsidies in the form of a tax credit, subsidizing the cost of natural gas, and a royalty credit incentivizing deep drilling. Please refer to the Appendix B for more information on individual subsidies and incentive programs. Overall provincial comparison is summarized in the graphic below.

Alberta	Ontario	Saskatchewan	British Columbia
<ul style="list-style-type: none"> • Offers three tax credits. • Supports economic development in communities and corporations as well as scientific research and development. 	<ul style="list-style-type: none"> • Offers a grants. • Supports innovative energy technology. 	<ul style="list-style-type: none"> • Offers three tax credits. • Supports manufacturing or processing activities. 	<ul style="list-style-type: none"> • Offers a royalty credit and a tax credit. • Supports deep drilling and the extraction and liquefaction of oil and gas.

Power Producers

Types of Companies

Power producers includes companies that are involved in the production process and sale of conventional and renewable energy (all technologies including hydro, biomass, wind, solar etc.). Our research focused on incentive programs and subsidies available to these types of companies. Both federal and provincial subsidies offered to power producers require the organization to operate and incorporate within Canada.

Subsidies

From the sixteen subsidies offered to Canadian power producers, eleven are also offered to petroleum producers. The five exclusively offered to power producers are funds to prevent climate change and develop ecofriendly energy alternatives. Specifically, nine subsidies were classified as tax credits, five were classified as grants, one was a tax deduction and the last subsidy took the form of a low-interest loan.

Summary of Findings

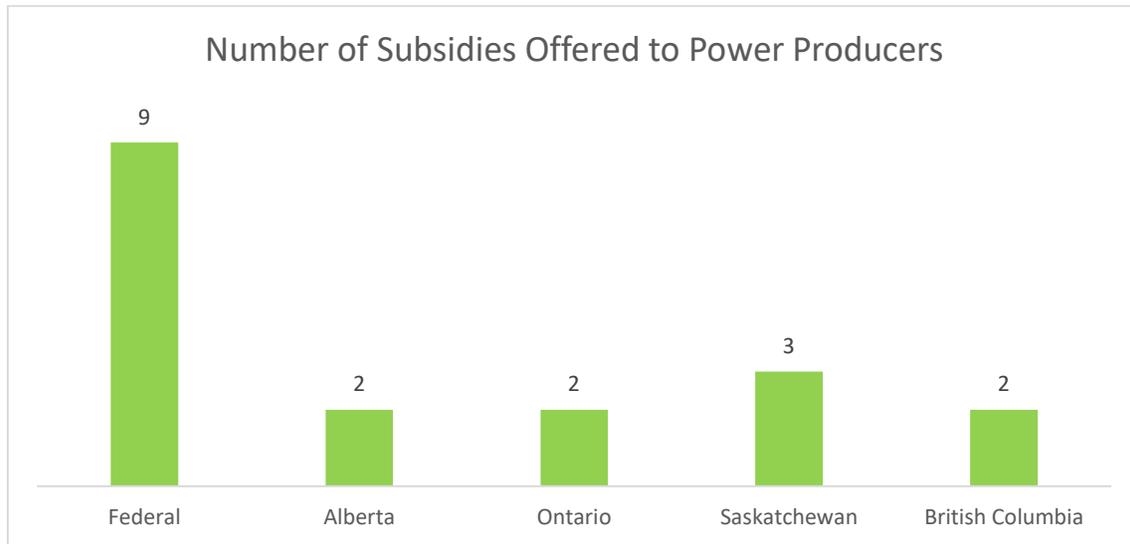
The following table summarizes MNP's findings for Power Producers, with additional details about each of the programs outlined in Appendix A and C.

Summary of Power Producers' Subsidies in Canada		
Category	Number of Programs/Subsidies	Subsidies ranges (where applicable)
Total Number of Subsidies Reviewed	16	N/A
Tax Benefits¹	10	N/A
<i>Federal</i>	5	Subsidies range from 5% to 100% of the eligible project expenses.
<i>Provincial</i>	5	Subsidies range from 10% to 30% of eligible project expenses and hold a maximum value of \$60,000 to \$5,000,000.
Grants²	5	N/A
<i>Federal</i>	1	Grant offers funding for up to 15% of eligible projects expenses,
<i>Provincial</i>	2	Grants offer up to 50% of eligible project expenses with a maximum value of \$200,000 to \$2,000,000
<i>Federal & Provincial</i>	2	Funding available up to 40% of eligible project expenses with no maximum value.
Low-Interest Loan³	1	N/A
<i>Federal</i>	1	Loan amounts range from 15% to 50% of project costs with a minimum loan amount of \$10,000,000.
<i>Provincial</i>	0	N/A

1. The tax benefits subsidize the cost of purchasing new buildings, equipment, or machinery; the sale of shares to fund a project; the development of a renewable energy; the cost of scientific research and experimental development; the economic development of communities; the cost of manufacturing and processing.

2. Grants fund projects involving microgrid, solar, storage, smart meter data, nuclear and other projects; infrastructure projects that support the management of renewable energy; projects which improve rural and northern communities; the identification and development of low-carbon supplements.
3. Low-interest loans contribute to the research, development, and commercialization of innovative products, processes, and/or services.

The following chart summarizes the number of subsidies/incentive programs available for companies identified as power producers across different provinces and those offered by the federal government.



Provincial Comparison

While MNP researched subsidies and incentive programs across all the Canadian provinces, we did not find substantial information on programs directly targeting power producers in provinces outside of the ones summarized in our analysis. Most of the subsidies available in these other provinces were focused on end consumers in the sector. Falling outside the scope of this study these programs have not been included in our high-level analysis and observations, but for reference have been summarized under Appendix D- Additional Research.

The BC and federal government, in a bilateral agreement, offer two unique grants for organizations who are building infrastructure that supports clean energy or benefits the sounding community. Exclusive to power producers, Ontario offers a grant to organizations developing innovative ideas to accelerate the adoption of low-carbon alternatives. Both subsidies offered by the Alberta government are offered to petroleum producers as well and act as a catalyst for economic development in communities and organizations within the province. Lastly, Saskatchewan offers three subsidies to both Power Producers and Petroleum Producers within the province subsidizing the recipients' manufacturing process. Refer to the appendix for more information on individual subsidies. The graphic below summarizes key takeaways on the provincial comparison of subsidies available to power producers.

Alberta	Ontario	Saskatchewan	British Columbia
<ul style="list-style-type: none"> • Offers two tax credits. • Supports economic development in communities and corporations. 	<ul style="list-style-type: none"> • Offers two grants. • Supports innovative energy technology and climate action. 	<ul style="list-style-type: none"> • Offers three tax credits. • Supports manufacturing or processing activities. 	<ul style="list-style-type: none"> • Offers two grants funded by the BC and Federal Government. • Supports the development of rural and northern communities and climate action.

CONSIDERATIONS

The provincial comparison has been used to showcase key subsidies and incentive programs that were identified only for the above-mentioned provinces. Other provinces, such as Quebec, do not have specific programs at the producer level, but there are subsidies available to end consumers in these sectors across multiple provinces.

While MNP focused our research on the subsidies available to petroleum and power producers, in our research we did come across different levels of subsidies that are available to the end consumers in these sectors. These subsidies can be directly administered by the government or through a government agency leading to savings and incentives for end consumers, for instance savings in electricity rate provided to industrial consumers in a particular province. This research has been included under Appendix D and does not feature into the analysis provided earlier in the report.

APPENDIX A – SUBSIDIES OFFERED TO BOTH PETROLEUM AND POWER PRODUCERS

Serial Number	Subsidy/Incentive Program Name	Subsidy Type	Description	Funding Agency	Eligible Activities	Subsidy/Incentive Mechanism
1	Atlantic Investment Tax Credit	Tax Credit	Provides Atlantic Region companies an investment tax credit for purchasing new buildings, new equipment, or new machinery.	Federal; Income Tax Act and Income Tax Regulations	The purchase of new machinery, equipment, or buildings used fishing, farming, logging, manufacturing, storing grain, harvesting peat, energy generation and conservation, or the production or processing of electrical energy or steam.	If the qualified resource property was acquired: <ul style="list-style-type: none"> o Between 2013 and 2016, the specified percentage is 5% o After 2015, the specified percentage is 0% o After 2013, before 2017 and is eligible for the transitional relief rate, the specified percentage is 10%
2	Accelerated Capital Cost Allowances	Tax Credit	Offers additional depreciation for Canadian mining companies on capital assets used in mining. Timeline: 2013-2020	Federal; Natural Resources Canada	Purchasing capital assets before the beginning of commercial production, or for major expansions, or for the portion of investment expenditures in excess to 5% of gross income from the mine.	<ul style="list-style-type: none"> o 100% - 2013-2016 o 90% - 2017 o 80% - 2018 o 60% - 2019 o 30% - 2020 o 0% - 2020+
3	Flow-Through Shares	Tax Credit	Certain corporations in the mining, oil and gas, and renewable energy and energy conservation sectors may issue FTSs to help finance their exploration and project development activities. The FTSs must be newly issued shares that have the attributes generally attached to common shares.	Federal	Considered a FTS if it is: <ul style="list-style-type: none"> - A share issued by a PBC or a right to acquire a share of the capital stock of a PBC - It is issued pursuant to a written agreement with an investor under which the PBC agrees to incur CEE(CRCE) in an amount equal to the consideration received for the share or the right and renounce this amount in favour of the investor within a specific period of time - It is issued for consideration that does not include property transferred by the investor on a tax-deferred basis. 	The FTS program provides tax incentives to investors who acquire FTSs by allowing: <ul style="list-style-type: none"> - Deductions for resource expenses renounced by eligible corporations - Investment tax credits for individuals (excluding trusts) on resource expenses in the mining sector that qualify as flow-through mining expenditures.
4	Scientific Research and Experimental Development Tax Incentive Program	Tax Credit	The Scientific Research and Experimental Development (SR&ED) program uses tax incentives to encourage Canadian businesses of all sizes and in all sectors to conduct research and development in Canada.	Federal	The term "qualified expenditure" is defined in the Income Tax Act and means: an expenditure incurred in the tax year by the claimant in respect of scientific research and experimental development carried on in Canada and is: An allowable expenditure of a current nature for SR&ED directly undertaken by the claimant; <ul style="list-style-type: none"> - 80% of an expenditure which is: - a contract expenditure for SR&ED performed on behalf of the claimant, and a third-party payment; - An expenditure for shared-use-equipment (SUE) acquired before 2014; - An allowable expenditure of a capital nature acquired before 2014; OR A prescribed proxy amount (PPA) of the claimant for the tax year.	Whatever eligible SR&ED work you are doing, your investment tax credit will be at least 15% and can be as much as 35% of your qualified SR&ED expenditures. If you have any unused ITCs, you can carry them back 3 years or forward 20 years and apply them against tax payable for other years.

Serial Number	Subsidy/Incentive Program Name	Subsidy Type	Description	Funding Agency	Eligible Activities	Subsidy/Incentive Mechanism
5	Strategic Innovation Fund	Low-Interest Loan	The Strategic Innovation Fund's objective is to spur innovation for a better Canada. Specifically, it serves to simplify application processes, accelerate processing, and provide assistance that is more responsive and focused on results.	Federal	<p>The project must involve activities related to the research, development and commercialization of innovative products, processes and/or services. Activities in this stream must be within Technology Readiness Levels (TRLs) 1-9 and should support the development of a technology to a higher readiness level which then has the potential to lead to the implementation or commercialization of a resultant product, process or service.</p> <p>Must be requesting a minimum of \$10M</p>	<p>The amount of the contribution is based on the minimum amount required to allow an eligible activity to proceed. The sharing ratio (contribution vs costs of activities) will be based on the type of activities proposed for a given project. It will not exceed 50% of the costs for eligible activities and the maximum level will only be considered in exceptional circumstances.</p> <p>The program contributions are:</p> <ul style="list-style-type: none"> • conditionally or unconditionally repayable; non-repayable; or • a combination of 1 and 2. <p>Repayments will be performance-based and reflect a risk-sharing approach. Non-repayable contributions will only be considered for eligible activities that demonstrate strong economic, innovation and public benefits with clear strategic value or global significance (see next section for more information). The amount and terms of repayment will be determined during the due diligence review.</p>
6	International Energy Demonstration Fund (IEDF)	Grant	The International Energy Demonstration Fund (IEDF) is a discretionary, non-entitlement funding program being administered by the Ontario Ministry of Energy on a pilot basis. The program focusses on demonstrations of innovative energy technologies in collaboration with domestic and international partners, to test these technologies in new operational environments.	Provincial; On	<p>A range of energy demonstration project types may be considered eligible, including microgrid, solar, storage, smart meter data, nuclear and other projects.</p> <p>All projects must be demonstrations in a new market.</p>	<p>\$250,000-\$2M per project</p> <p>Covers costs incurred in Ontario up to a maximum of 50% of total project costs. A stacking limit of 75% from all domestic government sources would be applied.</p>
7	Community Economic Development Corporations (CEDCs)	Tax Credit	Alberta-based investors in Community Economic Development Corporations (CEDCs) that are encouraging rural economic development or making a social impact in their communities are eligible for the CEDC Tax Credit which, with an annual budget of \$3,000,000, offers them a 30% tax credit.	Provincial; Alberta	<p>In order to be eligible to register under the CEDC program, a Community Economic Development Investment Fund must:</p> <ul style="list-style-type: none"> • have equity capital of at least \$10,000 • be registered under the Alberta Business Corporations Act • not be registered as an Alberta Investor Tax Credit (AITC) Venture Capital Corporation under the Investing in a Diversified Alberta Economy Act • have a share structure consisting of only common shares that have no special rights or restrictions and/or common shares that have rights or restrictions related only to the redemption of the shares by the corporation 	<ul style="list-style-type: none"> • Offers them a 30% tax credit. • A \$60,000 maximum aggregate credit can be applied per year.

Serial Number	Subsidy/Incentive Program Name	Subsidy Type	Description	Funding Agency	Eligible Activities	Subsidy/Incentive Mechanism
8	The Capital Investment Tax Credit (CITC)	Tax Credit	The CITC encourages companies to make timely capital investments by returning a percentage of the company's costs, including the purchase of machinery, equipment and buildings, for projects related to manufacturing, processing or tourism infrastructure that will spur economic diversification and job creation.	Provincial; Alberta	The eligible costs under this program include the purchase of machinery, equipment and buildings that closely align to capital costs allowed under the federal government's Capital Cost Allowance. Eligible Qualified Property – or a property/purchase that is eligible for a tax credit – must be acquired by the eligible corporation to be used primarily for: <ul style="list-style-type: none"> • manufacturing or processing of goods for sale or lease as defined in subsections 127(9) and (11) of the federal Income Tax Act, with the exclusion of Section 127(9)(b.1). • providing or operating tourism infrastructure that, subject to the regulations, is property or in a class of property included in Schedule II of federal Income Tax Regulation 	Offers a non-refundable tax credit valued at 10% of a corporation's eligible capital expenditures, up to \$5 million
9	Saskatchewan Manufacturing and Processing Profits Tax Reduction	Tax Deduction	The Manufacturing and Processing (M&P) Profits Tax Reduction applies to firms in the manufacturing and processing industry. Eligible corporations can reduce their Saskatchewan income tax rate on Canadian manufacturing and processing profits by as much two percentage points. Saskatchewan-based firms with a high allocation of income to Saskatchewan will receive a larger tax reduction than firms with a low allocation of income.	Provincial; Saskatchewan	Performing manufacturing or processing in Alberta	You can reduce the Saskatchewan income tax rate on Canadian manufacturing and processing profits by 2%.
10	Saskatchewan manufacturing and processing investment tax credit	Tax Credit	You can earn this credit on qualified property that is used in Saskatchewan mainly for manufacturing or processing goods for lease or sale.	Provincial; Saskatchewan	To claim this credit: <ul style="list-style-type: none"> – you must have acquired qualified property in the current year for use in Saskatchewan – you must use the property primarily for manufacturing or processing goods for sale or lease. – the property must not have been used, or acquired for use or lease, for any purpose before you acquired i 	The credit is fully refundable and is equal to 6% of the capital cost of a qualified property acquired after March 22, 2017. The rate was previously 5%.
11	Manufacturing and Processing Exporter Tax Incentive	Tax Credit	The M&P Exporter Tax Incentive provides non-refundable tax credits to eligible corporations that expand the number of M&P-related full time employees above the number that were employed in 2014	Provincial; Saskatchewan	<p>Hiring Incentive Eligible corporations are those that are primarily engaged in manufacturing and processing, or undertaking creative industry activities at a facility in Saskatchewan and at least 25% of revenues of that activity are generated through export.</p> <p>Head Office Incentive For the head office portion of the incentive, eligible corporations must have an office located in Saskatchewan where at least 10 employees with a current payroll of at least \$1,000,000 are performing at least five of nine prescribed head office functions. Prescribed head office functions include strategic planning, corporate communications, taxation, legal, marketing, finance, human resources, information technology, and procurement.</p>	The incentive offers an eligible business non-refundable tax credits equal to \$3,000 in respect of each incremental full-time employee for each of the 2015 through 2019 taxation years.

APPENDIX B – SUBSIDIES OFFERED TO PETROLEUM PRODUCERS

Serial Number	Subsidy/Incentive Program Name	Subsidy Type	Description	Funding Agency	Eligible Activities	Subsidy/Incentive Mechanism
1	Canadian Development Expense	Tax Credit	Offers oil and gas companies a tax deduction valued at 30% of their yearly expenses for drilling, converting, completing an oil field, or sinking a mine shaft.	Federal; Income Tax Act	<ul style="list-style-type: none"> o Drilling or completing an oil or gas well o Building a temporary access road to the well o Preparing a site in respect of the well. o Drilling or converting a well for the disposal of waste liquids o Drilling or converting a well for the injection any substance to assist in the recovery of petroleum or natural gas; o Drilling for water or gas for injection into a petroleum or natural gas formation o Drilling or converting a well for the purpose of monitoring fluid levels, pressure changes, or other phenomena in an accumulation of petroleum or natural gas. 	30% of the yearly expense balance on a declining-basis
2	Canadian Exploration Expense (CEE)	Tax Credit	Offers oil and gas companies a tax deduction valued at 100% of their yearly exploration expenses.	Federal; Income Tax Act	<ul style="list-style-type: none"> o G3 expenses: Geological, geophysical, or geochemical expenses incurred for the purpose of determining the existence, location, extent, or quality of an accumulation of petroleum or natural gas in Canada. o Exploratory probe expenses: A probe that is used to extract samples for test purposes. o Drilling expenses: Expenses incurred in drilling or completing an oil or gas well in Canada or in building a temporary access road to (or preparing a site in respect of) such as well, provided that: <ul style="list-style-type: none"> - The drilling or completion of the well resulted in the discovery that a natural underground reservoir contained either petroleum or natural gas and the discovery occurred at any time before six months after the end of the year; - The well is abandoned within six months after the end of the year without ever having produced otherwise that for a specified purpose; - The expense is incurred during the period of 24 months after completion of the well and the well has not produced during that period otherwise than for specified purposes. - The Minister of Natural Resources issues a certificate that he or she is satisfied that the total of expenses incurred will exceed \$5M and the well will not produce within the first 24 months. 	100% of the company's CEE expenses.
3	Canadian Oil and Gas Property Expense	Tax Credit	Provides oil and gas companies an income tax break valued at 10% of their cost to acquire oil and gas wells and rights.	Federal; Income Tax Act	Acquiring a Canadian oil and gas resource property.	10% of the cost of the property investment.
4	Foreign Resource Expense	Tax Credit	Canadian mining companies that incur exploration and development expenses abroad can claim the FRE on a country-by-country basis for income tax purposes.	Federal; Income Tax Act	Purchasing foreign resource property in respect of drilling, exploration, prospecting, surveying, and acquisition costs	Companies can claim between 10% and 30% of their Adjusted Cumulative Foreign Resource Expense account
5	Mineral Exploration Tax Credit	Tax Credit	Offers companies involved in mineral exploration a tax credit to help raise equity funds.	Federal; Natural Resources Canada	Flow-through mining expenditures <ul style="list-style-type: none"> o Exact definition: Paragraph (f) of subsection 66.1(6) of the federal Income Tax Act 	15% non-refundable tax credit on eligible expenses

Serial Number	Subsidy/Incentive Program Name	Subsidy Type	Description	Funding Agency	Eligible Activities	Subsidy/Incentive Mechanism
6	New Well Royalty Reduction	Tax Credit	The regulation applies to royalty on eligible production recovered or obtained from a new well on or after May 1 2010 and on or before December 31 2021	Federal	Subject to the applicable Schedule to this Regulation, crude oil or gas recovered or obtained from a well event is eligible production if (a) it is not excluded production, (b) it is recovered or obtained from a well event in a new well, including a well event specified in a schedule to this Regulation, (c) the Crown interest in it is greater than 0%, and (d) it is subject to the payment of royalty under the Petroleum Royalty Regulation, 2009 (AR 222/2008), the Natural Gas Royalty Regulation, 2009 (AR 221/2008) or section 27 of the Oil Sands Royalty Regulation, 2009 (AR 223/2008).	If crude oil or gas recovered or obtained from a well event is eligible production, the royalty payable to the Crown on that crude oil or gas shall be calculated at a rate not exceeding 5% until (a) the end of the eligible production month cap of the well that contains the well event, (b) the volume cap is reached for the well that contains the well event, (c) the date that the well becomes part of a Project under the Oil Sands Royalty Regulation, 2009 (AR 223/2008), or (d) December 31, 2021,
7	Alberta Scientific Research and Experimental Development Tax Credit	Tax Credit	The Alberta SR&ED tax credit program provides a refundable tax credit to qualified corporations that incur eligible expenditures in respect of SR&ED activities carried out in Alberta after December 31, 2008.	Provincial; Alberta	A qualified corporation's eligible SR&ED expenditures for Alberta purposes for a taxation year. Using calculations found in source link.	A qualified corporation is entitled to an Alberta SR&ED tax credit equal to 10 per cent of the lesser of: o The corporation's eligible expenditures for the taxation year, and o The corporation's maximum expenditure limit for the taxation year.
8	Natural Gas Tax Credit	Tax Credit	A qualifying corporation may claim a tax credit for a taxation year that begins on or after January 1, 2020 .	Provincial; BC	Oil and gas extraction or the liquefaction of natural gas.	The maximum credit you can claim in a taxation year is the least of: o 3% of the cost of natural gas acquired at an LNG facility inlet meter, o The corporation's B.C. corporate income tax payable after all other B.C. income tax credits have been deducted o The amount used to reduce your B.C. corporate income tax to the amount that would be payable if the B.C. general corporate income tax rate was 9%.
9	Deep Drilling Credit	Royalty Credit	Provides royalty credits to Oil and Gas companies drilling deep wells.	Provincial; BC	Drilling deep wells who qualify as Tier 1 or Tier 2 o Tier 1 Criteria - A gas well with a spud date of April 1, 2014 or later that is not part of a coalbed methane project; - A horizontal well with a completion point (the point where the well bore first exceeds 80 degrees from vertical) shallower than 1,900 metres; and, - A "Deep-Well Depth" (calculated based on total vertical depth plus horizontal length times horizontal length factor) greater than 2,500 metres. o Tier 2 Criteria - Vertical Well - A gas well that is not part of a coalbed methane project and is not a deep re-entry well, and has a completion point deeper than 2,500 metres - Horizontal Well - A gas well that is not part of a coalbed methane project and is not a deep re-entry well, and has a completion point deeper than 1,900 metres	o Tier 1 - Minimum of \$440,000 (for a well with a deep-well depth of 2,500 metres) to a maximum of \$2.81 million (for wells 5,500 metres or deeper). o Tier 2 - Minimum three per cent royalty. - Exact subsidy amounts found in source linked below

APPENDIX C – SUBSIDIES OFFERED TO POWER PRODUCERS

Serial Number	Subsidy/Incentive Program Name	Subsidy Type	Description	Funding Agency	Eligible Activities	Subsidy/Incentive Mechanism
1	Canadian Renewable and Conservation Expense	Tax Credit	CRCE allows a tax credit for expenditures incurred in respect of the development of a project.	Federal	<ul style="list-style-type: none"> o The expenditures must: <ul style="list-style-type: none"> be payable to a person or partnership with whom the taxpayer is dealing at arm's length; and not be specifically excluded from CRCE. o Projects for which it is reasonable to expect that at least 50% of the capital cost of depreciable property to be used in the project would qualify for inclusion in Class 43.1 or 43.2. o The cost of drilling geothermal wells o Expenses incurred solely to determine the extent and quality of a geothermal resource, such as for example, the cost of completing an exploratory well. o Expenditures for a test wind turbine that is part of a wind farm project. 	Eligible expenditures are added to the taxpayer's CCEE pool and may be deducted by the taxpayer in the tax year that they are incurred or carried forward indefinitely for deduction in future tax years.
2	Innovation and Clean Energy Growth Research, Development, and Demonstration Programs **PROGRAM APPLICATION NOW CLOSED**	Grant	Energy Innovation Program key priority areas are: renewable, smart grid and storage systems; reducing diesel use by industrial operators in northern and remote communities; methane and VOC emission reduction; reducing greenhouse gas emissions in the building sector; carbon capture, use and storage; improving industrial efficiency.	Federal	<p>Program funds may be directed to the following kinds of demonstration activities:</p> <ul style="list-style-type: none"> o The permanent (for the normal life of the equipment) installation of a pre-commercial technology with the intent that it continues to operate in its intended operational environment. o Permanent modification of existing processes, equipment, or systems to accommodate an innovative technology or process; o The permanent installation of equipment and/or infrastructure to support a demonstration, or multiple demonstrations. o Associated costs for the engineering, design and permitting of a permanent installation as identified in the bullets above, including elements of a Front-End Engineering Design study (FEED) (see below) if required as part of a demonstration. Operation, performance testing, and analysis of pre-commercial equipment in its intended environment to assess performance of an innovation. 	The total cost of all direct expenditures and up to 15% of eligible expenditures can be direct overhead costs
3	The CleanBC Communities Fund (CCF) ** APPLICATION DEADLINE March 27, 2019 ** *Final decisions are anticipated in late 2019/early 2020.*	Grant	The CleanBC Communities Fund (CCF) will fund infrastructure projects that support the management of renewable energy, access to clean energy transportation, improved energy efficiency of buildings and the generation of clean energy.	Federal & Provincial; BC	<p>Project eligibility is based on its ability to meet one of the following outcomes set out by Infrastructure Canada. Projects may meet multiple outcomes. Proponents will need to select the one outcome that the project best supports within the application. Outcomes are:</p> <ul style="list-style-type: none"> o Increased capacity to manage renewable energy; o Increased access to clean energy transportation; o Increased energy efficiency of buildings; o Increased generation of clean energy. 	<p>There is no cap on the maximum allowable funding amount per project; however, consideration will be given to a fair distribution of funding. Applicants should consider whether phasing is an option where project funding would represent more than 10% of the total funding available for the intake (\$6.294 million).</p> <p>Funding is available up to 40% of the eligible project costs (25% Government of Canada, 15% Province of British Columbia).</p>

Serial Number	Subsidy/Incentive Program Name	Subsidy Type	Description	Funding Agency	Eligible Activities	Subsidy/Incentive Mechanism
4	The Rural and Northern Communities (RNC) Program **The deadline for the application intake is January 23, 2019 (11:59pm PST). **	Grant	Provides funding through an Integrated Bilateral Agreement between Canada and British Columbia. ICIP will fund projects that improve Rural and Northern Communities; Green; Community, Culture and Recreation; and, Public Transit infrastructure.	Federal & Provincial; BC	Additional outcomes eligible for RNC (from other specified ICIP programs): o Community, Culture and Recreation Outcomes (CCR) o Green Infrastructure – Environmental Quality Outcomes (EQ) - Increased capacity to treat and/or manage wastewater and stormwater. - Increased access to potable water. - The project will increase capacity to reduce and/or remediate air pollutants (through solid waste diversion). - The project will increase capacity to reduce and/or remediate soil pollutants. o Green Infrastructure - Adaptation, Resilience and Disaster Mitigation Outcomes - Increased structural capacity and/or increased natural capacity to adapt to climate change impacts, natural disasters and/or extreme weather events.	NA
5	Partners in Climate Action **Approved projects could plan to start as early as fall 2017 and must be complete by March 2019.**	Grant	Ontario is launching Partners in Climate Action, a grant program designed to identify and support the development, testing and evaluation of innovative ideas to accelerate the adoption of low-carbon choices by Ontarians	Provincial; On	The program will provide funding to projects that: o Help Ontarians understand how their actions contribute to climate change; o Identify and remove barriers to behaviour change; o Motivate Ontarians to make low-carbon choices; and o Evaluate behaviour-based approaches to achieving greenhouse gas emissions reductions. The program is looking to fund projects that implement and evaluate behaviour-based, action-oriented approaches to achieving greenhouse gas reductions in Ontario. The program will not fund awareness raising campaigns, pure research projects, or investments in capital assets or infrastructure.	Up to \$200,000 per project

APPENDIX D – ADDITIONAL RESEARCH

Serial Number	Subsidy/Incentive Program Name	Subsidy Type	Description	Funding Agency	Eligible Activities	Subsidy/Incentive Mechanism
1	Electric Vehicle Infrastructure Demonstrations	Grant	Through the Energy Innovation Program supporting and demonstrating the next-generation of electric vehicle charging infrastructure in Canada	Federal	<ul style="list-style-type: none"> - The permanent (for the normal life of the equipment) installation of a pre-commercial technology with the intent that it continues to operate in its intended operational environment. - Permanent modification of existing processes, equipment, or systems to accommodate an innovative technology or process; - The permanent installation of equipment and/or infrastructure to support a demonstration, or multiple demonstrations. - Associated costs for the engineering, design and permitting of a permanent installation as identified in the bullets above, including elements of a Front-End Engineering Design study (FEED) (see below) if required as part of a demonstration. Operation, performance testing, and analysis of pre-commercial equipment in its intended environment to assess performance of an innovation. 	Variable depending on project application
2	Program of Energy Research and Development	Grant	PERD funds research and development designed to ensure a sustainable energy future for Canada in the best interests of both our economy and our environment.	Federal	Providing support or collaborating with a federal department performing activities to advance the renewable energy industry through R&D	N/A
3	Sustainable Development Technology Canada	Grant	Funds projects that support Canadian small and medium-sized enterprises advancing technology that demonstrate significant and quantifiable environmental and economic benefits	Federal	Innovative technologies that are pre-commercial and have the potential to demonstrate significant and quantifiable environmental and economic benefits in one or more of the following areas: climate change, clean air, clean water, and clean soil.	<ul style="list-style-type: none"> - On average 33% (up to 40%) of eligible projects costs - The average contribution is \$3 million, with funds disbursed in five years or less. - 25% of the eligible costs must be funded through private sector contributions (including in-kind). - Funding from all levels of government must not surpass 75% of eligible costs. - At least 50% of eligible project costs must be incurred in Canada.
4	Innovative Solutions Canada	Grant	Participating federal departments and agencies will issue public challenges designed around a desired outcome rather than a known product or process specification and will be based on each department's mission and mandate.	Federal	Solving the listed challenges	

Serial Number	Subsidy/Incentive Program Name	Subsidy Type	Description	Funding Agency	Eligible Activities	Subsidy/Incentive Mechanism
5	Innovative Superclusters Initiative ** Application Deadline November 24th 2017**	Grant	Supports business-led innovation superclusters with the greatest potential to energize the economy and become engines of growth. Through a small number of high-value, strategic investments this initiative is co-investing with industry in bold and ambitious proposals to strengthen Canada's most promising clusters and build superclusters at scale.	Federal	The approach had to leverage strengths, address gaps, and incent innovation ecosystem players to work together more strategically around five themes of activity for the collective benefit of the cluster: <ul style="list-style-type: none"> • Technology leadership (mandatory) • Partnerships for scale • Diverse and skilled talent pool • Access to innovation • Global advantage 	Decided upon application approval
6	Green Municipal Fund	Grant	The Green Municipal Fund (GMF) offered by the Federation of Canadian Municipalities (FCM) provides funding and knowledge services to support sustainable community development. GMF-supported initiatives aim to improve air, water, and soil, and reduce greenhouse gas emissions.	Provincial; BC Municipalities	Your capital project must include a combination of energy efficient measures that together, target net zero energy performance in a new municipal facility (administration buildings, police stations and fire halls, recreation centres and arenas, wastewater treatment plants, etc.). Most of the funding goes to projects in municipally owned buildings, but a non-municipally owned building may be eligible if it is used mostly for municipal purposes.	Decided upon application approval
7	Natural Gas Program	Grant	The province is helping expand natural gas access to more communities in Ontario through the new \$100 million Natural Gas Grant Program ("the Grant program"). The Grant program is part of Moving Ontario Forward - the province's \$31.5 billion plan to invest in public transit, transportation and other priority infrastructure over ten years.	Provincial; ON	<ul style="list-style-type: none"> • Projects that will help convert primarily residential connections to natural gas. • Projects that will help convert primarily business connections to natural gas and benefit agri-businesses, rural Ontario, First Nations communities or unincorporated areas. 	NA
8	Ontario Community Environment Fund **It is expected that applicants will be notified in the fall of 2018.**	Grant	How not-for-profit organizations, First Nations and Métis communities, municipalities, schools, colleges, universities, and conservation authorities can get government grants for local projects that help protect and restore the environment.	Provincial; ON	Eligible projects <ol style="list-style-type: none"> 1) Community-based environmental remediation and restoration projects. 2) Research, education, and outreach activities. 3) Measures that build spill preparedness and response capacity in the community. 	NA

Serial Number	Subsidy/Incentive Program Name	Subsidy Type	Description	Funding Agency	Eligible Activities	Subsidy/Incentive Mechanism
9	Investing in Canada Infrastructure Program: Rural & Northern Stream	Grant	The Investing in Canada Infrastructure Program (ICIP) is a cost-shared infrastructure funding program between the federal government, provinces and territories, and ultimate recipients. This program will see more than \$30 billion in combined federal, provincial and other partner funding, under four priority areas, including Rural and Northern infrastructure.	Federal & Provincial; On	<p>Eligible asset type:</p> <ul style="list-style-type: none"> • road; • bridge; • air; • marine. <p>Eligible project types:</p> <ul style="list-style-type: none"> • new construction; • rehabilitation; • replacement work 	<p>Eligible project costs are third-party costs such as:</p> <ul style="list-style-type: none"> • Environmental assessment costs • Design/engineering costs • Project management costs • Materials • Construction • Contingency costs (maximum 25%) <p>Note: Project costs are eligible only if incurred after federal approval</p>
10	The Alberta Investor Tax Credit (AITC)	Tax Credit	The Alberta Investor Tax Credit (AITC) offers a 30% tax credit to investors who provide equity capital to Alberta small businesses doing research, development or commercialization of new technology, new products or new processes. It is also applicable to businesses engaged in interactive digital media development, video post-production, digital animation or tourism.	Provincial; Alberta	Eligibility for investors is limited to investors who pay personal or corporate taxes in Alberta and invest in small businesses in Alberta. Eligible activities involve the investment into a small business located in Alberta	30% tax credit to investors who provide equity capital to Alberta small businesses
11	EcoPerformance	Grant	EcoPerformance aims to reduce greenhouse gas emissions and the energy consumption of businesses by financing projects related to energy consumption and production, as well as to the improvement of processes.	Provincial; Quebec	<p>The program provides financial assistance to large consumers (GC) and small and medium-consumers (PMC) who meet the eligibility requirements to enable them to turn energy efficiency and reduce their emissions Gheg. It revolves around the following two components:</p> <ol style="list-style-type: none"> 1. Analysis: Analytical projects for the refurbishment of mechanical systems of buildings-energy management projects 2. Implementation: Energy efficiency projects-energy conversion projects-fugitive emissions projects 	Applicants of the EcoPerformance program may request a bonus of \$40 to \$50/tCO2 at the time of filing the application for financial assistance

Serial Number	Subsidy/Incentive Program Name	Subsidy Type	Description	Funding Agency	Eligible Activities	Subsidy/Incentive Mechanism
12	Forest Biomass Program	Tax Credit	The residual forest biomass program is available to companies, institutions and municipalities that use fossil fuels and undertake initiatives to reduce their consumption measurably and sustainably through the implementation of residual forest biomass.	Provincial; Quebec	<p>Expenses must be necessary, justifiable and directly attributable to the realization of the project.</p> <p>Fees for professional services provided under the various components of the program may not exceed those mentioned in the public bodies Contracts Act (chapter C-65.1). In addition, the maximum hourly rates for salaries or fees for different categories of employment can be fixed by TEQ and, in this case, these rates would prevail.</p> <p>The eligible expenses of the participant's internal staff are salary and fringe benefits without any increase. Evidence of internal expenditures may be required, such as copies of pay cheque stubs to validate eligible internal expenses.</p> <p>Administrative or management fees may be considered in the total allowable expenditure up to a maximum percentage of 15%.</p>	The financial assistance allocated by TEQ can be combined with complementary programs offered by other government departments or agencies (provincial or federal) and energy distributors. Cumulation of financial assistance obtained from government departments or agencies (Federal and provincial), energy distributors and TEQS in respect of the measures shall not exceed 75% of the total allowable expenditures.
13	Electricity Subsidy Through BC Hydro - NO DIRECT SOURCE FOUND	Hydro Subsidy	Allows LNG Canada and Woodbridge LNG to pay BC Hydro's industry electricity rate of roughly \$47.71 opposed to the previous \$81.39 per MWh	Provincial; BC	Powering fracking and LNG	Pay approximately \$47.71 per MWh of hydro from the new Site C power facility opposed to the previous \$81.39

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