



environmental  
defence

# CARBON PRICING IN ALBERTA

A review of its  
successes and impacts



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Cover Photo David Dodge, [GreenEnergyFutures.ca](http://GreenEnergyFutures.ca)

# A PROGRESS REPORT ON ALBERTA'S CARBON LEVY

**Alberta's economy-wide carbon levy was introduced in 2017. The aim of the levy is to reduce carbon pollution which causes climate change, while minimizing any negative impacts to the province's economy or to lower-income Albertans. A lot of claims have been made about the levy and the effectiveness of carbon pricing in general. Given that the province is almost through two years of the carbon levy, it's a good time to look and see whether, and to what extent, this policy is meeting its aims.**

Carbon pricing isn't a new idea in Alberta. The province first put a price on carbon pollution in 2008, with the Specified Gas Emitters Regulation (SGER) on the province's largest emitters. However, emissions continued to grow in Alberta, largely due to the oil boom and the expansion of the oil sands. In 2015, the province announced the Alberta Climate Leadership Plan (CLP), an ambitious plan to take further action to reduce greenhouse gas emissions. The CLP commits to:

- **reduce methane pollution from oil and gas facilities (another potent greenhouse gas)**
- **put a hard limit of 100 megatonnes of carbon pollution from the oil sands**
- **put a price of \$20 per tonne of carbon dioxide pollution in 2017, increasing to \$30 per tonne in 2018**
- **phase out coal electricity generation in Alberta**
- **increase electricity generation from renewables to 30 per cent by 2030**

The CLP was a significant step to address the major sources of greenhouse gas pollution in Alberta and make further progress towards limiting the province's contributions to climate change. In addition, Alberta's carbon levy would bring in billions of dollars to be redeployed in Alberta on programs that reduce the province's carbon pollution, safeguard low-income Albertans from rising energy costs, and ensure a just transition for Alberta's energy workers. So, is the carbon levy working as intended? Has there been any economic fallout? Let's take a look.



Photo Credit: Chris Schwarz/Government of Alberta

# 1. THE IMPACT OF THE CARBON LEVY ON ALBERTA'S ECONOMY

Alberta was not the first Canadian jurisdiction to implement an economy-wide price on carbon. As such, the province benefited from being able to learn from the experiences of British Columbia and Quebec, and chose an approach suited to the unique nature of Alberta's economy.

## **Alberta's carbon levy combines:**

**1. a straightforward price on most fuels**

**2. an output-based system for large emitters**

This approach, though slightly modified, has now been adopted by the federal government, and will be implemented in provinces that do not put their own carbon pricing systems in place.

2017 was the first year of the carbon levy in Alberta. It was also a good year for Alberta's economy.

Alberta led economic growth in Canada in 2017, with real GDP growth of 4.9 per cent.<sup>1</sup> Since the carbon levy was put in place, real wages are up, GDP is up and tens of thousands of jobs were added in the province.<sup>2</sup> Furthermore, Royal Bank of Canada projects growth to be 2.4 per cent in Alberta in 2018, beating the Canadian average of 2 per cent.<sup>3</sup> While the economic recovery from the 2015 recession is ongoing, the province and major banks are cautiously optimistic that Alberta will continue its recovery through 2018.<sup>4</sup>

Opponents regularly claim that a price on carbon would hamstring the economy and lead to massive job losses. But the evidence shows us a different story, one that is backed up by major banks and economists. However, in the latter part of 2018, there was a great deal of coverage about the price of oil and the state of Alberta's economy. After so many years of expansion in the oil and gas industry, new projects have slowed, despite the price of oil averaging \$44.45 for 2018, which is a 17.5 per cent increase over the average price in 2017 of \$37.82.<sup>5</sup>

In fact, in the last few years, we have seen that the price of oil has a far more significant impact on the province's economy than any other factor and we continue to see this today. In contrast to the impact of the price of oil, the carbon levy is actually quite small in the context of Alberta's \$300 billion economy.

It's necessary to recognize that there are still many thousands of Albertans out of work, men and women who trained for an industry that will likely no longer require their skills. However, to blame this situation on the carbon levy would be misguided. We must find solutions to our unemployment and a carbon levy can actually be a part of that solution.

Economic forecasting by the province predicted that the Climate Leadership Plan as a whole would impact real GDP growth by just 0.75 per cent by 2024, or about 0.1 per cent per year.<sup>6</sup> And so far, if the carbon levy has had any negative impact, it's hard to see it. Employment grew by 1 per cent in 2017 and is forecasted to grow by 1.9 per cent in 2018<sup>7</sup>. By the end of 2017 the unemployment rate was down to 7.0 per cent, from a high of 9 per cent.<sup>8</sup> Retail sales were up by 7.1 per cent,<sup>9</sup> and the consumer price index increased by 1.5 per cent.<sup>10</sup>

**“ Alberta's economy is recovering, so much so that it is the fastest growing province this year.”**

**- Conference Board of Canada <sup>11</sup>**

**“ [Alberta] has begun to attract net migrants from the rest of the country, oil production is growing, the manufacturing sector is bouncing back, and firms are hiring at a good clip again.”**

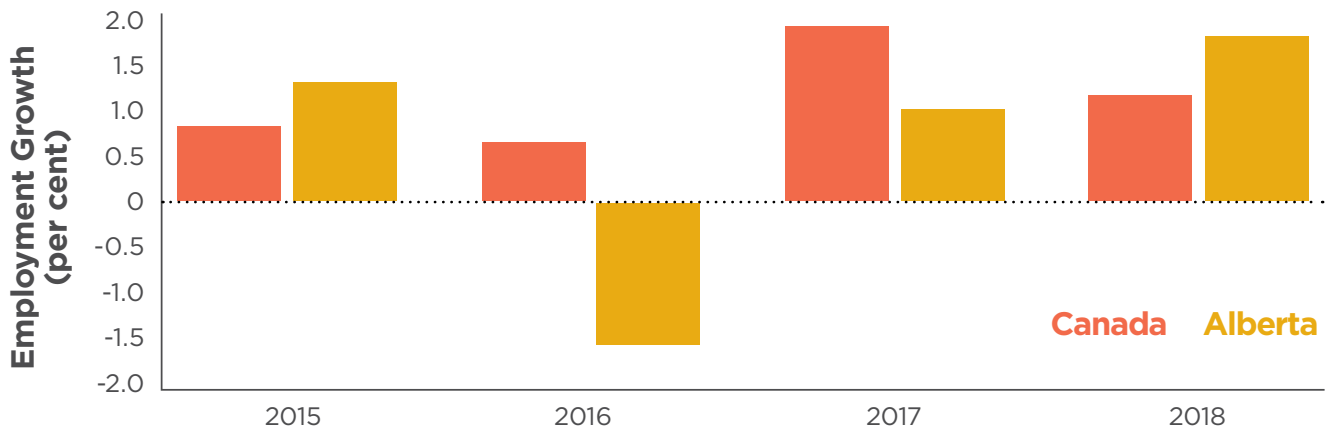
**- Royal Bank of Canada<sup>12</sup>**



Alberta did lose tens of thousands of jobs in 2016, as the graph below shows. But this decrease in employment is largely due to the decrease in the price of oil and happened well before an economy wide price on carbon was in place. In 2017, there was modest growth in employment of 1 per cent, and in 2018 TD Bank forecasts employment growth of 1.8 per cent, the largest employment growth in several years. The point is, Alberta's economy and employment rate has improved since the carbon levy was put into effect.

Alberta is not alone. Four of the five fastest growing economies in Canada – Alberta, B.C., Ontario and Quebec – all had a price on carbon pollution in 2017. These provinces are forecasted to lead the country in growth again in 2018, evidence that putting a price on carbon does not hamper economic activity.

**Figure 1: Employment Growth in Alberta 2015-2018<sup>13</sup>**

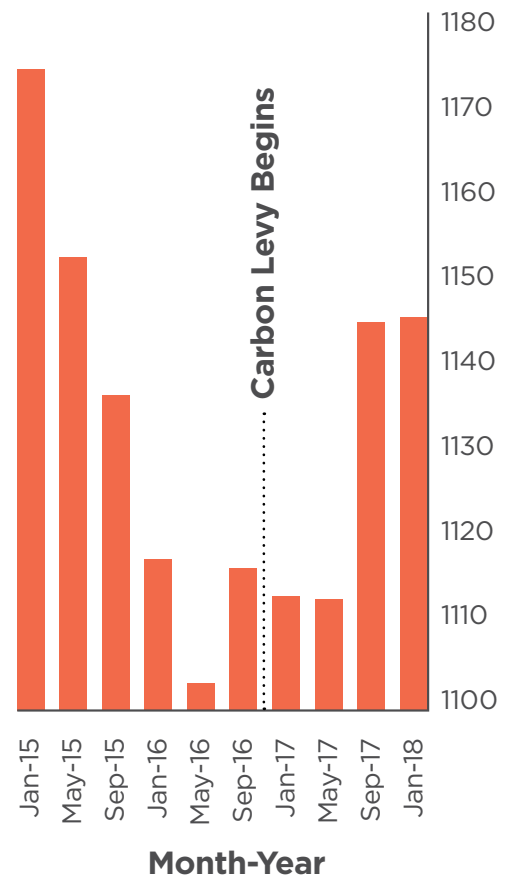


**Figure 2: Real wage growth, weekly earnings 2015-2018<sup>14</sup>**

Real wage growth is climbing back to levels seen at the beginning of 2015, when Alberta entered into a recession. Wage growth has improved steadily since the carbon levy was brought into effect.

To be clear, we are not claiming that the carbon levy is the reason for this wage and job growth, but that there is no evidence it has had a negative impact on the province's economy. Alberta lead the country in growth in 2017 and is projected to be near the top for 2018, if not the leader again. Alberta can have a meaningful price on carbon pollution and maintain a strong economy.

**Weekly Wage**



**There is no evidence the carbon levy has a negative impact on Alberta's economy.**

## 2. WHAT IS THE CLIMATE LEADERSHIP PLAN AND HOW IS IT MOVING ALBERTA FORWARD?

Alberta, like the rest of the world, is faced with the challenge of dramatically reducing its greenhouse gas (GHG) emissions to meet the province's share of action on climate change. These emissions have long been understood to be a major problem, as they contribute to atmospheric warming and the increase of extreme weather events. This challenge is particularly acute in Alberta where emissions have grown from 232.8 megatonnes (Mt) in 2005 to 262.9 Mt of carbon dioxide in 2016.

To begin combating this rising greenhouse gas pollution and to limit the rate at which emissions grow, the government of Alberta implemented a price on carbon for large emitters, the Specified Gas Emitters Regulation (SGER), in 2008. Although a great step in the right direction, and cementing Alberta's place as one of the first provinces, states or territories in North America that priced carbon, the system had its shortcomings. The emission limits for each facility were based on its historic emissions and therefore discriminated against facilities that had fewer emissions to begin with or that had already invested in emissions reductions. It was also perceived as unfair by industry as the burden of the reduction of emissions in the province was on their shoulders, instead of applying an economy-wide price on carbon that makes the whole economy contribute to the emissions reductions targets.

In 2015, a new Alberta government was elected with a mandate to address climate change and its impacts. In order to create the plan, the government convened an expert climate leadership panel to study best practices from around the world and develop recommendations. In addition to consulting with experts, the panel consulted with Albertans through public houses, an online survey, technical sessions and submissions from a variety of stakeholder groups. The panel's work culminated in the publication of a report with recommendations to the government.

In the fall of 2015, the government of Alberta announced the Climate Leadership Plan, which is heavily based on the recommendations of the Climate Leadership Panel. The plan is built on a set of pillars:

- **pricing carbon**
- **ending pollution from coal-fired power**
- **developing more renewable energy**
- **capping oil sands emissions**
- **reducing methane emissions**

This plan was met with approval from the oil and gas industry, indigenous groups and environmentalists for its long range outlook on climate change in Alberta. This plan would raise \$1.5 billion dollars annually that was to be invested into Alberta through energy efficiency programs, public transportation and agricultural support, to help industry and Alberta citizens transition to a low-carbon economy.

### **So, how is the plan progressing? Unevenly.**

It has now been close to two years since the economy-wide carbon price was implemented. Many of the Climate Leadership Plan energy efficiency programs are in place and are being utilized by hundreds of thousands of Albertans. However, the first draft of the methane reduction regulations showed considerable room for improvement. As well, the regulations that would enforce the legislated cap on oil sands emissions have yet to be released. While Alberta is taking good first steps on the road to a low-carbon future there is still work to be done. Let's now take a closer look at the other pieces of the Climate Leadership Plan.

**While Alberta is taking good first steps on the road to a low carbon future there is still work to be done.**

# COAL PHASE-OUT

Coal generation in Alberta is ending. ATCO and TransAlta will have their plants converted from coal to natural gas by 2020 and 2023, respectively. The transition is happening faster than required by law, because of coal's high costs compared to natural gas and renewable energy. The carbon levy allocates \$97 million annually until 2030 supporting the electricity companies to transition their coal generation facilities to natural gas.<sup>15</sup> The coal transition includes assistance to workers to help retrain and find new jobs, as well as supports to the companies for the early retirement of some of their generating plants.

This transition will result in 287 Mts of avoided carbon emissions, and the avoidance of 373 million kilograms of nitrogen oxide and 517 million kilograms of sulphur oxides being released post 2030.<sup>16</sup> The coal transition will save millions of dollars in related healthcare costs due to fewer hospital visits, and will increase worker productivity due to fewer sick days.

Photo Credit: David Dodge, Green Energy Futures





# DEVELOPING RENEWABLE ENERGY

As a part of transition of Alberta's electricity generation away from coal, the Climate Leadership Plan includes a goal of 30 per cent electricity generation from renewables by 2030. Renewable energy can include geothermal, hydro, wind, solar, and sustainable biomass.

The Renewable Energy Program's (REP) first round of its renewable energy auction in December 2017 surpassed its 400 megawatts (MW) goal, with the four successful bids adding nearly 600 MW of wind power to Alberta, enough to power almost 255,000 homes. One of the four winning bids is Alberta-based company Capital Power's 201 MW Whitla Wind Project, located 60 km southwest of Medicine Hat. Capital Power is not new to wind energy; their 150 MW Halkirk Wind Farm was built in 2012.

**These bids set a record low price for renewable energy in Canada at 3.7c/kWh, and will result in \$1 billion in private-sector investments.** To put this in perspective, Ontario's 2016 renewable energy procurement had an average contract price of

8.6c/kWh, with the lowest price of 6.0c/kWh. Alberta's prices were so low that the government was able to procure an additional 200 MW over their initial goal, which is enough power for almost 85,000 homes. These winning bids of the first round of REP will create an estimated 740 jobs.<sup>17</sup>

The second round of REP is underway, and the winning bids will be announced in December 2018. The procurement target is 300 MW for this round. Each proposed project needs to have 25 per cent indigenous ownership, and must be over 5MW. By 2030, an estimated \$10 billion will be invested into the Albertan economy through REP, creating a total of 7000 jobs.<sup>18</sup>



Photo credit: Government of Alberta



Photo credit: David Dodge, Green Energy Futures





## Case Study: Brooks Utility-Scale Solar Project

Western Canada's first utility-scale solar project was built near the town of Brooks in 2017 by the Canadian company Elemental Energy. This solar project covers 78 acres and has a capacity of 17MW, enough power for 3000 homes. To construct it, this \$33.7 million project received almost \$15 million in funding from Emissions Reductions Alberta from SGER, (the previous carbon levy). The electricity produced from this solar farm is sent to a corporate buyer through a corporate off-taker agreement, making this project more economical. This agreement allows the company to receive the Renewable Energy Credits generated from this project, as well as providing the project with a long-term guaranteed income.

Investment in this project has stayed within the community: 90 per cent of the project labour was done by Albertans, with over half of the construction work done by local contractors within 75km of Brooks. The operations and maintenance of this project was also sourced to a local Calgarian company.

While this may be the first utility-scale solar project in Alberta, there are even larger solar projects proposed for in this region due to the sunny climate and transmission line accessibility.<sup>19</sup>

## LIMITING OIL SANDS EMISSIONS

The Oil Sands Advisory Group (OSAG) was created by Premier Notley to come to a consensus on how to implement the cap on oil sands emissions. OSAG was comprised of industry leaders, Indigenous representatives and members of the environmental community (including Environmental Defence), to ensure that all voices were heard in developing a plan to limit pollution from the oil sands.

OSAG submitted its final report to the Premier and to the Minister of the Environment and Parks, but there have not been any regulations or updates provided on how or when this cap will be implemented. At present, the legislated cap on emissions has no directives that give a clear outline of how companies should respond as the industry approaches the 100 Mt limit. Without regulations, it's possible that companies will be able to pollute over the limit. Fortunately, there is still time to get these regulations right, as emissions are not expected to grow to the 100Mt cap until sometime next decade, if ever.



# METHANE REDUCTIONS

The regulations to stop methane leaks at oil and gas sites are the final component of the CLP. The regulations were promised to reduce methane pollution by 45 per cent. However, a first draft of the methane regulations were released in 2018 and, after careful study, they were found to be insufficient to yield the intended 45 per cent reduction.<sup>20</sup> According to experts, Alberta's draft regulations will likely only achieve a 30 per cent reduction in methane emissions.

Methane is a very potent short-lived greenhouse gas, about 84 times more effective at trapping heat in our atmosphere than carbon dioxide over a 20 year period. Stopping methane leaks is also beneficial to Alberta workers and the economy. By eliminating 45 per cent of the methane that is wasted each year, Canada stands to gain about \$9 billion in lost revenue, with most of the benefits in Alberta. These benefits are realized due to the prevention of 235 Mt of carbon emissions, with an estimated climate change cost of \$11.3 billion if this carbon pollution had been emitted between 2018 and 2035.<sup>21</sup> Strong regulations would also mean more jobs checking for and repairing methane leaks, and there are many Alberta-based companies that are keen to do this work.

One example is Calscan Solutions, which started in 1995 as an instrumentation and control company. Headquartered in Edmonton, Calscan has 25 employees over their locations in Edmonton, Calgary and Houston. Calscan develops products for the oil and gas industry to reliably measure and reduce methane emissions.

**“...venting of gas from pneumatic devices used at well sites produces the equivalent of more than 15 million tonnes of carbon dioxide each year in Alberta. Calscan’s BEAR control system can replace all well site pneumatic devices and emits zero emissions.”**

**—Henri Tessier, operations Manager for Calscan<sup>22</sup>**



Photo credit: Clean Air Task Force

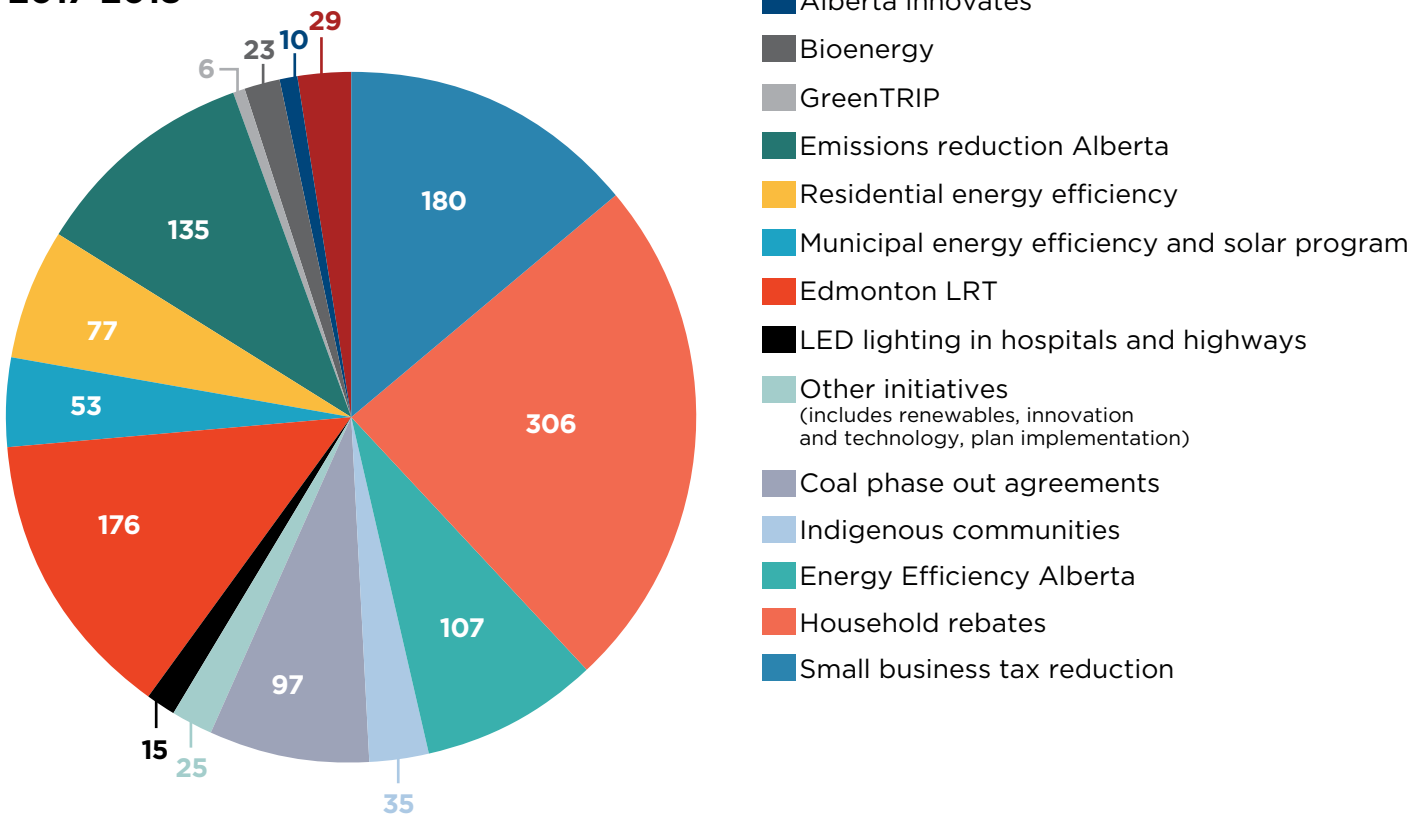
# REVENUE AND SPENDING

As previously noted, in 2008 Alberta first put a price on carbon for large emitters, the Specified Gas Emitters Regulation (SGER). In 2016-2017, SGER's price on carbon raised \$250 million. In 2017, with the introduction of an economy-wide price on carbon, the revenue significantly increased. Between the carbon levy, which raised \$1,046 million, and SGER, which raised \$250 million, a total of \$1,296 million was raised for investment in the Alberta economy in 2017.

In 2018, SGER was replaced with the Carbon Competitiveness Incentive regulation (CCIR). The carbon levy and CCIR targets carbon emissions for both consumers, those who use fossil fuels (approximately 40 percent of Alberta's emissions) and producers, the oil and gas industry (approximately 60 percent of Alberta's emissions).

## SPENDING OF THE REVENUE FROM PRICING CARBON POLLUTION

**Figure 3: Pie chart: Alberta Allocation of Carbon Pricing Revenue in Millions 2017-2018<sup>23</sup>**





## HOUSEHOLD REBATE

To ensure that the carbon levy did not adversely impact Albertans who could least afford it, the CLP contained a rebate to all households that had less than \$95,000 in income in the previous year. This income threshold means that approximately 66 per cent of Albertans will receive a rebate that will be larger than the estimated amount the carbon levy will cost them. The maximum rebate for a couple with a combined income of less than \$95,000 and two children was \$420, while a single individual with an income of less than \$47,500 would receive \$200. A family of four is set to receive \$540 in rebates in 2018.<sup>24</sup>

The carbon rebate is the CLP program that most Albertans will use, as it will be automatically delivered to families and individuals who have filed their previous year's taxes. This program will have an increased impact over time as more people take advantage of other programs – such as the no-charge residential energy program – by lowering their carbon costs and keeping more of the rebate in their pocket.



Photo Credit: David Dodge, Green Energy Futures

**Figure 4: Carbon Levy Costs and Rebates for Households<sup>25</sup>**

		Single	Couple	Couple with two children
Estimated fuel use	Natural Gas use (GJ)	100	123	135
	Gasoline use (L)	2000	3000	4500
Estimated carbon levy costs	Natural Gas Cost	\$152	\$186	\$205
	Gasoline Cost	\$134	\$202	\$303
Total carbon levy costs		\$286	\$388	\$508
Full Rebate		\$300	\$450	\$540

## SMALL BUSINESS TAX CUT

In 2017, \$180 million was used to reduce the small business tax from three per cent to two per cent. This helps ensure that small businesses will thrive even with a carbon price. Alberta's job growth and increase in weekly earnings suggest that the small business tax cut is working.

# ENERGY EFFICIENCY

Energy efficiency programs have the potential to significantly reduce carbon emissions, energy use and energy costs across a wide range of sectors. In January 2017, Energy Efficiency Alberta (EEA) was established. Before this, Alberta was the only jurisdiction in North America without energy efficiency programs. In 2017, \$77 million was put into residential energy efficiency projects, \$15 million was used to change to LED lighting in health facilities and for highways, and \$54 million was put into municipal energy efficiency and solar energy programs.

In 2017 the following programs were launched:

- Residential No-Charge Energy Savings Program
- Residential Retail Products Program
  - Online Rebates
  - Instant Savings
  - Home Improvement Rebates
- Business, Non-Profit and Institutional Energy Savings Program
- Residential and Commercial Solar Program

The demand for these new energy efficiency programs was larger than expected and many programs upon their launch were oversubscribed. Pre-Registration for the Residential No-Charge Energy Saving Program opened in February of 2017. The program saw over 135,800 households sign up.

The Residential No-Charge Energy Savings Program is designed to allow any Albertan to take advantage of it, regardless of housing type. Once an Albertan is registered, they receive a call to set up an appointment for an installer to come to their home and conduct a walk through. The installer then installs the new energy efficiency products in the home at no charge. These products could include LED light bulbs, high-efficiency shower heads, faucet aerators, a smart power bar, and a smart thermostat.

Energy Efficiency programs are saving Albertans energy and money:

- 50,000 households increased their energy efficiency through renovations or energy efficient products.
- Nine million energy efficient products were purchased through the Residential Retail Products Program, generating \$200 million in associated energy savings for Albertans over the lifetime of the products.
- More than 150,000 Alberta households registered for the Residential No Charge Energy Savings Program. When all installations are complete, this will mean energy savings of 700,000 gigajoules annually, and a reduction of more than 20,000 tonnes of greenhouse gas emissions.

That's the equivalent of taking



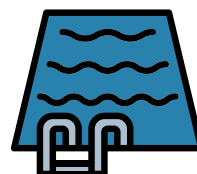
8,000  
CARS

off Alberta roads,  
or enough energy for



5,800  
HOMES

Participating Albertans will also  
have saved almost three million  
litres of water: enough to fill



1,000  
OLYMPIC  
SWIMMING  
POOLS

# INDIGENOUS COMMUNITIES

In 2017, \$35 million was put into solar panel installations, building retrofits, energy audits to support capacity building, and employment programs in Indigenous communities. The following programs were started to support this work: the Alberta Indigenous Climate Capacity Program (AICCP); Green Employment Program (AIGEP); Climate Planning Program (AICPP); and Energy Efficiency Retrofit Program (AIEERP). As well, the Alberta Indigenous Community Energy Program (AICEP) was moved from a pilot program launched in 2016, to a full program in 2017 with \$3 million from the carbon levy fund.<sup>26</sup>

AICCP works to build technical and leadership capacity within indigenous communities. AIGEP provides grant money to support training for indigenous groups or individuals on alternative energy and other technologies that lower carbon emissions. AICPP supports energy efficiency programming and helps communities pursue opportunities in Alberta's new energy economy. AIEERP provides grants to improve energy efficiency for Indigenous communities and organization-owned buildings. These measures include retrofits to reduce energy consumption, costs, and carbon emissions of the buildings. Finally, AICEP grants are available for Indigenous communities and organizations to determine how energy is being used in their buildings, and to identify opportunities to save energy and energy costs through the development of comprehensive building audits.

These programs were successful and in many cases were quickly oversubscribed upon opening.



Photo credit: Government of Alberta



# INFRASTRUCTURE AND PUBLIC TRANSPORTATION

The carbon levy will support the expansion of light rail transit systems (LRT) in both Calgary and Edmonton. In Calgary, the new Green Line will receive \$1.53 billion over eight years. In Edmonton, the first stage of the Valley Line will be funded with \$176 million going to the expansion in 2017.

In other communities across Alberta, the Alberta Community Transit Fund provides municipalities with funding to help expand transit systems, green transit fleets, and increase transit ridership.

The program is merit-based. Projects will be evaluated on the level of regional collaboration that went into developing the project proposal and its environmental, social and economic benefits. The government has allocated \$215 million over five years for this program – with \$115 million coming from carbon levy funds. The program will fund up to 40 per cent of eligible costs for the highest ranked projects and up to 50 per cent of eligible costs for projects that also support the Climate Leadership Plan by significantly reducing GHGs.<sup>27</sup>

Over the next three years, revenue from the carbon levy will also go into government building retrofits to improve the energy efficiency of these buildings.



Artist Rendering of the Misericordia Transit Station, Valley Line LRT Photo credit: City of Edmonton

# INNOVATION AND TECHNOLOGY

Funded through revenues raised from the carbon price on industrial emissions, Emissions Reduction Alberta (ERA) has, to date, invested \$385 million into 129 projects. These projects added over \$1.8 billion to Alberta's GDP and have resulted in 1400 jobs created each year.

Emissions Reductions Alberta (ERA) received \$135 million in 2017 to expand its programming. This included starting a Methane Challenge that focused on doing field pilots and demonstration projects for methane leak detection, monitoring and other similar projects that reduced methane in the oil and gas, power generation, agriculture, and forestry sectors. Through this project, 1.3 Megatons of methane emissions are predicted to be reduced by 2020. The ERA funded 13 projects with \$32.8 Million to target methane emissions.

In 2017, \$10 million went into Alberta Innovates, a program devoted to building the province's research and technology sector, with the aim of diversifying and strengthening Alberta's economy through research and innovation. In addition \$23 million was invested in bioenergy through the BioEnergy Producer Program launched on October 1<sup>st</sup>, 2017. This program provides funding for the production of liquid biofuels and electricity generated through the combustion of biomass and biogas.



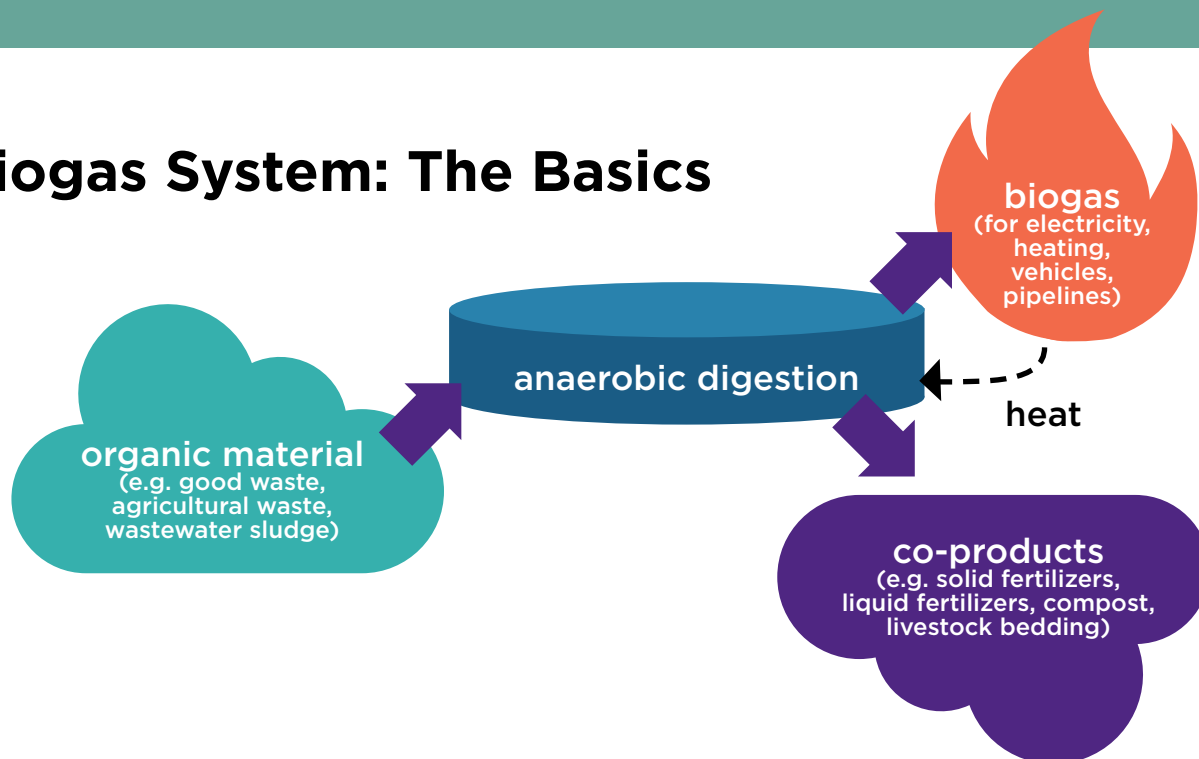
## Case Study: Anaerobic Digestion Facility

One of the projects that received funding from Emissions Reduction Alberta (ERA) was an Anaerobic Digestion Facility built by the City of Edmonton's Waste Management Services in partnership with the University of Alberta. This facility will generate renewable energy from organic materials diverted from landfills.

Once constructed, the digester will divert 48,000 tonnes of organic waste annually. In addition to helping the City of Edmonton reach its goal of increasing its diversion of waste to the landfill from 50 per cent to 90 per cent, it will generate renewable electricity and heat from biogas produced by processing the organic waste. This will reduce greenhouse gas emissions by displacing fossil fuel sources of energy and avoiding landfill methane emissions. Additionally, this facility will complement the existing organics processing done at the Edmonton Composting Facility, which provides high quality compost for use in local agriculture and horticulture.

Of the \$39 million needed to build this project, ERA provided \$10 million. Alberta's Climate Change and Emissions Management Corporation also helped fund the Anaerobic Digestion Facility. This project created 50 jobs in constructing the facility, and approximately 10 full-time jobs in operations and maintenance. The City of Edmonton is leading the world in viewing waste as a resource, and has invested in other innovative processes to increase waste diversion including the world's first industrial-scale waste-to-biofuels facility.<sup>28, 29</sup>

## Biogas System: The Basics





# CAPPING ELECTRICITY PRICES

A cap on electricity prices has been implemented so that consumers are protected against an unexpected spike in electricity prices. The price cap was implemented in June 2017 and limits the price of electricity to rise not higher than 6.8 cents per kilowatt hour. The price of electricity did not reach the threshold of 6.8 cents per kilowatt hour until late 2018, at which time carbon levy funds were used to offset the price of electricity that consumers paid.



## CONCLUSION

Alberta's carbon levy and the Climate Leadership Plan are off to a great start. The carbon price doesn't appear to be impacting Alberta's economy, while it raises a sizeable amount of money to support other key aspects of the Climate Leadership Plan that will ensure that Alberta contributes to the global effort to limit climate change. Many of the programs funded by the carbon levy have been highly successful in their short period of operation and are producing financial savings and preventing waste and pollution. As these programs continue, more and more Albertans will benefit from them and the province's per capita energy usage will continue to decrease. While it is too early to tell if Alberta's emissions are going down, it is clear that the programs put into place are making a difference, especially the popular energy efficiency programs.

However, Albertans need to make sure that the province keeps all its commitments in the Climate Leadership Plan. Programs to reduce emissions have only just begun, and some policies like the 100 Mt cap on oil sands emissions mean growth and not reductions. Alberta needs to add additional policies and regulations that will be critical to move the province towards a low-carbon future. This new-low carbon economy will benefit Albertans and all of Canada for generations to come.

**Many of the programs funded by the carbon levy have been highly successful in their short period of operation and they are producing financial savings and preventing waste and pollution.**

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