



# Target Submission

Corporate Climate Leaders Program



EDMONTON FEDERATION OF  
COMMUNITY LEAGUES

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August 28, 2019

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## Project Background and Scope

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### Project Background

The Corporate Climate Leaders Program was designed by the City of Edmonton to encourage and support Edmonton based corporations, both for-profit and non-profit, in their actions surrounding climate change. The program encourages, celebrates, and aids with carbon reduction resulting from the actions of local companies. The City of Edmonton has recently joined 55 other Canadian municipalities (Random Acts of Green, 2019) and 822 jurisdictions worldwide (Ellsmoor, 2019) in declaring a climate emergency.

The Edmonton Federation of Community Leagues (EFCL) signed onto the Corporate Climate Leaders Program in September 2018. Since joining the program, EFCL staff have attended information sessions with Climate Smart, and, with the assistance of Climate Smart, developed and committed to a GHG emissions reduction plan and set emissions reduction targets for 2025 and 2035. Home to the Green Leagues program, which supports Community Leagues throughout Edmonton in sustainability and renewable energy initiatives, the EFCL has a history of supporting climate action. The EFCL office had a roof-mounted solar photovoltaic array installed in April 2013. The 1.2 kW system produced 1,478.9 kWh in 2018, amounting to roughly 2,306 pounds of CO<sub>2</sub> equivalent (using the U.S. national average of CO<sub>2</sub> equivalent per kWh of electricity produced), or the equivalent of 4,115 km driven by an average sized passenger vehicle. By signing onto the Corporate Climate Leaders Program, the EFCL hopes to go further in our commitment to climate mitigation and become an example for other organizations throughout Edmonton.

### Project Scope

The EFCL has committed to reducing the emissions of our main office building in Queen Alexandra. The previous Energy Transition Officer at the EFCL attended information sessions held by Climate Smart, passing the information learned to the new Energy Transition Officer before leaving the organization. The current Energy Transition Officer has taken up the project, going on to create a reduction plan consisting of reduction strategies covering 3 scopes (explained below) and the following four categories:

- Natural gas
- Electricity use
- Staff commuting
- Paper consumption

This reduction plan informs the GHG reduction targets for 2025 and 2035 committed to by EFCL as part of the Corporate Climate Leadership Program. Using an absolute approach measuring total tonnes of CO<sub>2</sub> equivalent, our Energy Transition Officer used a combination of scientific and bottom-up target setting methodology, described in the GHG Reduction Targets section below. The reduction plan is set to begin in September of this year (2019). The EFCL is dedicated to joining other Corporate Climate Leaders in Edmonton, reducing our GHG emissions and doing our part to prevent a global 1.5 degree temperature increase.

## Data Requirements and Methodology

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The EFCL used January 1, 2018 to December 31, 2018 as our baseline data collection year. Our total GHG emissions for that period were 66.81 tonnes of CO<sub>2</sub> equivalent. A list of data categories and collection methodology can be found below, along with reasons for the exclusion of others.

### Natural Gas

Using data compiled from utility bills from January to December of 2018, it was determined that the EFCL office directly burned a total of 627 GJ worth of natural gas during that period, equating to 32.9479 tonnes of CO<sub>2</sub> equivalent. Natural gas accounts for 49.3% of the EFCL's total emissions.

### Electricity

Using data compiled from utility bills from January to December of 2018, it was determined that the EFCL office consumed a total of 40,059 kWh of electricity in 2018. This was offset by the 1,479 kWh of electricity produced by the roof-mounted solar PV array, resulting in a net consumption of 38,580 kWh, equating to 27.3918 tonnes of CO<sub>2</sub> equivalent. Electricity accounts for 41.0% of the EFCL's total emissions.

### Transportation

Both staff commuting to and from work and business commuting were included in the analysis. Personal staff commuting was calculated based on staff reported commute distances combined with self-reported average vehicle sized (small, medium, large, etc.). Business commuting is reported by kilometer for staff compensation; this was used with the assumption of an average medium sized automobile with a mileage of 10.2L/km to make the calculation. It was determined that the total emissions related to transportation in 2018 equate to 6.2184 tonnes of CO<sub>2</sub> equivalent. This accounts for 9.3% of the EFCL's total emissions.

### Paper Use

Paper use was calculated from office invoices detailing all paper purchases for the EFCL. Emissions were calculated by inputting total paper consumption for 2018 into Climate Smart's emissions calculator. It was determined that paper use accounted for 0.2648 tonnes of CO<sub>2</sub> equivalent in 2018, representing 0.4% of the EFCL's total emissions for that period.

### Waste

The waste produced at the EFCL office is generously collected by the City of Edmonton Parks and Roadways department at no cost. As such, no data on waste production is available. We have therefore excluded waste from the inventory.

### Water Use

Water use was not included in the inventory.

## GHG Baseline Data

Emissions are divided as instructed by the GHG protocol into three scopes. Scope 1 emissions are those produced directly on site. In the case of the EFCL, only natural gas falls into this category, as gas is burned directly on site for heating. Scope 2 emissions are indirect emissions produced elsewhere but directly proportional to energy consumed on site and over which the user has direct control. In the case of the EFCL, only electricity falls into this category, as electricity is directly consumed on site but is produced indirectly and transported via the utility grid. Finally, scope 3 emissions are indirect emissions over which the company does not own or control the emitting activities. In the case of the EFCL, both paper consumption and transportation fall into this category. Scope 3 emissions tend to be more variable than Scope 1 and 2 emissions.

As mentioned, all emissions data was collected from the period beginning January 1, 2018 and ending December 31, 2018, and calculated based on the GHG protocol, using Climate Smart’s online GHG inventory tool.

## Reports for Baseline 2018

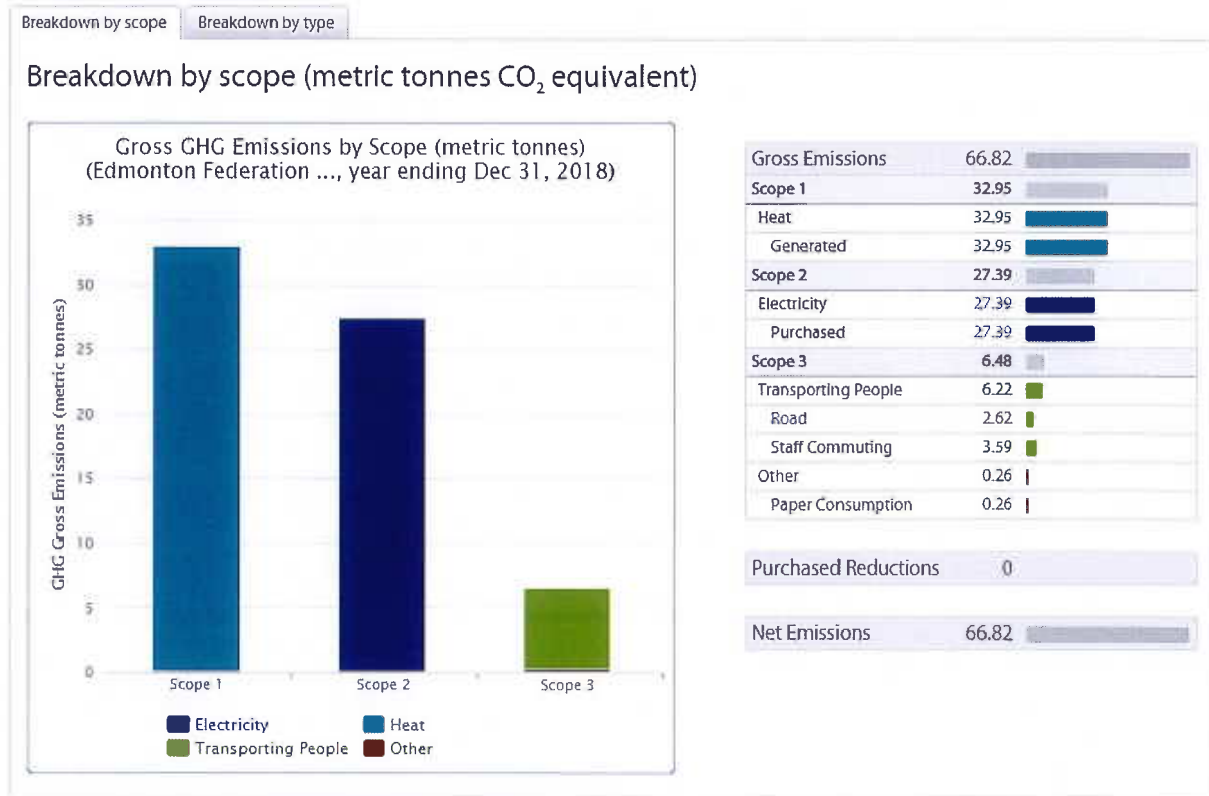


Figure 1: GHG emissions breakdown by scope, with gross GHG emissions measured in metric tonnes displayed in the y-axis and scope on the x-axis. Figures in the table are measured in metric tonnes of CO<sub>2</sub> equivalent.

# Reports for Baseline 2018

Breakdown by scope | Breakdown by type

## Breakdown by type (metric tonnes CO<sub>2</sub> equivalent)

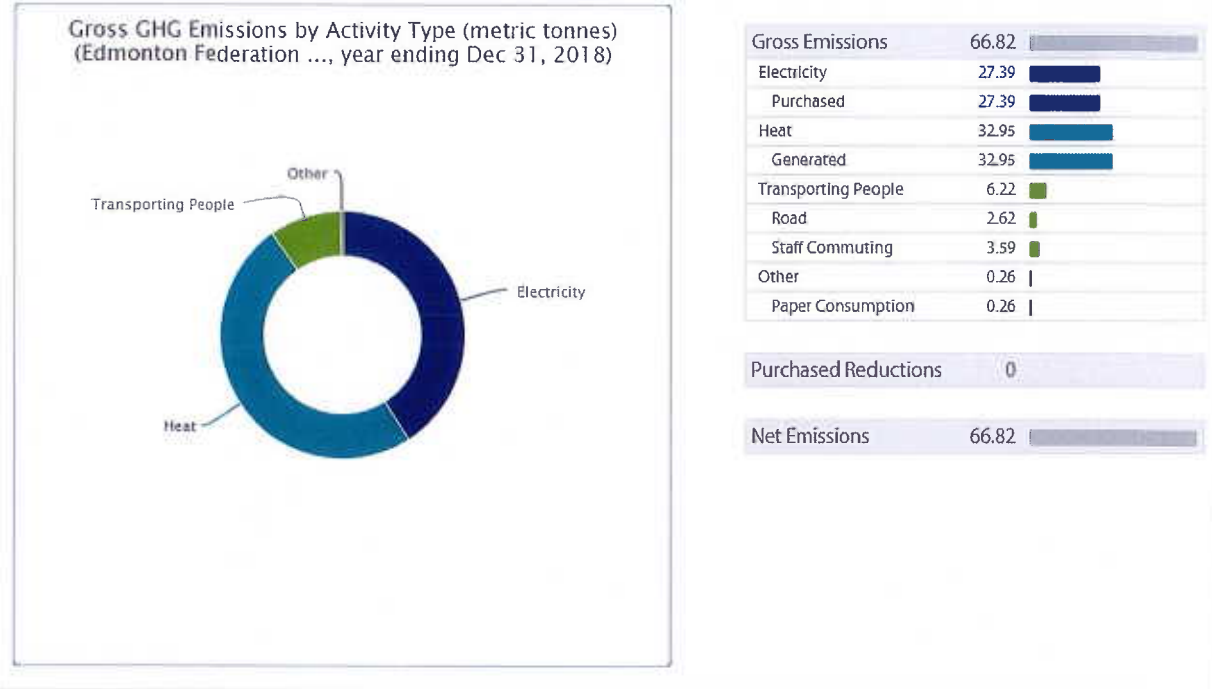


Figure 2: GHG emissions breakdown by type. Figures in the table are measured in metric tonnes of CO<sub>2</sub> equivalent.

## GHG Reduction Targets

### 2025 Reduction Target

10%

### 2035 Reduction Target

50%

Reduction targets were set using a combination of bottom-up and scientific target setting methodology. First, the scientific method was used to determine recommended reduction targets based upon the Science Based Targets Initiative target setting tool. Then, a bottom up approach was taken to determine probable reduction targets based on current reduction strategies and emissions scenarios. Scientific targets were then adjusted to ambitious yet realistic values, and emissions scenarios reduced accordingly. In other words, the approach used was one that met in the middle between realistic scenarios and desired goals. As a result, modest targets were set for 2025, with more ambitious targets for 2035 to be achieved after office relocation. The resulting target breakdown and reduction scenarios can be found below.

### Reduction Target Breakdown

MEASURED AND PROJECTED TOTAL EMISSIONS

■ Actual Inventory ■ Projected Inventory (->2025) ■ Projected Inventory (-> 2035)

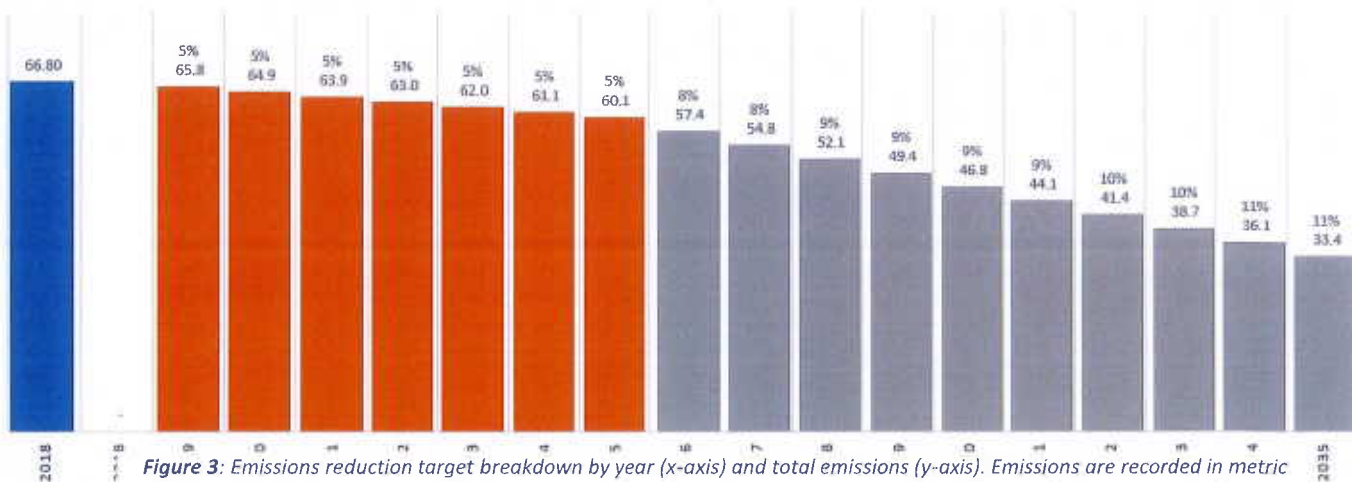


Figure 3: Emissions reduction target breakdown by year (x-axis) and total emissions (y-axis). Emissions are recorded in metric tonnes of CO<sub>2</sub> equivalent, with absolute values displayed below percent reductions from baseline, above each bar.

## 2025 Reduction Scenarios

Table 1: 2025 GHG emission reduction scenarios

<b>The information in this table is used to calculate the baseline</b>			<i>Choose the year for the reductions to be implemented</i>		<b>2025</b>
			<b>Total emissions to reduce to stay within target</b>		<b>6.68</b>
<i>Unit of Emissions</i>			<b>Reductions achieved from the scenario</b>		<b>6.79</b>
<b>Sites</b>	<b>Activity</b>	<b>Emissions</b>	<b>Reductions scenarios %</b>	<b>Reductions to achieve</b>	<b>Target Emissions</b>
Head office	Purchased Electricity	27.39	15%	4.11	23.28
Head office	Generated Heat	32.94	5%	1.65	31.29
Head office	Owned Vehicles	2.62	15%	0.39	2.23
Head office	Staff Commuting	3.59	15%	0.54	3.05
Head office	Paper Consumption	0.26	40%	0.10	0.16

## 2035 Reduction Scenarios

Table 2: 2035 GHG emission reduction scenarios

<b>The information in this table is used to calculate the baseline</b>			<i>Choose the year for the reductions to be implemented</i>		<b>2035</b>
			<b>Total emissions to reduce to stay within target</b>		<b>33.40</b>
<i>Unit of Emissions</i>			<b>Reductions achieved from the scenario</b>		<b>33.49</b>
<b>Sites</b>	<b>Activity</b>	<b>Emissions</b>	<b>Reductions scenarios %</b>	<b>Reductions to achieve</b>	<b>Target Emissions</b>
Head office	Purchased Electricity	27.39	50%	13.70	13.70
Head office	Generated Heat	32.94	55%	18.12	14.82
Head office	Owned Vehicles	2.62	25%	0.66	1.97
Head office	Staff Commuting	3.59	25%	0.90	2.69
Head office	Paper Consumption	0.26	50%	0.13	0.13



## Reduction Plan

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The emissions reduction plan developed will be implemented over the course of the next 2 months and will be reinforced and reviewed continually. The plan will be updated in the future, when the EFCL either:

- a) gains more control over its offices, and can therefore engage in reduction strategies relating to building envelope and building energy conservation measures, or
- b) the EFCL moves to a building with a longer planned lifespan and can then lobby the City of Edmonton to make building envelope upgrades and implement energy conservation measures.

A summary of reduction strategies can be found below. A detailed reduction plan including all reduction strategies, implementation timeline and executive sign-off can be found in **Appendix B**.

### Electricity

- Use standby settings on electronics *Planned: August 2019*
- Set computers to power saving mode *Planned: August 2019*
- Put up signage to remind people to turn off lights *Planned: August 2019*
- Regularly monitor usage through an online account with our utility provider to identify inefficiencies (nighttime or weekend use, etc.) *Planned: September 2019*
- Implement a policy that all office-based equipment and lighting is turned off when not in use *Planned: August 2019*
- Purchase/Install energy efficient office equipment as old ones expire (those owned by us and not the city) *Planned: Ongoing*

### Heat

- Program thermostat to turn heat down when building is unoccupied *Considering: August 2019*
- Include building energy efficiency in selection criteria when moving to a new building (as far as it is in our control to do so) *Planned: Date TBD*

### Transportation

- Engage employees to consider lower carbon modes of travel when possible for business trips *Implemented*
- Promote carpooling to work by installing a ride share board or facilitating participation in a local carpooling program *Considering: September 2019*
- Provide bicycle parking *Implemented*

- Pre-purchase transit tickets for staff  
*Implemented*
- Encourage carpooling for business trips  
*Planned: September 2019*

## Paper

- Put up signage to increase staff paper awareness  
*Planned: August 2019*
- Reduce paper consumption (e.g. limiting handout use during office meetings, using white board or projector to write out agendas, etc.)  
*Implemented*
- Set computer defaults to double-sided printing  
*Planned: August 2019*
- Switch from paper to electronic invoicing  
*Implemented*
- Switch from paper to electronic file storage  
*Implemented*
- Employ a fax to email service  
*Considering: September 2019*
- Track and report on office paper use  
*Planned: September 2019*
- Purchase paper with recycled content  
*Considering: September 2019*
- Purchase wheat-straw paper  
*Considering: September 2019*

## Employee Engagement

- Communicate to staff why your company is getting Climate Smart certified and how they can get involved  
*Implemented*
- Solicit ideas for greening operations from staff (e.g. via a green suggestion box or inbox)  
*Considering: September 2019*
- Install a green board to communicate GHG emissions reduction initiatives and other sustainability-related activities  
*Considering: September 2019*
- Develop and include sustainability policy in operations and/or employee manual  
*Considering*
- Regularly report to staff on GHG emissions reduction initiatives and progress  
*Planned: Ongoing*

## Future Reduction Strategies

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A new Edmonton Leisure Centre is slated to be built in the field to the South of Strathcona High School in the near future. As a result, the EFCL offices will be demolished to make room for additional green space, and the EFCL will be moving location. The EFCL will attempt to include energy utilization index in the relocation choice criteria, as far as EFCL staff have the capacity to influence the relocation decision. The relocation will also provide an opportunity to update the current reduction plan to include reduction strategies relating to building envelope and energy conservation measures, with the possible addition of a new solar photovoltaic array, should funding be available.



## Sign-Off

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The Greenhouse Gas Target Submission was prepared by the Edmonton Federation of Community Leagues and submitted by

A handwritten signature in black ink, appearing to read 'Laura Cunningham-Shpeley', is written over a horizontal line.

Laura Cunningham-Shpeley, Executive Director

September 5, 2019

## References

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Alannah. (2019, April 3). Random Acts of Green. 55 Canadian Municipalities have Declared a Climate Emergency. Retrieved from <https://raog.ca/2019/04/03/40-canadian-municipalities-have-declared-a-climate-emergency/>

Ellsmoor, J. (2019, July 20). Climate Emergency Declarations: How Cities Are Leading The Charge. Retrieved from <https://www.forbes.com/sites/jamesellsmoor/2019/07/20/climate-emergency-declarations-how-cities-are-leading-the-charge/#51ada5e24f14>

# Edmonton Federation of Community Leagues

Greenhouse Gas Emissions Report for the 2018 Calendar Year

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January 1, 2018 to December 31, 2018



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## Key terms

For further terms, see Climate Smart's [online glossary](#).

**Baseline GHG Emissions Inventory:** A comprehensive, quantified list of an organization's greenhouse gas emissions and sources for the initial reporting year (base year). The baseline GHG inventory is the level of greenhouse gas emissions against which future GHG inventories are compared.

**Biologically sequestered carbon:** Long-term carbon stored in biomass, such as forests, soils and peatland. Carbon is "locked" into organic matter through biological processes. This carbon can be released through e.g. burning of biomass as fuel or change in land use.

**Carbon Dioxide Equivalent (CO<sub>2</sub>e):** The universal unit for comparing the emissions from various greenhouse gases. The carbon dioxide equivalent for a gas is derived by multiplying the mass of the gas by the associated global warming potential (GWP). For example, the GWP for methane is 21. This means that emissions of one metric tonne of methane are equivalent to the emissions of 21 metric tonnes of carbon dioxide.

**Carbon Offset:** A project or activity that results in a given amount of greenhouse gases being avoided or reduced in one place, that is used to 'balance out' another's total GHG emissions. Emission reductions that are real, additional (beyond business as usual), measurable, permanent, and verified can generate offset credits. Credits are tradable certificates.

**Emission Factor:** A factor that converts activity data to GHG emission values, e.g. lbs of carbon dioxide emitted per barrel of fossil fuel consumed.

**Renewable energy certificates (RECs):** RECs are tradable energy certificates representing proof that 1 megawatt-hour (MWh) of electricity was generated from an eligible renewable energy resource (e.g. solar or wind) and was fed into the electricity grid.

## Climate Smart at a glance

Climate Smart is an award-winning certified B Corp that has developed a practical and solutions-based program for SMEs to **profitably track and reduce GHG emissions**. Climate Smart emphasizes the business case for GHG reduction: **operational efficiencies, cost savings, and competitive advantage**.

Using an SME tailored approach, Climate Smart provides **innovative tools and programming** for our "host partners" on the front lines—cities, ports, airports, chambers, and financial institutions—to disrupt old economic trajectories and invest in more efficient technologies to deliver cleaner products and services.

Since 2007, Climate Smart has worked with 40+ host partners to engage close to 1000 businesses to prepare for and participate in the low-carbon economy. **Case studies** from a sampling of 78 Climate Smart businesses show a total **annual cost savings of \$2.6 million**.

Climate Smart also links SMEs to global impacts through harnessing the power of SME derived data to inform estimates of emissions from SMEs at different geographical scales, through our **Business Energy and Emissions Profiles (BEEPs)**. Climate Smart was awarded the Grand Prize in the **2016 MIT Climate CoLab contest** and was judges' choice in 2018 for our BEEPs. We have produced BEEPs for cities across Canada and the US. Our goal is to produce 100 BEEPs across North America.

**950+**

Climate Smart certified businesses to date (trained or in training)

**5,148,000+**

Total emissions measured by Climate Smart to date, in tonnes (t) CO<sub>2</sub>e

**21%**

Average reduction if businesses see a reduction between two years

**\$397**

Projected cost savings to a business, per tonne CO<sub>2</sub>e reduced

1

measure

2

reduce

3

leverage



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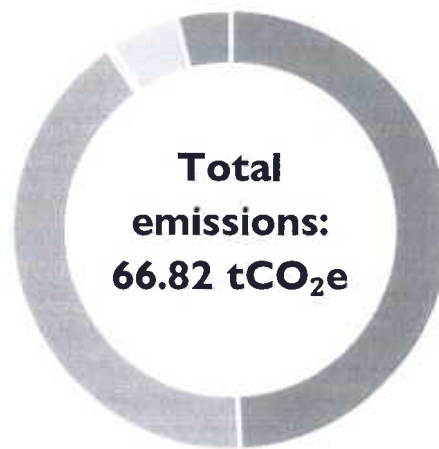
# Edmonton Federation of Community Leagues's 2018 calendar year carbon footprint

This report details the greenhouse gas emissions footprint for Edmonton Federation of Community Leagues during the 2018 calendar year, including the breakdown of emissions by source activity and EFCL's plan to reduce their emissions going forwards. This report and inventory were compiled in compliance with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard, Revised Edition.

EFCL are working to reduce their GHG emissions from:

- electricity
- paper
- &
- staff engagement

Total emissions for the 2018 calendar year by activity



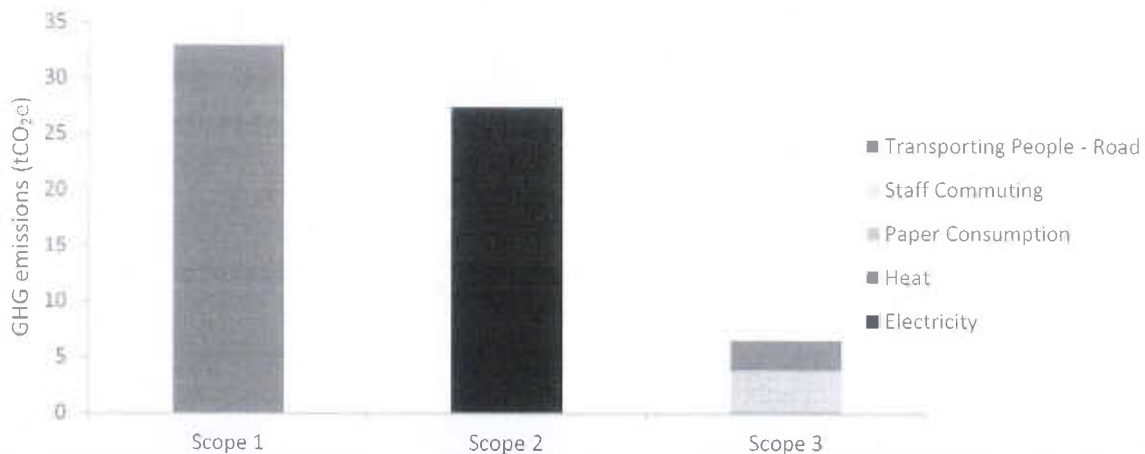
- Scope 1 Heat
- Scope 2 Electricity
- Scope 3 Paper Consumption
- Scope 3 Staff Commuting
- Scope 3 Transporting People - Road

EFCL's GHG emissions in their 2018 baseline year are equivalent to 14 passenger vehicles driven for one year<sup>1</sup>.

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Total emissions by scope





## Analysis

Edmonton Federation of Community Leagues ("EFCL") measured its first greenhouse gas inventory with Climate Smart for the 2018 calendar year (January 1, 2018 to December 31, 2018) and recorded emissions of 66.82 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e). Overall, EFCL's largest emissions sources were electricity (41%) and heat (49%). EFCL is Climate Smart certified for 2019.

The following sections present the breakdown of EFCL's emissions for their 2018 calendar year inventory by scope, as well as details of any emissions of CO<sub>2</sub> from combustion of biologically sequestered carbon and purchased offsets and renewable energy certificates (RECs).

### Scope 1

Scope 1 emissions totalled 32.95 tCO<sub>2</sub>e in EFCL's 2018 calendar year:

Activity	Baseline 2018	% of emissions
<b>Scope 1</b>		
Heat	32.95	49%
<b>Grand Total</b>	<b>32.95</b>	<b>49%</b>

### Scope 2

Scope 2 emissions totalled 27.39 tCO<sub>2</sub>e in EFCL's 2018 calendar year:

Activity	Baseline 2018	% of emissions
<b>Scope 2</b>		
Electricity	27.39	41%
<b>Grand Total</b>	<b>27.39</b>	<b>41%</b>

### Market based emission factors

The 2015 [GHG Protocol Scope 2 guidance](#) requires companies to report their Scope 2 emissions in two ways: **location-based** (reflecting grid emission factors), and **market-based** (using supplier specific emissions factors and/or those from contractual instruments such as renewable energy certificates - RECs). The table below shows emissions from purchased electricity calculated using these two methods. Note that location-based values are shown on the emissions summary charts presented in this report.

	Total kWh	Category of instruments	kWh	Total tCO <sub>2</sub> e
Location-based Calculation <sup>1</sup>	38,580	Edmonton Emission Factor	38,580	27.39
Supplier Specific Market-based Calculation <sup>2</sup>		Alberta Emission Factor	38,850	35.58

<sup>1</sup> Emission Factor based on emission factors supplied to Climate Smart by the City of Edmonton

<sup>2</sup> Emission Factor based on Environment and Climate Change Canada: National Inventory Report, 2016.

## Scope 3

Scope 3 emissions totalled 6.48 tCO<sub>2</sub>e in EFCL's 2018 calendar year:

Activity	Baseline 2018	% of emissions
<b>Scope 3</b>		
Transporting People - Road	2.62	4%
Staff Commuting	3.59	5%
Paper Consumption	0.26	0%
<b>Grand Total</b>	<b>6.48</b>	<b>10%</b>

## Offsets & renewable energy certificates

EFCL has not purchased offsets or renewable energy certificates for their 2018 inventory year.



## EFCL's emissions reduction plan

Based on their 2018 calendar year inventory, EFCL will work to minimize their emissions by focusing on strategies aimed at electricity, paper use, and staff engagement. EFCL's current reduction plan is shown below.

Category	Strategy	Considering	Planned	Implemented
Electricity	Make use of natural lighting as much as possible			
	Use standby settings on electronics		Aug 2019	
	Set computers to power saving mode		Aug 2019	
	Put up signage to help people remember to turn off lights and equipment		Aug 2019	
	Regularly monitor your usage through your online account with your utility provider to identify inefficiencies		Sept 2019	
	Implement a policy that all office-based equipment and lighting is turned off when not in use		Aug 2019	
	Purchase/install energy efficient office equipment as old ones expire			
Heat	Check settings on programmable thermostats (if installed) so that heat is turned down in the evenings and on weekends	Aug 2019		
	Include building energy efficiency in selection criteria when moving to a new building.			
Transportation	Engage employees to consider lower carbon modes of travel where possible for business trips			
	Promote carpooling to work by installing a ride share board or facilitating participating in local carpooling program	Sept 2019		
	Provide bicycle parking		Oct 2019	
	Pre purchase transit tickets for staff			
Paper	Encourage carpooling for business trips		Sept 2019	
	Put up signage to increase staff paper awareness		Aug 2019	
	Reduce paper consumption during meetings			
	Re-use paper			
	Set computer defaults to double-sided printing		Aug 2019	
	Switch from paper to electronic invoicing, where possible			
	Switch from paper to electronic file storage			
	Employ a fax to email service	Sept 2019		
Employee engagement	Track and report on office paper use		Sept 2019	
	Purchase paper with recycled content	Sept 2019		
	Purchase wheat-straw paper	Sept 2019		
	Communicate to staff why your company is getting Climate Smart certified and how they can get involved			2019
	Solicit ideas for greening operations from staff	Sept 2019		



Category	Strategy	Considering	Planned	Implemented
	Install a green board to communicate GHG emissions reduction initiatives and other sustainability-related activities	Sept 2019		
	Develop and include sustainability policy in operations and/or employee manual			
	Regularly report to staff on GHG emissions reduction initiatives and progress			



## Methodology

As a Climate Smart certified business, EFCL conducted its GHG emissions inventory according to the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard, Revised Edition. The GHG Protocol is an internationally recognized standard published by the World Resources Institute and the World Business Council on Sustainable Development.

## Organizational Boundaries

EFCL used the operational control approach to determine its organizational boundary and included in its inventory all operations over which it has operational control.

## Inventory Boundaries

The GHG Protocol requires the inclusion of Scope 1 and 2 emissions, and suggests including Scope 3 emissions from activities relevant to an organization's business and goals, and for which reliable data can be obtained. EFCL included emissions from the following activities under Scopes 1, 2 and 3:

- **Scope 1:** includes direct GHG emissions from sources that are owned or controlled by the reporting company or organization
  - Natural gas heating
- **Scope 2:** includes indirect GHG emissions from purchased electricity and purchased heat
  - purchased electricity
- **Scope 3:** includes indirect GHG emissions that are consequences of the reporting company's operations but occur at sources owned by another company
  - road business travel;
  - paper consumption; and
  - staff commuting.

Scope 3 emissions from delivery of goods and waste were excluded from the inventory.

## Emission factors

This inventory was conducted using the emissions factors from the Climate Smart web-based greenhouse gas management tool. The Climate Smart GHG management tool was designed for adherence to the GHG Protocol. Climate Smart's emission factors come from a variety of sources, such as Environment Canada, the GHG Protocol Initiative, the US Environmental Protection Agency and the Intergovernmental Panel on Climate Change. Climate Smart reviews its emission factors annually to update them based on refined industry methodology and changing electricity grids.

Climate Smart also acknowledges that complete adherence to the Protocol requires the six major greenhouse gases to be accounted for separately, and is working towards adding this feature at a future date. Further details on Climate Smart's emission factors, their sources, and methodology for updating them are available upon request to [info@climatesmartbusiness.com](mailto:info@climatesmartbusiness.com).



## Sources of data included

EFCL used the following sources of data to estimate their greenhouse gas emissions for the 2018 calendar year:

Activity	Data source
Electricity > Purchased	The total kilowatt-hours of electricity used, based on utility bills, were entered into the Climate Smart software tool.
Heat > Generated	The total giga-joules of natural gas used were entered based on utility bills.
Transporting People > Vehicles owned by others > Road	Estimate by distance by vehicle type was entered to estimate total fuel consumed.
Staff Commuting	The distance commuted by each mode of transport was entered based on staff commuting survey.
Paper Consumption	The paper type, paper bond weight, number of reams used and post-consumer recycled content were entered. The paperweight and paper type were entered into the paper calculator ( <a href="http://papercalculator.org">http://papercalculator.org</a> ) to calculate emissions.

Prepared on: September 3, 2019  
Prepared by: Marianne Pemberton (Client Advisor)  
Prepared for:  
Michael Barnard, Energy Transition Office  
Laura Cunningham-Shepley, Executive Director  
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# Greenhouse Gas Emissions Reduction Plan

## WELCOME

Company Name : Edmonton Federation of Community Leagues  
 Respondent's Name : Michael Barnard

## ELECTRICITY

### BEHAVIOUR CHANGE

	STATUS			MONTH	YEAR
	Considering	Planned	Implemented		
Make use of natural lighting as much as possible			X		
Use standby settings on electronics		X		August	2019
Set computers to power saving mode (detailed instructions <a href="#">here</a> )		X		August	2019
Put up signage to help people remember to turn off lights and equipment (Climate Smart can provide signage)		X		August	2019
Regularly monitor your usage through your online account with your utility provider to identify inefficiencies (night-time or weekend use, etc.)		X		September	2019
Implement a policy that all office based equipment and lighting is turned off when not in use (including computers, copiers, fax machines, etc.)		X		August	2019
Implement a policy that all non-office based equipment is turned off when not in use (including compressors and other machinery)					


### EQUIPMENT & LIGHTING

	STATUS			MONTH	YEAR
	Considering	Planned	Implemented		
Replace incandescent lightbulbs with compact fluorescent lightbulbs (CFL)					
Replace incandescent lightbulbs with light-emitting diodes (LED)					
Replace fluorescent tube lighting with LED tubes					
Replace older fluorescent lighting with higher-efficiency models (such as T-8, T-5)					
Purchase / install energy efficient office equipment as old ones expire (fridges, copiers, etc.)		X			
Replace desktop computers with laptops at their end of life					
Install occupancy sensors in common areas					
Use variable-frequency drives (VFD) to improve efficiency					

## HEAT

### BEHAVIOUR CHANGE

	STATUS			MONTH	YEAR
	Considering	Planned	Implemented		
Ensure bay doors in warehouses and workshops are closed when not in use					
Implement a regular maintenance program					
Check settings on programmable thermostats (if installed) so that heat is turned down in the evenings and on weekends	X			August	2019
Conduct a FortisBC Commercial Energy Assessment (~\$300)					

 Please record any additional heat focussed strategies and notes (if applicable) along with their status and timeline:

#### DESCRIPTION

Include building energy efficiency in selection criteria when moving to a new building.

#### STATUS

Planned

#### MONTH

June

#### YEAR

2025

## TRANSPORTATION



 EMPLOYEE COMMUTE & BUSINESS TRAVEL

	STATUS			MONTH	YEAR
	Considering	Planned	Implemented		
Engage employees to consider lower carbon modes of travel where possible for business trips (e.g. taking the ferry, train or bus instead of flying)			X		
Promote carpooling to work by installing a ride share board or facilitating participating in local carpooling program	X			September	2019
Promote public transit by providing (discounted) transit passes to employees					
Allow employees to telecommute					
Reduce business travel through the use of teleconferencing / videoconferencing					
Participate in Ride-to-Work Week or similar programs					
Provide bicycle parking		X		October	2019
Provide EV charging station(s)					
Provide shower facilities					
Provide change room(s)					

 Please record any additional transportation focussed strategies and notes (if applicable) along with their status and timeline:

**DESCRIPTION**

Pre-purchase transit tickets for staff

**STATUS**

Implemented

**MONTH**

**YEAR**

**DESCRIPTION**

Encourage carpooling for business trips

**STATUS**

Planned

**MONTH**

September

**YEAR**

2019

**PAPER**

 PAPER MANAGEMENT

	STATUS			MONTH	YEAR
	Considering	Planned	Implemented		
Put up signage to increase staff paper awareness		X		August	2019
Reduce paper consumption (e.g. limiting handout use during office meetings, using white board or projector to write out agendas, etc.)			X		
Re-use paper					
Set computer defaults to double-sided printing		X		August	2019
Switch from paper to electronic invoicing, where possible			X		
Switch from paper to electronic file storage			X		
Employ a fax to email service (i.e. <a href="http://efax.ca">efax.ca</a> )	X			September	2019
Track and report on office paper use		X		September	2019
Purchase paper with recycled content	X			September	2019
Purchase wheat-straw paper	X			September	2019

**EMPLOYEE ENGAGEMENT**

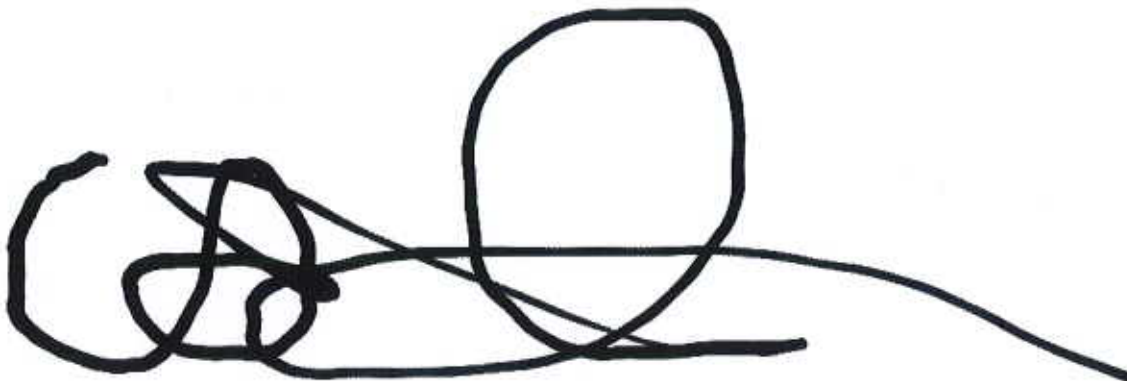
**EMPLOYEE ENGAGEMENT STRATEGIES**

	STATUS			MONTH	YEAR
	Considering	Planned	Implemented		
Communicate to staff why your company is getting Climate Smart certified and how they can get involved			X		2019
Solicit ideas for greening operations from staff (e.g. via a green suggestions box or inbox)	X			September	2019
Install a green board to communicate GHG emissions reduction initiatives and other sustainability-related activities	X			September	2019
Establish an employee green team to help develop and coordinate GHG emissions reduction initiatives					
Develop and include sustainability policy in operations and/or employee manual	X				
Regularly report to staff on GHG emissions reduction initiatives and progress			X		
Build sustainability into employees' performance metrics					
Include sustainability as a metric for executive compensation					

**SIGN-OFF**

Climate Smart certification requires the reduction plan to be approved by a senior decision-maker in the organization. Please have a senior decision maker in your company insert their name and title below. For more details on the Climate Smart certification requirements, please visit [climatesmartbusiness.com/certification](http://climatesmartbusiness.com/certification)

On behalf of Edmonton Federation of Community Leagues, I approve the above Greenhouse Gas Emissions Reduction Plan and commit to supporting its implementation.



Signature of: Colin Johnson

Approved and signed by -  
Job Title

Governance And Programs Senior Director

Date of approval

15.08.2019