# GREEN OFFICE INITIATIVE



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# **About FOKABS**

FOKABS is a Canada-based climate change and sustainability consulting firm operating under the Canadian Business Number 936942-2. FOKABS has three permanent offices: branches located in Yaoundé – Cameroon and Ouagadougou – Burkina Faso, and our main office located in Ottawa – Canada. The presence of the company can be felt globally, undertaking projects in more than 65 countries in nearly every continent.



We specialize in: mid-term review and final evaluation for projects and programs; conducting baseline studies; private sector investment in nationally determined contributions (NDC) and green initiatives; technology needs assessment (TNA); climate vulnerability and risk assessment; climate change mitigation and adaptation; forest; environment; REDD+; payment for ecosystem services; sustainable consumption and production; agriculture; agroforestry; energy; international negotiations; climate finance; value chains; climate mainstreaming; capacity building; bankable project preparation, and rural development.

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# **COMPANY VALUES**

Vision



Our Vision is to build greener communities by providing leadership in sustainability practices in our services and products

**Mission** 



Our Mission is to advance low-carbon and climate-resilient development

**Openness** 



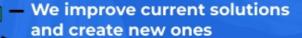
We collaborate and partner with others to find lasting solutions

**Integrity** 



We work with respect for one another through our sound judgement, and professionalism

**Innovation** 



Sustainability



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## BACKGROUND

#### **Climate Change**

The United Nations (UN) defines climate change as the long-term shifts in global weather patterns that have been altered because of human activities that create harmful greenhouse gas emissions such as burning coal, oil, and gas (United Nations, 2021). Unless mitigation and adaptation efforts are put in place to address climate change, its effects are projected to become more severe as time passes. To help combat the effects of climate change, FOKABS seeks to build greener resilient communities by providing leadership in sustainability practices through our services and products. This includes the introduction of climate risk management to ensure that our environmental goals can be achieved. Implementation of climate risk management practices improves the efficiency and effectiveness of sustainability projects. This would reduce the amount of time and resources required to carry out the project, as well as reduce the negative environment impacts incurred in regular business operations.



#### What is a Green Office Initiative?

Green Office Initiatives (GOI) are becoming more popular with the rise of environmental responsibility. GOI are intended to address all aspects of the office that can be improved through a sustainability lens, such as building construction and maintenance, waste management, resource consumption, and employee participation and training. Buildings account for nearly 40% of global CO2 emissions, which is why it is essential to improve building construction and management (Architecture 2030, n.d.). There are also organizations that have created accredited programs awarding certifications to buildings and companies that implement a core value of sustainability throughout the workplace. This then helps organizations acquire clients and attract high value employees to improve the future intellectual capital of the organization. Buildings account for a massive amount of both domestic and international emissions and therefore, FOKABS is taking responsibility in our own building operations. An important aspect of the GOI is the element of employee participation, as this allows for sustainable practices at work to be brought back to the homes of employees, dramatically increasing the area of effect of the environmentally responsible lifestyle promoted by FOKABS.



## **FOKABS GOI**

Our GOI is a set of actionable goals and targets that will lower our environmental impact and contribute to a greener community. Implementing the GOI at our Canada office will act as a steppingstone towards larger scales of influence and building our brand, including environmental education in schools, for clients, and on national and international levels. Furthermore, FOKABS will be implementing a phased approach to include all offices. Our Canada office will share findings and best practices with the Cameroon and Burkina Faso offices, thus broadening our impact to a global scale. This initiative directly ties in with our values, such as sustainability, where we strive to create positive social, economic, and environmental impacts through our actions and practices.

The GOI will act as a roadmap for meeting the "E" in ESG, by setting environmental targets as part of our ESG plan. ESG represents a set of environmental, social, and governance standards that encompass the risks and opportunities of a company to create long-term positive value by addressing climate change and resource scarcity (environment), gender and cultural diversity (social), and business transparency (governance) issues (PwC, n.d.). Environmental targets set by the GOI will allow FOKABS to work towards environmental stewardship and corporate social responsibility (CSR) through routine assessments to track ongoing performance of key performance indicators and metrics. Factors considered include greenhouse gas emissions, energy efficiency, waste management, and resource use. With this in mind, the goals of the FOKABS GOI are to:



Achieve carbon neutrality/ net zero carbon emissions by the end of 2025



Improve waste management in our offices (garbage, plastics, and compost)



Improve energy efficiency in our offices

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# **FOKABS GOI**

## **Energy Reduction and Consumption**

Implementing everyday actions in the office can contribute to a significant reduction in energy usage in the long term. This includes actions such as lowering thermostats both when in the office as well as when the office is closed, turning off and unplugging appliances when not in use, and turning lights off in unoccupied areas. Although the short-term elements are relatively small in impact, they pave the way for more ambitious future projects. These would include high energy efficiency appliances such as electronics, and heating and cooling systems as well as the future potential for generating office electricity through solar power. As a result, the future projects will help FOKABS become more sustainable while also lowering monthly electricity costs.



## **Consumption and Waste Management**

Cost effectively reducing consumption is one of the easiest steppingstones toward our environmental goals, which is why all office consumption will be monitored. This includes finding ways to buy in bulk to allow for reusable packaging and have the chance to eliminate single-use plastics. Additional ways to cost effectively reduce consumption include choosing local and ethical sources that reduce transportation-related emissions, as well as considering the social responsibility of our consumption habits.

There are a variety of waste-related objectives that FOKABS is planning to implement to reduce all forms of waste (garbage, plastic, and compostable). Transitioning waste from landfill to recycling is beneficial, but the goal is to reduce waste everywhere so that as little is thrown away as possible. A comprehensive waste disposal system will be put in place in the kitchen area to ensure the effective use of garbage, recycling, and compost programs.





# **FOKABS GOI**

## Landscaping and Ground Management

This area invited innovation from the entire team to tackle the goal of transforming the office space. The GOI team plans to propose a company garden in the outdoor green space, contingent on landowner approval, which will include garden boxes to grow fruits and vegetables. With the company garden, employees will be able to grow their own food and learn how to maintain a garden.





### **Sustainable Cleaning Supplies**

To address the single-use property of cleaning supplies, the GOI will create a sustainable system for soaps and detergents with the help of local businesses that allow for re-filling of personal bottles. With products such as paper towels however, it is much more difficult considering the current situation of the COVID-19 pandemic. While single-use materials are needed to reduce the spread of the bacteria, they are also harmful to the environment. Therefore, recycled, and sustainable paper towel options will be used so that the office is able to consider both environmental and health responsibility.

## Employee Impact and Promotion of Sustainable Lifestyle

It is at the core of the GOI to make environmentally conscious decisions that help reduce the greenhouse gas (GHG) emissions that come from the daily practices at the office. This also extends to creating environmentally friendly choices that can be brought home by employees, thus increasing the positive environmental impact of the GOI.



# **BASELINE DATA**



Small to medium enterprises (SMEs), such as FOKABS, collectively contribute significantly to global GHG emissions, though they are often overlooked. It is therefore crucial for all enterprises to attempt to reduce carbon emissions, set science-based targets, and track their impact on the climate and the environment. For companies to determine areas of improvement in terms of carbon emission reduction, a baseline inventory must first be developed. A baseline inventory can provide insight into the parts of the business operations that are contributing the most to overall emissions and waste, thus allowing the company to identify solutions to address them (The Climate Registry, n.d.). Quantifying and reporting the companywide emissions and waste into a baseline inventory can provide other benefits to the company, such as improving its reputation, improving energy efficiency, and reducing long-term energy expenses. First, in order to report a baseline inventory, FOKABS must establish reporting boundaries. This includes determining which operations, facilities and sources are relevant to the overall carbon footprint of the company. For instance, the reporting boundaries for FOKABS will be the Canadian office and then can be expanded to our other offices as the GOI develops further. After this, the company will collect activity data by measuring each source of emission and waste being produced within reporting boundaries. Types of relevant activity data for our GOI include records of fuel consumption, distance travelled to and from work as well as plane travel, energy bills, and plastic and garbage waste. Once the activity data is collected, the raw emissions from the emission sources are then calculated. The amount of each gas activity will be recorded, and then multiplied by the appropriate emission factors. Emission factors are metrics that describe how much of a GHG is emitted based on a measurable quantity of an activity, 141 gCO2/kWh). To determine the heat trapping impact of each activity, the raw emissions data will be converted into tonnes of CO2 equivalent (eCO2t) by multiplying each emission activity by the global warming potential (GWP) values of each respective gas (The Climate Registry, n.d.).

For this project, baseline data will be collected to understand the current carbon footprint of the office, and to uncover areas of improvement. Data will be collected for amounts of waste, recycling (paper and plastic), electricity, and carbon emissions from each employee commute. From this data the GOI will calculate the CO2 emissions for each activity and employee in the office.



## **Goal 1 - Carbon Neutrality**

To accomplish net zero carbon emissions at our Canadian office, we must first establish the initial baseline for all the relevant activities from each goal, by applying the information collected in our baseline inventory. These emission activities include transportation of each staff member from the office (car, bus, etc.), and the average monthly energy consumption of the office. Measurements of FOKABS' energy usage will be included in our Scope 2 and 3 emission activities.

## **Goal 2 - Energy Efficiency**

Since energy usage has indirect emissions through energy creation and consumption, finding ways to reduce FOKABS' energy use and improve its energy efficiency is crucial for creating a sustainable workplace at the various offices. An initial baseline inventory needs to be established by measuring the average monthly energy consumption prior to the implementation of any target activities.



# FOKABS GOALS AND ACTIVITIES



## **Goal 3 - Improve Waste Management**

Since FOKABS is planning to reduce all forms of waste, a comprehensive waste disposal system will be put in place to ensure the effective disposal of garbage and recyclable items. To reduce the overall garbage waste produced by our Canadian office, constant monitoring and evaluation must be completed. To determine the baseline of this goal, the overall weight of weekly garbage waste being produced by the office measured is the only relevant activity. Similar to the goal of reducing garbage waste, an initial baseline for all the relevant activities of plastic waste will be established by measuring the weight of weekly waste from recyclable plastics. The same baseline will be measured for the weekly waste from recycled paper.

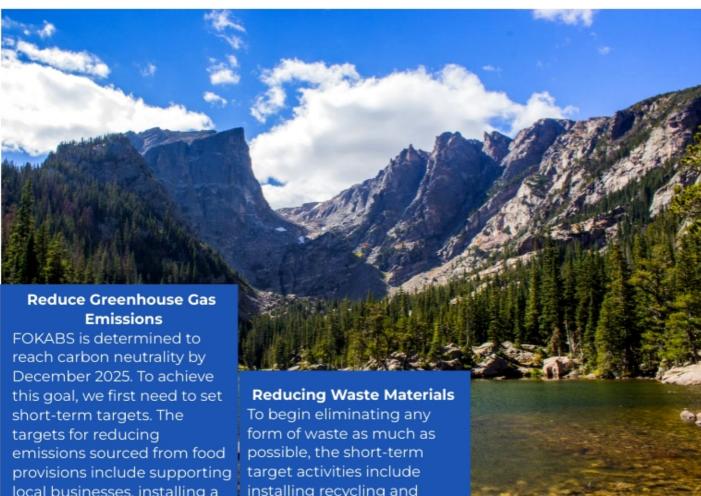
## **Goal 4 - Environmental Education**

Working with local schools, universities, and education centers will allow FOKABS to engage with local communities and to promote sustainable lifestyles. Our key actions include offering presentations and workshops on climate change and environmental issues in schools as well as engaging with local community activities to promote sustainable development. It is through these actions that Fokabs will create positive change within local communities in the form of environmental education.

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# **SHORT-TERM ACTIVITIES**



local businesses, installing a Brita faucet filtering system to eliminate waste from plastic water bottles, and installing a waste bin to separate garbage waste from recycling materials. To reach targets associated with emissions from energy use, activities include unplugging devices and appliances when not in use, adjusting thermostat temperature depending on the season, and keeping doors and windows closed while the heater or air conditioning is

installing recycling and compost bins, switching to food products that use less plastic for packaging, and purchasing refillable products (e.g., soap, cleaning products etc.) to reduce plastic waste. Other activities such as avoiding overpurchasing food products to reduce unnecessary waste and ensuring that most (if not all) of the food products are fully consumed before package materials are disposed of are effective ways to reduce overall waste.

As mentioned in the carbon neutrality short-term activities, unplugging devices and appliances when not in use, adjusting thermostat temperature depending on the season, and keeping doors and windows closed while heater or air conditioning is running are all easily implementable solutions to begin reducing FOKABS' energy usage.



## **MID-TERM ACTIVITIES**

#### Office Projects and Implementations

In the mid-term time scale. FOKABS has broadened the scope of Goal #1 to include the reduction of all greenhouse gases, in addition to reducing carbon emissions. The midterm goals for reducing GHG emissions at the office include the creation of an outdoor garden in the office courtyard or personal home garden as a means for sustainable production of fruits and vegetables to reduce the amount of food bought at grocery stores. This garden, in conjunction with installing bike racks, promotes more sustainable lifestyles by lessening food and plastic consumption, and lowering emissions emitted by cars. FOKABS chose to emphasize support for alternative transportation methods, as carpooling or choosing to bike to work can reduce around 1000 g/CO2 per day (Table 1).



### Improve Waste Management

The aforementioned company and personal gardens address waste management because it will reduce some of the waste accumulated by grocery shopping. The growth of local fruits and vegetables reduces the waste from grocery stores and emissions that come from the transportation of the food from other regions. With the implementation of the office/home garden. water consumption is expected to increase; to address this increase, rain collection barrels will be installed to capture and use the rainwater for both outdoor and indoor plants. The office will also be providing reusable water bottles to reduce waste created through the use and manufacturing of bottled water. Additionally, an electronic waste collection system will be introduced to properly dispose and recycle old or broken electronics with either private or public entities within the city of Ottawa. This collection system also extends to items such as Brita filters,

# Sustainable Building Design

One of the main goals of improving energy efficiency is to eventually become LEED (Leadership in Energy and Environmental Design) certified to highlight achievements in the office toward becoming a sustainable workplace. LEED certified buildings are accredited by the Canadian federal government and are often eligible for tax breaks and incentives.



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pens, and batteries.



# **LONG-TERM ACTIVITIES**



#### **Achieve Carbon Neutrality**

The long-term goals for reducing GHG emissions include the installation of electric vehicle chargers in the parking lot of the office and solar panels on the roof of the building to reduce the amount of fossil fuel powered electricity sources and reducing operational costs. Completing these goals will also help FOKABS achieve the goal of acquiring a LEED certification for the Ottawa office. Given the longer time frame required to implement such large projects, FOKABS has set a goal to complete this aspect of the GOI by the end of 2025.

#### Reduce Long-Term Consumption

Many of the long-term goals proposed are related to the continuation of monitoring and recording both landfill and recycling waste. The office will also eliminate all single-use items in the kitchen apart from items required to comply with COVID-19 considerations. FOKABS will also be purchasing second-hand electronics, when possible, to reuse electronics that require rare earth metals to be produced. FOKABS has set a goal to complete this aspect of the GOI by the end of 2023.

#### Reduce Energy Dependency

The largest element of this plan is to achieve LEED certification and install methods of sustainable energy procurement through solar panels and efficient devices to lower the overall demand of energy for the office. It is estimated that over the lifetime of around 30 years the solar panel will save the owners nearly \$20,000 from energy production (Haliburton Solar & Wind, 2020). The installation of solar panels will act as a steppingstone towards sustainable development while also helping to save operational costs.





## LIMITATIONS

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Many of the limitations of this proposed GOI are related to the extra considerations put in place due to the COVID-19 pandemic. An example of this can be seen in decisions made to eliminate single-use paper towels in the office bathroom for washing hands. However, during the COVID-19 pandemic, this causes possible exposure to the virus between coworkers, which does not follow health and safety guidelines. Although there are possibilities to implement more environmentally responsible options, they were not feasible considering the health guidelines.



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