

## **Deliverable B-Client Needs Identification**

GNG1103-D03

25/01/2020

Professor Muslim Majeed

Presented by :

Aleksandar Plackoski, 300074474

Joshua Coutinho, 300117908

Carter Ingalls, 300114073

Adrian Fournier, 300062441

Xinyan Jiang, 300049676



uOttawa

University of Ottawa

## Introduction

After hearing from the client, our team has identified several needs in the creation of a hydroponic greenhouse for a rural Québec community. The following table summarizes and prioritizes these needs.

## Needs Statement

*Table 1 - Client needs*

| Needs   | Weight (out of 5) |
|---|-------------------|
| Water collection and reuse                              | 5                 |
| Electricity generation                                  | 5                 |
| Durable to extreme weather conditions (ice, rain, cold) | 4                 |
| Heat generation for cold months                         | 3                 |
| Grow plants to feed up to 5 adults                      | 5                 |
| Should not be harmful to wildlife                       | 2                 |
| Protection from wildlife                                | 4                 |
| Cost should be under 500 \$                             | 2                 |
| Must withstand weight of snow                           | 4                 |
| Transportable   | 4                 |
| Minimal labour and low-cost maintenance                 | 3                 |
| Educational for youth in the community                  | 1                 |

## Problem Statement

Our client requires a transportable, weather-resistant greenhouse that can feed up to five people while needing minimal maintenance, being self-powered, and automatically watered. The greenhouse should be low-cost while remaining easy to use.