**Mission Statement**

We are currently in an age of transition. Technology and energy are both aspects of human life that we seek to attain, reproduce, and refine for the benefit of civilization. With the slow transition from fossil fuels to renewable energies, it is important for everyone to know and understand exactly how renewable energies benefit them.

With the growing availability and continued cost reductions of solar technology in particular, more and more people around the globe are investing in this technology for both the financial and environmental benefits. The rooftop of a building is a prime location to collect solar energy for the purpose of electricity generation. This electricity can be used to power buildings within our community more sustainably and has the added benefit of reducing electricity costs! Our mission with GoSolar is to give the people of Ottawa an estimate into the solar energy their roof receives to better inform them on the power-generating potential of their rooftop.

**App Information**

Included in this app are three different data layers: Summer Solstice Data, Equinox Data (incoming solar radiation would be approximately the same for both equinox’s), and Winter Solstice Data. Each layer contains the building footprints within Ottawa. For each building footprint there is data on the amount of incoming solar radiation received over a 24-hour period in Watt Hours per square-metre. This information is then used to calculate how much electricity could be generated by a single standard residential panel on that day. A single standard residential panel is assumed to have an area of 1.65 square metres and have an efficiency of 18%.