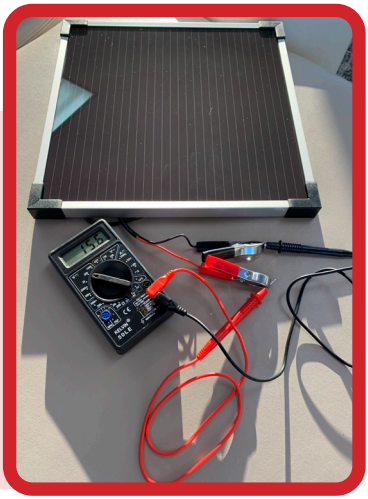
SOLAR

How to set up your solar panel:

1. Place your solar panel facing the sun
2. Connect the cord on the back of the solar panel to the cord with the red and black clips
3. Set your multimeter:
   - Place the black multimeter lead into the 'COM' port and the red multimeter lead into the 'VΩmA' port
   - Set the multimeter dial to measure DC voltage at 20V range
     *(*set to 20 because if you check the specifications on the back of the solar panel, it reads 12V. The multimeter should be set at a range above what's indicated on the solar panel)*
4. Secure the red and black clips onto the respective multimeter leads
5. Read the output displayed on the multimeter
6. Adjust the solar panel to maximize output. Some factors to compare include:
   - **Outside vs. inside**
   - **Window type**
   - **Panel angle**
   - **Time of day**

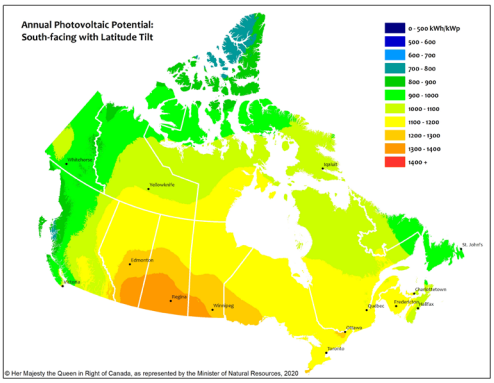


Follow-Up Questions:

1. What was the optimal set up of your solar panel?
2. Storage is an essential component of solar energy. Typically a battery would be attached to a solar panel like this so the electricity can be used at any time. How could you attach a battery to this solar panel set up?
3. How would you scale something like this up to provide power for your school or home?

What is going on with solar energy in Alberta?

Solar energy is on the rise in Alberta! Check out this map to see that Alberta and Saskatchewan have the highest solar potential of all of the Canadian provinces and territories.



(source: Natural Resources Canada)

In Alberta, most buildings with solar panels are still connected to the electricity grid. This means that even when the sun isn't shining, electricity is taken from the grid to power the building, and when an excess amount of solar electricity is being generated, it is sold back to the grid.

Travers Solar Project

- At 465 megawatts (MW), Greengate Power's Travers Solar Project near Vulcan, Alberta is the largest solar farm in Canada.
- Construction finished in 2022 and under optimal conditions, it will generate enough electricity to power over 150,000 Albertan homes.
- Learn more here: ***https://majorprojects.alberta.ca/details/Travers-Solar-Project/3656***

Residential Solar Rebates

- The Municipal Climate Change Action Center (MCCAC) provides funding for community solar projects.
- The federal government rolled out the Canada Greener Homes Grant in May 2020, which provides homeowners up to $5000[18] for energy efficient retrofits, such as solar panels.
- Solar Alberta's Alberta Solar Map shows where solar projects are located across the province - check it out to see if any are near you! ***https://solaralberta.ca/go-solar/case-studies/***