

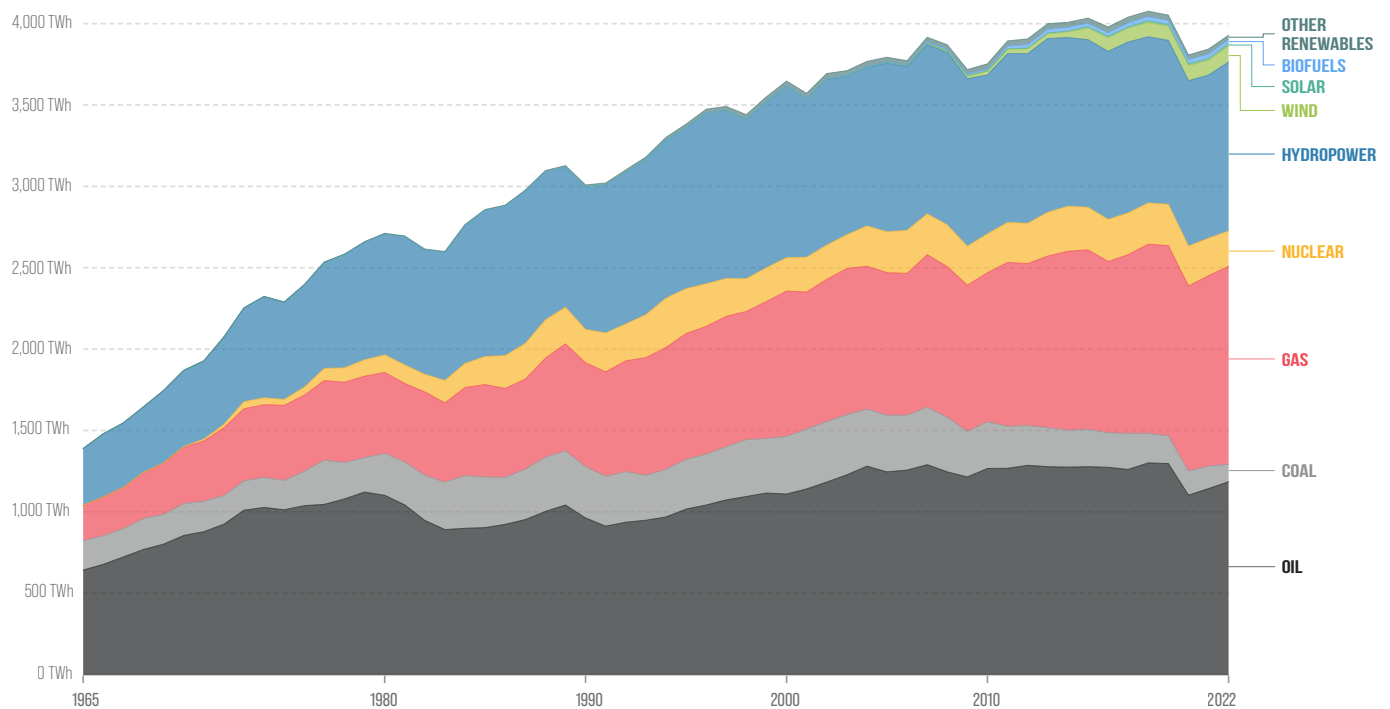
# CLEAN ENERGY FACILITY TOUR

Organizing a trip to your closest clean energy facility provides you with an immersive experience to better understand the intricacies of clean energy production, as well as the individual and community-level actions required to increase the scale and impact of these centers.

## ▶ IMPACT

### Energy consumption by source, Canada

Primary energy consumption is measured in terawatt-hours (TWh). It has been calculated using the substitution method<sup>1</sup>, which adjusts non-fossil sources for the inefficiency of fossil fuel equivalents.



Data source: Energy Institute Statistical Review of World Energy (2023) Note: 'Other renewables' includes geothermal, biomass and waste energy.

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According to the Government of Canada [Energy Maps \(2021\)](#), “Canada is the fifth largest energy producer in the world and the eighth largest consumer of energy.” Canada’s [energy mix](#) consists of a variety of fossil fuel sources, namely oil, natural gas, petroleum, and coal, as well as other cleaner sources such as hydroelectricity, nuclear power, wind, solar, and geothermal energy.

This action is all about focusing on the nearest clean energy source or treatment facility to your community so that you can learn more about its associated environmental and social impacts. If you are unsure what types of energy

sources you can visit, here is a list of some options that may be accessible to you:

- **District energy** systems
- **Biomass** facilities
- **Wastewater treatment** plants
- Solar or wind farms
- Renewable **energy storage** labs
- **Hydropower** dams
- **Nuclear energy** plants

The energy facilities listed above are just examples of the types of places you can visit, of course, you know your community best and can research what your city is best known for in terms of sustainable energy production or treatment. One important note to mention is that while some of these facilities are technically considered renewable, some of them may also be harmful to the surrounding neighborhoods. For example, hydropower is considered a **clean source of energy**, however, the potential for the release of emissions, **dam flooding, and overall land seized** from local communities for construction can result in devastating social and health impacts. Therefore, it is important to use this tour as an opportunity to investigate the pros and cons of some of these facilities and to determine how you can help to raise awareness and support those facilities that are aligned with your values as well as Canada's net-zero goals.

If visiting a facility is not available to you, you can reach out to the leaders of clean energy projects in and around

your community to learn more about their organizations and how their work contributes to Canada's climate goals. For inspiration on who to reach out to, you can visit the **ImaGENation website** to learn more about Indigenous youth-led clean energy projects, as well as the **Guided Projects** page on the Student Energy website as starting points.

Aside from highlighting the social and community impacts of clean energy production, visiting an energy facility near you can also improve your awareness of the wider energy system in Canada and how that specific type of energy production fits (or doesn't) into a feasible pathway to achieving net-zero emissions by 2030. Additionally, the information learned during this site tour can highlight other opportunities for you to get involved – this can include writing a letter to your city official, Member of Parliament, or even asking at the facility how you can support its production. These actions can go a long way in terms of advocating for more clean energy facilities in your area.

## ▶ HOW TO ORGANIZE AN ENERGY FACILITY TOUR

### ▶ STEP 1: PRELIMINARY PLANNING

- Research the clean energy facilities in and around your community
- Contact friends, co-workers, neighbors, or others in your community to see if they would be interested in joining your site visit
- Create a list of sites or facilities that are open to the public
- Contact them to see if you can organize a tour

### ▶ STEP 2: PREPARE FOR YOUR ENERGY FACILITY VISIT

- Continue your research on the energy sources in your community, try to read, watch videos, or listen to podcasts on the environmental, social, and economic impacts of this particular source of clean energy

- Come up with a list of questions and or goals for your site visit - you will want to be intentional about your time there, and planning ahead will help you get the most out of your trip

### ▶ STEP 3: TRACK YOUR IMPACT

- Bring a notebook with you to write down anything interesting that you see or learn during your visit
- Look into any on-going campaigns, that you can sign and share with the others. This is a great way for people to take action on issues right away!
- Write a reflection about your experience and share it on social media
- Take photos throughout the event and share them along with your impact results on social media and feel free to share your results and photos with us at [research@studentenergy.org](mailto:research@studentenergy.org) so we can see your awesome work!

Have fun!

## ▶ REFERENCES

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