

## What is a carbon footprint?

Just like muddy boots leave footprints on a clean floor, we leave traces of everything we do on the planet. This is called our carbon footprint. It's the amount of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases (GHGs) released because of the things we use or do.

While you can't see it, the planet definitely feels it. The bigger the footprint, the worse it is for the planet.



## What adds to our carbon footprint?

Everything has a carbon footprint. When we use things, their carbon footprint gets added to ours. Our footprint grows as we heat our homes and drive our cars. Even the water we use, the food we eat, and the products we buy add to our footprint.

Our carbon footprint can also get bigger when we buy things. That's because GHGs were probably released when those things were being made. GHGs are also released during travel. That means something made farther away has a bigger footprint than something made close to home. This even includes food!

It can be hard to figure out the carbon footprint of some things. Your trash, for example, is pretty tricky. That's why carbon footprints give us a good idea of our impact, but they aren't perfect.





### Did you know

In 2021, Canada's Carbon Footprint was **670 megatonnes**.

That means the weight of the GHGs that Canada released into the air was equal to the weight of **670 million cows!**



### Did you know...

If everyone in the world had the same carbon footprint as the average Canadian, we would need 5 Earths!

### What does a big carbon footprint mean for the planet?

Having a big carbon footprint is bad for the planet. It means lots of GHGs have been released. People aren't the only ones with carbon footprints. Countries and industries have them too, and their footprints can be HUGE!

These GHGs aren't a good thing. When they're in the air, they trap heat from the sun. This can cause the weather in an area to change over time. It can make things hotter, colder, wetter, or drier. The changes are called climate change, and they can lead to big problems.

Right now, we are seeing more sea ice melting and oceans getting warmer. Climate Change makes weather events like storms and heat waves more dangerous. It can also cause flooding in some towns and cities. These changes can hurt animals, plants, and people.





## The Role of Industries

Canada is a special place with lots of natural resources. These are things like oil, gas, minerals, and metals, which we get from the earth. Canada has used these natural resources for a long time to make lots of things, including energy.

The energy industry is really important for Canada's economy. It helps make money and creates jobs. But it's also one of the biggest causes of climate change.

In Canada, more than **80% of GHGs** come from how we make and use energy<sup>1</sup>. Let's take a closer look:



**26% of emissions** are released from actions like taking oil and gas from the ground and making electricity and heat.



**13% of emissions** are released from homes and offices.



**26% of emissions** are released by cars, buses, trucks, and planes.



**9% of emissions** are released from factories where things like plastics, chemicals, fertilisers, and other things are made.



**7% of emissions** are those that escape during actions like drilling and mining for resources.



Canada has set big goals to lower the amount of GHGs we release into the air. By the year 2030, Canada aims to lower GHGs by 40-45% compared to what they were in 2005. By 2050, Canada aims to get to net-zero GHG emissions. That means not releasing more of these gases into the environment.

To reach these goals, it will be important for everyone to work together. Industries, businesses, and governments all have a big role in protecting our planet.

### Did you know...

Canada releases a lot of GHGs. It is ranked as the 10th highest GHG emitting country in the world!

<sup>1</sup>International Energy Agency, Canada 2022 <https://www.iea.org/reports/canada-2022/executive-summary>

## How can we keep our own carbon footprint small?



### Let's work together!

There are lots of easy and fun ways to make our carbon footprint smaller! Working together is the next step. Ask for help from family and friends, but don't stop there. Getting local stores, community groups, and governments on board will help make things even better!

Find out your carbon footprint with the **Carbon Footprint Calculator!** Learn what actions you can take to make it smaller.