The internet's dirty carbon secret

We all know that using one-use products such as plastic bottles, coffee cups and plastic bags contribute to the release of greenhouse gases and have dire consequences on the environment but what do we know how our internet use is damaging our planet?

Although it's widely understood how electricity plays a huge role in the climate catastrophe, many are unaware of just how much their individual internet use contributes to this. Truth is, there is a huge amount of CO2 emissions generated through our internet use and the devices that we own are *constantly* on! Meaning that the CO2 emissions emitted from them never stop or have a break. A study by the Boston Consulting Group found that combining all of the world's smartphones, laptops, desktops and devices emits around one billion tonnes of greenhouse gases a year which works out as 2% of the world's total emissions.

How internet use produces a carbon footprint

So, how does the internet emit CO2? The huge amount of cables, mobile networks, satellites and data centres across the world powering the internet all use electricity and fuel that emit CO2 emissions and London has the biggest concentration of data centres in any given city in the world. The internet, quite shockingly, has a higher carbon footprint than the aviation industry.

Each form of online activity carries its own carbon footprint and sadly, when used at the capacity that we collectively use them, none of them is small. Digital currency Bitcoin is a form of cryptocurrency that annually consumes up to 45.8 TWh of electricity which emits 22.0 to 22.9 metric tons of CO2, equivalent to the emissions produced by countries Jordan and Sri Lanka each year.

A 2016 study from the University of Bristol found that watching over a billion hours on YouTube resulted in around 11.13 million tons of carbon dioxide being emitted over a year. UK credit company Credit Angel found that each Google search emits 0.2g of CO2, sending an email emits 4g of CO2 and a tweet emits 0.02g of CO2 emissions, which is an enormous amount when you take into account collective world usage. Even a quiet night in watching Netflix produces millions of tonnes of CO2 each year. In 2018, Netflix usage accounted for 300m tonnes of carbon dioxide globally, which is as much as Spain emits in a year.

Reducing your online carbon footprint isn't that difficult

There are many very simple ways to reduce your online carbon footprint. Setting your computer to go into sleep mode when you're not using in for a while and using a lower brightness or night mode will help reduce energy. Downloading videos and music as opposed to streaming them will also help lower the overall energy that your device uses.

Using search engine Ecosia that plants a tree for every search is a fantastic way to offset your carbon footprint as is having less mobile and computer upgrades and keeping devices for a longer period of time. When you're ready for an upgrade, recycle opposed to throwing devices away. When it comes to emails, unsubscribe from newsletters that you don't find useful and block repeated junk mail. Only send emails that you absolutely need to, do you really need to send an email to someone in your office when you're in the same room as them?

Discover Ecosia

Read also

---

8 alternatives to Google

Businesses that wish to reduce their online carbon footprint could use this calculator to discover how much CO2 their website emits as well as get useful tips on how to reduce the amount. When it comes to conducting business online, a simpler design produces less CO2, so creating websites that are as minimal as possible will help to lower your carbon footprint.

Avoiding clickbait and using SEO effectively to create useful content that readers won't click on and then leave also helps to reduce CO2 emissions as it reduces the number of people who simply open and close a website without staying on. Switching to green web hosts such as GreenGeeks, DreamHost and HostPapa will also significantly reduce the carbon footprint produced by your website.

Making change is possible

Big businesses are also taking action to reduce the amount of CO2 emissions emitted due to internet use. Apple has made it one of its missions to lessen its global carbon footprint. In 2018 they reached a milestone of being powered by 100% renewable energy across the world. This includes Apple's retail stores, offices and data centres in 43 countries including the UK, America, China and India. This means that the company uses power from solar panels, wind farms, biogas fuel cells and other emerging technologies.

Likewise, Google achieved 100% renewable energy for its global operations in 2017. This is implemented across the company's data centres and offices using wind and solar electricity. Facebook is also focusing on using more renewable energy sources across their data centres. This year, they aim to reduce greenhouse gas emissions by 75% from what they emitted in 2017.

The online world is one that will never slow down. With new devices, faster connections and new forms of social media fueling the way we work, communicate and indulge in leisure activities, we must turn our intentions on drastically reducing internet usage and opting for more sustainable methods of using it.

The positive is news that the world is moving in the right direction towards understanding the internet's part in climate change and some of the biggest global companies, responsible for much of the internet's carbon footprint are implementing renewable resources. In support of this, internet users need to apply small changes to their online usage that will create a big impact over time and in the long run.

Article by TALI RAMSEY