# What the Hell is Net Zero?

Debunking the Mystery

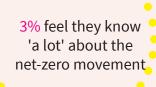
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## 64% of the UK Public are unaware of Net Zero as a concept

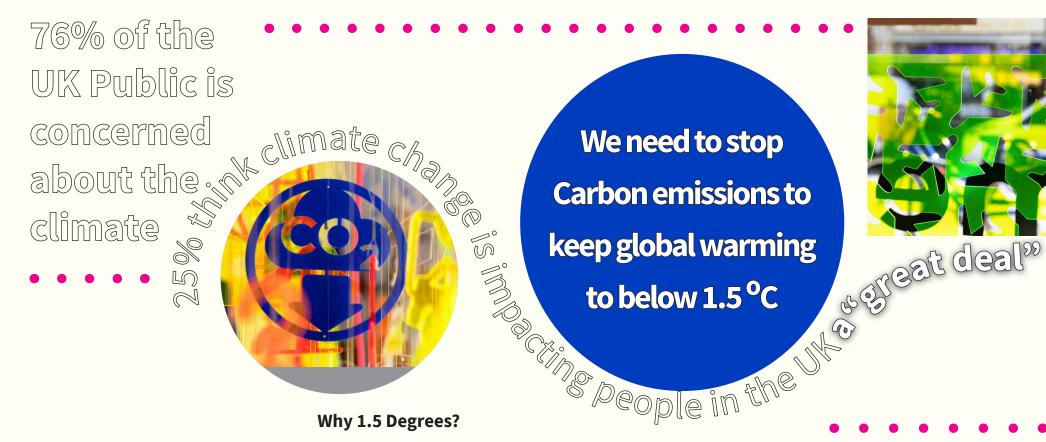
A government survey of more than 1,800 UK citizens has found that the public is largely unaware of the net zero movement and what that means for the UK, despite more than three quarters of citizens being concerned about climate change.



To keep global warming in check we need to reach NET ZERO CARBON EMISSIONS BY 2050.



UK emissions have fallen by 38%, but globally have increased by 60%. As a country we are going in the right direction, but we all have to make a change if we are to meet the 2050 target.



Why 1.5 Degrees?

Climate change is wreaking havoc on our wildlife and habitats, and impacting eople's lives and homes, here and around the world. But what we've experienced so far is nothing compared to what warming of 2°C could look like, and the damage it could have on a global scale.

The difference between 1.5 degrees and 2 degrees might not seem much, but the difference for people and nature will be huge. Limiting global warming to 1.5°C means 1.3 billion fewer people exposed to extreme heatwaves, and 60 million fewer people to droughts. It means the chance to protect up to 30 per cent of coral reefs versus the near certainty of destroying all of them - an ecosystem on which a billion people depend.

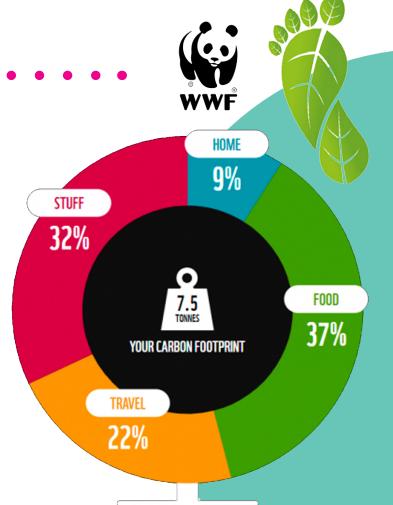
Breaching 1.5°C is not inevitable, but it requires bold political leadership right now to achieve rapid and deep cuts to greenhouse gas emissions.maybe there's also a way that you can extrapolate that into your everyday life where you go to the supermarket, or the clothes store or whatever, and you have an awareness, whether it's on the label, whether it's through general education, whether it's little bit intuitive, although some of the things aren't very intuitive, about what the effective carbon costs that like embody cost of products are we live in a consumer society, society, that's about sort of, like reducing the amount of products you intake, and then also being aware of them?



Every action we do, every lifestyle choice, every item we buy, eat, use, discard, has the potential to emit carbon.

Want to find out your carbon imprint and the impact you have?

Why not try the WWF footprint calculator https://footprint.wwf.org.uk/



## Debunking the Mystery

EXCERPT OF PODCAST EP 1

'WHAT THE HELL IS NET ZERO?'

Fome Owuasu took to the studio to record a three-part podcast series with Seda, owner of Fin and Earth in Hackney, Michael, owner of Little Spoons and Guiseppe from Refabricate to answer the question, 'What the Hell is Net Zero?'

Fin and Earth, Hackney is is a sustainable and plastic-free lifestyle store on a mission to help reduce plastic waste and raise awareness about plastic pollution.

**Little Spoons** is a Vegan and 'earth friendly' gelato company based in Brockley, London.

**Re-fabricate** is a collaborative research project calling for architects and designers to craft and innovate new materials and uses from waste products.

"As confusing as the whole thing sounds, it's balancing the amount of greenhouse gases released into the atmosphere and amount removed from the atmosphere. And we're currently living so fast, and we rely so much on fossil fuels, we need to make drastic changes. And this could be done by lowering our emissions and planting more trees, switching to clean energy and reducing our waste and just protecting our environment"

**Guiseppe** - Yeah, I suppose for me ... you've got to reduce the emissions as much as possible until they're so low that you can, in theory, then offset that through carbon capture with trees or other technologies. To the point that, in theory, human emissions are net zero. There's nothing going on. That's kind of my understanding.

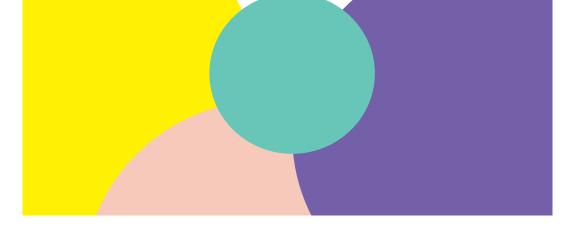
Michael - I echo that. So at what point do we not become sort of a burden in addition to the amount of carbon in the atmosphere. What point is it net, not adding? Yeah, and then, like you say, you've got two parts of that you've got the reduction part. But then also, we can't not emit any carbon. We're human beings. We're going about our daily life. You can start to offset it through various things like tree planting for example.

**Fome** - This is like a more personalised question. What does net zero mean to you? And why is it important right now?



"To me, I feel like it gives me some sort of hope for the future, because the more you know about the facts, the more anxious you feel for the future and knowing that something is being done, and there's some sort of target, it sort of gives you some hope and motivates you to push more on making change." seda

Michael - I think, you know, the science behind global warming and methane and carbon and where it's coming from and carbon sinks and some carbon sequestration stuff. That's almost like GCSE level and above kind of science. So potentially people who are younger than that have no understanding about it, and they don't know how it works. I don't know how the schooling is at the moment. I'm sure loads of teachers are going to slap me for saying that because I know that the education system is becoming really progressive on loads of this kind of stuff and getting kids to think more progressively about real issues today. Because, you know, it has a huge effect. You know, most of my career has been formed by the fact that I studied climate change at University, leading to building a business completely around that. So you know, you start people early, you get them to understand it. And if they know the brain work as to why things are happening, rather than just being told this is what it is, if you understand it more deeply, then I suppose it forms your, your behaviour, your whole life, which is huge.



Yeah, and maybe we're not going to be the ones that feel the full force. The effects, it's sadly the sort of slightly less well off countries and slightly less wealthy people that end up dealing with the consequences of these things first, and if we don't set a way, as sort of less developed countries start to emerge into modern technologies, if you like, if, if they go through the whole Industrial Revolution, as we've done, going through coal and oils before we get to renewables, then we're gonna have a massive problem on our hands. So we are gonna have to set precedents quickly.

"The more that we talk about it, the more people become more educated, but the figures of deaths due to pollution in the UK are just like unbelievable...and I just don't think people know."

## What are the biggest problems facing the environment?

**Guiseppe** - Where to start? You know, biodiversity loss, deforestation, plastic in our oceans, you know, warming, frozen, frozen ice....what am I trying to say? Melting ice caps? Yeah, I don't know, which is more prevalent, but they're all seem pretty bad. Yeah in my mind are so many.

Michael - Yeah, I don't think you can necessarily put one on it. But what you can start to do is say, well, where does this lead? This leads to... Again, how do you get people to start thinking about change? It's gonna affect me, ultimately. The biggest problem is that there's going to be a real humanitarian crisis, it's going to come out of this. Whether it's drought, flooding, mass migration, so many people in the world at this time anyway. So all of them together create one very bad problem for us and our survival.

### How do we achieve a net zero world?

Seda - I think there's so many things we can do as individuals that will add up. So we can reflect on what we do at home and how it's making an impact and really start to make small changes in our life. Whether it's eating local, and seasonal food or changing the way we travel, changing the way we shop, shopping from small businesses a lot more and just, you know, creating the community and working together.

**Guiseppe** - it's about informing those decisions, whether they're big or small, I suppose, on the individual level where they're sort of, you know, day to day about maybe trying to understand what impacts things have. Incremental things like one of my friends she did a year where she gave up a new type of plastic each month. She obviously kept going with the previous month - it was like in a toilet roll one month toothbrush next month - so then you've given up 12 things over the year but each month you just sort of work out your system and your new habit and the ones you've already got just carry on going it was kind of easy.

So bringing it back to the whole idea of does it concern me? How can we change the image of being green? How can we make it more mainstream and the norm?

We took to the streets of London and asked members of the public three questions...





Do you engage with the environment and climate in your everyday life?

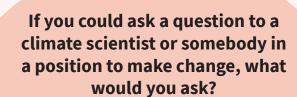
"Years ago when I was younger, we didn't understand anything like this. We didn't realise plastic bags were causing so much destruction to weld and stuff like that. We was ignorant to all that type of thing. Now we're learning. I mean, before you put wet wipes down the loo, now we're realising what problems it's causing."

"I think about it all the time? Because it's terrifying. Yeah. Yeah."

What specifically is terrifying for you?

"Just the idea that maybe if like, if I have kids one day, they might not like, ever see snow ever really see the world the way that we know it. And that scares me. So like, these things are happening in the world right now."

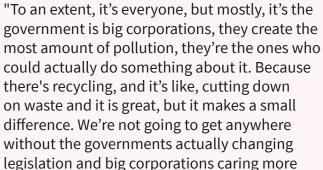
"Any rubbish I got yeah, I recycle it. Yeah.
Any food I've got, I'll give it to the birds
going through the park. And I cycle to
work. Yeah. And I don't drive. I want it good
for the youngsters, you know..."



"I just think I'm just like, so confused, for example, like profiting off like, wastage of food, for example, like you can't buy food in like smaller packages and stuff. And like there's so much waste in this country that could be like going other places in the world. There's actually no other reason for that other than profiting money and corporations making more money. And it's just so confusing why they don't overnight, lterally, they could change the law overnight."



Climate Change-Who's to Blame?



about the world and people than money."



### We asked Young People:

## What did you think Net Zero Carbon was before this project? What does it mean to you now? Are you making any changes to your lifestyle?

I had heard of the term before and understood that it had to do with lowering carbon emissions and climate change.

Net zero carbon is about output and input; ensuring that ones output is equal or less to the amount of green house gases removed from the atmosphere.

I regularly use public transport to commute. Some of the food that I buy from the supermarket is imported from abroad rather than locally sourced. I'm working towards lowering my carbon footprint by being sustainable in terms of the products I use everyday such as carrying a reusable bottle with me, using reusable make up pads, shopping locally etc.

I thought carbon zero was just about trying to eliminate the use of carbon. I didn't even know what carbon actually was, just knew it was something that can be bad for the planet. The easiest way I've understood it for myself is, net zero carbon is a balancing act. Every time we emit carbon into the atmosphere, we remove carbon from the atmosphere too. That way, the total is zero. Taaa-dahhh!

My resolution to lower my carbon footprint is by going digital - printing less and reading on computers; Using Public Transport rather than Uber and now cycling to work as the cycle lanes are perfect.

"I'm reading around the topic within my respective interests. For instance reading into sustainable fashion brands such as Pangaia and new technologies that are 'repurposing' carbon emissions into sustainable clothing pieces."

"I'm speaking about it more to my friends, and I've realised I now have a subconscious little voice that questions me whenever I want to use plastic and non-environmentally friendly products. This helps me think twice and even change my bad habits step by step."



Fome Owuasu



Muhsin Mahmud



I understood net zero carbon through a very material lens, such as using local and sustainable materials in buildings or production of goods in general so as to reduce the amount of CO2 released into the atmosphere through transportation.

However now I realise how every decision we make can contribute.

Although I have been vegetarian for years

Although I have been vegetarian for years and mainly use public transport, my carbon footprint is definitely brought up massively by air travel, as I have family abroad we regularly like to visit. In such a globalised world where we are so used to commodities, I've been reading about economic degrowth as being the way forward. In a non-defeatest kind of way however, I do think, what difference do our individual choices make when we have billionaires like Jeff Bezos emitting over the carbon footprint of .... for a 10 min flight to space. Let alone the amount of climate distasters happening around the the world currently.

"We have to use our consumer voices to hold big corporations and people in power to account to make those big changes that will actually make a difference, as well as taking responsibility with our individual choices."



I never really had a view in regards to net zero, in my head as long as I wasn't causing any unnecessary mess or throwing trash in the street and avoiding the use of plastic bags as much as possible I thought that counted.

"Net zero goes far beyond just using a reusable bag and a recycling box outside your front door. It's thinking about one's meat consumption and whether or not I need to be eating as much meat as I'm eating. Even with general furniture, rather than buying new, shipped from the other side of the world it's more carbon friendly to buy something second hand or refurbished."

I calculated my carbon footprint using the WWF online calculator and I kind of expected this (a relatively high amount), hopefully in the next year it will get better... I might have to cut down on the takeaways, maybe reduce my meat consumption, buy more seasonal/local fruit and veg. Reuse more and anything that means I'm not adding to the problem.

Before this I didn't even know what carbon zero was, I thought of it as carbon as in the carbon from the periodic table and nothing to do with climate change

I work on my computer a lot therefore my carbon score probably isn't the best however I do turn off appliances, lights and electronics when I'm not using them

The activities that bring it up for me are eating chicken and using electronics for work purposes a lot.

Something that I'm working towards to decrease my carbon footprint is to raise awareness about stuff like this, use the 5 r's of refuse, reduce, reuse, rot, recycle and when I get a car only use it when I need to use it

"I think that its important that we ensure that we speak to young people very early on regarding the impact that they could potentially be having in regards to the challenges that we face in regards to climate change."



Jonas Andrew-Phillips

## Debunking the Language

#### **Emissions**

Emissions are any release of gases such as carbon dioxide which cause global warming, a major cause of climate change. They can be small scale in the form of exhaust from a car or methane from a cow, or larger-scale such as those from coalburning power stations and heavy industries.

#### Net Zero

term used to describe any process where there is no net release of carbon dioxide (CO2). For example, growing biomass takes CO2 out of the atmosphere, while burning it releases the gas again. The process would be net zero if the amount taken out and the amount released were identical. A company or country can also achieve net zero by means of carbon offsetting. Net zero processes or manufactured items are sometimes also described as being "carbon neutral".

Carbon Dioxide
Carbon dioxide (CO2) is an important heat-trapping (greenhouse) gas, which is released through human activities such as deforestation and burning fossil fuels, as well as natural processes such as respiration and volcanic eruptions.

#### Climate Change

A pattern of change affecting global or regional climate, as measured by average temperature and rainfall, and how often extreme weather events like heatwaves or heavy rains happen.

This variation may be caused by both natural processes and by humans. Global warming is an informal term used to describe climate change caused by

#### Carbon Footprint

humans.

The amount of carbon emitted by an individual or organisation in a given period of time, or the amount of carbon emitted during the manufacture of a

#### Sustainability

Sustainability means consuming the planet's resources at a rate at which they can be replenished. It's sometimes known as "sustainable development". Types of renewable energy such as solar or wind power are described as sustainable, while using wood from managed forests where trees are replanted according to how many are cut down is another example.

Carbon
Carbon is a
configuration of
molecules and an
elemental building
block of all organisms
on Farth.

#### 1.5 Degrees

Keeping the rise in global average temperature rise below 1.5 degrees Celsius will avoid the worst impacts of climate change, scientists say That's compared with "pre-industrial times". The world has already warmed about 1C since then.

"I try and minimise the use of disposable stuff. Because it's weird that we make plastic objects disposable and throw them away when actually we should be making permanent objects out of plastic because it is permanent. or nearly. Make disposable objects out of stuff which is degradable like paper. There's nothing I can do about that personally, I do kind of feel like the argument is often framed wrong. Because people keep talking about saving the planet. Rubbish. The planet is going to be here. We're not trying to save the planet. We're trying to save conditions in an ecosystem which will support human life. So it's got nothing to do with saving the planet. We're trying to save our lives."

**Feilden Clegg Bradley Studios** is an architectural and urban design practice with an international reputation for design quality, for pioneering environmental expertise and a progressive architectural approach.

**Beyond the Box** engage in creative placemaking, co-designing and co-producing with communities, to design equitable places to live, work and play. The spaces we occupy can only be equitable once everyone has the opportunity to participate in their design. We work beyond the boundaries of the tick box to ensure we're building a society that is inclusive of every citizen and every voice.

#### What is the project?

FCBS has designed an installation in their London Studio to communicate to audiences what 'net zero carbon' actually means. The practice is collaborating with Beyond the Box to ensure that this message of 'net zero' is shared and understood by young people too.

To find out more about the installation, project, access to resources and the podcast we created visit:

https://www.whatisnetzero.fcbstudios.com/



Feilden Clegg Bradley Studios

## What choices that you regularly make can you recognise as being heavy carbon emitters?

How easy is it for you to change these habits?

Why should you care for the environment?