1

Event organiser (if there is one) introduces themselves and welcomes attendees to the venue, points out fire exits, checks everyone can hear and see OK and invites people to the front if not.

Organiser explains in one or two sentences what made them passionate enough to put on the event and then invites both co-speakers to introduce themselves.

Each speaker introduces themselves: "I am XX from Extinction Rebellion."

Talk a bit about your background – how/why did you get involved in XR? Explain you're an ordinary person like them, just stepping up to offer this talk.

Say that the talk you will hear today is being given all around the country to mobilise people to join the movement.

2

We will talk more about Extinction Rebellion later but for now, just one slide of introduction.

We are a non-violent direct action civil protest organisation. We're everyday citizens, looking for a solution to the climate and ecological crisis.

We have recognised that individual action is not going to be sufficient to tackle these crises.

Therefore, we must get our governments, both here at home and internationally, to take decisive action on our behalf. They must support and protect us, as they pledged to do when they came to power.

3

Our civilisation is more **fragile** than we like to think.

The Covid-19 pandemic shows how vulnerable our big, strong, technological society really is. It gives us a timely clue what the much bigger and nastier monster of climate crisis would be like.

XR has been accused of applauding the Coronavirus pandemic for reducing fossil fuel use. That is not the case. The likely drop in carbon dioxide emissions for 2020 resulting from measures used to combat Covid-19 is likely to be around 4 to 7%[1]. The impact of this cut for one year only will make no difference to global heating[2]. Remember the 2008 financial crash? That also showed a drop in greenhouse gas emissions, but it was temporary. By 2011, levels has returned to the original trend and continued to soar upwards.

The panicked, last-minute response of our government to Covid-19 means that the pain is being shared unequally across society, with some people suffering much more than others. Disadvantaged

groups are suffering the most[3].

The climate crisis shows a similar injustice. People in the global south are unfairly suffering the consequences of our consumerist lifestyles in the global north.

Going back to “business as usual” is not an option.

XR aims to bring about **lasting change** that is **socially fair**.

1. Temporary reduction in daily global CO2 emissions during the COVID-19 forced confinement. (2020) Nature. https://www.nature.com/articles/s41558-020-0797-x
2. Fall in COVID-linked carbon emissions won’t halt climate change - UN weather agency chief. 2020. https://news.un.org/en/story/2020/04/1062332
3. For example: Higher COVID-19 death rate and economic hardship for ethnic minorities. 2020. http://www.lse.ac.uk/News/Latest-news-from-LSE/2020/e-May-20/Higher-COVID-19-death-rate-and-economic-hardship-for-ethnic-minorities

---

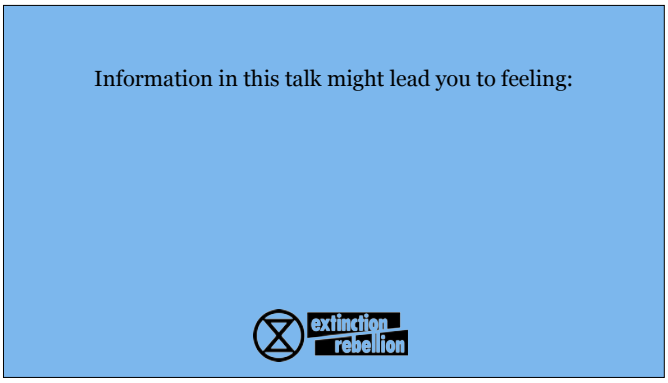
4

Now that it’s clear why I’m here today, I’d like to ask you to talk a bit about why YOU are here.

Please find someone, preferably someone you don’t yet know; introduce yourself and discuss why you’ve come here tonight.

[Give them 2-3 min to do this]

[If there is time, ask the audience for 3-4 volunteers to state their reasons for everyone to hear. If you do this, always start with a speaker who is less privileged, e.g. a woman, a person of a minority etc. Avoid white, middle-aged males as first speakers.]



5-1

When we talk about the climate and ecological crisis tonight, you might experience a range of emotions.

Many people have expressed grief about the extinction of species, or anger at the inaction of governments.

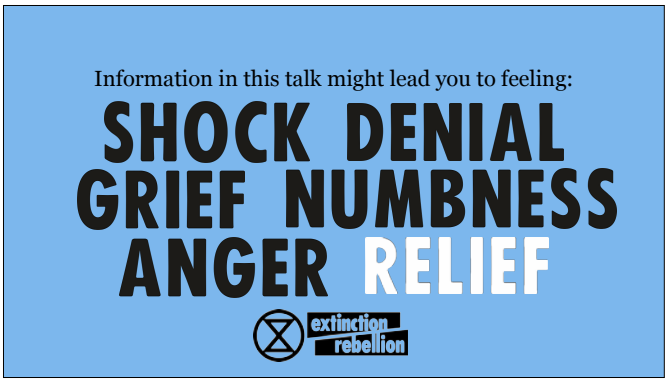
Some just feel in denial and hope that the problem will somehow get sorted, by someone.

Others feel shocked or numb, feeling unable to take action.

These reactions are to be expected.

But the feeling you can make a difference however bad things are, brings hope and relief. It has for me: when I joined XR, for the first time in as long as I can remember, I felt empowered.

People who join Extinction Rebellion, typically find the experience therapeutic. We a massive group of likeminded people, all working towards the same goals, and it’s uplifting to be part of that.



5-2

6-1

This talk has four parts: the first part is about the climate crisis – the second part is about the ecological crisis.

The third part explains how civil resistance movements work, and how they can be successful.

The final part is about Extinction Rebellion, and how we propose to achieve our goals.

There will also be time for questions at the end.

[Note to speakers: depending on audience, you might not want to take questions from the floor. In which case, say that if anyone has questions, you will be happy to talk to them after the talk].

6-2

7-1

This beautiful planet is our life support system. Everything we need is contained in this sphere – the air we breathe, the food we eat, the water we drink and the ground we build our homes on.

Our planet is a complex, interdependent system. You have probably seen some of the placards people carry saying ‘”There is no planet B” – well there isn't – this is it, and if we destroy it, there is nowhere else to go.

7-2

7-3

8

However, we are destroying our planet on every level.

We are threatening the survival of a huge proportion of living creatures and plants as well as ourselves. I will begin by talking about the climate crisis

---

9

The science on global heating is solid – it has been around for well over a century – it is basic physics and chemistry.[1]

Our atmosphere surrounds the earth like a blanket, keeping us warm.

The Earth's atmosphere contains greenhouse gases: these are gases that trap heat. When energy from the sun reaches the surface of the Earth, it tries to radiate away but most of it gets blocked by these greenhouses gases. Without greenhouse gases in the atmosphere, the Earth would be tens of degrees cooler[2].

Humans have changed the atmosphere. If we add more greenhouse gases to the atmosphere, it will warm up[2]. It is not new science[1].

The most important greenhouse gas is carbon dioxide (CO2)[3]. There are other greenhouse gases, like methane and nitrous oxide, but they are less urgent[4].

By burning fossil fuels for energy, we have been pumping carbon dioxide into the atmosphere at an unprecedented rate for the past 200 years[5]. Carbon dioxide remains in the atmosphere for a very long time – changes in atmospheric carbon dioxide concentrations persist for thousands of years[6].

Carbon dioxide accumulates and makes the earth warmer[3].

1. **On the Influence of Carbonic Acid in the Air upon the Temperature of the Ground, Svante Arrhenius,** Philosophical Magazine and Journal of Science Series 5, Volume 41, April 1896, pages 237-276. https://www.rsc.org/images/Arrhenius1896_tcm18-173546.pdf
2. **The Basics of Climate Change.** The Royal Society. https://royalsociety.org/topics-policy/projects/climate-change-evidence-causes/basics-of-climate-change/
3. **Focus on cumulative emissions, global carbon budgets and the implications for climate mitigation targets. 2018.** Environmental Research Letters. https://iopscience.iop.org/article/10.1088/1748-9326/aa98c9/meta
4. **Anthropogenic and Natural Radiative Forcing.** 2013. Intergovernmental Panel on Climate Change. https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_Chapter08_FINAL.pdf
5. **CO2 emissions by fuel.** Our World In Data. https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions
6. **Atmospheric Lifetime of Fossil Fuel Carbon Dioxide. 2008.** Annual Review of Earth and Planetary Sciences. https://www.researchgate.net/publication/38136820_Atmospheric_Lifetime_of_Fossil_Fuel_Carbon_Dio

xide

10

The scientific consensus is overwhelming[1]. There is no doubt left that humans are causing global heating. The consensus is shared by over 99% of climate scientists, according to an ongoing study[2].

Scientists from all over the world also agree that 100% of global warming since 1950 is due to humans, and that nearly all heating since 1850 is due to greenhouse gas emissions and other human activities[3].

Carbon dioxide is released by the burning of fossil fuels and from land use, such as clearing forests and tilling soils.

Human sources of methane come primarily from the fossil fuel industry and agriculture, while nitrous oxide is mainly from fertiliser use in agriculture and fossil fuel burning[1].

Explanatory note for speakers

It's possible that some members of the audience may question the claim in the slide that 100% of global heating is due to human activity because the IPCC concluded that "It is extremely likely that human activities caused more than half of the observed increase in global average surface temperature from 1951 to 20105.

The 100% claim and the IPCC claim are not inconsistent. The cited reference from Carbon Brief explains the difference as follows:

"How much warming is caused by humans?

In its 2013 fifth assessment report, the IPCC stated in its summary for policymakers that it is "extremely likely that more than half of the observed increase in global average surface temperature" from 1951 to 2010 was caused by human activity. By "extremely likely", it meant that there was between a 95% and 100% probability that more than half of modern warming was due to humans.
This somewhat convoluted statement has been often misinterpreted as implying that the human responsibility for modern warming lies somewhere between 50% and 100%. In fact, as NASA's Dr Gavin Schmidt has pointed out, the IPCC's implied best guess was that humans were responsible for around 110% of observed warming (ranging from

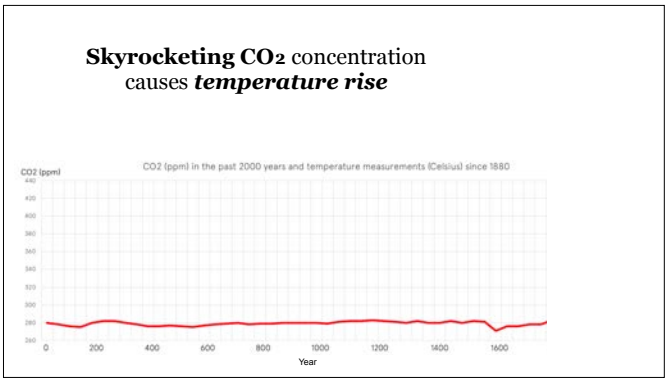
72% to 146%), with natural factors in isolation leading to a slight cooling over the past 50 years.

Similarly, the recent US fourth national climate assessment found that between 93% to 123% of observed 1951-2010 warming was due to human activities.

These conclusions have led to some confusion as to how more than 100% of observed warming could be attributable to human activity. A human contribution of greater than 100% is possible because natural climate change associated with volcanoes and solar activity would most likely have resulted in a slight cooling over the past 50 years, offsetting some of the warming associated with human activities."

1. **Consensus on consensus: a synthesis of consensus estimates on human-caused global warming,** Environmental Research Letters, 2016. https://iopscience.iop.org/article/10.1088/1748-9326/11/4/048002
2. **'No doubt left' about scientific consensus on global warming, say experts.** Guardian, July 2019. https://www.theguardian.com/science/2019/jul/24/scientific-consensus-on-humans-causing-global-warming-passes-99
3. **Analysis: Why Scientists Think 100% of Global Warming Is Due To Humans.** Carbon Brief, December 2017. https://www.carbonbrief.org/analysis-why-scientists-think-100-of-global-warming-is-due-to-humans
4. **How do Human Activities Contribute to Climate Change and How do They Compare with Natural Influences?** IPCC Working Group 1, Frequently Asked Question 2.1. https://wg1.ipcc.ch/publications/wg1-ar4/faq/wg1_faq-2.1.html
5. **Page 60. Technical Summary. In: Climate Change 2013: The Physical Science Basis.** Contribution of Working Group I to the Fifth Assess- ment Report of the Intergovernmental Panel on Climate Change. http://www.climatechange2013.org/images/report/WG1AR5_TS_FINAL.pdf

---



11-1

This chart shows how global average temperatures have been rising in tandem atmospheric carbon dioxide[1]. It shows atmospheric concentration of carbon dioxide over the past 2000 years (red line), and then the average annual temperature from 1880 to 2019 (blue squiggly line). The graph is called a hockey stick graph – for obvious reasons. Although there is variation from year to year, the overall CO_2 trend is upward.

Before the Industrial Revolution, carbon dioxide pretty much stayed somewhere around **280 parts per million[2]**. After the Industrial Revolution, carbon dioxide emissions, and therefore concentrations in the atmosphere, began to skyrocket. This rise in atmospheric concentration is mainly due to burning of fossil fuels such as coal, oil and gas[3].

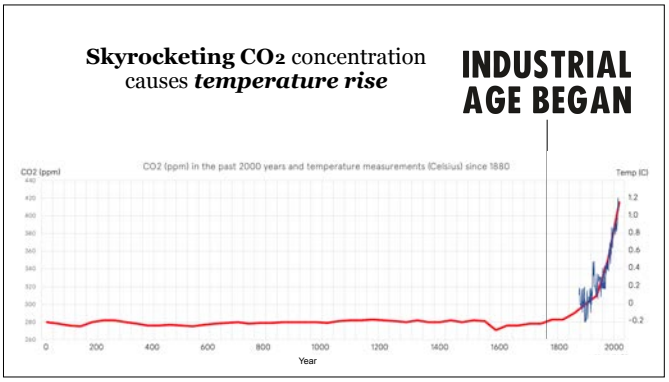
Global average annual carbon dioxide concentration was **411 parts per million in 2019[3].** Each year brings new record levels[4] and the rate of increase in carbon dioxide concentration is accelerating[4]. Increased CO_2 causes an accompanying temperature rise[5].

We are already at **1.1ºC above pre-industrial levels**[6] – and heading for around **3-4ºC, or more** by the end of the century[7]

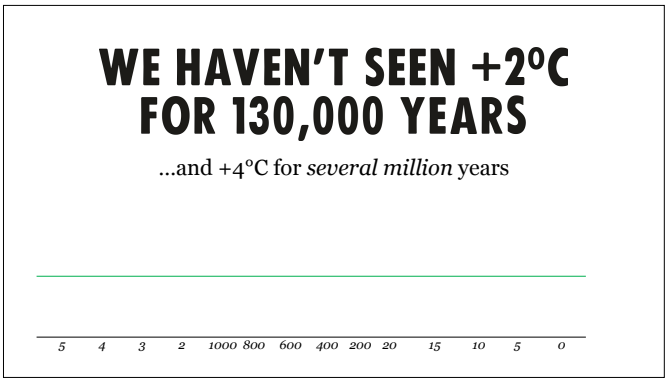
.

Even if we fulfil ALL our pledges under the Paris Agreement (a big if), we get **a rise to 3C.** A rise to 1.5-2ºC will only happen with **radical new pledges and immediate action.**

1. **Global Temperatures and CO2 Concentrations. 2020.** https://www.climatecentral.org/gallery/graphics/global-temperatures-and-co2-concentrations-2020
2. **Scripps Institute,** https://scripps.ucsd.edu/programs/keelingcurve/
3. **Annual average CO2.** https://www.co2.earth/annual-co2
4. **Carbon Dioxide Levels Hit Record Peak in May. 2019.** https://scripps.ucsd.edu/programs/keelingcurve/2019/06/04/carbon-dioxide-levels-hit-record-peak-in-may/
5. **Climate Change 2014 Synthesis Report. Summary for Policymakers. 2104. IPCC.** https://www.ipcc.ch/site/assets/uploads/2018/02/AR5_SYR_FINAL_SPM.pdf
6. **WMO Statement on the State of the Global Climate in 2019.** https://library.wmo.int/doc_num.php?explnum_id=10211
7. **Climate Action Tracker, December 2019.** https://climateactiontracker.org/global/temperatures/



11-2



12-1

When you talk about global heating you might say: "Well, the Earth has had several warm periods in the past, what's the big deal?"

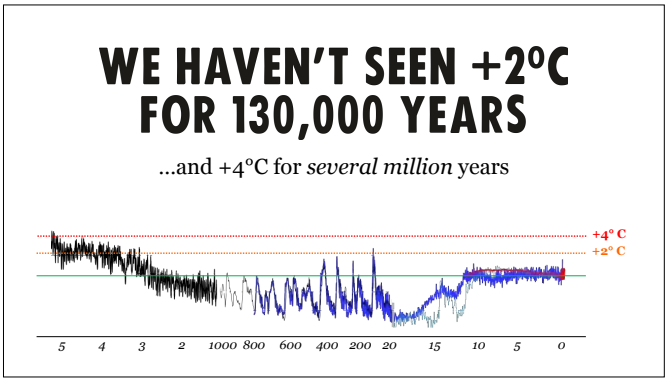
While it's true that there *have* been warm periods in the Earth's past, these warm periods have not happened during our current human civilisation.

This is a chart of the temperature anomaly[1] for the last last 20,000 years.

You can see that for the last 10,000 years – during the formation of today's human civilisation – we've had a very stable climate, called the Holocene[2]. We've been able to develop agriculture and cities, we've been able to spread out and cover the surface of the Earth.

Human civilisation as we know it has not existed on a +2ºC Earth and the human species has not existed at all on a +4ºC Earth[3]. We don't know if it can.

1. In climate change studies, temperature anomalies are more important than absolute temperature. A temperature anomaly is the difference from an average, or baseline, temperature. The baseline temperature is typically computed by averaging 30 or more years of temperature data.
2. **A Reconstruction of Regional and Global Temperature for the Past 11,300 Years**. 2013. Science. https://www.researchgate.net/publication/235885717_A_Reconstruction_of_Regional_and_Global_Temperature_for_the_Past_11300_Years
3. **Climate sensitivity, sea level and atmospheric carbon dioxide**. 2013. Philosophical Transactions of the Royal Society. https://royalsocietypublishing.org/doi/10.1098/rsta.2012.0294



12-2

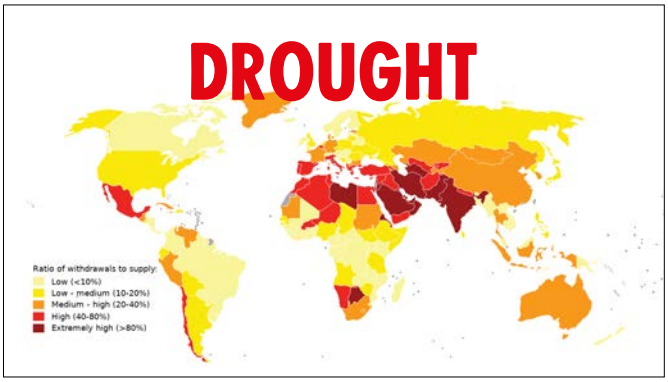
13-1

Climate crisis is not something bad that might happen in the future – it is something bad that is happening **right now**[1].

I'm going to talk about the consequences of just 1.1°C of heating above pre-industrial levels. And throughout this, I would like you to remember that 20–40% of the global human population live in regions that have already experienced warming of more than 1.5°C[2].

1. **Effects of global warming.** National Geographic, https://www.nationalgeographic.com/environment/global-warming/global-warming-effects/
2. **IPCC Special Report.** Global Warming of 1.5°C. https://www.ipcc.ch/sr15/

13-2



14

Global warming has contributed to droughts since at least 1900 and the influence will get stronger[1].

In the Mediterranean, for example, declines in rainfall driven by climate change have increased drought across the region[2], amplifying recent events including the drought that preceded the Syrian civil war[3]. The recent drought in Cape Town, South Africa that led to drinking water shortage was made three times more likely by global warming[4]. This is now, not at some future date.

Scientists have identified unequivocally an increased drying and drought risk for many regions of the world. Most likely to be adversely affected are Mediterranean regions of Europe and Africa, Central America, southwest US and the subtropics of the southern hemisphere[5].

1. **Twentieth-century hydroclimate changes consistent with human influence.** Nature, 59-65 (2019). https://www.nature.com/articles/s41586-019-1149-8
2. **On the Increased Frequency of Mediterranean Drought.** Journal of Climate, Volume 25 (2012). https://psl.noaa.gov/people/tao.zhang/Hoerling-etal.2012.JCLI.pdf
3. **Did Climate Change Help Spark The Syrian War?** https://www.earth.columbia.edu/articles/view/3235
4. **Likelihood of Cape Town water crisis tripled by climate change.** World Weather Attribution, 2018. https://www.worldweatherattribution.org/the-role-of-climate-change-in-the-2015-2017-drought-in-the-western-cape-of-south-africa/
5. **Climate change is already making droughts worse. Carbon Brief, 2018.** https://www.carbonbrief.org/guest-post-climate-change-is-already-making-droughts-worse

15

At the very same time, too much water is also already a problem.

When we introduce more heat (which is a form of energy) into a system, it becomes, well, more energetic. That's true about wildfires, and it's true about storms too. Bigger, more devastating hurricanes are already linked to climate change[3].

We know that global heating causes storms to drop more rain.

For example, the extreme rainfall and flooding caused by Tropical Storm Imelda in Texas in 2019 was made more likely and intense due to global warming[1], as was the extreme rainfall and likelihood of Hurricane Harvey in Texas in 2017[2].

This is now, not at some future date.

1. **Rapid attribution of the extreme rainfall in Texas from Tropical Storm Imelda.** World Weather Attribution, 2019. https://www.worldweatherattribution.org/rapid-attribution-of-the-extreme-rainfall-in-texas-from-tropical-storm-imelda/
2. **Attribution of extreme rainfall from Hurricane Harvey, August 2017.** Environmental Research Letters, Volume 12, Number 12, 2017. https://iopscience.iop.org/article/10.1088/1748-9326/aa9ef2
3. **Normalized US hurricane damage estimates using area of total destruction, 1900−2018.** PNAS, 2019. https://www.pnas.org/content/116/48/23942
4.

16

Forest and bush fires around the world are increasing in number, duration and size – Siberia – the Amazon – California - Australia

The Climate Council of Australia's report on the fires in November 2019 begins with the words - **'this is not normal'**[1].

An estimated **17 million hectares** were destroyed[2] – an area nearly the size of France

And an estimated **1 billion animals, birds and reptiles** burnt to death[3].

The 2019 Australian bushfires we made more likely by global warming that the heatwave of the intensity that preceded the fires was 10 times more likely than in 1900[4].

Autumn days with extreme fire weather have more than doubled in California since the early 1980s due to climate change[5].

This is now, not at some future date.

1. **Climate Change and Escalating Risk.** Climate Council, Australia, 2020. https://www.climatecouncil.org.au/resources/bushfire-briefing-paper/
2. **Government set to revise total number of hectares destroyed during bushfire season to 17 million.** https://www.9news.com.au/national/australian-bushfires-17-million-hectares-burnt-more-than-previously-thought/b8249781-5c86-4167-b191-b9f628bdd164 **(need better reference, when published)**
3. **More than one billion animals killed in Australian bushfires.** University of Sydney, 2020. https://www.sydney.edu.au/news-opinion/news/2020/01/08/australian-bushfires-more-than-one-billion-animals-impacted.html
4. **Attribution of the Australian bushfire risk to anthropogenic climate change.** World Weather Attribution, 2020. https://www.worldweatherattribution.org/bushfires-in-australia-2019-2020/
5. **Stanford researchers forecast longer, more extreme wildfire seasons.** https://news.stanford.edu/2020/04/02/increasing-risk-extreme-wildfire-weather/

17

Melting glaciers and ice sheets are causing sea level rise, and coastal extreme events are becoming more severe[1].

The rate of sea level rise is accelerating and is unprecedented over the past century. Worst-case projections of a 2m rise by 2100 cannot be ruled out[1].

Greenland melt is unprecedented in at least 350 years[1]. At +2°C the Arctic will likely be ice free in the summer[2].

The West Antarctic sheet is retreating and thinning rapidly[1], adding to sea level rise.

Glaciers could lose a fifth of their mass this century, even if emissions are low, and more than 80% in regions such as Central Europe[1].

1. **IPCC Special Report on the Ocean and Cryosphere in a Changing Climate.** 2019. https://www.ipcc.ch/srocc/
2. **Reduced probability of ice-free summers for 1.5 °C compared to 2 °C warming.** 2018. Nature Climate Change. https://www.nature.com/articles/s41558-018-0127-8

Photo credits

Dogs hauled a sled through meltwater last week on coastal sea ice in northwest Greenland.
Credit: Steffen M. Olsen/Danmarks Meteorologiske Institut, via Associated Press

NASA Climate 365 project - a collaboration of the NASA Earth Science News Team, NASA Goddard and Jet Propulsion Laboratory communications teams, and NASA websites Earth Observatory and Global Climate Change. Photo credits: Photographed by William O. Field on Aug. 13, 1941 (left) and by Bruce F. Molnia on Aug. 31, 2004 (right). From the Glacier Photograph Collection. Boulder, Colorado USA: National Snow and Ice Data Center/ World Data Center for Glaciology.

18

So what about us here in the UK?

19-1

We sweltered in summer 2019 – as did the rest of Europe. We had the hottest day ever recorded in the UK when the temperature hit **38.7°C** 101.66°F[1]. The heatwaves during the summer of 2019 are linked to the deaths of 892 people in England[2] alone.

Exposure to excessive heat has wide ranging health impacts for all humans, often amplifying existing conditions and resulting in premature death and disability[3].

1. **New official highest temperature in UK confirmed.** Met Office, 2019. https://www.metoffice.gov.uk/about-us/press-office/news/weather-and-climate/2019/new-official-highest-temperature-in-uk-confirmed
2. **PHE heatwave mortality monitoring Summer 2019.** Public Health England, 2019. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/841320/PHE_heatwave_report_2019.pdf
3. **Information and public health advice: heat and health.** WHO. https://www.who.int/globalchange/publications/heat-and-health/en/

19-2

20-1

Floods are happening more often[1].

There is a link between climate change and flooding because a warmer atmosphere holds more moisture[2], resulting in heavier rainfalls

The devastating flooding in Northern England, Southern Scotland and Ireland in December 2015 was made 60 per cent more likely by the climate crisis[3].

More flooding is projected for the UK[2]. We had the wettest February ever in 2020 with some areas receiving 400% more rain than average[4].

People's homes and businesses are being ruined and lives devastated-- not just by water damage-- but also contamination from sewage, chemicals and farm effluent.

1. **Are UK floods becoming worse due to climate change?** Carbon Brief, February 2020.https://www.carbonbrief.org/guest-post-are-uk-floods-becoming-worse-due-to-climate-change
2. **What climate models tell us about future rainfall. Carbon**

Brief, 2018. https://www.carbonbrief.org/explainer-what-climate-models-tell-us-about-future-rainfall
3. **UK Storm Desmond revisited, December 2017.** World Weather Attribution, 2017. https://www.worldweatherattribution.org/uk-storm-desmond-revisited-december-2017/
4. **Record breaking Rainfall**, Met Office, March 2020. https://www.metoffice.gov.uk/about-us/press-office/news/weather-and-climate/2020/2020-winter-february-stats
5. **Long-term health effects of flooding.** Journal of Public Health, Volume 30, Issue 4, December 2008 https://academic.oup.com/jpubhealth/article/30/4/353/1513480

20-2

21-1

Then we have the problem of rising sea levels and storm surges.

This is a picture of the coastal village of Fairbourne in North Wales.

The local council have decided to decommission Fairbourne. Within 25 years, or sooner, people will need to abandon their homes. The reason is that the village is very low-lying and the council realised they couldn't afford the flood defences indefinitely.

They could be considered our first climate refugees. You can imagine what this announcement has done to the housing prices in Fairbourne[1].

About a quarter of a million homes and existing properties in the UK are at risk of flooding and/or coastal erosion, both on sea shores and on floodplains of rivers[2].

1. **The UK's first climate change refugees?** https://www.bbc.co.uk/news/av/uk-51667018/the-uk-s-first-climate-change-refugees?SThisFB&fbclid=IwAR1A25pKwSuMVU5rRhTTtvcObnmLlgKJugh0MRBzcBEJVkEfvIhtgLTLW5M

2. **Climate change impacts and adaptation,** Environment Agency, 2018. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/758983/Climate_change_impacts_and_adaptation.pdf

---

21-2

22-1

There are wildfires all over the world, but people think they're far away. This is a picture of Saddleworth Moor, just upwind of Manchester. In June 2018 the moor burned for more than three weeks. People had to be evacuated from their homes and the fire caused hazardous air pollution. In 2019 it burned again. The same year, a fire in Morayshire in Scotland burned an area of grassland the size of the city of Nottingham.

Wildfires in the UK broke records in 2019 – by April that year the number of wildfires had already exceeded those recorded in *any* previous year[1]. This is at least partly due to the record temperatures in February 2019, and a long, dry period without rain, that preceded the fires. Similar circumstances occurred with the infamous Australian bushfires.

1. https://www.newscientist.com/article/2200502-the-uk-has-already-had-more-wildfires-in-2019-than-any-year-on-record/
2. https://www.carbonbrief.org/guest-post-understanding-the-uks-recent-spike-in-wildfires

22-2

THE WORLD IS AT 1.1°C

23-1

We've talked about 1.1ºC so far, but now we need to look into the future.

We are already at 1.1ºC above pre-industrial levels[1] – and heading for 3ºC with current policies[2]. Given historic failures to curb emissions, we could be heading for 4 to 5ºC by the end of the century[2], which would be disastrous for much of the world's population[3].

What will happen as the heating continues? Our options are now **limited to a choice between an unmitigated disaster and a 'less bad' disaster.**

1. **WMO Statement on the State of the Global Climate in 2019.** https://library.wmo.int/doc_num.php?explnum_id=10211
2. **Climate Action Tracker, December 2019.** https://climateactiontracker.org/global/temperatures/
3. **Climate Change 2014 Synthesis Report. IPCC.** https://ar5-syr.ipcc.ch/topic_summary.php

---

THE WORLD IS AT 1.1°C

BUT WE'RE HEADING TO 3-4°C OR MORE BY THE END OF THE CENTURY

23-2

World hunger is rising after being in decline for many years. More than 820 million people do not have enough to eat[1]. There are many reasons for this change, with climate change adding to problem.

The climate crisis is **already** affecting food production, and poorer countries are likely to be worse affected[2].

Climatic extremes can lead to bread basket failures[3] (major food producing regions are known as 'breadbaskets').

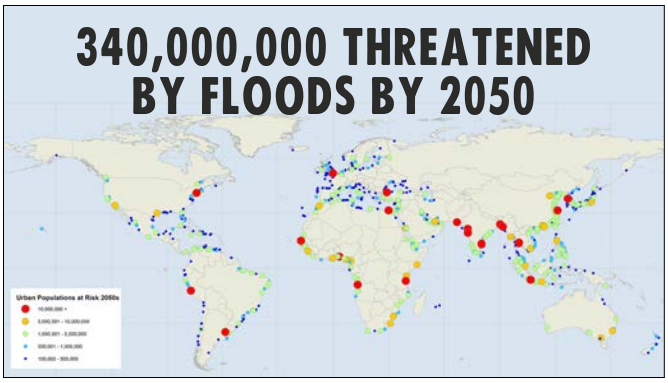
Future impacts of climate crisis – higher temperatures, extreme weather, drought, increasing levels of carbon dioxide and sea level rise – threaten to decrease our food supplies[4] and make millions more people go hungry.

As nearly half of our food in the UK is imported – we will face threats to food supplies and massive price hikes[5].

Optional additional info:

[Even worse, the risk of the world's top four corn exporters (U.S., Brazil, Argentina and the Ukraine) suffering simultaneous crop failures of 10% or more is a staggering 86% if global temperatures increase by 4ºC by the end of the century[6].]

1. **Food Security and Nutrition In The World 2019.** United Nations Food and Agriculture Organisation. http://www.fao.org/state-of-food-security-nutrition/en/
2. **Climate change is already affecting global food production unequally.** University of Minnesota, 2019. https://phys.org/news/2019-05-climate-affecting-global-food-productionunequally.html
3. **Changing risks of simultaneous global breadbasket failure.** 2019. Nature Climate. https://www.nature.com/articles/s41558-019-0600-z?proof=true
4. **How Climate Change Will Alter Our Food. Columbia University, 2018.** https://blogs.ei.columbia.edu/2018/07/25/climate-change-food-agriculture/
5. **The UK cross government programme on food security research.** https://www.foodsecurity.ac.uk/challenge/uk-threat/
6. **Future warming increases probability of globally synchronized maize production shocks.** PNAS, 2018. https://www.pnas.org/content/115/26/6644https://www.nature.com/articles/ncomms13931



25

Many global heating-driven[1] extreme weather events such as heatwaves, heavy rainfall and coastal flooding, are highly likely to get more extreme both in frequency and intensity[2].

Hurricanes become stronger and more damaging as warmer oceans result in more powerful storms with higher wind speeds and bigger storm surges[3].

The intensity of the most severe storms is projected to increase by the end of the century by 85% globally and 136% in the Atlantic basin[3].

In addition, changes in the jet stream are causing storms to stall in one place – causing even greater devastation[4,5].

If greenhouse gas emissions continue to increase, **worldwide 340 million or more people living in coastal areas will be threatened by flooding by 2050.[6]**

1. **Special report on the ocean and cryosphere in a changing climate. IPCC, 2019.** https://www.ipcc.ch/srocc/
2. **Changes in Climate Extremes and their Impacts on the Natural Physical Environment.** Chapter 3**,** Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation, IPCC, 2012. https://www.ipcc.ch/site/assets/uploads/2018/03/SREX-Chap3_FINAL-1.pdf
3. **How climate change is making hurricanes more dangerous.** Yale Climate Connections, 2019. https://www.yaleclimateconnections.org/2019/07/how-climate-change-is-making-hurricanes-more-dangerous/
4. **A global slowdown of tropical-cyclone translation speed.** Nature, 2018. https://www.nature.com/articles/s41586-018-0158-3
5. **Hurricane stalling along the North American coast and implications for rainfall. Nature,** Climate and Atmospheric Science, 2019. https://www.nature.com/articles/s41612-019-0074-8
6. **New elevation data triple estimates of global vulnerability to sea-level rise and coastal flooding**. Nature Communications, 2029. https://www.nature.com/articles/s41467-019-12808-z.pdf?stream=top

26

More areas will experience severe water shortages due to droughts and the melting of glaciers.

By 2025 – that's in five years time! – 4 billion people are projected to be living in water-stressed areas[1].

And by 2050, at about 2ºC of average global warming, 3.7 billion people are projected to be exposed to extreme drought, low rainfall and poor water availability[2].

1. **Drinking-water, Key Facts. WHO, 2019.** https://www.who.int/news-room/fact-sheets/detail/drinking-water
2. **Table 3.4, Global warming of 1.5°C, IPCC Special Report.** 2018**.** https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_High_Res.pdf
3.

27

A heating planet is expected to contribute to more mass displacement, leading to conflict and eventual societal collapse[1] if we carry on as we are.

Climate-fuelled disasters were the number one driver of internal displacement over the last decade. They forced an estimated 20 million people a year from their homes[2].

Climate chaos is on track to produce mass displacement of somewhere between 200m and 1bn people by 2050[5,6].
This is by **far** the greatest ever movement of people in the history of humankind.

Intensifying climate chaos increases the risk of violent armed conflict[3].

Extreme weather, food and water scarcity resulting from global warming will also add pressure to societies already facing fear, closed borders, authoritarianism, lack of international cooperation and resource wars.

1. **Existential climate-related security risk: A scenario approach.** Breakthrough - National Centre for Climate Restoration, 2019. https://docs.wixstatic.com/ugd/148cb0_a1406e0143ac4c469196d3003bc1e687.pdf
2. **Forced from Home: Climate-fuelled displacement.** Oxfam, 2019. https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620914/mb-climate-displacement-cop25-021219-en.pdf
3. **Climate as a risk factor for armed conflict.** Nature, 2019. https://www.nature.com/articles/s41586-019-1300-6
4. **Government Office for Science, 2011**. Foresight: migration and global environmental change. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/287717/11-1116-migration-and-global-environmental-change.pdf
5. **Crisis or adaptation? Migration and climate change in a context of high mobility**. 2009. Environment and urbanization *https://journals.sagepub.com/doi/10.1177/0956247809342182*
6. **Stern review report on the economics of climate change.** 2006. http://www.lse.ac.uk/GranthamInstitute/publication/the-economics-of-climate-change-the-stern-review/

28

More people will die and become ill as more of us are exposed to extreme temperatures[1].

Global average temperatures do not reveal the extremes of heat people will experience.

If average global temperature rise reaches 3°C, the average person is expected to experience a temperature increase of 7.5°C.[2] This is because people are not evenly distributed on the earth and many live in areas are warming faster than the global average.

At 1.5°C of average global warming, 4 billion people are expected to be exposed to damaging heatwaves, rising to 6 billion at warming of 2°C[3]. If global temperatures reach 3°C as forecast by the end of the century, about a third of the world's population will be living in extreme heat[2].

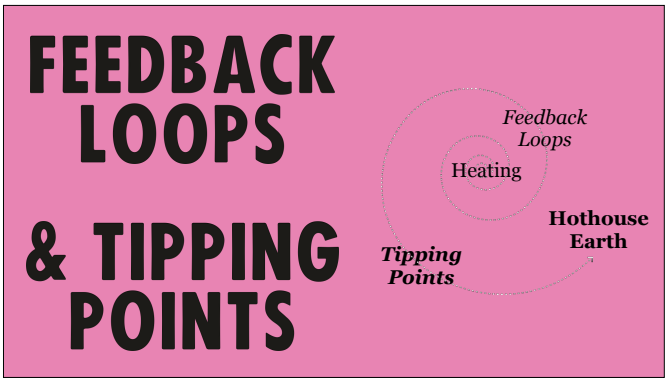
If greenhouse gas emissions continue to rise unabated, by the end of the century deadly heat stress is projected to affect three-quarters of the world population[4].

1. **The 1.5 Health Report. Synthesis on health and climate science in the IPCC SR1.5.** 2018. WHO. https://www.who.int/globalchange/181008_the_1_5_healthreport.pdf
2. **Future of the human climate niche, Proceedings of the National Academy of Sciences of the United States of America (PNAS). 2020. https://www.pnas.org/content/early/2020/04/28/1910114117**
3. **Table 3.4, Global warming of 1.5°C, IPCC Special Report.** 2018. https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_High_Res.pdf
4. **Global risk of deadly heat.** 2017. Nature Climate Change. https://www.nature.com/articles/nclimate3322

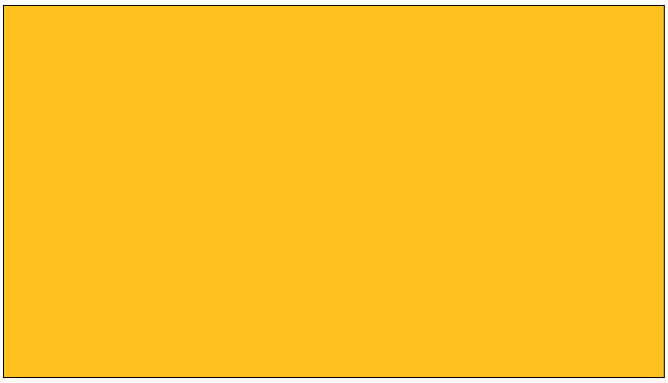
29-1

The world is currently heading for a destructive 3.5 - 4ºC temperature rise[1] by the end of this century.

This warming is serious enough BUT there's a real risk it will be even worse as a result of feedback loops and tipping points.



29-2



30-1

In summary**, the longer we leave it, the more difficult it gets.** We need to take drastic action to reduce emissions, NOW, to avoid having to take even more drastic measures later.

Coronavirus has shown us what drastic measures can look like. We don't want to have to suddenly turn off the economy, just to survive. The sooner we take action, the less painful it will be.

[Additional info, if you want to go into more detail]

The only thing that matters in terms of temperature is the carbon budget. That's the amount of CO_2[1] that we are allowed to emit, to stay within a certain amount of warming.

The only way to avoid even more dangerous warming is to quickly stop overspending the budget. To stop emitting CO_2. For 1.5ºC, we have probably already exhausted our carbon budget.

To have a good chance of staying below 1.5ºC warming, global CO_2 emissions need to reach zero by around 2025. Remember, up to 40% of the world's population already live in areas with a dangerous 1.5ºC of warming[1].

As you can see from this graph, the longer you leave it, the more difficult it gets. That's because the store of CO_2 in the atmosphere is growing each year at around 40 billion tonnes.

If we had begun reducing emissions from 2000 (10 years after the world knew for sure that we had to cut emissions to avoid dangerous climate change), a reasonable chance to limit global heating to 1.5ºC would have required reductions of around 4% per year. That could have been relatively easily achieved.

Starting now, we need a lot steeper reduction year on year. If we leave it for later, we will need steeper reductions still[3].

Will this happen?

Few people believe that the global political will is sufficient to bring this change about.

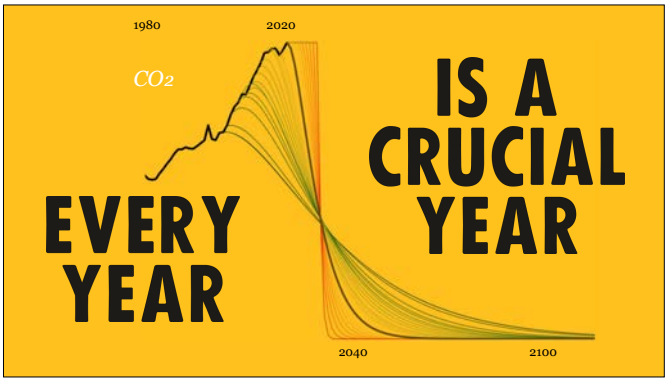
However, this does **NOT mean that we should not strive to do everything we can** to keep global heating as low as possible.

Every single fraction of a degree matters[2] – the IPCC 1.5ºC report shows that the damage to people and the planet is much worse for every fraction of a degree extra warming. Working together we **can** make a difference.

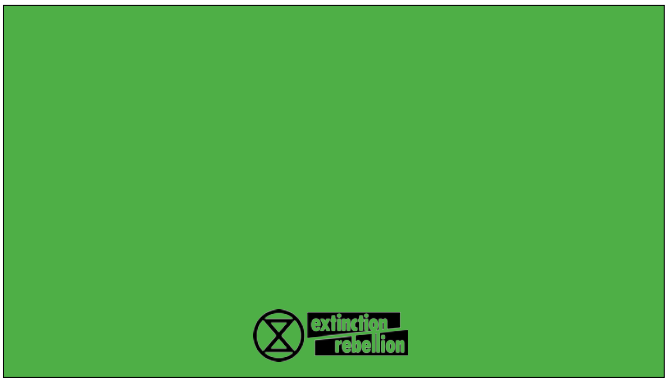
1. **Focus on cumulative emissions, global carbon budgets and the implications for climate mitigation targets.** Environmental Research Letters, 2018. https://iopscience.iop.org/article/10.1088/1748-9326/aa98c9
2. **In-depth Q&A: The IPCC's special report on climate change at 1.5C.** Carbon Brief, 2018. https://www.carbonbrief.org/in-depth-qa-ipccs-special-report-on-climate-change-at-one-point-five-c
3. **Cut global emissions by 7.6 percent every year for next decade to meet 1.5°C Paris target.** United Nations

Environment Programme, 2019. https://www.unenvironment.org/news-and-stories/press-release/cut-global-emissions-76-percent-every-year-next-decade-meet-15degc

---



30-2



31-1

That was climate, but climate is only part of the problem.

Now we go to Part II, the Ecological Crisis.

31-2

32-1

In addition to the climate, there is also a crisis in the biosphere – the ecology, the web of living beings that sustains us. Humans depend on a healthy natural environment for our wellbeing and survival.

32-2

33-1

In 2019 a hard hitting international report[1], backed by the United Nations, had these things to say about the impact of humans on the planet:

- Nature is declining globally at rates unprecedented in human history – and the rate of species extinction is accelerating.
- Around a quarter of species are already threatened with extinction. Species are being destroyed at rates at least 10-100 times higher than the 'background' (average) extinction rate over the last 10 million years.
- Humans affect three-quarters of land, two-thirds of the oceans, three-quarters of fresh water leaving little room for anything else. 85% of wetlands have been destroyed.

The chair of the organisation that produced the report said: "We are eroding the very foundations of our economies, livelihoods, food security, health and quality of life worldwide."[2]

1. **The global assessment report on Biodiversity and Ecosystem Services**. 2019. IPBES. https://ipbes.net/sites/default/files/2020-02/ipbes_global_assessment_report_summary_for_policymakers_en.pdf
2. **Sir Robert Watson**, 2019, IPBES Chair. https://ipbes.net/news/Media-Release-Global-Assessment

---

33-2

34-1

Agriculture is one of the biggest causes of habitat destruction[1] – the need to produce enough food of certain types to support the world's rising population[2].

Food production generates a quarter of the world's greenhouse gas emissions[3].

Over 80% of the human diet is provided by plants[4] but meat, aquaculture, eggs, and dairy use over 80% of the world's farmland, despite providing only 18% of our calories[4].

This is not just the land that the animals themselves occupy, but also the plants we need to grow, to feed them.

Natural habitats are also carbon sinks, in other words they protect the planet from climate change[5]. Replacing natural habitats with monoculture leads to more global heating.

Through its extensive use of pesticides, high-input agricultural land also contributes to precipitous declines in insect populations[6].

1. **Living Planet Report, 2018.** WWF. https://s3.amazonaws.com/wwfassets/downloads/lpr2018_summary_report_spreads.pdf
2. **United Nations Population**. https://www.un.org/en/sections/issues-depth/population/index.html
3. Food production is responsible for one-quarter of the world's greenhouse gas emissions. 2019. Our World In Data. https://ourworldindata.org/food-ghg-emissions
4. **Sustainable Development Goals, facts and figures.** 2018. https://www.un.org/sustainabledevelopment/biodiversity/
5. **The global assessment report on Biodiversity and Ecosystem Services**. 2019. IPBES. https://ipbes.net/sites/default/files/2020-02/ipbes_global_assessment_report_summary_for_policymakers_en.pdf
6. **Worldwide decline of the entomofauna: A review of its drivers.** Biological Conservation, 2019. https://www.sciencedirect.com/science/article/abs/pii/S0006320718313636

34-2

35-1

DEFORESTATION

Natural healthy forests are vital to our survival.

- Around 1.6 billion people depend on forests for their livelihood, including 70 million indigenous people.
- Forests are home to more than 80% of all terrestrial species of animals, plants and insects.
- Forests soak up carbon from the atmosphere and lock it up in wood and soil[2,3]. They also help regulate rainfall and local weather[4].

Tropical forests used to be a major carbon sink, but are now a net carbon source because of deforestation and land degradation[5]. When we burn those forests we take that carbon that was locked up in trees and release it into the air.

Forests have a tipping point – when they lose a certain amount of their mass they lose the ability to sustain themselves. They cease to be carbon-absorbing environments and instead turn to dry savannah.

The Amazon, for example, is rapidly being burned, exploited and deforested for farmland. The Amazon may have already passed a tipping point from which it can't recover. But concerted action now may still save it.[6]

DESERTIFICATION

Deforestation is often the start of process of desertification, which has been described as the greatest environmental challenge of our time - and global heating is making it worse[7].

- Roughly 500 million people live in areas that experience desertification[7].
- 23 hectares of land are lost to drought and desertification EVERY MINUTE. That is roughly 35 football pitches per minute. In a year, we could grow 20 million tons of grain on that lost land.
- 74% of the world's poor are directly affected by land degradation globally[8].

[Note to speakers in case this is raised in discussion: Rainforests are not the "lungs of the planet" as is sometimes stated: http://www.yadvindermalhi.org/blog/does-the-amazon-provide-20-of-our-oxygen# and burning rainforests is not depleting the world of oxygen. https://theconversation.com/amazon-fires-are-destructive-but-they-arent-depleting-earths-oxygen-supply-122369]

1. **Sustainable development goals: 15, Life On Land.** United Nations. https://www.un.org/sustainabledevelopment/biodiversity/
2. **A Large and Persistent Carbon Sink in the World's Forests.** 2011. Science. https://science.sciencemag.org/content/333/6045/988
3. **Carbon Sinks and Sequestration.** UNECE. https://www.unece.org/forests/outlook/carbonsinks.html
4. **Trees, forests and water: Cool insights for a hot world.** 2017. Global Environmental Change. https://www.sciencedirect.com/science/article/pii/S0959378017300134
5. **Tropical forests are 'no longer carbon sinks' because of**

human activity. 2017. Carbon Brief. https://www.carbonbrief.org/tropical-forests-no-longer-carbon-sinks-because-human-activity
6. **Amazon tipping point: Last chance for action.** 2019. Science Advances. https://advances.sciencemag.org/content/5/12/eaba2949
7. **Desertification' and the role of climate change.** 2019. Carbon Brief. https://www.carbonbrief.org/explainer-desertification-and-the-role-of-climate-change
8. **Sustainable Development Goals: 15, Life On Land.** United Nations. https://www.un.org/sustainabledevelopment/biodiversity/

35-2

36-1

It's not just the land – the oceans are an equally threatened habitat, and are also critical to our survival[1].
As with forests, oceans are an important carbon sink[1]. They **absorb about one third of the CO_2 emissions from human activity[3].**
And of course they also supply much of our food. Oceans serve as the world's largest source of protein, with more than 3 billion people depending on the oceans as their primary source of protein[1].
So the oceans are a very important part of our life support system. Oceans face many threats: overfishing, acidification and pollution.

[Extra oceans facts[1] if needed]

- Oceans cover three-quarters of the Earth's surface, contain 97% of the Earth's water, and represent 99% of the living space on the planet by volume.
- Oceans contain nearly 200,000 identified species, but actual numbers may lie in the

millions

1. **Sustainable Development Goals. Goal 14: Conserve and sustainably use the oceans, seas and marine resources.** United Nations. https://www.un.org/sustainabledevelopment/oceans/
2. **The oceanic sink for anthropogenic CO_2 from 1994 to 2007.** 2019. Science. https://science.sciencemag.org/content/363/6432/1193

36-2

37-1

A mass extinction of species is already underway[1].

There have been 5 previous mass extinctions in the earth's history. The last one was 66 million years ago[2].

The current one is caused by exploding human consumption, not natural events. What's more humans know that it's happening and why[3]. That is why it's better called an extermination.

We may already have lost 7% of the species on earth[4].

And it's not just about species extinction: from 1970 to 2014, we lost 60% of our individual mammals, birds, amphibians and fish[5].

Farmland birds in Britain have declined by a dramatic 57% since 1980. For all common birds (not only farmland birds), it is a 14 decline%[6].

[SPEAKERS: more details, if needed.]

A mass extinction is defined as when 75% or more of our species are wiped out. They were also due to dramatic changes in greenhouse gases in the atmosphere, probably from volcanic activity and of course caused by the asteroid that precipitated the extinction of the dinosaurs[2].

Species have always gone extinct - there is an expected “background” extinction rate, the rate at which species went extinct before humans were around. What we are experiencing now is many times this. And it’s not just about the extinction of species but the terrible attrition in the numbers of our individual wild creatures. See next slide.

1. **Accelerated modern human–induced species losses: entering the sixth mass extinction**. 2015. Science Advances. https://advances.sciencemag.org/content/1/5/e1400253
2. **Has the Earth’s sixth mass extinction already arrived?** 2011. Nature. https://www.nature.com/articles/nature09678
3. **Summary for Policymakers: The global assessment report on biodiversity and ecosystem services.** 2019. IPBES. https://ipbes.net/sites/default/files/2020-02/ipbes_global_assessment_report_summary_for_policymakers_en.pdf
4. **Mass extinction in poorly known taxa. 2015.** PNAS. https://www.pnas.org/content/112/25/7761
5. **Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).** Media Release. 2019. https://ipbes.net/news/Media-Release-Global-Assessment#5-By%20the%20numbers
6. **Pan European Common Bird Monitoring Scheme.** https://pecbms.info/trends-and-indicators/indicators/

SPECIES THREATENED WITH EXTINCTION

38-1

1 million species are threatened with extinction[1].

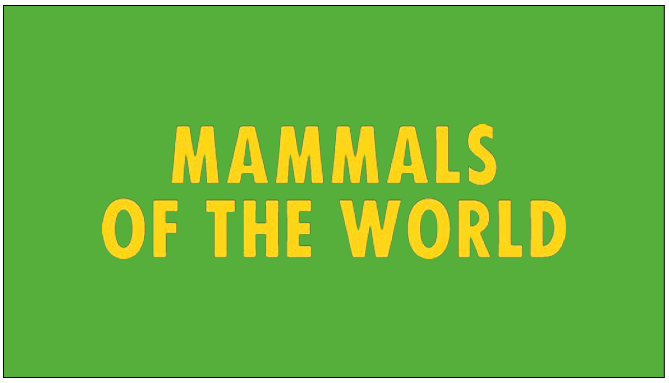
41% of amphibians, 34% of conifers, 33% of reef building corals, 25% of mammals and 14% of birds are threatened[2].

Land based insects – vital for biodiversity and food production – are in a dramatic decline of around 9% in abundance per decade[3]. 41% are threatened with extinction[3,4].

Unless we change our ways of producing food, insects as a whole will go down the path of extinction in a few decades[5].

1. **Summary for Policymakers: The global assessment report on biodiversity and ecosystem services.** 2019. IPBES. https://ipbes.net/sites/default/files/2020-02/ipbes_global_assessment_report_summary_for_policymakers_en.pdf
2. **International Union for Conservation of Nature.** https://www.iucnredlist.org/about/background-history
3. **Meta-analysis reveals declines in terrestrial but increases in freshwater insect abundances**. 2020. Science. https://science.sciencemag.org/content/368/6489/417
4. **Insect declines and why they matter. 2019.** The Wildlife Trusts. https://www.somersetwildlife.org/sites/default/files/2019-12/FULL%20AFI%20REPORT%20WEB%20Small_1.pdf
5. **Worldwide decline of the entomofauna: A review of its drivers.** 2019. Biological Conservation. https://www.sciencedirect.com/science/article/pii/S0006320718313636

38-2



39-1

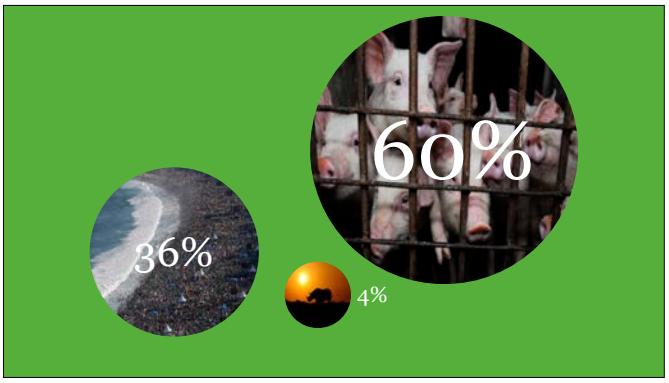
We inherited a world of richness that we might not hand on to our children.

The biomass[1] of wild land mammals has declined by 85% over the last 10,000 years[2]. That's five out of every six wild mammals.

Today, by biomass, the mammals of the world are represented like this: 60% livestock; 36% humans; 4% wild[2].

… and so if we were to be more honest with our children their world of animals looks like this: cow, cow, pig, human, cow.

1. **Biomass is one way of describing the composition of the living world.** In describing a complex system like the biosphere, it is critical to quantify the abundance of individual components of the system (i.e., species, broader taxonomic groups). A quantitative description of the distribution of biomass is essential for taking stock of biosequestered carbon and modeling global biogeochemical cycles, as well as for understanding the historical effects and future impacts of human activities[2].
2. **The biomass distribution on Earth. 2018.** PNAS. https://www.pnas.org/content/115/25/6506



39-2

40

"Outbreaks [such as the coronavirus] are manifestations of our dangerously unbalanced relationship with nature.

They all illustrate that ***our own destructive behaviour towards nature is endangering our own health*** *– a stark reality we've been collectively ignoring for decade."*

Elizabeth Maruma Mrema is executive secretary of the UN Convention on Biological Diversity; Maria Neira is director of the World Health Organization department of environment, climate change and health

---

41

"Climate change is the defining issue of our time — and we are at a defining moment.

If we do not change course by 2020, we risk missing the point where we can avoid runaway climate change, with ***disastrous consequences for people*** and **all the natural systems that sustain us."**

Antonio Guterres, UN Secretary General

https://www.theguardian.com/world/2020/jun/17/pandemics-destruction-nature-un-who-legislation-trade-green-recovery

---

42

This is the end of the part on the facts behind the ecological crisis.

Now we'll have a moment together to reflect and take notice of how everything we've just heard makes us feel.

[Pause for one minute of silence. The slide will automatically advance after a minute.]

Break & talk to your neighbour
about what you have just heard

extinction rebellion

43

Now let's have a break for a couple of minutes to discuss what we just heard. If you would rather sit in silence and continue thinking about what we've just heard, that's OK too.

44

[5 second pause for reading]

Now we look at what we need to do.

WHAT MUST CHANGE?

extinction rebellion

45-1

If we do nothing else, we need to stop CO_2 emissions from fossil fuel burning. Everything else is secondary because if we don't do that, then we will fail. It's that straightforward.

To have any chance of keeping below 2°C, we also need a rapid change of high carbon lifestyles and consumption of energy and "stuff" by the world's richest people.

Personal action on its own **WILL FAIL**. It is critical that our new approach encourages governments, international organisations and corporations to change.

And that is **EXACTLY** what XR is here to do.

[These next notes are optional]

There is a linear relationship between the amount of CO_2 that accumulates in the atmosphere and temperature rise[1].

Halting climate change requires human society to stop emitting CO_2 **rapidly[a], entirely and forever**; or any emissions must be matched by an equal amount of rapid CO_2 vacuuming from the atmosphere. There are however no available or likely available technologies to safely vacuum up CO_2 at the scale and timescale needed[2].

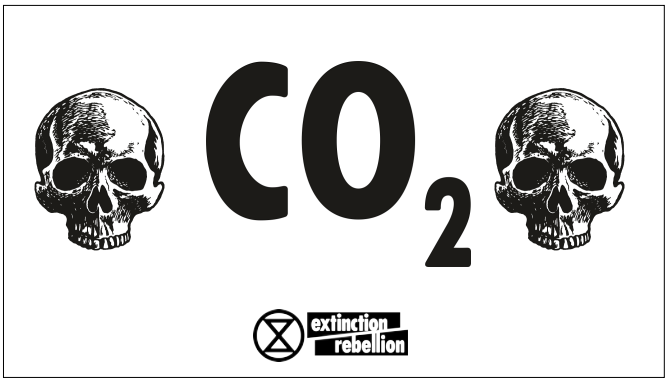
By far, the biggest cause of CO_2 emissions is burning fossil fuels for energy (used for electricity and heat production, transport, industry, manufacturing and commerce) [3].

So, the climate change problem is principally an energy problem.

And to have any chance of staying well below 2°C, there must be a rapid and complete transformation of the energy system.

a. To have any chance staying well below 2°C, emissions of CO_2 from wealthy countries need to reach zero by 2035 to 2040, with interim mitigation rates of 10% to 20% per year[4].

1. **Focus on cumulative emissions, global carbon budgets and the implications for climate mitigation targets.** 2018. Environmental Research Letters. https://iopscience.iop.org/article/10.1088/1748-9326/aa98c9/meta
2. **Negative emission technologies: What role in meeting Paris Agreement targets?.** 2018. European Academies Science Advisory Council. https://easac.eu/fileadmin/PDF_s/reports_statements/Negative_Carbon/EASAC_Report_on_Negative_Emission_Technologies.pdf
3. **Global Carbon Project**. https://www.globalcarbonproject.org/carbonbudget/19/highlights.htm
4. **Professor Kevin Anderson. A Prescription for the Planet**. 2019. https://www.cat.org.uk/a-prescription-for-the-planet/



46-1

So, what have we tried, so far?

GLOBALLY:

We have had the IPCC (Intergovernmental Panel on Climate Change) since 1988, whose job it has been to provide scientific evidence to governments, to support their decision making.

In 30 years, they had 25 major conferences, 5 major reports and many smaller ones.

And we've had a couple of global agreements, the Kyoto Protocol (1995) and the Paris Agreement (2015).

LOCALLY:

We've tried many things to make changes locally, within each country.

Politically, there have been a range of efforts to curb emissions, from carbon trading schemes to climate legislation.

Legally, there have been many challenges to governments. Around 1,300 legal actions concerning climate damage have been brought against governments in 28 countries.

(http://www.lse.ac.uk/GranthamInstitute/publication/global-trends-in-climate-change-litigation-2019-snapshot/ in https://www.theguardian.com/environment/2019/jul/04/governments-and-firms-28-countries-sued-climate-crisis-report)

Traditional campaigning has been around for decades, such as marches, petitions, and the professional activist groups such as Greenpeace, Friends of the Earth, Sierra Club, WWF.

And we have all the **individual commitments**. Recycling more, walking to work instead of driving, cycling, planting more trees, installing rooftop solar, getting electric cars, flying less, eating less meat, etc. etc. All of these things are commendable and we are right to act according to our personal values. Such action is worthwhile in itself, plus it models behaviour for others to follow. BUT the problem is too big to be solved by individual action alone.

46-2

47-1

The Climate Change Act (2008) was and is still a trailblazing piece of legislation.
BUT
UK's Government's own Climate Change Committee has said the UK is not on track to meet 2C climate targets, NOT ON TRACK TO MEET carbon neutral target by 2050. The science is clear that 2050 is way too late, but we're not even on track for way too late.
The government hands out over £10 billion of fossil fuel subsidies a year, while reducing subsidies from renewables (e.g. solar panels, electric cars).

Government promised to phase out coal from the energy mix by 2022, and indeed we only have about 5% left in there.
BUT
The government gave permission to a new coal mine in Cumbria that will produce coal for the next 50 years (Nov 2019)

We had a fracking moratorium, announced during the election campaign last November.
BUT
While we may have stopped fracking on these shores, it's not a ban, just a moratorium. The government can decide to restart at a later date.
And, at the same time, we are on track to make a £1bn fracking investment in Argentina, from a green investment fund! The money goes to Shell. (Oct 2019)

Adverse planning regulations have prevented on-shore wind for years. These are being reviewed and hopefully will be changed.
BUT
Instead of investing in green infrastructure, this government wants bigger airports, more roads and more polluting vehicles.
At the UK-Africa investment summit this January, our government, which has committed to support African clean energy, made energy deals worth £2bn, of which more than 90% was for oil and gas. (Jan 2020)

The UK Parliament announced a climate emergency following XR's April actions in 2019.
BUT
Government hasn't. The government is under no obligation to do anything.

The parliament then called for a citizens' assembly to discuss the climate emergency, which was conducted in Jan-March 2020.
BUT
This has no legal teeth – it's purely in an advisory capacity. It's a great exercise to have done, but we are sceptical as to the efficacy, when the government is under no obligation to take its advice.

Heathrow expansion has just been ruled illegal because it didn't consider the Paris Agreement. This is a success over the government, thanks to XR's legal team.
But we haven't succeeded on HS2 yet, which is set to destroy wildlife habitats for what is essentially a vanity project with no proven benefit, economic, social or otherwise.

FINALLY:
Government says they have reduced CO2 emissions by 40% since 1990
BUT
CO2 emissions in the UK have actually stayed pretty much the same since 1990 - when you include aviation and the things we import.

So you can see that our current approach is not

working in the UK.

47-2

47-3

47-4

THE UK GOVERNMENT'S TRACK RECORD

Government *says*	**Government *does***
Climate Change Act (2008)	*Not on track to meet targets*
Promise to phase out coal (by 2022)	More fossil fuel subsidies
Fracking moratorium (2019)	*More fracking*

extinction rebellion

47-5

THE UK GOVERNMENT'S TRACK RECORD

Government *says*	**Government *does***
Climate Change Act (2008)	*Not on track to meet targets*
Promise to phase out coal (by 2022)	More fossil fuel subsidies
Fracking moratorium (2019)	*More fracking*
Parliament declares climate emergency (2019)	More coal

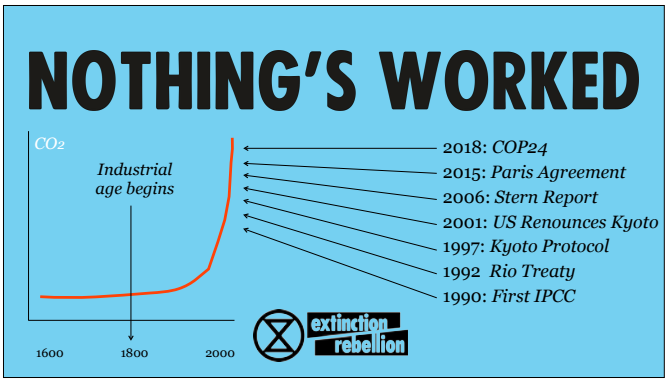
extinction rebellion

47-6

THE UK GOVERNMENT'S TRACK RECORD

Government *says*	**Government *does***
Climate Change Act (2008)	*Not on track to meet targets*
Promise to phase out coal (by 2022)	More fossil fuel subsidies
Fracking moratorium (2019)	*More fracking*
Parliament declares climate emergency (2019)	More coal
Heathrow illegal (2020)	*Continuing destruction of ancient woodland for HS2*

extinction rebellion



48

NONE OF IT HAS WORKED. How do I know?

This is how. Since the formation of the IPCC in 1988, we have emitted more CO2 *knowingly*, than ALL of our emissions previously[1].

And there are no signs that the tendency is changing.

When people tell you that we are making progress, look at this graph.

If this graph keeps on going up like it is currently doing, then we are failing. No matter how many things we are doing.

We are only having an impact if it starts to tail off.

You would be right to ask, well, why hasn't all this stuff worked?

1. **How have global CO_2 emissions changed over time?** Our World In Data. https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions

---

49

So, why haven't our efforts worked?

[SPEAKERS – please try not to expand on these points, keep it short.]

Our current electoral system. Politicians have a need to be popular, otherwise they wouldn't be elected, or re-elected.

If a government says: "We're going to do something that will cause a great deal of inconvenience, for the next ten years or twenty years" then it won't be voted back in.

So any politician thinking about a 5-year election cycle finds it extremely difficult to think 20-30 years ahead. This is not their fault, it's the way in which the system works.

The second problem is the **constant demand for growth**. Capitalism has been instrumental in creating the quality of life we enjoy here in the global north today. But it has two fatal flaws:

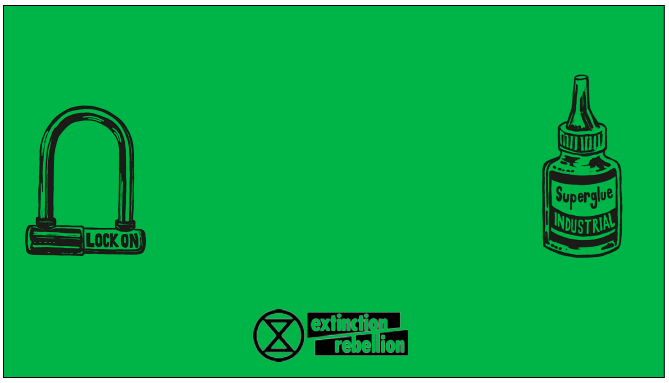
1. It is unable to "price in" the future. It's really good at telling us the price of a packet of nappies today, but has nothing to say about the price of clean air for our grandchildren.
2. It externalises the cost of doing business into the environment. In other words, it assumes the environment is an endless **source** of materials (such as clean water, clean air, soil, minerals etc.) and an endless **sink** of waste and pollution.

It assumes that these resources are free, forever, and that dumping waste has no consequences, forever.

But of course there is a limit to the planet. This has never historically been a problem, but it is now, because this is the first time in human history that the human footprint is bigger than the planet.

If the economy kept on growing at historical rates, then we'd need several planets by the end of the century, and of course, we've only got one.

The third problem is that **change will only work if we all do it**. It doesn't make sense for one person or a few people to do it. As individuals, we know what we should collectively do. But despite what we may think is right as individuals, we are trapped in this fact that unless and until everybody works together, our individual actions are pointless.



50-1

Once we have seen that all the things we have tried so far have failed, it becomes clear that we need a new approach.

50-2

51-1

When the rules don't work for us, we must break the rules.

We won't be the first ones to do so. In fact, breaking the rules in the name of a good cause has a long and noble tradition.

It has been used successfully many times in the past, notably by Gandhi who organized Indian rebellion against British rule, Rosa Parks who famously refused to give up her seat on a bus to a white person and triggered the American Civil Rights movement, and Martin Luther King who organized that movement and mobilized huge numbers of Americans to force changes to racially discriminatory laws.

These people, and the millions who surrounded them, are regarded as heroes now, but at the time were often vilified as criminals for breaking the law.

You may have noticed that throughout history, elites with power and money tend not to give away rights without being pressured to do so.

Think of the universal vote, women's suffrage, gay marriage rights, racial discrimination, desegregation, liberty from colonial rule, equality under the law. Think of Apartheid, think of the Velvet Revolution in Eastern Europe in 1989.

Civil resistance, also called disobedience or non-violent direct action (NVDA – Extinction Rebellion's preferred term) means normally law-abiding citizens breaking rules and laws as a way to force change in a system that is refusing to change.

51-2

52-1

I imagine you may be wondering how we think Extinction Rebellion might succeed where all these other efforts have failed.

Before we talk about XR, we need to discuss a few concepts about civil resistance, from history and from social science.

So let's look at the shape of successful non-violent civil resistance movements.

Non-violent. We say rules must be broken, but always in a non-violent way. This is because social science tells us that non-violent resistance has a much higher chance of success then violent resistance. It's also morally right, because we are not violent by nature; we are just average people who want to live a worthwhile life and leave a habitable planet for our offspring.

There is another important reason to be non-violent: governments typically find it easier to engage and negotiate with movements that are **respectful**, rather than threatening to blow them up. When a movement

is respectful, it can **shift the loyalties** of some elements in the regime. One of the key success factors in past non-violent movements was that security forces or judiciaries decided to either refuse to represent the authorities, or even joined the movement.

Size. Being non-violent also lowers the barrier of entry into the movement – people find it easier to imagine themselves participating, than if they were expected to take up arms.

This leads to a larger movement, and the science is clear that larger, more diverse, non-violent movements are more likely to succeed.

This is because in order to achieve change, a movement must be able to generate leverage. The bigger the movement, the more leverage it can generate. Diversity is crucial.

1. The more types of people take part, the more skills there will be in the movement. Lawyers, scientists and lecturers, ex-police, artists, organisers, all of whom provide essential services to a movement.
2. The more diverse the movement, the better it represents the overall population, and the more likely it is to be accepted and supported by wider society
3. And the more types of people take part, the more difficult it will be for the regime

What can create positive pressure on a regime?

Disruption. Our instincts as good citizens are not to break the law but to *obey* the law. However, in order to get people's attention, and get government's willingness to engage, it's necessary to be disruptive. Quietly offering leaflets in a shopping centre will not cut it. Historically, that has meant people putting themselves in other people's way. Not just temporarily, like in a protest march, which washes over, but in lasting ways, such as road blocks, boycotts, strike action, hunger strikes, and many other creative ways.

Dilemmas. Before a regime engages, it often tries to suppress movements. Social science tells us that in many instances, attempts at repression backfire, and lead to even more sympathy for the movement. This is called a dilemma: when a regime can choose to allow the movement to carry on (e.g. with a road block), or remove/arrest the participants. Both of these choices have the tendency to increase awareness and sympathy for a movement.

So a movement that wants to succeed, should present such dilemmas to the regime.

The protest needs to be focused where the power is – in London, for example, where the government is based.

The resistance needs to be prolonged enough. Change doesn't occur overnight, and so a movement needs to build **resilience**, or it will dissipate over time, as we have seen with the Occupy movement, for instance.

Ref:
Chenoweth, Erica and Maria J. Stephan. Why civil resistance works: The strategic logic of nonviolent conflict. Columbia University Press, 2011.

SUCCESSFUL CIVIL RESISTANCE

- **Nonviolence:** more successful *as well as morally right*

extinction rebellion

52-2

SUCCESSFUL CIVIL RESISTANCE

- **Nonviolence:** more successful *as well as morally right*
- **Size:** lots of people *from all backgrounds*

extinction rebellion

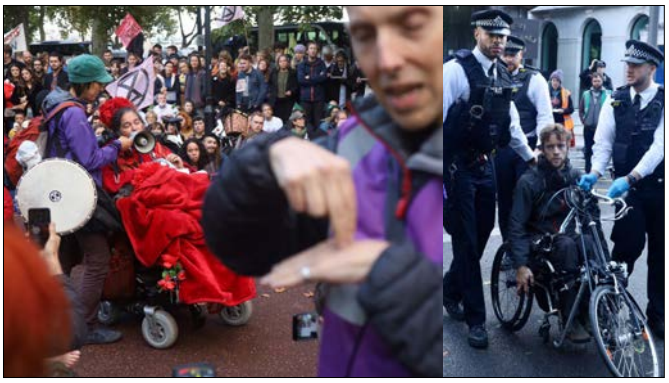
52-3

SUCCESSFUL CIVIL RESISTANCE

- **Nonviolence:** more successful *as well as morally right*
- **Size:** lots of people *from all backgrounds*
- **Pressure:** cause disruption *and dilemmas*

extinction rebellion

52-4



53

One of the important ways for a movement to build solidarity in the population, and build pressure on the regime, is by **public self-sacrifice**. Hunger strikes are a good historical example, and voluntary mass arrest is another.

Mass arrest is important for two reasons.

1. When the numbers are large enough our message is amplified. We saw this in XR's October Rebellion when over 1,700 rebels were arrested. The larger the number arrested, the more media coverage and the greater the opportunity to make our case in court.
2. Mass arrest is also important in building sympathy. For instance, the majority of the population agrees that the climate crisis is a clear and present danger. When someone gets arrested for trying to protect the future of our children, the majority of the population will take the side of the protester, not the authorities. This is how the power base of the regime gets eroded, and the impact of the movement grows.

Ref:
Chenoweth, Erica and Maria J. Stephan. Why civil resistance works: The strategic logic of nonviolent conflict. Columbia University Press, 2011.

54-1

I hear you ask: how big does a movement need to grow before it succeeds? Let's look at some numbers.

The great news is that to achieve system change, we don't need *everyone* on board. Social science tells us that whenever a non-violent movement achieves a level of active support equivalent to somewhere between 2% and 3.5% of the population, it has a high chance of success. [1] Not a certainty, but a much higher chance.

So, a small group of people have been shown by science to be able to make a huge difference.

In fact, all but three non-violent movements since 1945 that reached 3.5% have been successful.

Importantly, we don't know whether 3.5% will work this time, because the climate emergency is a historically completely unprecedented challenge.

There is no research that can tell us whether it will work.

However, that would be a poor reason for not trying anyway, especially when we have already tried everything else, and nothing seems to have worked.

And with that, let's take a look at XR; what it is, and what we're trying to do!

[Additional info for speakers]

Movements with far less than 3.5% can succeed too.

For example, the peaceful ousting of the regime in the Soviet Union in 1989 involved only 700,000 active participants. Less than 1%.

In Brazil, military rule was changed peacefully in 1985, by a resistance movement of 1 million. Again, less than 1%.

In the Philippines, the Marcos regime was non-violently replaced in 1986, by 2 million protesters. 3.5%

In Nigeria, the military regime was non-violently ousted by 1 million protesters. That's 1%.

The list goes on.

So when you leave this room, I want you to remember this number. If you remember just one thing from today's talk, let it be this number: 3.5%.

In the UK, 3.5% means roughly 2m people.

In [**insert name of the location where the talk is taking place]**, it's about [**insert appropriate number**].

XR has about 350,000 supporters in the UK (January 2020). We had a couple of hundred thousand people on the streets on September 20th 2019.

Globally, 3.5% means over 260m people. During the September 2019 Global Climate Strike, we had just under 8m.

So, while 3.5% may not sound like a lot, we are not there yet, not by a long mile.

WE NEED MORE PEOPLE TO JOIN. We need YOUR support.

So the challenge for any location like **[insert name of location]** is: can you get to 3.5%? Can you get **[XXX]** supporters locally?

Ref:

[1] Erica Chenoweth. 2020. Questions, answers, and some cautionary updates regarding the 3.5% rule. *Carr Center Discussion Paper Series, April 2020*.

Pronounce Chenoweth: **CHEN**-o-weth.

54-2

55-1

The movement began in 2018 with a small group of people who were deeply concerned with the looming climate and ecological catastrophe and all that entails. We were frustrated with the lack of truth telling by governments and media, the failure of action up to now, and were inspired by the research on civil resistance and its success on other issues.

Anyone who adheres to our principles and values is part of Extinction Rebellion. There's no membership fee, you don't need to wear a badge. Signing up for one of our newsletters is a good first step.

55-2

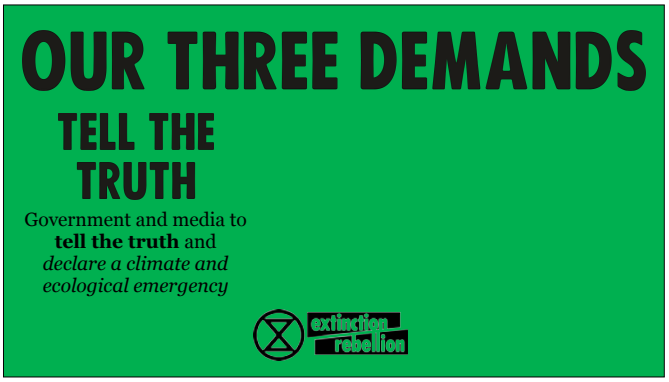
56-1

We have three big, clear demands.

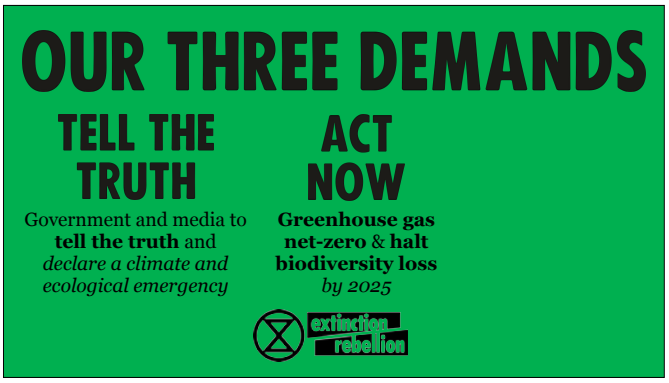
The first demand is for the government and media to tell the full truth about the situation we are in. That means the kind of information we covered in the first half of this talk. Everybody should be told about this, in the same way people were told about the threat from Nazi Germany. Not like the confusion and lies we've seen from governments over the coronavirus pandemic.

The second demand is for the government to set a legally binding target for greenhouse gas emissions to reach net-zero by 2025.

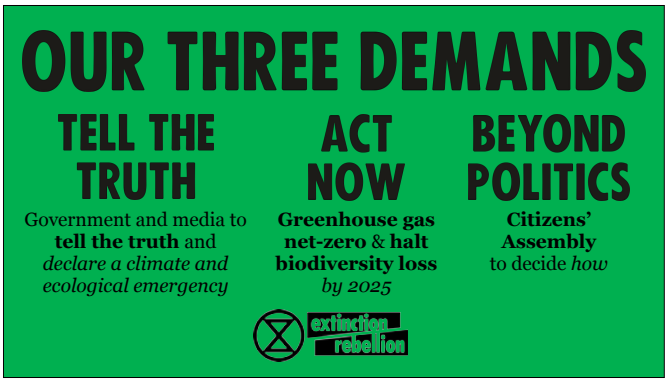
The third demand is for a citizens' assembly to decide how to address the issues. Their recommendations must be legally binding. They would be commissioned and funded by the government, but independently organised and run. XR would NOT be involved in set-up, nor running, the assembly.



56-2



56-3



56-4

57

In other emergency situations, such as the coronavirus pandemic, the government and media were heavily focused on the issues at stake. It dominated politics and news. We need this level and priority of output now, but we need it to be honest.

Let's stop and notice just how little media attention has been given to the biggest issue probably in the history of human civilisation.

It's extraordinary, to think that there has never been a major BBC series on the climate crisis.

It's a step forward that the media in general have increased their coverage since we began rebelling. For example, the October Rebellion in 2019 generated more than 40,000 news items. However, many people in power prefer to listen to half-truths and conspiracy theories.

National and local government have not stepped up. They are all but silent. Ask most people on the street and they haven't heard about the dangers, say, of tipping points and they don't know the scale of the risks and how soon they could happen..

The public must be informed of threats or they cannot act on them.

The government and media are the biggest source of information for most people. They are both failing in a basic duty. The lack of information feeds an unconscious minimisation of climate and ecological threat, the thought "it can't be that big a problem or we'd be hearing about it all the time."

The second demand is for the UK to all but stop emitting greenhouse gases, and offset any unavoidable emissions by taking carbon from the atmosphere. That is what *net*-zero means. We need this across all nations and that is why we are an international movement. If some countries show it can done, others will follow.

We are already in a very risky zone. Even if we stopped all emissions tomorrow there will still be 415 parts per million of carbon dioxide left in the atmosphere which will continue heating the earth. We need to start the process of change immediately. The government's target of 2050 is incredibly risky, it's misleading, and even worse they are not even on course to meet it. It's a method of avoidance, kicking the can down the road until it's too late.

2025 gives enough time for a complete change of course for our economy and priorities, **from one whose goal is industrial growth at all costs, to one whose goal is to sustain life.** In WW2 we completely turned our economy around to focus on the war effort. It can be done. If Coronavirus has taught us anything, it's that you CAN switch the economy off, with the right political will.

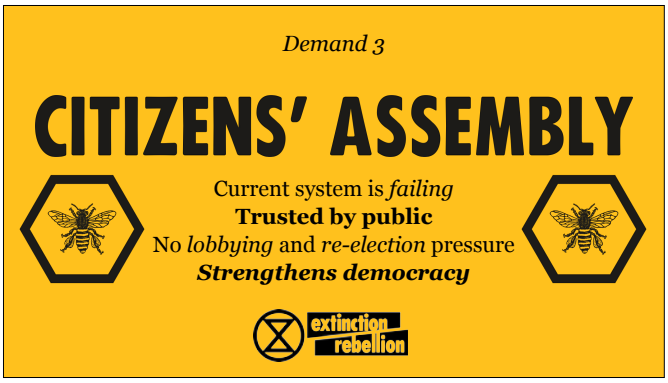
We suggest a similarly fundamental transition now, one that happens over 5 years, rather than in 2 weeks (which as we've seen can have devastating consequences of other kinds).

The message of the pandemic is that non-critical activities can be pared back, when the lives of millions of people are at stake.

We should do the same for the climate emergency, where hundreds of millions of lives are at stake, and perhaps billions.

Our job as a movement is get the message out that a rapid transition is both urgent and doable, and to make the change *politically and psychologically* possible.

[You can talk about shifting the Overton window here if appropriate for the audience. The Overton window is the range of what is commonly thought and said. XR has already moved the Overton window significantly on net-zero targets. 2 years ago a zero carbon target was barely discussed by society, and when it was, 2050 was the kind of timescale mentioned, or later. Now the discussion is about where to aim between 2020 and 2050, and most of the public now want 2030.]



59

Our political system as it stands is incapable of making complex decisions, such as those presented by the climate emergency. Party politics and the focus on the next election makes it difficult, if not impossible, for politicians to take a long term view.

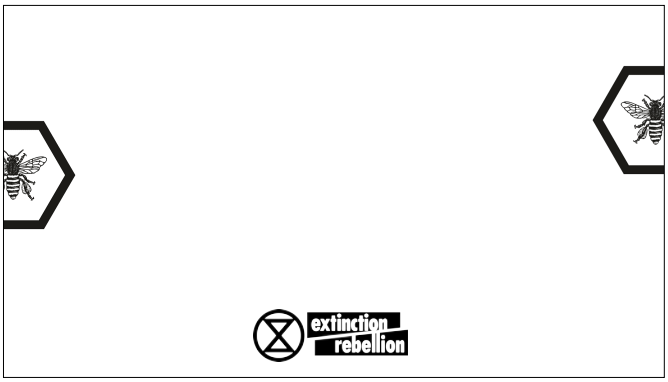
Because a CA has people who come from all walks of life, research shows that what they decide is more accepted by the public, People know "someone like me" was on the assembly so more easily accept their decision. The decisions they make are usually better, because members, unlike politicians, are not worrying about their career, whether they'll get re-elected, or what the press will say. They are not getting a distorted view from wealthy donors, lobbyists or being only from privileged backgrounds.

So a citizens' assembly is a way of upgrading and strengthening our democracy.

We demand a government-supported assembly working in conjunction with the government. This is because only national government has the power and resources to co-ordinate and make policy changes required (industrial policy, tax, local empowerment, global cooperation).

Citizens' Assemblies have worked very well in the past. The Irish Citizens' Assembly topics included a constitutional change on abortion, as well as national action addressing climate change. In Poland, assemblies determined city flood protections action.

The XR website includes a lot of information about Citizens' Assemblies under our "Demands" tab. Please check it out.



60-1

A citizens' assembly is a large group of people who are selected to represent all elements of the population and shades of view.

They are brought together to learn about and discuss an issue, and agree what they think should happen.

The people are selected to reflect the population –in terms of age, sex, ethnicity, social class and sometimes relevant attitudes (e.g. preferences for a small or large state).

Depending on the issue they may meet over weeks, or years.

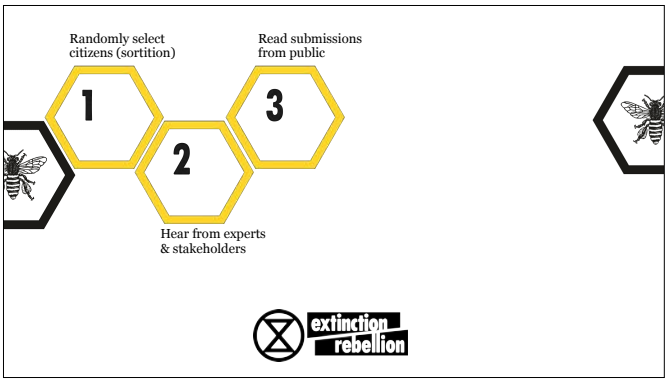
First they are taught critical thinking and discussion skills, including how to work together and listen to each other.

The assembly is made up of ordinary people with a broad range of backgrounds and opinions. They will hear from various experts, as well as people affected directly, and explore different options. They will have

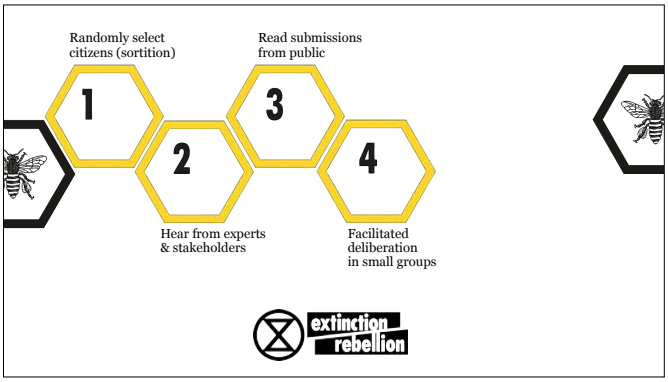
to consider each other's views and lives, and decide what is the best way forward for everyone together. The government then has clear instructions as to what its citizens actually want.

60-2

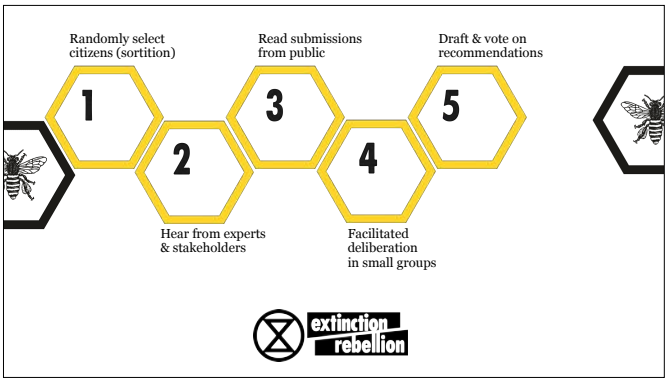
60-3


Randomly select citizens (sortition)
Read submissions from public
1
2
3
Hear from experts & stakeholders
extinction rebellion

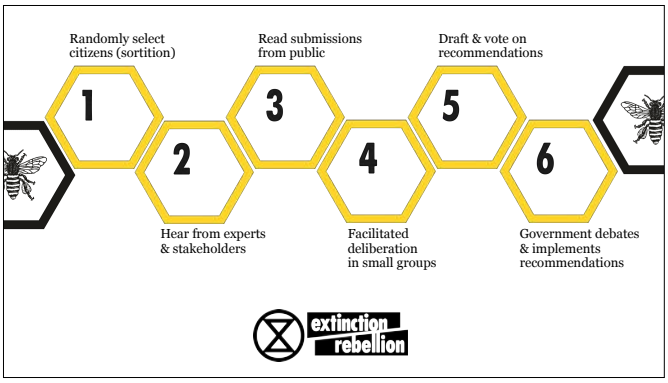
60-4


Randomly select citizens (sortition)
Read submissions from public
1
2
3
4
Hear from experts & stakeholders
Facilitated deliberation in small groups
extinction rebellion

60-5


Randomly select citizens (sortition)
Read submissions from public
Draft & vote on recommendations
1
2
3
4
5
Hear from experts & stakeholders
Facilitated deliberation in small groups
extinction rebellion

60-6



60-7

61

OK so how does Extinction Rebellion work?

62

Anyone can take action in the name of Extinction Rebellion as long as you support our aims and demands, and follow our 10 principles and values. These are on our website, but here are three important ones.

The most important of these is that we are non-violent.

We are autonomous and decentralised, we avoid concentrations of power, so as I said anyone can take action in the name of XR. We don't have orders given from 'top leaders', instead we have hundreds of groups working away on different things and coordinating with each other. It's a very decentralised structure and that means people can feel equally important – it's an amazing movement to be part of because you don't feel that you need to get through lots of layers of permission if you have an idea on something that you want to do.

Thirdly, within XR we want to build the kind of culture we would like to live in. One that supports life and our own flourishing. We call this a regenerative

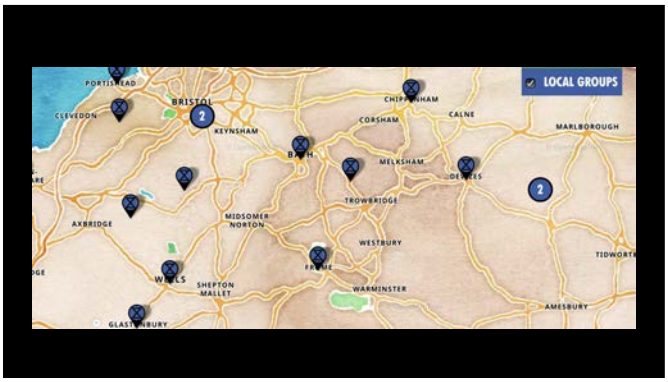
culture. This includes lots of emphasis on looking after each other, building community, taking time to reflect and learn, respecting our own and each other's needs, and giving space to our feelings, as we have done a little tonight.

63

The movement has grown rapidly, first in the UK and soon after across the world. New groups are popping up all the time.

XR has groups in 68 countries across the world, **389 groups in the UK alone, and nearly 1,100 groups globally (as of May 2020).**

https://rebellion.earth/act-now/local-groups/
https://rebellion.global



64

Here is map of local groups in our area. *[PLEASE AMEND SLIDE WITH A MAP OF **YOUR** AREA]*

We are a movement not an organisation, there isn't a membership system. So you can get involved in whichever group suits you and attend events by any group.

You can also show up and join in any action. We recommend doing some training so you can learn about nonviolent civil disobedience, understand your legal rights, and how to look after yourself and others. We recommend people form groups called affinity groups that get to know each other and go to actions together.

Local, regional and national groups also undertake all sorts of activities through 'working groups' for example planning actions, giving trainings, art groups, samba bands, media teams, and so on.

https://rebellion.earth/act-now/local-groups/

65

Our core activities are actions – these are the things that aim to cause disruption and to get us to the notice of the public and to the notice of authorities.

66

The world's most pressing problems are closely interlinked.

At the heart of it all sits POWER.
Power (financial and governmental) is concentrated in the hands of a very small minority of humanity. Think political leaders, think global corporations, think financial institutions, think the mega-rich.

This concentration of power doesn't care about the damage it does to the Earth, and it perpetuates gross inequalities amongst humanity.

It is impossible to ‘do justice’ to global justice in just one slide, but here are some examples.

People of colour are disproportionately affected by the adverse effects of climate change, in the global South.

And even within industrialised nations such as ours, people of colour are dying of Covid at twice the rate of white people[1]. People pf colour are also disproportionately affected by air pollution, have lower life expectancy, have less access to education and suffer more police brutality
.
Many movements are advocating for justice, for a more equal distribution of power and resources.

Whether it’s Black Lives Matter, LGBTQ rights, refugee rights, famine, water stress or air pollution, We stand with them. We call for system change, for a world that is not built on exploiting people or planet.

1. https://www.theguardian.com/environment/2020/jun/18/environmental-justice-means-racial-justice-say-activists

67

XR is the fastest growing international movement.

We are in 78 countries in just 18 months - some have said we are the most successful start-up in history. This is a truly global movement – organised at a grass-roots level in six continents.

We recognise the people who have produced the least amount of carbon are suffering the worst impacts of the climate emergency today.

That's why Extinction Rebellion have been working with the Internationalist Solidarity Network to support groups in the Global South to bring the important issue of climate justice into our approach.

68

In April and October 2019 we held large nationally organised rebellions in London. In both we held occupations around the centres of power in London: parliament, government buildings, the BBC, the Bank of England, City Airport.

The April rebellion resulted in 1,000 arrests for civil disobedience and generated a huge amount of sustained media publicity for the first time ever about the climate and ecological emergency. Many public figures such as Rowan Williams, the former archbishop of Canterbury, plus academics, doctors, and others came out in support. Many of those arrested have been prosecuted, and were able to explain the reasons for their actions in court, with significant sympathy from the judiciary.

Immediately following the April Rebellion, the Labour Party leadership came out in support, and Parliament (though not the government!) voted to declare a Climate Emergency.
Theresa May, under pressure, passed a net zero target of 2050 – absolutely not nearly enough, but a sign of feeling the heat.

The October rebellion was even bigger, and the police arrested 1,700 people and got so desperate that they tried to ban all protest – which didn't work, people stayed on the street! This police response was later deemed illegal by the courts, an overreach of power.

What has been the effect? The climate crisis is now much more frequently reported on by all sections of the media. It's still far from enough, but we have broken the almost complete silence on the issue, that it's hard to remember reigned until 2 years ago.

A survey of 1,400 nationally-representative adults by Cardiff University in October 2019, found climate change was ranked the second most important issue facing the UK, up from 13th place in 2016. Climate concern has doubled in the past four years, with 40% saying they were now "very or extremely" worried. 75% of survey respondents supported using public money now to prepare the UK for climate risks.

Now all of this is absolutely nowhere near the scale of change we need. It's ***so*** far from enough. But our civil disobedience approach is definitely having an effect and now we need to massively grow the

movement to get our demands met.

LOCAL ACTIONS

Stop Bristol airport expansion

& THEIR RESULTS

69

[This slide should be amended / replaced with one which shows actions local or regional to you. We strongly recommend these are actions or campaigns that have had a demonstrable impact in some way. For example getting a local council to declare a climate emergency].

Local and regional groups also design, plan and carry out their own actions.

Here are two examples locally:

In 2019, rebels, in conjunction with other campaigners, mounted a sustained and successful campaign to get Bath and North East Somerset to declare a climate emergency. This included a strong presence both outside and inside council meetings in the run up to the election, including a die-in on the council steps that councillors had to walk through. When the council met to vote on the climate emergency, rebels who were in the public gallery, revealed t-shirts spelling out ‘2030’ to drive home the point that any later target was unacceptable. We had feedback from people within the council that our presence over many weeks, in and outside the Guildhall, had had a palpable effect on councillors and staff.

In early 2020 there was a large and sustained campaign against Bristol airport expansion, again successful. Hundreds of people wrote objections to the planning application, there were protests including a large day of action on Weston super Mare beach th the weekend before the vote, and a huge presence outside the final planning committee meeting.

We have found that because local politicians are much more connected, in a human way, to concerns, really are affected by large, respectful, demonstrations of feeling.

281 local authorities across the UK have declared a CEE. (May 2020)

70-1

In order to be able to carry out disruptive actions and create dilemmas for the authorities, we need people who are willing to do things that risk arrest.
Arrest itself is also a form of disruption as it uses police resources and court time. We have found our court cases have created thousands of opportunities to present the issues to the judiciary, and reach one part of the establishment.

However, for every person who is what we call an “arrestable” – somebody who is *willing* to be arrested to make this point – there are maybe 10 or 20 other people who are part of the movement who support them, or help the movement in other ways – who helped to create the artwork, for example, or ran trainings, or supported after arrest. Joining Extinction Rebellion doesn’t mean you have to get arrested – you don’t. There are so many other things to do.

70-2

71

72-1

Here are many of the hundreds of roles and activities that can help the movement flow, grow, be resilient and be enjoyable to be part of. There are so many ways you can help, and we really need you, whether you have an hour a week or are able to give up your job to volunteer full-time.

Civil disobedience works when it's a mass movement which is broad and diverse. We want to have 1 million people actively involved.

I particularly want to draw your attention to our top tasks, as these are part of a mass mobilisation strategy: Leafleting and stalls, Phone banking, doorknocking, giving this talk, and house meetings. If you can do any of these things you can help grow the movement as fast as possible.

72-2

73-1

I've hit you with a lot of facts, but whether you join us is also about how comfortable you feel, how welcome you feel, and and whether you feel we will make a difference. For most of us, civil disobedience is new territory, and brings up anxiety and doubt. So here are some final thoughts:

It might work!
In this super complex system, we can't be sure what will work, but this is our best chance. We are already having more success than has been achieved by traditional campaigning. Also, the question is not: "can we fix this or can't we"? It's "can we make this situation better?" And even in the worst situation we can always make it better.

Active hope and feeling better: We know that those acting on the CEE, in an effective way, feel better. We create hope, through the possibility of change, by acting.

Connection: The movement is a hugely supportive, growing community, it feels really good to connect with others who care and are deeply concerned. The

movement is also about building the community we will need for the times ahead, so come and be part of that, in any way that works for you.

Meaning: We have been born into an extraordinary time, that we didn't choose. Now we find ourselves here, the question is, what do you want your life to be about?
[Optional quote: As the poet Mary Oliver said: "What is it you plan to do, with your one wild and precious life?"]

Find your power: And when you start to take action you realise you have more power and influence than you thought. You also realise that you have more capacity to love and give, and more bravery than you imagined.

The Coronavirus pandemic showed us how radical change is possible. We must seize this moment! Now is the time to act.

73-2

74

You don't need permission to get involved with XR – you can visit the website for all sorts of information on our demands, our values, events, groups. You can also sign up for the UK newsletter. If you've got your phone on you you can just take a photo of the QR code and it'll take you right there.

We are now going to hand out sign up sheets if you'd like to receive the newsletter for: the local group and also to get some feedback on the talk.

I want you to leave with two key takeaways:

1. DO NOT BELIEVE FOR A SECOND THAT IF YOU HAVE MADE YOUR PERSONAL COMMITMENTS THEN YOU'VE DONE YOUR BIT.

FORCING GOVERNMENT ACTION IS NECESSARY; PERSONAL COMMITMENTS ARE NOT ENOUGH.

2. DO NOT BELIEVE FOR A SECOND THAT XR

HAVE GOT YOUR BACK. THAT YOU CAN SIT BACK AND RELAX BECAUSE WE'RE ACTING ON YOUR BEHALF.

WE NEED PEOPLE, LOTS MORE PEOPLE. WE NEED YOU. YOUR PLANET NEEDS YOU. LIFE ITSELF NEEDS YOU.

75

[Mention here the next action that the local group is engaged in, so that people in the room can join that action. And add the details into the slide!!]

76

This is not a Drill is a book published by XR. Every new rebel is encouraged to read it. It's widely available in print and in e-reader formats. Purchasing the book also supports the movement.

I'm going to end with a short excerpt from the book, from XR's Declaration of Rebellion:

"We hereby declare the bonds of the social contract to be null and void; the government has rendered them invalid by its continuing failure to act appropriately. We call upon every principled and peaceful citizen to rise with us.

"We demand to be heard, to apply informed solutions to these ecological crises and to create a national assembly by which to initiate those solutions needed to change our present cataclysmic course.

"We refuse to bequeath a dying planet to future generations by failing to act now.

"We act in peace, with a ferocious love of these lands in our hearts.

"We act on behalf of life."