

# COP28 Overview

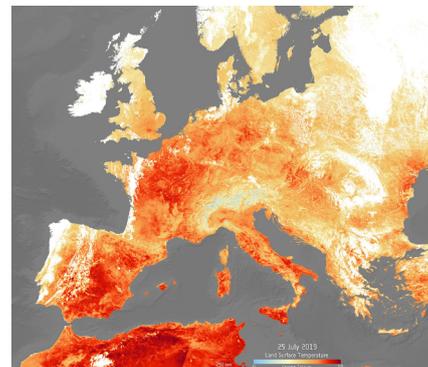
## Climate Conference Briefing

### 1. What is COP28 all about?

In 1994 the countries of the United Nations (UN) signed the first international treaty on climate change. All agreed that action and annual talks (Conferences of the Parties/COPs) were essential.

In their latest report to the UN, the world's scientists said '*human-caused climate change is already affecting many weather and climate extremes in every region across the globe*'. NASA Vital Signs shows this as a stark upward graph of warming, with the two hottest years ever on record being in 2016 and 2020.

Even as the historic UN Paris Agreement was signed in 2015 it was understood that when added together, country targets to cut emissions by 2030 simply would not limit the global temperature rise to below 2°C let alone keep to the aspirational level of 1.5°C increase (above pre-industrial levels). We know from the IPCC (2023) that, '*feasible, effective, and low-cost options for mitigation and adaptation are already available*' (ref). Eight years on from signing the Paris Agreement, however, and **the window to keep the 1.5°C goal alive is barely open**.



Heatwave Image: [European Space Agency](#) generated by Copernicus Sentinel-3 (2019)

Climate action is essential across every sector and in every country of the world. Nations coming together in Dubai for COP28 have to show that they have delivered on their Paris targets and will urgently commit to even greater ambition. UAE has the Presidency and are calling for far more: **\*political will \* funding & technology \* joint international actions**.

### 2. What will happen at your conference?

Your Climate Conference will be run as if you are taking part in **global negotiations at COP28** (see Appendix 1 for key terms).

**\* Representation:** Groups will be assigned a country and tasked to prepare your delegation's opening speech. You will represent your country's views, negotiate and vote on key questions.

**\* Collaboration:** Each country will be asked to contribute to a 'solutions' working group and you will all consider how to raise more awareness and, vitally, more climate finance (see also p.7).



**Cities:** Many major cities are at the forefront of new approaches to infrastructure, cutting pollution, and smart energy use. Much more can be done to develop low-carbon, liveable cities.

**Energy:** Fossil fuels (coal, gas and oil) still make up over 80% of the world's energy supply and demand increases every year. Use and storage of renewable energy must drastically speed up.

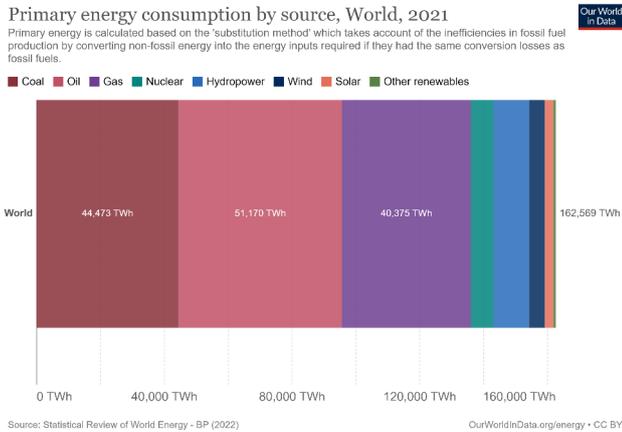
**Forests and food:** Deforestation is causing as much as 15% of global GHG emissions. More joint work is needed globally to reverse the process and invest in better agricultural practices.

**Oceans:** A global CALL TO ACTION has been issued in recognition of our oceans' pivotal part in absorbing atmospheric gases, and the impact of plastics on the oceans and our food-chains.

**Cross-cutting:** Education is a 'critical agent' in changing ideas and motivating new behaviours. Climate finance underpins everything and promises must be kept: **inaction is costing the earth**.

### 3. Is the world making progress?

For many countries at our conference, the targets they set in Paris 2015 were either not very ambitious, or are not being met, or both. A growing number of countries have committed to Net Zero (see [here](#)) carbon emissions by 2050, 2060 (China, Indonesia) or 2070 (India). However, there is a significant gap between promises and action. CO2 emissions have risen significantly since 1990, and in 2021 mostly returned to pre-COVID levels (see Table 1).



\* Hannah Ritchie, Max Roser and Pablo Rosado (2020) - "Energy". Published online at [OurWorldInData.org](https://ourworldindata.org/energy). Retrieved from: 'https://ourworldindata.org/energy' [Online Resource]

Economic development has been tied to fossil fuels with a massive leap in consumption over 50 years. Although countries' coal use is falling, and renewable energy sources are expanding, there is a 'major push' for fossil natural gas.

Emerging economy countries feel it is unfair if their targets for cutting CO2 emissions equal those of industrialised nations who have been high emitters (and benefiting from development) for far longer.

Climate vulnerable countries (V20) are suffering greatly from the impacts of climate change and stress the overwhelming injustice in having to pay to adapt to problems they didn't create. There is a loud call for proper help to fund 'loss and damage' (see Appendix 1).

Dr Sultan bin Ahmed Al Jaber (COP28 President-Designate) said at a UN meeting (Berlin, May 23), "the most recent IPCC report has already made it crystal clear that we are way off track... Let us restore political credibility to the legal agreements that we have not yet fulfilled. Let's work together to deliver an ambitious agenda and a practical action-oriented plan for 2030".

#### Tables: Latest CO2 emissions (Source: [EC JRC EDGAR 2022 Report](#))

Table 1 gives emissions for each of the countries at this conference as a percentage of the global total. Table 2 provides emissions per person. The world's top 5 emitters together produce almost 70% global fossil CO2 emissions.

| Table 1 Countries listed by % total global CO2 emissions |               |               |                  |               |                  |                       | Table 2 By emissions per person |            |                  |
|--|---------------|---------------|------------------|---------------|------------------|-----------------------|---------------------------------|------------|------------------|
| CO2 from energy & cement*                                | 1990          | 2020          | % Growth cf 1990 | 2021          | % Growth cf 2019 | % of Global Emissions | CO2 from energy & cement*       | 2021       | % Global Average |
| China  | 2,426         | 11948         | 392.57%          | 12466         | 4.3%             | 32.9%                 | UAE                             | 19.5       | 405%             |
| United States  | 5068          | 4464          | -11.91%          | 4752          | 6.5%             | 12.6%                 | Australia                       | 14.3       | 298%             |
| EU-27  | 3818          | 2622          | -31.33%          | 2775          | 5.8%             | 7.3%                  | United States                   | 14.2       | 296%             |
| India  | 599           | 2396          | 300.08%          | 2649          | 10.5%            | 7.0%                  | Russian Federation              | 13.5       | 281%             |
| Russia   | 2395          | 1798          | -24.95%          | 1943          | 8.1%             | 5.1%                  | China                           | 8.7        | 181%             |
| Indonesia  | 165           | 591           | 259%             | 603           | 2.0%             | 1.6%                  | EU-27                           | 6.3        | 130%             |
| Brazil   | 228           | 441           | 93%              | 490           | 11.0%            | 1.3%                  | United Kingdom                  | 5.0        | 103%             |
| Australia  | 278           | 377           | 35%              | 368           | -2.4%            | 1.0%                  | Chile                           | 4.6        | 96%              |
| United Kingdom   | 588           | 319           | -46%             | 335           | 5.2%             | 0.9%                  | Egypt                           | 2.5        | 52%              |
| Egypt  | 91            | 243           | 167%             | 259           | 6.6%             | 0.7%                  | Brazil                          | 2.3        | 47%              |
| UAE  | 173           | 189           | 9%               | 194           | 2.2%             | 0.5%                  | Indonesia                       | 2.2        | 46%              |
| Bangladesh   | 14            | 104           | 622.69%          | 107           | 2.6%             | 0.3%                  | India                           | 1.9        | 40%              |
| Chile  | 33            | 84            | 152.95%          | 86            | 2.6%             | 0.2%                  | Senegal                         | 0.68       | 14%              |
| Senegal  | 6             | 11            | 71.91%           | 12            | 7.5%             | <0.1%                 | Bangladesh                      | 0.62       | 13%              |
| Uganda   | 1             | 6             | 865.67%          | 7             | 5.4%             | <0.1%                 | Uganda                          | 0.14       | 3%               |
| Marshall Islands   | -             | -             | -                | -             | -                | <0.1%                 | Marshall Islands                | -          | 0%               |
| <b>Total above</b>                                       | <b>15,884</b> | <b>25,594</b> | <b>61.13%</b>    | <b>27,045</b> | <b>5.7%</b>      | <b>71.4%</b>          | <b>Global Average</b>           | <b>4.8</b> |                  |
| <b>Global total</b>                                      | <b>22,728</b> | <b>35963</b>  | <b>58.23%</b>    | <b>37,856</b> | <b>5.3%</b>      |                       |                                 |            |                  |

\* In megatonnes. Excludes effects of land use change and forestry

\* Tonnes per person

## 4. Country positions

This website tracks progress for many countries: [Climate Action Tracker](#)

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| <b>Australia</b>   | <i>Emissions Target:</i> By 2030, 43% below 2005 levels<br><i>Are you committed to net zero carbon by 2050:</i> <b>Yes, in policy</b>                |
| <p>Many countries at the conference argue that Australia’s emission reduction pledges for 2030 made in Paris were too weak. The poorer countries feel particularly strongly, especially as your climate change policies were rated the weakest of the 57 countries responsible for 90% of GHG emissions.</p> <p>In June 2022, however, you upped your target to 43% cuts by 2030 – a welcome move. Your Prime Minister vowed to end the climate wars and make big shifts in policy direction since coming to power. However, you continue to support existing and even new gas projects and it is projected that you will not hit net zero emissions by 2050. You might point to progressive policies in South Australian states and cities, and work on coral reefs.</p>  |  |
| <b>Bangladesh</b>  | <i>Emissions Target:</i> 5% below 'Business As Usual' levels by 2030<br><i>Are you committed to net zero carbon by 2050:</i> <b>“Not applicable”</b> |
| <p>Your country is one of the most vulnerable to climate change in the world. You are already dealing with the effects of the changing climate, with more frequent flooding and rising sea levels and soil that is spoiled for crop-growing. You need to protect tens of millions of your population, including in your capital city Dhaka. It is largely your citizens who are paying for the high costs of repairs and adaptation to climate change (estimated at \$2 billion a year).</p> <p>Bangladesh pledged an unconditional contribution to reduce GHG emissions by 5% by 2030 in the power, transport and industry sectors, and made a pledge to increase this to 15%, <i>if</i> you receive international finance and technological support. As Chair of the countries’ group called the Vulnerable 20 (V20), you are putting pressure on high emitting countries to do much more to tackle the causes of climate change and especially to pay for extensive loss and damage.</p>  |  |
| <b>Brazil</b>  | <i>Emissions Target:</i> By 2030, reduce 2005 emission levels by 43%<br><i>Are you committed to net zero carbon by 2050:</i> <b>Yes, in policy</b>   |
| <p>Brazil is the eighth largest economy in the world. As the first major developing nation to pledge an absolute reductions target (rather than a target linked to the economy) you will be in a strong position at the conference to bridge the gap between rich and poor nations. You are likely to be challenged, however, on the fact that President Bolsonaro’s lax environmental stance has made achieving Brazil’s emission pledges more remote.</p> <p>Meeting your targets is highly dependent on tackling deforestation and your action to protect the Amazon rainforest has slowed. On the plus side: important actions are taking place in cities where the vast majority of your population live; you have a strong record on renewable energy; Your former President Bolsonaro had promised to end illegal deforestation by 2030. President Lula da Silva narrowly won the 2022 election and sent envoys to COP. He has a far stronger record on environmental protection.</p> |  |
| <b>Chile</b>   | <i>Emissions Target:</i> By 2030, reduce emissions by 30% 2007 levels<br><i>Are you committed to net zero carbon by 2050:</i> <b>Yes</b>             |
| <p>Most countries regard your original Paris pledges to be too weak, but you have impressive new targets and actions e.g. going carbon neutral by 2050 and phasing out coal power stations, despite your very high dependence on coal. You also have comprehensive policies and are leading actions for increasing renewable energy. Some may argue however that you need to bring the new plans still further forward eg your promise to phase out coal completely by 2040.</p> <p>President Gabriel Boric, your new leader, is taking a strong approach on climate change and social justice. He will press other nations, saying passionately at the UN recently, “Distributing wealth and power in a better way should go hand-in-hand with sustainable growth.”</p>   |  |

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| <b>China</b>   | <p><i>Emissions Target:</i> By 2030, to achieve peak emissions and reduce emissions per unit of GDP by 60-65% compared to 2005 levels.</p> <p><i>Are you committed to net zero carbon by 2050:</i> <b>2060 announced</b></p> |
| <p>In Paris, you pledged that your emissions will peak by 2030 and you also set a target of meeting 20% of your energy needs from renewable sources by then. Good progress has been made but China accounts for a quarter of global energy consumption and a third of all emissions. Your President’s announcement that China aims to be carbon neutral by 2060 has been welcomed around the world.</p> <p>Despite your good efforts on this and in renewable energy such as solar power, you may come under pressure for building coal power stations and having your highest ever output of coal in 2021. You may be asked for more aid but can point to your growing international development programme where you have doubled funding to help other countries respond.</p>  |  |
| <b>Egypt</b>   | <p><i>Emissions Target:</i> No actual figures were presented</p> <p><i>Are you committing to net zero carbon by 2050:</i> <b>No</b></p>  |
| <p>Your President El-Sisi is not a vocal advocate for climate change solutions. He stressed the need for developed countries to provide finance to allow greater action to address climate issues. You have made recent efforts to improve climate policies, but there have been some rollbacks e.g. the priority to expand natural gas production rather than renewable energy. Your overall rating for your policies and targets remains at, ‘Highly insufficient’.</p> <p>You held the Presidency for COP27, however, which meant having a major role in securing international commitment to more action and ambition. You promised to submit a renewed plan with specific targets across multiple sectors. Together with US, your focus at last year’s conference was how to improve people’s lives through Adaptation in Africa, building resilience in the face of a changing climate.</p>  |  |
| <b>European Union</b>  | <p><i>Emissions Target:</i> By 2030, reduce 1990 emission levels by 40%</p> <p><i>Are you committed to net zero carbon by 2050:</i> <b>Yes, by law</b></p>   |
| <p>Your member states include some of the world’s richest nations. You are increasingly threatened by the effects of climate change, leading some young people to sue you at the European Court of Human Rights for emissions and the impact of climate change. Europe’s strong economy and institutions mean you are better prepared than most to adapt. Developing countries might look to you for help with their own goals and in improving resilience.</p> <p>As one of the world’s largest emitters, other countries may call on you to decarbonise faster. You can point to recent announcements that as you are likely to over-achieve on your targets, you are raising ambitions to at least 55% reduction in emissions by 2030 and a legal commitment to be carbon neutral by 2050. The focus is to increase renewable energy to 27% and achieve 30% improvement in energy efficiency. You need to recapture your reputation for innovative, strong policies eg by phasing out coal more aggressively, limiting investment in gas, and tackling transport emissions. You led a new Global Methane Pledge with President Biden before COP26, inviting others to join.</p> |  |
| <b>India</b>   | <p><i>Emissions Target:</i> By 2030, reduce emissions by 33-35% (of 2005)</p> <p><i>Are you committed to net zero carbon by 2050:</i> <b>2070 announced</b></p>  |
| <p>Your Prime Minister Modi announced your goal to reach net zero emissions by 2070 at COP26. You have been recently making significant efforts to reduce your GHG emissions, including substantial investment in battery development and solar power, wind, hydro-power and biomass and are willing to do more with substantial aid and technical support from developed countries. You need \$200 billion to 2030 for adaptation alone &amp; want industrialised countries to pay towards your costs and those of other developing countries.</p> <p>As a country that is still developing, you face the difficulty of balancing your goal of becoming more developed and industrialised with your goals regarding climate change. You are the third biggest producer of coal and have been registering record outputs for months in this year to support economic growth. Since you announced your net zero target at COP26, other nations may expect you to demonstrate your plans to meet that target. Your overall rating of these plans is currently given as ‘Highly Insufficient’ (Climate Tracker).</p>  |  |

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| <b>Indonesia</b>   | <i>Emissions Target:</i> By 2030, reduce emissions by 32% (of BAU)<br><i>Are you committed to net zero carbon by 2050:</i> <b>2060 announced</b> |
| <p>In the Paris Agreement Indonesia pledged to reduce emissions unconditionally by 29% relative to a ‘Business as usual’ trajectory, and have increased this to 32% and more if you receive substantial international financial support. Most countries think your target is extremely weak and easily reached.</p> <p>Most (63%) of your emissions result from changes of land-use to expand agriculture. You may come under pressure for high levels of deforestation and loss of peatlands, and that you have continued to build many coal power stations. You are the world’s fifth biggest producer of coal but have recently announced no new plants from 2023 onwards. Overall, your policies and targets are rated as ‘Highly Insufficient’. As an archipelago state, you have densely populated low-lying land vulnerable to sea level rise, including the coastal city of Jakarta.</p>   |  |
| <b>Marshall Islands</b>  | <i>Emissions Target:</i> By 2025 32% cut, by 2030 a 46% cut (from 2010)<br><i>Are you committed to net zero carbon by 2050:</i> <b>Yes</b>       |
| <p>Climate change is already a matter of life and death for the Marshall Islands. Your 29 small atolls are only metres above the Pacific ocean leaving you highly vulnerable to the impacts of climate change. Despite your size (just 58,000 population) and tiny levels of emissions you play a highly visible role at the COP by chairing the influential High Ambition Coalition (HAC) and as a member of the Association of Small Island States (AOSIS) and V20.</p> <p>The Marshall Islands has used its ‘moral voice’ as a poor and highly vulnerable country to help bridge divides between developed and developing countries. Your willingness to call out major polluters – both rich and poor countries alike – for their lack of ambition has been a successful tactic to highlight that all countries need to act. You are also at the forefront of climate action by setting its own ambitious emission reduction targets.</p>  |  |
| <b>Russian Federation</b>  | <i>Emissions Target:</i> By 2030, reduce 1990 levels by 25-30%<br><i>Are you committed to net zero carbon by 2050:</i> <b>2060 announced</b>     |
| <p>Many countries believe your targets are highly inadequate. After accounting for forestry, your GHG target is a reduction of only 6% to 11% below 1990 levels and is actually <i>an increase</i> of 30% to 38% compared to 2012 levels. You continue to build coal power stations. You are one of the few countries to have progress rated, ‘Critically Insufficient’.</p> <p>Historically President Putin had been sceptical about the need to invest in renewables for instance, and until very recently Russia was one of the very few countries not to have ratified the Paris Agreement. You issued a 29 point plan of action (2020) but may come under attack for your weak Paris targets, your high deforestation rates, the on-going Ukraine war, and for continuing to use and export so much coal and gas. You have one of the largest forest areas in the world and your targets rely on these taking up double the amount of carbon. Wildfires have devastated some areas, however, and your laws governing deforestation are lax.</p> |  |
| <b>Senegal</b>   | <i>Emissions Target:</i> By 2030, reduce 1990 emission levels by 21%<br><i>Are you committed to net zero carbon by 2050:</i> <b>Not yet</b>      |
| <p>Your record on climate change is strong – you are active in global climate governance and Ms Sarr (Head of Senegal’s Climate Change Division) has just stepped down as Chair of the Least Developed Countries negotiating group in UN climate talks. Like many LDCs, Senegal is a minor contributor to emissions but is vulnerable to, and already experiencing, climate change impacts.</p> <p>You feel developed nations should bear most costs and should provide climate finance for less-developed countries to make changes. Major gas reserves found in your waters, however, mean that with your neighbour Mauritius, you are about to become a gas exporter in 2023 with BP and Kosmos Energy investment.</p>  |  |
| <b>Uganda</b>  | <i>Emissions Target:</i> By 2030, reduce 2010 emission levels by 22%<br><i>Are you committed to net zero carbon by 2050:</i> <b>Not yet</b>      |
| <p>As a developing country with a very low carbon footprint, you do not produce many emissions. In Paris in 2015, however, you pledged to reduce your GHG emissions by 22% relative to ‘Business as Usual’ projections by 2030 but with help from the international community.</p>   |  |

In 2021 you have passed a Climate Change Law with a range of interventions including a National Climate Change Advisory Committee (technical advisers), climate education and investment in renewables and reforestation. You believe you are acting responsibly. Your country is significantly affected by climate change caused by past emissions by richer developed countries and you believe the developed countries have an obligation to provide support to help you deliver this plan. However, you are planning a new 1,000km crude oil pipeline with investments from French and Chinese giant oil companies (TOTAL and CNOOC).

**United Arab Emirates**

*Emissions Target: By 2030, reduce usual levels by 31%*  
*Are you committed to net zero carbon by 2050: Yes*

You have updated your targets recently: to reduce GHG emissions by 31% by 2030 - an update on your previous target of 23.5% reduction by 2030. Your aim is to achieve net-zero emissions by 2050, including a target for 50% of your power supply to be from clean energy sources by then.

Your record on climate change is mixed and some research suggests you are unlikely to meet your Net Zero target. You have a limited record on action especially given your economic reliance on oil, and you have the highest emissions rate per head of your population of countries at this conference. Your wealth allows you to use technologies to overcome problems brought about by a changing climate.

You speak about ambitious targets and projects to tackle it, especially in the run-up to hosting COP28, which you are hosting. You also feel developed nations must play a larger role and that climate change policies should not be a disproportionate burden for your economy. There are vocal criticisms that Dr. Sultan al-Jaber leads your Presidency for COP28 as he is also head of Adnoc, the world’s 12<sup>th</sup> largest oil company.

**United Kingdom**

*Emissions Target: By 2032, reduce 1990 emission levels by 57%*  
*Are you committed to net zero carbon by 2050: Yes, in law*

The UK led the world by enshrining carbon cuts in law under the 2008 Climate Change Act. It means the current and successive governments must cut emissions by at least 57% by 2032 against 1990 levels. Carbon budgets are put into force every 5 years. You have recently strengthened your emissions targets by becoming one of the first major countries to commit *in law* to achieving net-zero emissions (by 2050).

You have achieved great reductions by shutting coal power stations. You launched your ‘Clean Growth Strategy’ in 2017 which aims to protect businesses and households from high energy costs and to invest in low cost, low carbon technologies. You want other countries, particularly developing countries, to follow suit.

You may be questioned whether the measures announced so far will actually result in the steep emission reductions needed for your targets. It is also likely that developing countries will ask for increased financial support from the UK (UK’s fair share contribution to the USD 100bn goal) as you have decreased your financial commitment in the recent past.

**USA**

*Emissions Target: By 2030, reduce 2005 levels by 50-52%*  
*Are you committed to net zero carbon by 2050: Yes, in policy*

The other countries at the conference will welcome your return to the global climate action community. They will have high expectations of you because of your position as the world’s richest and most powerful country. You created a new Global Methane Pledge with EU ahead of COP26. Together with Egypt, you will focus at COP27 on how to improve people’s lives through Adaptation in Africa, building resilience in the face of a changing climate.

The conference will also be expecting more domestic ambition and action. President Biden has a climate agenda that includes a faster move to clean energy. These targets are thought to be ‘almost sufficient’ although progress is being blocked by the right-wing. Extreme weather and wildfires in USA is impacting millions of people (50% Native Americans said it’s seriously affected health) and influencing their view about the need for climate action.

You can point out that your states, cities, and big business are forging ahead with some ground-breaking actions. Even with the previous President’s back-tracking on national (federal) laws these ‘local’ actions could help the US come close to its Paris targets (with reductions of perhaps just over 20% relative to 2005), although that’s not enough from the planet’s point of view.

## 5. Priorities for collaboration

This table give a snap-shot of countries' priorities across the following four themes. Use it to help you identify who to work with on joint proposals for more ambitious global climate action.

| Country                     | Cities  | Energy  | Forests & food   | Oceans   |
|-----------------------------|---|---|--|--|
| <b>All</b>                  | Be prepared to contribute on cross-cutting themes: <b>Education and awareness raising; Climate Finance.</b> |   |  |  |
| <b>Australia</b>            | States & cities have own green policies   | Solar schemes & storage a priority                          |  | Barrier reef research in to sea acidification              |
| <b>Bangladesh</b>           | Dhaka and other cities needs protection   | History of financing own power schemes                      |  | Sea rises will impact 30 mill on your coasts               |
| <b>Brazil</b>               | 85% live in cities. Flood early warning needed  |   | Rise of illegal logging & Amazon tree losses                           |  |
| <b>Chile</b>                | Santiago: new buses & zero carbon by 2030   |   | 2019 worst wild- fires destroyed much forest                           |  |
| <b>China</b>                | 30 new eco-cities being built. Greener transport as air pollution is huge                                   | New coal plants still being built. Solar & wind leads world | Millions of hectares planted but timber imports are very high          |  |
| <b>Egypt</b>                | Protection policies in Cairo & sustainable water supplies funding   | Gas production has increased                                |  | Coastal cities and towns at risk from sea                  |
| <b>European Union</b>       | Smart cities, transport & climate planning all key  | Speed up shift from coal & to restrict gas                  | Law making traders cut links to deforestation                          |  |
| <b>India</b>                | 100 smart cities & focus on energy saving   | Priorities: solar, wind, hydropower, biomass                | Record tree-planting in several states                                 | Increase in cyclones, floods & salinisation*               |
| <b>Indonesia</b>            |   |   | Need to stop clearing forests & peat-land                              | Poorest most affected on low-lying coasts                  |
| <b>Marshall Islands</b>     |   | Reducing electricity emissions as priority                  |  | Protect against sea rise. Work depends heavily on the sea. |
| <b>Russian Federation</b>   |   | Shift in President's view about role of renewables          | 2 <sup>nd</sup> largest forest. 7% lost via illegal logging            |  |
| <b>Senegal</b>              |   | Largest wind farm, and oil and gas reserves in region       |  | 1 mill at risk from erosion & sea rise.                    |
| <b>Uganda</b>               | Kampala: climate strategy helping 'green' expansion   |   | High rates of deforestation having negative effects                    |  |
| <b>United Arab Emirates</b> | Dubai using technology & green start-ups  | Expanding oil and gas. New solar and nuclear schemes.       |  | New mangroves & coral reef protection projects             |
| <b>UK</b>                   | Zero carbon targets for Govt, cities & towns  | Expanding renewables: offshore wind farms                   | Northern forest to plant 50mill trees                                  |  |
| <b>USA</b>                  | Cities & states targets, energy efficiency & transport schemes  | Renewable energy overtook coal powered electricity in 2019  | Historic scale wild-fires across Western states repeating year on year |  |

\* Salinisation is when salt builds up in the soil and can be toxic to plants.

## APPENDIX 1 **Brief guide to the key terms**

### UN Climate Agreements

|   |  |
|---|--|
| <b>UN Framework Convention on Climate Change (UNFCCC)</b> | The 1994 international climate treaty to which almost every country in the world has signed up.  |
| <b>Conference of the Parties (COP)</b>                    | Governing body of the UNFCCC made up of countries or 'Parties' that meet annually to assess progress.  |
| <b>The Paris Agreement</b>                                | This historic universal 'legally binding' agreement was signed by 196 countries and the European Union in 2015, committing them to cut their own greenhouse gases by an agreed time. |
| <b>Ratcheting mechanism</b>                               | To keep the world within the 2° Celsius target, countries agreed in Paris 2015 to review targets every 5 years to become ever more ambitious (ratchet up).                           |

### Technical terms

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| <b>Adaptation</b>                        | Ways to reduce how vulnerable we are to the effects of the many negative changes brought about by climate change.  |
| <b>Anthropogenic GHG emissions</b>       | Greenhouse gases (see below) that are created through human activity eg driving cars, heating homes, growing food.   |
| <b>Carbon pricing</b>                    | A 'polluter pays' mechanism that forces down overall CO <sub>2</sub> emissions by charging those responsible for producing them. Two methods: a) placing a tax on each tonne of emissions, or b) a 'cap and trade' to trade carbon using a set 'carbon price'.   |
| <b>Gigawatts (GW)</b>                    | A unit of power equal to one billion (10 <sup>9</sup> ) watts.   |
| <b>Greenhouse Gas (GHG)</b>              | A gas that contributes to the greenhouse effect by absorbing infra-red radiation. Carbon dioxide (CO <sub>2</sub> ), methane (CH <sub>4</sub> ) and nitrous oxide (N <sub>2</sub> O) are all examples of greenhouse gases.   |
| <b>Loss and damage</b>                   | Includes damage caused by intense short-lived events & long-term loss of health, livelihoods and traditions, as well as bio-diversity and habitat-loss. Pressure at UN, e.g. from V20 group, focuses on climate justice (responsibility and what's fair) with strong calls for 'compensation' from industrialised nations. |
| <b>Mitigation</b>                        | Actions that tackle the causes of climate change, intending to limit, stop or reverse the extent and/or rate of it long-term.  |
| <b>Net-zero CO<sub>2</sub> emissions</b> | This means reaching a point where we take the same amount of carbon pollution from the atmosphere as we add to it, e.g. by swapping renewable energy for fossil fuels and using tree planting and carbon capture to 'offset' the remaining GHG.  |
| <b>Peak emissions</b>                    | In order for GHG concentrations in the atmosphere to stabilise, global GHG emissions caused by human (anthropogenic) activity need to peak then decline by a set point in time.  |
| <b>Resilience</b>                        | Capacity of our world's complex social and environmental systems to absorb the stresses brought about by climate change, to adapt and be better prepared for future effects.   |

### Country plans

|   |   |
|---|---|
| <b>Intended Nationally Determined Contributions (INDCs)</b> | 165 countries submitted documents in Paris 2015 outlining an 'offer' or pledge to reduce their GHG emissions in coming years, saying why their offer is appropriate and ambitious.      |
| <b>National Adaptation Plans (NAPs)</b>                     | Also developed by each country in 2015, these plans raised the profile of climate change adaptation and showed the financial and technical support developing countries need right now. |