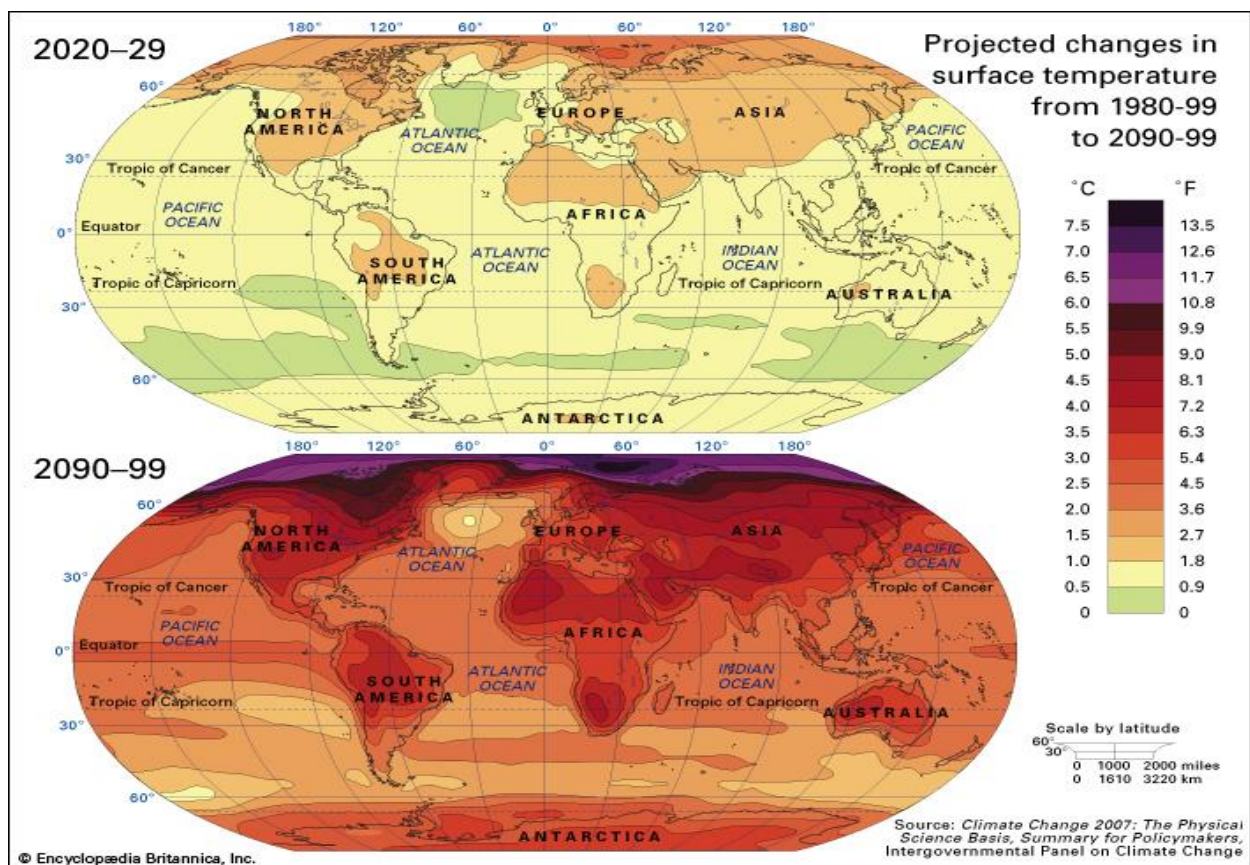


## Enforcing COP 21

Climate change is now affecting every country on every continent. It is disrupting national economies and affecting lives, costing people, communities and countries dearly today and even more tomorrow.

People are experiencing the significant impacts of climate change, which include changing weather patterns, rising sea level, and more extreme weather events. The greenhouse gas emissions from human activities are driving climate change and continue to rise. They are now at their highest levels in history. Without action, the world’s average surface temperature is projected to rise over the 21st century and is likely to surpass 3 degrees Celsius this century—with some areas of the world expected to warm even more. The poorest and most vulnerable people are being affected the most.



**The Paris Agreement's** central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust transparency framework.

The Paris Agreement requires all Parties to put forward their best efforts through “nationally determined contributions” (NDCs) and to strengthen these efforts in the years ahead. This includes requirements that all Parties report regularly on their emissions and on their implementation efforts. There will also be a global stocktake every 5 years to assess the collective progress towards achieving the purpose of the agreement and to inform further individual actions by Parties.

The Paris Agreement opened for signature on 22 April 2016 – Earth Day – at UN Headquarters in New York. It entered into force on 4 November 2016, 30 days after the so-called “double threshold” (ratification by 55 countries that account for at least 55% of global emissions) had been met. Since then, more countries have ratified and continue to ratify the Agreement, reaching a total of 125 Parties in early 2017.

### **Historical background:**

The First World Climate Conference was organized in **Geneva in 1979** by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) in partnership with the International Council of Scientific Unions (ICSU). It marked the start of a global climate research program.

The international political response to climate change began at the Rio Earth Summit in 1992, where the ‘**Rio Convention**’ included the adoption of *the UN Framework on Climate Change (UNFCCC)*. This convention set out a framework for action aimed at stabilising atmospheric concentrations of greenhouse gases (GHGs) to avoid “dangerous anthropogenic interference with the climate system.” The UNFCCC which entered into force on 21 March 1994, now has a near-universal membership of 195 parties.

The main objective of the annual Conference of Parties (**COP**) is to review the Convention's implementation:

- COP1 Berlin 1995 - The first Conference of the Parties was marked by uncertainty as to which means the individual countries possessed to combat greenhouse gas emissions. This resulted in "*The Berlin Mandate*", which set a two-year analysis and evaluation phase. This phase was to result in a catalogue of instruments from which the member countries could choose and thereby compose a set of initiatives that matched their needs.
- COP3 Kyoto 1997 - At this conference the *Kyoto Protocol* was adopted after intense negotiations. For the first time the protocol introduced binding targets for greenhouse gas emissions in 37 industrialised countries from 2008 to 2012. Subsequently there were several years of uncertainty as to whether a sufficient number of countries would ratify the treaty, but on 16 February 2005 it came into force. Several of the member countries of the UNFCCC have not ratified the Kyoto Protocol and do not acknowledge its requirements regarding emissions.
- The Kyoto Protocol - [http://unfccc.int/kyoto\\_protocol/items/2830.php](http://unfccc.int/kyoto_protocol/items/2830.php)
- COP6 Bonn 2001 - When the parties met again about six months after the breakdown in negotiations in The Hague, expectations of a result were not high. In the meantime the USA – under its new President Bush – had definitively rejected the Kyoto Protocol and accordingly only took part in negotiations about the protocol as an observer. Despite the low level of expectations, agreement was reached on several significant questions. These included the extent to which forests and other carbon sinks could be included in countries' budgets for greenhouse gas emissions; the principles for sanctions relating to countries that did not meet their targets, and the flexible mechanisms that in different ways enabled reduction obligations to be moved between countries in return for financial compensation.
- COP11/CMP1 Montreal 2005 - This conference was the first one to take place after the Kyoto Protocol had come into force. Accordingly the annual meeting between the parties to the UNFCCC (COP) was supplemented by the annual conference between the parties to the Kyoto Protocol (CMP or COP/MOP). The countries that had ratified the UNFCCC but not accepted the Kyoto Protocol had observer status at the latter conference. The focus of both conferences was what should happen after the expiry of the Kyoto Protocol in 2012.

In 2015 **COP21**, also known as **The 2015 Paris Climate Conference**, will, for the first time in over 20 years of UN negotiations, aim to achieve *a legally binding and universal agreement on climate*.

- **COP22 Marrakech 2016** – The Marrakech Climate Change Conference took place after the historically rapid entry into force of the Paris Agreement, which was agreed at the conclusion of the 2015 Paris Climate Change Conference. Many looked to the 22nd session of the Conference of the Parties (COP 22) to maintain the momentum established at COP 21. The two-week meeting, which took place in Marrakech, Morocco, included COP 22 to the UN Framework Convention on Climate Change (UNFCCC), the 12th session of the Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (CMP 12), and the first session of the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement (CMA 1). The Marrakech Action Proclamation was issued by heads of state, government, and delegations, to signal a shift towards “*a new era of implementation and action on climate and sustainable development*.” Among other things, it notes the momentum on climate change is irreversible, and is being driven not only by governments, but by science, business and global action at all levels; and stresses the need to purposefully reduce emissions and to foster adaptation efforts, which will benefit and support the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs).

**June 1 2017** – The U.S. President Donald Trump announced on 1 June, 2017, that the *U.S. would withdraw from the Paris Agreement and immediately cease implementing the agreement including implementing the Nationally Determined Contributions (NDCs) and financial contributions*. In accordance with Article 28 of the Paris Agreement, the earliest possible effective withdrawal date by the United States cannot be before November 4, 2020, four years after the Agreement came into effect in the United States and coincidentally one day after the 2020 U.S. presidential election. Until the withdrawal takes effect, the United States may be obligated to maintain its commitments under the Agreement, including the requirement to continue reporting its emissions to the United Nations. On August 4, 2017, the Trump administration formally outlined its intention of the withdrawal in an official notice delivered to the United Nations as depositary. In a separate statement, the State Department said it will continue participating in international climate change negotiations, including talks aimed at implementing the climate deal. Following Trump's announcement, the governors of several U.S. states formed the United States Climate Alliance to continue to advance the objectives of the Paris Agreement despite the federal withdrawal. As at July 25

2017, 14 states and Puerto Rico have joined the alliance, and similar commitments have also been expressed by other state governors, mayors, and businesses.

Efforts made by the most important polluting country: **China**. Chinese President Xi Jinping on Wednesday (Oct 18 2017) affirms China's commitment in doubling up on green development, in line with his idea of a "new model of modernisation" "We encourage simple, moderate, green and low-carbon ways of life, and oppose extravagance and excessive consumption," Mr Xi. While the central government has punished more than 6,000 local officials for negligence or malpractice in environmental protection work in 2016, it still faces difficulties in getting local governments to enforce environmental laws and regulations.

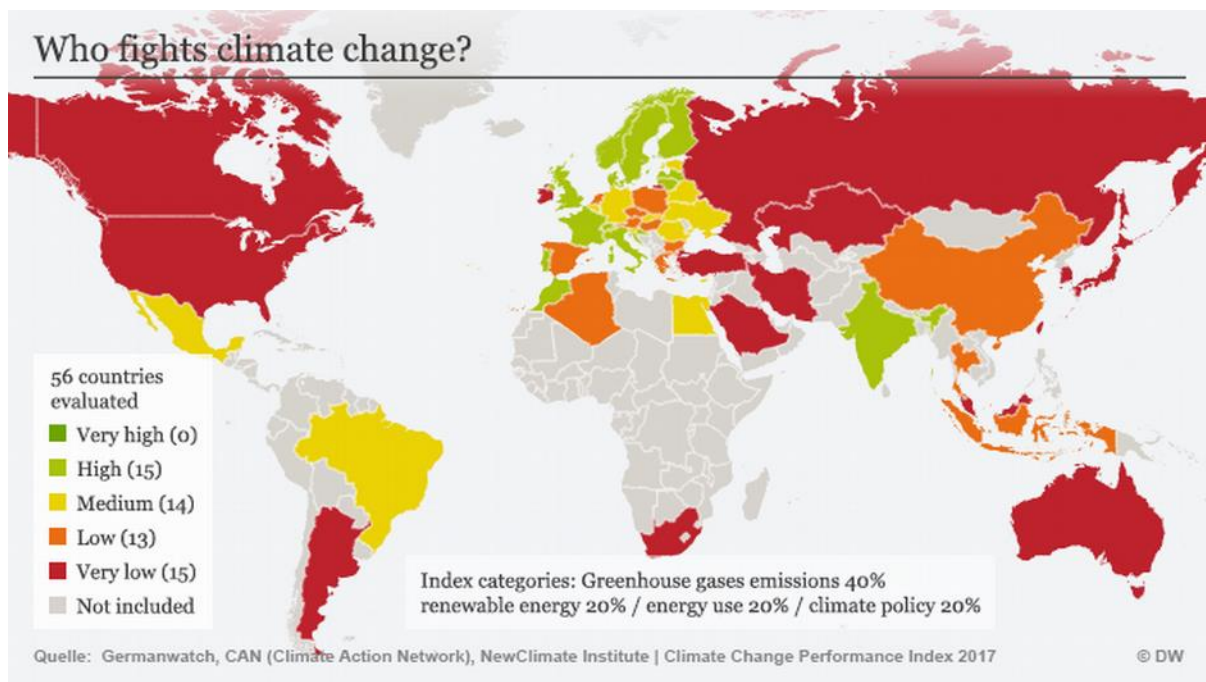
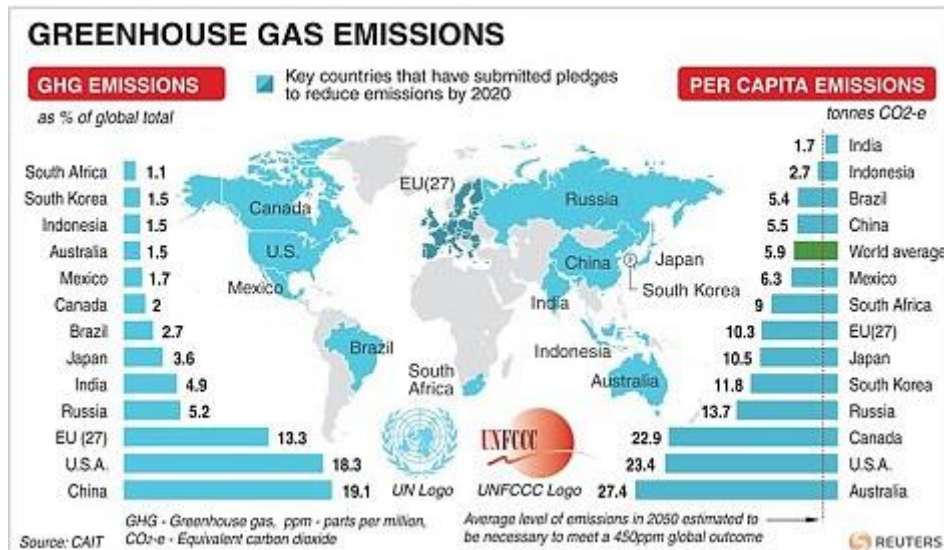
**European Union:** The global climate change agreement reached in Paris late last year may not be signed, sealed and delivered just yet, but the European Union is determined to maintain the momentum and goodwill generated at the summit. Last month, the European Commission completed an assessment of the deal aimed at determining what the EU must do to implement the agreement.

- **COP23 Bonn 2017** - At COP23 Governments was a meeting to advance the implementation of the Paris Agreement. The focus is on the development of guidelines on how the Paris Agreement's provisions will be implemented across a wide range of issues including transparency, adaptation, emission reductions, provision of finance, capacity-building and technology. The aim is make progress in all these areas so that the guidelines can be completed by COP24 in Poland in 2018.

### Key vocabulary:

- Climate change - is a change in the statistical distribution of weather patterns when that change lasts for an extended period of time. Climate change may refer to a change in average *weather conditions*, or in the time variation of weather within the context of *longer-term average conditions*. Climate change is caused by factors such as: biotic processes, variations in solar radiation received by Earth, plate tectonics, and volcanic eruptions. Certain human activities have been identified as primary causes of ongoing climate change, often referred to as *global warming*;
- Greenhouse gas - is a gas in an atmosphere that absorbs and emits radiant energy within the thermal infrared range. The primary greenhouse gases in Earth's atmosphere are: water vapor, carbon dioxide, methane, nitrous oxide, and ozone;

- Greenhouse effect - is the process by which radiation from a planet's atmosphere warms the planet's surface to a temperature above what it would be without its atmosphere.



## Global sustainable development challenges post-2015

- The impact of climate change threatens to escalate in the absence of adequate safeguards and there is a need to promote the integrated and sustainable management of natural resources and ecosystems and take mitigation and adaptation action in keeping with the principle of common but differentiated responsibilities;

- b) Rapid urbanization, especially in developing countries, calls for major changes in the way in which urban development is designed and managed, as well as substantial increases of public and private investments in urban infrastructure and services;
- c) Energy needs are likely to remain unmet for hundreds of millions of households, unless significant progress in ensuring access to modern energy services is achieved;

Over the past years, the global challenges to sustainable development have been driven by a broad set of “megatrends”, such as changing demographic profiles, changing economic and social dynamics, advancements in technology and trends towards environmental deterioration.

A better understanding of the linkages among these trends and the associated changes in economic, social and environmental conditions is needed.

## **Solutions for a Sustainable Development:**

Unsustainable consumption and production patterns have resulted in huge economic and social costs and may endanger life on the planet.

Achieving sustainable development will require global actions to deliver on the legitimate aspiration towards further economic and social progress, requiring *growth and employment*, and at the same time *strengthening environmental protection*. Sustainable development will need to be *inclusive* and take special care of the needs of the *poorest* and *most vulnerable*.

Strategies need to be ambitious, action-oriented and collaborative, and to adapt to different levels of development. They will need to systemically change consumption and production patterns, and might entail, inter alia, significant price corrections; encourage *the preservation of natural endowments*; *reduce inequality*; and *strengthen economic governance*. We focus on three important cross sectoral issues: sustainable cities, food security and energy transformation.

### **I. Need for inclusive strategies and technology innovation.**

Technology will certainly play a major role in this transformation. Changes in consumption patterns can drive the creation of new technologies necessary for sustainability and their adoption and diffusion at the desired pace. Success in bringing about these changes will require substantial reorganization of the economy and society and changes in lifestyles. Economic and financial incentives for the

creation and adoption of new technologies will be needed which may include innovative policy reforms.

**II. Towards sustainable cities** Urbanization provides new jobs and new opportunities for millions of people in the world, and has contributed to poverty eradication efforts worldwide. At the same time, rapid urbanization adds pressure to the resource base, and increases demand for energy, water, and sanitation, as well as for public services, education and health care. Sustainable development of urban areas requires integration and coordination, including regarding land-use issues, food security, employment creation, transportation infrastructure development, biodiversity conservation, water conservation, renewable energy sourcing, waste and recycling management, and the provision of education, health care and housing. Sustainable development of cities in poor countries entails investment in infrastructure such as roads, water, sewers, electricity and services such as schools, public transportation and health care. Leapfrogging investment in a green industrial transformation can generate youth employment. In cities of middle- and high-income countries, *investment in infrastructure, renewable energy, buildings, and improved electricity and water efficiencies* is important. Investment in the reduction of waste production and improvement of waste collection and recycling systems is needed in most cities across the world. Providing *access to modern energy services* is a real challenge to urban authorities in developing countries which often do not have enough capacity to respond, nor the ability to raise the needed long-term financial resources for investment.

**III. Transformation of the energy system needs to be a core element of the sustainable development agenda**

The latest estimates confirm that emissions trends will likely lead to temperature increases with potentially catastrophic consequences. *Even if all currently planned mitigation policies were fully implemented—including expanded use of renewable energy sources and improvements in energy efficiency—a stabilization of greenhouse gas emissions at 450 parts per million (ppm) will not have been achieved by 2050.* If one focuses on the rise in renewable energy, the advances in reducing pollution in some cities, the implementation of policies to improve sustainable development, the world is undoubtedly greener today than it would have been if no actions had been taken. However, even after taking into account all of these factors, the likely outlook is that the desired emissions reduction targets will not be met.



*According to some projections, emissions concentrations might reach between 650 and 700 ppm of carbon dioxide equivalent (CO<sub>2</sub> e) by 2050 and between 800 and 1,300 ppm of (CO<sub>2</sub> e) by 2100 (Organization for Economic Cooperation and Development, 2012c). These increases would be associated with increases in global average temperature of 2°C -3°C by 2050 and of 3.7°C -5.6°C by 2100.*

Multiple **pathways** towards **sustainable energy** have been identified. There are many existing *energy technology* options for mitigating emissions and increasing welfare. Hundreds of *scenarios* have shown that the world can follow a large number of energy paths towards sustainable development which require, however, *ambitious policies*, improved *international cooperation*, including in means of implementation, *behavioural changes* and unprecedented levels of investment.

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