

## IPCC Report on Global Warming 2018

### Why in news?

The Special Report on Global Warming of 1.5°C was recently approved by the Intergovernmental Panel on Climate Change (IPCC).

Click [here](#) to read on IPCC's draft report on global warming.

### What is the report on?

- The report focusses on keeping warming to under 1.5°C as compared to pre-industrial times.
- Preventing an extra single degree of heat could make a life-or-death difference in the next few decades.
- So it calls for the world's leaders to limit future human-caused warming to just 0.5°Celsius from now.
- This is, notably, well below the earlier globally agreed-upon goal of 1° C from now.
- The report details how Earth's weather, health and ecosystems could be made better.
- It will be a key scientific input into the Katowice Climate Change Conference in Poland in the coming December.
- The governments will review the Paris Agreement to tackle climate change in this upcoming conference.

### What is the current warming scenario?

- In 2010, international negotiators adopted a goal of limiting warming to 2°C since pre-industrial times, called the 2° goal.
- In 2015, in Paris climate agreement, they set dual goals - 2°C and a more demanding target of 1.5°C from pre-industrial times.
- The world has already warmed 1°C since pre-industrial times.
- It is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate.
- **Impact** - In that case, climate-related risks to health, livelihoods, food security, water supply, human security and economic growth would increase.
- The world's poor would likely be hit the hardest, and extreme weather, especially heat waves, will be deadlier.

- Diseases such as malaria, dengue, and conditions like premature deaths due to air pollution, undernourishment are likely to multiply.

### **What would limiting to 0.5°C from now mean for the world?**

A number of climate change impacts could be avoided by limiting global warming to 1.5°C compared to 2°C, or more.

- Half as many people would suffer from lack of water.
- There would be fewer deaths and illnesses from heat, smog and infectious diseases.
- There would be substantially fewer heat waves, downpours and droughts.
- Around 420 million fewer people would be exposed to extreme heat waves.
- About 65 million fewer people will be exposed to exceptional heat waves.
- Seas would rise nearly 4 inches (0.1 meters) less.
- Half as many animals with back bones and plants would lose the majority of their habitats.
- The West Antarctic ice sheet might not kick into irreversible melting.
- Most of the world's coral reefs would be saved from dying.
- Limiting warming to 0.5°C from now means the world can keep the ecosystems much as it is now.
- Adding another 0.5°C on top of that essentially means a different and more challenging Earth for people and species.

### **What does it call for?**

- The nations' pledges in the Paris agreement are insufficient to limit warming to 1.5°C in any way.
- Meeting the more ambitious goal of slightly less warming would require unprecedented changes.
- It needs "rapid and far-reaching" changes in energy systems, land use, city and industrial design, transportation and building use.
- It involves much sharper and quicker emission cuts by big emitters like China, the US, the European Union and India.
- The measures are also likely to be heavily dependent on the success of yet-to-be-developed carbon removal technologies.
- Annual carbon dioxide pollution levels should halve by 2030 and then be near zero by 2050.
- Emissions of other greenhouse gases, such as methane, also will have to drop.
- Switching away rapidly from fossil fuels to do this could be 3 to 4 times more expensive but would clean the air of other pollutants.
- In turn, this would avoid more than 100 million premature deaths through

this century.

**Source: The Hindu, Indian Express**

### **Quick Fact**

#### **Intergovernmental Panel on Climate Change (IPCC)**

- IPCC was established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988.
- It is the leading international body for the assessment of climate change.
- It provides a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts.

