



CLIMATE CHANGE IS REALLY HERE AND IT'S NOT OVER!

Summary of IPCC report on climate change

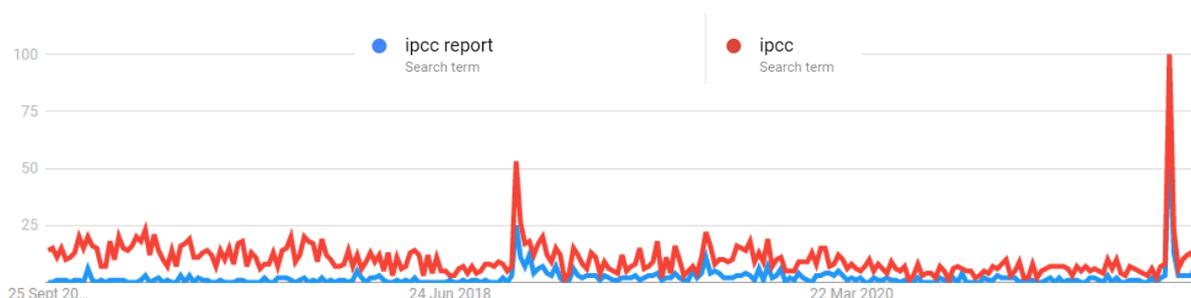
The latest assessment report of climate change by the Intergovernmental Panel on Climate Change (IPCC) was published in August 2021. It is part of a continuous scientific assessment of our understanding of climate change and its future.

1. Why is the IPCC report on climate change important?

The various IPCC reports represent the scientific consensus on climate change and provide the evidence of our progress (or lack of it) to meet the ambition of limiting increases in temperatures to 1.5°C and 2°C above pre-industrial levels.

The latest report highlights that the evidence in respect to climate change is mounting up - there are a good number of references to “multiple lines of evidence” in the report. While uncertainty remains, it is diminishing, and the report describes more findings with a “high degree of confidence” than with medium or low confidence.

And last but not least, people in the UK are taking more notice of the IPCC reports. The graph below shows data from Google trends and shows how the interest has increased compared to the previous IPCC report from 2018.



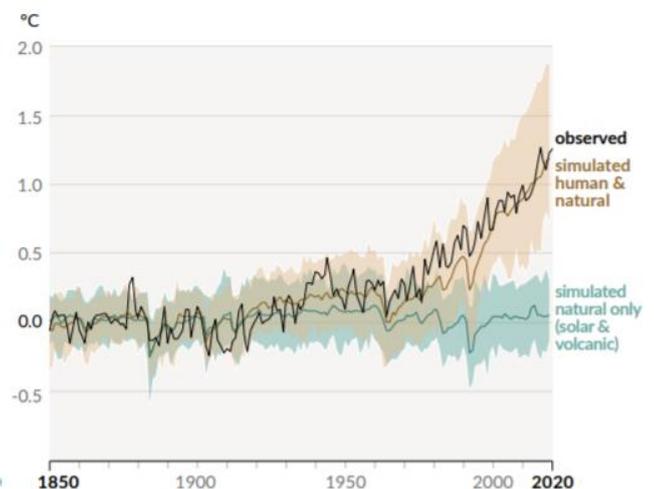
Source: Google Trends

2. How is the climate changing so far?

The average temperature during the first two decades of 21st century was nearly 1°C higher than 1850-1900. Further simulation analysis suggests that this change is most likely the result of human activity.

But there are also other changes:

- precipitation has increased since 1950s and it seems to be increasing at a faster rate since the 1980s;



Source: IPCC

- global retreat of glaciers has been taking place since 1990s; and
- oceans have been getting warmer since 1970s.

3. What parts of the world are affected?

The latest IPCC report assesses observed changes in climate (since 1950s) in 45 regions and distils the likelihood of extreme changes. Below is a summary. Overall, it seems likely that the world will be exposed to more extreme events. This would mean a combination of more insurance opportunities and some risks and locations becoming uninsurable.

Region	'Hot extremes'	'Heavy precipitation'	'Agricultural and ecological drought'
Northern Europe	↑	↑	?
Western and Central Europe	↑	↑	↑
Eastern Europe	↑	↑	?
Mediterranean	↑	?	↑
North-Western NA	↑	?	?
North-Eastern NA	↑	?	?
Western NA	↑	?	↑
Central NA	?	↑	?
Eastern NA	?	↑	?

Note: "↑" means an increase in likelihood and "?" means unclear evidence
 Source: based on IPCC report

If you want to investigate the impact on geographies, the IPCC has published an interactive atlas - available [here](#).

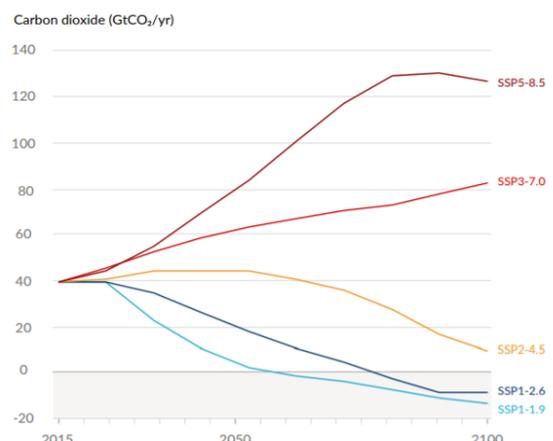
4. How warm is the future going to be?

Future warming depends on the path of greenhouse gas (GHG) emissions.

The IPCC has identified five scenarios or "shared socio-economic pathways" to emphasise the dependence on the obvious socio-economic factors and behavioural change.

Starting from the top of the chart, the second scenario of GHG emissions (SSP3-7.0) projects that emissions continue to grow at roughly the same rate.

The next three scenarios show different paths of reducing CO2 emissions.



Source: IPCC

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The IPCC has considered the results in respect of the near term (2021 to 2040), mid-term (2041 to 2060) and long term (2081 to 2100). The main results are that global temperatures will:

- continue to increase until at least the mid-century under all scenarios;
- increase by more than 1.5°C and 2°C unless deep cuts in emissions occur in the coming decades.

Cuts in emissions are needed now but the effects will only be visible in the second half of the 21st century. This is the key challenge of climate change for our society and for the insurance industry.

KEY FINDINGS AND CONCLUSIONS

1. More people rely on the IPCC report than ever before. Data and methods have been fine-tuned providing better insights.
2. Average temperatures have risen so far by 1°C since industrialisation, along with more frequent extreme weather.
3. In the coming decades, temperatures will increase by more than 1.5°C unless deep cut in emissions occur.
4. Stakeholders are now paying significantly more attention to climate change and the issue is becoming a mainstream issue within corporate strategy.
5. Increasing weather variability will result in a combination of insurance opportunities and some risks and locations becoming uninsurable.

HOW CAN CRESCENDO ADVISORS HELP?

We pride ourselves in offering the help your business needs rather than an off-the-self solution that should work for you. This would need to reflect your business model and any progress you might have already made in the consideration of climate change financial risk.

We have already worked with various clients on different aspects of climate change financial risk and provided Board training, materiality analysis, gap analysis against regulatory expectations, developed a climate change strategy and a road map, analysed the climate change transition within an investment portfolio.

FURTHER INFORMATION

If you would like to discuss how can Crescendo Advisors help your business consider the impacts of climate change financial risks, please contact Isaac Alfon (isaac.alfon@crescendo-erm.com). Visit www.crescendo-erm.com for further details about our credentials.