Science for COP26

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UN CLIMATE Change Conference UK 2021

OFFICIAL SENSITIVE

The Working Group I contribution to the IPCC's 6th Assessment Report

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UN's 'code red' warning: Global temperature likely to rise 1.5°C in 20 years

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Vishwa Mohan / TNN / Updated: Aug 10, 2021, 13:12 IST

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Amit Shah behind

Abhishek, TMC

activists in Tripur

attacks on

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NEW DELHI: In its most direct and unequivocal report on the dire threat of climate change, the United Nations' intergovernmental panel on climate change (IPCC) on Monday



Climate report is 'code red for humanity' () 2h Science & Environmen Time nearly up to stop climate catastrophe - Sharma O LIVE Sea level rises, other changes irreversible, UN warns

7m 'Shiver down the spi 23m Climate change affects wildlife too





Then and now: The burning issue of wildfires





Record results for A-level students as 45% get A* or A grades after second year of exams cancelled due to Covid

THE STRAITS TIMES

The New York Times

devastating impacts of global warming are

A major new report finds some of the

now unavoidable.

livestock and water supplies in Madera, Calif., last month. David Sw

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Climate change is speeding up, key warming threshold set to be breached by 2030s: IPCC report





The challenge

- COVID-19
- Ambition gap:
 - On mitigation: Despite recent progress, NDCs still fall far short of what the science shows us is needed to limit warming 1.5C and even 2C over the next decade; Long-term strategies (LTSs) to reach net-zero by mid-century are also key to achieve these thresholds;
 - **On finance:** High income countries need to deliver and surpass on the \$100bn goal per year of climate finance to developing countries;
 - On adaptation: Loss and damage due to climate change is happening now and more needs to be devoted to helping communities adapt and be resilient in the face of climate change.
- Ratchet year under the Paris agreement
- Public expectation

COP26 Presidency Science Objectives



Highlight the **scientific case for ambitious mitigation and adaptation**, especially their benefits, net-zero pathways and practical solutions.



Assist in using scientific evidence to **build public and Government support** for achieving a climate-resilient net-zero future.



Role model and provide a platform for sharing experiences of **using evidence to inform policy-making** to encourage others to use effective processes



Build literacy, skills and capacity for science and innovation to help deliver climate action in the UK and abroad.

How are we working towards this?

- Science and Innovation Steering Group
- Three dedicated science programmes on climate risk assessment, Net Zero futures and health co-benefits along with innovation activities
- Science and Innovation Day at COP26 Tuesday 9 November
- Working closely with the UK's COP26 University Network
- Collaboration with key science-policy organisations such as the International Science Council
- Talking to networks of universities, and convening to catalyse collaboration
- UK Science and Innovation Network to engage directly with academics in-country

Where can the academic community be useful

- Systems and integrative thinking
- Embedding technology in wider social, political, economic and behavioural factors
- Developing roadmaps for transition
- Continue highlighting costs of inaction, benefits of action
- Providing technical support on National Adaptation Planning or developing Long Term Strategies
- Monitoring and evaluation
- Assessing cultural, institutional and knowledge barriers

Collaboration is crucial



Climate risk assessment for heads of government

Raise awareness of the significant global impacts of climate change



Futures we Want

Offer solutions informed by evidence to avoid the worst impacts



Climate for Health, Health for Climate

Highlight the cobenefits and trade-offs associated with climate actions

Conclusion

- Science underpins global action on climate change
- Underpins all UK government action on climate and our negotiating positions
- Science provides the solutions not just defines the problem
- Supports in justifying, planning and measuring
- Huge energy among academic community to be useful
- Knowledge is out there
- Collaboration and co-production key, and closer engagement with the social sciences.



Thank you for listening!

Mitigation

- The world needs to halve emissions over the next decade and reach net zero carbon emissions by the middle of the century if we are to limit global temperature rises to 1.5 degrees.
- We are calling on all countries to update their NDCs so that they are in line with holding temperature rise to 1.5 degrees.
- While targets are important, they must translate into action, and fast.
- To do this, the UK COP Presidency is working with countries and partners to:
 - Accelerate the transition from coal to clean power
 - Protect and restore nature for the benefit of people and climate
 - Accelerate the transition to zero emission vehicles



Adaptation

- Support National Adaptation Plans and disaster risk reduction policies
 - Joining the Coalition for Disaster Resilient Infrastructure to share knowledge on infrastructure risk management, standards, financing, and recovery mechanisms
- Building and supporting early warning systems, and early and anticipatory approaches to the impacts of climate change
 - Building on existing research to improve early warning and action systems, for example through the <u>Risk Informed Early</u> <u>Action Partnership</u>



- Scaling up action-oriented research to ensure the most pressing knowledge needs are met
 - Joining the Adaptation Research Alliance

Finance

- Improving the quantity and quality of public finance
 - Understanding implementation mechanisms for \$100 billion goal
 - Tools/approaches for climate finance accounting, and case studies of good practice in accounting and measuring progress
- Developing and communicating evidence on how to mobilise more private finance
 - Presenting case studies of private finance flows and their effects on emissions, vulnerability and poverty
 - Analysing institutions and policy to understand barriers to knowledge exchange across sectors/disciplines
- Supporting finance institutions in ensuring every financial decision takes climate change and nature into account
 - Developing key performance indicators, risk indicators and common standards
 - Providing open geospatial data and analytics to accurately measure risks and impacts in detail



Mitigation finance initiatives

- Glasgow Financial Alliance for Net Zero (GFANZ)
- UN-convened Net Zero Banking Alliance
- UN-convened Net Zero Asset
 Owners Alliance
- the Net Zero Asset Managers Initiative.

Adaptation finance initiatives

- Collaborative on Accelerating Investment in Climate Adaptation and Resilience (DFI+ A&R Collaborative)
- Coalition for Climate Resilient Investment (CCRI)
- Insuresilience



Join the Race to Zero and Race to Resilience