IN BRIEF

In 2015 in Paris, the governments of the world agreed to limit global warming to well below 2°C and to pursue efforts to limit it to 1.5°C. But as the Intergovernmental Panel on Climate Change (IPCC) has said, overshoot—at least temporary—is likely.

Every tenth of a degree matters, increasing the serious negative impacts on ecosystems and people, especially the most vulnerable. Further warming also raises the chance of crossing irretrievable planetary boundaries. The risks of overshooting the 1.5°C goal will be felt across all the UN Sustainable Development Goals, with profound environmental and political consequences.

Risks will increase in line with the extent and the duration of the overshoot. Today’s global warming of about 1.1°C is already creating significant impacts. It is essential to lower risks and impacts on populations and ecosystems as much as possible.

KEY DIFFERENCES IN CLIMATE IMPACTS BETWEEN A WARMING OF 1.5°C AND 2°C ABOVE PREINDUSTRIAL
EVERY 0.1°C MATTERS

<table>
<thead>
<tr>
<th>GLOBAL CLIMATE IMPACT</th>
<th>1.5°C</th>
<th>2°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat Wave Duration*</td>
<td>11 months</td>
<td>16 months</td>
</tr>
<tr>
<td>Increase in Heavy Precipitation Intensity</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Sea-Level Rise in 2100</td>
<td>40 cm</td>
<td>50 cm</td>
</tr>
<tr>
<td>Coral Reefs at Risk of Annual Bleaching in 2100</td>
<td>70%</td>
<td>99%</td>
</tr>
<tr>
<td>Change in Local Maize Yields</td>
<td>-1%</td>
<td>-6%</td>
</tr>
</tbody>
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Source: Based on EATnRice et al 2016.  
*Consecutively daily maximum temperatures which exceed the 90th percentile over the reference period.

Additional approaches

The world has rightly focused on deep and rapid emissions cuts, and this should remain the primary means to combat climate change. But it has become necessary to explore additional approaches to further reduce risks beyond what lowering emissions alone can achieve.
These include:

// greatly expanded and accelerated adaptation measures to reduce climate vulnerability
// removing excess carbon dioxide from the atmosphere
// possibly cooling the planet by reflecting incoming sunlight

These additional approaches should be researched and evaluated so that, with appropriate governance, well-informed decisions can be made about their potential use. Their governance should be just and equitable. But serious governance gaps—most acutely for sunlight reflection—limit the ability of the international community to systematically assess the full array of responses to reduce risks to people and ecosystems. It is time to address this challenge.

The Commission
The Global Commission on Governing Risks from Climate Overshoot (the ‘Climate Overshoot Commission’) is an independent group of eminent global leaders who will recommend a strategy to reduce risks should global warming goals be exceeded. Building upon the authoritative scientific assessments of the IPCC, it is holding the necessary conversations to identify the combination of approaches with the greatest potential to reduce risks and a path to filling the critical global governance gaps.
The Climate Overshoot Commission is the first high-level group to address all of these approaches in a comprehensive strategy, independent of common political constraints. Members include former heads of government and national ministers, directors of intergovernmental organizations, leaders of environmental groups, and academic experts.

After a series of six in-person meetings in diverse global locations, the Commission will recommend a comprehensive governance strategy to reduce the risks posed by climate overshoot. This will be in the context of relevant international frameworks such as the Sustainable Development Goals, and will strive to be effective, ethical, integrated, evidence-based, and resilient. The Climate Overshoot Commission’s final report, issued well ahead of the 2023 UN climate change conference, will help guide future global discussions on wide-ranging action to govern climate risks. The Commission will disseminate its report and encourage wide discussions about its recommendations.

Advice and support
The Climate Overshoot Commission is assisted by a group of leading international scientists who will ensure that Commissioners have access to the latest relevant research and information.

A Secretariat composed of professional diplomats and academic experts supports the Commission’s work. It arranges logistics and organization, provides briefings to inform discussions, and assists the Commission in drafting papers on key issues. The Secretariat is hosted by the Paris Peace Forum, a civil society organisation committed to improve global governance.