



Ice Emergency: Scientists and Alliance of Concerned Nations urge UN New York Climate Ambition Summit to “take 2°C off the table” to Prevent Catastrophic Impacts from Melting Ice

New York, 19 September 2023

Representatives of a broad coalition of concerned governments, [Ambition on Melting Ice](#) (AMI), backed by top international scientists, will deliver an urgent warning about the global impacts of ice and snow melt as the UN Secretary-General convenes a milestone [Climate Ambition Summit](#) at United Nations Headquarters on 20 September 2023.

“Without urgent and immediate emissions reductions consistent with the lower Paris Agreement limit of 1.5°C, the damage from ice loss will result in scales of destruction well beyond the limits of feasible adaptation. It will leave no nation untouched”, says Carlos Fuller, a seasoned climate negotiator and Permanent Representative to the United Nations of low-lying nation Belize. This is the message being brought to New York by the member nations of the *Ambition on Melting Ice (AMI) High-level Group on Sea-level Rise and Mountain Water Resources*.

Led by Chile and Iceland, this unique group of ministers represents not just “ice nations” (polar and mountain), but the low-lying and downstream areas that will bear the brunt of loss of the planet’s stabilizing stores of snow and ice – the cryosphere.

“The inaction of world leaders is dragging humanity into a perfect storm of water scarcity and irreversible sea-level rise that will hamstring economic growth, devastate coastlines and fuel political instability across the globe,” says Dr. James Kirkham, Chief Science Advisor to AMI.

Ice melt impacts whole planet

Formed last November at COP27 in Egypt, this game-changing alliance of polar and mountain states with tropical and sub-tropical countries such as Liberia and Samoa marks the realization that changes in the cryosphere have their greatest impacts worldwide – well outside colder regions. Countries across the globe will suffer dramatically from rising seas, water shortages and cold-water fisheries loss if changes in the Arctic, Antarctic and mountain regions from fossil fuel pollution are not halted soon.

At a high-level event on the margins of the summit and accompanying [Climate Week NYC](#), AMI, alongside some of the world’s top climate scientists, will warn government, business and civil society leaders: even temporarily reaching the upper limit of 2°C set out in the Paris Agreement would be catastrophic and must give way to an emergency focus on decreasing fossil fuel pollution to remain close to 1.5°C.

“Chile this year is seeing record-low amounts of snow in our mountains due to repeated heatwaves, which may cause difficult water shortages in the coming summer,” said Chile’s Environment Minister and AMI Co-chair Dr. Majsja Rojas. “As an active research presence in Antarctica, we are seeing global warming impacts both at home, and on Antarctica that tell us 1.5°C should be a firm upper limit for global temperatures.”

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Event:

At a high-level event in the *Explorers Club* from 3-4:30PM on September 22, AMI governments and leading climate scientists will outline why newly-understood cryosphere impacts mean 2°C must give way to an exclusive focus on 1.5° at COP28.

For media access: please contact amy@iccinet.org

The Explorers Club: Headquartered in New York City with a community of Chapters around the world, The Explorers Club supports the scientific fieldwork of “groundbreaking explorers” around the globe.



Scientific Messages and Quotes:

Antarctic ice loss and sea level rise accelerating

[Meeting in Trieste, Italy, last week](#), the world's leading Antarctic scientists warned that even today's temperature with 1.2°C of warming, puts the continent "on the edge":

"Based on the newest research presented here, ice loss from Antarctica will occur sooner, and at lower temperatures than previously thought. What were called "low likelihood" events are now looking more likely than not if we don't cut emissions and halt warming within the 1.5°C envelope," said Dr. Tim Naish, an IPCC author and conference organizer.

"While we can't avoid some sea-level rise, unless we cut emissions quite literally immediately – not next year, or next decade -- we are setting in train many meters more, and we won't be able to stop it," added Dr. Naish. Two meters can occur early next century, according to latest models, which would place permanently under water the current homes of at least 670 million people.

Fossil fuel pollution melting "Third Pole", thawing permafrost

The Hindu Kush Himalaya region holds the third largest frozen body of water after the poles. Izabella Koziell, Deputy Director General of [International Centre for Integrated Mountain Development](#) (ICIMOD), the intergovernmental centre serving the eight countries of the region, states: "The ground evidence is categorical. Cryosphere here is disappearing at a staggering pace. With 2 billion people and countless irreplaceable lifeforms in Asia reliant on meltwater from these mountains for water, food and energy, the consequences of delaying the phase-out of fossil fuels are almost too vast to contemplate. Koziell spoke as ICIMOD hosted the Sept. 20-21 Hindu Kush Himalaya Science-Policy Forum in Kathmandu.

Dr. Christina Schaedel of [Woodwell Climate Research Center](#), who will speak to AMI ministers in New York, warns of the intense warming feedbacks caused by thawing permafrost: "Already today, thawed permafrost is emitting both carbon dioxide and methane on the same scale as a top-10 emitter such as Japan," she noted. "Those CO₂ and methane emissions will continue for centuries. To minimize the burden on future generations, every tenth of a degree matters; and a 2°C limit is definitely too high for global permafrost."

Risk of pushback at COP28 in Dubai

"Only by remaining within the Earth's 1.5°C guardrail can we prevent the worldwide impacts that are resulting from the rapidly accelerating loss of the Earth's snow and ice reserves", says AMI Chief Science Advisor Kirkham.

But seasoned observers of the UN climate talks fear this year's COP28, to be held in the oil-rich United Arab Emirates, could see a push to backtrack and revert to the higher limit of 2°C, leaving more scope for the continued use of fossil fuels.

Carbon dioxide (CO₂) levels in the atmosphere should be decreasing by 7% a year this decade according to the IPCC, but growth each year continues the same as before. CO₂ reached a record 424ppm this year, meaning the atmosphere now holds [50 percent more CO₂ than before the onset of the industrial era](#). In addition to extreme warming, this is now corroding the shells of marine animals in both polar oceans, because cold water takes up CO₂ and "acidifies" more quickly.

"Billions of people's lives are at risk if the world does not accept that 1.5 degrees is an absolute limit", says ICIMOD Director Izabella Koziell: "Yet, as the UN global stocktake released this week shows, we are way off track. We must transition from fossil fuels to



renewables faster than ever before; speed up fund transfer for adaptation, ecosystem restoration and mobilise loss and damage finance.”

“While much of the rhetoric today focuses on 1.5°C, the reality is that 2°C remains an acceptable Paris goal; and many countries still aim their targets at 2°C”, says Pam Pearson, Director of the AMI Secretariat and [International Cryosphere Climate Initiative](#) (ICCI). “Knowing what we know today, we should be doing everything possible to stay within 1.5°C and do what’s needed to protect our own and especially, our children’s future.”

The UN sees its Climate Ambition Summit as a “rallying call for the meaningful contributions still needed to halve carbon emissions by 2030 and to be on a path to net-zero by 2050.” For that to happen, AMI ministers urge that COP28 in Dubai must move forward on the pledge made at COP26 in Glasgow, to “keep 1.5°C alive”:

“Perhaps it is time to take 2°C formally off the table”, says Pearson.

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Further Information:

[State of the Cryosphere Report 2022 \(ICCI\)](#)

[ICIMOD’s Report – Water, Ice, Society, and Ecosystems in the Hindu Kush Himalaya](#)