# **ICCI 2018 Annual Report**

### **Summary**

Alongside projects demonstrating the potential of short-lived climate pollutants to slow cryospheric warming, "Cryosphere High Urgency" -- making Paris climate commitments as ambitious and realistic as possible -- was ICCI's chief focus in 2018. "Realistic" in cryosphere terms however refers not to political realism, but the realism of the cryosphere response to warming, which will result in irreversible changes to the Earth system. In 2018, the "High Urgency" process became an ever-broadening coalition of senior scientists and policy makers committed to making that choice clear.

The cryosphere message broke through in Paris in 2015, but current commitments fall drastically short of what is needed. A lasting legacy of ICCI's 2015 "Thresholds" report released in Paris (<a href="www.iccinet/thresholds">www.iccinet/thresholds</a>) was a robust partnership between this group of scientists and policymakers, committed to working together until the goal of real action to halt cryosphere climate change becomes a reality.

## **Specific Achievements**

**High Urgency Cryosphere: Towards 2020** 

Cryosphere science makes clear that later timing of emissions reductions, and temperature "overshoot" can trigger global changes and feedbacks that may be rapid and – more seriously -- to a great degree irreversible for thousands of years. The aim of the "High Urgency" process is greater political-level, and public support for climate action plans consistent with a 1.5 degree goal, incorporated into 2020 NDCs by a maximum number of countries at COP-26 specifically to prevent cryosphere collapse.

This Chatham House rules effort built on early consultations with negotiators at the May 2018 UNFCCC negotiations in Bonn. An exploratory meeting with several climate negotiators and IPCC scientists took place in June 2018 in Stockholm. The group agreed this approach would help move the political level towards more "urgent" and concrete measures for 2020 NDCs. A second and broadened meeting took place in November 2018, hosted by the United Kingdom in London; and focused on the newly-released SR1.5 and COP-24/Katowice. Iceland will host the group's third meeting in April 2019, with topics to include Chile's and (pending finalization) the United Kingdom's COP-25 and COP-26 Presidencies, respectively; the UN Climate Summit; release of the SROCC; and potential connections with Iceland's pending Arctic Council chairmanship and the Nordic Declaration on Carbon Neutrality.

In addition to IPCC scientists, WMO, UNEP and Sweden; current members of the group serve as negotiators for Great Britain, Iceland, Canada, Netherlands, Chile,

Marshall Islands, Switzerland and New Zealand. The overall process works towards moving as many of these, and other countries as possible to adopt very concrete climate action plans consistent with a 1.5 degree goal. The banner message of the process is that, as former IPCC Co-chair and participant Jean-Pascal van Ypersele puts it, "There is no negotiating with the melting point of water." (ICCI's UNFCCC event, Paris 2015). Its basic premise is that, far from being "unrealistic," adopting 1.5 degree degree pathways is the only "realistic" response on a globe where the cryosphere has moved from being an early "indicator" of climate change – the "canary in the coal mine" – to now being the driving engine behind the changes we have only begun to see in the global climate system.

### **SLCP Demonstration Projects to Slow Cryosphere Warming:**

Alongside the push towards more urgent and ambitious NDCs, ICCI continues its work on a practical level to develop new projects aimed at reductions in black carbon and other short-lived climate pollutants, an important corollary to  $CO_2$  reductions that hold special promise for mitigation of climate change in cryosphere. These efforts also contribute greatly to meeting SDG goals, especially in the Health, Energy and Zero Hunger SDGs. In 2018 these focused on agricultural open burning near the Arctic, Andes and Himalayas; and heating stoves, primarily wood stoves but also stoves using coal in Eastern Europe and many nations near the Himalayas.

Based on a grant from the Nordic Council of Ministers, ICCI earlier developed a black carbon testing protocol that will allow woodstoves to be compared on a consistent and reliable basis as to their black carbons emissions, for possible use in eco-labelling by the Nordic Swan. This work then leveraged the first-ever domestic heating grant from UNEP/the Climate and Clean Air Coalition, to take this beta-testing global. The CCAC grant also included elements focused on decreasing black carbon from existing stoves using "burn right" campaigns with consumers (<a href="www.burnright.org">www.burnright.org</a> and <a href="www.burnrightvermont.org">www.burnrightvermont.org</a>); policy support for interested governments, especially in the LRTAP Convention; work with stove producers; and addressing the thorny problem of combined cooking and heating in developing countries. Final reports of the five components of this project will be released in 2019.

ICCI also continued and expanded its global work on decreasing agricultural sector open burning, with a focus on near-cryosphere Andes and Himalayan regions; as well as Ukraine due to its strong Scandinavian and Arctic impact. Regional demonstration projects have been initiated in Huancayo, Peru and Punjab, India in order to demonstrate effective and economically advantageous no-burn alternatives to local farmers. The work is taking place with grants from UNEP/the Climate and Clean Air Coalition, and NEFCO. Further information on these projects, includes maps showing annual burning patters globally is available at <a href="https://www.openburning.org">www.openburning.org</a>.

## **Antarctic and Arctic Climate Change:**

Work continued in 2018 to bring climate concerns more directly into the Antarctic Treaty System, which in contrast to the Arctic Council has proven resistant to addressing climate issues outside the UNFCCC. ICCI works as part of the ASOC coalition of NGOs in this connection. ICCI also is part of the Arctic 21 coalition of NGOs, and provides input to the work of the Black Carbon and Methane Task Force, as well as the EU-Arctic Council Black Carbon project.

Antarctica especially is today's elephant in the room on climate change, and along with the pending IPCC Special Report on Oceans and Cryosphere in 2019, more "bi-polar" efforts will be key in the coming two years to convince governments and the private sector that time is short; and the permanent consequences far too dire to allow these cryosphere dynamics to proceed any further.