

## **ENHANCED BLACK CARBON AND METHANE EMISSIONS REDUCTIONS**

### **AN ARCTIC COUNCIL FRAMEWORK FOR ACTION**

We, the Arctic States: Canada, the Kingdom of Denmark, the Republic of Finland, the Republic of Iceland, the Kingdom of Norway, the Russian Federation, the Kingdom of Sweden, and the United States of America, in collaboration with the Permanent Participants of the Arctic Council: the Arctic Athabaskan Council, the Aleut International Association, the Gwich'in Council International, the Inuit Circumpolar Council, the Russian Association of Indigenous Peoples of the North and the Saami Council,

*Recognizing* that the Arctic is warming considerably faster than other regions of the globe, leading to fundamental changes to the environment and human living conditions in both the Arctic and around the world;

*Acknowledging* that black carbon and methane emitted within and beyond the borders of Arctic states have substantial impact on the Arctic and that their reductions lead to near-term climate, health and economic benefits in the Arctic, contributing to global efforts to limit the increase in global average temperature to below 2 degrees Celsius above pre-industrial levels;

*Recognizing* that work under this Arctic Council Framework supports and complements the goal of the United Nations Framework Convention on Climate Change and that reducing anthropogenic carbon dioxide emissions remains the most important challenge to address global and Arctic climate change;

*Commit* to take leadership based on this Arctic Council Framework by further reducing the overall black carbon and methane emissions from our countries and by working with Arctic Council Observer States and others to also reduce emissions produced beyond the borders of Arctic States.

## **A COMMON VISION FOR ENHANCED ACTION**

We commit to take enhanced, ambitious, national and collective action to accelerate the decline in our overall black carbon emissions and to significantly reduce our overall methane emissions. Through our enhanced actions under this Arctic Council Framework, we further commit to provide black carbon inventories starting in 2015; to establish an aggregate summary of black carbon and methane emissions; and to adopt an ambitious, aspirational and quantitative collective goal on black carbon, and to consider additional goals, by the next Arctic Council Ministerial meeting in 2017;

We also commit to share national reports and policies for our actions to reduce emissions; measure our collective progress; and jointly identify conclusions and recommendations. We call upon Arctic Council Observers to join us in these actions given the global nature of the challenge.

All of these efforts aim to further spur continuous improvements for climate and health in the Arctic.

### **ARCTIC STATES RESOLVE TO:**

#### **1. TAKE LEADERSHIP NATIONALLY**

##### *National actions, action plans or mitigation strategies*

Arctic States commit to enhance actions to reduce black carbon and methane emissions at the national level in line with the common vision of this Arctic Council Framework and our national priorities, through the development of national actions or action plans or mitigation strategies, which can include setting of aims and objectives, implementing policies and regulations, identifying best practices and awareness-raising activities. We intend to strengthen our respective actions and mitigation strategies over time by learning from each other's policy experiences and best practices via the two-year iterative process outlined in Annex A.

##### *Improved emission information and inventories*

Each Arctic State commits to:

- develop and improve emission inventories and emission projections for black carbon using, where possible, relevant guidelines from the Convention on Long-Range Transboundary Air Pollution (CLRTAP) and improve the quality and transparency of information related to emissions of black carbon;

- enhance expertise on the development of black carbon inventories, including estimation methodologies and emissions measurements, by working jointly through the Arctic Council and other appropriate bodies; and
- continue to improve anthropogenic emission inventories and projections for methane, as reported to the United Nations Framework Convention on Climate Change (UNFCCC).

### National Reporting

Each Arctic State commits to submit a national report to the Arctic Council Secretariat according to the guidelines and the timeline in Annex B. The Arctic Council Secretariat will make the national reports publically available.

## **2. ENHANCE COLLECTIVE ACTION**

### Continually driving mitigation ambition

To improve ambition and promote enhanced action over time, we establish a two-year iterative process as described in Annex A. The process will be driven by an Expert Group as described in Annex C to periodically assess the progress made under this Framework in order to drive enhanced action on black carbon and methane. A “Summary of Progress and Recommendations” report will be presented to Arctic Council Ministers for their consideration. This process should inform and engage policy makers in all Arctic States and Arctic Council Observer States, including through the possibility of convening a higher-level policy maker forum, and/or an open dialogue at the discretion of the Arctic Council Chair. Based on analysis, recommendations, and exchange of experiences, Arctic States will seek to adopt enhanced strategies, policies and practices, appropriate to their national circumstances and priorities.

### Science, research and monitoring

Arctic States underscore the importance of continuing monitoring, research and other scientific efforts, with the inclusion of traditional and local knowledge, to improve the understanding of black carbon and methane emissions, emission inventories, Arctic climate and public health effects, and policy options.

Arctic States support a four-year cycle of periodic scientific reporting, including the assessment of status and trends of short-lived climate pollutants such as black carbon and methane with a focus on the impacts of anthropogenic emissions on Arctic climate and public health. This should include estimates of associated costs of mitigation, as well as enhancing our state of knowledge regarding natural sources.

Arctic States intend to sustain and, as appropriate, expand their own existing activities and capabilities to monitor levels of black carbon and methane in the Arctic. Arctic States resolve to

improve coordination across the region, through relevant forums in order to, among other things, assist in assessing collective mitigation progress and characterizing climate impacts in the Arctic, including the capability to detect changes in natural methane releases as a result of Arctic warming.

#### *Increasing awareness*

Arctic States commit to raise awareness of the impact of black carbon and methane emissions on the environment, climate, and health of the inhabitants of the Arctic. Arctic States intend to work with subnational governments, and Permanent Participants of the Arctic Council to identify areas and activities related to awareness-raising, which can lead to projects that strengthen local capacities to identify, mitigate, and prevent localized pollution.

Based on sound science and socio-economic knowledge/analysis, Arctic States intend to work jointly to raise awareness of the impacts of these pollutants internationally, particularly with Observer States and other States whose emissions potentially impact the Arctic region, and seek action on their part to reduce black carbon and methane emissions. As part of this effort each Arctic State's national report and the "Summary of Progress and Recommendations" report will be made publically available on the Arctic Council website and shared with all Arctic Council Observers, relevant international organizations, and other stakeholders.

#### *Project and sector based activities*

Arctic States resolve to carry out project- and sector-based activities, within the Arctic Council and nationally, based on best available technologies and practices for concrete reductions of black carbon and methane emissions in different sectors of the economy, including also broader programmes that impact these emissions. Project- and sector-based activities should focus in particular on sectors identified as the most significant and emerging sources<sup>1</sup> of anthropogenic black carbon and methane to support the Framework's objectives, national actions, and promote joint cooperation. These activities are to continue to build on work already underway within the Arctic Council. In each two-year cycle, the Arctic Council chair, in consultation with Arctic States, Permanent Participants, and taking into consideration ongoing work in the Arctic Council, may select a particular sector or area for focused attention.

Arctic States recognize the role of the Project Support Instrument in financing approved Arctic Council projects to reduce black carbon and methane emissions in the Arctic, as well as the need for funding from other sources to increase the scale and pace of black carbon and methane emission reductions.

<sup>1</sup> Sectors identified by the Arctic Council Task Force on SLCFs in its 2011 and 2013 reports.

### **3. PROMOTE ACTION BY OTHERS**

#### Arctic Council Observers

Given the substantial impact that black carbon and methane emitted beyond the borders of Arctic States have on the Arctic, robust mitigation action by Arctic Council Observer States is vital for overall success. Accordingly, Arctic States look forward to Arctic Council Observer States joining us and actively participating in the implementation of this Framework including by strengthening their domestic actions, developing robust emission inventories, taking part in relevant meetings and submitting national reports as outlined in Annex B. Arctic Council Observer States are particularly encouraged to focus on activities of theirs that disproportionately impact the Arctic. Arctic Council Observer States' efforts will be highlighted in the "Summary of Progress and Recommendations" report, and particularly noteworthy contributions will be recognized by the Arctic Council.

Arctic States also encourage Arctic Council Observer Organizations to enhance knowledge and awareness of black carbon and methane emissions and their impact on the Arctic, and to undertake activities aimed at reducing emissions.

#### Other stakeholders

The private sector has an important role in reducing emissions, developing new technologies, and sharing best practices that will lower emissions, especially in key sectors like transportation and oil and gas development. The Arctic Council invites the private sector to participate, as appropriate, in the implementation of this Framework. Other stakeholders, including civil society, other governments, financial institutions and academia, can also play a key role in helping to reduce emissions of methane and black carbon and enhancing awareness of the impacts of these emissions on the Arctic.

Arctic States intend to work with financial institutions to both promote financing of activities to reduce black carbon and methane emissions as well as to encourage mainstreaming of considerations of these emissions into their broader funding decisions.

Arctic States intend to carry out further activities with stakeholders to increase awareness and encourage actions to reduce emissions within, and transported to, the Arctic in order to reduce the impacts of these pollutants on Arctic peoples and the environment.

#### International and regional forums and agreements

Arctic States will actively work with, and within, relevant forums and agreements to provide an Arctic perspective, prioritize collective efforts, and promote actions and decisions that lead to enhanced black carbon and methane emissions reductions. The Expert Group will assess and identify specific opportunities for Arctic States to engage in this regard.

## **Implementation**

This Arctic Council Framework represents high-level political commitments of the Arctic States, and does not have binding obligations under international law. The guidance and processes for implementing the common vision for enhanced action are set forth in the three Annexes that follow.

## **Annex A – Two-Year Iterative Process to Enhance Implementation**

1. By 1 September of the first year of each two-year Chairmanship period, Arctic Council States submit national reports to the Arctic Council Secretariat. National reports will be made publically available by the Arctic Council Secretariat.
2. The Arctic Council Secretariat will compile the national reports submitted by Arctic States as well as national reports from, and other information on, efforts and accomplishments by, participating Arctic Council Observer States and others.
3. By 1 October of the same year as specified in paragraph 1 above, the Arctic Council Secretariat will provide a “compilation” report to the Expert Group.
4. The Expert Group will review, analyze, and assess progress toward the common vision of the Framework based on the “compilation” report, relevant output of Arctic Council Working Groups and other information. The Expert Group will be supported in this regard by the Arctic Council Secretariat and relevant bodies of the Arctic Council.
5. The Expert Group will produce a “Summary of Progress and Recommendations” report, including conclusions and specific recommendations for further action.
6. At its discretion, the Arctic Council Chair may convene a high level policy-maker forum among relevant decision makers to promote greater action and ambition, and/or an open dialogue among a broader group of relevant stakeholders including from the private sector and other states. Such an effort would complement and support the work of the Arctic Council.
7. The “Summary of Progress and Recommendations” report is presented through the Senior Arctic Officials, to Ministers from Arctic Council States as well as Observer States.
8. Based on the “Summary of Progress and Recommendations” report, all Arctic States, Permanent Participants, participating Arctic Council Observer States and other relevant stakeholders will consider opportunities for enhanced individual and collective action.

## **Annex B - Guidance for National Submissions**

This guidance is intended to provide clarity for the initial launch and implementation of the Arctic Council Framework. As this Framework creates a first-time reporting and review function that will occur periodically over multiple chairmanship cycles of the Arctic Council, this initial guidance is intentionally simple and flexible, and may need to be further refined and clarified over time as more experience is gained.

Arctic States and participating Arctic Council Observer States are requested to provide information following this guidance, taking into account national circumstances.

Each Arctic State, and participating Arctic Council Observer States, should submit, to the degree possible, the following to the Arctic Council Secretariat:

1. Summary of current black carbon emissions to CLRTAP, where appropriate, and, if available, future projections
2. Summary of current methane emissions to UNFCCC and, if available, future projections
3. Summary of National Actions, National Action Plans, or Mitigation Strategies by sector
4. Highlights of best practices or lessons learned for key sectors
5. Projects relevant for the Arctic
6. Other information if available (e.g., climate, health, environmental, economic effects of emissions and mitigation)

Further guidance for each of these elements is provided here:

*Summary of current black carbon emissions to CLRTAP, as appropriate, and, if available, future projections*

In the national submission to the Arctic Council Secretariat, each Arctic State and participating Arctic Council Observer States should have the option of including: a) a high-level summary of their black carbon emissions as submitted to CLRTAP or that is generally consistent with relevant guidelines under CLRTAP; b) the same submission as provided to CLRTAP; or c) notification to the Secretariat that the black carbon emission inventory has been submitted to CLRTAP and where it can be collected from CLRTAP's public website. The sectoral breakout of black carbon emissions is expected to be consistent with relevant CLRTAP guidelines, where applicable. States not submitting inventories to CLRTAP may wish to provide a high-level summary of national black carbon emissions. Future black carbon emission projections, if available, should generally cover the same sectors as provided in the emissions inventory, and should extend from the latest available baseline year out to the next 10-30 years.

*Summary of current methane emissions to UNFCCC and, if available, future projections*

In the national submission to the Arctic Council Secretariat, each Arctic State and participating Arctic Council Observer States should have the option of including: a) a high-level summary of



their methane emissions as submitted to UNFCCC; b) the same inventory as submitted to UNFCCC; or c) notification to the Secretariat that the greenhouse gas (including methane) inventory has been submitted to UNFCCC and where it can be collected from UNFCCC's public website. The sectoral breakout of methane emissions is expected to be consistent with the inventories submitted to UNFCCC.

Future anthropogenic methane emission projections, if available, should generally cover the same sectors as provided in the emissions inventory, and should extend from the best available baseline year out to the next 10-30 years.

*Summary of National Actions or National Action Plans or Mitigation Strategies by sector*

Each Arctic State and participating Arctic Council Observer States should provide brief information about key mitigation actions occurring in each sector, but should have flexibility in how such information is summarized. For example, information on national actions, brief summaries of action plans, or brief descriptions of mitigation strategies can be included. Summaries of methane mitigation actions contained in National Communications to the UNFCCC may be used for this purpose.

*Highlights of best practices or lessons learned for key sectors*

In the national submission to the Arctic Council Secretariat, each Arctic State and participating Arctic Council Observer States may wish to highlight successes, progress, and/or lessons learned in reducing emissions and implementing mitigation strategies for particular sources and sectors.

*Projects relevant for the Arctic*

In the national submission to the Arctic Council Secretariat, each Arctic State and participating Arctic Council Observer States may wish to highlight particular demonstration, research, atmospheric modeling, or mitigation projects that address either emissions characterization, emission reduction potential, mitigation implementation feasibility, mitigation costs, and/or environmental, health, and climate effects. This may include projects occurring under the Arctic Council or projects occurring outside of Arctic Council Working Groups, including in other multi-national fora.

*Other information if available (e.g., climate, health, environmental, economic effects of emissions and mitigation)*

In the national submission to the Arctic Council Secretariat, each Arctic State and participating Arctic Council Observer States may wish to highlight particular analyses and assessments that could contribute to improved understanding of climate, health, environmental and/or economic effects of current or projected levels of emissions, and the effects of mitigating emissions.

## **Annex C**

### **TERMS OF REFERENCE**

#### **Expert Group**

#### **In support of implementation of the Framework for Action on Black Carbon and Methane**

##### **Objective:**

The objective of this Expert Group is to periodically assess progress of the implementation of the Arctic Council's Framework for Action on Black Carbon and Methane, and to inform respective policy makers from Arctic States and for participating Arctic Council Observer States. This includes preparing, on a once every two-year cycle of the Arctic Council chairmanship, a high level "Summary of Progress and Recommendations" report, with appropriate conclusions and recommendations, for presentation to Arctic Council Ministers at the biennial ministerial meeting on collective progress by Arctic States, and participating Arctic Council Observer States, where possible, in achieving the common vision and commitments outlined in the Framework.

##### **Structure and composition:**

The Expert Group will be comprised of representatives from Arctic States, Permanent Participants, and Arctic Council Working Groups, with expertise in policies and measures related to emissions and emissions reductions of black carbon and methane from multiple sources, as well as experience in reviewing information and synthesizing it for policy makers. Those Arctic Council Observer States which intend to provide national reports will also be invited to send representatives with similar expertise to participate in the Expert Group. Experts from academia, international or other organizations may be invited to provide advice and guidance, as required.

Each Arctic State will nominate one or two government representatives to this group, through their respective Senior Arctic Official. Each Permanent Participant will nominate one or two representatives through their Permanent Participant Head of Delegation. AMAP and ACAP, and any other interested Arctic Council Working Groups will be invited. Arctic Council Observer States which intend to provide national reports will inform the Arctic Council Secretariat of their representative.

The Expert Group will be chaired by a representative of the Arctic Council State which is the current Chair of the Arctic Council during the two-year period that coincides with the preparation of the "Summary of Progress and Recommendations" report.

The Expert Group should be supported administratively by the Arctic Council Secretariat.

### **Tasks:**

Drawing on national submissions from Arctic States, and other information as appropriate (see Annex B of Framework), the Expert Group will, *inter alia*:

- prepare quantitative and/or qualitative analysis on how Arctic States are collectively progressing in meeting the common vision and other elements agreed on in the Framework document. This analysis will include information about emissions, projections and mitigation actions (and associated costs) and could be further informed by climate and public health impacts. This may involve the assistance of relevant Arctic Council Working Groups;
- prepare a similar analysis of participating Arctic Council Observer State actions on emissions reductions as well as to compile other relevant data on emissions by other countries;
- identify steps necessary by which to share information and actively engage Arctic Council Observer States and other stakeholders;
- document the lessons learned and best practices of completed or ongoing projects. This may involve the assistance of relevant Arctic Council Working Groups;
- identify areas and actions related to policies and best practices that could potentially be enhanced or replicated; opportunities for further action where gaps exist; and activities related to awareness-raising, or where there is the opportunity to share this with relevant international and regional fora;
- prepare the draft “Summary of Progress and Recommendations” report, including appropriate conclusions and recommendations, which could help inform both Arctic Council Ministers as well as a high level policy maker forum and/or dialogue if convened by the respective Arctic Council Chair for that two year iterative cycle, to further explore opportunities for individually and collectively taking action on the report’s recommendations;
- transmit the report to Senior Arctic Officials for their review and approval, and for submission to Arctic Council Ministers for their Arctic Council Ministerial meeting;
- conduct other activities as necessary to achieve the objectives laid out for the Expert Group;
- discuss and if necessary propose improvements of the Framework and its annexes;
- assess and identify specific opportunities for Arctic States to further engage in relevant international and regional forums and agreements;and
- propose options for consideration in order to establish a collective baseline, undertake the analysis and identify options for quantitative goal(s) as described in “the common vision” of this Framework.

### **Modalities:**

Once national submissions are made available, the Expert Group will meet twice in person during the two-year period, unless the Chair determines that an additional face-to-face meeting or meetings are required. The first meeting will be to scope out the elements of the report,

identify leads, and assign tasks; the second meeting will be to finalize the report to ministers. Otherwise, the Expert Group will conduct its work predominantly by teleconference, electronic and other means.

The Chair of the Expert Group will be accountable for the overall preparation of the “Summary of Progress and Recommendations” report, including: coordination of the work; developing and managing timelines; pulling together the draft report; and coordinating its review and approval by the Expert Group members. The Chair may seek the support of a smaller group of Expert Group members to assist with some of these tasks.

**Resources and budget:**

Meeting costs will normally be financed by the host country. Travel costs and accommodation will be covered by the participants, in accordance with applicable laws and available resources. Expert Group members are expected to cover the in-kind costs associated with their routine participation in the activities of the group.

**SAO guidance:**

The Chair of the Expert Group should provide updates to SAOs and seek guidance as appropriate.