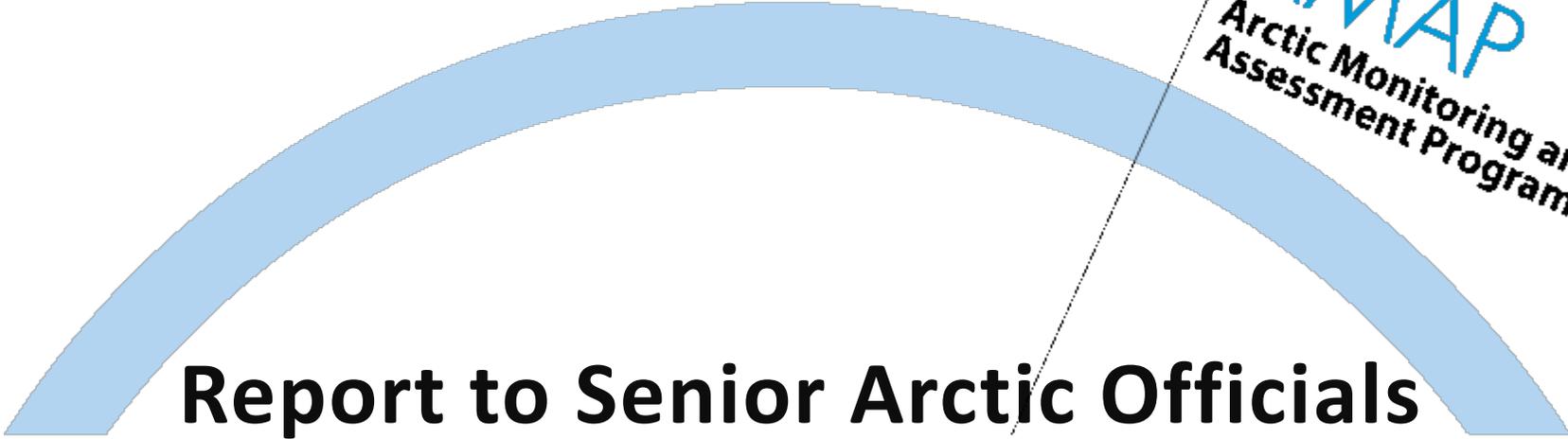


AMAP
Arctic Monitoring and
Assessment Programme



Report to Senior Arctic Officials

Benjamin J. DeAngelo

AMAP Chair

1 December 2021

Status of our 2021 deliverables

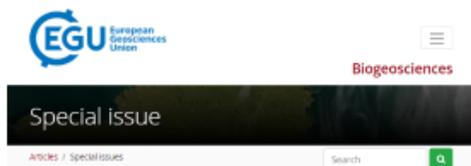
- All recent and past reports available at: amap.no
- All Summaries for Policymakers available
- Underlying technical assessments are being finalized, electronic publication by end 2021/early 2022 and print shortly thereafter:
 - POPs and Chemicals of Emerging Arctic Concern: Influence of Climate change
 - Human Health in the Arctic
 - Mercury Assessment
 - Arctic Climate Change Update 2021: Key Trends and Impacts
 - Impacts of Short-lived Climate Forcers on Arctic Climate, Air Quality, and Human Health

AMAP's communication and outreach efforts

- AMAP SPMs are getting translated into additional languages
 - French, Japanese
 - Russian, Sámi, Mandarin, Spanish in progress/planned
- Publications of supporting scientific papers associated with AMAP's major 2021 deliverables (see slide 4)
- Likewise, we are planning events at major scientific conferences relevant for our 2021 deliverables (see slide 5)
- Recent side events at key conventions:
 - COP26 (see slide 6)
 - Minamata Convention COP4 side event in November, co-organized with ICC and Canada's Northern Contaminants Program
- 30th AMAP anniversary film in development

Journal articles

SLCF Expert Group



Arctic climate, air quality, and health impacts from short-lived climate forcers (SLCFs): contributions from the AMAP Expert Group (ACP/BG inter-journal SI)(ACP/BG inter-journal SI)

Editor(s): Sandy Harrison and Kirsten Thorike
Special issue jointly organized between Atmospheric Chemistry and Physics and Biogeosciences

► [More information](#)

15 Sep 2021

Review and synthesis: Arctic fire regimes and emissions in the 21st century
Jessica C. McCart, Juho Aalio, Ville Veikko Paasikallio, Steve B. Aronoff, Sabine Schardt, Zligniew Klimont, Justin J. Flann, Nikolaos Evangelou, An Verstaalen, Nadezhda M. Tchekalova, Elena I. Parfenova, Kaarle Kupiainen, Amber J. Soja, Lin Huang, and Simon Wilson

Biogeosciences, 18, 5053–5083, <https://doi.org/10.5194/bg-18-5053-2021>, 2021

► [Short summary](#)



POPs Expert Group



Publication of articles based on AMAP 2021 POPS/CC assessment in Themed Issue of Environmental Science: Processes & Impacts

Mercury Expert Group

International Journal of Environmental Research and Public Health

International Journal of Environmental Research and Public Health is an interdisciplinary, peer-reviewed, open access journal published semi-monthly online by MDPI. It covers Environmental Sciences and Engineering, Public Health, Environmental Health, Occupational Hygiene, Health Economic and Global Health Research, etc. The International Society Doctors for the Environment (ISDE) and Italian Society of Environmental Medicine (SIMA) are affiliated with IJERPH and their members receive a discount on the article processing charges.

► [Open Access](#) — free for readers, with article processing charges (APC) paid by authors or their institutions.

Publication of articles based on AMAP 2021 Mercury assessment in Special Issue of Science of the Total Environment



ISSN: 0924-6460

Human Health Expert Group

Science of the Total Environment

An International Journal for Scientific Research into the Environment and its Relationship with Humankind

This is a Transformative Journal.

Publication of articles based on AMAP 2021 Human Health Assessment in the International Journal of Environmental Research and Public Health

Litter and Microplastic Expert Group



The EG is currently preparing manuscripts for a special issue of the journal Arctic Science

Science conferences

POPs Expert Group

PSETAC Europe 32nd Annual Meeting
(Copenhagen, 15–19 May 2022)

Human Health Expert Group

Problems of Health Maintenance and Sanitary-Epidemiological Well-being Provision of Arctic Population
(St Petersburg, 13-15 November)

Litter and Microplastic Expert Group

ArcticNet Annual Scientific Meeting
(December 6-10 2021)

Radioactivity Expert Group

Seminar on Arctic Radioactivity Issues 2021, Helsinki, Finland
(16 November 2021)

5th International Conference on Radioecology & Environmental Radioactivity in 2022
(4 – 9 September 2022)

‘Waste Management 2022 Symposium’
(6-10 March 2022)

Mercury Expert Group

International Conference on Mercury as a Global Pollutant
(July 2022, virtual event)



Arctic Climate and Health Implications of Short Lived Climate Forcers



Climate Change Impacts on Saami Reindeer Herding Pastures



- Arctic climate trends
- Short-lived climate forcers
- Pilot study on Saami reindeer herding pastures
- Climate change and acidification effects on Arctic Ocean

Watch all our events at COP26!

01-12 NOV 2021
GLASGOW
COP26
IN PARTNERSHIP WITH ITALY



Work Programme (1)

- Updated assessment of radioactivity (2023)
 - Anthropogenic and naturally-occurring radioactivity in the Arctic
 - Radioactive waste and decommissioning
 - Monitoring
 - Climate change effects
- Biannual climate change update (2023)
 - Focus on select issues (e.g., Arctic change and mid-latitude weather patterns)
- Joint project with CAFF to assess the impacts of climate change on Arctic ecosystems and ecosystem feedbacks on climate
 - Products from individual components 2023; larger synthesis likely 2025 (see CAFF presentation for more detail).
- Societal implications of climate change.
 - Health, Indigenous livelihoods, transportation, infrastructure (2023)
 - Economic implications (2025?)

Work Programme (2)

- Assessment of local versus long-range transport of contaminants (2023?)
- Joint project with SDWG on biosecurity:
 - Linking contaminants, human health, climate change, and zoonotic diseases, (short report, 2023).
- Obtaining a more comprehensive overview of the key indicators of climate change and air quality, as well as their implications for pollution and human health.
- Litter and microplastics: update monitoring guidelines and technical report on what is known about effects in the Arctic
- Permanent Participant engagement:
 - We are working to mainstream PP engagement into our 'traditional assessments' in addition to pursuing dedicated pilots
 - NCM-funded project 'Climate Impacts on Terrestrial Environments (CITE)', a pilot study on co-production of knowledge in coordination with Saami Council (highlighted at COP26)

Other issues

- AMAP's observer partners are eager to collaborate and have much to offer
- IPCC Sixth Assessment Report is incredibly valuable for AMAP's work programme in terms of providing resources and identifying key knowledge gaps
- COP26 follow-up issues?

Overview of Primary Areas of Coordination with other WGs

- ACAP
 - Wildfires, public health and black carbon
- CAFF
 - Climate change impacts on ecosystems and feedbacks
- EPPR
 - Circumpolar Wildland fire
 - Radioactivity
- EGBCM
 - Comparison of SLCF emissions and future projections
 - Evaluation of new methane pledges?
- PAME
 - Regional Action Plan on Marine Litter; ecosystem-based management
- SDWG
 - One Health, Biosecurity

Thank you

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