The Arctic's Chemicals, Plastics, and Climate Crisis

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We acknowledge that our offices are located on the ancestral and unceded traditional territories of the Dena'ina Peoples. Indigenous peoples of "Alaska" never surrendered lands or resources to Russia or the United States.

Alaska Community Action on Toxics (ACAT):

Mission: We believe everyone has the right to clean air, clean water, and toxic-free food. Driven by a core belief in environmental justice, ACAT empowers communities to eliminate exposure to toxics through collaborative research, shared science, education, organizing, and advocacy. We are committed to protecting the health of future generations.

Our methods include:

- Community-based and participatory scientific research
- Public education and training
- Community organizing and advocacy
- Achieving policy change at the local to international levels

Acknowledgements:

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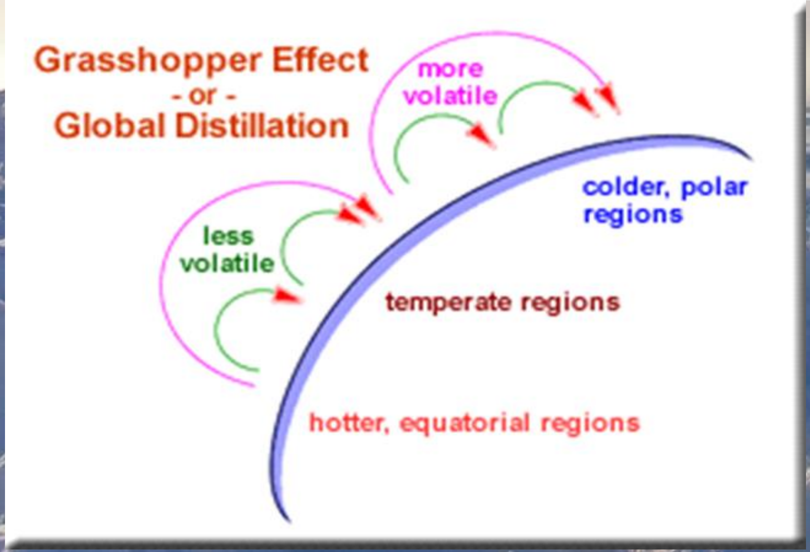
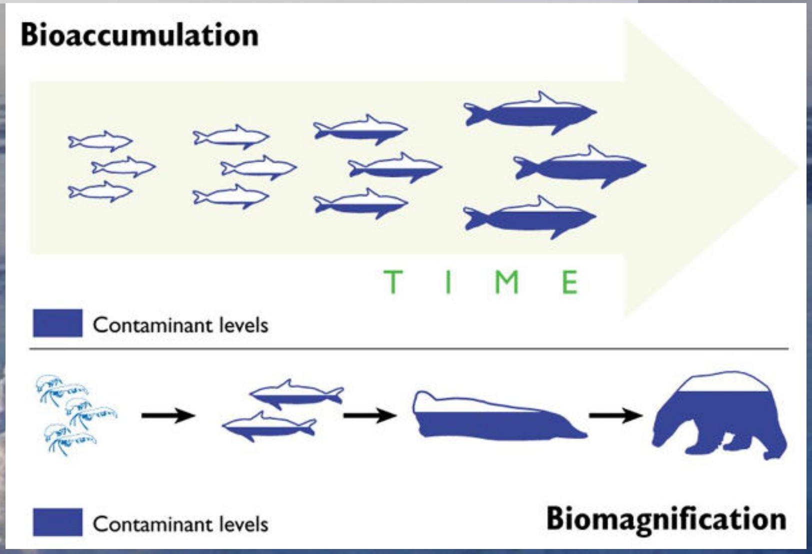
Available at: www.akaction.org; www.ipen.org

Global Transport of Persistent Chemicals and Climate Crisis in the North/Arctic

- The north is a hemispheric sink for persistent industrial chemicals and plastics
- Indigenous Peoples in the Circumpolar North face disproportionate exposures to toxic chemicals, and children are at highest risk
- Arctic Indigenous Peoples who rely on a traditional diet are particularly vulnerable to exposure and have levels of persistent contaminants in blood and breast milk that are among the highest of any population on Earth
- The mobilization and transport of contaminants into and within the Arctic is exacerbated by climate warming
- The Arctic is warming four times as fast as the rest of the world. Melting of Arctic ice, glaciers, and permafrost is releasing sequestered chemicals and microplastics into our environment and food web





The Arctic as a

HEMISPHERIC SINK

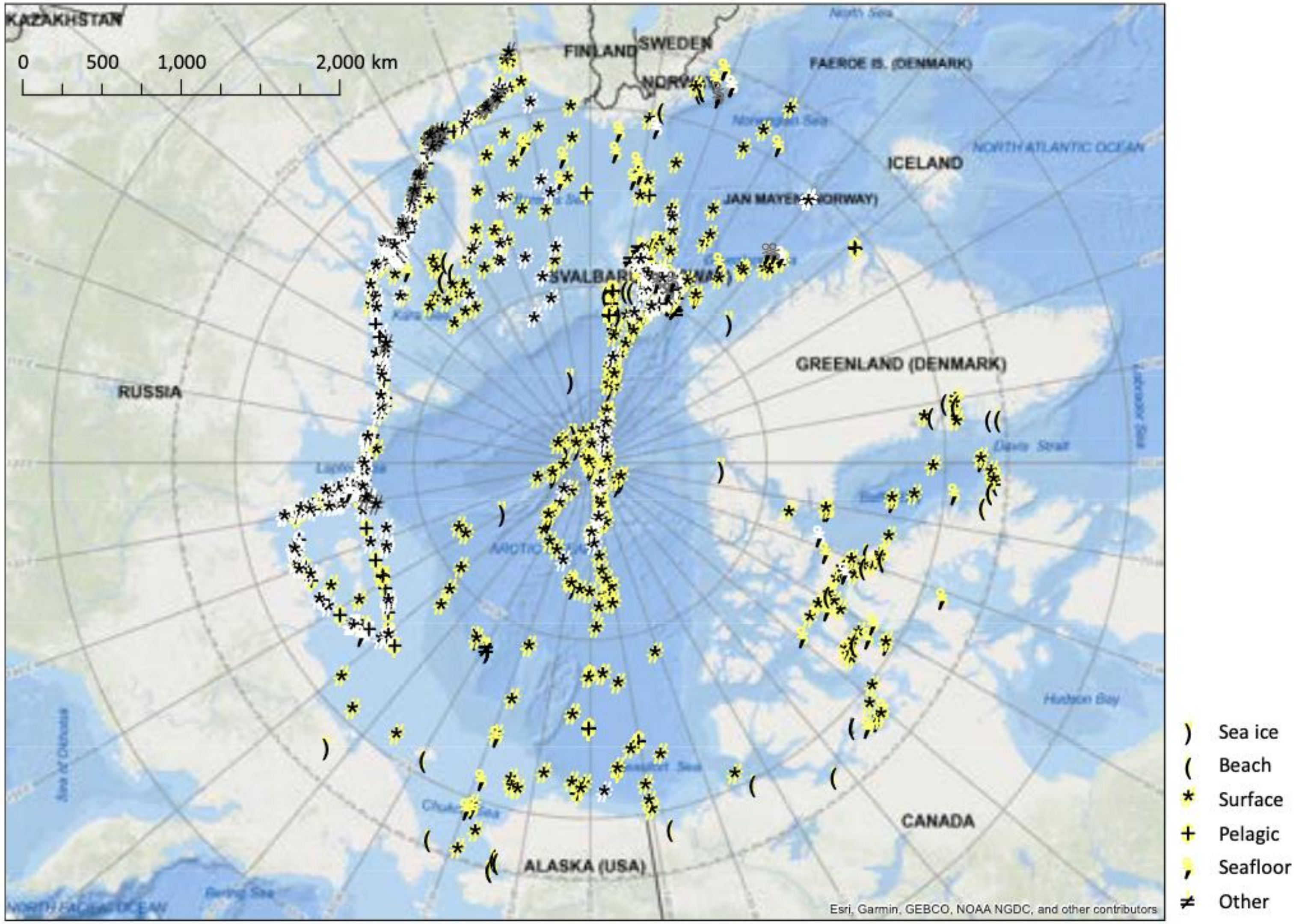


Figure 6 Documented concentrations of plastic litter, including microplastics, throughout the Arctic. Reprinted with permission of Dr. Melanie Bergmann, Alfred Wegener Institute.

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IPEN for a toxics-free future

Report Findings: Microplastics in the Arctic

- At least 62,000 tons of plastics enter the Arctic Ocean every year.

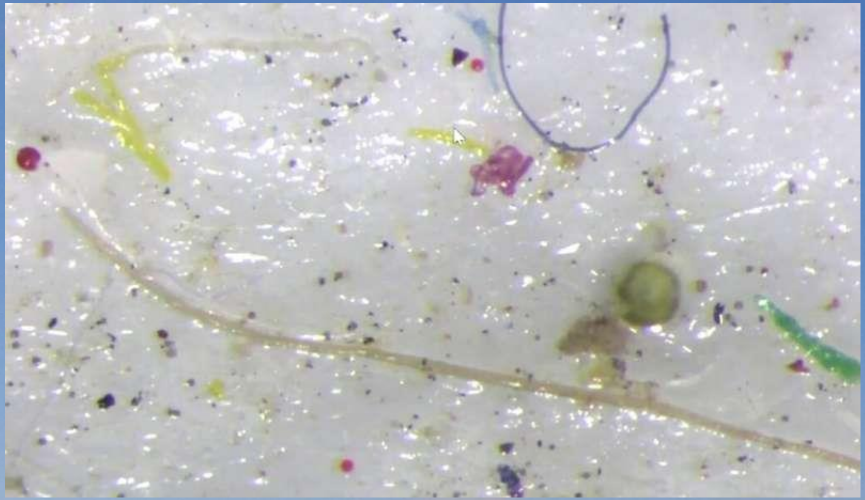
- The Arctic Ocean contains the highest concentrations of microplastics than any other ocean basin in the world.

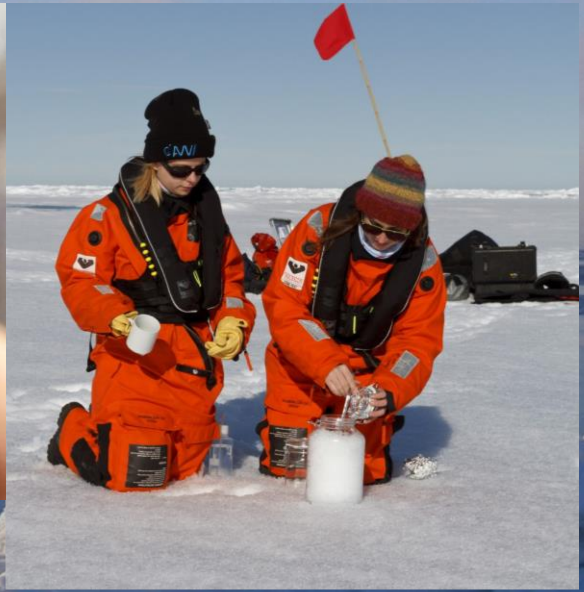
- 210,000 metric tons of microplastics in seawater, sea ice, and sediments of the Beaufort and Chukchi Seas.

- Arctic sea ice is a major global sink for microplastic particles.

- Concentrations of microplastics are highest in areas of the most rapid sea ice melting.

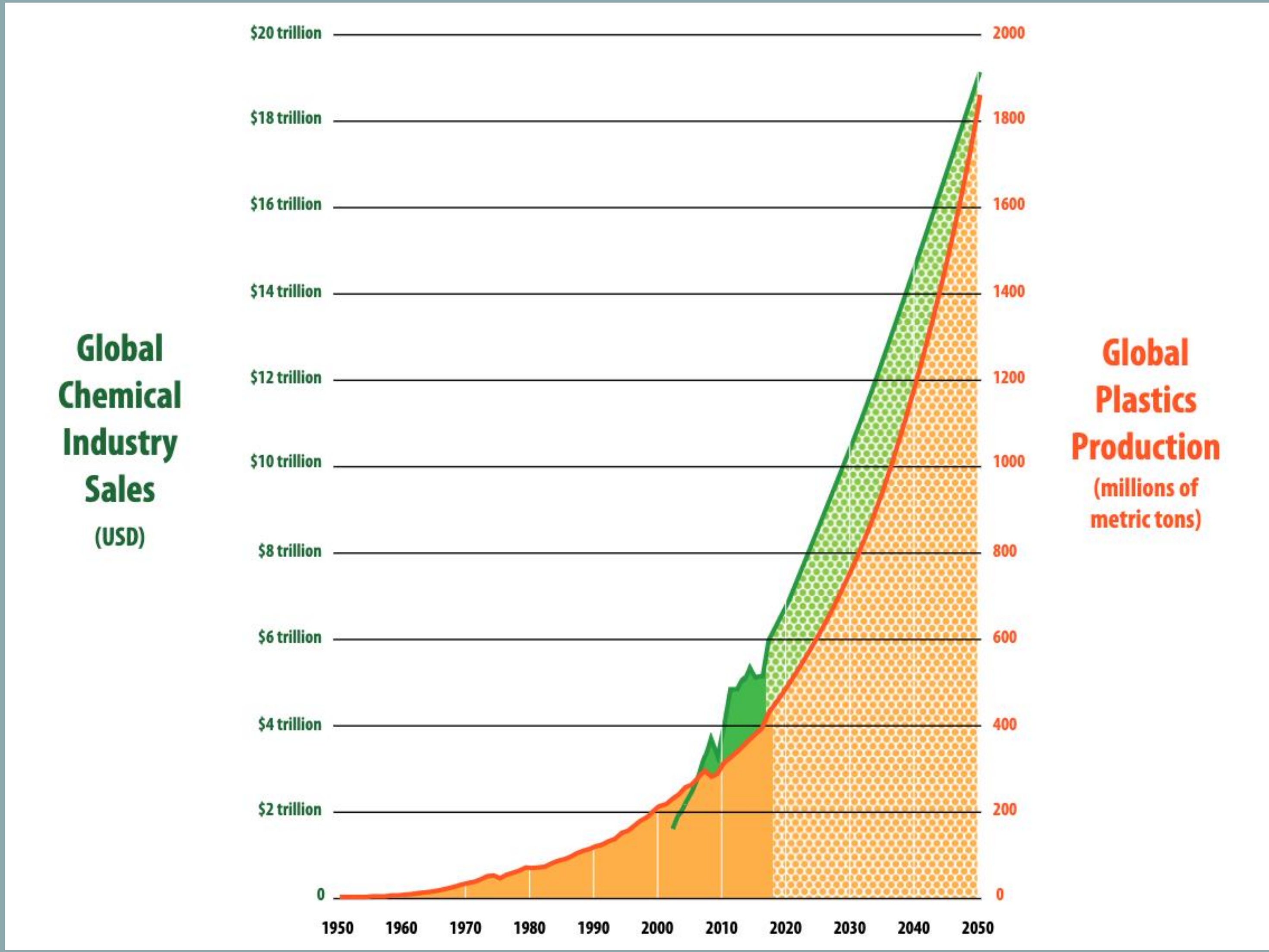
- Thousands of tons of chemical additives are transported with plastic debris to the Arctic each year.





Report Findings: Microplastics in the Arctic

- Microplastics have been found in Arctic marine mammals, including: bearded seals, ringed seals, spotted seals, Pacific walrus, beluga whales, fin whales, gray whales, humpback whales, and minke whales.
- Evidence shows translocation into tissues of marine mammals including lung, blubber, muscle, liver, acoustic fat pad, and melon (fatty tissue found in the foreheads of all toothed whales that acts as a "sound lens)."
- Arctic seabirds are exposed to hormone disrupting chemicals, such as phthalates and UV stabilizers, through ingestion of microplastics.
- 386 marine fish species worldwide have been found to have ingested plastic debris including 210 species of commercial importance. Over the last decade the incidence has doubled, increasing by almost 2.5% per year.



More plastics produced means

MORE PLASTIC POLLUTION

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U.N. adopts historic resolution (March 2, 2022): the United Nations agreement lays out a plan for developing a legally binding treaty by the end of 2024 aimed at ending plastic pollution

Recommendations from the report

- Shift to clean, renewable energy and stop petrochemical industry expansion
- Integrate principles of the Louisville Charter for Environmental Justice, Jemez Principles, and Just Transition Framework
- Strengthen implementation of the Stockholm Convention, including elimination of new chemicals that harm the Arctic

Ensure negotiation of an effective plastics treaty that will:

- Protect health and the environment
- End the production and use of toxic chemicals in plastics
- Remove toxic impacts at all stages of the lifecycle of plastics
- Ban recycling of plastics containing hazardous chemicals
- Protect the public's right to know about chemicals in plastics and information on plastic production and waste exports
- Charge plastic producers to finance the treaty
- Promote safer, more sustainable materials for a toxics-free circular economy
- Curb toxic and climate pollutants

Dr. Marcos Orellana, United Nations Special Rapporteur on Toxics and Human Rights: stages of the plastics cycle and their impacts on human rights

- *Each stage of the plastics cycle has direct and adverse impacts on the enjoyment of human rights. This includes extraction and transport of fossil fuels that are used to make virgin plastic; the release of hazardous substances during plastics production that affect fenceline communities; the exposure during use to the hazardous chemicals added to plastics; and the mountains of plastics and microplastic waste that is mismanaged. To be effective, the plastic treaty must address all stages of the plastics cycle.“*

- *“Safeguarding the human rights of present and future generations that are compromised by the growing toxification of the planet demands that the international community reverse the plastics crisis. Addressing the negative impacts of the plastics cycle on human rights and integrating a human rights-based approach to plastics policy are indispensable for effective and legitimate solutions to the global plastics problem.”*

Indigenous Peoples' knowledge is at the foundation of our community-based research—and a call to action

"We are overwhelmed with concern about the health harms associated with climate change, the loss of sea ice and melting permafrost and the mobilization of chemicals and plastics — these are all interconnected. We are running out of time!" *– Delbert Pungowiyi, Native Village of Savoonga*

"We have always been a vigilant people. Our community-based research enables us to be vigilant at the molecular level." – *Merle Apassingok, Native Village of Gambell*

"We don't just eat one chemical. We eat the whole fish." – *Violet Yeaton, Native Village of Port Graham*

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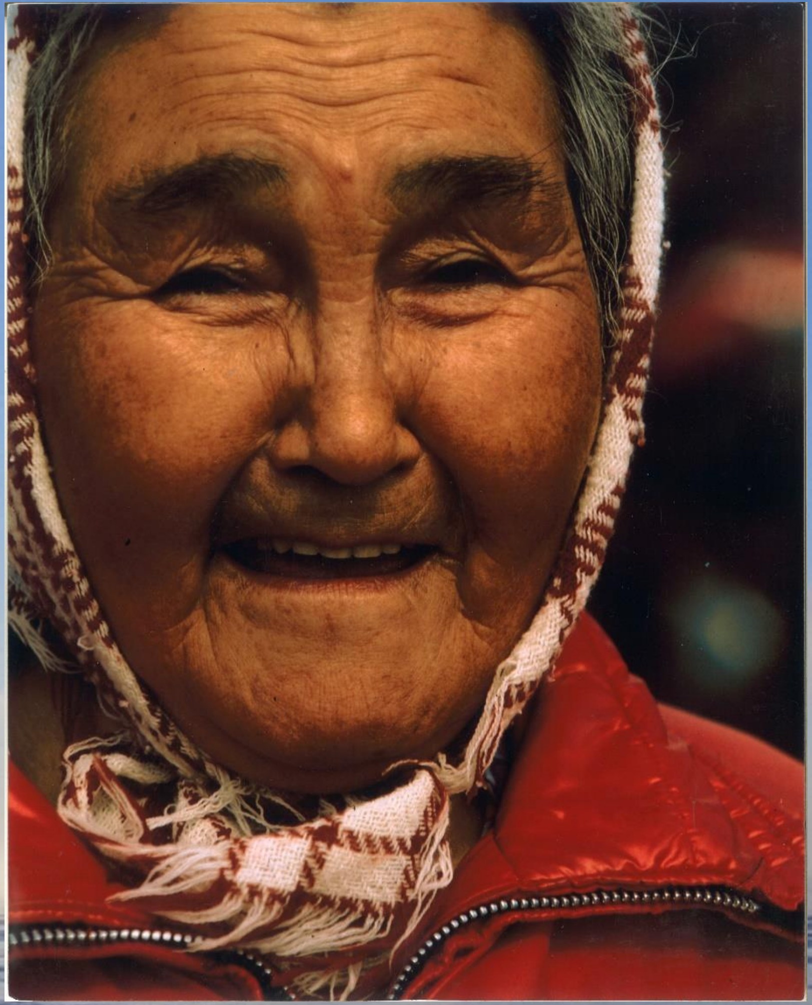

I Will Fight Until I Melt! Igamsiqayugviikamsi
We recognize our elder and teacher, Aghnaaqa
(Annie Alowa)

THANK YOU!

ACAT

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