

EIPCCP

ENGAGEMENT
INDIGENOUS PEOPLES
IN CLIMATE CHANGE POLICY

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Newsletter

CHANGES / INNOVATIONS / CLEAN TECHNOLOGIES / ADAPTATION AND CLIMATE RESILIENCE



COP27: The 2022 United Nations Climate Change Conference



Indigenous women, youth and gender diverse individuals are disproportionately affected by climate change impacts.

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Indigenous Protected and Conserved Areas

Indigenous people have been caring for this continent for millennia with the understanding that human systems are merely a part of, and must remain in balance with, ecosystems. The Indigenous population is facing significant human rights issues.

Indigenous Protected and Conserved Areas

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Carbon Sequestration: way to slow global warming

Carbon sequestration is the process of capturing and storing carbon dioxide (CO₂) in the ground or in plants. CO₂ is a gas that is produced when we burn fossil fuels like coal and oil, and it can be harmful to the environment.

Carbon Sequestration – what is it and why is it important?

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COP27: The 2022 United Nations Climate Change Conference

The world is warming at an unprecedented rate due to human produced emissions, mostly from burning fossil fuels.

What is COP27?

United Nations (UN) holds climate summits every year for governments to agree on steps to limit global temperature rise. These meetings are referred to as COPs, which stands for “Conference of Parties,” with the parties being the countries that attended and signed up for the original UN climate agreement in 1992. The 27th annual UN meeting on climate, COP27, took place in Sharm el-Sheikh from November 6th to November 18th, 2022.

Why Is COP27 important?

The world is warming at an unprecedented rate due to human produced emissions, mostly from burning fossil fuels. Global temperatures have risen 1.1 °C and are heading towards 1.5 °C, according to the [Intergovernmental Panel on Climate Change \(IPCC\)](#). If temperatures continue to rise to 1.7 – 1.8 °C above the 1850s levels, the IPCC estimates that half of the world’s population could be exposed to life threatening heat and humidity. These devastating consequences will be felt more by vulnerable communities around the world, and place further stress and hardship on Indigenous women. In an effort to limit the amount of temperature increase, 194 countries signed the [Paris Agreement](#) in 2015, agreeing to pursue efforts to limit global temperature rises to 1.5 °C.



Half of the world’s population could be exposed to life threatening heat and humidity, if temperatures continue to rise.

► RESPONDENTS SPOKE

about an expectation of women’s climate change/environmental leadership





What will be discussed at COP27?

COP27 is focused on three areas:

- 1 **Reducing** emissions.
- 2 **Helping** countries prepare for and deal with climate change.
- 3 **Securing** technical support and funding for developing countries to prepare for and deal with climate change.

Areas that were not resolved or covered at COP26 will be discussed, such as:

- 4 **Loss and damage** financing which will help countries recover from the effects of climate change rather than just preparing for it.
- 5 **Establishment** of a global carbon market to price the effects of emissions into products and services globally.
- 6 **Strengthening** the commitments to reduce coal use.

There are also themed days on issues including gender, agriculture, and biodiversity. Highlights and broadcasts of COP27 Pavilion and Side Events, can be found on the [UN Climate Change YouTube Channel](#).

How does COP27 affect Indigenous women, youth, and gender diverse people?

Women are still underrepresented in climate governance and decision-making structures, more so for Indigenous women. During the opening session for Gender Day, the African Women's Climate Adaptive Priorities (AWCAP) initiative was announced and launched by the President of the National Council of Women of Egypt, Dr Maya Morsy. This initiative was based on the key insight that

in the wake of disasters, women and children account for around 80% of those needing assistance, while poor women in rural areas are fourteen times more likely to die during a natural disaster.



Women are still underrepresented in climate governance and decision-making structures.



▲ COAL USE

Strengthening the commitments to reduce coal use

◀ NO PLANET B

Global climate change strike protest demonstration.
©MikeDotta



Highlights from the COP27 Gender Day

The need for gender to be considered as part of ensuring a just and managed transition to a new, and more sustainable, economic model.



▲ **2022: UNICEF**
Goodwill Ambassador Vanessa Nakate of Uganda speaks about climate justice and the upcoming COP27 climate summit.
© Phil Pasquini

1 **Women and Climate Change Finance**

Considered the role of women in society and business and how addressing inequalities could lead to different outcomes when it comes to climate finance, highlighting the need for ensuring sufficient, appropriate, and accessible climate finance which is sensitive and responsive to the needs and priorities of women.

2 **Voices of Women Leaders in Climate Debates, Policies, Implementation and Beyond**

Focused on how women are disproportionately affected by the climate crisis and how, if given the opportunity can be the stimulus for change and innovative approaches in addressing the climate crisis.

3 **African Women Climate Change Realities: Adaptation, Mitigation, and Response**

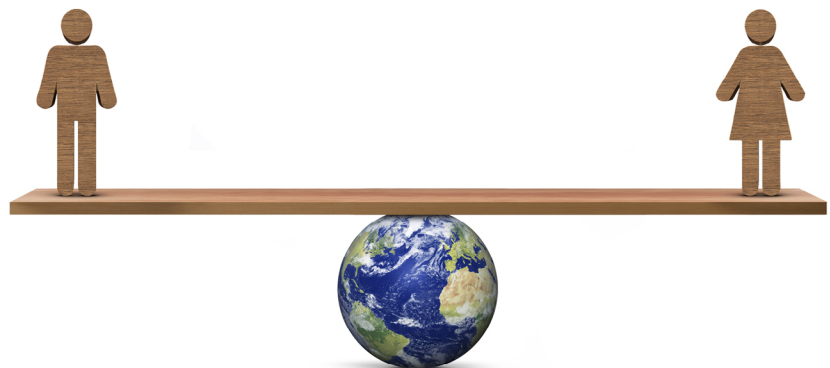
Focused on the critical role women play in climate change mitigation and adaptation. They stressed the need for African governments, civil society, and policy makers to invest in capacity and skill building for women and girls.

4 **COVID-19 and Climate Change: Women at the Centre of Planning and Response**

Highlighted that women were among the most affected segments of the global pandemic and only added more burden to women's lives and livelihoods who were already disproportionately affected by the risks and impacts of climate change.

5 **The Women Livelihood Within Just Economic Transition**

Explored the need for gender to be considered as part of ensuring a just and managed transition to a new, and more sustainable, economic model. This transition would include the training and skill building that are central to preserving the socioeconomic gains already achieved while opening new pathways for women's economic empowerment and gender equality.





Indigenous Women: Vulnerable, Although Resilient

The devastating effects of Climate change, driven by the increase of heat-trapping greenhouse gas emissions, are already clear in the environment.

▼ **CLIMATE CHANGE** particularly have devastating impacts in Indigenous communities. It alters the availability of water, and affects the wildlife habitat.

Glaciers and ice sheets are shrinking, river, lake and sea ice is breaking up earlier, plant and animal geographic ranges are shifting, and plants and trees are blooming sooner. We are also experiencing longer than normal heat waves, droughts, wildfires, and extreme rainfall at a faster rate than the Intergovernmental Panel on Climate Change (IPCC) have already assessed. These changes particularly have devastating impacts in Indigenous communities. They can alter the availability of water, can create challenges to modes and patterns of transportation, affects the wildlife habitat and hinders Indigenous people's ability to access and share traditional foods. Indigenous communities are more vulnerable to the threat of climate change and biodiversity loss due to their deep connection with the natural world and traditional cultural practices.

Indigenous women, youth and gender diverse individuals are disproportionately affected by climate change impacts. Indigenous women are guardians of the languages, customs, and traditions of their peoples. The loss of traditional occupations, coupled with the degradation of agricultural land and natural resources which are made worse due to climate change are major factors as to why Indigenous men migrate outside the community for wage labour leaving an increasing number of women to assume greater responsibility within the communities. For Indigenous women, the potential loss of traditional knowledge and the activities involved are often not taken into consideration when environmental projects are planned or implemented.



Indigenous communities are more vulnerable to the threat of climate change and biodiversity loss due to their deep connection with the natural world and traditional cultural practices.



While Indigenous women are more vulnerable to the negative impacts of climate change, they are also resilient. It has been suggested, using Levi-Strauss's concept of bricolage as the basis of the argument, that the process of "making do" with whatever is available at hand allows for indigenous communities in fragile ecosystems to innovate and improvise in the face of climate change (Ford, et al.). A study in three Inuvialuit communities showed that some local adaptations had been initiated in the region as a response to environmental change, noting that "different types of environmental change have different and unique impacts, each requiring different types of responses (Abu & Reed, 2018)." Indigenous women have shown remarkable resilience to build alternative sustainable models and solutions to these challenges. For example, Indigenous women have adapted their traditional food growing practices and ecological

wisdom to produce their own food. They play a key role in the selection of seeds and decisions on what to plant for harvest.

Within their respective communities and knowledge systems exists the knowledge on how to adapt to climate change impacts and heal the earth by implementing their traditional ecological knowledge, practices, and traditions that are unique to their locations to help their communities to adapt and become resilient – provided that they are given equal standing in the climate change policy realm so their voices can be heard. Indigenous women are more than qualified to take leadership in climate change adaptation and must be considered equal partners by the government and industry leaders. Without respecting Indigenous values, norms, and cultural traditions external adaptation plans are more likely to fail due because they don't take into consideration what matters to the individual Indigenous Community.



The process of "making do" with whatever is available at hand allows for indigenous communities in fragile ecosystems to innovate and improvise in the face of climate change.

▼ INDIGENOUS WOMEN

play a key role in the selection of seeds and decisions on what to plant for harvest.



References:

Abu, R., & Reed, M. G. (2018). Adaptation through bricolage: Indigenous responses to long-term social-ecological change in the Saskatchewan River Delta, Canada. *The Canadian Geographer*.

Ford, J. D., King, N., Gakappaththi, E. K., Pearce, T., McDowell, G., & Harper, S. L. (2020). The Resilience of Indigenous Peoples to Environmental Change. *One Earth*.



Indigenous Protected and Conserved Areas

Indigenous people have been caring for this continent for millennia with the understanding that human systems are merely a part of, and must remain in balance with, ecosystems.

▼ **IPCAS**
Indigenous-led territories, culturally rich and spiritually significant areas.

The Indigenous population is facing significant human rights issues that stem from a loss of nature and environment. Nature loss in Canada is having devastating impacts on Indigenous communities, particularly Indigenous women who are disproportionately affected by environmental degradation, climate change and pollution.

Indigenous lands make up around 20% of the Earth's territory, containing 80% of the world's remaining biodiversity—a sign Indigenous Peoples are the most effective stewards of the environment. Previous efforts to create natural parks and protected areas by the Canadian and American governments were not concerned with the health and wellbeing of nature, viewing nature as the backdrop for recreational purposes. Early in the creation of these park systems, Indigenous people were

considered to be an obstacle to the enjoyment of nature and were forced to relocate or were restricted in ways that effectively eliminated their Indigenous practices and economies which were vital to a healthy and diverse ecosystem based on their traditional ecological knowledge and sustainable stewardship practices. Indigenous-led protected and conservation areas are the best option for biodiversity conservation. They are important because they give local people authority to protect their land, which prevents conflicts over ownership and allows more efficient management than government agencies can provide. Indigenous leadership within IPCAs is an important part of the solution to combatting biodiversity loss.

IPCAs Indigenous-led territories are culturally rich and spiritually significant areas, where the continued relationship between



IPCAs are Indigenous-led and aim to conserve ecosystems and biodiversity while simultaneously supporting sustainable and culturally appropriate human uses within Indigenous territories.



the land and Indigenous people highlights the importance of protected areas.

To be considered an Indigenous Protected and Conservation Area, it must:

- 1 **Indigenous Peoples** have the primary role in determining goals, boundaries, management plans and governance structures for IPCAs. This is part of their exercise of self-determination
- 2 **IPCAs involve** a long-term commitment to the conservation of lands and waters for future generations
- 3 **IPCAs highlight** Indigenous rights and responsibilities. An example is the responsibility to care for, and respect, lands, and waters consistent with natural and Indigenous laws

IPCAs seek to maintain land and water for future generations of both Indigenous and non-Indigenous Canadians while simultaneously advancing Canada's commitment to reconciliation. IPCAs also contribute to Canada's international commitments for biodiversity which aims to conserve 25% of land and 25% of its oceans, by 2025 and 30% of land and 30% of its oceans, by 2030. Indigenous-led conservation may be Canada's best chance to support an environment staggered by the ills of climate change, and simultaneously make amends for the traumas inflicted on the original stewards of this land. IPCAs are making it easier for indigenous led initiatives, such as the [conservation effort in the Rocky Mountains of British Columbia](#) to increase caribou abundance and cultural practices. In the face of a growing number of threats to our environment, establishing Indigenous led protected and conservation areas (IPCAs) is an opportunity to take control of their own future and manage their land in a sustainable way. IPCAs can



Indigenous-led conservation may be Canada's best chance to support an environment staggered by the ills of climate change.

▲ **THE ROCKY MOUNTAINS, BC**
Fenced enclosures in caribou habitats — maternal pens — allow adult female caribou to birth and raise their calves safely.
©Giguere/Wildlife Infometrics.

help communities regain control over land that has been claimed by governments, corporations or other groups. Indigenous people are often forced off their traditional lands due to conflict, need for material resources and/or lack of respect for local values — such as biodiversity.

To illustrate the success of Indigenous-led IPCAs, the following three IPCA's will be highlighted, **Thaidene Nënë Indigenous Protected Area**, **Edézhíe Dehcho Protected Area**, and **Nuhé Nene** (Seal River Watershed).

Thaidene Nënë

Thaidene Nënë, which means “land of the ancestors” in Dënesų́íné, is a designated Indigenous protected and the homeland of the Łutsël K'é Dene First Nation. Designated in 2019 using Dene Law, after over forty years of advocacy, the Łutsël K'é Dene First Nation signed agreements with Parks Canada and the Government of the Northwest Territories. The agreements state that each party has a particular set of authority and responsibility and further recognises that each party has its own set of laws by which

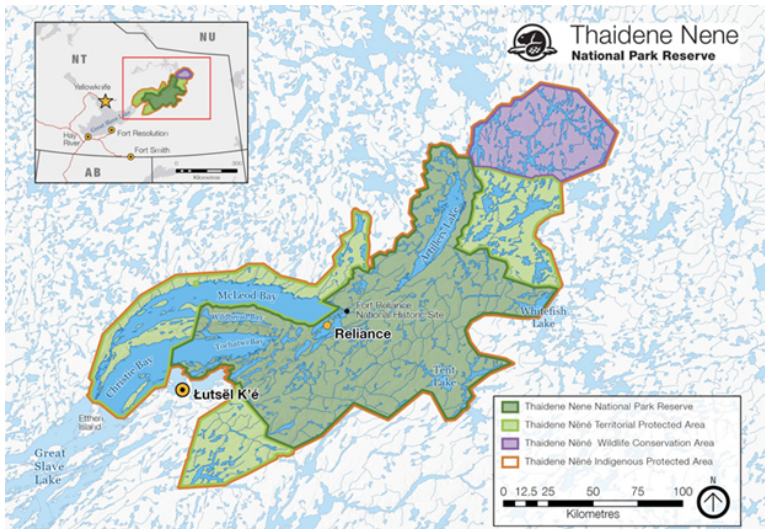


they entered into the agreements. In partnership with the Parks Canada and the Government of the Northwest Territories, portions of the Thaidene Nënë Indigenous Protected Area have been designated a national park reserve (NPR), a territorial protected area (TPA), and a wildlife conservation area (WCA).

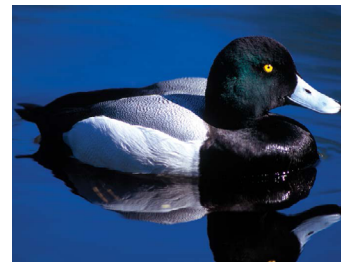
The Thaidene Nënë Indigenous Protected Area comprises 25,376 square kilometers of land at the transition between the boreal forest and tundra, including part

of the deepest freshwater lake in North America, Tu Nedhé (Great Slave Lake). The Thaidene Nënë Indigenous Protected Area provides habitat to animals such as grizzlies, wolves, moose, wolverine, muskox and is the critical wintering ground for some of the last herds of barren-ground caribou; all while being a globally significant carbon sink. The Indigenous-led conservation model is made possible through innovative conservation finance mechanism called the Thaidene Nënë Trust, which is critical to the long-term conservation and lasting stewardship

of this protected area. Management of Thaidene Nene National Park Reserve, found within the IPCA and designated by Parks Canada, is shared with the Indigenous governments who have a cultural connection to the landscape: Łutsël K'è Dene First Nation, Northwest Territory Métis Nation, Deninu K'ue First Nation, and Yellowknives Dene First Nation. This is a culturally rich and spiritually significant area, where the continued relationship between the land and Indigenous people highlights the importance of protected areas.



◀ **THAIDENE NĒNĒ, NWT**
Designated Indigenous protected and the homeland of the Łutsël K'è Dene First Nation.

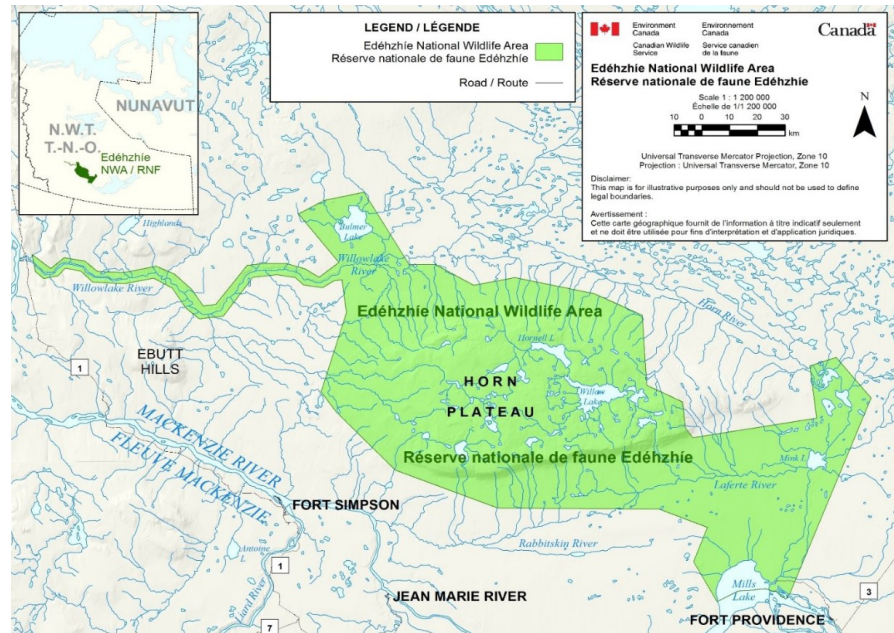




Edézhíe Dehcho Protected Area

Located in the traditional Dehcho territory in the southwestern part of the Northwest Territories, Edézhíe is a spiritual place that is ecologically and physically unique. Its lands, waters, and wildlife are integral to the Dehcho Dene culture, language, and way of life. Edézhíe protects the headwaters of much of the watershed of the Dehcho region. In 2018 Edézhíe became the first Indigenous Protected and Conserved Area within Canada. This unprecedented designation as an Indigenous Protected Area is considered to be a key conservation milestone for many conservation efforts on a global scale as Edézhíe contains unique watersheds and boreal forest biomes.

The Horn Plateau, rising six hundred meters above the surrounding plains, holds the source waters for the Willowlake, Horn, and Rabbitskin Rivers and supplies fresh water to much of the Dehcho region. Mills Lake serves as an important wetland for waterfowl, especially the keystone species, the greater white-fronted goose and was designated an Important Bird Area of Canada in 2004. Edézhíe is co-designated as a National Wildlife Area (NWA) with the Government of Canada, primarily for Dene land-based cultural activities, and for wildlife and habitat conservation. As an IPCA and NWA, Edézhíe supports several **species as risk**, including woodland/boreal caribou, wood bison, wolverines, peregrine falcons, short-eared owls, olive-sided flycatcher, common nighthawks, rusty blackbirds, yellow rails, evening grosbeaks, and northern leopard frogs which are suspected species at risk within Edézhíe. Within the boundaries of Edézhíe NWA there are at least seventy-three vascular plant families representing 537 species, along with two hundred species of native higher plants. It is also home to around 250



Edézhíe is considered to be a key conservation milestone for many conservation efforts on a global scale as Edézhíe contains unique watersheds and boreal forest biomes.

▲ EDÉZHÍE DEHCHO PROTECTED AREA, NWT

Southwestern part of the Northwest Territories, Edézhíe is a spiritual place that is ecologically and physically unique.



species of amphibians, fish, birds, and mammals, which includes 197 bird species. Entry into the Edézhíe NWA is prohibited, but an entry permit can be requested under the Wildlife Area Regulations. Individuals exercising section 35 rights under the Constitution Act (1982) will be able to enter the Edézhíe NWA without a permit, in a manner consistent with Dehcho law.



Nuheh Nene (Seal River Watershed)

In the northern most region of Manitoba, the Nuheh Nene (Seal River Watershed) encompasses a vast 50,000 square kilometers of landscape of forests, tundra, rivers, and wetlands and provides habitat for at least twenty-three at risk species. The small community of Sayisi Dene First Nation is the only community within the 50,000 square kilometer watershed. Sayisi Dene First Nation is leading an initiative to protect the entirety of the Seal River watershed from industrial activity in partnership with its Cree, Dene, and Inuit neighbours and is void of mines, logging operations, and industrial development. The Sayisi Dene, along with three other First Nations and Inuit neighbors, are taking the lead in conserving this region as an Indigenous Protected Area to ensure it remains that way.



◀ NUHEH NENE, SEAL RIVER WATERSHED, MB

Encompasses a vast 50,000 square kilometers of landscape of forests, tundra, rivers, and wetlands and provides habitat for at least twenty-three at risk species.

▼ BELUGA WHALES

Beluga whales in the Seal River estuary.
©Jordan Melograna

▼ SEAL RIVER WATERSHED

Landscape of the Seal River watershed.
©Chris Paetkau

The Seal River Watershed provides many ecosystem services, including, but not limited to carbon storage, increasing biodiversity, erosion and sediment control, wildlife corridors, water storage and filtration, flood control, food, recreation, as well as reducing the regions vulnerability to invasive species, natural disasters, and the negative impacts of climate change. The Seal River estuary is a designated Important Bird Area with thousands of birds in the spring and fall. Every summer, thousands of beluga whales cluster in this protected pocket of water. Belugas — bleach white, sea-ice adapted mascots of the polar seas, a species designated at-risk across most of its Canadian habitat — come to here to birth calves and to feed. Climate change threatens the belugas' summer sanctuary as the sea ice, which is rapidly declining, previously limited killer whale's access to the estuary. Killer whales, which were once a rarity are now spotted every summer.



Belugas a species designated at-risk across most of its Canadian habitat — come to here to birth calves and to feed.



Source: <https://nunatsiaq.com/stories/article/watershed-south-of-arviat-to-become-indigenous-protected-area/>



Carbon Sequestration – what is it and why is it important?

Carbon sequestration is the process of capturing and storing carbon dioxide (CO₂) in the ground or in plants. CO₂ is a gas that is produced when we burn fossil fuels like coal and oil.

▼ CARBON SEQUESTRATION

Carbon sequestration helps to reduce the amount of CO₂ in the air by capturing it and storing it in a safe place.

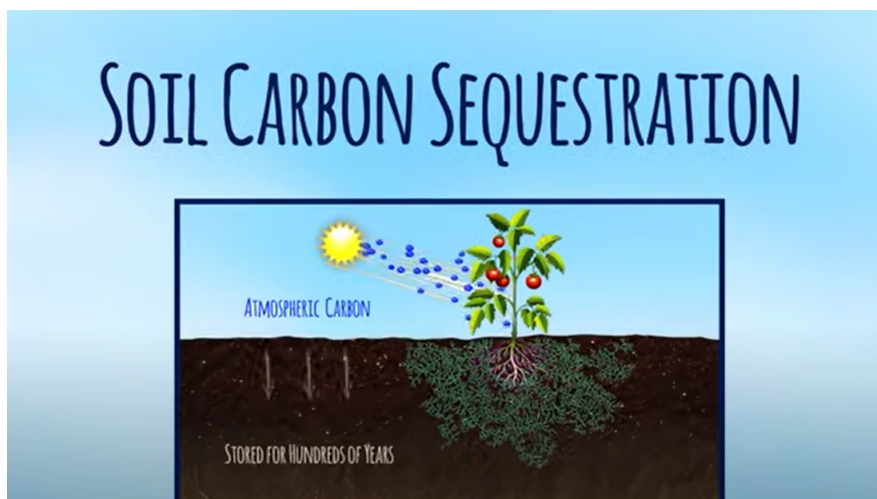
Carbon dioxide (CO₂) can be harmful to the environment because it traps heat in the atmosphere and contributes to global warming. Carbon sequestration helps to reduce the amount of CO₂ in the air by capturing it and storing it in a safe place. For example, trees and other plants can absorb CO₂ from the air and store it in their leaves, branches, and roots. This is called **“biological sequestration.”** Another way to store CO₂ is to pump it underground into rocks or other natural formations. This is called **“geological sequestration.”** The CO₂ is trapped in the rocks and cannot escape into the air. Carbon sequestration is a way to slow global warming by storing carbon dioxide so that it doesn't cause more damage to the climate.

Forests can absorb 2.6 billion tons of carbon dioxide every year while soil can absorb around 25% of all

carbon emissions, with most of it stored as permafrost. Phytoplankton in our oceans are responsible for absorbing 25% of carbon emissions. Even with nature's incredible ability to remove carbon dioxide from the atmosphere, it is unfortunately being released faster than the earth can absorb it due to the over reliance of fossil fuels.

The permafrost is at risk of thawing, releasing its carbon stores, while the oceans are warming and are becoming inhospitable to organisms whose shells and skeletons are made from calcium carbonate as they dissolve faster. Reducing the amount of carbon that is emitted into the atmosphere is key to mitigating the impacts of climate change and creating a sustainable planet for future generations.

An Indigenous led study is underway in Piikani First Nation to investigate the ability for sweetgrass to sequester



“Even with nature's incredible ability to remove carbon dioxide from the atmosphere, it is unfortunately being released faster than the earth can absorb it due to the over reliance of fossil fuels.”



naturally carbon while also sharing traditional ecological knowledge with youth. The project is also teaching new adaptation methods to local youth to decrease their dependence on imported foods as traditional foods are also threatened by the impacts of climate change. As one of the sacred plants, sweetgrass is also threatened by climate change but it is often overlooked in western science-based conservation efforts as it doesn't directly lead to food security.

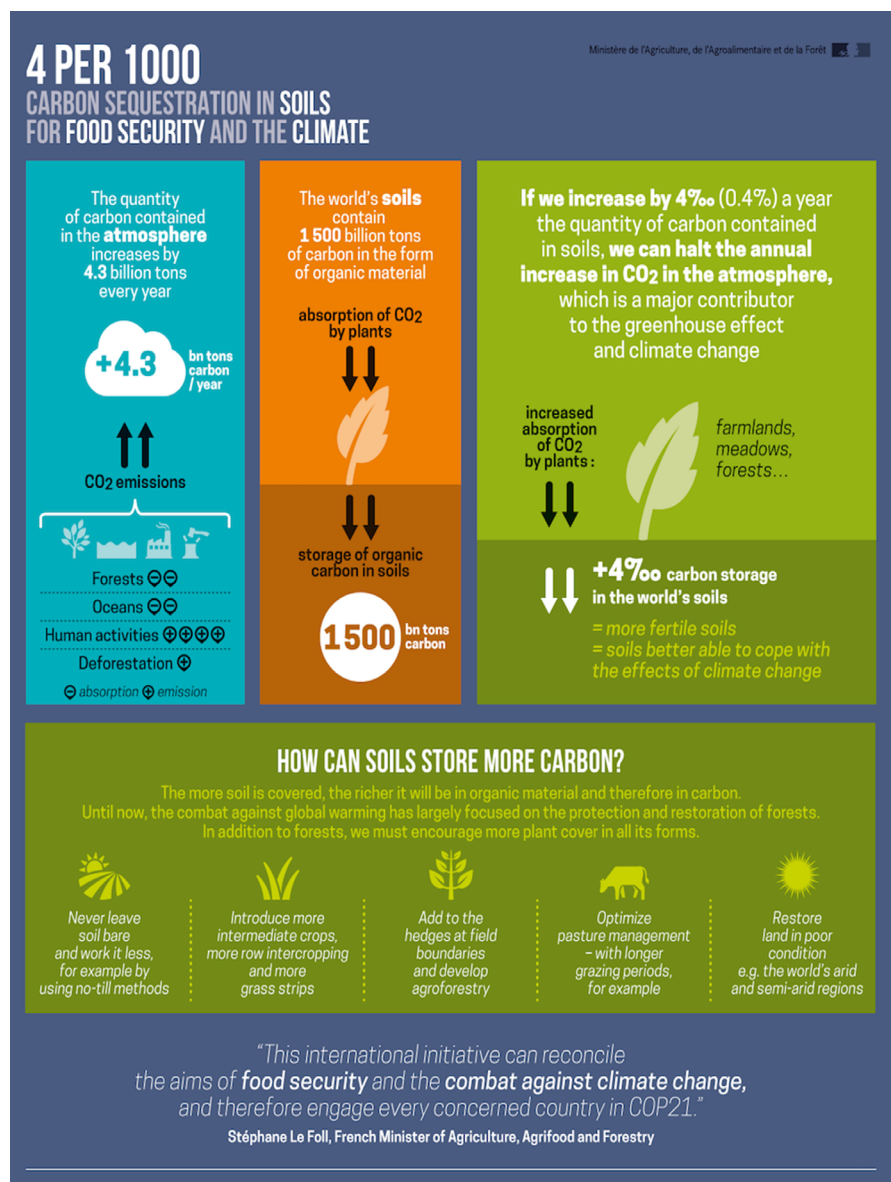
Sweetgrass is found in wetlands, wet meadows, and marshes – ecosystems that are disappearing and suffering due to human impact and the impacts of climate change. Scientists will analyze soil and sweetgrass samples to gain a better understanding of how sweetgrass is connected to both the earth and the climate, while honouring Indigenous ways of knowing. It is believed that that the mutual transfer of knowledge can help protect ecosystems for future generations. In a ceremonial transfer of the sweetgrass, Elders intoned a blessing and bestowed three braided lengths of sweetgrass to visiting academics and researchers from the Resilience Institute. This ceremonial transfer of sweetgrass signified a coming together of western science and the Traditional Knowledge of the Piikani, serving as an invitation for the scientists to look at the important ceremonial plant and determine its ability to capture and store carbon emissions from the environment.



As one of the sacred plants, sweetgrass is also threatened by climate change

By braiding together traditional ecological knowledge with scientific research on carbon sequestration, we can gain a more comprehensive and nuanced understanding of the factors that influence carbon storage and sequestration in natural systems. This can help us develop more effective and sustainable strategies for mitigating and adapting to climate change. Furthermore, involving

Indigenous and local communities in the research process can not only enhance the accuracy and relevance of the findings, but also foster greater collaboration and partnership between scientific and traditional knowledge systems. Incorporating traditional ecological knowledge in carbon sequestration research is a crucial step towards achieving a more holistic and inclusive approach to addressing climate change.



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