



# CLIMAFACTS

MONTHLY NEWSLINE

## NEWSLINE

### JANUARY

#### New Progress Announced Involving the Hydrogen Alliance Between Canada and Germany

**Author:** Tomas Wang

**Date:** Aug 18, 2024

**Link to Blog Post:**

<https://climafacts.ca/new-progress-announced-involving-the-hydrogen-alliance-between-canada-and-germany/>

Humankind has begun exploiting energy since time immemorial; from the discovery of fire to the internal combustion engine to nuclear power plants, we have slowly become masters of the forces that power our world. However, our progression in energy manipulation was not free of charge. Starting in the recent centuries, the climate and environment have seen great damage due to our exploitation. Global warming, animal extinction, and rising sea levels are all results of our excessive and unregulated energy use. In response, countries worldwide have worked relentlessly in attempts to move on to cleaner means of energy generation and manipulation. Amongst them, one method stands out to be especially relevant to Canada: Green Hydrogen. Green hydrogen describes a form of hydrogen that involves chemically processing the hydrogen gas using nothing but renewable energy. This way, the production of hydrogen gas will result in no emission of carbon dioxide and pollution.

The article “Canada, Germany commits \$600M for hydrogen export in Atlantic Canada” outlines the hydrogen alliance between Canada and Germany that saw recent progress. In 2022, when the war in Ukraine began, it significantly affected the European energy industry, since Russia is one of the largest natural gas providers in the world.



As many European countries looked for new providers of natural gas, Germany had a different idea. Ambitious, Germany looked into a form of eco-friendly energy: green hydrogen. If successful, this could make Germany a new center of eco-friendly energy. Due to a lack of space suitable for generating green hydrogen, Germany signed an agreement with Canada to produce green hydrogen in Atlantic Canada. Finally, after 2 years, this agreement became in progress.

This investment would boost the progress of many pre-existing plans, including but not limited to the Port au Port-Stephenville Wind Power and Hydrogen Generation Project, which was registered in 2022 and appealed the release decision a month prior.

To learn more and read the full article, visit our website Blog Page.

#### INFORMATION AND SIGNIFICANCE

On July 31, 2024, the Canadian government announced news about the agreement signed in 2022: a 300 million-dollar investment into the green hydrogen project from each side, a total of 600 million dollars. This piece of news is quite significant to the Canadian side of the agreement. Green hydrogen sounds great on paper, but realistically, the generation of green hydrogen would require a lot more renewable energies than we have in Atlantic Canada. Fortunately, this new investment would do just that. 600 million dollars is more than enough to have much progress made around the energy problem of green hydrogen.





# Climate Change Shrinks Puffins and Alters Beaks in New Brunswick

**Author:** Sanuli Wijayasundara

**Date:** August 3, 2024

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<https://climafacts.ca/climate-change-shrinks-puffins-and-alters-beaks-in-new-brunswick/>

The puffins of Machias Seal Island are undergoing dramatic changes as a result of rising ocean temperatures. Situated southwest of New Brunswick’s Grand Manan Island, this vital seabird sanctuary is home to over 8000 breeding pairs of puffins. Dr. Heather Major, a marine biology professor at the University of New Brunswick, leads a research team studying these birds to uncover the effects of climate change. Since 1995, their findings have highlighted significant alterations in puffin size, beak dimensions, and breeding patterns. As warming waters challenge the puffins’ traditional food sources and habitats, scientists are racing to understand and address the long-term implications for these beloved seabirds.

To learn more and read the full article, visit our website Blog Page.

“THE GREATNESS OF A NATION CAN BE JUDGED BY THE WAY ITS ANIMALS ARE TREATED.”  
—Ghandi



### Animals Affected By Climate Change

4

5

6

7

8

1

2

3

Down

1. Cute grey animals that live in Austria.

2. Small golden amphibians that onced lived in Costa Rica. Now they are extinct.

4. Big animals with spotted grey fur coats and are related to lions.

Across

3. Marine invertebrate animals that ar colorful and beautiful.

5. Antarctic birds that are colored black an white.

7. One of the most frequently eaten fish They live in the Atlantic Ocean.

8. White-skinned bears that live in the Arcti region.

9. Bears that are colored black and white, tha are found in China.

# How Local Seeds Are Shaping Atlantic Canada’s Future

**Author:** Sanuli Wijayasundara

**Date:** August 13, 2024

**Link to Blog Post:**

<https://climafacts.ca/how-local-seeds-are-shaping-atlantic-canadas-future/>

As climate change challenges the resilience of global agriculture, the importance of locally sourced seeds is coming into focus. Local farmers and seed growers in Canada are front and center in preserving agricultural biodiversity and developing climate-resilient seed systems. By highlighting the work of SeedChange, a non-profit organization dedicated to promoting ecological and organic farming practices, we can understand how locally adapted seeds can secure food security, reduce import dependency, and contribute to a sustainable agricultural future.

To learn more and read the full article, visit our website Blog Page.





## Discovery Around the Melting of Greenland and Rising Sea Levels

**Author:** Tomas Wang

**Date:** Aug 31, 2024

**Link to Blog Post:**

<https://climafacts.ca/discovery-around-the-melting-of-greenland-and-rising-sea-levels/>

Science suggests that Earth hasn't always been what we perceive today; from being a water planet to the first volcanic eruption to Pangea the supercontinent to the ice ages, our world has evolved far. At the place we stand today, with the global temperature gradually increasing and its many subsequent effects impacting our everyday lives, we doubtlessly live in a time of change. With divination proven deceitful by science, it is difficult to predict the future of humankind after the said changes occur. However, interestingly enough, sometimes through looking into our past, we can find hints at what the future may bring.

The article “New fossils reveal an ice-free Greenland — it’s bad news for sea level rise” discusses a discovery made by scientists around the past of Greenland and its significance toward rising sea levels. For years, the fact that Greenland is an ice-covered island has been a running joke in the English-speaking communities. It may be quite surprising to many that there was a time when Greenland was actually green. It was only because of the fall of the carbon dioxide in the atmosphere that the glaciers we see today could form. The period of the ice-free Greenland was thought to be at least 3 million years ago by the scientific community and not many discoveries have been made around that period. The discovery outlined by this article is one of the first of its kind and it may be quite significant to the way we perceive the past and our future.

### INFORMATION AND SIGNIFICANCE

In 2022, Andrew Christ of the University of Vermont made a discovery and the conclusion was published in the previous week. Andrew’s discovery was in the form of fossils, taken from the ice core of the Greenland glacier. What he found was “remnants of ancient poppies, insect parts, and tree bark”. Those may seem ordinary to us who live in the modern era, but for a glacier-covered island, it may be quite significant. The team at the University of Vermont worked relentlessly for the past years to study the significance of the fossils. Finally, they discovered that Greenland was free of ice a mere 1.1 million years ago. This is quite a major cut from the previous 3 million years. Furthermore, they also discovered the existence of vegetation and thriving ecosystems throughout the island 416,000 years ago.

Those discoveries are groundbreaking to the scientific communities and Andrew Christ believed his discovery was a mixture of luck and a different perspective: “Because I wasn’t trained as an ice core scientist, I had worked on lake sediment for the first 10 years of my career, and I knew how to find fossils....It was a completely lucky moment.”

As great as this breakthrough may sound, it is not at all positive for our environment. As mentioned previously, the formation of the Greenland Glacier is a result of decreasing carbon dioxide in the atmosphere, which is the exact opposite of what nature is undergoing in the present. This indicates that the past of Greenland may reoccur in the near future. The fact that the glacier of Greenland formed closer to the present than we thought may indicate that the glacier of Greenland will melt away faster than we thought. Our global temperature is the highest in the past 125,000 years. It wouldn’t take long for the glacier of Greenland to melt even under the previous knowledge, a shortened time does not do us good.

To learn more and read the full article, visit our website [Blog Page](#).

