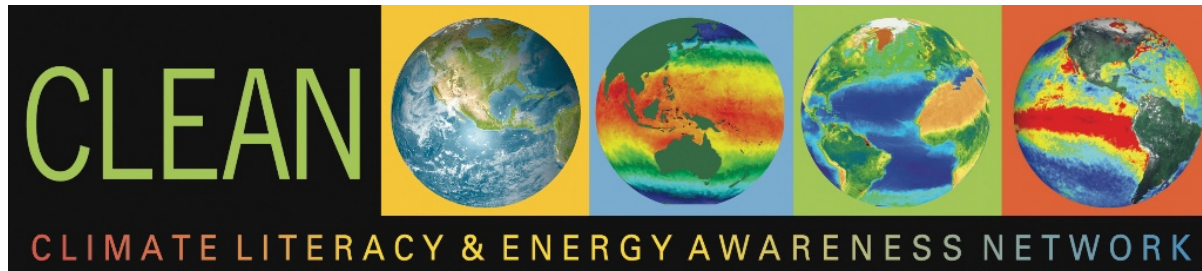
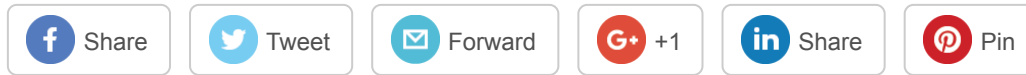


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## ***CLEAN STEM Flash***

A Timely Climate and Energy E-Learning Series to Use and Share

August 9, 2019

### **Topic: All That Ice Melt!**

The ice sheets that cover the Arctic are of great importance to the Earth's climate. Because of current temperature increases around the world, the cryosphere is facing severe ice sheet loss.

#### **CLEAN Resource Feature**

##### **Visualization: [Arctic Sea Ice Is Losing Its Bulwark](#)**

Scientists research and report on the melting and growth of the Arctic sea ice sheet each year. In the past few years the older ice that normally remained constant has started to melt away. In turn, this loss caused a great deal of environmental and climate-related issues, including a loss of albedo effect, sea level rise and an increase in greenhouse gases from melting permafrost.

*Video length: 0:43*

*Audience: Middle School, High School, College*

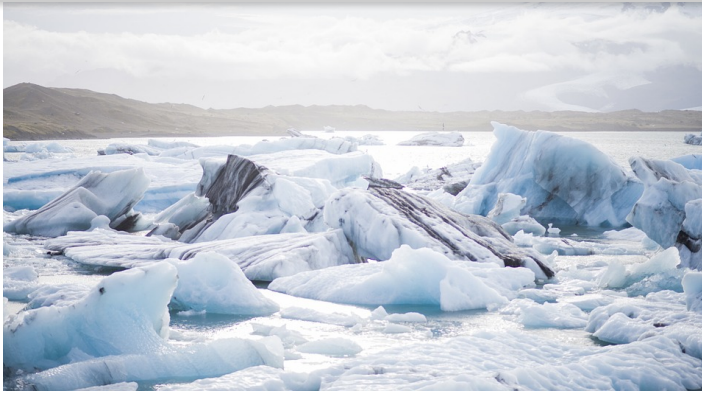
**Browse CLEAN for more videos related to [Arctic Ice](#).**

These visualizations and subsequent video offer imagery of the Arctic ice

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decades. Over the past several years, the Arctic ice sheet has been shrinking as more of the older ice melts away due to increasing global temperatures. In the 1980s, the multi-year older ice made up 20% of the ice sheet. Currently, it makes up only 3%.

### CLEAN Resource Feature

#### Activity: [Predicting Glacial Futures](#)

Using a case study format, students explore and research data on ice loss from the Greenland ice sheet by the means of glacial flow output into the ocean. From there, students learn more about data trends and are able to make predictions about future ice loss.

*Audience: High School, College*

Take a look at some more CLEAN resources focused on [Ice Loss](#).

This activity is a great introduction into glacial melt and its rate of change over an 8-year period. Using data from 34 marine-terminating outlet glaciers in Greenland, students are able to calculate the average rate of area change and make predictions on what it will be in future years.



### In the News: [The Greenland ice sheet poured 197 billion tons of water into the North Atlantic in July alone](#)

The July 2019 high temperatures in the Northern Atlantic caused extreme melt of the Greenland ice sheet. Within one day, 197 billion tons of water were lost to the Atlantic Ocean from ice melt alone.

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