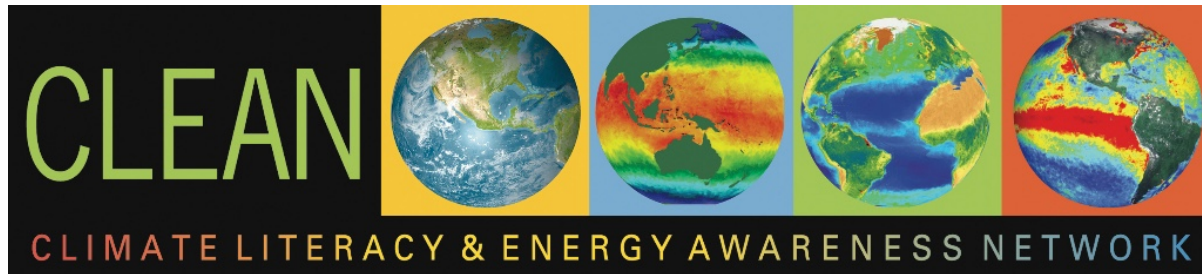


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CLEAN STEM Flash

Climate—Energy—Education

Topic: Sea Change for Arctic Ice & Polar Bears

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

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CLEAN supports teaching and learning about climate and energy with 600+ free peer-reviewed, scientifically accurate, and classroom-ready resources.

[Browse](#) the CLEAN Collection for NGSS-aligned resources.

CLEAN Resource Spotlight:

Video: [How Do We Know: Shrinking Arctic Ice](#)

The Arctic sea ice minimum in 2016 tied the second lowest minimum on record. This short video from Climate Central explains the technology used to monitor changes in Arctic sea ice.

Audience: Middle through high school students

Video length: 2:01

See more resources on [sea ice](#) in the CLEAN Collection.

Long-term satellite tracking since the late 1970's shows that Arctic sea ice has been in a steady decline, which could have

CLEAN Resource Spotlight:

Activity: [March of the Polar Bears: Global Change, Sea Ice, and Wildlife Migration](#)

Polar bears need sea ice to survive. In this activity, students correlate NASA satellite data with USGS ground tracking of polar bears to study how changes in temperature and snow-ice coverage impact polar bears.

Audience: Middle and high school classes

Lesson time: Two 50-minute periods

Find more resources on the [Arctic ecosystem](#) in the CLEAN Collection.



Polar bears rely on sea ice for nearly all of their life cycle functions, especially for foraging. Polar bears feed almost solely on seals, which they hunt for from the surface of sea ice.

Climate & Energy in the News

The NOAA Arctic Program recently released its [2016 Arctic Report Card](#), which highlights climate-related changes at the top of the world.

This week, the U.S. Fish and Wildlife Service stated the [loss of sea ice is the primary threat to polar bears](#) and that decisive action on climate change is needed to save polar bears from extinction.

[In Alaska, 2016 was the warmest year on record](#) with warmer than average days outnumbering cooler than average days 9:1, as reported by NOAA Climate.gov.



U.S. DEPARTMENT OF
ENERGY



Science Education
Resource Center @ Carleton
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