



## World Heritage Glaciers

Glaciers are set to disappear completely from almost half of World Heritage Sites if business-as-usual emissions continue, according to the **first-ever global study of World Heritage glaciers**. The study, 'Disappearing World Heritage glaciers as a keystone of nature conservation in a changing climate has been **co-authored by** scientists from the **International Union for Conservation of Nature (IUCN)**.

- The authors of the study also developed the **first ever inventory of glaciers on the UNESCO World Heritage list**, documenting about 19,000 glaciers present in 46 out of the 247 natural World Heritage sites.
- The sites are **home to some of the world's most iconic glaciers**, such as the Grosse Aletschgletscher in the Swiss Alps, **Khumbu Glacier in the Himalayas** or Greenland's Jakobshavn Isbrae.
- **Climate change is the fastest growing threat to natural World Heritage sites**, according to the IUCN World Heritage Outlook 2 Report, with the number of sites threatened by climate change doubling between 2014 and 2017.
- Natural World Heritage sites are recognised as the planet's most important protected areas, providing life-supporting benefits to millions of people worldwide.

### Key Findings

- The authors predict **glacier extinction by 2100 under a high CO2 emission scenario in 21 of the 46 natural World Heritage sites** where glaciers are currently found.
  - Even under a low emission scenario, 8 of the 46 World Heritage sites will be ice-free by 2100.
- The study also expects that **33% to 60% of the total ice volume present in 2017 will be lost by 2100**, depending on the emission scenario.
- Several iconic landscapes found in World Heritage sites will be impacted by rising temperatures.
  - **Los Glaciares National Park in Argentina** contains some of the largest glaciers on the Earth and is threatened by very large ice loss - about 60% of the current volume - by 2100.
  - In Europe, the disappearance of small glaciers is projected in the **Pyrenees -- Mont Perdu World Heritage site** before 2040.
  - **Te Wahipounamu -- South West New Zealand**, which contains three quarters of New Zealand's glaciers, is projected to lose 25% to 80% of the current ice volume over the course of this century.
- **Impact**
  - Loss of glaciers will have **major consequences for the availability of water resources, sea level rise and weather patterns**.
  - This unprecedented decline can also jeopardise the listing of the sites in question on the World Heritage list.
- **Suggestions**
  - **Significant cuts need to be made in greenhouse gas emissions**.
  - This study further emphasises the need for **individual and collective actions** to achieve the mitigation and adaptation aspirations of the [Paris Agreement](#) on climate change.

### World Heritage List

- The United Nations Educational, Scientific and Cultural Organization (**UNESCO**) seeks to

encourage the identification, protection and **preservation of cultural and natural heritage** around the world considered to be of outstanding value to humanity. It has **World Heritage List for the same.**

- This is embodied in an international treaty called the Convention concerning the Protection of the World Cultural and Natural Heritage, adopted by UNESCO in 1972.

### **International Union for Conservation of Nature (IUCN)**

- IUCN is a membership Union uniquely **composed of both government and civil society organisations.**
- Created in **1948**, IUCN has evolved into the world's largest and most diverse environmental network.
- It is headquartered in **Switzerland.**
- The **IUCN Red List** of Threatened Species, is the world's most comprehensive inventory of the global conservation status of plant and animal species.
- The **IUCN World Heritage Outlook** provides **conservation** outlook assessments for **all natural World Heritage sites.**

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