

Report 8 Structure Draft

TOPIC

气候变化 极端天气 关系 relationship Climate change and weather/natural disasters

Carbon emission → global warming (climate change) → affecting nature/weather
(global examples)

INTRO

Carbon emission affecting Temperature

<https://climate.nasa.gov/vital-signs/global-temperature/> (global mean temperature 1970-2020)

Globally natural disasters

<https://ourworldindata.org/grapher/number-of-natural-disaster-events> (global extreme weather 1970-2019)

<https://reliefweb.int/report/world/2020-non-covid-year-disasters-global-trends-and-perspectives> (2020)

EXAMPLES

1. Forest/Bushfire

Australia Bushfire

Amazon Bush fire Southeast Amazonia is no longer a carbon sink

<https://www.nature.com/articles/d41586-021-01871-6>

Brazil's Amazon is now a carbon source, unprecedented study reveals

<https://news.mongabay.com/2021/07/brazils-amazon-is-now-a-carbon-source-unprecedented-study-reveals/>

WHY?

Recommendation specific

2. Heat Wave

June ends with exceptional heat | World Meteorological Organisation

<https://public.wmo.int/en/media/news/june-ends-exceptional-heat>

Western North American extreme heat virtually impossible without human-caused climate change

<https://www.worldweatherattribution.org/western-north-american-extreme-heat-virtually-impossible-without-human-caused-climate-change/>

Recommendation

3. Europe and China Flood

暴雨中的郑州：全球气候变化之下，人类如何生存？

<https://i.ifeng.com/c/883wQoLkhts>

极端天气近期在全球多地出现 背后有无共性原因？

http://www.xinhuanet.com/tech/2021-07/22/c_1127680472.htm

全球极端天气频发，与气候变暖关系密切。世界气象组织秘书长彼得里·塔拉斯表示，气候变化是今夏席卷西欧地区的暴雨和洪水的根本原因，在减缓气候变化取得成效之前，极端天气事件和自然灾害将越来越多。“如果没有气候变化，人们不会在加拿大和美国的西部地区观察到如此高的温度，这是气候变化的明显迹象。”塔拉斯说。

Specific Recommendation: smart city, resilient city

4. South Pole Sea Ice Melting

As carbon dioxide emissions rise, the Earth's temperature will continue to increase, causing large patches of sea ice to melt. The melting ice could affect a variety of species, including emperor penguins, who rely on sea ice for survival.

<https://www.fws.gov/news/ShowNews.cfm?ref=us-fish-and-wildlife-service-proposes-to-list-the-emperor-penguin-as- ID=36967>

Climate Change Could Devastate Emperor Penguins, U.S. Officials Warn

<https://www.nytimes.com/2021/08/03/climate/emperor-penguins.html>

The call of the emperor penguin

<https://onlinelibrary.wiley.com/doi/full/10.1111/gcb.15806>

5. Sea level rise or Southeast Asia Typhoon

[optional]

CONCLUSION

- **Future Projection**
- **Overall Recommendation: climate change**
- **Call to action**