

# 6 Arguments to Refute Climate Denial

Evidence-Based Responses for Holiday Conversations

Climate Communication Guide

## THE CHALLENGE

Family gatherings often feature climate denial arguments that seem immune to scientific evidence

## CONTEXT

Despite overwhelming scientific consensus, misinformation persists in personal conversations, requiring strategic, evidence-based responses

## Scientific Agreement

**97%**

CLIMATE  
SCIENTISTS AGREE

**consensus**

**11,000+**

PEER-REVIEWED  
STUDIES

**growing**

**195**

COUNTRIES IN  
PARIS AGREEMENT

**unified**

## EXPERT CONSENSUS

*“The evidence is overwhelming: levels of greenhouse gases in the atmosphere are rising. Temperatures are going up. Springs are arriving earlier. Ice sheets are melting. Sea level is rising.”*

— NASA Climate Change and  
Global Warming

## Argument 1: 'It's Cold Outside Today'

- Weather ≠ Climate: Daily weather varies, climate is long-term patterns
- Global average temperatures rising despite local cold snaps

- Arctic warming disrupts jet stream, causing extreme cold events
- Record heat days now outnumber record cold days 2:1 globally

## Argument 2: 'Natural Cycles Explanation'

- Solar cycles account for  $<0.1^{\circ}\text{C}$  warming since 1750
- Current warming rate 10x faster than post-ice age recovery

- CO2 levels highest in 3+ million years, rising exponentially
- Isotopic analysis confirms fossil fuel origin of excess CO2

### Argument 3: Temperature Data Comparison

Period	Avg Temp Change	Rate (°C/decade)	Primary Cause
Natural Variation	$\pm 0.2^{\circ}\text{C}$	0.01	Solar/Volcanic
1880-1980	$+0.4^{\circ}\text{C}$	0.04	Mixed Factors
1980-2020	$+0.8^{\circ}\text{C}$	0.20	Human Activity

Temperature change rates show clear acceleration during industrial period

## Argument 4: 'Climate Action Hurts Economy'

- Clean energy sector employs 3.3 million Americans
- Renewable energy now cheaper than fossil fuels

- Climate damages cost US \$150B annually already
- Green investments generate 2.5x more jobs per dollar

## Economic Reality Check

**\$150B**

ANNUAL US CLIMATE  
DAMAGES

**rising**

**2.5x**

JOB CREATION  
MULTIPLIER

**positive**

**85%**

COST DROP IN  
SOLAR (2010-2020)

**declining**

## Argument 5: 'Global Conspiracy Theory'

- Independent research from 195+ countries reaches same conclusions
- Oil companies' own scientists confirmed climate change in 1970s
- Fossil fuel industry spent \$2B on climate misinformation campaigns
- Military, insurance, and agriculture sectors all planning for climate impacts

## Argument 6: 'Models Are Unreliable'

- Climate models successfully predicted current warming since 1970s
- Models actually underestimated ice loss and sea level rise
- Weather prediction  $\neq$  climate projection (different timescales)
- Multiple independent models show consistent warming trends

## CONVERSATION STRATEGY

Focus on shared values, use local examples, acknowledge uncertainty while emphasizing risk management, and avoid overwhelming with data

## THE GOAL

Plant seeds of doubt about misinformation, not necessarily immediate conversion

## CONTEXT

Changing minds takes time and repeated exposure to credible information from trusted sources

## Sources

- NASA Climate Change and Global Warming
- IPCC Sixth Assessment Report (2021-2023)
- NOAA Climate.gov Temperature Data
- Cook et al. (2016) Consensus on consensus: Climate scientists agree
- Supran & Oreskes (2021) Rhetoric and frame analysis of ExxonMobil climate change communications
- Bureau of Labor Statistics: Green Jobs Report 2023