

Contents

Foreword	11
Introduction	14
World Map	18

Chapter 1: Debating Global Climate Change

1. International Science Societies Concur That Climate Change Is Happening	20
--	----

RoyalSociety.org

The professional science societies of several nations—Brazil, Canada, China, France, Germany, India, Italy, Japan, Russia, United Kingdom, and the United States—declare that “climate change is real” and ask policy makers to address climate change issues.

2. Nobel Committee Recognizes Climate Change Scientists and Advocates	26
---	----

R.K. Pachauri

The 2007 Nobel Peace Prize lecture, given by R.K. Pachauri of the United Nations Intergovernmental Panel on Climate Change, highlights the scientific consensus that human activity is changing Earth’s climate.

3. World’s Scientists Acknowledge Uncertainties and Disagreements, but Most Agree Climate Change Is a Real Threat	41
---	----

Fred Pearce

A significant majority of the world’s climate scientists agree that climate change is happening, but many researchers disagree about its progression and impacts. A slim minority disputes this core scientific consensus and denies the existence of human-driven climate change.

4. Climate Change Skeptics Do Not Receive Equal Funding 51
Jeff Mason
 Scientists espousing varying degrees of climate change skepticism claim it is difficult to obtain funding for their research, especially from European governments and organizations.
5. **European Union** Nations Assert That Policies of the United States Fail to Address Climate Change 55
Markus Becker and Holger Dambeck
 European nations accuse the United States, one of the world's top emitters of greenhouse gases, of having an irresponsible policy on climate change. European Union countries wanted the United States to join the existing Kyoto Protocol and agree to discuss and enact future emissions reduction targets.
6. **United Kingdom** Research Group Asserts That Climate Change May Benefit Humans 62
Antony Barnett and Mark Townsend
 Environmentalists oppose a corporate-funded British policy group that asserts that human-induced climate change may not exist.
7. **United States** Congress Alleges Federal Interference with Climate Change Science 67
United States House of Representatives, Committee on Oversight and Government Reform
 Responding to allegations in the international media, the U.S. House Oversight Committee investigated federal executive and agency policies on climate change science, asserting that federal staff censored and deliberately disregarded scientific work on climate change issues.
- Periodical Bibliography 73

Chapter 2: The Impact of Global Climate Change

1. The International Economic Impacts of Climate Change: An Overview 75
Nicholas Stern
From adopting new farming practices to relocating population centers, an organization tries to assess the potential economic costs of global climate change.
2. **Malawi's** Food Security Is Threatened by Climate Change 83
Singy Hanyona
Climate change and a lack of agricultural adaptation are causing food scarcity in southern African nations already burdened by high rates of drought and disease.
3. The **Middle East** Faces Water Shortages and Food Scarcity Due to Climate Change 90
United Nations Office for the Coordination of Humanitarian Affairs
Climate change threatens food security throughout the region, but Yemen—already struggling with water shortages—will likely be the nation most severely affected. Observers worry that scarcity of food, water, and farming land could trigger political and social unrest in the region.
4. **Bangladeshis** Fear Climate Change Will Bring Stronger Storms, Flooding, and Famine 96
Fred de Sam Lazaro
Bangladeshis worry that rising sea levels may destroy farms and villages, increase salt levels in soil and fresh water, and force millions of people to flee to crowded cities. Climate change may also strengthen the seasonal monsoons and cyclones that lash the region.

5. **Small Island States Face Substantial Challenges from Rising Sea Levels** **103**
Intergovernmental Panel on Climate Change: Working Group II
 Rising sea levels threaten the future of small island states, especially in the South Pacific region. Food and water shortages and land scarcity may ultimately lead to the abandonment of some islands.
6. **South America's Amazon Basin Faces Loss of Animal Species and Habitats** **109**
Michael Case
 The Amazon rain forests are home to millions of plant and animal species unique to the region. However, deforestation and climate change could cause many species—and the rain forests themselves—to become extinct.
7. **Canada's Inuit Peoples Are Affected by Arctic Melting** **135**
Emily Gertz
 Inuit groups in Canada view combating arctic melting and global warming as human rights issues. For the Inuit, whose traditions depend on a thriving tundra, retreating ice caps and environmental degradation may undermine their communities.
8. **Italy's Canal City of Venice Must Cope with Rising Sea Levels** **144**
Eric Jaffe
 A new floodgate system is designed to spare Venice, Italy, from regular flooding, but it will fail to protect the city from rising sea levels.
- Periodical Bibliography **150**

Chapter 3: Developing Nations and Climate Change

1. Climate Change Disproportionately Affects the Inhabitants of Developing Nations 152
Rachel Oliver
Environmental justice advocates assert that the world's poorest citizens produce the fewest greenhouse gas emissions but are more likely to feel the most severe impacts of climate change.
 2. Poor Nations Must Also Work to Cut Carbon Emissions 159
Haider Rizvi
Developing nations in the global South should work to reduce their own emissions, whether or not they receive funds for "green" projects from the world's wealthiest nations.
 3. International Emissions Restrictions May Harm Developing Regions 165
Hans Martin Seip and Sigbjorn Gronas
Researchers consider whether emissions restrictions in industrialized nations may hinder economic growth in the world's developing regions and contribute to poverty.
 4. **China's** Rapid Development Raises Global Levels of Greenhouse Gas Emissions 170
The Economist
Rapid development in China is causing the nation's greenhouse gas emissions to soar above scientific estimates as the nation constructs new coal-burning power plants to meet its increased energy needs.
- Periodical Bibliography 181

Chapter 4: Combating Global Climate Change

1. Worldwide Tree Planting Project Aims to Offset Some Emissions **183**
United Nations Environment Programme
The United Nations Environment Programme launches a successful campaign to plant a billion trees in an effort to fight climate change. The project is intended to alleviate desertification and deforestation as well as offset carbon emissions.
 2. Information Technology Companies Can Take Action Against Climate Change **193**
Michael Dell
The founder of a large international corporation asserts that both national policies and individual commitments to “green” living are essential to combating climate change.
 3. **Australia’s** Government Bans Traditional Light Bulbs **199**
Wendy Frew and Linton Besser
Australia bans traditional incandescent light bulbs in favor of energy-wise compact fluorescent lights.
 4. **Philippine** Activists Protest Construction of a Coal-Fired Power Plant **204**
Greenpeace
Environmental activists from Greenpeace International and local citizens gather to protest the construction of a power plant in Iliolo, Philippines. The protestors oppose the plant’s use of coal and lack of emissions-reducing technology.
- Periodical Bibliography **208**
- For Further Discussion **209**
- Glossary **211**
- Organizations to Contact **216**
- Bibliography of Books **219**
- Index **223**