



# Introduction

**“The ultimate solutions to climate change are workable, cost-effective technologies which permit society to improve living standards while limiting and adapting to changes in the climate. Yet scientific, engineering, and organizational solutions are not enough. Societies must be motivated and empowered to adopt the needed changes.**

**For that, the public must be able to interpret and respond to often bewildering scientific, technological, and economic information. Social psychologists are aware, through their painstaking scientific research, of the difficulties that individuals and groups have in processing and responding effectively to the information surrounding long-term and complex societal challenges.**

**This guide powerfully details many of the biases and barriers to scientific communication and information processing. It offers a tool—in combination with rigorous science, innovative engineering, and effective policy design—to help our societies take the pivotal actions needed to respond with urgency and accuracy to one of the greatest challenges ever faced by humanity: global-scale, human-induced environmental threats, of which the most complex and far reaching is climate change.”**

—Jeffrey Sachs, Director, The Earth Institute, Columbia University

## WHY AREN'T PEOPLE MORE CONCERNED ABOUT CLIMATE CHANGE?

Research shows that most Americans do not feel a personal connection to climate change.<sup>1</sup> They are aware of

it, they may even rank it as a concern, but according to a 2008 Pew Research Center for People and the Press, they do not perceive it as a near-term priority on par with, say, the economic downturn or the need to reform health care. In fact, despite scientists' calls for urgent action, climate change has slipped to the bottom of the list of American priorities.<sup>2</sup>

Many people can recite at least a few things they could do to help mitigate global climate change, but are not. Why not? Somehow, and despite a lot of media attention following the release of *An Inconvenient Truth*, messages about climate change and what people need to do to help prevent it seem to have fallen on deaf ears.

There are many theories about why awareness of climate change does not inspire the kind of behavior changes it should. Addressing all of them goes beyond the scope of this guide. What this guide does provide are principles derived from the social sciences concerning how to communicate effectively about a topic that is complex, confusing, uncertain, sometimes overwhelming, and often emotionally and politically loaded.

CRED research shows that, in order for climate science information to be fully absorbed by audiences, it must be actively communicated with appropriate language, metaphor, and analogy; combined with narrative storytelling; made vivid through visual imagery and experiential scenarios; balanced with scientific information; and delivered by trusted messengers in group settings. This guide combines laboratory and field research with real-world examples. It blends information from the broad spectrum of disciplines that CRED encompasses: psychology, anthropology, economics, history, environmental science and policy, and climate science.

Intended for anyone who communicates about climate change, from scientists, journalists, educators, clerics, and political aides to concerned citizens, the guide's purpose is to assist communicators in reaching two key audiences—the general public and decision makers from government and business—more effectively. The principles found in this guide should help make climate change presentations and discussions more effective.

## TERMINOLOGY NOTE

### Climate Change vs. Global Warming



Erich Nagler

This guide uses the term *climate change* to refer to the changes that are occurring in the earth's climate system and the impacts such changes are having on ecosystems and society. *Climate change* is a better choice than the term *global warming*

because it avoids the misleading implications that every region of the world is warming uniformly and that the only dangerous outcome of growing greenhouse gas emissions is higher temperatures, when that, in fact, is just the tipping point for a cascade of changes in the earth's ecosystems.

In addition, *climate change* better conveys the coexistence of human-made effects with natural climate variability, a more accurate, "state-of-the-science" portrayal of the causes for the phenomenon. Since the climate is warming in fits and starts rather than on a constant basis, each year might not be warmer than the previous one. As this guide will show, using more precise terminology (and defining easily misunderstood terms) is a vital ingredient to clear, memorable, and impactful communication.