

What Copenhagen Means for Environmental Investing Today

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A Movement Toward Climate Services

Many communities are still assessing what impact the Copenhagen Accord may have on international and national policies regarding greenhouse gases and climate change. However, a broader shift in the approach to the issues of climate adaptation and mitigation that was perceptible before the 15th Conference of the Parties (COP 15) has certainly gained momentum in the climate community. This shift is away from the debate about the ability to detect, measure, predict, or ascribe causation to climate change and towards the ability to provide the information necessary to take timely action to adapt to climate change and to mitigate its effects. How should this information be provided? The unbiased and objective data that describe how climate is changing, where it is changing, and to what degree it will be changed in the future must find its way from scientists into the hands of businesses, resource managers, policy makers, and individuals. Information products that are understandable and inherently valuable to these users must be distilled from the observations and numerical model results provided by climate scientists. These products must also be delivered by services that are reasonably convenient and widely accessible. Recent events such as the so-called "Climategate" email controversy underscore the need for the processes by which these information products are derived to be transparent and independently traceable to original data sources.

The availability of these climate information products and services will ideally encourage informed investments, aid decision-making, and promote the development of good policies. Thus, climate information could be expected to have a similar influence on business and society as weather information currently does, though with an emphasis on long-term rather than short-term influences. As an analogue to the weather industry that has grown dramatically over the past 60 years, it is likely that a "climate industry" will grow around climate data, information products, and services. The climate industry will play a major role in adding value to those basic services delivered by government agencies and developing tailored products to meet the needs of particular businesses and investors.

Less than two months after COP 15 closed, the US Department of Commerce announced that it would establish a Climate Service within its National Oceanic and Atmospheric Administration. The goal of the Climate Service was articulated by the Under Secretary of Commerce for Oceans and Atmosphere, Dr. Jane Lubchenco, to be "providing critical planning information that our

businesses and our communities need," and she said that it would "build on our success transforming science into useable climate services." It is expected that other climate-related activities and research at different US federal agencies (Energy, Interior, Agriculture, Transportation, Department of Defense, Environmental Protection Agency, and National Aeronautics and Space Administration) will be coordinated with the Department of Commerce's activities, much as the nation's weather services are today. Such large-scale government investment in climate products and services should provide the on-going, stable information support required by businesses and investors that are engaged in climate adaptation and mitigation, as well as those who can benefit from long-range environmental predictions.

The outlook for environmental investing over the next five years must be regarded as excellent if one considers enhanced access to high-quality climate information to be vital for successful investment strategies. Assessments of climate change-related impacts to various business sectors, on regional to local scales, will be facilitated and should be better-suited to the challenges of investing than the global-scale assessments more commonly available today. Of course these challenges include more than just obtaining access to information, but also understanding the uncertainties inherent in this information. Investors that understand the implications for both the rewards and risks in the use of information should have a distinct advantage in the marketplace.

Biography

Dr. Edward Kearns is the Deputy Chief of the Remote Sensing Applications Division at NOAA's National Climatic Data Center. He earned a B.S. in Physics from the University of Miami, FL (1990) and a Ph.D. in Physical Oceanography from the University of Rhode Island (1996). Dr. Kearns was a faculty member at the University of Miami's RSMAS Remote Sensing Laboratory working on retrievals of ocean temperature and color from NASA satellites until he joined the National Park Service in 2005 to prepare for ecosystem restoration in the Everglades and Biscayne Bay. In 2008, Dr. Kearns joined NOAA to assist in the creation of climate data records from satellites.

He currently lives in Asheville, NC with his wife Wendy and their 3 children.