

## **Evolving Essential Climate Variables Into Public-Private Partnerships for Societal Benefit**

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Based on the GCOS ECVs, the understanding of climate risks and impacts of extreme events is growing for public and private companies. Government and other organizations are investing in building capacity for adaptation and resiliency of their infrastructure, energy supply, and other core operational elements. As private sector companies start assessing their options, it raises several needs for relevant climate and environmental information for improved risk management and opportunities for innovation. In addition, key fundamental questions arise such as “How do I analyse the risks to my company,” “What are the information sources for data and expert services,” and “What is the motivation or business case?”

This discussion will 1) provide an overview of the National Oceanic and Atmospheric Administration (NOAA) National Centers for Environmental Information (NCEI) as an information source, 2) give insights into climate change trends, nationally and locally, and 3) portray examples of climate adaptation and resilience from other companies and organizations. In addition, I will discuss a framework that showcases how government and private sector sectors are moving forward in investing in resiliency.

This dialogue is an opportunity for interaction between government, industry, and academic leaders about the role of environmental information in fostering greater resilience in the public and private sectors.

Earlier this year NOAA Satellite and Information Services (NESDIS) moved into a new organizational structure, including the merger of our four data centers into the National Centers for Environmental Information. NCEI is responsible for hosting and providing access to one of the largest archives, with comprehensive oceanic, atmospheric, and geophysical data. From the depths of the ocean to the surface of the sun and from million-year-old tree rings to near real-time satellite images, NCEI is one of the leading authorities for environmental information.

This is a great opportunity to grow awareness of the products and services that NCEI's Center for Weather and Climate provides that can and do supplement and support critical decisions made across the public-private sector impacting citizens across the U.S. and world each day.