Ghosts from the past

2014 marks the centennial of the commencement of World War I. One connection between today and that seemingly long-ago war is how we make choices when the future seems obvious only in retrospect, in what former U.S. Secretary of State George P. Shultz refers to as a world “awash in change.” Max Hastings, in *Catastrophe 1914: Europe Goes to War*, summarizes his views on how the rulers of Europe allowed World War I to start, then continue with a loss of over 8.6 million soldiers: “It is more appropriate to call them deniers, who preferred to persist with supremely dangerous policies and strategies....”

The parallels between today’s political decisions regarding climate change and the decisions that led Europe to World War I are sobering. Those made in 1914 reflected political policies pursued for short-term gains and benefits, institutional hubris, and a failure to imagine and understand the risks. The result was a disaster in many ways, the reverberations from which are still felt a century later.

Once again, nations face a challenge—climate change—which, if left unmanaged, has the potential to bring tremendous pain to hundreds of millions of people and seriously disrupt the existing economic and political orders of the day. Although we do not know exactly how climate change will evolve, we do know that ignoring climate change is tantamount to assuming that there will be no change, an exceedingly unlikely outcome.

So, what to do? Here are three proposals for action to “buy-down” the risk we have accrued: Increase our understanding of the near-term future, and focus on the most dangerous and most probable risks; take the actions needed to maintain society’s essential infrastructure: water, food, and a viable coastline; and make the commitments to accelerate our shift to a no-carbon energy future.

We need to have adequate warning of truly extreme environmental conditions or abrupt, unexpected changes. This goal cannot be achieved without substantially improving the ability to monitor Earth’s systems. This will lead to a better understanding of when, why, and how the details of climate are changing and improvements of early-warning systems for any sudden changes.

We must devote greater resources to the management and efficient use of fresh water, and its impact on food and energy production. We must address another water challenge—the inexorable rise in sea level, which threatens coastal communities and vital economic and security infrastructure. We must also meet the challenge of ocean acidification, global warming’s “silent, evil twin,” on ocean ecosystems, the primary source of protein for about 2 billion people.

We must stabilize the climate system by solving the root cause of its changes: unchecked greenhouse gases entering the atmosphere. We must focus the best minds on this challenge, develop the needed technologies, and drive their costs down so that they can be implemented. Ubiquitous, affordable, non–carbon-based power and clean water will change the world for the better.

In 2014, we again face uncertainties and choices of enormous consequence, just as the European powers faced choices in 1914. The data and projections are laid out in front of us, as they were for them. Will we repeat the same mistakes they made a century ago? This is not a political or partisan issue—the atmosphere, water, and ice neither know nor care how anyone votes or thinks. Humanity can perform amazing, nearly miraculous feats. But it requires sustained leadership from all sectors and at all levels. Political leaders must remember those ghosts from history a century ago—and this time avert the crisis.

—David Titley
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