

sophisticated



THE AMERICAN IMPERATIVE

By invitation
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while helping save civilization. Although crippled capital markets may lead to less US investment in wind in 2009 than 2008's record \$17 billion, this sector remains one of the few rays of hope in today's battered economy and holds the promise of igniting a green industrial revolution for America and the world.

Wind provided an astounding 42% of America's new electric generating capacity in 2008, yet still only meets 1% of total US electricity needs. In contrast, Denmark already generates more than 20% of its electricity from wind power, with a goal of 50% by 2025. Germany generates 7%, with a goal of 25% by 2025 and Ireland generates 9%, with 40% by 2020 in its sights. America can, and must, do better.

Top climate experts are warning us that the actions we take—or do not take—in the next decade will determine whether we stave off the most catastrophic effects of global warming. "We are near a tipping point, a point of no return, beyond which the built-in momentum and feedbacks will carry us to levels of climate change with staggering consequences for humanity," says NASA climate scientist Dr James Hansen. Already nearly two years have passed since Dr Rajendra Pachauri, chair of the Intergovernmental Panel on Climate Change, warned the world: "What we do in the next two to three years will determine our future. This is the defining moment."

The world's economic and environmental survival hinges on our ability to rapidly transition from coal-dominated electricity supply systems to those powered by wind and other renewables. As the first renewable energy source that is both cost-competitive and quickly scalable to hundreds of gigawatts, wind is uniquely positioned to lead the emerging green energy economy. But with great opportunity also comes great responsibility, meaning the leaders of the US wind industry have a moral imperative to do everything in their power to spark this power shift by becoming corporate champions for a green industrial revolution. This requires getting serious about the scope of the challenges we face.

The American Wind Energy Association's goal of 20% wind power by 2030, while a good start, is clearly too little, too late, to effectively address the global climate crisis. It also needlessly delays by a decade economic stimulus that is desperately needed now. The urgency of the situation demands more of the titans of this vital industry. They can begin by raising the bar to 40% wind power by 2020 and demanding federal policies to facilitate this goal.

Greening America's energy grid in such a short time span will not be easy. It will require a massive World War II-type mobilisation at lightning speed. But no new energy technologies are needed to realise this hopeful and exciting vision. Virtually all of America's electricity needs can be met by 2020 through expanded energy efficiency measures and responsibly developed, large and small scale wind, solar and geothermal technologies.

Those who say such aggressive goals are unrealistic underestimate the creative genius and will of the American public and the capabilities of American businesses and workers. We are a supremely resourceful people with a long history of meeting and exceeding monumental challenges. When destiny called during World War II, we answered by leading the allied forces to victory in three-and-a-half short years. What is unrealistic is thinking business as usual will leave a habitable planet for our children.

GOLDEN OPPORTUNITIES

Undeniably, many obstacles stand between us and a green energy future, but in each case there are practical ways to turn these problems into opportunities. Lack of adequate transmission to get remote wind resources to load centres is an opportunity to use stimulus dollars to jump-start construction of a national green grid, while also reforming power system planning and cost-recovery policies. An inadequate manufacturing supply chain to meet this level of scale-up is an opportunity to use spare capacity in the automotive and aerospace sectors, while unleashing American entrepreneurs to fill the gaps. A missing, credible, long-term national commitment to renewables is an incentive to enact an aggressive national Renewable Energy Standard to rally the nation around a common goal.

There are not enough trained people to do all the necessary work, but that can be fixed by launching a federal crash program of "wind grant" colleges and other educational institutions to train a new, green collar workforce. The wind industry struggles to compete in a market distorted by antiquated subsidies for dirty, depleting fuels—but that is an opportunity to shift investment incentives and R&D spending away from fossil fuels and nuclear and towards job-rich renewables and energy efficiency measures.

The course of human history is littered with golden opportunities either squandered or seized. The US wind industry faces such a defining moment now. Will we be content with simply growing our businesses and playing a marginal role in the world's energy future, or will we lead a generational mission by mustering our moral and industrial force to address this planetary emergency? It is time to decide.

About the author

Tom Weis, based in Boulder, Colorado, is president of Wind Power Solutions, an environmental consulting firm dedicated to solving the global climate crisis. He has more than 20 years of environmental and political organising experience and has worked in the wind industry since early 2004, helping Enxco permit 600 MW of wind projects. He is co-creator of the newly formed American Wind Wildlife Institute and is a strategic advisor to the president of the American Wind Energy Association.