



FACT SHEET: POWERING AMERICA WITH MORE THAN 50 PERCENT CLEAN ENERGY BY 2030

NextGen Climate is calling on candidates and elected officials to address climate change by producing a plan to power America with more than 50 percent clean energy by 2030, putting us on a pathway to 100 percent clean energy by 2050. Voters across the country support bold clean energy goals—now we need candidates and elected officials to lay out concrete plans to achieve #50by30.

CLIMATE CHANGE PUTS AMERICA'S ECONOMY AND SECURITY AT RISK

Failing to address climate change will have devastating effects on America's economy and security. New research from leading economists finds that the negative impacts of climate change could reduce America's Gross Domestic Product (GDP) by 5 percent by 2050. Multiplying by the end of the century, a 36 percent hit to the GDP is projected if action on climate is not taken. ^[1]

We are already feeling the effects of climate change at home. From 2010 to 2014 the United States experienced nearly 50 climate-related disasters with costs in excess of \$1 billion each, and between 2011 and 2012 the United States experienced more than \$185 billion in losses from climate-related events. ^[2] Left unchecked climate change will fuel more intense and frequent extreme weather events while contributing to rising sea levels, increased illness, and dangerously high temperatures.

Failure to take action on climate change not only threatens to devastate our economy, it threatens our national security. Just last year, 16 retired three- and four-star generals and admirals issued a report identifying the anticipated food shortages, droughts, and floods from climate change as a "catalyst for conflict." ^[3] Additionally, the Pentagon's 2014 Quadrennial Defense Review highlights that climate change poses a serious national security threat and will aggravate stressors like poverty, political instability, and social tension abroad. ^[4]

ACHIEVING MORE THAN 50 PERCENT CLEAN ENERGY BY 2030 WILL CREATE MILLIONS OF JOBS AND SPUR ECONOMIC GROWTH

Transitioning to a clean energy economy will create American jobs and is crucial to ensuring a prosperous future for our country. A recent economic analysis by ICF international and NextGen Climate America finds that transitioning to a clean energy economy, with existing technology, will create over a million jobs by 2030 and up to two million jobs by 2050. ^[5] Job growth will be especially robust in the construction sector, where clean energy growth could create more than 460,000 jobs by 2030 and more than 1.2 million jobs by 2050.

By 2050, the transition to clean energy will not only create jobs – it will save money for American families. Electric bills in the United States will be reduced by more than \$40 billion. Families will also see their household disposable income increase by as much as \$650 – but only if we meet this achievable clean energy goal.

MORE THAN 50 PERCENT CLEAN ENERGY BY 2030 IS ACHIEVABLE WITH EXISTING TECHNOLOGY

The transition to a clean energy economy is already underway. Last year, the solar industry added jobs 20 times faster than the overall economy, with more than twice as many Americans now employed in solar than coal mining. In fact, in 2014 one out of every 78 new jobs in the U.S. was created by the solar industry. Over the long term, solar energy creates eight times more jobs in construction, installation, operations, and maintenance than coal and natural gas. ^[6]

Even better – clean energy technologies are becoming increasingly competitive with outdated fossil fuels – and on a level playing field, are often the cheapest energy source:

- Solar has reached cost parity with coal and gas in many regions and is projected to be cheaper than fossil fuels throughout most of the United States by 2017.^[7]
- The United States has installed over 22,000 megawatts of solar, enough to power more than 4.6 million average American homes—a number that is expected to double in the next two years.^[8]
- Nearly 1 million U.S. homes and businesses have gone solar, and a new solar project was installed every 2 minutes in the first half of 2015.^[8]
- Over the past 5 years, the price of wind has been reduced by more than half.^[9]
- Wind power is one of the fastest-growing sources of new electricity capacity and the largest source of new renewable power generation added in the United States since 2000.^[10]
- United States' wind resources can provide more than 10 times current electricity demand.^[10]

With these technologies, the United States' electricity generation is becoming cleaner, cheaper and more reliable. When combined with the Obama Administration's historic steps to stop unlimited dumping of carbon pollution into our air with the Clean Power Plan, achieving more than 50 percent clean energy by 2030 is well within reach.

Under the Clean Power Plan, the Energy Information Agency estimates that approximately 40 percent of the electricity produced in 2030 will be clean and carbon free.^[11] Furthermore, the market is rapidly trending towards clean and renewable low carbon energy sources that are cheaper than traditional fossil fuels. Electricity generation from coal has been declining, and EIA forecasts a 9 percent drop in 2015, reflecting the ongoing market transformation towards cleaner energy.^[12]

Our country needs bold leadership that accelerates the transition away from dirty fossil fuels and towards America's clean energy future. In the past, the fossil fuel industry has

stacked the deck against clean energy, as subsidies and other preferential treatment prop up outdated fossil fuels, stifling American innovation and businesses.

By fully implementing the Clean Power Plan and pursuing common sense policy solutions that allow clean energy sources to compete against fossil fuels on a level playing field, candidates and elected officials can ensure we transition to a clean energy economy and help prevent climate disaster.

VOTERS AGREE: IT'S TIME TO TRANSITION TO CLEAN ENERGY

Transitioning to a clean energy economy is overwhelmingly popular among American voters across the political spectrum. According to Hart Research, 84 percent of Democrats, almost 70 percent of independents and a majority of Republicans in key battleground states favor a goal to power our country with more than 50 percent clean energy by 2030.^[13] That same poll found that young Americans—from all political backgrounds—are overwhelmingly more likely to vote for a candidate who embraces a plan to achieve more than 50 percent clean energy by 2030. And according to polling from the ClearPath foundation, 72 percent of Republicans support accelerating the development of clean energy.^[14]

It is not too late to avoid the worst consequences of climate change – but time is running out. The longer we delay the transition to a clean energy economy, the more devastating the economic impacts will be. In order to address the threat of climate change, the United States must reduce carbon emissions by 83 percent economy-wide by 2050. Powering America with more than 50 percent clean energy by 2030 is a bold, but achievable goal that will help address the threat of climate change, grow our national economy and improve the quality of life for every American.

That's why NextGen Climate is calling on candidates and elected officials to lay out their specific plans to achieve #50by30. We have the technology, we have the public support—now all we need is political leadership to get us there.

ENDNOTES

- [1] Burke, Marshall, Solomon M. Hsiang, and Edward Miguel, "Global non-linear effect of temperature on economic production," *Nature*, 2015.
- [2] NOAA, Billion-Dollar Weather and Climate Related Disasters: Summary Stats, accessed July 6, 2015.
- [3] CNA Military Advisory Board, "National Security and the Accelerating Risks of Climate Change," 2014.
- [4] Department of Defense, "Quadrennial Defense Review 2014," March 2014.
- [5] ICF International, "Our Clean Energy Economy," November 2015.
- [6] The Solar Foundation, National Solar Jobs Census, accessed November 23, 2015.
- [7] Lazard Financial Advisory, "Lazard's Levelized Cost of Energy Analysis – Version 8.0," September 2014.
- [8] Solar Energy Industry Association, Solar Industry Data, accessed November 23, 2015.
- [9] American Wind Energy Association, The Cost of Wind Energy in the U.S., accessed November 23, 2015.
- [10] U.S. Department of Energy, "WindVision: A New Era for Wind Power in the United States," March 2015.
- [11] EIA, "Analysis of the Impacts of the Clean Power Plan," May 2015.
- [12] EIA, Short Term Energy Outlook: Coal, November 2015.
- [13] Hart Research Associates, Swing State Poll on Clean Energy Goals, July 2015.
- [14] Clearpath Polling, ClearPath Clean Energy Poll, September 2015.