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

NextGen Climate is calling on candidates and elected officials to tackle climate change — the defining issue of our time — by producing a plan to power America with more than 50 percent clean and carbon-free energy by 2030, putting us on a pathway to 100% clean energy by 2050. The transition to clean electricity is urgently needed, technologically achievable, economically beneficial, and politically popular.

CLIMATE CHANGE PUTS AMERICA'S ECONOMY AND SECURITY AT RISK

Left unchecked, climate change will have devastating effects on America's economy and security.

The International Panel for Climate Change (IPCC) conservatively estimates that, without action, 1–5% percent of global mean Gross Domestic Product is at risk due to climate change, and in some localized places the risks even higher.[1]

Intensifying seasonal weather patterns, extreme weather events, rising sea levels, and increased illness and disease will cost the U.S. economy billions of dollars a year in property damage, increased costs, and lost productivity.

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 in 2013 alone the United States experienced $125 billion in expenses from climate-related events.[2]

Climate change poses a grave national security risk as well. Just last year, 16 retired three- and four-star generals and admirals issued a report, *National Security and the Accelerating Risks of Climate Change,* identifying climate change as a "catalyst for conflict." Additionally, the Pentagon's 2014 *Quadrennial Defense Review* laid out that climate change poses a serious threat and will aggravate stressors abroad.

TRANSITIONING TO A CLEAN ENERGY ECONOMY WILL PREVENT CLIMATE DISASTER

It is not too late to avoid the worst consequences of climate change — though time is running out. The longer the United States, and the global community, delay the transition to a clean energy economy the larger the economic impacts will be. In order to help prevent climate disaster, the United States must reduce carbon emissions by 83 percent economy-wide by 2050.

A plan to power America with more than 50 percent clean and carbon-free energy by 2030 will put us on the path to a 100 percent clean-energy economy by 2050, accomplishing the necessary carbon emissions reduction from the electricity sector.

MORE THAN 50 PERCENT CLEAN ENERGY BY 2030 IS A TECHNOLOGICALLY ACHIEVABLE GOAL

The transition to a clean energy economy is already underway. Clean energy technologies like wind and solar are increasingly competitive with outdated fossil fuels on cost, and are growing rapidly across America and around the world:

- Installed solar capacity in the United States increased 34 percent between 2013 and 2014.[3]
- The U.S. has installed over 20,000 megawatts of solar enough to power more than 4 million average American homes — and that is expected to double in just the next two years.[4]
- Utility scale 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 U.S. by 2017.[5]

Combined with significant technological cost breakthroughs of clean energy technologies and the Obama Administration's historic steps to stop the unlimited dumping of carbon pollution into our air and water with the Clean Power Plan, the U.S. electricity sector is beginning to transform to one that is cleaner, cheaper, and more reliable.

The Energy Information Administration projects that the electricity mix in 2030 will be approximately 25% coal, 31% natural gas, 1% oil, 18% nuclear, 7% hydropower, 12% wind, 3+% solar, and 3% other renewable sources.[6] This means that with no additional policies other than expected implementation of the Clean Power Plan, nearly 43% of the electricity produced is projected to be clean or carbon-free in 2030.

Though the transformation to a clean energy economy is already underway, and accomplishing more than 50 percent clean energy by 2030 is technologically possible, policymakers must do their part to push us over the top. The deck is currently stacked against clean energy, as subsidies and other preferential treatment prop up outdated fossil fuels, stifling American innovation and slowing the growth of modern renewable energy sources.

Our country needs bold leadership that accelerates the transition away from fossil fuels that cause climate change and towards America's clean energy future and the economic benefits it will bring. By fully implementing the Clean Power Plan and pursuing other policy solution that will allow energy sources like solar and wind to compete against fossil fuels on a level playing field, our leaders can ensure we transition to clean energy in time to prevent climate disaster.

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

Today, clean energy jobs are significantly outpacing fossil fuels jobs. In 2014, the number of people working in solar power surpassed the number of people employed as coal miners.[7] As the technology landscape continues to change, clean energy has the opportunity to be a significant driver of employment in every city, state, and region. These jobs include installing and operating clean energy, performing energy retrofits, designing and researching new technologies, and operating the clean energy businesses of tomorrow.

- Solar jobs are growing 20 times faster than the broader economy.[8]
- Solar energy creates eight times more jobs in construction, installation, operations, and maintenance, than coal and natural gas do across full project lifetimes.
- There are more than 500 wind manufacturing facilities across the U.S. and there are currently more than 70,000 people employed in wind-related jobs.[9]

In this global race for clean energy, the nation that leads on clean energy technology development will have a significant advantage in creating the millions of clean energy jobs that are up for grabs in this new energy revolution.

The United States is on the road to a clean energy economy. Technology and economics no longer limit our ability to realize this new energy system. With bold political leadership, we can accelerate America's transition to a clean energy economy, win this global clean energy race, strengthen our economy, and help mitigate potentially trillions of dollars of damages from climate change.

[1] Intergovernmental Panel on Climate Change, "Fourth Assessment Report: Climate Change 2007: 5.7 Costs, benefits and avoided climate impacts at global and regional levels," 2007.
[2] NOAA, "Billion-Dollar Weather and Climate Related Disasters: Summary Stats, " accessed 7/6/15.
[3] Solar Energy Industry Association, "Solar Industry Data," accessed 07/02/15.
[4] Solar Energy Industry Association, "Solar Industry Data," accessed 07/02/15.
[5] Lazard Financial Advisory, "Lazard's Levelized Cost of Energy Analysis – Version 8.0," 9/2014.
[6] EIA, "Analysis of the Impacts of the Clean Power Plan," 5/2015.
[7] Fortune, "In U.S. there are twice as many solar workers as coal miners, " 1/16/15.
[8] Greentech Media, "Solar is Adding Jobs 20 Times Faster Than the Broader Economy, but 'All Bets Are Off' in 2017," 01/15/15.
[9] American Wind Energy Association, "Wind Energy Facts at a Glance," accessed 6/20/15.