

H.RES. XX**National Economic Competitiveness and National Security through the Transition to Clean Energy, Full Employment, and Infrastructure Modernization Resolution of 2015**

Expressing the sense of the Senate and the House of Representatives that the policies of the United States should support a transition to clean energy, full employment and a sustainable economy to promote national economic competitiveness and national security to reflect the most recent credible scientific findings concerning the current and potential adverse impacts of changing climate conditions for the purpose of avoiding climate catastrophe.

Whereas, leading economists, policy experts and business leaders conclude that transitioning to a clean energy economy would create millions of green jobs, improve our living standards and boost economic growth in coming years;¹

Whereas, a Stanford University study concludes that the United States energy supply could be based entirely on renewable energy by the year 2050 using current technologies. A study by the National Renewable Energy Laboratory (NREL) states that 80 percent of the U.S. energy supply could come from renewable energy using current technologies by 2050;^{2,3}

Whereas, hundreds of thousands of jobs can be created in the conversion to renewable energy, in the development and installation of energy generation projects such as industrial wind generation and industrial solar parks, as well as solar system installations on rooftops of residences, businesses, and public buildings; jobs that pay decent wages and can be quickly created in cities and rural towns;⁴

Whereas, consumers, clean tech companies and related businesses and research centers stand to benefit from the development of clean renewable energy technologies and the expansion of clean energy-based local, national and global markets and economies;⁵

¹ Stanford scientist unveils 50-state plan to transform U.S. to renewable energy, *Stanford News*, February 26, 2014. <http://news.stanford.edu/news/2014/february/fifty-states-renewables-022414.html>.

² Stanford scientist unveils 50-state plan to transform U.S. to renewable energy, *Stanford News*, February 26, 2014. <http://news.stanford.edu/news/2014/february/fifty-states-renewables-022414.html>.

³ *Renewable Electricity Futures Study (RE Futures)*, National Renewable Energy Laboratory, 2012. http://www.nrel.gov/analysis/re_futures/.

⁴ Richardson, Jake, "174,000 US Solar Jobs Now!," *Clean Technica*, January 15, 2015. <http://cleantechnica.com/2015/01/15/174000-us-solar-jobs-now/>; German Energy Transition – Arguments for a renewable energy future, Energy Transition, Federal Government of Germany, 2012. <http://energytransition.de/2012/10/key-findings/>

⁵ 2013 Clean Energy Industry Report, Massachusetts Clean Energy Center. <http://www.masscec.com/content/2013-clean-energy-industry-report>.

Whereas, an overwhelming scientific consensus of credentialed climate scientists and scientists in related scientific fields, in the United States and abroad, National Academy of Sciences, World Meteorological Organization, U.S. Department of Defense, National Intelligence Council, National Oceanic and Atmospheric Administration, U.S. Environmental Protection Agency and United Nations Intergovernmental Panel on Climate Change (IPCC), support the findings that climate change is happening and that human activities are a key contributor to it,^{6,7,8,9,10,11}

Whereas, the U.S. Department of Defense and the National Intelligence Council warn that climate destabilization threatens U.S. national and global security by contributing to increased violent conflict and failed nation states suffering from water shortages, food scarcity and poverty;¹²

Whereas, an increase in the global average temperature, if not stopped, will have major adverse impacts on both the natural and human-made environments and will increase human suffering and loss of life due to heat waves, prolonged droughts, water scarcity, food insecurity, rising sea levels, ocean acidification, mass species extinctions, increasing number of refugees, and intensification and frequency of extreme weather events;¹³

Whereas, atmospheric temperature measurements show an estimated warming of 0.85 degrees Celsius (1.5 degrees Fahrenheit) since 1880 according to the IPCC Fifth Assessment Report (AR5);¹⁴

⁶ Summary for Policymakers, Climate Change 2014: Impacts, Adaptation, and Vulnerability, 5th Assessment Report, IPCC, http://www.ipcc-wg2.gov/AR5/images/uploads/WG2AR5_SPM_FINAL.pdf. <http://www.ipcc.ch/index.htm>.

⁷ Climate Change Evidence and Causes, Royal Society and the U.S. National Academy of Sciences, February 27, 2014. <http://nas-sites.org/americasclimatechoices/events/a-discussion-on-climate-change-evidence-and-causes/>.

⁸ "WMO Annual Climate Statement Highlights Extreme Events," WMO, March 24, 2014. http://www.wmo.int/pages/mediacentre/press_releases/pr_985_en.html.

⁹ Climate Change: Basic Information, U.S. EPA. <http://www.epa.gov/climatechange/basics/>.

¹⁰ Climate, NOAA. <http://www.noaa.gov/climate.html>.

¹¹ 2014 National Assessment Report (Third), U.S. Global Change Research Program, 2014. <http://nca2014.globalchange.gov/report>.

¹² Quadrennial Defense Review, U.S. Department of Defense, p.8.

http://www.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf. "Climate Change Deemed Growing Security Threat by Military Researchers," *The New York Times*, May 13, 2014.

http://www.nytimes.com/2014/05/14/us/politics/climate-change-deemed-growing-security-threat-by-military-researchers.html?_r=0. http://www.cna.org/sites/default/files/MAB_2014.pdf.

http://www.dni.gov/files/documents/GlobalTrends_2030.pdf. <http://www.npr.org/2012/12/10/166895624/the-world-in-2030-asia-rises-the-west-declines>.

¹³ Summary for Policymakers, Climate Change 2014: Impacts, Adaptation, and Vulnerability, 5th Assessment Report, IPCC, http://www.ipcc-wg2.gov/AR5/images/uploads/WG2AR5_SPM_FINAL.pdf. <http://www.ipcc.ch/index.htm>.

¹⁴ Summary for Policymakers, Climate Change 2013: The Physical Science Basis, 5th Assessment Report, IPCC, p. 5. http://www.climatechange2013.org/images/report/WG1AR5_SPM_FINAL.pdf, <http://www.ipcc.ch/report/ar5/wg1/>. <http://www.ipcc.ch/index.htm>.

Whereas, thirteen of the fourteen warmest years on record have all happened in the 21st century - each of the last three decades has been hotter than the prior one and 2001-2010 was the warmest decade on record according to the World Meteorological Organization;¹⁵

Whereas, global atmospheric concentrations of carbon dioxide exceeded 400 parts per million in April 2013, a level not reached in at least 800,000 years;¹⁶

Whereas, since 1990, when the IPCC issued its First Assessment Report (AR1), global carbon dioxide emissions have increased by nearly 60 percent;¹⁷

Whereas, the IPCC Fifth Assessment Report concludes that human emissions of greenhouse gases, particularly carbon dioxide, are chiefly responsible for the increases in the global average temperature;¹⁸

Whereas, public health experts have documented the health impacts of climate change, including the spread of infectious diseases, risks to worldwide food supplies, increase of cancer and asthma, as well as the direct physical effects of more frequent and extreme weather events;¹⁹

Whereas, climate change has a disproportionate adverse impact in the United States and throughout the world on people of color and lower incomes, on marginalized women such as refugee and displaced persons, sexual minorities, religious or ethnic minorities, adolescent girls, women and girls with physical and mental challenges, and those who are HIV positive and women in poor and developing nations where they regularly assume increased responsibility for growing the family's food and collecting water, fuel, and other resources;²⁰

Whereas, climate change will cause a major increase in unemployment in our nation's agricultural sectors, threaten our food supply and increase the cost of fruits, vegetables, and grains for consumers due to droughts and dwindling water supplies for irrigation. Likely climate-linked events in recent years that harmed American agriculture and communities include a historic drought in California and the Southeast, record heat waves and flooding in the Midwest,

¹⁵ "WMO Annual Climate Statement Highlights Extreme Events," WMO, March 24, 2014.

http://www.wmo.int/pages/mediacentre/press_releases/pr_985_en.html.

¹⁶ "Carbon Dioxide at NOAA's Mauna Loa Observatory reaches new milestone: Tops 400 ppm," NOAA, May 10, 2013.

<http://research.noaa.gov/News/NewsArchive/LatestNews/TabId/684/ArtMID/1768/ArticleID/10061/Carbon-Dioxide-at-NOAA%e2%80%99s-Mauna-Loa-Observatory-reaches-new-milestone-Tops-400-ppm.aspx>.

¹⁷ "Global CO2 emissions to hit 60% above 1990 levels, ITV, November 19, 2013.

<http://www.itv.com/news/update/2013-11-19/global-co2-emissions-to-hit-60-above-1990-levels/>.

¹⁸ 5th Assessment Report, IPCC. <http://www.ipcc.ch/index.htm>.

¹⁹ Jonathan Fowler, "Climate change poses growing health threat: UN," AFP, August 27, 2014.

[http://news.yahoo.com/climate-change-poses-growing-health-threat-un-](http://news.yahoo.com/climate-change-poses-growing-health-threat-un-170547801.html)

[170547801.html](http://news.yahoo.com/climate-change-poses-growing-health-threat-un-170547801.html); [_ylt=AwrBJSa3rgNUahQAwNbQtDMD](http://www.cdc.gov/climateandhealth/effects/default.htm). Climate and Health: Health Effects, Centers for Disease Control and Prevention (CDC). <http://www.cdc.gov/climateandhealth/effects/default.htm>.

²⁰ Charles Lee, "Climate Justice," EPA website, April 24, 2014. <http://blog.epa.gov/ei/2014/04/climate-justice/>.

Women, Gender Equality and Climate Change, United Nations website.

http://www.un.org/womenwatch/feature/climate_change/.

powerful storms like hurricanes Katrina and Sandy in the South and East Coast and the widest F5 tornado ever recorded occurring in Oklahoma;²¹

Whereas, urban areas have distinct sensitivities to climate change impact including amplified heat waves due to increased absorption of heat during the day as a result of the characteristic concrete paved landscape, and increased adverse impacts due to higher population densities and aging infrastructure;²²

Whereas, rural livelihoods and communities are highly vulnerable to the impacts of climate change due to decreased agricultural crop production, damage to natural resources, tourism and recreation, and the lack of financial and emergency capabilities to cope with severe weather impacts;²³

Whereas, climate change will make it more difficult and costly for people to insure their homes, businesses, or other valuable assets in high risk areas;²⁴

Whereas, a growing number of scientific, economic, religious, academic and other governmental, business and civil society leaders believe steps must be taken to avoid catastrophic effects of climate change;²⁵

Whereas, many religious leaders and organizations in the United States and worldwide have stated that we all have a moral obligation to be good stewards of the Earth and that there is a moral imperative for bold action on climate change;²⁶

Whereas, many Native American communities have taken the lead in warning of the dangers of climate change, possessing unique knowledge and Native wisdom drawn from a long history of living in sacred relationship with the Earth, which includes the need to live sustainably to ensure a healthy planet for the next seven generations to come;

Whereas, indigenous people and communities, who make up 5 percent of the world's population and live sustainably off the earth, often in poverty and in under-resourced areas, are especially

²¹ Nick Kirpatrick, "California's drought: What losing 63 trillion gallons of water looks like," *Washington Post*, August 28, 2014. <http://www.washingtonpost.com/news/morning-mix/wp/2014/08/28/californias-drought-what-losing-63-million-gallons-of-water-looks-like/>. Widespread Flooding Threatens Midwest Crops, *Pro Farmer*, June 23, 2014. <http://www.profarmer.com/perspective-opinion/more/guest-columnists/martell-widespread-flooding-threatens-midwest-crops>.

²² Climate Change, United Nations Habitat. <http://unhabitat.org/urban-themes/climate-change/>.

²³ IPCC AR5, March 2014. http://ipcc-wg2.gov/AR5/images/uploads/WGIIAR5-Chap13_FGDall.pdf.

²⁴ Maggie Koerth-Baker, "Mutually Insured Destruction," *New York Times*, August 27, 2013. http://www.nytimes.com/2013/09/01/magazine/mutually-insured-destruction.html?_r=0.

²⁵ Text of the American College & University Presidents' Climate Commitment. <http://www.presidentsclimatecommitment.org/about/commitment>.

²⁶ Gregg Zoroya, "Taking to the pulpit against climate change," *USA Today*, July 15, 2014. <http://www.usatoday.com/story/news/nation/2014/07/15/climate-religion-kansas-church-global-warming-evangelical/12515665/>.

vulnerable to a changing climate that threatens their traditions and way of life, including the destruction of small island communities from rising sea levels;²⁷

Whereas, numerous nations, municipalities, organizations, businesses and academic institutions throughout the world have set a goal to achieve carbon or climate neutrality, including over 680 college and university presidents who have signed the American College & University Presidents' Climate Commitment;²⁸ and

Whereas, the Intergovernmental Panel on Climate Change Fifth Assessment Report recommends a global goal of achieving near zero greenhouse gas emissions or below, which is necessary to stabilize the global average temperature to avoid climate catastrophe, and that an unprecedented level of international cooperation is urgently required between now and 2030 to reduce the costs of cutting global greenhouse gas emissions.²⁹

Be it Resolved by the Senate and House of Representatives of the United States in Congress assembled, shall

(1) support shifting the energy supply strategy of the United States from coal, oil, natural gas and other fossil fuels to solar, wind, geothermal, and other clean renewable energy sources along with increased energy efficiency and conservation to significantly reduce and eventually end dependence on fossil fuels to promote national economic competitiveness and strengthen national security;

(2) establish a national goal of 50 percent of electricity to be derived from renewable sources by January 1, 2030;³⁰

(3) set a national goal of a 50 percent reduction in petroleum use by cars and trucks below 2015 levels by January 1, 2030;³¹

(4) establish a national goal doubling efficiency of existing buildings from 2015 levels by January 1, 2030;³²

²⁷ Climate Change and Indigenous People, United Nations.

http://www.un.org/en/events/indigenousday/pdf/Backgrounder_ClimateChange_FINAL.pdf.

²⁸ Text of the American College & University Presidents' Climate Commitment.

<http://www.presidentsclimatecommitment.org/about/commitment>.

²⁹ Summary for Policymakers, Climate Change 2014: Mitigation of Climate Change, 5th Assessment Report, IPCC, see p. 13. http://report.mitigation2014.org/spm/ipcc_wg3_ar5_summary-for-policymakers_approved.pdf.
<http://www.ipcc.ch/index.htm>. http://ipcc.ch/pdf/ar5/pr_wg3/20140413_pr_pc_wg3_en.pdf.
<http://in.reuters.com/article/2014/04/13/us-climatechange-un-factbox-idINBREA3C06820140413>.
http://articles.chicagotribune.com/2014-04-13/news/chi-un-climate-report-20140413_1_greenhouse-gases-ipcc-greenhouse-gas-emissions.

³⁰ Governor Jerry Brown's 2015 Inaugural Address <http://gov.ca.gov/news.php?id=18828>

³¹ Governor Jerry Brown's 2015 Inaugural Address <http://gov.ca.gov/news.php?id=18828>

³² Governor Jerry Brown's 2015 Inaugural Address <http://gov.ca.gov/news.php?id=18828>

(5) establish policies and programs to modernize the national infrastructure for the 21st Century, transition toward full-employment with millions of new green jobs and build a sustainable economy;

(6) provide educational and job training programs, transitional financial assistance and job opportunities for coal miners and other fossil fuel industry workers displaced due to the transition to a renewable energy-based economy;

(7) provide retraining and re-employment for green jobs for military veterans, including those returning from military service in Iraq and Afghanistan;

(8) provide increased funding for educational, training and job assistance programs for rural residents and for increased emergency preparation and assistance to damaged rural communities due to the adverse impacts of climate change;

(9) help the people of the United States to establish resiliency to withstand the significant impacts of climate change that are already occurring and that are expected to accelerate in years ahead.

(10) establish policies that capture and store carbon by protecting forests, improving land and agricultural practices, and planting and greening of urban landscapes;

(11) support trade policies to maintain American labor and environmental standards and, through tax incentives, promote the growth of jobs in the United States, including manufacturing jobs, for the purpose of achieving full employment and protecting the environment;³³

(12) phase out all subsidies for fossil fuels; and

(13) support a policy of the United States to work with the United Nations and other international organizations and nations to significantly reduce greenhouse gas emissions as soon as necessary to avoid catastrophic impacts from global climate change; and to set a national and global goal to achieve net zero greenhouse gas emissions by replacing fossil fuels with renewable energy.³⁴

³³ <http://blogs.sierraclub.org/compass/2014/09/why-the-climate-movement-cannot-ignore-trade.html>

³⁴ http://www.huffingtonpost.com/jamie-henn/the-climate-talks-find-an_b_6308094.html