

# Renewable Energy and Energy Efficiency Advisory Committee, *Charter IV*, Recommendation Fact Sheet

## Recommendation #2 (Approved, June 21, 2017):

Keeping America First in the Competitive Global Marketplace for Renewable Energy, Energy Efficiency and Other Innovative Energy Technologies (“REEE”)

We recommend the following concrete actions that thereby increase U.S. market share, exports and job growth:

- The Secretary of Commerce should encourage the Commerce Department and the White House to express confidence and support for U.S. REEE in policy statements (as Secretary Pruitt and Secretary Perry recently did at public events as referenced below), and also in U.S. promotional materials and activities, including updating the America First Energy Plan (the “Energy Plan”) to reflect U.S. leadership in REEE and its potential contributions to the Energy Plan’s goals (our specific wording recommendations follow in the Appendix).
- The Secretary of Commerce should direct the Commerce Department to conduct a study of the financial, inter-governmental, and promotional activities being undertaken by foreign governments to benefit the export of their own REEE technologies that put U.S. REEE at a competitive disadvantage, and recommend best practices to ensure U.S. REEE remains a global leader.
- The Secretary of Commerce should promote U.S. technological leadership in REEE by leveraging the worldwide network of the Commerce Department through leadership communications, missions, workshops, and other intergovernmental outreach and educational activities.

**Sub-Committees:** Finance, Export Competitiveness, & Market Outreach & Education

### Background Information:

The United States is, and has always been, a strong global leader in energy. Its technological leadership in the REEE is equally unsurpassed. We must leverage this advantage to insure the United States fully exploits this emerging multi-trillion dollar global market.

**International REEE Market Background.** REEE contributed \$1.4 trillion to the global economy in 2016, representing 7 percent growth from 2015.<sup>1</sup> Across the world, the REEE sector is now double the value of the airline industry, and equal to apparel. Well over half – 55 percent - of all of the new electrical generating capacity added to the world’s energy systems in 2016 utilizes renewable technologies.<sup>2</sup> Prices are falling rapidly as the technology advances and competition increases, so much so that in many places REEE are the cheapest form of energy. For example, In April 2016, Piyush Goyal, the Minister of State for Power, Coal New & Renewable Energy and Mines of India, stated that solar costs in his country had fallen below that of conventional sources.<sup>3</sup> REEE pricing around the world continues to fall sharply, powering world economic growth with large quantities of low-cost energy.<sup>4</sup>

<sup>1</sup> Advanced Energy Economy, “Advanced Energy Now 2017 Market Report: Global and U.S. Market Revenue 2011-16 and Key Trends in Advanced Energy Growth” (March 2017)(“AEE 2017 Market Report”), available at <http://info.aee.net/aen-2017-market-report>

<sup>2</sup> Eckhouse, “Clean Energy Isn’t Just the Future—It’s the Present” (April 2017), available at <https://www.bloomberg.com/news/photo-essays/2017-04-19/clean-energy-isn-t-just-the-future-it-s-the-present>

<sup>3</sup> <http://www.sciencealert.com/india-says-the-cost-of-solar-power-is-now-cheaper-than-coal>

<sup>4</sup> <https://www.bloombergquint.com/markets/2017/01/11/india-s-solar-prices-set-to-drop-amid-competition-lower-costs>

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**Domestic REEE Industry Background.** In the United States, REEE now comprises a \$200 billion industry, growing at 5 percent per year on average for the last six years and 28 percent over that period.<sup>5</sup> REEE technologies grew over three times faster than the U.S. Gross Domestic Product in 2016, excluding ethanol (affected by low fuel prices overall). REEE is rapidly becoming a leading energy sector employer. Over 3.3 million people are employed in REEE in the U.S., double the number employed in building construction and equal to the number in retail.<sup>6</sup> Just two examples show REEE's importance to U.S. employment: energy efficiency now comprises more than one-third of all energy jobs in the United States,<sup>7</sup> while solar energy contributed 1 in every 50 new jobs last year, and now contributes over 260,000 jobs.<sup>8</sup> Wholesale energy costs of REEE are also continuing to fall, with utility-scale solar and wind power purchase contract pricing falling over 80 percent and over 70 percent, respectively, over the last eight years in the United States<sup>9</sup> and new record-breaking low prices being set in India, Mexico and other countries are becoming a regular occurrence. Energy storage prices have also dropped precipitously- over 70 percent since 2010 the United States.<sup>10</sup> In summary, REEE is providing a large number of jobs and substantial value to the U.S. economy, and all indicators point to continued exponential growth.

**REEE & The Goals of the Administration.** The Energy Plan, with its keen focus on jobs and the economy, is fully consonant with the values provided by REEE. Each of the key components of the Energy Plan would be advanced by U.S. REEE products and services. As one of the fastest-growing segments of the world economy, in which competitors from many other countries are quickly catching up to U.S. products and services, the express support of the U.S. Government is key to market confidence, successful sales, and continued U.S. leadership. The U.S. Government should leverage the tremendous research and development investments it has made in REEE and convert them into jobs and economic growth here at home; failure to do so will allow others to benefit from our nation's hard work, and enable them to dominate the world market for decades to come.

Secretary Pruitt's speech on June 1, 2017 addressing the withdrawal of the U.S. from the Paris Accord was particularly relevant to REEE:

*"Our efforts, Mr. President, as you know, should be on exporting our technology, our innovation, to nations who seek to reduce their CO2 footprint to learn from us. That should be our focus, versus agreeing to unachievable targets that harm our economy and the American people."*

Energy Secretary Perry's recent statement on April 10, 2017, when representing the United States at the G-7 Energy Ministerial, is an example of the kind of statement that helps ensure that U.S. products and services are competitive in the global marketplace:

*"Innovation is also a top priority for the Trump Administration. We are committed to developing, deploying and commercializing breakthrough technologies and developing the*

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<sup>5</sup> AEE 2017 Market Report

<sup>6</sup> AEE 2017 Market Report

<sup>7</sup> DOE, 2017 U.S. Energy and Employment Report, available at <https://energy.gov/articles/doe-releases-second-annual-national-energy-employment-analysis-0>

<sup>88</sup> Solar Foundation, 2016 National Solar Jobs Census, available at <http://www.thesolarfoundation.org/national/>.

<sup>9</sup> Liebreich, Bloomberg New Energy Finance Summit Presentation (April 2017)(citing BNEF and LBNL)("Liebreich").

<sup>10</sup> Liebreich (citing BNEF).

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*necessary policies that will help renewables become competitive with traditional sources of energy.<sup>11</sup>*

The role that REEE products and services are increasingly playing in achieving the Energy Plan's objectives justifies their express recognition—as does the benefit to U.S. competitiveness that recognition of REEE would convey in the global REEE market. The additions to the America First Energy Plan we recommend above, which simply identify the ways in which REEE promote the objectives of the Plan, are intended to further signal U.S. confidence and support of its own products and services to those making buying decisions around the world- for whom that show of support may well be a deciding factor.

The United States is, and has always been, a strong global leader in energy. Its technological leadership in the REEE is equally unsurpassed. We must leverage this advantage to insure the U.S. fully exploits this emerging multi-trillion dollar global market.

### **Expected Impact on Export Competitiveness:**

Increase credibility and competitiveness of U.S. REEE in world markets, resulting in increased U.S. market share.

### **Specific Agencies Responsible for Implementation:**

Executive Office of the President; Department of Commerce

### **Metric to Track Success:**

1. REEE citations in U.S. Government public statements on energy, including in the America First Energy Plan
2. Study of foreign country efforts to expand their REEE exports, and recommendations for best practices for U.S. adoption to maintain its competitive edge
3. Increased U.S. REEE exports
4. Increased private sector investment in U.S. REEE

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<sup>11</sup> <https://www.energy.gov/articles/secretary-energy-rick-perry-press-statement-g-7-energy-ministerial>

## Appendix

- We recommend adding the following language to the Energy Plan and to echo these themes in all other U.S. Government public statements on energy:

Sound energy policy begins with the recognition that we have vast untapped domestic energy reserves right here in America. The Trump Administration will embrace the shale oil and gas revolution, as well as new advancements and cost reductions in renewable energy and energy efficiency technologies, all which bring jobs and prosperity to millions of Americans. We must take advantage of the estimated \$50 trillion in untapped shale, oil, and natural gas reserves, and our practically limitless renewable resources, especially those on federal lands that the American people own. Increased use of energy efficiency technologies will also increase economic output and quality of life while lowering costs and reducing burdens on American businesses and households without need for sacrifice. We will use the revenues from energy production to rebuild our roads, schools, bridges and public infrastructure. Less expensive energy will be a big boost to American agriculture, as well. Our leadership in all energy technologies will increase exports in the competitive global marketplace, and support American job growth in these sectors to a greater level than ever before.

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In addition to being good for our economy, boosting domestic energy production from all sources, as well as enhancing energy efficiency, is in America's national security interest. President Trump is committed to achieving energy independence from the OPEC cartel and any nations hostile to our interests. At the same time, we will work with our Gulf allies to develop a positive energy relationship as part of our anti-terrorism strategy.

The updated Energy Plan would read as shown on the following page:

## An America First Energy Plan (*Revised*)

Energy is an essential part of American life and a staple of the world economy. The Trump Administration is committed to energy policies that lower costs for hardworking Americans and maximize the use of American resources, freeing us from dependence on foreign oil.

For too long, we've been held back by burdensome regulations on our energy industry. President Trump is committed to eliminating harmful and unnecessary policies such as the Climate Action Plan and the Waters of the U.S. rule. Lifting these restrictions will greatly help American workers, increasing wages by more than \$30 billion over the next 7 years.

Sound energy policy begins with the recognition that we have vast untapped domestic energy reserves right here in America. The Trump Administration will embrace the shale oil and gas revolution, as well as new advancements and cost reductions in renewable energy and energy efficiency technologies, all which bring jobs and prosperity to millions of Americans. We must take advantage of the estimated \$50 trillion in untapped shale, oil, and natural gas reserves, and our practically limitless renewable resources, especially those on federal lands that the American people own. Increased use of energy efficiency technologies will also increase economic output and quality of life while lowering costs and reducing burdens on American businesses and households without need for sacrifice. We will use the revenues from energy production to rebuild our roads, schools, bridges and public infrastructure. Less expensive energy will be a big boost to American agriculture, as well. Our leadership in all energy technologies will increase exports in the competitive global marketplace, and support American job growth in these sectors to a greater level than ever before.

In addition to being good for our economy, boosting domestic energy production from all sources, as well as enhancing energy efficiency, is in America's national security interest. President Trump is committed to achieving energy independence from the OPEC cartel and any nations hostile to our interests. At the same time, we will work with our Gulf allies to develop a positive energy relationship as part of our anti-terrorism strategy. Lastly, our need for energy must go hand-in-hand with responsible stewardship of the environment. Protecting clean air and clean water, conserving our natural habitats, and preserving our natural reserves and resources will remain a high priority. President Trump will refocus the EPA on its essential mission of protecting our air and water.

A brighter future depends on energy policies that stimulate our economy, ensure our security, and protect our health. Under the Trump Administration's energy policies, that future can become a reality.