The American Renewable Energy and Efficiency Act Introduced by Senator Edward J. Markey (D-Mass.)

Supported by: American Wind Energy Association, National Hydropower Association, Solar Energy Industry Association, American Council for an Energy Efficient Economy, TechNet, New England Clean Energy Council, Natural Resources Defense Council, Union of Concerned Scientists, League of Conservation Voters, The Pew Charitable Trusts, Environment America, Sierra Club, The Wilderness Society, First Wind, Ameresco, National Wildlife Foundation, Conservation Law Foundation

Overwhelming majorities of Americans from both parties and across the country want greater access to clean energy. And they want government policies that support greater deployment of these technologies.

The American Renewable Energy and Efficiency Act would create huge benefits for consumers, create jobs, and protect the environment by requiring electric utilities to obtain a minimum of 25 percent of their electricity from renewable sources like wind, solar, hydro, geothermal, and biomass by 2025. The bill also requires electric and natural gas utilities to implement energy efficiency programs that would save the equivalent of 15 percent and 10 percent of sales, respectively, by 2025.

Thirty U.S. states and the District of Columbia already have mandatory renewable electricity targets and 24 states have energy efficiency requirements. The American Renewable Energy and Efficiency Act would complement these existing state programs and ensure that the United States is not left behind by the 118 other nations that already have clean energy targets in place.

Analysis of the American Renewable Energy and Efficiency Act and similar previously-introduced legislation found that, if enacted, the bill would:

- Create more than 400,000 jobs
- Lead to energy efficiency improvements that will save the average American household $39 annually. Cumulative consumer savings through 2030 would be nearly $90 billion
- Spur more than $200 billion in new capital investments in renewable energy technology, leading to nearly a quadrupling of renewable electricity production by 2025
- Reduce carbon dioxide emissions by 480 million metric tons annually by 2025, the equivalent output of 120 coal-fired power plants.[1]

The time has come to move forward aggressively in deploying renewable energy in the United States. Technology costs are plummeting and deployment around the world is skyrocketing. Solar panel prices have declined by 75 percent over the last three years, and wind power has become cheaper than conventional energy from the grid in New England and many other parts of the United States. Nearly half of all electrical capacity installed worldwide last year was

renewable energy. Clean energy companies are expected to generate almost $2 trillion in revenues globally between 2012 and 2018. The American Renewable Energy and Efficiency Act would ensure that the United States is at the forefront of this economic boom and that American consumers enjoy the benefits.

Summary of the American Renewable Energy and Efficiency Act

- The bill requires retail electric suppliers — defined as utilities that sold more than 1 million megawatt hours (MWh) of electricity to consumers for purposes other than resale during the preceding year — to meet a certain percentage of their load with electricity generated from renewable resources and electricity savings. The renewable electricity requirement begins at 6 percent in 2015 and gradually rises to 25 percent in 2025. The separate energy efficiency savings requirement begins at 1 percent of sales for electric utilities in 2015 and rises to a cumulative savings total of 15 percent in 2025. For natural gas utilities, the energy savings requirement begins at 0.5 percent in 2015 and rises to a cumulative savings total of 10 percent in 2025.

- The bill defines renewable resources to include wind, biomass, solar, geothermal, certain hydropower projects, marine and hydrokinetic renewable energy, landfill gas, and biogas and biofuels derived from eligible biomass. Biomass fuel is eligible if it yields a 50 percent reduction in lifecycle greenhouse gas emissions as compared to a combined cycle natural gas electric generating facility when calculated over a 20-year life cycle. An electric supplier's requirement is reduced in proportion to any portion of its electricity sales that is generated from certain existing hydroelectric facilities and combustion of municipal solid waste.

- Electric and natural gas suppliers can demonstrate achievement of electricity and natural gas savings relative to business-as-usual projections through a variety of efficiency measures, including savings achieved through combined heat and power, fuel switching, reductions in distribution system loses, codes and standards, and reductions in end-use energy consumption attributable to equipment upgrades. Suppliers may meet the efficiency standards either by achieving savings directly or by using bilateral contracts to purchase savings achieved by other distribution companies, states, or third-party efficiency providers.

- To encourage greater deployment of distributed generation technologies, like small wind and rooftop solar, these projects are eligible for two credits for

each MWh produced. Renewable projects developed on Indian lands and on disturbed brownfield sites are eligible for two credits for each MWh produced.

- Utilities will be issued one renewable electricity credit for each MWh of electricity produced from a renewable resource. These credits may be sold, traded, banked for future use, or submitted for compliance. In lieu of renewable electricity credits and demonstrated electricity savings, retail electric suppliers and natural gas suppliers may submit an alternative compliance payment equal to $50 per credit (5 cents per kilowatt hour).