#### Testimony of Robert F. Kennedy, Jr. President Waterkeepers Alliance before the Select Committee on Energy Independence and Global Warming December 1, 2011

Thank you, Chairman Markey and Ranking Member Sensenbrenner, for the opportunity to testify today on the critical choices facing our nation regarding energy independence and global warming. My name is Robert F. Kennedy, Jr. and I appreciate the opportunity to share my experience and perspective on this vital issue. We stand now on the cusp of a new global era, one that will be defined by the international race to build the energy systems of the future. There are three drivers to this race: economic security, national security, and environmental security. Around the globe, the race is on to develop the technologies of tomorrow that will foster new economic growth, allow the freedom to power that economy with homemade energy, and reduce the dangerous pollution that threatens public health and environmental stability. I believe whichever nation wins this race will hold the reins of power for decades to come. I want that nation to be ours—and I believe it will be.

America has become the envy of the world by rejecting false choices—the false choice of economic growth versus labor rights; the false choice of jobs versus clean water and air; the false choice of private enterprise versus public health. Time and again, America has chosen to invest simultaneously in the three pillars of a strong economy, good paying jobs, and a cleaner environment. That choice lies at the foundation of America's great strength.

But right now, faced with our next great challenge as a nation, I'm hearing the same old story from many big corporations and trade association lobbyists. They are saying we can't do it again. They claim that cleaning up pollution will send jobs overseas, that government programs will stifle innovation, that addressing global warming will cost too much. These are the same sky-is-falling claims we heard when it was time to stop acid rain, when it was time to take lead out of gasoline and paint or toxic pollution out of our waterways.

But the sky never fell. And industry's cost estimates have proven grossly exaggerated time and again. We've proven that America can build an economy that is second to none at the same time it delivers quality of life that is the envy of the world. That in fact, the two go hand in hand. Look at the 40 year history of the Clean Air Act, a bipartisan law put in place to clean up air pollution. Analyses show the benefits of the Clean Air Act outweigh the costs by as much as a 40-1 margin, with an estimated \$21.7 trillion in net benefits to the American people.<sup>1</sup>

The big polluters want you to think that we can't do it again, but I still believe in America. We can lead the 21<sup>st</sup> Century and build a new prosperity that extends the America Dream to all segments of our society. But we can't do that by ignoring the realities we face or succumbing to

<sup>&</sup>lt;sup>1</sup> Environmental Protection Agency, 1997. The Benefits and Costs of the Clean Air Act, 1970 to 1990. http://www.epa.gov/oar/sect812/1970-1990/chptr1 7.pdf

the politics of false choices. The stakes are simply too high. The threat of global warming is too real, energy independence too urgent, and the economic potential of clean energy too great.

#### **Climate Security**

The impacts of global warming are already being felt and the worst is yet to come. Heattrapping pollution is disrupting the climate on which our prosperity is based. As global temperatures rise we are witnessing more severe floods, droughts, and wildfires; we are witnessing rising sea levels and increased ocean acidity; and we are witnessing increased risk of food insecurity and the spread of infectious disease. These consequences of our reliance on fossil fuels have already begun in many parts of the world, including here at home. But they will become increasingly severe until we transition to a clean energy economy.

Make no mistake; this is not a matter of conjecture. The U.S. National Academy of Sciences, the body established by Congress in 1863 to provide expert advice to the federal government, reviewed the evidence earlier this year and concluded that climate change is happening, is caused by humans and "poses significant risks for—and in many cases is already affecting—a broad range of human and natural systems." Furthermore, all of the allegations leveled against climate scientists last year based on a handful of stolen email messages have been thoroughly debunked in a series of independent reviews.

Meanwhile, the damages from extreme weather events made more likely by global warming continue to mount. Just this year the floods in Pakistan killed thousands and displaced millions while the heat wave and wildfires in Russia resulted in more than a thousand premature deaths and disrupted global food supplies. The United States was relatively lucky, but not immune. More than 50 Americans were killed by floods in Iowa and Tennessee this spring. More than 150 U.S. weather stations tracked by NOAA for long-term climate monitoring recorded their hottest summer ever this year. Not only was it hot during the day, but it didn't cool off as much as it used to at night, with 278 weather stations setting an all time record high for night time temperatures this summer. This is a particular threat to the health of our senior citizens and vulnerable communities that can't escape the heat.

Public health leaders have recognized the threat posed by global warming to the health of our citizens. The American Medical Association, the American Academy of Pediatrics, the American Lung Association, the American Public Health Association, and dozens of other health organizations wrote to Congress earlier this year warning that "As temperatures rise, more Americans will be exposed to conditions that can result in illness and death due to respiratory illness, heat- and weather-related stress and disease carried by insects. These health issues are likely to have the greatest impact on our most vulnerable communities, including children, older adults, those with serious health conditions and the most economically disadvantaged."<sup>2</sup>

Military leaders have recognized that the impacts of global warming threaten our nation's overall security by putting at risk our public health, economic stability, and national security. It is an

<sup>&</sup>lt;sup>2</sup> Letter from the American Academy of Pediatrics et al., November 18, 2010 (attached).

urgent and growing crisis that must be addressed. Fortunately, the solution to this crisis—a clean energy future—will also help rebuild our economy while providing energy security, a vital component of national security.

# **Energy Independence and National Security**

America's dependence on oil is a threat to our national security and our economy. Growing demand and shrinking domestic production means America is importing more and more oil each year - much of it from the world's most unfriendly or unstable regions. The United States spends nearly \$1 billion a day on foreign oil. That's more than \$200,000 per minute -- \$13 million per hour—of American dollars flowing to fuel foreign economies, not our own. Much of this national treasure is feeding hostile regimes directly or indirectly. And our excessive dependence on oil drives up global oil prices, enriching Iran by an extra \$100 million per year.

Adding insult to injury, burning oil exacerbates global warming, which military and intelligence experts including the Pentagon, the State Department, and the CIA recognize poses serious environmental, social, political and military risks. Climate change is often cited as a "threat multiplier," adding new layers of instability to already unstable scenarios—like food shortages or population migration.

In 2009, the CNA Military Advisory Board concluded that "overdependence on imported oil by the U.S. and other nations—tethers America to unstable and hostile regimes, subverts foreign policy goals, and requires the U.S. to stretch its military presence across the globe." As such, a "major shift in energy policy and practice is required."

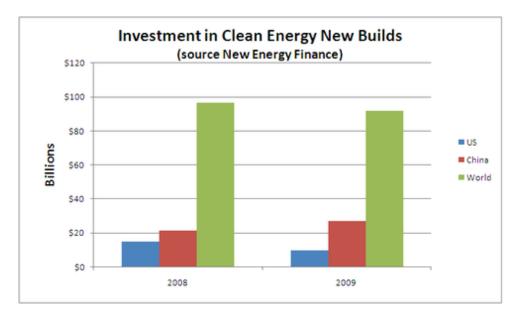
That major policy shift will mean breaking our addiction to oil. With only three percent of known oil reserves, we cannot drill or import our way to energy independence. The only real solution is to reduce our demand for oil and therefore the economic and security risks of dependence on imports. It starts with increasing the efficiency of our cars and trucks, and developing more renewable sources of energy.

# **Clean Energy and Economic Security**

We have an opportunity to become the leaders of the new energy economy, and capture the jobs that will come with it, but only if we take decisive action now. The race has already begun and China and Germany and India aren't waiting for us to overcome political gridlock. They are barreling ahead building the energy economy of the future. For example, in 2009, China announced a plan to invest \$738 billion in clean energy over the next decade, while the U.S. still has no long-term clean energy strategy.<sup>3</sup>

According to Bloomberg New Energy Finance, China is currently ranked number one in clean energy asset investment and last year outspent the US nearly three to one on new build renewable energy projects (see graph below):

<sup>&</sup>lt;sup>3</sup> <u>http://www.businessweek.com/news/2010-07-20/china-may-spend-738-billion-on-clean-energy-projects.html</u>



If we continue to delay our own commitment to the clean energy economy, the U.S. will lose its competitive position in global markets for products that were originally developed here. Instead of leading the clean energy market, we will lurch from dependence on foreign oil to dependence on foreign solar energy modules.

This is not due to a lack of domestic renewable energy resources. We have abundant wind, solar, and bioenergy potential. What we lack is a coherent policy. Trillions of investment dollars are waiting on the sidelines. These dollars will be invested once there are clear signals about the clean energy future. These clear signals can be provided by Clean Air Act standards, strong domestic Renewable Energy and Energy Efficiency Standards (RES, EERS), and federal support for efficiency standards and codes. Energy efficiency alone can reduce our nation's energy bill \$1.2 trillion by 2020 while creating almost 1 million new jobs, according to McKinsey and Company. And a report released by the Blue Green Alliance (BGA) and the Renewable Energy Policy Project showed that a 10-year effort to introduce 185,000 megawatts of renewables – the rough equivalent of a 15 percent RES – had the potential to create 850,000 jobs with \$160 billion of investments in manufacturing.

#### How Do We Get There?

The failure to complete a comprehensive clean energy and climate bill means we must effectively use the tools in hand to cut emissions and drive clean energy investment while continuing to press for legislation to enhance these tools and make them more comprehensive.

Despite setbacks in Congress, the administration has taken important steps to address global warming upon which we can build. Since taking office less than two years ago, President Obama laid the groundwork for a clean energy economy that will make America more prosperous and secure while dramatically reducing emissions of carbon dioxide, methane, and other greenhouse gases that are warming the planet.

The administration has taken many significant actions, using its authority to improve the gas mileage and cut the emissions of new cars and trucks; bring down the cost of highly insulated windows; promote renewable energy such as wind and solar; and foster energy efficiency. Each of these steps will lower energy costs and cut carbon emissions either directly or by reducing the need for the electricity production that is responsible for more than a third of our nation's greenhouse gases.

Taken together, these administrative actions are set to cut carbon emissions in the United States by hundreds of millions of tons per year over the next two decades. Clearly, they are no substitute for the legislation we need to help reduce our national carbon footprint and drive investment in clean energy. They are, however, an important start.

### **Exercising Administrative Authority**

As we look for new opportunities to pass climate and clean energy legislation, we need to use – and defend – the laws already on the books – principally the Clean Air Act – that direct the executive branch to curb dangerous pollution and move us to a cleaner energy future.

In 2007, in a landmark case brought by states and environmental organization, the U.S. Supreme Court ruled that carbon dioxide and other greenhouse gases are "air pollutants" and must be curbed under the Clean Air Act if the Environmental Protection Agency (EPA) determines, based on the science, that they endanger public health or welfare. In December 2009, after an exhaustive science-based analysis, the EPA found that emissions of carbon dioxide, methane, and four other greenhouse gases are reasonably anticipated to endanger both the health and welfare of current and future generations.

The Clean Air Act is a genuine American success story and one of the most effective tools in U.S. history for protecting public health. It has sharply reduced pollution from automobiles, industrial smokestacks, utility plants and major sources of toxic chemicals and particulate matter since its passage in 1970. The law has saved tens of thousands of lives each year by reducing harmful pollutants that cause or contribute to asthma, emphysema, heart disease and other potentially lethal respiratory ailments. In economic terms, the Clean Air Act has saved tens of trillions of dollars by keeping Americans out of hospitals and in schools and on the job. And it has helped create new industries and green jobs that annually generate billions of dollars in revenue.

Building on this success story, the EPA has already taken several steps to begin reducing carbon emissions through the Clean Air Act, beginning with motor vehicles. In future steps, the EPA needs to address the carbon pollution of the nation's electric power plants and other big industries.

### Feeding Our Fuel Tanks and Minding Our Tailpipes

Our cars and trucks make up a majority of the transportation sector, which is responsible for 27 percent of carbon emissions in the United States. We can cut those emissions by 80 percent by 2050 by using cleaner and more fuel-efficient vehicles, improving public transit, and designing

communities that reflect the way people choose to live, work, and shop.

In April of this year, the EPA and the National Highway Traffic Safety Administration (NHTSA) issued a clean car standard that requires new cars and light trucks to cut their carbon emissions 30 percent compared to vehicles of just a few years ago, and get on average 35.5 miles per gallon of gas by 2016. These standards build on California's landmark clean car law. This measure will cut carbon emissions by nearly 1 billion tons over the lifetime of the cars produced under the standards, while saving some 75 billion gallons of oil. That will save an average of \$3,000 for each car owner, reduce our need for imported oil, and make a down payment on the carbon reductions we need to turn back climate change. But we need to go even further and set a goal of 60 miles per gallon for passenger cars by 2025.

By next July 2011, the EPA and the NHTSA plan to issue similar carbon pollution and fuel economy standards for new medium- and heavy-weight commercial trucks and buses, beginning with model year 2014.

The standards are expected to cut carbon emissions by a total of 250 million tons—saving more than 21 billion gallons of fuel—over the life of the vehicles produced during the first five years of the program.

### **Taking Stock of Industrial Carbon Emissions**

More than half of the carbon dioxide, methane and other greenhouse gases generated in this country come from about 10,000 large coal-fired power plants, refineries, cement makers, and other industrial users of large amounts of fossil fuels.

In 2007 Congress directed EPA to require large facilities to monitor and report that pollution. Last January, the EPA began requiring owners of these facilities to document their greenhouse gas emissions. Beginning early next year, we will have the first annual, facility-level picture of our country's heat-trapping pollution.

This will provide a national inventory of industrial greenhouse gas emission levels—a tool that can be used by businesses and the EPA—to help determine how to reduce those pollutants cost effectively.

Also, beginning in January 2011, the largest new and expanded facilities will have to show that they are using the best available and affordable technology to reduce greenhouse gas emissions. For the first half of the year, this measure will apply only to new and expanded facilities that are already required to use best technology to reduce emissions of other air pollutants, such as sulfur dioxide, and that will also increase their yearly output of greenhouse gases by 75,000 tons or more.

Beginning next July, the same must be shown for any new facility that will kick out 100,000 tons or more in greenhouse gases per year, or any expanded existing facilities that will increase their annual greenhouse gas emissions by 75,000 tons or more.

These are first steps toward treating greenhouse gases like the destructive pollutants they are, identifying the sources of those pollutants, and, eventually, enforcing limits on them. EPA needs to build on this beginning by setting national performance standards for both new and existing power plants and other industrial categories that contribute most to our country's carbon pollution.

# **Repowering with Renewable Energy**

America needs to accelerate the transition of its power generation system to clean and homegrown renewable electricity that we can harness from the sun, wind and other renewable resources. An immediate step Congress should take to help this transition is extending the Treasury Grant Program (TGP) for renewable electricity projects. Congress should also enact a Renewable Electricity Standard (RES) to support the transition over the longer term.

The TGP, also called the "Section 1603 Program," has been critical to the continued construction of renewable electricity projects across the country during the recession. The program unfortunately expires at the end of this year. Congress enacted the TGP as an alternative to the Section 48 federal renewable investment tax credit, which become essentially worthless to businesses as a result of the recession. According to a Lawrence Berkeley National Laboratory study released earlier this year, the TGP may have enabled as much as 2,400 MW of wind power projects (equivalent to about 5 power plants), which is estimated to have supported over 55,000 jobs. The economic factors that led to problems with the Section 48 tax credits are still present, so it is critical that Congress extend the TGP for two years.

An RES, which requires electricity providers to supply a minimum percentage of the power they sell from renewable resources, is essential to cleaning up our power generation sector. The standard would also save consumers money on their energy bills and create clean energy jobs. According to an analysis by the Union of Concerned Scientists, a 20 percent by 2020 RES would achieve \$31.8 billion in cumulative savings by 2030 and generate 185,000 jobs by 2020. Congress should enact an RES that requires electricity providers to supply 20 percent of their power from renewable resources by 2020, and 25 percent by 2025.

### Building Better Light Bulbs, Windows, and Motors

Residential and commercial buildings account for roughly 40 percent of the nation's energy use, 70 percent of national electricity consumption, and—through the coal-fired generators that produce half of our electricity—a huge share of the country's carbon emissions.

In order to reduce demand for electricity and directly shave our carbon footprint, the administration, through the U.S. Department of Energy (DOE), has issued new standards aimed at improving the efficiency of the equipment we use in our daily lives at home and on the job. This program was established by Congress in the 1970s in recognition of well-documented

market barriers to cost-effective energy efficiency and it is paying large dividends in reduced energy costs and air pollution.

In May of this year, the DOE instituted a program to link builders, architects, renovators, and other high-volume buyers of windows directly to more than 40 suppliers of energy-efficient windows. The program gives these buyers the advantages of volume pricing, helping to bring down the windows' cost—the main barrier to using energy-efficient windows. New highly-insulating windows can reduce heat loss by up to 40 percent, saving on heating bills and keeping homes cooler in summer, therefore also reducing air conditioning costs.

The DOE has set a new residential water heater standard. Encouraging heat pump technology, which saves up to 50 percent on energy use when compared to conventional water heaters, the standard will cut carbon dioxide emissions by 160 million tons and save consumers \$10 billion in energy use over the next 30 years.

In August, NRDC and other energy efficiency advocates negotiated an agreement with major appliance manufacturers belonging to the Association of Home Appliance Manufacturers (AHAM) on new, more stringent energy efficiency standards for home appliances. Products meeting the new standards will cut the typical household's electricity use by 6 percent, saving consumers nearly \$30 billion in electricity costs for products purchased by 2030, according to an analysis by the American Council for an Energy-Efficient Economy. The DOE estimates that his agreement could reduce carbon dioxide emissions by 550 million tons over the same period, while saving enough energy to power 4 out of every 10 homes in the country for a year.

Owners of manufactured housing (modular homes and the like) typically pay \$1,600 for electricity and gas each year. Over 30 years, the total bill for those utility costs will likely equal the cost of the home itself. In February, the DOE began developing standards aimed at improving the energy efficiency of such homes, which are becoming increasingly popular in retirement communities. Because they are built in factories under controlled conditions, small improvements in building design and construction process can make a big difference in the overall energy efficiency of manufactured homes, thereby capturing the vast potential for reducing energy use.

In March, the DOE established minimum efficiency standards for small—1/4 horsepower to 3 horsepower—electric motors, used in a multitude of applications on common equipment ranging from air conditioners and refrigerators to air compressors and drills. The new standards apply to all electric motors—domestic or imports—sold in this country after March 2015. The efficiency gains will cut carbon emissions by 112 million tons between 2015 and 2045, as much as 25 million cars produce in one year. By 2045, these standards will eliminate the need for eight new 250-megawatt power plants.

In addition, President Obama has directed federal agencies to walk the talk. In October 2009, the President ordered federal agencies to set specific sustainability goals. Last January, on the basis of those plans, he committed the federal government to cutting its carbon emissions 28 percent by 2020. Beginning that year, all new federal buildings must produce as much energy as they use through cogeneration, solar panels, heat recapture, and other means. Obama has also directed all

federal agencies to reduce carbon emissions from indirect sources such as employee commuting and travel by 13 percent by 2020.

### **Building the Clean Energy Economy**

These are encouraging measures, and provide a roadmap for how we can take America forward into a clean energy future. But they are incomplete. Further progress over the next few years is critical if we are going to win the international race.

But it's not the policies alone that matter. There is a deeper question that will determine our success or failure as a nation. We have a choice to make, a choice whether we believe America can no longer lead, and must only follow. I believe we can lead. I believe success depends on rejecting those voices wedded to the status quo and a policy of denial.

We cannot let the naysayers stand in the way of EPA doing its job to clean up air pollution, setting higher efficiency standards, and choosing renewable energy over the dirty fossil fuels of the past.

We must reject the pessimists who think America's ability to innovate is over. I believe America can unlock the clean energy promise of tomorrow, and I know the American public is looking to its leaders to help make that promise a reality, to once again believe in America's ability to deliver a strong economy and breathable air; to have good local jobs and healthy communities; to create domestically produced, cleaner, safer energy; to move forwards, not backwards.