

CRS Report Summaries

R40147 – Green Buildings

This is a definition and analysis of the cost and benefits of green buildings. It also cites agencies and laws that encourage the building of environmentally neutral structures. Integrating green buildings into our housing market would improve energy costs and environmental appreciation among citizens.

R40175 – Wind Energy: Offshore Permitting

There are many coastal areas where wind energy would be effective in US territory and the continental shelf. However, getting them approved is a difficult balance between federal agencies and state governments. This is so largely because of the Environmental Protection Act, and subsequent regulations, which moved this authority away from the Army Corps of Engineers to where it now lies with other agencies and states. Currently no single agency has authority to spearhead all of this.

R40187 – U.S. Energy: Overview and Key Statistics.

Simply put, this CRS follows the history of energy source and consumption. It follows oil, coal, nuclear and renewable. It also follows some of the pros and cons involving each one.

R40412 – Energy Provisions in the American Recover and Reinvestment Act of 2009

A great deal of the funding in this Act (approx. \$4 billion) goes to Energy Efficiency and Conservation Block Grants. These grants go toward households and communities becoming more environmentally efficient. There are also weatherizing subsidies for households. Money is also supplied to improve electricity transportation and modernization of the grid. About \$1.5 billion is allocated to research in improved fossil fuel collection.

R40523 – Tax Credit Bonds: Overview and Analysis

This is a general evaluation of Tax Credit Bonds and various types of energy conservation bonds. It has to do with raising funds for projects and the tax attached.

R40529 – Biomass: Comparison of Definitions in Legislation Through the 111th Congress

It defines Biomass and also brings up the option of not only growing biomass but also harvesting it from our forests. However, the majority of this report simply covers the various definitions that have been used in legislation and their differences over the years. This could be very helpful in defining how cases worked out at different times because of their definition.

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R40556 – Market-Based Greenhouse Gas Control: Selected Proposals in the 111th Congress

As of May 2010 there have been nine stand-alone proposals that would control greenhouse gas emissions. Some work through caps, taxes, and design elements. Market-based approaches are typically used to try and control these emission regulations.

R40565 – Biomass Resources: The Southeastern United States and the Renewable Electricity Standard Debate. May 2009

A worry with the Renewable Energy Standard (RES) is that if there is a standard created by the federal government we may not have the resources available to meet that standard of renewable energy requirement. Biomass is evidently the largest source of domestic renewable energy. Those in favor of RES look more toward the greater amount of alternate energy that will be used. The south is being targeted in this report as they are so far behind everyone else in effective alternate energy development. There are many suggested methods for using biomass. None of which I'll detail here (pg 5-8). This report follows the feasibility and usefulness of biomass, as well as its effects on prices, etc.

R40662 – Clean Coal Authorizations, Appropriations, and Incentives – Nov 2010

Clean Coal plants put their exhaust back into reserves in the ground. Recently, over \$3 billion has been sequestered for getting CO₂ into the ground after use. The DOE is supporting clean coal research. They are putting money aside to innovate new ways on getting fuel from coal. They continue on, outlining the ways in which money is being supplied to different coal plants. Running low on funds, they are retrofitting old plants to be clean.

R40667 – Anaerobic Digestion: Greenhouse Gas Emission Reduction and Energy Generation – Jan 2011

Anaerobic Digestion technology could be used to turn animal waste into a methane fuel source. Only 150 such plants are operating nationwide at this time. If congress finds this to be a proper methane use it could encourage use by deciding whether the methane use would be a CO₂ offset, whether it is clean energy or carbon gas emissions, working on finance options. However, there is still unclear science whether this is even worth it. The methane isn't as powerful as current fuels, but could provide an alternative. Obstacles to it are lack of economic return, reliability issues, relatively new so no standard, utility collaboration, and maintenance.

R40669 – Energy and Water Development: FY2010 Appropriations – Jan 2010

Provides funding for civil works projects of the Army Corps of Engineers (Corps), the Department of the Interior's Bureau of Reclamation, and the Department of Energy. Spending for alternative energies is increased, including solar. There are many projects focused on improving energy production and usage. It seems to be focused on the usual: security, environment, economy, etc.

WORKING DRAFT

R40670 – Energy Efficiency in Buildings: Critical Barriers and Policy – June 2009

Focus is on reducing CO2 emissions through greater energy efficiency in buildings. Also includes an analysis on a “complete and integrated understanding of the full set of barriers to building efficiency and the range of carbon outcomes they imply.” Hence, this article relates in the fact that there are policies in place that are getting in the way of implementing housing regulations, just like energy regulations.

R40806 – Energy Projects on Federal Lands: Leasing and Authorization – May 2011

It explains the “legal framework for energy leasing and permitting for onshore lands subject to the control of the federal government... It reviews the laws and regulations affecting leasing of federal lands for exploration and production of oil, natural gas, and coal,” etc. This is an article that applies to our project very well.

R40833 – Renewable Energy – A Pathway to Green Jobs? – September 2009

It is likely that as renewable energy becomes more efficient there will be fewer jobs. The way to maximize jobs here is to stress domestic design and manufacture. This requires US investment or it won't happen. This may also require changes in policy to improve incentives for green companies to manufacture here.

R40841 – Assisting Households with the Costs of a Cap-and-Trade Program: Options and Considerations for Congress – October 2009

Without subsidies to companies and households, setting cap-and trade is not a financially viable option. In some cases they have begun to look at different sources of energy to alleviate the financial burden that is set from cap-and-trade policy.

R41493 – Options for a Federal Renewable Electricity Standard – Nov 2010

Renewable energy standards have historically fallen on the state. However, many state standards are expiring by, or before, 2020. Many maintain that for renewable energy to grow above current levels, Federal action needs to come into play more directly. It reviews potential alternate energy availability by energy type (i.e. solar, hydro, etc.). The remainder of the paper debates the ability and aspects of having a Federal Renewable Energy Standard.

R41507 – Energy's Water Demand: Trends, Vulnerabilities, and Management –Jan 2011

Alternative Energy will of necessity consume more water as time passes. A problem here lies in the fact that many of the areas that are most strapped for water also are areas where alternative energy can be used successfully. This report is to help congress understand the effects made in their decisions toward who gets the water and when.

R41573 – Tax-Favored Financing for Renewable Energy Resources and Energy Efficiency – Jan 2011

This is an examination of tax benefits and issues surrounding the tax policy and renewable energy incentives.

WORKING DRAFT

R41618 – Israel's Offshore Natural Gas Discoveries Enhance Its Economic and Energy Outlook – May 2011

Natural Gas has been found offshore of Israel. This will likely help them to be less dependent on others for energy sources. They may even become an exporter.

R41635 – ARRA Section 1603 Grants in Lieu of Tax Credits for Renewable Energy: Overview, Analysis, and Policy Options – Feb 2011

This report analyses whether grants are a better financial alternative to tax credit incentives. It also discusses what the implications would be for letting the grant program expire at the end of 2011, when it's scheduled to. It also provides interesting information on amounts of grant money given to wind and solar energy both by federal and state entities.

R41687 – The Strategic Petroleum Reserve and Refined Product Reserves: Authorization and Drawdown Policy – March 2011

The history, state, and future plans for the Strategic Petroleum Reserve. This was put in place for national security should we be embargoed.

R41720 – Clean Energy Standard: Design Elements, State Baseline Compliance and Policy Considerations – March 2011

This report analyses the questions about the Clean Energy Standard put in place to meet Obama's goal of 80% clean energy by 2035. These questions are about credits, value of compliance payments, preference to renewable generation, and qualifications to be considered clean energy.

R41748 – China and the United States – A Comparison of Green Energy Programs and Policies – March 2011

China has made tremendous strides in increasing their green energy consumption. Alternately, the US does not, according to some critics, have a firm national plan and presence on establishing green energy firmly. Follows the acts and emphasis on the environment that the US has undergone. Infrastructure needs to be further developed to utilize these energy sources.

R41769 – Energy Tax Policy: Issues in the 112th Congress – April 2011

Government encroaching on the energy production market is from the assumption that Government can correct market failures. This is another report about taxes and their effects on the energy market. This is focused on fossil fuel production with some views on alternative.

R41797 – Clean Energy Standard: Potential Qualifying Energy Sources – May 2011

This is an examination of the benefits and issues surrounding a Clean Energy Standard (CES). Essentially it provides a structure and grading system for what is considered to be green energy. Issues surrounding the logistical growth of alternative energy include: technology, electricity transmission, variability, project economics, material cost and supply. The report then discusses the usual suspects to decide whether they are clean enough to be clean energy.

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R41875 – The U.S.-Canada Energy Relationship: Joined at the Well – June 2011

The U.S. and Canada have a great petroleum history and support each other well. This relationship needs to be taken into account when looking at more sources of energy (including alternative and fossil fuel). The ability to build cross-national pipelines could shift the focus that the U.S. has on alternative energies.

R41893 – Master Limited Partnerships: A Policy Option for the Renewable Energy Industry – June 2011

This is similar to the grant report earlier. It is another way of funding renewable energy. The pros and cons are discussed. It shifts the way taxes are enacted.

R41908 – Energy and Water Development FY2012 Appropriations – Aug 2011

This is an overview of the money budgeted to different areas of energy and water development. In the summary it gives a quick rundown on the main considerations.

R41910 – Nuclear Energy Cooperation with Foreign Countries: Issues for Congress – Aug 2011

America is increasingly dependent on other countries for material, etc., for nuclear energy. That grows the worry that there will be transfer of nuclear tech to other countries who are not so kind. In addition, America is losing influence over who gets this technology and when. So there are policies and practices that need to be figured out.

R41912 – The World Bank Group Energy Sector Strategy – July 2011

This is international in scope. It's not focused on American Alternative Energy Development.

R41919 – China's Greenhouse Gas Emissions and Mitigation Policies – July 2011

As the title suggests, this is entirely about China's gas emissions and policies. America is brought into the picture only to discuss the relations between the two countries, especially on this topic. However, page 15 there is a comparative chart of energy usage and where it comes from in both the U.S. and China.

R41953 – Energy Tax Incentives: Measuring Value Across Different Types of Energy Resources – Aug 2011

Renewable energy sources receive more funding proportionally, in the form of tax-related financial support, than the fossil fuel counterpart. Renewables keep going up while Fossil Fuels go down. However, the revenue loss on this funding for renewable energy is higher than for fossil fuels. Pages 13 and 14 have a breakdown of subsidies by fuel type. That could be interesting to have.

WORKING DRAFT

R41954 – U.S. Renewable Electricity Generation: Resources and Challenges – Aug 2011

Focus of this report is to first assess the potential of renewable energy in the states, then to discuss challenges, issues, and barriers that might limit renewable electricity generation deployment. “A number of potential barriers to large-scale deployment exist, including cost, power system integration, intermittency and variability, land requirements, transmission access, possible limits to the availability of key materials and resources, certain environmental impacts, specialized infrastructure requirements, and policy issues. Ultimately, the amount of renewable electricity generation in the U.S. may be dependent on the ability to address these deployment barriers.” The report gives resource and cost estimates for: wind, solar, geothermal, ocean and hydrokinetic, hydro, and biomass.

R41960 – Federal Agency Authority to Contract for Electric Power and Renewable Energy Supply – Aug 2011

This report focuses on contracts for energy from federal agencies. It examines incentives, land usage, and power administration.

RL31865 – The Low Income Home Energy Assistance Program (LIHEAP): Program and Funding – May 2011

Grants are given to the states for citizens. These grants are to help with heating, cooling, crisis assistance, weatherization, and counseling services.

RL33558 – Nuclear Energy Policy – May 2011

This report examines the issues, risks, and incentives associated with the U.S. Nuclear Program. The current administration wishes to increase Nuclear Energy sites as clean energy. They are still seeking to determine good places to dispose of the waste. It examines funding and legislation associated with the energy source.

RL33970 – Greenhouse Gas Emission Drivers: Population, Economic Development and Growth, and Energy Use – March 2010

This report is an analysis of global emissions and the U.S.’s place in them. There are certain policies that the U.S. must adopt to be in accordance with the Copenhagen Accord. It’s there and they are working for a change.

RL34130 – Renewable Energy Programs in the 2008 Farm Bill – March 2011

This is mostly the history and regulation of biofuels. This is applicable should we branch down that direction.

RL34239 – Biofuels Provisions in the 2007 Energy Bill and the 2008 Farm Bill: A Side-by-Side Comparison – Jan 2009

The biofuel programs have been significantly expanded under these bills. This could be very helpful should we need to know both history and regulations on biofuel.

WORKING DRAFT

RS22858 – Renewable Energy R&D Funding History: A Comparison with Funding for Nuclear Energy, Fossil Energy, and Energy Efficiency R&D – Jan 2011

This report is an analysis of where funding has gone in the energy sector during times of relative security and during times of scarcity (e.g. wartime, the 70's, etc.)