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## How Restoration and Expansion of the 1603 Grants Program Could Help Build America's Renewable Energy Infrastructure

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### Introduction

Many Americans are now yearning to create an energy infrastructure with renewable energy at the foundation. Environmental concerns have caused policy makers to join other advocates and provide subsidies for various renewable and energy efficient technologies through the tax code.<sup>1</sup> Part I of this article reviews the history of modern energy tax incentives. Part II discusses the efficacy of the expired grants in lieu of tax credits ("1603 Grants") program that was adopted by the American Recovery and Reinvestment Act of 2009 ("ARRA"), and concludes that the program was effective and should be restored. Part III addresses the possibility of expanding the 1603 Grants program to

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<sup>1</sup> MOLLY F. SHERLOCK, CONG. RESEARCH SERV., RL41227, ENERGY TAX POLICY: HISTORICAL PERSPECTIVES ON AND CURRENT STATUS OF ENERGY TAX EXPENDITURES 1 (2011).

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individuals who wish to pursue renewable energy at their personal residence. The restoration of the 1603 Grant program—and the extension of such grants to individuals—would even the playing field for American families interested in pursuing a greener future and continue progress toward making U.S. energy consumption sustainable over the long term.<sup>2</sup>

## **I. A Brief History of Energy Tax Incentives in the United States**

Interest in renewable energy tax policy has its roots in the Energy Tax Act of 1978 (the “ETA”). Congress realized that it was imperative that the U.S. further develop domestic sources of energy after the Organization of Arab Petroleum Exporting Countries’ oil embargo in 1973.<sup>3</sup> The ETA included substantial reforms related to the residential energy and investment energy tax credits as well as tax subsidies for the use of alcohol as an alternative fuel.<sup>4</sup>

In the 1980’s, the U.S. took a hands-off approach, opting to not use the tax system to advocate for energy policy.<sup>5</sup> Most energy tax provisions passed in the 1970’s were left to expire as scheduled.<sup>6</sup> However, Congress did leave one tax provision in place to spur investment in alternative energy: the investment tax credit for purchase of energy property (which included solar, geothermal, ocean geothermal, and biomass investments).<sup>7</sup> In the 1990’s Congress again began to promote

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<sup>2</sup> See generally American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, § 1603, 123 Stat. 115, 364-66 (2009) (hereinafter ARRA).

<sup>3</sup> SHERLOCK, *supra* note 1, at 3.

<sup>4</sup> See Energy Tax Act of 1978, Pub. L. No. 95-618, §§ 101, 221, 301, 92 Stat. 3174, 3175-80, 3185-86, 3194-3201 (1978).

<sup>5</sup> SHERLOCK, *supra* note 1, at 4-5.

<sup>6</sup> *Id.* at 5.

<sup>7</sup> *Id.*

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alternative energy production through a number of tax provisions—such as incentives for alcohol and unconventional fuels.<sup>8</sup>

As the U.S. saw the cost of oil pushing up over \$30 a barrel on average in the 2000s,<sup>9</sup> Congress was again confronted with U.S. dependence on foreign energy sources and hoped to find a way to negotiate comprehensive energy legislation that would fix the problem. Between the Working Families Tax Relief Act of 2004 and the Energy Policy Act of 2005, the U.S. implemented new deductions for the construction of energy efficient commercial buildings, a credit for electricity produced from certain renewable resources, credits for the construction of new energy efficient homes, a credit for existing home owners who install energy-efficient property, credits for home appliances, credits for the installation of solar panels on residential property, an increased credit percentage benefit to businesses installing solar panels, and a new alternative motor vehicle tax credit.<sup>10</sup> Then, in a big shift, the ARRA combined a tax credit with upfront subsidization in the 1603 Grants program to create a new way to stimulate alternative energy infrastructure.<sup>11</sup>

## **II. The Rise and Fall of the 1603 Grants Program**

The ARRA, enacted in 2009, was meant to lift the U.S. economy out of recession.<sup>12</sup> The 1603 Grant program came at a time when Congress perceived a weak equity market for renewable energy

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<sup>8</sup> See SHERLOCK, *supra* note 1, at 6. This time period also resulted in a variety of lesser known provisions, including one which incentivized the production of electricity from poultry waste. Ticket to Work and Work Incentives Improvement Act of 1999, Pub. L. No. 106-170, § 507, 113 Stat. 1860, 1922-23 (1999) (codified as amended at 25 U.S.C. §45(d) (2011)).

<sup>9</sup> Tim McMahon, *Historical Crude Oil Prices*, INFLATION DATA (April 13, 2012), [http://inflationdata.com/Inflation/Inflation\\_Rate/Historical\\_Oil\\_Prices\\_Table.asp](http://inflationdata.com/Inflation/Inflation_Rate/Historical_Oil_Prices_Table.asp).

<sup>10</sup> See Energy Policy Act of 2005, Pub. L. No. 109-58, §§ 1331-1335, 1337, 1341, 119 Stat. 594, 1020-36, 1038-49 (2005).

<sup>11</sup> ARRA § 1603, 123 Stat. at 364-66; Working Families Tax Relief Act of 2004, Pub. L. No. 108-311, § 313, 118 Stat. 1166, 1181 (2004).

<sup>12</sup> See H.R. REP. NO. 111-16, at 2 (2009).

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projects because of the financial crisis; the ARRA sped up the process for obtaining capital in alternative energy projects to address those concerns.<sup>13</sup> The ARRA included the 1603 Grant program, which has since spurred private investment in alternative energy projects into the billions.<sup>14</sup> The 1603 Grant program provides a payment equal to 30% of the cost of specified energy property that a business places in service.<sup>15</sup> Energy property is defined as: (1) solar energy property; (2) equipment used to create energy from geothermal deposits; (3) fuel cell or micro turbine property; (4) combined heat and power system property (cogeneration); (5) certain small wind property; and (6) thermal energy source property.<sup>16</sup>

The 1603 Grant program was a derivative of a tax incentive that began in the ETA.<sup>17</sup> Before the 1603 Grant program, a business could privately invest in alternative energy and then file its business tax return at the end of its fiscal year to obtain an offset against federal income taxes in the form of a tax credit.<sup>18</sup> Only taxpayers who had income in a year could obtain the benefits of the tax credits; and those benefits were delayed until the taxpayers filed their tax returns.<sup>19</sup> Many investors lacked the capital to invest in renewable energy after seeing their dollars disappear in the financial crisis and were looking for a way to monetize the path to renewable energy.<sup>20</sup> The 1603 Grant program was a solution to the private sector's concerns because it provided investors with an initial

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<sup>13</sup> PHILLIP BROWN & MOLLY F. SHERLOCK, CONG. RESEARCH SERV., RL41635, ARRA SECTION 1603 GRANTS IN LIEU OF TAX CREDITS FOR RENEWABLE ENERGY: OVERVIEW, ANALYSIS, AND POLICY OPTIONS 16 (2011) (hereinafter BROWN & SHERLOCK).

<sup>14</sup> See U.S. DEP'T OF THE TREASURY, OVERVIEW AND STATUS UPDATE OF THE §1603 PROGRAM 1 (2013) available at <http://www.treasury.gov/initiatives/recovery/Documents/STATUS%20OVERVIEW.pdf>.

<sup>15</sup> ARRA § 1603(b)(2)(A), 123 Stat. at 364.

<sup>16</sup> ARRA § 1603, 123 Stat. at 364-66.

<sup>17</sup> See BROWN & SHERLOCK, *supra* note 13, at 2 (citing 26 U.S.C. § 48 (Supp. III 2007-2010)).

<sup>18</sup> See *id.*

<sup>19</sup> See generally I.R.S. PUB. 334, TAX GUIDE FOR SMALL BUSINESS (FOR INDIVIDUALS WHO USE SCHEDULE C OR C-EZ) (2012) available at <http://www.irs.gov/pub/irs-pdf/p334.pdf>.

<sup>20</sup> See BROWN & SHERLOCK, *supra* note 13, at 4-5.

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cash infusion to: (1) obtain additional financing for renewable energy projects in many cases; and (2) decrease the overall project cost to a price point that allowed a satisfactory return on investments.

Appendix A shows a rough calculation of a \$100,000 wind or solar project with offsets from tax and grant incentives. Appendix A estimates that an investor would be able to invest in a renewable energy project and obtain tax and grant benefits to decrease the cost of the acquired property by 55% of the market cost. Given this level of price reduction, it would seem that many U.S. businesses utilized the 1603 Grant program to increase the return on investment.

As of March 21<sup>th</sup>, 2013, the Department of Treasury reported that 18.2 billion dollars had been awarded through 1603 Grants.<sup>21</sup> The Treasury also estimated that the 1603 Grant program induced 62.9 billion dollars of private sector investment into the renewable energy market.<sup>22</sup> However, critics argue that the 1603 Grant program may not be as good as it sounds.<sup>23</sup> Many contend that projects which received 1603 Grants would have been built even if the 1603 Grants had not been available.<sup>24</sup> With that line of reasoning the 1603 Grants just left the government to foot some of the bill without inducing new investment in alternative energy projects.<sup>25</sup> This may be partly true but there is no solid evidence which can verify this as fact.<sup>26</sup> After the Tax Relief,

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<sup>21</sup> See U.S. DEP'T OF THE TREASURY, *supra* note 14, at 1.

<sup>22</sup> *Id.*

<sup>23</sup> See, e.g., BROWN & SHERLOCK, *supra* note 13, at 21-22.

<sup>24</sup> *Id.*

<sup>25</sup> *Id.* at 21-22.

<sup>26</sup> DANIEL STEINBERG ET AL., U.S. DEP'T OF ENERGY, PRELIMINARY ANALYSIS OF THE JOBS AND ECONOMIC IMPACTS OF RENEWABLE ENERGY PROJECTS SUPPORTED BY THE \$1603 TREASURY GRANT PROGRAM vi (2012) *available at* <http://www.nrel.gov/docs/fy12osti/52739.pdf>.

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Unemployment Reauthorization, and Job Creation Act of 2010 renewed the program for a year, it was allowed to expire on December 31, 2011.<sup>27</sup>

The 1603 Grant Program shows that Americans are willing to invest their own money in renewable sources of energy to build a greener future. Congress should re-instate the 1603 Grant program to continue private investment into renewable energy sources. The 1603 Grant program has not only created new alternative energy sources but has also created an estimated 52,000 to 75,000 renewable energy manufacturing and construction jobs.<sup>28</sup> It would seem that continued investment would also trickle down into the research and development departments and, over time, help reduce the cost of alternative energy products through technological innovations.

### **III. Expanding the 1603 Program to Private Homeowners**

In addition to reinstating the 1603 Grant Program, Congress should expand it to allow individuals to apply for grant funding.<sup>29</sup> This is not a novel concept; the Commonwealth of Massachusetts has a tax credit program where residential homeowners may receive up to one thousand dollars for installation of renewable energy source property.<sup>30</sup>

The new 1603 Grant Program could accept applications from individual homeowners in the same way businesses apply. Then grants could be awarded to homeowners based on their eligibility

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<sup>27</sup> Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010, Pub. L. No. 111-312, § 707, 124 Stat. 3296, 3312 (2010).

<sup>28</sup> STEINBERG, *supra* note 26, at v.

<sup>29</sup> Midwest Renewable Energy Association, a non-profit 501(c)(3), is a great example of organizations which have received great individual interest in sustainable energy. The organization holds a yearly energy fair to educate the public about renewable energy and its benefits. In 2013, the organization expects around 20,000 people to join them at their three day education fair. Michael Tortorello, *Solar Power to the People*, N.Y. TIMES, June 20, 2013, at D1.

<sup>30</sup> MASS. GEN. LAWS ANN. ch. 62, § 6(d) (West 2013). See Massachusetts Tax Form 2012 Instructions Schedule EC available at <http://www.mass.gov/dor/docs/dor/forms/inctax12/addl/sched-ec.pdf>.

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and in accordance with the allocated budget. Depending on the popularity, the percentage awarded per project could be decreased from 30% to 20% in order give more families access to the grant program. In order to pay for this expansion, Congress could look into reforming the complicated depletion tax rules which benefit the oil and gas industry.<sup>31</sup>

### Conclusion

There needs to be a joint effort between businesses and families to make the U.S. less dependent on foreign energy sources with harmful environmental effects. Just as the 1603 Grant program stimulated billions of dollars of investment from businesses, the program has the potential to do the same thing with American families. Re-enactment of the 1603 Grant program, coupled with widened eligibility, would be a great step forward for U.S. stimulation of private investment in a greener America.

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<sup>31</sup> See generally 26 U.S.C. §§ 611-617 (2011). Reform of oil and gas tax subsidies has support from the Oval Office. In a June 25<sup>th</sup> speech, President Obama noted that “[a]nd because billions of your tax dollars continue to. Still, subsidize some of the most profitable corporations in the history of the world, my budget once again calls for Congress to end the tax breaks for big oil companies and invest in the clean energy companies that will fuel our future.” Meg Shreve, *Obama Reiterates Call for End of Oil and Gas Tax Subsidies*, 140 Tax Notes 49 (July 1, 2013).

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## Appendix A

### Tax Effects to a Business Spending \$100,000 to Purchase Renewable Solar or Wind Energy Property

#### I. Tax Benefit Calculation

1603 Grants (30% of energy property cost basis) <sup>32</sup>	\$30,000
Bonus Depreciation** <sup>33</sup>	\$12,750
Other Depreciation Benefit <sup>34</sup>	\$12,750
<b>Tax Benefit from Acquisition of Energy* Property</b>	<b>\$55,000</b>

#### II. Net Cost After Tax Benefit

Market Cost of Solar or Wind Property Before Tax/Grant Savings	\$100,000
Estimated Tax/Grant Savings	\$55,000
<b>Actual Taxpayer Cost for Acquisition of Energy Property</b>	<b>\$45,000</b>

**Note:** When a business invests in property, such as a solar panel, the business is allowed to depreciate the property placed in service. So, along with the grants, a business will be able to decrease its taxable income and receive a tax benefit on top of the grant just for placing the property in service. The two depreciation items shown in this analysis, Bonus Depreciation and Other Depreciation represent how much money will be saved in taxes by fully depreciating the property. The provisions listed result in the ability to fully depreciate the property placed in service in the year of acquisition.

\* Assumes an average 30% income tax rate.

\*\* As required, only a 50% basis adjustment for amounts received by grant to energy property is made pursuant to IRC § 50(c)(3).

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<sup>32</sup> See I.R.C. § 48.

<sup>33</sup> See I.R.C. § 168(k)

<sup>34</sup> See IRC § 179

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