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Job Creation Estimates Through Proposed Inflation Reduction Act

Modeling Impacts of Climate, Energy, and
Environmental Provisions of Bill

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Sources for Budget Figures and Methodology for Inflation Reduction Act Job Creation Estimates

SOURCES FOR BUDGET FIGURES

The expenditures modeled in this analysis include all of the climate, energy, and environmental justice programs in the Inflation Reduction Act (IRA) of 2022. This amounts to more than 100 total programs, each with a distinct section number in the legislation. Dollar figures for the tax credits come from the Congressional Budget Office and the Joint Committee on Taxation. All other dollar figures come from the legislation itself.

Specific references include the following:

Tax credit scores from the Congressional Budget Office and the Joint Committee on Taxation: https://www.cbo.gov/system/files/2022-08/hr5376_IR_Act_8-3-22.pdf

Text of the Inflation Reduction Act of 2022: https://www.democrats.senate.gov/imo/media/doc/inflation_reduction_act_of_2022.pdf

Line-item summary of the IRA programs modeled in this analysis: https://docs.google.com/document/d/1PpmSTgaA7gQ_hX2Sjpf04tsrD1l8p5MRtFrFyb7pzQ/edit

Spreadsheet tabulation of the IRA programs modeled in this analysis: <https://docs.google.com/spreadsheets/d/1iHbr4Ph3cD7r30Z093pWUMV2P1kLhywAeW2UilVp09U/edit#gid=0>

METHODOLOGY FOR EMPLOYMENT ESTIMATES

All figures have been estimated on the basis of calculations generated within the 2022 dollar year for the IMPLAN U.S. input/output tables. The IMPLAN U.S. input/output model features 546 industries within the U.S. economy. The data in the model are from 2019.

Time Dimension in Measuring Job Creation

Any type of spending activity creates employment over a given amount of time. To understand the impact on jobs of a given spending activity, one must therefore incorporate a time dimension into the measurement of employment creation. For example, a project that creates 100 jobs that last for one year only needs to be distinguished from another project that creates 100 jobs that continue for 10 years each. It is important to keep this time dimension in mind in any assessment of the impact on job creation of any investment activity.

There are two straightforward ways in which one can express such distinctions. One is through measuring “job years.” This measures cumulative job creation over the total number of years that jobs have been created. Thus, an activity that generates 100 jobs for 1 year would create 100 job years. By contrast, the activity that produces 100 jobs for 10 years would generate 1,000 job years. The other way to report the same figures would be in terms of jobs-per-year. Through this measure, we show the year-

to-year breakdown of the overall level of job creation. Thus, with the 10-year project we are using in our example, we could express its effects as creating 100 jobs per year for 10 years.

In the following tables, we report employment creation both in terms of jobs-per-year—i.e. average annual job creation—as well as cumulative job years. For the purposes of the present analysis, we assume, for simplicity, that all programs in the IRA will operate for 10 years. In fact, most programs in the bill are scheduled to operate for 10 years. But a minority of programs in the bill are scheduled to operate for less than 10 years. Note that our assumption of a 10-year duration for all programs does not affect the figures we report for total budgets or total job-years.

Details on Employment Estimates

For in-depth discussions of our methodological approach to estimating job creation through investments in clean energy and infrastructure, see:

Pollin et al. (2014) *Green Growth*, <https://www.americanprogress.org/issues/green/reports/2014/09/18/96404/green-growth/>;

Pollin et al. (2015) *Global Green Growth*, https://www.unido.org/sites/default/files/2015-05/GLOBAL_GREEN_GROWTH_REPORT_vol1_final_0.pdf.

Leveraging Public Funds to Expand Overall Public and Private Spending

Private spending incentive programs. For all tax credit and related programs in which public spending is designed to incentivize further private spending, we assume that the overall level of public spending will be matched equally by the same level of private spending—i.e. \$2 in total spending for every dollar of public funding. For example, we assume that the proposed \$7,500 tax credit per electric vehicle would incentivize another \$7,500 in private spending for electric vehicle purchases, for a total of \$15,000 in overall spending. The literature on leveraging public sector funds for incentivizing private spending considers a large number of variables and presents a range of estimates as to the likely private spending levels that result from such leveraging programs. We deliberately assume here a relatively low leveraging rate for the relevant IRA programs.¹

Loan guarantee programs. The Department of Energy's loan guarantee programs stipulate the loan authority associated with each level of appropriation. This includes a \$250 billion loan authority associated with a \$5 billion appropriation for the larger DOE program and a \$40 billion authority based on a \$3.6 billion appropriation. For the Tribal Loan Guarantee program, we assume the authority is \$3.8 billion based on an appropriation of \$75 million. The program thus assumes an approximate 50-to-1 leveraging ratio.²

1 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/438763/bis-15-340-relationship-between-public-and-private-investment-in-R-D.pdf; <https://www.cgdev.org/sites/default/files/assessing-leverage-climate-investment-funds.pdf>

2 Discussion of the larger DOE program is at <https://prospect.org/environment/inflation-reduction-bill-uses-public-finance-to-stoke-energy-investment/>. We note that this 50-to-1 leveraging ratio for the DOE loan guarantees is close to the 47-to-1 ratio resulting from the DOE's 1705 loan guarantee program within the 2009 American Recovery and Reinvestment Act. See Pollin et al. (2014), pp. 260 – 263 for discussion on the this earlier loan guarantee program.

TOTAL JOB CREATION ESTIMATES

Summary Figures

	Average Annual Budget and Job Creation Figures over 10 Years			Total Budget and Job-Years Figures	
	Public Spending	Total Spending (= <i>public</i> + <i>private spending</i>)	Annual Job Creation	Total Spending	Total Job Creation, Job-Years
Electricity Programs	\$21.4 billion	\$66.3 billion	573,177	\$663 billion	5,731,771
Transportation Programs	\$3.3 billion	\$5.6 billion	65,821	\$56 billion	658,212
Building Programs	\$4.8 billion	\$9.4 billion	91,082	\$94 billion	910,819
Manufacturing Programs	\$6.7 billion	\$12.8 billion	106,032	\$127.7 billion	1,060,320
Environmental Justice and Community Resilience Programs	\$1.1 billion	\$1.1 billion	14,892	\$11 billion	148,916
Lands Programs	\$1.1 billion	\$1.1 billion	22,582	\$10.9 billion	225,817
Agriculture Programs	\$2.2 billion	\$2.2 billion	38,573	\$22 billion	385,732
TOTALS	\$40.6 billion	\$98.4 billion	912,159	\$984 billion	9,121,587

ELECTRICITY
Public Spending Only Programs

**1A) Job Creation per \$1 Million in Spending:
Direct, Indirect, Induced, and Total Job Creation**

	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
Greenhouse Gas Reduction Fund: <i>Sec. 60103</i>	1.8	2.0	3.1	6.8
Rural Electric Cooperative Loans <i>Sec. 22044</i>	2.9	2.8	3.8	9.6
National Laboratory Investments <i>Sec. 50144</i>	3.2	3.2	4.9	11.3
Hydrogen and Fuel Cell Technologies <i>Sec. 22002</i>	2.2	2.9	3.9	9.0
Underutilized Renewable Energy Technologies <i>Sec. 22002</i>	2.3	2.2	4.0	8.5
Uranium Investments <i>Sec. 50173</i>	1.8	2.6	3.1	7.5
Interstate Transmission Line Grants <i>Sec. 501152</i>	3.2	2.3	4.3	9.8
Interregional Transmission Planning Investments <i>Sec. 50153</i>	3.2	3.1	4.2	10.5

1B) ELECTRICITY Public Spending Only Programs:
Total Jobs Created with Budgetary Figures

	1) Total Jobs/ \$1 Million (from Table 1A)	Average Annual Job Creation Over 10 Years			Job Years Created, All Years	
		2) Public Spending	3) Total Spending (= public + private spending)	4) Job Creation per Year (=column 1 x column 3)	5) Total Budget	6) Total Job Years (=column 4 x 10)
Greenhouse Gas Reduction Fund <i>Sec. 60103</i>	6.8	\$2.7 billion	\$2.7 billion	18,451	\$27 billion	184,512
Rural Electric Cooperative Loans <i>Sec. 22044</i>	9.6	\$970 million	\$970 million	9,329	\$9.7 billion	93,295
National Laboratory Investments <i>Sec. 50144</i>	11.3	\$200 million	\$200 million	2,253	\$2.0 billion	22,527
Hydrogen and Fuel Cell Technologies <i>Sec. 22002</i>	9.0	\$100 million	\$100 million	900	\$1.0 billion	9,004
Underutilized Renewable Energy Technologies <i>Sec. 22002</i>	8.5	\$17.7 million	\$17.7 million	151	\$177 million	1,511
Uranium Investments <i>Sec. 50173</i>	7.5	\$70 million	\$70 million	524	\$700 million	5,245
Interstate Transmission Line Grants <i>Sec. 501152</i>	9.8	\$76 million	\$76 million	747	\$760 million	7,473
Interregional Transmission Planning Investments <i>Sec. 50153</i>	10.5	\$10 million	\$10 million	105	\$100 million	1,050

ELECTRICITY
Public and Incentivized Private Spending Programs

**2A) Job Creation per \$1 Million in Spending:
Direct, Indirect, Induced, and Total Job Creation**

	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
Renewable Energy Production Tax Credit <i>Sec. 13101</i>	1.8	2	3.1	6.8
Clean Energy Investment Tax Credit: <i>Sec. 13102</i>	1.8	2.0	3.1	6.8
Nuclear Production Tax Credit <i>Sec. 13105</i>	3.9	2.9	4.4	11.2
Energy Investment Tax Credit <i>Sec. 13102</i>	1.8	2.0	3.1	6.8
Clean Electricity Production Tax Credit <i>Sec. 13701</i>	1.8	2.0	3.1	6.8
Carbon Capture Tax Credit <i>Sec. 13104</i>	9.0	2.2	7.0	18.3
Cost Recovery for Energy Technology <i>Sec. 13703</i>	2.5	2.9	3.8	9.2
Rural Renewable Energy Loans <i>Sec. 22001</i>	1.8	2.0	3.1	6.8
Transmission Facility Loans <i>Sec. 50151</i>	2.0	1.8	3.2	7.0

**2B) ELECTRICITY Public and Incentivized Private Spending Programs:
Total Jobs Created with Budgetary Figures**

	1) Total Jobs/ \$1 Million <i>(from Table 2A)</i>	Average Annual Job Creation Over 10 Years			Job Years Created, All Years	
		2) Public Spending	3) Total Spending <i>(= public + private spending)</i>	4) Job Creation per Year <i>(=column 1 x column 3)</i>	5) Total Budget	6) Total Job Years <i>(=column 4 x 10)</i>
Renewable Energy Production Tax Credit <i>Sec. 13101</i>	6.8	\$5.1 billion	\$10.2 billion	69,789	\$102 billion	697,891
Clean Energy Investment Tax Credit <i>Sec. 13102</i>	6.8	\$5.1 billion	\$10.2 billion	69,510	\$102 billion	695,103
Nuclear Production Tax Credit <i>Sec. 13105</i>	11.2	\$3 billion	\$6.0 billion	67,344	\$60 billion	673,440
Energy Investment Tax Credit <i>Sec. 13102</i>	6.8	\$1.4 billion	\$2.8 billion	19,093	\$28 billion	190,826
Clean Electricity Production Tax Credit <i>Sec. 13701</i>	6.8	\$1.1 billion	\$2.2 billion	15,313	\$22 billion	153,131
Carbon Capture Tax Credit <i>Sec. 13104</i>	18.3	\$323 million	\$646 million	11,787	\$6.46 billion	117,874
Cost Recovery for Energy Technology <i>Sec. 13703</i>	9.2	\$62.4 million	\$125 million	1,143	\$1.2 billion	11,432
Rural Renewable Energy Loans <i>Sec. 22001</i>	6.8	\$100 million	\$200 million	1,367	\$2.0 billion	13,668
Transmission Facility Loans <i>Sec. 50151</i>	7.0	\$200 million	\$400 million	2,802	\$4.0 billion	28,022

ELECTRICITY
Loan Guarantee Programs

**3A) Job Creation per \$1 Million in Spending:
Direct, Indirect, Induced and Total Job Creation**

	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
Tribal Energy Loan Guarantees <i>Sec. 50145</i>	2.9	2.8	3.8	9.6
Clean Energy Loan Guarantees <i>Sec. 50141</i>	2.9	2.8	3.8	9.6
Energy Infrastructure Reinvestments <i>Sec. 50144</i>	2.9	2.8	3.8	9.6

**3B) ELECTRICITY Loan Guarantee Programs:
Total Jobs Created with Budgetary Figures**

		Average Annual Job Creation Over 10 Years			Job Years Created, All Years	
		1) Total jobs/ \$1 Million (from Table 3A)	2) Public Budget	3) Total Spending (= public + private spending)	4) Job Creation per Year (=column 1 x column 3)	5) Total Budget
Tribal Energy Loan Guarantees <i>Sec. 50145</i>	9.6	\$7.5 million	\$380 million	3,655	\$3.8 billion	36,548
Clean Energy Loan Guarantees <i>Sec. 50141</i>	9.6	\$360 million	\$4.0 billion	38,472	\$40 billion	384,720
Energy Infrastructure Reinvestments <i>Sec. 50144</i>	9.6	\$500 million	\$25.0 billion	240,450	\$250 billion	2,404,500

TRANSPORTATION
Public Spending Only Programs

**4A) Job Creation per \$1 Million in Spending:
Direct, Indirect, Induced and Total Job Creation**

	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
USPS Clean Fleet Investments <i>Sec. 70002</i>	4.8	2.6	4.8	12.2
Zero-Emission Heavy-Duty Vehicle Investments <i>Sec. 60101</i>	4.8	2.6	4.8	12.2
Low-Emission Aviation Grants <i>Sec. 13203</i>	5.0	3.4	4.3	12.8
Clean Port Investments <i>Sec. 60102</i>	3.7	3.6	4.5	11.7
Neighborhood Access and Equity Grants <i>Sec. 60501</i>	11.7	3.2	4.8	19.7
Biofuels Investments <i>Sec.60108</i>	4.6	3.6	5.6	13.9

**4B) TRANSPORTATION Public Spending Only Programs:
Total Jobs Created with Budgetary Figures**

	1) Total Jobs/ \$1 Million <i>(from Table 4A)</i>	Average Annual Job Creation Over 10 Years			Job Years Created, All Years	
		2) Public Spending	3) Total Spending <i>(= public + private spending)</i>	4) Job Creation per Year <i>(=column 1 x column 3)</i>	5) Total Budget	6) Total Job Years <i>(=column 4 x 10)</i>
USPS Clean Fleet Investments <i>Sec. 70002</i>	12.2	\$300 million	\$300 million	3,667	\$3.0 billion	36,666
Zero-Emission Heavy-Duty Vehicle Investments <i>Sec. 60101</i>	12.2	\$100 million	\$100 million	1,222	\$1.0 billion	12,222
Low-Emission Aviation Grants <i>Sec. 13203</i>	12.8	\$29.7 million	\$29.7 million	380	\$297 million	3,803
Clean Port Investments <i>Sec. 60102</i>	11.7	\$300 million	\$300 million	3,517	\$3.0 billion	35,174
Neighborhood Access and Equity Grants <i>Sec. 60501</i>	19.7	\$305 million	\$305 million	5,998	\$3.05 billion	59,980
Biofuels Investments <i>Sec. 60108</i>	13.9	\$1.5 million	\$1.5 million	21	\$15 million	208

TRANSPORTATION
Public and Incentivized Private Spending Programs

**5A) Job Creation per \$1 Million in Spending:
 Direct, Indirect, Induced, and Total Job Creation**

	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
New EV Tax Credit <i>Sec. 13401</i>	1.3	3.4	3.3	8.0
Used EV Tax Credit <i>Sec. 13402</i>	1.3	3.4	3.3	8.0
Commercial EV Tax Credit <i>Sec. 13403</i>	4.8	2.6	4.8	12.2
Biodiesel Tax Credits <i>Secs. 13201 & 13202</i>	6.2	3.7	4.5	14.3
Clean Fuel Production Tax Credit <i>Sec. 13704</i>	6.2	3.7	4.5	14.3
EV Charging / Alt Fuel Tax Credit <i>Sec. 13404</i>	3.1	2.5	4.1	9.7
Aviation Fuel Tax Credit <i>Sec. 13203</i>	5.0	3.4	4.3	12.8

**5B) TRANSPORTATION Public and Incentivized Private Spending Programs:
Total Jobs Created with Budgetary Figures**

	1) Total Jobs/ \$1 Million <i>(from Table 5A)</i>	Average Annual Job Creation Over 10 Years			Job Years Created, All Years	
		2) Public Spending	3) Total Spending <i>(= public + private spending)</i>	4) Job Creation per Year <i>(=column 1 x column 3)</i>	5) Total Budget	6) Total Job Years <i>(=column 4 x 10)</i>
New EV Tax Credit <i>Sec. 13401</i>	8.0	\$754 million	\$1.5 billion	12,019	\$15 billion	120,191
Used EV Tax Credit <i>Sec. 13402</i>	8.0	\$135 million	\$269 million	2,147	\$2.69 billion	121,469
Commercial EV Tax Credit <i>Sec. 13403</i>	12.2	\$358 million	\$717 million	8,758	\$7.17 billion	87,583
Biodiesel Tax Credits <i>Secs. 13201 & 13202</i>	14.3	\$563 million	\$1.125 billion	16,143	\$11.25 billion	161,430
Clean Fuel Production Tax Credit <i>Sec. 13704</i>	14.3	\$295 million	\$589 million	8,455	\$5.89 billion	84,546
EV Charging / Alt Fuel Tax Credit <i>Sec. 13404</i>	9.7	\$174 million	\$348 million	3,368	\$3.48 billion	33,683
Aviation Fuel Tax Credit <i>Sec. 13203</i>	12.8	\$4.9 million	\$9.8 million	125	\$98 million	1,255

BUILDINGS
Public Spending Only Programs

**6A) Job Creation per \$1 Million in Spending:
Direct, Indirect, Induced, and Total Job Creation**

	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
Home Electrification and Energy Efficiency Rebates: Training for contractors <i>Sec. 50123</i>	2.6	3.4	3.8	9.7
Affordable Housing Resilience and Efficiency Investments <i>Sec. 30002</i>	2.6	3.4	3.8	9.7
Efficient Building Code Adoption Grants <i>Sec. 50131</i>	2.6	3.4	3.8	9.7
Federal Building Investments <i>Sec. 60502</i>	2.6	3.4	3.8	9.7

**6B) BUILDINGS Public Spending Only Programs:
Total Jobs Created with Budgetary Figures**

	1) Total Jobs/ \$1 Million <i>(from Table 6A)</i>	Average Annual Job Creation Over 10 Years			Job Years Created, All Years	
		2) Public Spending	3) Total Spending <i>(= public + private spending)</i>	4) Job Creation per Year <i>(=column 1 x column 3)</i>	5) Total Budget	6) Total Job Years <i>(=column 4 x 10)</i>
Home Electrification and Energy Efficiency Rebates: Training for contractors <i>Sec. 50123</i>	9.7	\$20 million	\$20 million	194	\$200 million	1,942
Affordable Housing Resilience and Efficiency Investments <i>Sec. 30002</i>	9.7	\$100 million	\$100 million	971	\$1.0 billion	9,710
Efficient Building Code Adoption Grants <i>Sec. 50131</i>	9.7	\$100 million	\$100 million	971	\$1.0 billion	9,710
Federal Building Investments <i>Sec. 60502</i>	9.7	\$25 million	\$25 million	243	\$250 million	2,427

BUILDINGS
Public and Incentivized Private Spending Programs

**7A) Job Creation per \$1 Million in Spending:
Direct, Indirect, Induced, and Total Job Creation**

	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
Residential Clean Electricity Tax Credit <i>Sec. 13302</i>	2.6	3.4	3.8	9.7
Residential Energy Efficiency Tax Credit <i>Sec. 13301</i>	2.6	3.4	3.8	9.7
New Energy Efficient Home Tax Credit <i>Sec. 13304</i>	2.6	3.4	3.8	9.7
Commercial Energy Efficiency Tax Credit Deduction <i>Sec. 13303</i>	2.6	3.4	3.8	9.7
Home Electrification and Energy Efficiency Rebates: Whole-house energy efficiency retrofit rebates <i>Sec. 50121</i>	2.6	3.4	3.8	9.7
Home Electrification and Energy Efficiency Rebates: Electrification rebates <i>Sec. 50123</i>	2.6	3.4	3.8	9.7

7B) BUILDINGS Public and Incentivized Private Spending Programs: Total Jobs Created with Budgetary Figures

	1) Total Jobs/ \$1 Million <i>(from Table 7A)</i>	Average Annual Job Creation Over 10 Years			Job Years Created, All Years	
		2) Public Spending	3) Total Spending <i>(= public + private spending)</i>	4) Job Creation per Year <i>(=column 1 x column 3)</i>	5) Total Budget	6) Total Job Years <i>(=column 4 x 10)</i>
Residential Clean Electricity Tax Credit <i>Sec. 13302</i>	9.7	\$2.2 billion	\$4.4 billion	42,765	\$44 billion	427,650
Residential Energy Efficiency Tax Credit <i>Sec. 13301</i>	9.7	\$1.2 billion	\$2.5 billion	24,179	\$25 billion	241,788
New Energy Efficient Home Tax Credit <i>Sec. 13304</i>	9.7	\$204 million	\$409 million	3,967	\$4.09 billion	39,673
Commercial Energy Efficiency Tax Credit Deduction <i>Sec. 13303</i>	9.7	\$36.2 million	\$72.4 million	703	\$724 million	7,030
Home Electrification and Energy Efficiency Rebates: whole- house energy efficiency retrofit rebates <i>Sec. 50121</i>	9.7	\$430 million	\$860 million	8,350	\$8.6 billion	83,503
Home Electrification and Energy Efficiency Rebates: Electrification rebates <i>Sec. 50123</i>	9.7	\$450 million	\$900 million	8,739	\$9.0 billion	87,386

MANUFACTURING
Public Spending Only Programs

**8A) Job Creation per \$1 Million in Spending:
Direct, Indirect, Induced, and Total Job Creation**

	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
Low-Carbon Materials Investments 1 <i>Sec. 60112</i>	2.7	3.4	4.2	10.3
Low-Carbon Materials Investments 2 <i>Sec. 60116</i>	2.7	3.4	4.2	10.3
Low-Carbon Materials Investments 3 <i>Sec. 60503, Sec. 70006</i>	2.7	3.4	4.2	10.3
Low-Carbon Materials Investments 4 <i>Sec. 60504</i>	2.7	3.4	4.2	10.3
Low-Carbon Materials Investments 5 <i>Sec. 60506</i>	2.7	3.4	4.2	10.3
Defense Production Act <i>Sec. 30001</i>	2.6	3.4	4.2	10.3

**8B) MANUFACTURING Public Spending Only Programs:
Total Jobs Created with Budgetary Figures**

	1) Total Jobs/ \$1 Million (from Table 8A)	Average Annual Job Creation Over 10 Years			Job Years Created, All Years	
		2) Public Spending	3) Total Spending (= <i>public</i> + <i>private</i> <i>spending</i>)	4) Job Creation per Year (=column 1 x column 3)	5) Total Budget	6) Total Job Years (=column 4 x 10)
Low-Carbon Materials Investments 1 <i>Sec. 60112</i>	10.3	\$25 million	\$25 million	258	\$250 million	2,577
Low-Carbon Materials Investments 2 <i>Sec. 60116</i>	10.3	\$10 million	\$10 million	103	\$100 million	1,031
Low-Carbon Materials Investments 3 <i>Sec. 60503, Sec. 70006</i>	10.3	\$215 million	\$215 million	2,216	\$2.2 billion	22,159
Low-Carbon Materials Investments 4 <i>Sec. 60504</i>	10.3	\$97.5 million	\$97.5 million	1,005	\$1.0 billion	10,049
Low-Carbon Materials Investments 5 <i>Sec. 60506</i>	10.3	\$200 million	\$200 million	2,061	\$2.0 billion	20,613
Defense Production Act <i>Sec. 30001</i>	10.3	\$50 million	\$50 million	515	\$500 million	5,153

MANUFACTURING
Public and Incentivized Private Spending Programs

**9A) Job Creation per \$1 Million in Spending:
Direct, Indirect, Induced, and Total Job Creation**

	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
EV Manufacturing Grants <i>Sec. 50143</i>	1.3	3.4	3.2	7.9
Clean Manufacturing Investment Tax Credit <i>Sec. 13501</i>	2.5	2.9	3.8	9.2
Wind, Solar, and Battery Manufacturing Production Tax Credit <i>Sec. 13502</i>	2.5	2.9	3.8	9.2
EV Manufacturing Loans <i>Sec. 50142</i>	1.3	3.4	3.3	8.0
Industrial Emissions Reduction Investments <i>Sec. 50161</i>	2.6	3.4	4.2	10.3
Hydrogen Production Tax Credit <i>Sec. 13204</i>	0.6	1.9	2.2	4.7

**9B) MANUFACTURING Public and Incentivized Private Spending Programs:
Total Jobs Created with Budgetary Figures**

		Average Annual Job Creation Over 10 Years			Job Years Created, All Years	
		1) Total Jobs/ \$1 Million (from Table 9A)	2) Public Spending	3) Total Spending (= public + private spending)	4) Job Creation per Year (=column 1 x column 3)	5) Total Budget
EV Manufacturing Grants <i>Sec. 50143</i>	7.9	\$200 million	\$400 million	3,151	\$2.2 billion	31,510
Clean Manufacturing Investment Tax Credit <i>Sec. 13501</i>	9.2	\$625.5 million	\$1.3 billion	11,459	\$12.5 billion	114,592
Wind, Solar, and Battery Manufacturing Production Tax Credit <i>Sec. 13502</i>	9.2	\$3.1 billion	\$6.1 billion	56,100	\$61.2 billion	560,995
EV Manufacturing Loans <i>Sec. 50142</i>	8.0	\$300 million	\$600 million	4,782	\$6.0 billion	47,815
Industrial Emissions Reduction Investments <i>Sec. 50161</i>	10.3	\$581.2 million	\$1.2 billion	11,980	\$11.6 billion	119,803
Hydrogen Production Tax Credit <i>Sec. 13204</i>	4.7	\$1.3 billion	\$2.6 billion	12,402	\$29.0 billion	124,024

ENVIRONMENTAL JUSTICE
Public Spending Only Programs

**10A) Job Creation per \$1 Million in Spending:
Direct, Indirect, Induced, and Total Job Creation**

	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
Climate Pollution Reduction Grants <i>Sec. 60114</i>	6.9	2.7	5.3	14.8
Environmental and Climate Justice Block Grants <i>Sec. 60201</i>	3.1	3.5	4.6	11.1
Methane Reduction Investments <i>Sec. 60113</i>	6.9	2.7	5.3	14.8
Chief Readiness Officer Investments <i>Sec. 70001</i>	3.1	3.5	4.6	11.1
Tribal and Native Hawaiian Climate Resilience Investments <i>Sec. 8000</i>	3.1	3.5	4.6	11.1
Air Pollution Reduction Investments <i>Sec. 60104</i>	6.9	2.7	5.3	14.8
Funding for Environmental Data and Enforcement <i>Sec. 60401</i>	6.9	2.7	5.3	14.8
Low Emissions Electricity Program <i>Sec. 60107</i>	2.9	2.8	3.8	9.6
Superfund Reinstatement <i>Sec. 13601</i>	6.9	2.7	5.3	14.8
Black Lung Disability Trust Fund Extension <i>Sec. 13901</i>	3.1	3.5	4.6	11.1

10B) ENVIRONMENTAL JUSTICE Public Spending Only Programs:
Total Jobs Created with Budgetary Figures

	1) Total Jobs/ \$1 Million (from Table 10A)	Average Annual Job Creation Over 10 Years			Job Years Created, All Years	
		2) Public Spending	3) Total Spending (= public + private spending)	4) Job Creation per Year (=column 1 x column 3)	5) Total Budget	6) Total Job Years (=column 4 x 10)
Climate Pollution Reduction Grants <i>Sec. 60114</i>	14.8	\$500 million	\$500 million	7,420	\$5.0 billion	74,196
Environmental and Climate Justice Block Grants <i>Sec. 60201</i>	11.1	\$300 million	\$300 million	3,341	\$3.0 billion	33,410
Methane Reduction Investments <i>Sec. 60113</i>	14.8	\$155 million	\$155 million	2,300	\$1.55 billion	23,001
Chief Readiness Officer Investments <i>Sec. 70001</i>	11.1	\$50 million	\$50 million	557	\$500 million	5,568
Tribal and Native Hawaiian Climate Resilience Investments <i>Sec. 8000</i>	11.1	\$41.2 million	\$41.2 million	459	\$412 million	4,588
Air Pollution Reduction Investments <i>Sec. 60104</i>	14.8	\$39.1 million	\$39.1 million	580	\$391 million	5,802
Funding for Environmental Data and Enforcement <i>Sec. 60401</i>	14.8	\$10.2 million	\$10.2 million	151	\$102 million	1,514
Low Emissions Electricity Program <i>Sec. 60107</i>	9.6	\$8.7 million	\$8.7 million	84	\$87 million	837
Superfund Reinstatement <i>Sec. 13601</i>	14.8	-	-	-	-	-
Black Lung Disability Trust Fund Extension <i>Sec. 13901</i>	11.1	-	-	-	-	-

LANDS
Public Spending Only Programs

**11A) Job Creation per \$1 Million in Spending:
Direct, Indirect, Induced, and Total Job Creation**

	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
Coastal Climate Resilience Investments <i>Sec. 40001</i>	12.1	3.1	5.9	21.1
Non-Federal Forest Conservation Grants				
Urban and Community Forestry Assistance Program <i>Sec. 23003</i>	12.1	3.1	5.9	21.1
Forest Legacy Program <i>Sec. 23003</i>	12.1	3.1	5.9	21.1
Federal Forest Restoration Investments <i>Sec. 23001</i>	12.1	3.1	5.9	21.1
Public Lands Conservation Investments <i>Sec. 50221</i>	12.1	3.1	5.9	21.1
Environmental Reviews <i>Sec. 50301</i>	12.1	3.1	5.9	21.1
NOAA Equipment, Facilities, and Research <i>Sec. 40002</i>	12.1	3.1	5.9	21.1
Drinking water/wastewater/stormwater <i>Sec. 50231</i>	5.4	3.1	4.9	13.5
Non-Federal Forest Grants <i>Sec. 23002</i>	12.1	3.1	5.9	21.1
Fish and Wildlife Investments <i>Sec. 60301</i>	12.1	3.1	5.9	21.1

**11B) LANDS Public Spending Only Programs:
Total Jobs Created with Budgetary Figures**

	1) Total Jobs/ \$1 Million (from Table 11A)	Average Annual Job Creation Over 10 Years			Job Years Created, All Years	
		2) Public Spending	3) Total Spending (= public + private spending)	4) Job Creation per Year (=column 1 x column 3)	5) Total Budget	6) Total Job Years (=column 4 x 10)
Coastal Climate Resilience Investments <i>Sec. 40001</i>	21.1	\$260 million	\$260 million	5,478	\$2.6 billion	54,777
Non-Federal Forest Conservation Grants						
Urban and Community Forestry Assistance Program <i>Sec. 23003</i>	21.1	\$150 million	\$150 million	3,160	\$1.5 billion	31,602
Forest Legacy Program <i>Sec. 23003</i>	21.1	\$70 million	\$70 million	1,475	\$700 million	14,748
Federal Forest Restoration Investments <i>Sec. 23001</i>	21.1	\$215 million	\$215 million	4,530	\$2.15 billion	45,296
Public Lands Conservation Investments <i>Sec. 50221</i>	21.1	\$100 million	\$100 million	2,107	\$1.0 billion	21,068
Environmental Reviews <i>Sec. 50301</i>	21.1	\$89.5 million	\$89.5 million	1,886	\$895 million	18,856
NOAA Equipment, Facilities, and Research <i>Sec. 40002</i>	21.1	\$71 million	\$71 million	1,496	\$710 million	14,958
Drinking water/wastewater/stormwater <i>Sec. 50231</i>	13.5	\$57.5 million	\$57.5 million	774	\$575 million	7,743
Non-Federal Forest Grants <i>Sec. 23002</i>	21.1	\$55 million	\$55 million	1,159	\$550 million	11,587
Fish and Wildlife Investments <i>Sec. 60301</i>	21.1	\$24.6 million	\$24.6 million	518	\$246 million	5,183

AGRICULTURE
Public Spending Only Programs

**12A) Job Creation per \$1 Million in Spending:
Direct, Indirect, Induced, and Total Job Creation**

	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
Farmland Conservation:				
Environmental Quality Incentives Program <i>Sec. 21001</i>	9.0	3.5	5.2	17.7
Regional Conservation Partnership Program <i>Sec. 21001</i>	9.0	3.5	5.2	17.7
Conservation Stewardship Program <i>Sec. 21001</i>	9.0	3.5	5.2	17.7
Agriculture Conservation Easement Program <i>Sec. 21001</i>	9.0	3.5	5.2	17.7
Agricultural Conservation Technical Assistance <i>Sec. 21002</i>	12.1	3.1	5.9	21.1
Biofuel Production Grants <i>Sec. 22003</i>	6.3	3.5	5	14.8

**12B) AGRICULTURE Public Spending Only Programs:
Total Jobs Created with Budgetary Figures**

	1) Total Jobs/ \$1 Million (from Table 12A)	Average Annual Job Creation Over 10 Years			Job Years Created, All Years	
		2) Public Spending	3) Total Spending (= public + private spending)	4) Job Creation per Year (=column 1 x column 3)	5) Total Budget	6) Total Job Years (=column 4 x 10)
Farmland Conservation:						
Environmental Quality Incentives Program <i>Sec. 21001</i>	17.7	\$845 million	\$845 million	14,939	\$8.45 billion	149,386
Regional Conservation Partnership Program <i>Sec. 21001</i>	17.7	\$675 million	\$675 million	11,933	\$6.75 billion	119,332
Conservation Stewardship Program <i>Sec. 21001</i>	17.7	\$325 million	\$325 million	5,746	\$3.25 billion	57,456
Agriculture Conservation Easement Program <i>Sec. 21001</i>	17.7	\$140 million	\$140 million	2,475	\$1.4 billion	24,750
Agricultural Conservation Technical Assistance <i>Sec. 21002</i>	21.1	\$130 million	\$130 million	2,739	\$1.3 billion	27,388
Biofuel Production Grants <i>Sec. 22003</i>	14.8	\$50 million	\$50 million	742	\$500 million	7,420

TOTAL JOB CREATION ESTIMATES

Summary Figures

	Average Annual Budget and Job Creation Figures over 10 Years			Total Budget and Job-Years Figures	
	Public Spending	Total Spending (= <i>public</i> + <i>private spending</i>)	Annual Job Creation	Total Spending	Total Job Creation, Job Years
Electricity Programs	\$21.4 billion	\$66.3 billion	573,177	\$663 billion	5,731,771
Transportation Programs	\$3.3 billion	\$5.6 billion	65,821	\$56 billion	658,212
Building Programs	\$4.8 billion	\$9.4 billion	91,082	\$94 billion	910,819
Manufacturing Programs	\$6.7 billion	\$12.8 billion	106,032	\$127.7 billion	1,060,320
Environmental Justice and Community Resilience Programs	\$1.1 billion	\$1.1 billion	14,892	\$11 billion	148,916
Lands Programs	\$1.1 billion	\$1.1 billion	22,582	\$10.9 billion	225,817
Agriculture Programs	\$2.2 billion	\$2.2 billion	38,573	\$22 billion	385,732
TOTALS	\$40.6 billion	\$98.4 billion	912,159	\$984 billion	9,121,587

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