

# Job Creation Estimates for Colorado Through Inflation Reduction Act

Modeling State-Level Impacts of Climate,  
Energy, and Environmental Provisions of Bill

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OCTOBER 2022

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# Sources for State-Level Budget Figures and Methodology for Inflation Reduction Act Job Creation Estimates

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## SOURCES FOR STATE-LEVEL 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](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](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\\_hX2Sjpf04tsrD1I8p5MRtFrYb7pzQ/edit](https://docs.google.com/document/d/1PpmSTgaA7gQ_hX2Sjpf04tsrD1I8p5MRtFrYb7pzQ/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

We estimated state-level budgetary allocations for each individual program within the national IRA as the weighted average of the share of U.S. population and share of U.S. GDP for each state as of 2019. Thus for Colorado, its population equaled 1.7 percent of U.S. population and its GDP equaled 1.9 percent of U.S. GDP. We therefore allocated 1.8 percent of total IRA spending to Colorado, in each individual IRA program category.

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 the state-level figures specific for Colorado from 2019.

In presenting results for expenditure levels and job creation for each of the program categories within the IRA—such as electricity, transportation, buildings and manufacturing—the total figures we report for these broad categories do not always sum up exactly to the figures for each of the individual programs within a category. Such small discrepancies are due to rounding.

## 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](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.<sup>1</sup>

**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.<sup>2</sup>

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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://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 FOR COLORADO**  
*Summary Figures*

	Average Annual Budget and Job Creation Figures Over 10 Years			Total Budget and Job-Years Figures Over 10 Years	
	Public Spending	Total Spending (= <i>public</i> + <i>private spending</i> )	Annual Job Creation	Total Spending	Total Job Creation, Job-Years
<b>Electricity Programs</b>	\$386 million	\$1.2 billion	5,500	\$12.0 billion	55,002
<b>Transportation Programs</b>	\$60 million	\$101 million	830	\$1.0 billion	8,297
<b>Building Programs</b>	\$86 million	\$169 million	1,550	\$1.7 billion	15,497
<b>Manufacturing Programs</b>	\$121 million	\$231 million	1,183	\$2.3 billion	11,826
<b>Environmental Justice and Community Resilience Programs</b>	\$20 million	\$20 million	170	\$199 million	1,700
<b>Lands Programs</b>	\$20 million	\$20 million	251	\$197 million	2,513
<b>Agriculture Programs</b>	\$39 million	\$39 million	429	\$390 million	4,289
<b>TOTALS</b>	\$731 million	\$1.8 billion	9,912	\$17.8 billion	99,124

## 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>	1.6	0.9	1.3	3.9
Rural Electric Cooperative Loans <i>Sec. 22044</i>	1.6	0.9	1.3	3.9
National Laboratory Investments <i>Sec. 50144</i>	3.1	2.5	2.8	8.4
Hydrogen and Fuel Cell Technologies <i>Sec. 22002</i>	1.5	1.5	1.5	4.5
Underutilized Renewable Energy Technologies <i>Sec. 22002</i>	1.6	1.0	1.3	3.9
Uranium Investments <i>Sec. 50173</i>	2.0	1.6	1.8	5.4
Interstate Transmission Line Grants <i>Sec. 501152</i>	2.8	1.0	1.9	5.7
Interregional Transmission Planning Investments <i>Sec. 50153</i>	2.8	1.0	1.9	5.7

**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			Total Job-Years Created Over 10 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>	3.9	\$48.7 million	\$48.7 million	189	\$487 million	1,887
Rural Electric Cooperative Loans <i>Sec. 22044</i>	3.9	\$17.5 million	\$17.5 million	68	\$175 million	678
National Laboratory Investments <i>Sec. 50144</i>	8.4	\$3.6 million	\$3.6 million	30	\$36.1 million	304
Hydrogen and Fuel Cell Technologies <i>Sec. 22002</i>	4.5	\$1.8 million	\$1.8 million	8.0	\$18.0 million	80
Underutilized Renewable Energy Technologies <i>Sec. 22002</i>	3.9	\$0.3 million	\$0.3 million	1.2	\$3.2 million	12
Uranium Investments <i>Sec. 50173</i>	5.4	\$1.3 million	\$1.3 million	6.8	\$12.6 million	68
Interstate Transmission Line Grants <i>Sec. 501152</i>	5.7	\$1.4 million	\$1.4 million	7.8	\$13.7 million	78
Interregional Transmission Planning Investments <i>Sec. 50153</i>	5.7	\$0.2 million	\$0.2 million	1.0	\$1.8 million	10

## 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>	1.6	0.9	1.3	3.9
Clean Energy Investment Tax Credit: <i>Sec. 13102</i>	1.6	0.9	1.3	3.9
Nuclear Production Tax Credit <i>Sec. 13105</i>	3.3	1.2	1.8	6.3
Energy Investment Tax Credit <i>Sec. 13102</i>	1.6	0.9	1.3	3.9
Clean Electricity Production Tax Credit <i>Sec. 13701</i>	1.6	0.9	1.3	3.9
Carbon Capture Tax Credit <i>Sec. 13104</i>	10.0	1.7	3.7	15.5
Cost Recovery for Energy Technology <i>Sec. 13703</i>	2.9	1.4	1.8	6.1
Rural Renewable Energy Loans <i>Sec. 22001</i>	1.6	0.9	1.3	3.9
Transmission Facility Loans <i>Sec. 50151</i>	2.1	0.7	1.4	4.1



**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			Total Job-Years Created Over 10 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>	3.9	\$92.0 million	\$184 million	713	\$1.8 billion	7,128
Clean Energy Investment Tax Credit <i>Sec. 13102</i>	3.9	\$92.0 million	\$184 million	713	\$1.8 billion	7,128
Nuclear Production Tax Credit <i>Sec. 13105</i>	6.3	\$54.1 million	\$108 million	680	\$1.1 billion	6,795
Energy Investment Tax Credit <i>Sec. 13102</i>	3.9	\$25.2 million	\$50.5 million	196	\$505 million	1,957
Clean Electricity Production Tax Credit <i>Sec. 13701</i>	3.9	\$19.8 million	\$39.7 million	154	\$397 million	1,537
Carbon Capture Tax Credit <i>Sec. 13104</i>	15.5	\$5.8 million	\$11.6 million	181	\$116 million	1,807
Cost Recovery for Energy Technology <i>Sec. 13703</i>	6.1	\$1.1 million	\$2.3 million	14	\$22.5 million	138
Rural Renewable Energy Loans <i>Sec. 22001</i>	3.9	\$1.8 million	\$3.6 million	14	\$36.1 million	140
Transmission Facility Loans <i>Sec. 50151</i>	4.1	\$3.6 million	\$7.2 million	30	\$72.1 million	299

**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>	2.5	0.9	1.4	4.7
Clean Energy Loan Guarantees <i>Sec. 50141</i>	2.5	0.9	1.4	4.7
Energy Infrastructure Reinvestments <i>Sec. 50144</i>	2.5	0.9	1.4	4.7

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

	1) Total jobs/ \$1 Million (from Table 3A)	Average Annual Job Creation Over 10 Years			Total Job-Years Created Over 10 Years	
		2) Public Budget	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)
Tribal Energy Loan Guarantees <i>Sec. 50145</i>	4.7	\$0.1 million	\$6.9 million	32	\$68.5 million	323
Clean Energy Loan Guarantees <i>Sec. 50141</i>	4.7	\$6.5 million	\$72.1 million	340	\$721 million	3,398
Energy Infrastructure Reinvestments <i>Sec. 50144</i>	4.7	\$9.0 million	\$451 million	2,124	\$4.5 billion	21,235

**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>	9.7	1.5	1.9	13.1
Zero-Emission Heavy-Duty Vehicle Investments <i>Sec. 60101</i>	9.7	1.5	1.9	13.1
Low-Emission Aviation Grants <i>Sec. 13203</i>	4.5	2.2	2.2	8.9
Clean Port Investments <i>Sec. 60102</i>	3.4	1.6	1.9	6.9
Neighborhood Access and Equity Grants <i>Sec. 60501</i>	12.0	2.1	2.5	16.7
Biofuels Investments <i>Sec. 60108</i>	7.0	2.4	4.1	13.4

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

	1) Total Jobs/ \$1 Million (from Table 4A)	Average Annual Job Creation Over 10 Years			Total Job-Years Created Over 10 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)
USPS Clean Fleet Investments <i>Sec. 70002</i>	13.1	\$5.4 million	\$5.4 million	71	\$54.1 million	706
Zero-Emission Heavy-Duty Vehicle Investments <i>Sec. 60101</i>	13.1	\$1.8 million	\$1.8 million	24	\$18.0 million	235
Low-Emission Aviation Grants <i>Sec. 13203</i>	8.9	\$0.5 million	\$0.5 million	4.8	\$5.4 million	48
Clean Port Investments <i>Sec. 60102</i>	6.9	\$5.4 million	\$5.4 million	38	\$54.1 million	375
Neighborhood Access and Equity Grants <i>Sec. 60501</i>	16.7	\$5.5 million	\$5.5 million	92	\$55.0 million	916
Biofuels Investments <i>Sec. 60108</i>	13.4	\$0.0 million	\$0.0 million	0.4	\$0.3 million	3.6

**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>	1.2	0.9	0.8	2.9
Used EV Tax Credit <i>Sec. 13402</i>	1.6	0.5	0.8	2.9
Commercial EV Tax Credit <i>Sec. 13403</i>	9.7	1.5	1.9	13.1
Biodiesel Tax Credits <i>Secs. 13201 &amp; 13202</i>	5.4	2.3	2.2	9.9
Clean Fuel Production Tax Credit <i>Sec. 13704</i>	5.4	2.3	2.2	9.9
EV Charging / Alt Fuel Tax Credit <i>Sec. 13404</i>	2.4	1.3	1.7	5.5
Aviation Fuel Tax Credit <i>Sec. 13203</i>	4.5	2.2	2.2	8.9

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

	1) Total Jobs/ \$1 Million (from Table 5A)	Average Annual Job Creation Over 10 Years			Total Job-Years Created Over 10 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)
New EV Tax Credit <i>Sec. 13401</i>	2.9	\$13.6 million	\$27.1 million	78	\$271 million	782
Used EV Tax Credit <i>Sec. 13402</i>	2.9	\$2.4 million	\$4.9 million	14	\$48.5 million	139
Commercial EV Tax Credit <i>Sec. 13403</i>	13.1	\$6.5 million	\$12.9 million	169	\$129 million	1,688
Biodiesel Tax Credits <i>Secs. 13201 &amp; 13202</i>	9.9	\$10.2 million	\$20.3 million	200	\$203 million	1,998
Clean Fuel Production Tax Credit <i>Sec. 13704</i>	9.9	\$5.3 million	\$10.6 million	105	\$106 million	1,046
EV Charging / Alt Fuel Tax Credit <i>Sec. 13404</i>	5.5	\$3.1 million	\$6.3 million	34	\$62.8 million	344
Aviation Fuel Tax Credit <i>Sec. 13203</i>	8.9	\$0.1 million	\$0.2 million	1.6	\$1.8 million	16

**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>	4.4	2.4	2.4	9.2
Affordable Housing Resilience and Efficiency Investments <i>Sec. 30002</i>	4.4	2.4	2.4	9.2
Efficient Building Code Adoption Grants <i>Sec. 50131</i>	4.4	2.4	2.4	9.2
Federal Building Investments <i>Sec. 60502</i>	4.4	2.4	2.4	9.2



**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			Total Job-Years Created Over 10 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>	9.2	\$0.4 million	\$0.4 million	3.3	\$3.6 million	33
Affordable Housing Resilience and Efficiency Investments <i>Sec. 30002</i>	9.2	\$1.8 million	\$1.8 million	17	\$18.0 million	165
Efficient Building Code Adoption Grants <i>Sec. 50131</i>	9.2	\$1.8 million	\$1.8 million	17	\$18.0 million	165
Federal Building Investments <i>Sec. 60502</i>	9.2	\$0.5 million	\$0.5 million	4.1	\$4.5 million	41

**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>	4.4	2.4	2.4	9.2
Residential Energy Efficiency Tax Credit <i>Sec. 13301</i>	4.4	2.4	2.4	9.2
New Energy Efficient Home Tax Credit <i>Sec. 13304</i>	4.4	2.4	2.4	9.2
Commercial Energy Efficiency Tax Credit Deduction <i>Sec. 13303</i>	4.4	2.4	2.4	9.2
Home Electrification and Energy Efficiency Rebates: Whole-house energy efficiency retrofit rebates <i>Sec. 50121</i>	4.4	2.4	2.4	9.2
Home Electrification and Energy Efficiency Rebates: Electrification rebates <i>Sec. 50123</i>	4.4	2.4	2.4	9.2

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

	1) Total Jobs/ \$1 Million (from Table 7A)	Average Annual Job Creation Over 10 Years			Total Job-Years Created Over 10 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)
Residential Clean Electricity Tax Credit <i>Sec. 13302</i>	9.2	\$39.7 million	\$79.3 million	726	\$793 million	7,264
Residential Energy Efficiency Tax Credit <i>Sec. 13301</i>	9.2	\$21.6 million	\$45.1 million	413	\$451 million	4,128
New Energy Efficient Home Tax Credit <i>Sec. 13304</i>	9.2	\$3.7 million	\$7.4 million	68	\$73.8 million	675
Commercial Energy Efficiency Tax Credit Deduction <i>Sec. 13303</i>	9.2	\$0.7 million	\$1.3 million	12	\$13.1 million	120
Home Electrification and Energy Efficiency Rebates: Whole- house energy efficiency retrofit rebates <i>Sec. 50121</i>	9.2	\$7.8 million	\$15.5 million	142	\$155 million	1,420
Home Electrification and Energy Efficiency Rebates: Electrification rebates <i>Sec. 50123</i>	9.2	\$8.1 million	\$16.2 million	149	\$162 million	1,486

**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>	2.2	1.6	1.7	5.6
Low-Carbon Materials Investments 2 <i>Sec. 60116</i>	2.2	1.6	1.7	5.6
Low-Carbon Materials Investments 3 <i>Sec. 60503, Sec. 70006</i>	2.2	1.6	1.7	5.6
Low-Carbon Materials Investments 4 <i>Sec. 60504</i>	2.2	1.6	1.7	5.6
Low-Carbon Materials Investments 5 <i>Sec. 60506</i>	2.2	1.6	1.7	5.6
Defense Production Act <i>Sec. 30001</i>	2.2	1.6	1.7	5.6

**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			Total Job-Years Created Over 10 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)
Low-Carbon Materials Investments 1 <i>Sec. 60112</i>	5.6	\$0.5 million	\$0.5 million	2.5	\$4.5 million	25
Low-Carbon Materials Investments 2 <i>Sec. 60116</i>	5.6	\$0.2 million	\$0.2 million	1.0	\$1.8 million	10
Low-Carbon Materials Investments 3 <i>Sec. 60503, Sec. 70006</i>	5.6	\$3.9 million	\$3.9 million	22	\$38.8 million	217
Low-Carbon Materials Investments 4 <i>Sec. 60504</i>	5.6	\$1.8 million	\$1.8 million	9.9	\$17.6 million	99
Low-Carbon Materials Investments 5 <i>Sec. 60506</i>	5.6	\$3.6 million	\$3.6 million	20	\$36.1 million	202
Defense Production Act <i>Sec. 30001</i>	5.6	\$0.9 million	\$0.9 million	5.1	\$9.0 million	51

**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>	1.2	0.9	0.8	2.9
Clean Manufacturing Investment Tax Credit <i>Sec. 13501</i>	1.8	1.0	1.2	4.0
Wind, Solar, and Battery Manufacturing Production Tax Credit <i>Sec. 13502</i>	2.9	1.4	1.8	6.1
EV Manufacturing Loans <i>Sec. 50142</i>	1.2	0.9	0.8	2.9
Industrial Emissions Reduction Investments <i>Sec. 50161</i>	2.2	1.6	1.7	5.6
Hydrogen Production Tax Credit <i>Sec. 13204</i>	0.8	1.7	1.4	3.9

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

	1) Total Jobs/ \$1 Million (from Table 9A)	Average Annual Job Creation Over 10 Years			Total Job-Years Created Over 10 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)
EV Manufacturing Grants <i>Sec. 50143</i>	2.9	\$3.6 million	\$7.2 million	21	\$72.1 million	208
Clean Manufacturing Investment Tax Credit <i>Sec. 13501</i>	4.0	\$11.3 million	\$23.4 million	94	\$234 million	939
Wind, Solar, and Battery Manufacturing Production Tax Credit <i>Sec. 13502</i>	6.1	\$55.9 million	\$110 million	671	\$1.1 billion	6,710
EV Manufacturing Loans <i>Sec. 50142</i>	2.9	\$5.4 million	\$10.8 million	31	\$108 million	313
Industrial Emissions Reduction Investments <i>Sec. 50161</i>	5.6	\$10.5 million	\$21.6 million	121	\$216 million	1,213
Hydrogen Production Tax Credit <i>Sec. 13204</i>	3.9	\$23.4 million	\$46.9 million	184	\$469 million	1,838

## 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>	5.1	1.8	2.6	9.5
Environmental and Climate Justice Block Grants <i>Sec. 60201</i>	2.8	2.0	2.1	6.9
Methane Reduction Investments <i>Sec. 60113</i>	5.1	1.8	2.6	9.5
Chief Readiness Officer Investments <i>Sec. 70001</i>	2.8	2.0	2.1	6.9
Tribal and Native Hawaiian Climate Resilience Investments <i>Sec. 8000</i>	2.8	2.0	2.1	6.9
Air Pollution Reduction Investments <i>Sec. 60104</i>	5.1	1.8	2.6	9.5
Funding for Environmental Data and Enforcement <i>Sec. 60401</i>	5.1	1.8	2.6	9.5
Low Emissions Electricity Program <i>Sec. 60107</i>	2.5	0.9	1.4	4.7
Superfund Reinstatement <i>Sec. 13601</i>	5.1	1.8	2.6	9.5
Black Lung Disability Trust Fund Extension <i>Sec. 13901</i>	2.8	2.0	2.1	6.9



**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			Total Job-Years Created Over 10 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>	9.5	\$9.0 million	\$9.0 million	85	\$90.2 million	855
Environmental and Climate Justice Block Grants <i>Sec. 60201</i>	6.9	\$5.4 million	\$5.4 million	37	\$54.1 million	375
Methane Reduction Investments <i>Sec. 60113</i>	9.5	\$2.8 million	\$2.8 million	26	\$28.0 million	265
Chief Readiness Officer Investments <i>Sec. 70001</i>	6.9	\$0.9 million	\$0.9 million	6.2	\$9.0 million	62
Tribal and Native Hawaiian Climate Resilience Investments <i>Sec. 8000</i>	6.9	\$0.7 million	\$0.7 million	5.1	\$7.4 million	51
Air Pollution Reduction Investments <i>Sec. 60104</i>	9.5	\$0.7 million	\$0.7 million	6.7	\$7.1 million	67
Funding for Environmental Data and Enforcement <i>Sec. 60401</i>	9.5	\$0.2 million	\$0.2 million	1.7	\$1.8 million	17
Low Emissions Electricity Program <i>Sec. 60107</i>	4.7	\$0.2 million	\$0.2 million	0.7	\$1.6 million	7.4
Superfund Reinstatement <i>Sec. 13601</i>	9.5	\$0.0 million	\$0.0 million	0.0	\$0.0 million	0.0
Black Lung Disability Trust Fund Extension <i>Sec. 13901</i>	6.9	\$0.0 million	\$0.0 million	0.0	\$0.0 million	0.0

**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>	8.1	2.1	2.8	13.0
Non-Federal Forest Conservation Grants				
Urban and Community Forestry Assistance Program <i>Sec. 23003</i>	8.1	2.1	2.8	13.0
Forest Legacy Program <i>Sec. 23003</i>	8.1	2.1	2.8	13.0
Federal Forest Restoration Investments <i>Sec. 23001</i>	8.1	2.1	2.8	13.0
Public Lands Conservation Investments <i>Sec. 50221</i>	8.1	2.1	2.8	13.0
Environmental Reviews <i>Sec. 50301</i>	8.1	2.1	2.8	13.0
NOAA Equipment, Facilities, and Research <i>Sec. 40002</i>	8.1	2.1	2.8	13.0
Drinking water/wastewater/stormwater <i>Sec. 50231</i>	3.5	1.9	2.2	7.7
Non-Federal Forest Grants <i>Sec. 23002</i>	8.1	2.1	2.8	13.0
Fish and Wildlife Investments <i>Sec. 60301</i>	8.1	2.1	2.8	13.0

**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			Total Job-Years Created Over 10 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>	13.0	\$4.7 million	\$4.7 million	61	\$46.9 million	611
Non-Federal Forest Conservation Grants						
Urban and Community Forestry Assistance Program <i>Sec. 23003</i>	13.0	\$2.7 million	\$2.7 million	35	\$27.1 million	353
Forest Legacy Program <i>Sec. 23003</i>	13.0	\$1.3 million	\$1.3 million	16	\$12.6 million	165
Federal Forest Restoration Investments <i>Sec. 23001</i>	13.0	\$3.9 million	\$3.9 million	51	\$38.8 million	505
Public Lands Conservation Investments <i>Sec. 50221</i>	13.0	\$1.8 million	\$1.8 million	24	\$18.0 million	235
Environmental Reviews <i>Sec. 50301</i>	13.0	\$1.6 million	\$1.6 million	21	\$16.1 million	210
NOAA Equipment, Facilities, and Research <i>Sec. 40002</i>	13.0	\$1.3 million	\$1.3 million	17	\$12.8 million	167
Drinking water/wastewater/stormwater <i>Sec. 50231</i>	7.7	\$1.0 million	\$1.0 million	8.0	\$10.4 million	80
Non-Federal Forest Grants <i>Sec. 23002</i>	13.0	\$1.0 million	\$1.0 million	13	\$9.9 million	129
Fish and Wildlife Investments <i>Sec. 60301</i>	13.0	\$0.4 million	\$0.4 million	5.8	\$4.4 million	58

**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>	6.5	2.1	2.3	10.9
Regional Conservation Partnership Program <i>Sec. 21001</i>	6.5	2.1	2.3	10.9
Conservation Stewardship Program <i>Sec. 21001</i>	6.5	2.1	2.3	10.9
Agriculture Conservation Easement Program <i>Sec. 21001</i>	6.5	2.1	2.3	10.9
Agricultural Conservation Technical Assistance <i>Sec. 21002</i>	8.1	2.1	2.8	13.0
Biofuel Production Grants <i>Sec. 22003</i>	5.4	2.3	2.2	9.9

**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			Total Job-Years Created Over 10 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 Sec. 21001	10.9	\$15.2 million	\$15.2 million	166	\$152 million	1,658
Regional Conservation Partnership Program Sec. 21001	10.9	\$12.2 million	\$12.2 million	132	\$122 million	1,324
Conservation Stewardship Program Sec. 21001	10.9	\$5.9 million	\$5.9 million	64	\$58.6 million	638
Agriculture Conservation Easement Program Sec. 21001	10.9	\$2.5 million	\$2.5 million	27	\$25.2 million	275
Agricultural Conservation Technical Assistance Sec. 21002	13.0	\$2.3 million	\$2.3 million	31	\$23.4 million	306
Biofuel Production Grants Sec. 22003	9.9	\$0.9 million	\$0.9 million	8.9	\$9.0 million	89

**TOTAL JOB CREATION ESTIMATES FOR MICHIGAN**  
*Summary Figures*

	Average Annual Budget and Job Creation Figures Over 10 Years			Total Budget and Job-Years Figures Over 10 Years	
	Public Spending	Total Spending (= <i>public</i> + <i>private spending</i> )	Annual Job Creation	Total Spending	Total Job Creation, Job-Years
<b>Electricity Programs</b>	\$386 million	\$1.2 billion	5,500	\$12.0 billion	55,002
<b>Transportation Programs</b>	\$60 million	\$101 million	830	\$1.0 billion	8,297
<b>Building Programs</b>	\$86 million	\$169 million	1,550	\$1.7 billion	15,497
<b>Manufacturing Programs</b>	\$121 million	\$231 million	1,183	\$2.3 billion	11,826
<b>Environmental Justice and Community Resilience Programs</b>	\$20 million	\$20 million	170	\$199 million	1,700
<b>Lands Programs</b>	\$20 million	\$20 million	251	\$197 million	2,513
<b>Agriculture Programs</b>	\$39 million	\$39 million	429	\$390 million	4,289
<b>TOTALS</b>	\$731 million	\$1.8 billion	9,912	\$17.8 billion	99,124

## ACKNOWLEDGMENTS

This project was commissioned by the BlueGreen Alliance. We greatly appreciate their financial support as well as the fact that they respected our terms of engagement. Those terms included full autonomy in developing our methodology and generating our results. We especially appreciate the contributions to this work of Ben Beachy, Vice President of Manufacturing and Industrial Policy at the BlueGreen Alliance. Caitlin Kline was extremely helpful, yet again, in enabling us to finish this project on a tight deadline. Kim Weinstein produced a readable document at record speed.

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