

POTENTIAL DOLLARS FOR CLEAN ENERGY FROM AMERICAN RECOVERY AND REINVESTMENT ACT, 2009 - H.R. 1

Working Document

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WASHINGTON STATE		2.26%		Default Values		WA has 2.26% of 2007 U.S. GDP and 2.14% of 2006 pop. We use GDP % as default. High and low multiple of point estimate				
				1.5	0.5					
CLEAN ENERGY PROVISIONS		Total for U.S.	% for WA	Point Estimate	High	Low	Notes	H.R. 1 Section	Page of H. R. 1	Lead Agency
BUILDING/APPLIANCE EFFICIENCY										
Federal green buildings program	\$4,500	2.26%	101.70	152.55	50.85			Div A, Title V	35	GSA
VA hospital and medical facility: for non-recurring maintenance, including energy projects	\$1,000	2.26%	22.60	33.90	11.30			Div A, Title X	85	DOD
Energy Efficiency and Conservation Block Grants-Formula	\$2,800	2.15%	60.31	66.34	54.28	WA CTED will administer about 28% and rest goes to cities and counties.		Div A, Title IV	24	DOE
Energy Efficiency and Conservation Block Grants-Competitive	\$400	2.26%	9.04	18.08	4.52	DOE to issue rules on competitive program				DOE
State Energy Program	\$3,100	1.96%	60.75	66.83	54.68	WA CTED will administer. State spent under \$1 million in this program in 2006. Part of the \$16.8 bn for "Energy Efficiency & Renewable Energy"		Div A, Title IV	24	DOE
Department of Housing and Urban Development's assisted housing for energy and green retrofit investments	\$250	2.26%	5.65	8.48	2.83			Div A, Title XII	108	HUD
Native American Housing Block Grants. New construction, acquisition, and rehabilitation, including energy efficiency and conservation, and infrastructure development.	\$510	2.26%	11.53	17.29	5.76			Div A, Title XII	101	HUD
Sustain, renovate, and modernize Dept. of Defense facilities: energy efficiency, Dept. of Defense Energy Conservation Investment Program	\$4,360	2.26%	98.54	147.80	49.27	\$120 mn for Energy Conservation Investment Program. WA has more than other states of DOD facilities		Div A, Titles III & X	18 & 78	DOD
Public Housing Capital Fund. Priority investments, including investments that leverage private sector funding or financing for renovations and energy conservation retrofit investments.	\$1,000	2.26%	22.60	33.90	11.30	Awarded by competitive grant		Div A, Title XII	100	HUD
Dept. of Defense research on energy efficiency at military installations.	\$300	2.26%	6.78	10.17	3.39	\$75 mn each for Army, Navy, Air Force & Defense-Wide		Div A, Title III	19	DOD
Smart and energy efficient appliances	\$300	2.26%	6.78	10.17	3.39	Part of the \$16.8 bn for "Energy Efficiency & Renewable Energy"		Div A, Title IV	24	DOE
HOME Investment Partnerships Program.	\$2,250	2.26%	50.85	76.28	25.43			Div A, Title XII	106	HUD
Weatherization Assistance Program. Install efficiency measures in low-income households.	\$5,000	1.21%	60.73	66.80	54.66	WA CTED will administer through contracts with community development agencies and housing authorities. Part of the \$16.8 bn for "Energy Efficiency & Renewable Energy"		Div A, Title IV	24	DOE
Direct spending subtotal	\$25,770									
Qualified Energy Conservation Bonds	803	2.25%	18.07	27.10	9.03			Sec 1112	208	
Tax Credits for Energy Efficient Improvements to Existing Homes	2,034	2.25%	45.77	68.65	22.88			Sec 1121	208	
Treasury Department Energy Grants in Lieu of Tax Credits	5	2.25%	0.11	0.17	0.06			Sec 1603	250	
Treasury Department Low-Income Housing Grants in Lieu of Tax Credits	69	2.25%	1.55	2.33	0.78			Sec 1602	248	
Tax provisions subtotal	\$2,911									
Building/Appliance Efficiency Subtotal	\$28,681									
SMART GRID/TRANSMISSION										
Electricity Delivery and Energy Reliability Program	\$4,500	2.26%	101.70	152.55	50.85	Includes \$100 mn for grid modernization worker training. 2 X because of BPA		Div A, Title IV	24	DOE
BPA Borrowing Authority for transmission lines	\$3250	40%	1,300.00	1,560.00	1,040.00	Borrowing authority; not direct allocation for spending. Will be repaid to US Treasury through BPA rates. Estimate for WA based on visual scan of map of existing BPA system on BPA website.		Div A, Title IV, Sec 401	26	DOE
Western Area Power Administration borrowing authority	\$3250	0%	0.00	0.00	0.00			Div A, Title IV, Sec 402	27	DOE
Renewable energy and transmission line construction loan guarantees.	\$6,000	2.26%	135.60	203.40	67.80	Expected to support more than \$60 bn in loans for such projects		Div A, Title IV	26	DOE
Grid/transmission Direct Spending Subtotal	\$17,000									
RENEWABLE ENERGY AND ALTERNATIVE ENERGY										
Renewable energy research	\$2,500	2.26%	56.50	84.75	28.25	Part of the \$16.8 bn for "Energy Efficiency & Renewable Energy"; includes \$800 mn for biomass & \$400 mn for geothermal		Div A, Title IV	24	DOE

	Dept. of Energy Advanced Research Project Agency to accelerate the innovation cycle for both traditional and alternative energy sources and energy efficiency.	\$400	2.26%	9.04	13.56	4.52		Div A, Title IV	26	DOE
	Carbon capture and sequestration research for coal-fired power plants.	\$3,400	1.00%	34.00	51.00	17.00	Includes \$1 bn for fossil energy research and development programs, \$800 mn for Clean Coal Power Initiative, \$1.52 bn for carbon capture & efficiency improvement, \$70 mn for geologic sequestration	Div A, Title IV	25	DOE
	U.S. Fish & Wildlife Service facilities construction, with emphasis on energy efficiency and renewable energy.	\$115	2.26%	2.60	3.90	1.30		Div A, Title VII	53	DOI
Direct spending subtotal		\$6,415								
	Long-term extension and modification of renewable energy production tax credit	13,143	2.25%	295.72	591.43	147.86		Sec 1101	205	
	Temporary election to claim the investment tax credit in lieu of the production tax credit	285	2.25%	6.41	9.62	3.21		Sec 1102	205	
	Removal of dollar limitations on certain energy tax credits	872	2.25%	19.62	29.43	9.81		Sec 1104	207	
	Clean Renewable Energy Bonds (CREBs)	578	3.00%	17.34	26.01	8.67	CREB is for public utilities and WA is one of 5 states that have a majority of electricity provided by publicly owned utilities.	Sec 1111	208	
	Advanced Energy Investment Credit	1,647	2.25%	37.06	55.59	18.53		Sec 1302	231	
Tax provisions subtotal		\$16,525								
Renewable & Alternative Energy Subtotal		\$22,940								
CLEAN VEHICLES & TRANSIT										
	General Services Administration program to purchase alternative fuel vehicles and plug-in hybrids for federal fleets.	\$300	0.50%	1.50	2.25	0.75	Lower percentage because limited industry in WA.	Div A, Title V	36	GSA
	Electrical infrastructure projects that encourage the use of plug-in electric drive vehicles and for near-term, large-scale electrification projects.	\$400	2.26%	9.04	13.56	4.52	Part of the \$16.8 bn for "Energy Efficiency & Renewable Energy"	Div A, Title IV	24	DOE
	Alternative fueled vehicles pilot grant program.	\$300	2.26%	6.78	10.17	3.39	Part of the \$16.8 bn for "Energy Efficiency & Renewable Energy"	Div A, Title IV	24	DOE
	Advanced battery research loans and grants.	\$2,000	2.26%	45.20	67.80	22.60	Part of the \$16.8 bn for "Energy Efficiency & Renewable Energy"	Div A, Title IV	24	DOE
	Diesel Emissions Reduction Act grants and loans.	\$300	2.26%	6.78	10.17	3.39	Part of the \$6.4 bn "State and Tribal Assistance Grants"	Div A, Title VII	56	EPA
	Investments in public transportation.	\$8,400	2.13%	179.05	196.96	161.15	High and low plus or minus 10%. Includes \$100 mn in discretionary grants for reduction of energy consumption & GHG emissions (see p. 96)	Div A, Title XII		DOT
	Investments in high speed rail and Amtrak.	\$9,300	2.25%	209.25	418.50	52.31	See map at http://www.fra.dot.gov/us/content/618 ; \$8 bn supports Capital Assistance to States program and High Speed Passenger Rail program; \$1.3 bn for Amtrak capital grants	Div A, Title XII	94	DOT
Direct Spending Subtotal		\$21,000								
	Tax Credits for Alternative Refueling Property	54	2.25%	1.22	1.82	0.61		Sec 1123	211	
	Plug-In Electric Drive Vehicle Credit	2,002	2.25%	45.05	67.57	22.52		Secs 1141-44	212	
	Parity for Transit Benefits	192	2.25%	4.32	6.48	2.16		Sec 1151	219	
	Modify Speed Requirement for High-Speed Rail Exempt Facility Bonds	288	2.25%	6.48	9.72	3.24		Sec 1504	241	
Tax provisions subtotal		\$2,536								
Renewable & Alternative Energy Subtotal		\$23,536								
JOBS TRAINING										
	Green jobs training - funds Green Jobs Act of 2007	\$500	2.25%	11.25	16.88	5.63		Div A, Title VIII	59	DOL
	Additional Workforce Investment Act funding - estimated green training allocation	\$998	2.25%	22.46	33.68	11.23	Additional \$3.45 bn was allocated for training & employment activities under the Workforce Investment Act, \$2.95 bn of which is provided for formula grants to the States. Of these, \$500 mn go to adult training activities, \$1.25 bn to dislocated worker training activities & \$1.2 bn for youth activities. Discussion on the Senate floor noted that the foregoing should favor sector-based and career pathways initiatives that are focused on green jobs, health care and other viable industries. For purposes of our estimates, we assume that approx 1/3rd of the \$2.95 bn will go to green jobs training	Div A, Title VIII	58	DOL
Jobs Training Direct Spending Subtotal		\$1,498								
TOTAL DIRECT SPENDING		\$71,683								
TOTAL TAX PROVISIONS		\$21,972								
GRAND TOTAL OF FEDERAL DOLLARS TO AREA		\$93,655		\$3,147	\$4,444	\$2,056				

Beware of the spurious precision of the state numbers; all are estimates and should be rounded to nearest r.

This sheet estimates the dollar value of spending from the energy provisions in the Act. Direct spending will occur over two to three years; the value of the tax provisions is over 10 years. These dollar estimates are only for the federal dollars and do not include the total value of the economic activity associated with clean energy. For instance, loan guarantees can leverage projects valued at ten times the amount of the guarantee. The high and low ranges are set at the default values unless there is reason to think there is a narrower range, as in the case of the formula drive disbursements in the state energy programs.

Sources:

1. Initial appropriations data from Center for American Progress at http://www.americanprogress.org/issues/2009/02/pdf/energy_recovery_hse_senate_21309.xls				
2. American Recovery and Reinvestment Act of 2009, http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.pdf				
3. Yellow shaded direct allocations from Center for American Progress at http://www.americanprogress.org/issues/2009/02/compromise_map.html .				
4. All estimates of dollar value of tax provisions from p.10 -14 of House Ways and Means summary at http://waysandmeans.house.gov/media/pdf/111/arra.pdf				
ADDITIONAL CLIMATE-RELATED PROVISIONS				
NOAA - climate modeling and research to mitigate climate change	\$170		Part of NOAA's \$600 mn allocated for "Procurement, Acquisition & Construction"	Div A, Title II NOAA
NASA - Science funding, including to accelerate the development of tier 1 set of Earth science climate research recommended by Nat'l Academies Decadal Survey	\$400		A portion of the \$400 mn to go to the described purpose	Div A, Title II NASA
				