

INDUSTRY

MULT RESPONSE GROUPS=\$sc (sc_1 sc_2 sc_3 sc_4 sc_5 sc_6 sc_7 sc_8 (1,50))
/FREQUENCIES=\$sc.

Multiple Response

Case Summary

	Cases				
	Valid		Missing		To
	N	Percent	N	Percent	N
\$sc ^a	5518	99.3%	40	0.7%	5558

a. Group

\$sc Frequencies

		Responses		Percent of Cases
		N	Percent	
\$sc ^a	Electric power generation	2321	27.7%	42.1%
	Electric power transmission, distribution, and storage	1068	12.7%	19.4%
	Energy efficiency, including heating, cooling and building envelope	2333	27.8%	42.3%
	Fuels	1454	17.3%	26.4%
	Motor vehicles	977	11.7%	17.7%
	Other	219	2.6%	4.0%
	DK/NA	10	0.1%	0.2%
Total		8382	100.0%	151.9%

a. Group

FREQUENCIES
VARIABLES = SDPrime
/ORDER=ANALYSIS.

Frequencies

Statistics

SDPrime

N	Valid	4077
	Missing	1481

SDPrime

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Electric power generation	1569	28.2	38.5	38.5
	Electric power transmission, distribution, and storage	272	4.9	6.7	45.2
	Energy efficiency, including heating, cooling and building envelope	1317	23.7	32.3	77.5
	Fuels	587	10.6	14.4	91.9
	Motor vehicles	244	4.4	6.0	97.8
	Other	74	1.3	1.8	99.7
	DK/NA	14	0.3	0.3	100.0
	Total	4077	73.4	100.0	
Missing	System	1481	26.6		
Total		5558	100.0		

ELECTRIC POWER GENERATION

MULT RESPONSE GROUPS=\$se_a (se_a_1 se_a_2 se_a_3 se_a_4 se_a_5 se_a_6 se_a_7 se_ /FREQUENCIES=\$se_a.

Multiple Response

Case Summary

	Cases				
	Valid		Missing		To
	N	Percent	N	Percent	N
\$se_a ^a	2287	41.1%	3271	58.9%	5558

a. Group

\$se_a Frequencies

	Responses	Percent of Cases	
		N	Percent
\$se_a ^a	Solar photovoltaic electric generation	1719	40.5%
			75.2%

Concentrated solar electric generation	271	6.4%	11.8%
Wind generation	527	12.4%	23.0%
Geothermal generation	217	5.1%	9.5%
Bioenergy/Biomass generation	263	6.2%	11.5%
Low-impact hydroelectric generation including wave/kinetic generation	159	3.7%	7.0%
Traditional hydropower	218	5.1%	9.5%
Advanced/Low emission natural gas	307	7.2%	13.4%
Nuclear	101	2.4%	4.4%
Fossil fuel generation	358	8.4%	15.7%
Other generation	108	2.5%	4.7%
Total	4248	100.0%	185.7%

a. Group

ELECTRIC POWER TRANSMISSION, DISTRIBUTION, STORAGE

MULT RESPONSE GROUPS=\$se_b (se_b_1 se_b_2 se_b_3 se_b_4 se_b_5 (1,50))
/FREQUENCIES=\$se_b.

Multiple Response

Case Summary

	Cases				
	Valid		Missing		To
	N	Percent	N	Percent	N
\$se_b ^a	1029	18.5%	4529	81.5%	5558

a. Group

\$se_b Frequencies

		Responses		Percent of Cases
		N	Percent	
\$se_b ^a	Traditional transmission and distribution	632	39.7%	61.4%
	Storage	534	33.5%	51.9%
	Smart grid	346	21.7%	33.6%
	Other	81	5.1%	7.9%
Total		1593	100.0%	154.8%

a. Group

ENERGY EFFICIENCY

MULT RESPONSE GROUPS=\$se_c (se_c_1 se_c_2 se_c_3 se_c_4 se_c_5 se_c_6 se_c_7 se_ /FREQUENCIES=\$se_c.

Multiple Response

Case Summary

	Cases				
	Valid		Missing		To
	N	Percent	N	Percent	N
\$se_c ^a	2268	40.8%	3290	59.2%	5558

a. Group

\$se_c Frequencies

		Responses		Percent of Cases
		N	Percent	
\$se_c ^a	Energy star appliances	819	13.4%	36.1%
	LED, CFL and other efficient lighting	1110	18.2%	48.9%
	Traditional HVAC goods and services	1089	17.8%	48.0%
	Energy Star/ High AFUE HVAC	909	14.9%	40.1%
	Renewable heating and cooling (including solar thermal)	969	15.9%	42.7%
	Advanced building materials/insulation	960	15.7%	42.3%
	Other	249	4.1%	11.0%
Total		6105	100.0%	269.2%

a. Group

FUELS

MULT RESPONSE GROUPS=\$se_d (se_d_1 se_d_2 se_d_3 se_d_4 se_d_5 se_d_6 se_d_7 (1, /FREQUENCIES=\$se_d.

\$se_e ^a	Gasoline and diesel motor vehicles (excluding freight trucking)	755	40.8%	77.3%
	Hybrid and plug-in hybrid vehicles	325	17.6%	33.3%
	Electric vehicles	265	14.3%	27.1%
	Natural gas vehicles	245	13.2%	25.1%
	Hydrogen vehicles	52	2.8%	5.3%
	Fuel cell vehicles	107	5.8%	11.0%
	Other	73	3.9%	7.5%
	DK/NA	28	1.5%	2.9%
Total	1850	100.0%	189.4%	

a. Group

VALUE CHAIN

MULT RESPONSE GROUPS=\$sf (sf_1 sf_2 sf_3 sf_4 sf_5 sf_6 sf_7 (1,50))
/FREQUENCIES=\$sf .

Multiple Response

Case Summary

	Cases				
	Valid		Missing		To
	N	Percent	N	Percent	N
\$sf ^a	5518	99.3%	40	0.7%	5558

a. Group

\$sf Frequencies

		Responses		Percent of Cases
		N	Percent	
\$sf ^a	A firm that manufactures and/or assembles	834	9.9%	15.1%
	A firm that provides engineering and research services	1065	12.6%	19.3%
	A firm that sells and distributes	2335	27.6%	42.3%
	A firm that installs	2342	27.7%	42.4%
	A firm that provides consulting, finance, etc.	1401	16.6%	25.4%
	Other	371	4.4%	6.7%

Not sure	105	1.2%	1.9%
Total	8453	100.0%	153.2%

a. Group

FREQUENCIES

VARIABLES = sg

/ORDER=ANALYSIS.

Frequencies

Statistics

SGPrime

N	Valid	4087
	Missing	1471

SGPrime

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A firm that manufactures and/or assembles	407	7.3	10.0	10.0
	A firm that provides engineering and research services	393	7.1	9.6	19.6
	A firm that sells and distributes	1062	19.1	26.0	45.6
	A firm that installs	1314	23.6	32.2	77.7
	A firm that provides consulting, finance, etc.	610	11.0	14.9	92.6
	Other	212	3.8	5.2	97.8
	Not sure	89	1.6	2.2	100.0
	Total	4087	73.5	100.0	
Missing	System	1471	26.5		
Total		5558	100.0		

PRODUCTS

FREQUENCIES

VARIABLES = sh si

/ORDER=ANALYSIS.

Frequencies

Statistics

		sH Product stage	sI Primary product stage
N	Valid	1753	217
	Missing	3805	5341

Frequency Table

sH | Product stage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primarily work with products that are already commercially available	1011	18.2	57.7	57.7
	Primarily work with products still under development	217	3.9	12.4	70.1
	Work with both products that are already available and under development	467	8.4	26.6	96.7
	DK/NA	58	1.0	3.3	100.0
	Total	1753	31.5	100.0	
Missing	System	3805	68.5		
Total		5558	100.0		

sI | Primary product stage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Concept	26	0.5	12.0	12.0
	Product development	99	1.8	45.6	57.6
	Pilot	71	1.3	32.7	90.3
	DK/NA	21	0.4	9.7	100.0
	Total	217	3.9	100.0	
Missing	System	5341	96.1		
Total		5558	100.0		

EMPLOYMENT

FREQUENCIES

VARIABLES = q1_code q2 q3_code q5

/ORDER=ANALYSIS .

Frequencies

Statistics

		q1_code Permanent employees	q2 More or fewer permanent employees 12 months from now	q3_code Energy employees	q5 More or fewer energy employees 12 months from now
N	Valid	5518	5518	5518	5437
	Missing	40	40	40	121

Frequency Table

q1_code | Permanent employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	1	0.0	0.0	0.0
	1 to 5 employees	2268	40.8	41.1	41.1
	6 to 10 employees	1047	18.8	19.0	60.1
	11 to 24 employees	933	16.8	16.9	77.0
	25 to 49 employees	508	9.1	9.2	86.2
	50 to 99 employees	289	5.2	5.2	91.4
	100 to 249 employees	206	3.7	3.7	95.2
	250 to 499 employees	72	1.3	1.3	96.5
	500 employees or more	75	1.3	1.4	97.8
	DK/NA	119	2.1	2.2	100.0
	Total	5518	99.3	100.0	
Missing	System	40	0.7		
Total		5558	100.0		

q2 | More or fewer permanent employees 12 months from now

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	More	2247	40.4	40.7	40.7
	Fewer	135	2.4	2.4	43.2
	Same number	2803	50.4	50.8	94.0
	Don't know/ Refused	333	6.0	6.0	100.0
	Total	5518	99.3	100.0	
Missing	System	40	0.7		
Total		5558	100.0		

q3_code | Energy employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	59	1.1	1.1	1.1
	1 to 5 employees	2584	46.5	46.8	47.9
	6 to 10 employees	1049	18.9	19.0	66.9
	11 to 24 employees	801	14.4	14.5	81.4
	25 to 49 employees	431	7.8	7.8	89.2
	50 to 99 employees	203	3.7	3.7	92.9
	100 to 249 employees	132	2.4	2.4	95.3
	250 to 499 employees	36	0.6	0.7	96.0
	500 employees or more	39	0.7	0.7	96.7
	DK/NA	184	3.3	3.3	100.0
	Total	5518	99.3	100.0	
Missing	System	40	0.7		
Total		5558	100.0		

q5 | More or fewer energy employees 12 months from now

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	More	2014	36.2	37.0	37.0
	Fewer	127	2.3	2.3	39.4
	Same number	2989	53.8	55.0	94.4
	Don't know/ Refused	307	5.5	5.6	100.0
	Total	5437	97.8	100.0	
Missing	System	121	2.2		
Total		5558	100.0		

FREQUENCIES

VARIABLES= q6_1 q6_2 q6_3 q6_4 q6_5 q6_6

/STATISTICS=MEAN MEDIAN SUM

/ORDER=ANALYSIS.

Frequencies

Statistics

		q6_1 Electric power generation	q6_2 Electric power transmission, distribution, and storage	q6_3 Energy efficiency, including heating, cooling and building envelope	q6_4 Fuels
N	Valid	2130	929	2169	1368
	Missing	3428	4629	3389	4190
Mean		30.61	15.43	10.13	12.97
Median		4.00	2.00	3.00	4.00
Sum		65202	14336	21981	17737
		49.3%	10.9%	16.6%	13.4%
		0.49346639548	0.1085010952	0.16635667067	0.13423825523

FILTER OFF.
USE ALL.
EXECUTE.

FREQUENCIES

VARIABLES= q7_1 q7_2 q7_3 q7_4 q7_5 q7_6 q7_7 q7_8 q7_9 q7_10 q7_11
/STATISTICS=MEAN MEDIAN SUM
/ORDER=ANALYSIS.

Frequencies

		q7_1 Solar photovoltaic electric generation	q7_2 Concentrated solar electric generation	q7_3 Wind generation	q7_4 Geothermal generation
N	Valid	1472	195	389	157
	Missing	4086	5363	5169	5402
Mean		26.17	4.41	18.98	5.98
Median		4.00	0.00	1.00	0.00
Sum		38529	860	7382	933
		64.4%	1.4%	12.3%	1.6%
		0.6438234982	0.01437517284	0.12335909191	0.01559049631

FILTER OFF.
 USE ALL.
 EXECUTE.

FREQUENCIES
 VARIABLES= q8_1 q8_2 q8_3 q8_4
 /STATISTICS=MEAN MEDIAN SUM
 /ORDER=ANALYSIS.

Frequencies

Statistics

		q8_1 Traditional transmission and distribution	q8_2 Storage	q8_3 Smart grid	q8_4 Other
N	Valid	500	400	249	68
	Missing	5058	5158	5309	5490
Mean		20.11	4.74	4.61	6.72
Median		2.00	1.00	0.00	1.00
Sum		10055	1896	1149	457
		74.2%	14.0%	8.5%	3.4%
		0.74168326326	0.13985394999	0.084753264	0.03370952276

FILTER OFF.
 USE ALL.
 EXECUTE.

FREQUENCIES
 VARIABLES= q9_1 q9_2 q9_3 q9_4 q9_5 q9_6 q9_7
 /STATISTICS=MEAN MEDIAN SUM
 /ORDER=ANALYSIS.

Frequencies

Statistics

		q9_1 Energy Star appliances	q9_2 LED, CFL and other efficient lighting	q9_3 Traditional HVAC goods and services	q9_4 Energy Star/ high AFUE HVAC
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N	Valid	507	725	724	556
	Missing	5051	4833	4834	5002
Mean		2.48	4.84	6.32	2.16
Median		0.00	1.00	1.00	0.00
Sum		1259	3506	4578	1200

7.6% 21.1% 27.6% 7.2%
0.07589885778 0.21131370363 0.27594707815 0.07233657816

FILTER OFF.
USE ALL.
EXECUTE.

FREQUENCIES
VARIABLES= q10_1 q10_2 q10_3 q10_4 q10_5 q10_6
/STATISTICS=MEAN MEDIAN SUM
/ORDER=ANALYSIS.

Frequencies

Statistics

		q10_1 Fossil fuels	q10_2 Corn ethanol	q10_3 Other ethanol/non-woody biomass	q10_4 Woody biomass
N	Valid	891	258	121	94
	Missing	4667	5300	5437	5464
Mean		13.89	5.32	4.09	4.66
Median		4.00	1.00	0.00	1.00
Sum		12374	1372	495	438

71.4% 7.9% 2.9% 2.5%
0.71414555318 0.07918277832 0.02856813066 0.02527846713

FILTER OFF.
USE ALL.
EXECUTE.

FREQUENCIES
VARIABLES= q11_1 q11_2 q11_3 q11_4 q11_5 q11_6 q11_7
/STATISTICS=MEAN MEDIAN SUM
/ORDER=ANALYSIS.

Frequencies

		Statistics			
		q11_1 Gasoline and diesel motor vehicles (excluding freight trucking)	q11_2 Hybrid and plug-in hybrid vehicles	q11_3 Electric vehicles	q11_4 Natural gas vehicles
N	Valid	660	224	182	194
	Missing	4898	5334	5376	5364
Mean		7.41	2.38	3.50	3.36
Median		2.00	0.00	0.00	0.00
Sum		4893	532	637	651
		69.3%	7.5%	9.0%	9.2%
		0.69335411648	0.07538614142	0.09026498512	0.09224883095

FILTER OFF.
 USE ALL.
 EXECUTE.

VALUE CHAIN EMPLOYMENT

FREQUENCIES
 VARIABLES= q13a q13b q13c q13d q13e q13f
 /STATISTICS=MEAN MEDIAN SUM
 /ORDER=ANALYSIS.

Frequencies

		Statistics			
		q13a Production or manufacturing positions	q13b Installation or repair positions	q13c Administrative positions	q13d Management or professional positions
N	Valid	4826	4859	4817	4779
	Missing	732	699	741	779
Mean		3.19	4.93	3.47	2.88
Median		0.00	1.00	1.00	1.00
Sum		15403	23974	16695	13752
		18.0%	28.0%	19.5%	16.1%
		0.18011459978	0.28034847688	0.19523416944	0.16080863006

FILTER OFF.
 USE ALL.
 EXECUTE.

HIRING DIFFICULTY

FREQUENCIES
 VARIABLES = q18
 /ORDER=ANALYSIS.

Frequencies

		Statistics
finding		
N	Valid	3111
	Missing	2447

q18 | Difficulty finding qualified applicants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very difficult	808	14.5	26.0	26.0
	Somewhat difficult	1435	25.8	46.1	72.1
	Not at all difficult	775	13.9	24.9	97.0
	DK/NA	93	1.7	3.0	100.0
	Total	3111	56.0	100.0	
Missing	System	2447	44.0		
Total		5558	100.0		

MULT RESPONSE GROUPS=\$q19 (q19_1code q19_2code (1,50))
 /FREQUENCIES=\$q19.

Multiple Response

Case Summary

	Cases				To
	Valid		Missing		
	N	Percent	N	Percent	
\$q19 ^a	916	16.5%	4642	83.5%	5558

a. Group

\$q19 Frequencies

		Responses		Percent of Cases
		N	Percent	
\$q19 ^a	Lack of soft skills (work ethic, dependability, critical thinking)	160	10.9%	17.5%
	Competition/ small applicant pool	183	12.4%	20.0%
	Insufficient qualifications, certifications, education	293	19.9%	32.0%
	Lack of experience, training, technical skills	389	26.4%	42.5%
	Difficulty finding industry-specific knowledge and skills	122	8.3%	13.3%
	Cannot provide competitive wages	78	5.3%	8.5%
	Location	85	5.8%	9.3%
	Other	116	7.9%	12.7%
	Cultural fit	28	1.9%	3.1%
	DK/NA	19	1.3%	2.1%
Total		1473	100.0%	160.8%

a. Group

MULT RESPONSE GROUPS=\$q20 (q20_1code q20_2code (1,50))

/FREQUENCIES=\$q20 .

Multiple Response

Case Summary

	Cases				
	Valid		Missing		To
	N	Percent	N	Percent	N
\$q20 ^a	916	16.5%	4642	83.5%	5558

a. Group

\$q20 Frequencies

		Responses		Percent of Cases
		N	Percent	
\$q20 ^a	Technician/ technical support	109	7.1%	11.9%
	Engineer	166	10.8%	18.1%

Sales, marketing, customer service	219	14.2%	23.9%
Installation	179	11.6%	19.5%
Manager, director, supervisor, VP	207	13.5%	22.6%
Electrician/ construction	157	10.2%	17.1%
Administrative support	51	3.3%	5.6%
Other	174	11.3%	19.0%
Software/ web development	22	1.4%	2.4%
Design/ architecture	56	3.6%	6.1%
Manufacturing/ production	18	1.2%	2.0%
Finance/ accounting	35	2.3%	3.8%
Analyst/ research	27	1.8%	2.9%
Consultant	11	0.7%	1.2%
Operations/ business development	20	1.3%	2.2%
Legal	10	0.7%	1.1%
DK/NA	76	4.9%	8.3%
Total	1537	100.0%	167.8%

a. Group

CUSTOMERS AND SUPPLIERS

FREQUENCIES

VARIABLES = q22 q23

/ORDER=ANALYSIS.

Frequencies

Statistics

		q22 Customer location	q23 Supplier and vendor location
N	Valid	5137	5133
	Missing	421	425

Frequency Table

q22 | Customer location

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	In-state	3593	64.6	69.9	69.9
	In a bordering state but out of state	267	4.8	5.2	75.1
	In the United States, but outside of a bordering state	1015	18.3	19.8	94.9
	Outside of the United States	105	1.9	2.0	96.9
	DK/NA	157	2.8	3.1	100.0
	Total	5137	92.4	100.0	
Missing	System	421	7.6		
Total		5558	100.0		

q23 | Supplier and vendor location

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	In-state	2518	45.3	49.1	49.1
	In a bordering state but out of state	462	8.3	9.0	58.1
	In the United States, but outside of a bordering state	1563	28.1	30.5	88.5
	Outside of the United States	205	3.7	4.0	92.5
	DK/NA	385	6.9	7.5	100.0
	Total	5133	92.4	100.0	
Missing	System	425	7.6		
Total		5558	100.0		

POLICIES CONTRIBUTED TO SUCCESS

MULT RESPONSE GROUPS=\$q24 (q24_1 q24_2 q24_3 q24_4 q24_5 q24_6 (1,50))
/FREQUENCIES=\$q24.

Multiple Response

Case Summary

	Cases				To
	Valid		Missing		
	N	Percent	N	Percent	
				N	

\$q24 ^a	5116	92.0%	442	8.0%	5558
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a. Group

\$q24 Frequencies

		Responses		Percent of Cases
		N	Percent	
\$q24 ^a	Renewable Energy Investment Tax Credit	1224	19.1%	23.9%
	Clean Power Plan or EPA's Clean Power Plan	294	4.6%	5.7%
	State-level Renewable Portfolio Standard (RPS) or Energy Efficiency Resource Standard (EERS)	692	10.8%	13.5%
	Other	914	14.3%	17.9%
	None	2517	39.4%	49.2%
	DK/NA	105	1.6%	2.1%
	Net metering	35	0.5%	0.7%
	Utility rebates	98	1.5%	1.9%
	Accelerated depreciation	18	0.3%	0.4%
	Solar Renewable Energy Credits and Carve-Outs	20	0.3%	0.4%
	Production Tax Credit and other production incentives	24	0.4%	0.5%
	Other tax exemptions, credits, and rebates	383	6.0%	7.5%
	Grants and loans	42	0.7%	0.8%
	Property Assessed Clean Energy	9	0.1%	0.2%
	Renewable Energy Credits	3	0.0%	0.1%
	Feed-in-Tariff	6	0.1%	0.1%
	Energy Star and other rating programs	12	0.2%	0.2%
Total		6396	100.0%	125.0%

a. Group

BARRIERS TO SUCCESS

MULT RESPONSE GROUPS=\$q25 (q25_1 q25_2 q25_3 q25_4 q25_5 q25_6 (1,50))
/FREQUENCIES=\$q25.

Multiple Response

Case Summary

	Cases				
	Valid		Missing		To
	N	Percent	N	Percent	N
\$q25 ^a	5117	92.1%	441	7.9%	5558

a. Group

\$q25 Frequencies

		Responses		Percent of Cases
		N	Percent	
\$q25 ^a	EPA's carbon regulations	153	2.9%	3.0%
	Clean Power Plan or EPA's Clean Power Plan	101	1.9%	2.0%
	State-level Renewable Portfolio Standard (RPS) or Energy Efficiency Resource Standard (EERS)	176	3.3%	3.4%
	Other	1380	26.1%	27.0%
	None	2647	50.1%	51.7%
	DK/NA	423	8.0%	8.3%
	Utility oppositions, policies/ regulations	83	1.6%	1.6%
	Policy uncertainty/ insufficiency	167	3.2%	3.3%
	Red tape regulations	105	2.0%	2.1%
	Competition	18	0.3%	0.4%
	Financing/ material costs	27	0.5%	0.5%
	Finding qualified employees	5	0.1%	0.1%
Total		5285	100.0%	103.3%

a. Group

SPECIFIC POLICIES

FREQUENCIES

VARIABLES = q26 q27 q28 q29 R1 R2

/ORDER=ANALYSIS.

Frequencies

Statistics

		q26 Are you aware of or familiar with the Renewable Energy Investment Tax Credit or ITC?	q27 Effect of Renewable Energy Investment Tax Credit on business prospects	q28 Are you aware of or familiar with the EPA's Clean Power Plan?	q29 Expected impact of EPA's Clean Power Plan on business prospects
N	Valid	3123	2568	3564	2046
	Missing	2435	2990	1994	3512

Frequency Table

q26 | Are you aware of or familiar with the Renewable Energy Investment Tax Credit or ITC?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1883	33.9	60.3	60.3
	No	1154	20.8	37.0	97.2
	DK/NA	86	1.5	2.8	100.0
	Total	3123	56.2	100.0	
Missing	System	2435	43.8		
Total		5558	100.0		

q27 | Effect of Renewable Energy Investment Tax Credit on business prospects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Considerably Increased business prospects	905	16.3	35.2	35.2
	Somewhat increased business prospects	496	8.9	19.3	54.6
	No impact on business prospects	944	17.0	36.8	91.3
	Somewhat reduced business prospects	41	0.7	1.6	92.9
	Considerably reduced business prospects	19	0.3	0.7	93.7
	DK/NA	163	2.9	6.3	100.0

Total	2568	46.2	100.0
Missing System	2990	53.8	
Total	5558	100.0	

q28 | Are you aware of or familiar with the EPA's Clean Power Plan?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	1806	32.5	50.7	50.7
No	1644	29.6	46.1	96.8
DK/NA	114	2.1	3.2	100.0
Total	3564	64.1	100.0	
Missing System	1994	35.9		
Total	5558	100.0		

q29 | Expected impact of EPA's Clean Power Plan on business prospects

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Considerably Increase business prospects	332	6.0	16.2	16.2
Somewhat increase business prospects	575	10.3	28.1	44.3
No impact on business prospects	772	13.9	37.7	82.1
Somewhat reduce business prospects	85	1.5	4.2	86.2
Considerably reduce business prospects	73	1.3	3.6	89.8
DK/NA	209	3.8	10.2	100.0
Total	2046	36.8	100.0	
Missing System	3512	63.2		
Total	5558	100.0		

R1 | Are you aware of or familiar with a Renewable Portfolio Standard (RPS) or Energy Efficiency Resource Standard (EERS) in your state?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	1595	28.7	41.5	41.5
No	2117	38.1	55.1	96.5
DK/NA	133	2.4	3.5	100.0
Total	3845	69.2	100.0	
Missing System	1713	30.8		
Total	5558	100.0		

R2 | Impact of Renewable Portfolio Standard (RPS) or Energy Efficiency Resource Standard (EERS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Considerably Increase business prospects	424	7.6	24.4	24.4
	Somewhat increase business prospects	430	7.7	24.8	49.2
	No impact on business prospects	641	11.5	36.9	86.1
	Somewhat reduce business prospects	54	1.0	3.1	89.2
	Considerably reduce business prospects	65	1.2	3.7	92.9
	DK/NA	123	2.2	7.1	100.0
	Total	1737	31.3	100.0	
Missing	System	3821	68.7		
Total		5558	100.0		

MULT RESPONSE GROUPS=\$q30 (q30_1code q30_2code q30_3code (1,50))
/FREQUENCIES=\$q30 .

Multiple Response

Case Summary

	Cases				
	Valid		Missing		To
	N	Percent	N	Percent	N
\$q30 ^a	948	17.1%	4610	82.9%	5558

a. Group

\$q30 Frequencies

	Responses	Percent of Cases		
		N	Percent	Percent of Cases
\$q30 ^a	Utility rebates	133	10.0%	14.0%
	Investment Tax Credit	273	20.6%	28.8%
	Renewable Energy Credits	16	1.2%	1.7%
	Renewable Portfolio Standards	16	1.2%	1.7%
	Solar Renewable Energy Credits	49	3.7%	5.2%
	Production Tax Credit	5	0.4%	0.5%
	Net metering	31	2.3%	3.3%
	Other tax exemptions, credits, rebates	322	24.3%	34.0%

Carbon tax/ trading	5	0.4%	0.5%
Feed-in-Tariff	7	0.5%	0.7%
Grants and loans (incl. Rural Energy for America Program)	36	2.7%	3.8%
Property Assessed Clean Energy	14	1.1%	1.5%
Other	67	5.1%	7.1%
DK/NA	307	23.2%	32.4%
Production incentives	20	1.5%	2.1%
Accelerated depreciation	23	1.7%	2.4%
Total	1324	100.0%	139.7%

a. Group

REVENUE

FREQUENCIES

VARIABLES = q31

/ORDER=ANALYSIS.

Frequencies

Statistics

q31 |
Revenue

N	Valid	5093
	Missing	465

q31 | Revenue

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All of it (100%)	2253	40.5	44.2	44.2
	Half to most of it (50% to 99%)	1103	19.8	21.7	65.9
	A quarter to almost half of it (25% to 49%)	447	8.0	8.8	74.7
	Less than a quarter (1% to 24%)	921	16.6	18.1	92.8
	DK/NA	369	6.6	7.2	100.0
	Total	5093	91.6	100.0	
Missing	System	465	8.4		
Total		5558	100.0		

tal
Percent
100.0%

42.1% Electric power generation

19.4% Electric power transmission, distribution, and storage

42.3% Energy efficiency, including heating, cooling and building envelope

26.4% Fuels

17.7% Motor vehicles

4.0% Other

0.2% DK/NA

38.5% Electric power generation

6.7% Electric power transmission, distribution, and storage

32.3% Energy efficiency, including heating, cooling and building envelope

14.4% Fuels

6.0% Motor vehicles

1.8% Other

0.3% DK/NA

se_a_8 se_a_9 se_a_10 se_a_11 se_a_12 (1,50)

tal
Percent
100.0%

75.2% Solar photovoltaic electric generation

11.8% Concentrated solar electric generation

23.0% Wind generation

9.5% Geothermal generation

11.5% Bioenergy/Biomass generation

7.0% Low-impact hydroelectric generation including wave/kinetic gen

9.5% Traditional hydropower

13.4% Advanced/Low emission natural gas

4.4% Nuclear

15.7% Fossil fuel generation

4.7% Other generation

tal
Percent
100.0%

61.4% Traditional transmission and distribution

51.9% Storage

33.6% Smart grid

7.9% Other

_c_8 (1,50))

tal
Percent
100.0%

36.1% Energy star appliances

48.9% LED, CFL and other efficient lighting

48.0% Traditional HVAC goods and services

40.1% Energy Star/ High AFUE HVAC

42.7% Renewable heating and cooling (including solar thermal)

42.3% Advanced building materials/insulation

11.0% Other

50))

tal
Percent
100.0%

71.7% Fossil fuels

24.2% Corn ethanol

11.6% Other ethanol/non-woody biomass

8.9% Woody biomass

3.4% Nuclear

17.4% Other

..e_8 (1,50))

tal
Percent
100.0%

77.3% Gasoline and diesel motor vehicles (excluding freight trucking)

33.3% Hybrid and plug-In hybrid vehicles

27.1% Electric vehicles

25.1% Natural gas vehicles

5.3% Hydrogen vehicles

11.0% Fuel cell vehicles

7.5% Other

2.9% DK/NA

tal
Percent
100.0%

15.1% A firm that manufactures and/or assembles

19.3% A firm that provides engineering and research services

42.3% A firm that sells and distributes

42.4% A firm that installs

25.4% A firm that provides consulting, finance, etc.

6.7% Other

1.9% Not sure

10.0% A firm that manufactures and/or assembles

9.6% A firm that provides engineering and research services

26.0% A firm that sells and distributes

32.2% A firm that installs

14.9% A firm that provides consulting, finance, etc.

5.2% Other

2.2% Not sure

57.7% Primarily work with products that are already commercially available

12.4% Primarily work with products still under development

26.6% Work with both products that are already available and under development
3.3% DK/NA

12.0% Concept
45.6% Product development
32.7% Pilot
9.7% DK/NA

0.0% None
41.1% 1 to 5 employees
19.0% 6 to 10 employees
16.9% 11 to 24 employees
9.2% 25 to 49 employees
5.2% 50 to 99 employees
3.7% 100 to 249 employees
1.3% 250 to 499 employees
1.4% 500 employees or more
2.2% DK/NA

40.7% More
2.4% Fewer
50.8% Same number
6.0% Don't know/ Refused

1.1% None
46.8% 1 to 5 employees
19.0% 6 to 10 employees
14.5% 11 to 24 employees
7.8% 25 to 49 employees
3.7% 50 to 99 employees
2.4% 100 to 249 employees
0.7% 250 to 499 employees
0.7% 500 employees or more
3.3% DK/NA

37.0% More
2.3% Fewer
55.0% Same number
5.6% Don't know/ Refused

q6_5 Motor vehicles	q6_6 Other
903	206
4655	5352
11.91	10.27
2.00	2.50
10759	2116
8.1%	1.6%
0.08142314196	0.01601444145

- 49.3% Electric power generation
- 10.9% Electric power transmission, distr
- 16.6% Energy efficiency, including heati
- 13.4% Fuels
- 8.1% Motor vehicles
- 1.6% Other

Statistics

q7_5 Bioenergy/Biomass generation	q7_6 Low-impact hydroelectric generation including wave/kinetic generation	q7_7 Traditional hydropower	q7_8 Advanced/Low emission natural gas	q7_9 Nuclear	q7_10 Fossil fuel generation
207	118	162	246	71	285
5351	5440	5396	5312	5487	5273
2.80	1.77	6.45	5.08	48.35	15.42
0.00	0.00	0.00	0.00	0.00	1.00
579	209	1045	1250	3433	4395
1.0%	0.3%	1.7%	2.1%	5.7%	7.3%
0.00967713636	0.00349691657	0.0174678728	0.02089176636	0.057365674	0.07344076238

74.2% Traditional transmission and distribution

14.0% Storage

8.5% Smart grid

3.4% Other

q9_5 Renewable heating and cooling (including solar thermal)	q9_6 Advanced building materials/insulation	q9_7 Other
--	---	--------------

623	599	197
4935	4959	5361
3.20	4.44	7.09
0.00	1.00	2.00
1992	2658	1398

12.0% 16.0% 8.4%

0.12008679666 0.16018203189 0.08423495374

7.6% Energy star appli
21.1% LED, CFL, and otl
27.6% Traditional HVAC
7.2% Energy Star/ high
12.0% Renewable heati
16.0% Advanced buildir
8.4% Other

q10_5 Nuclear	q10_6 Other
28	272
5530	5286
1.14	9.62
0.00	2.00
32	2616

0.2% 15.1%

0.00184682865 0.15097824205

71.4% Fossil fuels
7.9% Corn ethanol
2.9% Other ethanol/ non-woody biom:
2.5% Woody biomass
0.2% Nuclear
15.1% Other

q11_5 Hydrogen vehicles	q11_6 Fuel cell vehicles	q11_7 Other
27	67	57
5531	5491	5501
2.07	1.30	3.53
0.00	0.00	0.00
56	87	201
0.8%	1.2%	2.8%
0.00793538331	0.01232818478	0.02848235794

69.3% Gasoline and die
7.5% Hybrid and plug-
9.0% Electric vehicles
9.2% Natural gas vehi
0.8% Hydrogen vehicle
1.2% Fuel cell vehicles
2.8% Other

q13e Sales positions	q13f Other
4756	965
802	4593
1.79	7.42
0.00	2.00
8535	7157
10.0%	8.4%
0.09980120447	0.08369291937

18.0% % of solar workers in production
28.0% % of solar workers in installation
19.5% % of solar workers in administrative
16.1% % of solar workers in management
10.0% % of solar workers in sales posi
8.4% % of solar workers in other posi

26.0% Very difficult
46.1% Somewhat difficult
24.9% Not at all difficult
3.0% DK/NA

tal
Percent
100.0%

17.5% Lack of soft skills (work ethic, depen

20.0% Competition/ small applicant pool

32.0% Insufficient qualifications, certifica

42.5% Lack of experience, training, techn

13.3% Difficulty finding industry-specific

8.5% Cannot provide competitive wages

9.3% Location

12.7% Other

3.1% Cultural fit

2.1% DK/NA

42.5% Lack of experien

32.0% Insufficient quali

20.0% Competition/ sr

17.5% Lack of soft skills

13.3% Difficulty finding

9.3% Location

8.5% Cannot provide c

12.7% Other

3.1% Cultural fit

2.1% DK/NA

tal
Percent
100.0%

11.9% Technician/ technical support

18.1% Engineer

23.9% Sales, marketing

22.6% Manager, direct

23.9% Sales, marketing, customer service
19.5% Installation

22.6% Manager, director, supervisor, VP
17.1% Electrician/ construction
5.6% Administrative support
19.0% Other

2.4% Software/ web development
6.1% Design/ architecture
2.0% Manufacturing/ production
3.8% Finance/ accounting
2.9% Analyst/ research
1.2% Consultant

2.2% Operations/ business development
1.1% Legal
8.3% DK/NA

19.5% Installation
18.1% Engineer

17.1% Electrician/ construction
11.9% Technician/ technical
6.1% Design/ architecture
5.6% Administrative support

3.8% Finance/ accounting
2.9% Analyst/ research
2.4% Software/ web development
2.2% Operations/ business development
2.0% Manufacturing/ production
1.2% Consultant

1.1% Legal
19.0% Other
8.3% DK/NA

69.9% In-state

5.2% In a bordering state but out of state

19.8% In the United States, but outside of a bordering state

2.0% Outside of the United States

3.1% DK/NA

49.1% In-state

9.0% In a bordering state but out of state

30.5% In the United States, but outside of a bordering state

4.0% Outside of the United States

7.5% DK/NA

tal
Percent

100.0%

23.9% Renewable Energy Investment Tax Credit	23.9% Renewable Energy Investment Tax Credit
5.7% Clean Power Plan or EPA's Clean Power Plan	5.7% Clean Power Plan or EPA's Clean Power Plan
13.5% State-level Renewable Portfolio Standards	13.5% State-level Renewable Portfolio Standards
17.9% Other	0.7% Net metering
49.2% None	1.9% Utility rebates
2.1% DK/NA	0.4% Accelerated depreciation
0.7% Net metering	0.4% Solar Renewable Energy Credits
1.9% Utility rebates	0.5% Production Tax Credit
0.4% Accelerated depreciation	7.5% Other tax exemptions
0.4% Solar Renewable Energy Credits	0.8% Grants and loans
0.5% Production Tax Credit and other production tax credits	0.2% Property Assessed Clean Energy
7.5% Other tax exemptions, credits, and other tax incentives	0.1% Renewable Energy Production Tax Credit
0.8% Grants and loans	0.1% Feed-in-Tariff
0.2% Property Assessed Clean Energy	0.2% Energy Star and other rating programs
0.1% Renewable Energy Credits	17.9% Other
0.1% Feed-in-Tariff	49.2% None
0.2% Energy Star and other rating programs	2.1% DK/NA

tal	
Percent	
	100.0%

3.0% EPA's carbon regulations	3.4% State-level Renewable Portfolio S
2.0% Clean Power Plan or EPA's Clean	3.3% Policy uncertainty/ insufficiency
3.4% State-level Renewable Portfolio S	3.0% EPA's carbon reg
27.0% Other	2.1% Red tape regulat
51.7% None	2.0% Clean Power Plan
8.3% DK/NA	1.6% Utility opposition
1.6% Utility oppositions, policies/ regula	0.5% Financing/ materi
3.3% Policy uncertainty/ insufficiency	0.4% Competition
2.1% Red tape regulations	0.1% Finding qualified
0.4% Competition	27.0% Other
0.5% Financing/ material costs	51.7% None
0.1% Finding qualified employees	8.3% DK/NA

R1 Are you aware of or familiar with a Renewable Portfolio Standard (RPS) or Energy Efficiency Resource Standard (EERS) in your state?	R2 Impact of Renewable Portfolio Standard (RPS) or Energy Efficiency Resource Standard (EERS)
3845	1737
1713	3821

60.3% Yes
37.0% No
2.8% DK/NA

35.2% Considerably Increased business prospects

19.3% Somewhat increased business prospects

36.8% No impact on business prospects

1.6% Somewhat reduced business prospects

0.7% Considerably reduced business prospects

6.3% DK/NA

50.7% Yes
46.1% No
3.2% DK/NA

16.2% Considerably Increase business prospects
28.1% Somewhat increase business prospects
37.7% No impact on business prospects
4.2% Somewhat reduce business prospects
3.6% Considerably reduce business prospects
10.2% DK/NA

41.5% Yes
55.1% No
3.5% DK/NA

24.4% Considerably Increase business prospects

24.8% Somewhat increase business prospects

36.9% No impact on business prospects

3.1% Somewhat reduce business prospects

3.7% Considerably reduce business prospects

7.1% DK/NA

tal
Percent
100.0%

14.0% Utility rebates

28.8% Investment Tax Credit

1.7% Renewable Energy Credits

1.7% Renewable Portfolio Standards

5.2% Solar Renewable Energy Credits

0.5% Production Tax Credit

3.3% Net metering

34.0% Other tax exemptions, credits, reb

34.0% Other tax exemp

28.8% Investment Tax C

14.0% Utility rebates

5.2% Solar Renewable

3.8% Grants and loans

3.3% Net metering

2.4% Accelerated dep

2.1% Production incer

0.5% Carbon tax/ trading
0.7% Feed-in-Tariff

1.7% Renewable Ener
1.7% Renewable Portf

3.8% Grants and loans (incl. Rural Ene

1.5% Property Assesse

1.5% Property Assessed Clean Energy
7.1% Other
32.4% DK/NA
2.1% Production incentives
2.4% Accelerated depreciation

0.7% Feed-in-Tariff
0.5% Production Tax C
0.5% Carbon tax/ trad
7.1% Other
32.4% DK/NA

44.2% All of it (100%)

21.7% Half to most of it (50% to 99%)

8.8% A quarter to almost half of it (25% to 49%)

18.1% Less than a quarter (1% to 24%)

7.2% DK/NA

ope

ope

eration

lable

velopment

istribution, and storage
ng, cooling, and building envelope

q7_11 Other
89
5469
13.79
1.00
1228
2.1%

0.02051161225

- 64.4% Solar photovoltaic electric generation
- 1.4% Concentrated solar electric generation
- 12.3% Wind generation
- 1.6% Geothermal generation
- 1.0% Bioenergy/ biomass generation
- 0.3% Low-impact hydroelectric generation include wave/ kinetic gene
- 1.7% Traditional hydropower
- 2.1% Advanced/ low emission natural gas
- 5.7% Nuclear
- 7.3% Fossil fuel generation
- 2.1% Other

iances

ner efficient lighting

goods and services

1 AFUE HVAC

ing and cooling, including solar thermal

ng materials/ insulation

ass

iesel motor vehicles, excluding freight trucking
in hybrid vehicles

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n or manufacturing positions

n or repair positions

ative positions

ent or professional positions

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ce, training, technical skills

ifications, certifications, education

all applicant pool

; (work ethic, dependability, critical thinking)

industry-specific knowledge and skills

competitive wages

, customer service

or, supervisor, VP

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production

Energy Investment Tax Credit

or EPA's Clean Power Plan

Renewable Portfolio Standard (RPS) or Energy Efficiency Resource Standard (EERS)

Depreciation

Energy Credits and Carve-Outs

Production Tax Credit and other production incentives

Net metering, rebates, and other incentives

;

Renewable Energy

Energy Credits

Other rating programs

Renewable Portfolio Standard (RPS) or Energy Efficiency Resource Standard (EERS)

Availability/ insufficiency

Regulations

Provisions

Compliance with or EPA's Clean Power Plan

Requirements, policies/ regulations

Material costs

Number of employees

itions, credits, rebates
Credit

: Energy Credits

; (incl. Rural Energy for America Program)

reciation

atives

gy Credits
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ed Clean Energy

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ration