

**OMB Control Number 1910-New**  
**Expiration Date: MM/DD/YYYY**

**Paperwork Reduction Act Burden Disclosure Statement**

*This data is being collected to allow energy-related employment to be assigned by primary value chain activity, including: research and development; manufacturing; sales and distribution; installation, repair and maintenance; and professional services. It will also provide insight on workforce demographics and employers' ability to recruit qualified workers.*

*The data you supply will be used by industry, training organizations, community colleges, job seekers, federal agencies and other stakeholders, to better inform the workforce development system by highlighting changes in the industry that are driving demand for workers. This type of activity for energy and energy related industries is directly aligned with the broad administrative priority around job-driven training articulated in the Administration's Job Driven training initiative and associated Presidential Memorandum on interagency priorities around jobs, skills and training.*

*The data will also inform energy economic development planning activities at the local, state and regional levels by providing a more detailed assessment of energy jobs, as well as the changing energy landscape and how such changes influence labor markets.*

*Public reporting burden for this collection of information is estimated to be between 15-30 minutes, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of the Chief Information Officer, Enterprise Policy Development & Implementation Office, IM-22, Paperwork Reduction Project OMB Control Number 1910-New, U.S. Department of Energy, 1000 Independence Ave SW, Washington, DC, 20585-1290; and to the Office of Management and Budget (OMB), OIRA, Paperwork Reduction Project OMB Control Number 1910-New, Washington, DC 20503.*

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*Submission of this data is voluntary.*

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**Introduction:**

This communication is being made on behalf of the United States Department of Energy. We are conducting a national survey about the energy, energy-related, and advanced manufacturing industries. This important survey addresses businesses that research, develop, manufacture, install or work with products

that generate, distribute or save energy. This includes organizations involved in fossil and renewable energy production, energy efficiency products and services, motor vehicles, solar, wind, fossil and other energy sources, and other energy related products and services.

Your individual responses will **not** be published; only aggregated information will be used in reporting the survey results.

The survey is voluntary and should take approximately 15-30 minutes of your time. Your participation will help determine how investments of time and money should be made to support the industry and prepare the present and future labor pool.

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**Screener Questions**

A. Does your organization have at least one location with employees in the United States? (Please count yourself as an employee if you are an owner-operated business or sole proprietor).

- 1        Yes [CONTINUE]
- 2        No [TERMINATE]

For this survey, please only answer for your current business location. If your organization has other U.S. locations, please do not include their data. What is the zip code of your current location? [SHOW ADDRESS FROM SAMPLE FILE]

\_\_\_\_\_ (Accept all five-digit responses)

(DON'T READ) Have check box for Refused (Terminate if Refused)

**[SCREENER B NEEDS TO BE READ IN ITS ENTIRETY AS WRITTEN]**

B. Is your organization involved, in whole or part, with an activity related to energy? (PAUSE, IF UNSURE OR NO READ REMAINDER OF QUESTION, IF YES GO TO SC) We define this as being directly involved with researching, developing, producing, manufacturing, distributing, selling, implementing, installing, or repairing components, goods or services related to Electric Power Generation; Electric Power Transmission, Distribution, and Storage; Energy Efficiency, Including Heating, Cooling and Building Envelope; Fuels, including Extraction, Processing, Production, and Distribution; and Transportation, including Motor Vehicles. This also includes supporting services such as consulting, finance, tax, and legal services related to energy.

- 1 Yes [CONTINUE]
- 2 No [SKIP TO Q33]
- 3 Not sure [TERMINATE]

c. Which of the following industries describes your organization's work?  
[ALLOW MULTIPLE RESPONSES] [IF NEEDED: If your organization is involved in energy research or professional services for the industry, please select the options that are most relevant to your organization.]

1. Electric Power Generation
2. Electric Power Transmission, Distribution, and Storage
3. Energy Efficiency, Including Heating, Cooling and Building Envelope (IF NEEDED THIS INCLUDES THERMAL OR HOT WATER SOLAR)
4. Fuels
5. Transportation Vehicles, including Motor Vehicles
6. Component Parts for Transportation Vehicles
7. Other (Specify \_\_\_\_\_) TERMINATE
8. DK/NA TERMINATE

[ASK SCREENER D IF MORE THAN ONE SELECTED AT SCREENER C]

d. Which do you consider your organization's **primary** industry, based on the majority of labor hours performed at your location? [PIPE IN RESPONSES SELECTED AT SCREENER C, ACCEPT ONE]

1. Electric Power Generation
2. Electric Power Transmission, Distribution, and Storage
3. Energy Efficiency, Including Heating, Cooling and Building Envelope (IF NEEDED THIS INCLUDES THERMAL OR HOT WATER SOLAR)
4. Fuels
5. Transportation, including Motor Vehicles
6. Component Parts for Transportation Vehicles

CREATE **SDPRIME** FOR SC RESPONSE IF ONLY ONE RESPONSE AT SC, OR SD IF MULTIPLE RESPONSES AT SC

e. [ASK FOR EACH SCREENER C RESPONSE, EXCEPT SCREENER C = 7] Which of the following [INSERT SCREENER C RESPONSE] technologies is your organization directly engaged with?? [READ LIST, ALLOW MULTIPLE RESPONSES]

**A. Electric Power Generation**

1. Solar Photovoltaic Electric Generation
2. Concentrated Solar Electric Generation
3. Wind Generation

4. Geothermal Generation
5. Bioenergy/Biomass Generation
6. Low-Impact Hydroelectric Generation including Wave/Kinetic Generation
7. Traditional Hydroelectric Generation
8. Advanced/Low Emission Natural Gas
9. Nuclear Generation
10. Coal Generation
11. Oil and other Petroleum Generation
12. Natural Gas Generation
13. Combined Heat and Power
14. Other Generation (Specify)

**B. Electric Power Transmission, Distribution, and Storage**

1. Traditional Transmission and Distribution
2. Pumped Hydro Storage
3. Battery Storage
4. Other Storage
5. Smart Grid
6. Micro Grids
7. Other Grid Modernization
8. Other (Specify)

**C. Energy Efficiency, Including Heating, Cooling and Building Envelope**

1. Energy Star Appliances
2. LED, CFL and Other Efficient Lighting
3. Traditional HVAC goods, control systems, and services
4. Energy Star/ High Efficiency heating and cooling equipment, including boilers and furnaces with an AFUE rating of 90 or greater and air and central air conditioning units of 15 SEER or greater.
5. Renewable Heating and Cooling (including Solar Thermal)
6. Advanced Building Materials/Insulation
7. Recycled building materials
8. Reduced water consumption products and appliances
9. Other (Specify)

**D. Fuels**

1. Coal
2. Petroleum
3. Natural Gas
4. Other Fossil Fuel
5. Corn Ethanol
6. Other Ethanol/Non-Woody Biomass, including Biodiesel
7. Woody Biomass/Cellulosic Biofuel
8. Other Biofuels
9. Nuclear Fuel

10. Other (Specify)

**E. Transportation Vehicles, Including Motor Vehicles**

1. Gasoline and Diesel Motor Vehicles (excluding freight transport)
2. Hybrid Electric Vehicles
3. Plug-In Hybrid Vehicles
4. Electric Vehicles
5. Natural Gas Vehicles
6. Hydrogen Vehicles
7. Fuel Cell Vehicles
8. Other (Specify \_\_\_\_\_)

**F. Component Parts for Transportation Vehicles**

1. Transportation Vehicle Engine & Drive Parts
2. Transportation Vehicle Exhaust System Parts
3. Transportation Vehicle Body Parts
4. Other Transportation Vehicle Parts (Specify \_\_\_\_\_)

[IF RESPONDENT ONLY IDENTIFIES WITH ONE INDUSTRY AT SCREENER E (QC), USE THAT INDUSTRY FOR THE REMAINDER OF THE SURVEY IN PLACE OF “ENERGY” / IF MORE THAN ONE, CONTINUE TO USE “ENERGY.” EXCEPTION - IF THE ONLY SELECTION AT SCREENER C IS “OTHER” OR “DK/NA,” USE “ENERGY”]

F. Which of the following industry descriptions describes your organization’s focus as it relates to the [energy/ SC] industry? [ALLOW MULTIPLE RESPONSES]

1. An organization that manufactures and/or assembles [energy/ SC] goods or produces components that go into energy products
2. An organization that conducts research and development and related services for [energy/ SC]
3. An organization that sells and distributes [energy/ SC] products and services
4. An organization that installs [energy/ SC] systems or provides services for installation of [energy/ SC] systems
5. A public or private utility
6. An organization that provides consulting, engineering, finance, legal, or other professional services related to energy
7. Other support services (Specify: \_\_\_\_\_)
8. Other (Specify: \_\_\_\_\_)
9. (DON’T READ) Not sure

[ASK SCREENER G IF MORE THAN ONE SELECTED AT SCREENER F]

G. Which do you consider your organization's **primary** focus as it relates to the [energy/ SC] industry, based on the majority of labor hours performed at your location? [PIPE IN RESPONSES SELECTED AT SCREENER F, ACCEPT ONE]

1. An organization that manufactures and/or assembles [energy/ SC] goods or produces components that go into energy products
2. An organization that conducts research and development and related services for [energy/ SC]
3. An organization that sells and distributes [energy/ SC] products and services
4. An organization that installs [energy/ SC] systems or provides services for installation of [energy/ SC] systems
5. A public or private utility
6. An organization that provides consulting, engineering, finance, legal, or other professional services related to energy
7. Other support services (Specify: \_\_\_\_\_)
8. Other (Specify: \_\_\_\_\_)
9. (DON'T READ) Not sure

IF SG = 1, 2, 5 ASK SCREENER H, otherwise SKIP

H. Does your organization primarily work with products that are already widely commercially available or in the development stage?

1. Primarily work with products that are already widely commercially available
2. Primarily work with products still, at least in part, under development
3. Work with both products that are already widely commercially available and under development
4. DK/NA

IF SCREENER H = 2, ASK SCREENER I, OTHERWISE SKIP

I. How would you best describe the stage of your primary product(s)?

1. Concept
2. Product Development
3. Pilot
4. DK/NA

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## SECTION 1 - Organization Profile

For this survey, we will just be asking about the employees that work from or directly report to your current location.

1. Including all full-time and part-time employees, how many **permanent** employees work at or from your current location?

Record # of employees \_\_\_\_\_

(DON'T READ) Have check box for Refused

2. Based on [Take Q1 #] full-time and part-time permanent employees at your location, how many employees do you expect to have at your location 12 months from now?

- 1 More [record # \_\_\_\_\_]
- 2 Fewer [record # \_\_\_\_\_]
- 3 (DON'T READ) Same number
- 4 (DON'T READ) Refused

[If amount differs by 10% or more in either direction, ask: ]

Just to confirm, you currently have \_\_\_\_\_ permanent employees at your current location and you expect to have \_\_\_\_\_ (more/fewer) employees, for a total of \_\_\_\_\_ permanent employees 12 months from now.

3. Of the [Take Q1 #] full time and part-time permanent employees at your current location, how many of these workers support the [energy/ SC] portion of your business? Please note that your response should include administrative staff supporting the energy portion of your business.

Record # of employees \_\_\_\_\_

(DON'T READ) Have check box for Refused

[IF NEEDED: SUPPORT WORKERS ARE DEFINED AS THOSE INDIVIDUALS THAT SPEND ANY AMOUNT OF TIME, DIRECTLY WORKING ON ENERGY RELATED PROJECTS INCLUDING ADMINSTRATIVE SUPPORT WORKERS]  
[Q3 SHOULD BE LESS THAN OR EQUAL TO Q1 - BUILD IN CHECK]

4. How many full-time and part-time **permanent** employees did you have working at your current location 12 months ago that supported the [energy/ SC] portion of your business?

Record # of employees \_\_\_\_\_

(DON'T READ) Have check box for Refused

5. Based on [Take Q3 #] full-time and part-time permanent employees at your location that support the [energy/SC] portion of your business, how many employees do you expect to have at your location 12 months from now?

- 1 More [record # \_\_\_\_\_]
- 2 Fewer [record # \_\_\_\_\_]
- 3 (DON'T READ) Same number
- 4 (DON'T READ) Refused

Just to confirm, you currently have \_\_\_\_\_ permanent employees supporting the energy portion of your business and you expect that number to be \_\_\_\_\_ (more/fewer) 12 months from now, for a total of \_\_\_\_\_.

## SECTION 2 – Workforce Profile Questions

If SCREENER C > 1 response, ASK Q6

6. Thinking of your [Take Q3] [energy/ SC] workers at your location, please classify them in the following categories. Please count each employee only once and categorize them in the area where they spend the most time.

PIPE IN SCREENER C RESPONSES

Record # of employees \_\_\_\_\_

BUILD CHECK SO TOTAL MUST = Q3

IF SCREENER C = 1 and Screener E.A > 1 response, ASK Q7 OTHERWISE SKIP

USE Q3 IN PLACE OF Q6 IF SELECTED COUNT AT SCREENER C WAS ONE (ONE CHOICE)

7. Thinking of your [PIPE IN Q6/Q3 GENERATION ANSWER] energy generation workers at your location, please classify them in the following categories. Please count each employee only once and categorize them in the technology area where they spend the most time.

PIPE IN SCREENER E.A RESPONSES

Record # of employees \_\_\_\_\_

IF SCREENER C = 2 and Screener E.B > 1 response, ASK Q8 OTHERWISE SKIP

8. Thinking of your [PIPE IN Q6/Q3 ELECTRIC POWER TRANSMISSION, DISTRIBUTION, AND STORAGE ANSWER] energy transmission, distribution, and storage workers at your location, please classify them in the following categories. Please count each employee only once and categorize them in the technology area where they spend the most time.

PIPE IN SCREENER E.B RESPONSES

Record # of employees \_\_\_\_\_

9. Thinking of your [PIPE IN Q6/Q3 ENERGY EFFICIENCY, INCLUDING HEATING, COOLING AND BUILDING ENVELOPE ANSWER] energy efficiency, including heating, cooling and building envelope, workers at your location, please classify them in the following categories. Please count each employee only once and categorize them in the technology area where they spend the most time.

PIPE IN SCREENER E.C RESPONSES

Record # of employees \_\_\_\_\_

10. Thinking of your [PIPE IN Q6/Q3 FUELS ANSWER] fuels-related workers at your location, please classify them in the following categories. Please count each employee only once and categorize them in the technology area where they spend the most time.

PIPE IN SCREENER E.D RESPONSES

Record # of employees \_\_\_\_\_

11. Thinking of your [PIPE IN Q6/Q3 TRANSPORTATION VEHICLES ANSWER] motor-vehicle related workers at your location, please classify them in the following categories. Please count each employee only once and categorize them in the technology area where they spend the most time.

PIPE IN SCREENER E.E RESPONSES

Record # of employees \_\_\_\_\_

12. Thinking of your [PIPE IN Q6/Q3 COMPONENT PARTS ANSWER] energy generation workers at your location, please classify them in the following categories. Please count each employee only once and categorize them in the technology area where they spend the most time.

PIPE IN SCREENER E.F RESPONSES

Record # of employees \_\_\_\_\_

**Demographic questions**

13. Thinking of your [Take Q3] [energy/ SC] employees, how many are?

- a) Male: Record # employees \_\_\_\_\_
- b) Female: Record # of employees \_\_\_\_\_
- c) (DON'T READ) Refused

Q13 a+b must = Q3

14. Thinking of your [Take Q3] [energy/ SC] employees, please indicate the ethnicity:

- (a) Hispanic
- (b) Not Hispanic or Latino

15. Thinking of your [Take Q3] [energy/ SC] employees, please indicate the race and choose all that apply:

- a) American Indian or Alaskan Native: Record # of employees \_\_\_\_\_
- b) Asian: Record # of employees \_\_\_\_\_
- c) Black or African American: Record # of employees \_\_\_\_\_
- d) Native Hawaiian or other Pacific Islander: Record # of employees \_\_\_\_\_
- e) White: Record # of employees \_\_\_\_\_
- f) (DON'T READ) Refused

Q14 a-b must =Q3

Q15 a-e must = Q3

16. Thinking of your [Take Q3] [energy/ SC] employees, how many are:

- a) Veterans of the U.S. Armed Forces Record # of employees \_\_\_\_\_
- b) 55 and over Record # of employees \_\_\_\_\_
- c) Union members Record # of employees \_\_\_\_\_
- d) (DON'T READ) Refused

17. Thinking of the current [Take Q3] [energy/ SC] employees at your location, how many are in the following occupational categories?

(Please only assign one category to each employee that supports the [energy/ SC] portion of your business. If they fall into more than one category, please assign them to the category in which they devote more of their time.)

- a. Production/Manufacturing positions (includes assembly workers and those involved in the design, quality control and manufacturing process)

Record # of employees \_\_\_\_\_  
(DON'T READ) Have check box for Refused

- b. Installation or repair positions (includes technicians, building trades people, and supervisors that are working at project site)

Record # of employees \_\_\_\_\_  
(DON'T READ) Have check box for Refused

- c. Administrative positions (includes customer service representatives, clerks, office and operations support)

Record # of employees \_\_\_\_\_  
(DON'T READ) Have check box for Refused

- d. Management/Professional positions (**does not include** those supervisors that spend a majority of their time at project sites or sales managers)

Record # of employees \_\_\_\_\_  
(DON'T READ) Have check box for Refused

- e. Sales positions (includes cost estimators, sales representatives and sales managers)

Record # of employees \_\_\_\_\_  
(DON'T READ) Have check box for Refused

f. Other (Specify: \_\_\_\_\_)

Record # of employees \_\_\_\_\_  
(DON'T READ) Have check box for Refused

(CREATE INTERNAL CONTROL SO Q17 A+B+C+D+E+F EQUALS Q3)

18. Thinking of your [INSERT Q3] energy employees, how many spend at least 50% of their time supporting the energy portion of your business?

\_\_\_\_\_

19. Thinking of your [Q3 ANSWER] energy employees, how many spend all of their time supporting the energy portion of your business?

Record: \_\_\_\_\_

### **SECTION 3 – Workforce Development & Training Needs**

20. How many workers have you hired over the last 12 months, either for new positions or to replace former workers?

Record \_\_\_\_\_

IF Q20>0, ask Q21-24 otherwise SKIP

21. Thinking of the [Insert Q20] workers that you have hired at your location over the last 12 months, please indicate your level of difficulty finding qualified applicants to fill the positions.

1. Very difficult
2. Somewhat difficult
3. Not at all difficult
4. DK/NA

IF Q18 = 1 or 2 ask Q22 and Q23, otherwise SKIP

22. What are the two most significant reasons for the reported difficulty?

\_\_\_\_\_  
\_\_\_\_\_

23. Please provide the two most difficult positions for your organization to fill at your location.

\_\_\_\_\_  
\_\_\_\_\_

24. You reported [insert Q20] additional workers at your organization over the last 12 months. Of these [insert Q20] positions, how many:

a. Were newly created positions?

Record # of employees \_\_\_\_\_

b. Were existing employees that added energy responsibilities?

Record # of employees \_\_\_\_\_

c. Were hired to replace workers due to turnover or retirement?

Record # of employees \_\_\_\_\_

d. Were positions that required previous work experience related to the position?

Record # of employees \_\_\_\_\_

e. Required a bachelors degree or beyond: \_\_\_\_\_

Record # of employees \_\_\_\_\_

f. Required an associate degree or academic certificate from an accredited college, but not a bachelors degree: \_\_\_\_\_

Record # of employees \_\_\_\_\_

g. Required a vocational or technical postsecondary certificate or credential: \_\_\_\_\_

Record # of employees \_\_\_\_\_

25. You reported [insert Q20] energy hires at your location over the last 12 months. Of these [insert Q20] workers, how many:

a) Were male? Record # of employees \_\_\_\_\_

- b) Were female? Record # of employees \_\_\_\_\_
- c) (DON'T READ) Refused

Q25 a+b must = Q20

26. Of these [insert Q20] workers, please indicate the race and choose all that apply:

- a) American Indian or Alaskan Native: Record # of employees \_\_\_\_\_
- b) Asian: Record # of employees \_\_\_\_\_
- c) Black or African American: Record # of employees \_\_\_\_\_
- d) Native Hawaiian or other Pacific Islander: Record # of employees \_\_\_\_\_
- e) White Record # of employees \_\_\_\_\_
- f) Two or more races: Record # of employees \_\_\_\_\_
- g) (DON'T READ) Refused

Q26 a-f must = Q20

27. Of these [insert Q20] workers, please indicate their ethnicity:

- a) Hispanic or Latino: Record # of employees \_\_\_\_\_
- b) Not Hispanic or Latino: Record # of employees \_\_\_\_\_
- c) (DON'T READ) Refused

Q27 a+b must = Q20

28. Of these [insert Q20] workers. How many :

- a) Were veterans of the U.S. Armed Forces  
Record # of employees \_\_\_\_\_  
(DON'T READ) Have check box for Refused
- b) Were over the age of 55  
Record # of employees \_\_\_\_\_  
(DON'T READ) Have check box for Refused

**SECTION 4 – Business Questions**

29. Thinking about your organization's energy related customers, are they primarily located:
1. In-State
  2. In a bordering state but out of state
  3. In the United States, but outside of a bordering state
  4. Outside of the United States (WEB ONLY SPECIFY COUNTRIES \_\_\_\_\_)
  5. DK/NA
30. Thinking about your organization's energy related suppliers and vendors, are they primarily located:
1. In-State
  2. In a bordering state but out of state
  3. In the United States, but outside of a bordering state
  4. Outside of the United States (WEB ONLY SPECIFY COUNTRIES \_\_\_\_\_)
  5. DK/NA

### SECTION 5 – Revenue Questions

Ask Q31 if SF = 3 or 4

31. Can you name any specific rebates or incentives that can reduce the cost of selling, distributing or installing energy for your customers? [Record up to 3]

Record: \_\_\_\_

ASK Q32 if SE has multiple responses, otherwise SKIP

32. Approximately how much of your organization's work at your current location, in terms of total gross revenue, is related to each of the following products or services?

1. INSERT SE RESPONSE 1 \_\_\_\_%
2. INSERT SE RESPONSE 2 \_\_\_\_%
3. INSERT SE RESPONSE 3 \_\_\_\_%
4. ...
5. All other revenue not related to energy \_\_\_\_%

Q32 total must equal 100%

33. Are your customers primarily other businesses or individual consumers?
- a. Primarily businesses
  - b. Primarily individual consumers

- c. Both businesses and individuals

If Q 33 = a or c, ask Q34, otherwise SKIP

34. Is there a particular sector that represents the majority of your business customers?

- a. Yes (specify \_\_\_\_\_)
- b. No
- c. DK/NA (Don't Read)

### **SECTION 7 – Not Energy Follow-up**

[ASK ONLY IF SCREENER B = 2]

35. Is your organization planning on conducting any work related to energy over the next 12 months?

- 1 Yes [CONTINUE TO COLLECT CONTACT INFORMATION]
- 2 No [TERMINATE]
- 3 Not Sure [TERMINATE]

### **SECTION 8 – Technology Specific Questions**

ASK Q36 if SDPrime = 1 & SGPRIME DOES NOT = 5 otherwise SKIP

36. How much of your firm's work, as a percentage of your total gross energy revenue, is attributed to utility projects, including those funded by or owned by utilities?

- 1. All of it (100%)
- 2. Half to most of it (50% to 99%)
- 3. A quarter to almost half of it (25% to 49%)
- 4. Less than a quarter (1% to 24%)
- 5. (DON'T READ) DK/NA

ASK Q37 if SDPrime = 2 and SGPRIME DOES NOT = 5, otherwise SKIP

37. How much of your firm's work, as a percentage of your total revenue related to transportation and distribution of energy, is attributed to utility grid modernization projects, including those funded by or owned by utilities?

- 1. All of it (100%)
- 2. Half to most of it (50% to 99%)
- 3. A quarter to almost half of it (25% to 49%)
- 4. Less than a quarter (1% to 24%)

5. (DON'T READ) DK/NA

ASK Q38-41 IF  $Q7\_1 > 0$  OR  $Q7\_2 > 0$  OR  $Q9\_5 > 0$ , **OR IF SE RESPONSE = 1 AND SEA = 1 OR 2 OR SEC = 5 AND Q3 > 0**

38. You reported [PIPE IN  $Q7\_1 + Q7\_2 + Q9\_5$  OR Q3 IF SE = 1 RESPONSE] solar jobs please allocate these workers into each of the following project categories. Please assign each worker to the category for which they spend the majority of their time. (Please enter 0 if no workers spend the majority of their time in a category):

1. Residential \_\_\_\_\_
2. Commercial \_\_\_\_\_
3. Utility \_\_\_\_\_

39. Thinking of your average solar installer, approximately what percentage of his or her total compensated time is spent actively working on solar installation projects (as opposed to training, administrative duties, on-call activities, paid breaks, transportation, packing truck, lead generation, and other non-installation tasks)?

Record % of time: \_\_\_\_\_

40. Please provide the average number of labor hours, including both employees and contract labor, for a typical 5kW residential PV installation that your company installed over the past 12 months. Please include installation time only, not travel time to and from the site.

Record \_\_\_\_\_

41. Of these [insert] hours, how many of these were for electricians versus non-electrician vs non-installer labor hours?

1. Record # of hours for electricians \_\_\_\_\_
2. Record # of hours for non-electrician installers \_\_\_\_\_
3. Record # of hours for other non-installation workers \_\_\_\_\_

ASK Q42 & 43 if SC=6, OTHERWISE SKIP

42. Does your firm manufacture products that are intended to help achieve increasing fuel economy standards, such as:

1. Efficient engines
2. Drivetrains
3. Lightweight materials

4. Low rolling resistant tires
5. Other

43. Of your your firm's gross revenue related to component parts for transportation vehicles, how much is earned from products that increase fuel economy for vehicles?

1. All of it (100%)
2. Half to most of it (50% to 99%)
3. A quarter to almost half of it (25% to 49%)
4. Less than a quarter (1% to 24%)
5. (DON'T READ) DK/NA

ASK Q44 if SC = 5, otherwise SKIP

44. With which of the following types of transportation vehicles does your firm primarily design, manufacture, sell, repair, or otherwise work with? [SELECT ONE]

1. Automobiles
2. Light Duty Vehicles
3. Heavy Duty Vehicles
4. Industrial Vehicles, such as forklifts
5. Recreational Vehicles, such as golf carts
6. Rail
7. Other (specify \_\_\_\_\_)

ASK Q45 if SC = 6, otherwise SKIP

45. With which of the following types of transportation vehicles does your firm primarily provide parts for? [SELECT ONE]

1. Automobiles
2. Light Duty Vehicles
3. Heavy Duty Vehicles
4. Industrial Vehicles, such as forklifts
5. Recreational Vehicles, such as golf carts
6. Rail
7. Other (specify \_\_\_\_\_)

46. Thinking of the type of fuel used, does your organization offer parts for any of the following types of transportation vehicles? [ALLOW MULTIPLE]

1. Gasoline and Diesel Motor Vehicles (excluding freight transport)
2. Hybrid Electric Vehicles

3. Plug-In Hybrid Vehicles
4. Electric Vehicles
5. Natural Gas Vehicles
6. Hydrogen Vehicles
7. Fuel Cell Vehicles
8. Other (Specify \_\_\_\_\_)

## **SECTION 8 – Closing and Contact Info**

**Thank you for completing the survey. Since it sometimes becomes necessary for the project manager to confirm responses to certain questions, please verify your contact information.**

**This information will also be used to ensure that we do not call you as part of our telephone survey effort for this project.**

- A. First and Last Name \_\_\_\_\_
- B. Position \_\_\_\_\_
- C. Phone \_\_\_\_\_
- D. Email \_\_\_\_\_
- E. Organization Name \_\_\_\_\_
- F. Organization Address \_\_\_\_\_
- G. Organization City \_\_\_\_\_
- H. Organization State \_\_\_\_\_
- I. Organization Zip \_\_\_\_\_

**Thank you very much for your time.**

- J. Survey Date \_\_\_\_\_
- K. Survey Time \_\_\_\_\_