

**MassCEC Employer Survey – Phone Version**

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**Introduction:**

Hello, my name is \_\_\_\_\_. May I please speak to a Human Resources Manager or person responsible for staffing at [organization]?

Hello, my name is \_\_\_\_\_ and I'm calling on behalf of **the Massachusetts Clean Energy Center or MassCEC** who would value your participation in a brief survey about the region's workforce.

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

**(If needed):** The survey should take approximately 10 to 15 minutes of your time. By answering this survey, you can help inform how investments of time and money should be made to support the industry and how to prepare the present and future clean energy labor pool based on your needs.

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**Screener Questions**

A. Does your firm have at least one location with employees in Massachusetts? (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 Massachusetts business locations. If your firm has locations outside of Massachusetts, please do not include their data. What is the zip code of your current location?

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

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

B. Is your company involved with an activity related to the clean energy industry? We define this as being directly involved with researching, developing, producing, manufacturing, distributing or implementing components, goods or services related to renewable energy, energy efficiency or conservation, smart grid, energy storage, carbon management, and/or electric or hybrid vehicles.

- 1 Yes [CONTINUE]
- 2 No [SKIP TO Q27]
- 3 Not sure [SKIP TO Q27]

C. Which of the following clean energy industries is your firm most closely connected to?  
[ALLOW MULTIPLE RESPONSES]

- 1 Renewable energy
- 2 Energy efficiency (includes smart grid and energy storage)
- 3 Alternative transportation
- 4 Carbon management
- 5 Other (Specify: \_\_\_\_\_)
- 6 (DON'T READ) DK/NA

D. [ASK FOR EACH SCREENER C RESPONSE, EXCEPT SCREENER C = 5 or 6] Which of the following [INSERT SCREENER C RESPONSE] technologies is your firm most closely connected to? [READ LIST, ALLOW MULTIPLE RESPONSES]

A. Renewable Energy

- 1 Solar (PV or photovoltaic, thermal or concentrated or CSP)
- 2 Wind power
- 3 Fuel cell
- 4 Bioenergy
- 5 Hydropower or hydrokinetic (river, wave, tidal,...)
- 6 Geothermal
- 7 Hydrogen generation
- 8 Thermal to energy conversion
- 9 RE combined heat and power
- 10 Other (Specify: \_\_\_\_\_)
- 11 (DON'T READ) DK/NA

B. Energy Efficiency

- 1 Lighting
- 2 HVAC and building controls
- 3 Energy efficient appliances
- 4 Energy efficient processes and machinery
- 5 Energy storage
- 6 Demand response services
- 7 Smart grid (smart computing/software)
- 8 Weatherization services
- 9 Energy efficient building materials
- 10 Water and wastewater technologies related to conserving energy
- 11 Other (Specify: \_\_\_\_\_)
- 12 (DON'T READ) DK/NA

C. Alternative Transportation

- 1 Electric vehicles and systems
- 2 Electric rail
- 3 Other (Specify: \_\_\_\_\_)
- 4 (DON'T READ) DK/NA

D. Carbon Management

- 1 Carbon capture and storage
- 2 Secondary carbon market
- 3 Coal gasification
- 4 Other (Specify: \_\_\_\_\_)
- 5 (DON'T READ) DK/NA

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

E. Which of the following industry descriptions best describes your organization's focus as it relates to the [clean energy/ QC] industry? [ALLOW MULTIPLE RESPONSES]

- 1 A firm that manufactures and/or assembles [clean energy/ QC] goods or produces components that go into clean energy products
- 2 A firm that provides engineering and research services for [clean energy/ QC]
- 3 A firm that sells and distributes [clean energy/ QC] products and services
- 4 A firm that installs [clean energy/ QC] systems or provides services for installation of [clean energy/ QC] systems
- 5 Other (Specify: \_\_\_\_\_)
- 6 (DON'T READ) Not sure

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

F. Which do you consider your organization's **primary** focus as it relates to the [clean energy/ QC] industry? [PIPE IN RESPONSES SELECTED AT SCREENER E, ACCEPT ONE]

- 1 A firm that manufactures and/or assembles [clean energy/ QC] goods or produces components that go into clean energy products
- 2 A firm that provides engineering and research services for [clean energy/ QC]
- 3 A firm that sells and distributes [clean energy/ QC] products and services
- 4 A firm that installs [clean energy/ QC] systems or provides services for installation of [clean energy/ QC] systems
- 5 Other (Specify: \_\_\_\_\_)
- 6 (DON'T READ) DK/NA

(ONLINE ONLY)

G. Do you feel comfortable answering questions about the hiring and staffing needs of your Massachusetts location(s)?

- 1 Yes [CONTINUE]
- 2 No – Please provide us with the email address of someone at your firm who is better able to answer questions about hiring and staffing so that we can send him or her a survey.  
Collect Email: \_\_\_\_\_

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**SECTION 1 - Firm Profile**

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

1. How many business locations do you have in Massachusetts?

Record # of locations in Massachusetts \_\_\_\_\_

(DON'T READ) Have check box for Refused

[DO NOT ACCEPT ZERO AS RESPONSE]

[IF ONE, USE "LOCATION" THROUGHOUT SURVEY, IF MORE THAN ONE OR REFUSED, USE "LOCATIONS"]

2. Including all full-time and part-time employees, how many **permanent** employees work at or from your Massachusetts [location/ locations]?

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

(DON'T READ) Have check box for Refused

3. If you currently have [TAKE Q2 #] full-time and part-time **permanent** employees in Massachusetts, how many more or less permanent employees do you expect to have in Massachusetts 12 months from now?

- 1 More [record # \_\_\_\_\_]
- 2 Less [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 in Massachusetts and you expect to have \_\_\_\_ (more/less) employees, for a total of \_\_\_\_ permanent employees 12 months from now.

4. If you currently have [TAKE Q2 #] full-time and part-time **permanent** employees in Massachusetts, how many of these workers support the [clean energy/ QC] portion of your business? Please note that your response should include administrative staff supporting the clean energy portion of your business.

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

(DON'T READ) Have check box for Refused

[Q4 SHOULD BE LESS THAN OR EQUAL TO Q2 - BUILD IN CHECK]

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

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

(DON'T READ) Have check box for Refused

6. If you currently have [TAKE Q4 #] full-time and part-time **permanent** employees in Massachusetts that support the [clean energy/ QC] portion of your business, how many more or less permanent employees do you expect to have supporting the [clean energy/ QC] portion of your business from your Massachusetts [location/ locations] 12 months from now?

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

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

[CREATE INTERNAL CONTROL SO Q4 & Q6 (IF Q6=MORE Q4+Q6, IF Q6=LESS Q4-Q6, IF Q6=SAME Q4) DOES NOT EXCEED TOTAL OF Q2 & Q3 (IF Q3=MORE Q2+Q3, IF Q3=LESS Q2-Q3, IF Q3=SAME Q2)]

**[IF KNOWN UNIVERSE AND MORE CLEAN ENERGY WORKERS THAN LAST YEAR (Q4>Q5) Ask Section 2, Otherwise Skip to Section 3]**

**SECTION 2 – Workforce Development & Training Needs (KNOWN UNIVERSE ONLY)**

7. You reported [insert Q4-Q5] additional clean workers at your firm over the last 12 months. Of these [insert Q4-Q5] positions, how many:

- a. Were newly created positions?

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

- b. Were existing positions that added clean energy responsibilities?

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

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

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

- d. Required a bachelors degree or beyond: \_\_\_\_\_

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

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

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

(Q7 A+B+C COUNTS MAY OVERLAP, DO NOT NEED TO SUM TO Q4-Q5, however, each individual response for q7a through q7e must not be more than (Q4-Q5)]

- 8. Thinking of these additional [insert Q4-Q5] clean energy workers over the last 12 months, how many were in the following occupational categories?

(Please only assign one category to each employee that supports the [clean energy/ QC] 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/Technician

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

- b. Administrative

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

- c. Management/Professional

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

- d. Sales

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

- e. Other (Specify: \_\_\_\_\_)

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

(Q8 A+B+C+D+E SHOULD BE LESS THAN OR EQUAL TO Q4-Q5]

- 9. Thinking of these [insert Q4-Q5] additional clean energy workers, please provide any specific credentials that your firm deems valuable to their positions (accept up to 3 responses)

Record Response \_\_\_\_\_

10. Thinking of your new clean energy hires over the last 12 months, what recruitment methods were successful in filling open positions? (RANDOMIZE 1-7, MULTIPLE RESPONSE)

- 1 Word of mouth/referral
- 2 Online job postings such as Monster or Help Wanted
- 3 Social media tools such as LinkedIn, Twitter, or Facebook
- 4 Print advertising/newspaper help wanted
- 5 College/school recruitment
- 6 Job fairs
- 7 Workforce investment board referrals
- 8 Other (Specify: \_\_\_\_\_)
- 9 (DON'T READ) DK/NA

ASK Q10A ONLY IF MULTIPLE RESPONSES ARE SELECTED AT Q10

10a. Of the recruitment methods that you selected for the previous question, which one has been the most successful in filling open positions? (SINGLE RESPONSE)

[PIPE IN RESPONSES FROM Q10]

11. Please rate your difficulty finding applicants to fill your new clean energy positions over the last 12 months.

- 1 Very difficult
- 2 Somewhat difficult
- 3 Not at all difficult
- 4 (DON'T READ) DK/NA

[ONLINE ONLY If Q11 = 1 or 2, ask Q12, Otherwise Skip]

12. Please rank the following reasons for your reported difficulty.

- a. Not enough applicants with required technical experience
- b. Not enough applicants with required education
- c. Applicants had deficiencies with communications, problem solving, or analytical abilities
- d. Applicants demonstrated poor work ethic
- e. Competition from other companies
- f. Lack of networking or other opportunities to meet prospective applicants
- g. Too many resumes
- h. Other (Specify)

(DON'T READ) DK/NA

**SECTION 3 – Revenue Question (KNOWN UNIVERSE ONLY)**

13. Approximately how much of your firm’s work in Massachusetts, in terms of total revenue, is related to [clean energy/ QC] products or services?

- 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

**SECTION 4 – Installation Questions (KNOWN UNIVERSE ONLY)**

ASK Q14 - Q16 IF RENEWABLE ENERGY INSTALLER, SCREENER C= 1 and E = 4

14. How many megawatts (MW) or kilowatts (kW) of renewable energy systems did your firm install over the last 12 months?

Record \_\_\_\_\_

Have box for respondent to specify if answer is provided as megawatts or kilowatts

(DON'T READ) Have check box for Refused

15. How many megawatts (MW) or kilowatts (kW) of renewable energy systems does your firm have in process or in the pipeline to be installed over the next 12 months?

Record \_\_\_\_\_

Have box for respondent to specify if answer is provided as megawatts or kilowatts

(DON'T READ) Have check box for Refused

16. What size systems does your firm typically install? [ALLOW MULTIPLE RESPONSES]

- 1 Residential
- 2 Small commercial
- 3 Large commercial/ industrial
- 4 Utility-scale
- 5 (DON'T READ) DK/NA

**SECTION 5 – MassCEC Funding Questions (KNOWN UNIVERSE ONLY)**

[Formula Questions Entered Here for Companies Receiving MassCEC Funding, All Others Skip to Q24]

Our records indicate that you received a total of \$(Insert Figure) from MassCEC programs since July 1, 2009. The following questions will be related to the impacts of those funds on your business.

[If more than one program, state: Your firm received funding under more than one program. Please answer questions about the impacts of each program. If any of your workers were impacted by multiple programs, please report those workers only once.

17. Including the funding received from MassCEC in 2011, what was your firm’s total gross revenue in 2011?

Record \_\_\_\_\_  
(DON’T READ) Have check box for Refused

[IF UNABLE TO PROVIDE NUMBER, OFFER INTERVALS]

Would you say it was...

- 1 Less than \$1 million
- 2 Between \$1 million and \$10 million
- 3 Between \$10 million and \$25 million
- 4 Between \$25 million and \$100 million
- 5 More than \$100 million
- 6 (DON’T READ) DK/NA

18. Of the \$(Insert Figure 1) that you received related to (Insert Program 1 Name) over the past three years, about how much would you estimate your firm spent directly on labor costs?

Record \_\_\_\_\_(number given should not be greater than  
funding received)  
(DON’T READ) Have check box for Refused

19. Thinking of the \$(Insert Figure 1) that you received related to (Insert Program 1 Name) over the past three years, please report the number of permanent full-time and part-time jobs that were created or retained as a result of that funding.

Record \_\_\_\_\_  
(DON’T READ) Have check box for Refused

[CHECK: Q19 SHOULD BE LESS THAN OR EQUAL TO Q2]

IF Q19 IS > Q2 PROVIDE THE FOLLOWING CONFIRMATION:

Just to confirm, the [Q19] permanent jobs created or retained over the last three years as a result of funding from the (Insert Program 1 name) program is greater than your [Q2] current permanent employees.

- 1 Yes, we no longer have some of those employees – continue with the survey
- 2 No, correct the number of jobs created or retained from the funding

20. Thinking of the \$ (Insert Figure 1) that you received related to (Insert Program 1 Name), how many total hours of work were performed directly as a result of the funding? *Please do not include any hours that were funded by any other source of revenue.* Please note that one full time worker (40 hours per week x 52 weeks) is 2,080 labor hours per year and one half-time worker is 1,040 hours per year.

Fiscal Year 2010 (PIPE IN 2010 \$ RECEIVED), Total Labor Hours \_\_\_\_\_  
(DON'T READ) Have Check Box for Refused

Fiscal Year 2011 (PIPE IN 2011 \$ RECEIVED), Total Labor Hours \_\_\_\_\_  
(DON'T READ) Have Check Box for Refused

Fiscal Year 2012 (PIPE IN 2012 \$ RECEIVED), Total Labor Hours \_\_\_\_\_  
(DON'T READ) Have Check Box for Refused

[If more than one program, ask Q21 - Q23, otherwise skip to Q24]

21. Of the \$(Insert Figure 2) that you received related to (Insert Program 2 Name) over the past three years, about how much would you estimate your firm spent directly on labor costs?

Record \_\_\_\_\_(number given should not be greater than  
funding received)  
(DON'T READ) Have check box for Refused

22. Thinking of the \$(Insert Figure 2) that you received related to (Insert Program 2 Name) over the past three years, please report the number of permanent full-time and part-time jobs that were created or retained as a result of that funding.

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

IF THERE IS A RESPONSE THAT IS GREATER THAN ZERO AT BOTH Q19 & Q22 AND Q19+Q22 IS > Q2 PROVIDE THE FOLLOWING CONFIRMATION:

Just to confirm, you have created or retained [Q19] permanent jobs over the last three years from [program 1] and [Q22] permanent jobs from [program 2]. The total number of jobs created from both these programs [Q19+Q22] is greater than your [Q2] current permanent employees.

- 1 Yes, we no longer have some of those employees – continue with the survey
- 2 No, correct the number of jobs created or retained from [program 2]
- 3 No, correct the number of jobs created or retained from [program 1]

IF NO RESPONSE AT Q19 OR Q19=0 BUT Q22 IS >Q2 PROVIDE THE FOLLOWING CONFIRMATION:

Just to confirm, the [Q22] permanent jobs created or retained over the last three years as a result of funding from the (Insert Program 2 name) program is greater than your [Q2 number] current permanent employees.

- 1 Yes, we no longer have some of those employees – continue with the survey
- 2 No, correct the number of jobs created or retained from the funding

23. Thinking of the \$ (Insert Figure 2) that you received related to (Insert Program 2 Name), how many total hours of work were performed directly as a result of the funding? *Please do not include any hours that were funded by any other source of revenue.* Please note that one full time worker (40 hours per week x 52 weeks) is 2,080 labor hours per year and one half-time worker is 1,040 hours per year.

Fiscal Year 2010 (PIPE IN 2010 \$ RECEIVED), Total Labor Hours \_\_\_\_\_  
(DON'T READ) Have Check Box for Refused

Fiscal Year 2011 (PIPE IN 2011 \$ RECEIVED), Total Labor Hours \_\_\_\_\_  
(DON'T READ) Have Check Box for Refused

Fiscal Year 2012 (PIPE IN 2012 \$ RECEIVED), Total Labor Hours \_\_\_\_\_  
(DON'T READ) Have Check Box for Refused

**SECTION 6 – Revenue & Permission Questions**

KNOWN UNIVERSE ONLY

ONLY ASK IF DID NOT RECEIVE MASSCEC FUNDING (PER FIELD IN SAMPLE)

24. What was your firm's total gross revenue in 2011?

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

[IF UNABLE TO PROVIDE NUMBER, OFFER INTERVALS]

Would you say it was...

- 1 Less than \$1 million
- 2 Between \$1 million and \$10 million
- 3 Between \$10 million and \$25 million
- 4 Between \$25 million and \$100 million
- 5 More than \$100 million
- 6 (DON'T READ) DK/NA

25. Are you interested in receiving future information about the findings of this research?

- 1 Yes
- 2 No

26. Would you be willing to be contacted by educators and researchers to participate in a meeting in your local area to discuss workforce needs and how to grow the clean energy sector in your community?

- 1 Yes
- 2 No

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

[ASK ONLY IF SCREENER B = 2 OR 3]

27. Is your firm planning on conducting any work related to clean energy over the next 12 months?

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

**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. Company Name \_\_\_\_\_

F. Company Address \_\_\_\_\_

G. Company City \_\_\_\_\_

H. Company State \_\_\_\_\_

I. Company Zip \_\_\_\_\_

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

J. Survey Date \_\_\_\_\_

K. Survey Time \_\_\_\_\_