## ECIPP Program - Tier I Participant Survey

The purpose of the Tier I Participant Survey was to gather information from program participants regarding their program participation experience. The survey was designed by Research Into Action to contribute to the Process evaluation of the Enhanced Commercial Industrial Performance Program (ECIPP). The survey was managed by APPRISE Incorporated. Interviews were conducted by APPRISE Incorporated.

# Sample

### **Target Population**

The target population for the survey was ECIPP program year 10 Tier I participants. The survey respondent was the individual listed as the ECIPP program contact in the Buildings Portal data; that individual would have the best information on the participation decision.

### Sample Frame

The sample frame was downloaded from the NYSERDA Buildings Portal. The sample frame consisted of 324 projects that were completed and received ECIPP Tier I incentives during the targeted time period. Because the target respondent was the program contact, the sample frame was transformed so that there were 211 records - one record for each contact. [Note: 37 of the 211 contacts had more than one project.]

## Sample Selection

The sample frame was stratified into two groups based on ECIPP incentive amount. The moderate incentive group included all contacts with a project that had an incentive of \$2,500 or more, the amount at which an inspection is required. The second group was stratified into two subgroups; those with one ECIPP project and those with two or more ECIPP projects. Table 1 shows the number of contacts, the percent of contacts, and the percent of NYSERDA incentives for each stratum.

Table 1 – ECIPP Participant Survey Sample Stratification

Stratum	Number of Contacts	Percent of Contacts	Number of Projects	Percent of Projects	Percent of Incentives
#1 Moderate	26	12%	37	11%	47%
#2 Small Multi-Project	31	15%	133	41%	21%
#3 Small Single Project	154	73%	154	48%	32%
TOTAL	211	100%	324	100%	100%

The sample procedure allocated 20 interviews to stratum #1, 20 interviews to stratum #2, and 35 interviews to stratum #3. Using that approach, the overall population statistics achieved the target confidence interval (+/- 10% with 90% confidence). In addition, the target confidence interval was achieved in stratum #1. Table 2 furnishes information on the sample size by stratum, the confidence interval for each stratum, and the confidence interval for the overall sample.

Table 2 – ECIPP Tier I Contact Survey Sample Allocation

Stratum	Number of Contacts	Target Number of Interviews	90% Confidence Interval	
#1 Moderate	26	20	+/- 9%	
#2 Small Multi-Project	31	20	+/- 11%	
#3 Small Single-Project	154	35	+/- 12%	
TOTAL	211	75	+/- 9%	

### Sample Size

It was assumed that program participants would be relatively cooperative with the study. However, the target field period was only two weeks. To ensure that the targeted number of completed interviews would be achieved, a conservative response rate was assumed.

- Stratum #1 The population was 26 contacts. All cases were fielded. The expected response rate was 77%.
- Stratum #2 The population was 31 contacts. All cases were fielded. The expected response rate was 64%.
- Stratum #3 The population was 154 contacts. A simple random sample of 69 contacts was selected. The expected response rate was 50%.

The overall targeted response rate was 60%.

#### **Data Collection**

## Overview of Data Collection Procedures

The ECIPP Project Contact Survey was administered as a telephone interview with the NYSERDA project contact. Sampled contacts were sent an advance mailing notifying them of the data collection effort, including advance letters from NYSERDA and APPRISE regarding the study. Interviewers from APPRISE made contacts and conducted the surveys.

## Survey Instrument

The survey instrument was designed to collect information on the participation experience of Tier I and Tier II program participants. [Note: Once the survey was prepared, it was found that there were no Tier II program participants during the analysis period.] The draft survey was prepared by Research Into Action. APPRISE reviewed the survey and identified both general questions about survey administration and specific questions about the administration of certain items.

## Survey Administration

Interviewers called project contacts between 9 am and 5 pm on weekdays. If they reached the contact's voice mail, they would leave a message on first contact. After the first contact, they would leave a message every other day. The study was in the field for two weeks from 2/7/2008 to 2/21/2008. At least 8 contact attempts were made with each project contact. That survey administration procedure yielded 78 completed interviews (exceeding the target of 75). In addition, after the end of the survey administration period, additional survey respondents called in for interviews. Survey responses were accepted through 2/28/2008 and 82 interviews were completed.

Table 3 shows the final disposition of the sample. Table 4 shows the disposition by stratum.

Table 3 – ECIPP Participant Survey Sample Disposition

Disposition	Number	Percent	
Complete	Complete	82	65%
	Partial	0	1%
Contacted	Refused	6	5%
	Not Completed	23	18%
Not Contacted	Quota Met	5	4%
Excluded	Duplicate	5	4%
	Business or contact no longer available	2	1%
	Information not available for business/contact	3	2%

Disposition		Number	Percent
	Not Eligible	0	0%
TOTAL		126	100%

Table 4 – ECIPP Participant Survey Sample Disposition by Stratum

Disposition		Stratum #1		Stratum #2		Stratum #3	
		Number	Percent	Number	Percent	Number	Percent
Complete	Complete	20	76%	22	71%	40	58%
	Partial	0	0%	0	0%	0	0%
Contacted	Refused	2	8%	1	3%	3	4%
	Not Completed	3	12%	4	13%	16	23%
Not Contacted	Quota Met	0	0%	0	0%	5	7%
Excluded	Duplicate	1	4%	2	7%	2	3%
	Contact not available	0	0%	1	3%	1	1%
	No contact Information	0	0%	1	3%	2	3%
	Not Eligible	0	0%	0	0%	0	0%
TOTAL		26	100%	31	100%	69	100%

Table 5 shows the eligible sample size, the number of completed interviews, and the response rate by sample stratum.

Table 5 – ECIPP Participant Survey Response Rate

Stratum	Eligible Sample Size	Number of Interviews	Response Rate
#1 Moderate	25	20	80%
#2 Small Multi- Project	27	22	81%
#3 Small Single Project	59	40	68%
TOTAL	111	82	74%

#### **Data Processing**

# Coding

The survey included a number of "field-coded" questions. In these questions, the respondent was asked an open-ended question. The interviewer had the choice of coding the response as one of a number of pre-coded categories (coded from the open-ended responses for the prior surveys), or coding the response as "Other" and entering a text string to summarize the response. For all "Other" responses, the text was reviewed. The coder either selected one of the pre-coded responses or made the response eligible for development of a new code. After reviewing all questionnaires, text responses were grouped into categories. If a group represented at least 5% of responses (3 or more), a new code was created. If there were less than 3 responses, it was left as "Other."

## Keying

The survey data responses were keyed with 100% verification; the surveys were keyed twice and any discrepancies in the file were resolved.

### Data Processing

The survey data was checked for consistency with the survey instrument. The survey data was combined with the sample frame data. A number of data file formats were developed, including SAS, SPSS, Stata, and Excel. All files were labeled with variable labels and value labels.

### Weights

Since the survey was stratified and differential sampling rates were applied to each stratum, survey weights were developed and used for analysis of the data. Two weights were developed – a participant weight and an incentive weight.

- Participant Weight The same participant weight is computed for all completed interviews in the stratum. The formula for the participant weight (PW) is PW = # of Contacts / # of Interviews. [See Table 6]
- Incentive Weight The incentive weight is based on two factors the stratum factor and the
  respondent incentive. The formula for the stratum factor (SF) is SF = Sum of Stratum Incentives
  / Sum of Incentive for Stratum Respondents. The formula for the incentive weight (IW) for each
  respondent is IW = SF \* Incentive. [See Table 7]

**Table 6 – ECIPP Contact Survey Participant Weights** 

Stratum	Population	Number of Interviews	Participant Weight	
#1 Moderate	26	20	1.3	
#2 Small Multi-Project	31	22	1.4	

Stratum	Population	Number of Interviews	Participant Weight	
#3 Small Single-Project	154	40	3.85	
TOTAL	211	82	2.57	

Table 7 – Participating Owner Survey Incentive Weights

Stratum	Stratum Incentive Total	Respondent Incentive Total	Stratum Factor	Average Weight
#1 Moderate	\$136,710	\$106,255	1.29	6,835
#2 Small Multi-Project	\$62,366	\$52,027	1.20	2,835
#3 Small Single-Project	\$95,251	\$25,846	3.69	2,381
TOTAL	\$294,326	\$184,127	N/A	3,589