

# Regional Greenhouse Gas Initiative CO<sub>2</sub> Budget Trading Program



## Offset Project Monitoring and Verification Report Forms

### Building Sector Energy Efficiency

Version 1.1

Issued by:  
Bureau of Energy and Technology Policy  
CT Department of Energy & Environmental Protection  
<http://www.ct.gov/deep/>

April 2016

The Connecticut Department of Energy & Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act (ADA). Please contact us at (860) 418-5910 or [deep.accommodations@ct.gov](mailto:deep.accommodations@ct.gov) if you: have a disability and need a communication aid or service; have limited proficiency in English and may need information in another language; or if you wish to file an ADA or Title VI discrimination complaint.

## Contents

1.	Overview.....	3
2.	Submission Instructions.....	3
3.	M&V Report Forms.....	3
	Form 1.1 – Coversheet.....	5
	Form 1.2 – General Information.....	6
	Form 1.3 – Attestations.....	7
	Form 1.4 – Project Sponsor Statement.....	8
	Form 1.5 – Disclosure of Greenhouse Gas Emissions Data Reporting.....	9
	Form 2.1 – Demonstration of Conformance with M&V Plan.....	10
	Form 2.2 – Determination of Emissions Reductions.....	11
	Form 3.1 – Independent Verifier Certification Statement and Report.....	12

## 1. Overview

To demonstrate the achievement of CO<sub>2</sub>-equivalent emissions reductions from a building sector energy efficiency offset project that has received a consistency determination from the Connecticut Department of Energy & Environmental Protection (“Department”), a Project Sponsor must submit to the Department in accordance with instructions (see accompanying instructions packet) a fully completed *Offset Project Monitoring and Verification Report – Building Sector Energy Efficiency Version 1.1* (“M&V Report”), consisting of the coversheet and all forms and related attachments. Following the instructions will ensure that the M&V Report contains all necessary information and is submitted properly.

The Project Sponsor should review the CO<sub>2</sub> Budget Trading Program regulations at [section 22a-174-31a of the Regulations of Connecticut State Agencies](#) (“RCSA”) addressing offset projects and the award of CO<sub>2</sub> offset allowances. All offset project submittal materials and documents are available at [www.ct.gov/deep/cwp/view.asp?a=2684&Q=440696&depNav\\_GID=1619](http://www.ct.gov/deep/cwp/view.asp?a=2684&Q=440696&depNav_GID=1619).

## 2. Submission Instructions

Please complete this form and supporting documents in accordance with [section 22a-174-31a of the RCSA](#), the RGGI Model Rule ([www.rggi.org/documents](http://www.rggi.org/documents)) and accompanying instructions to ensure the proper handling of your application. These instructions are not a substitute for the requirements of the relevant statutes and any regulations thereunder. You should review all applicable laws prior to completing this application. Remember, it is your responsibility to comply with all applicable laws. There is no fee associated with the submission of this application.

Submit one (1) complete paper hardcopy original and one (1) electronic copy of the M&V Report in the form of a CD disk. The Model Rule requires that all offset project documentation, including *Monitoring and Verification Reports*, shall be signed by a Professional Engineer, identified by license number. Submit hardcopies of forms requiring signatures as originally-signed copies and scan such signed forms for electronic submission. Facsimiles of the M&V Report are not acceptable under any circumstances.

ATTN: KERI ENRIGHT-KATO  
CO2 BUDGET TRADING PROGRAM  
BUREAU OF ENERGY AND TECHNOLOGY POLICY  
CT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION  
10 FRANKLIN SQUARE  
NEW BRITAIN, CT 06051

If you have any questions about this application, please contact Keri Enright-Kato at [keri.enright-kato@ct.gov](mailto:keri.enright-kato@ct.gov) or at (860) 827-2642.

The M&V Report has three parts, as described below. Each part comprises specified forms and required documentation. The M&V Report has been created as a Microsoft Word document with editable fields. Enter information directly in the fields provided or submit information or documentation as an attachment, as instructed. Include headers on all attachments indicating the form to which each is attached, and the offset project name, and offset project ID code.

The Project Sponsor should save an electronic copy for his or her file to serve as a reference for any necessary remediation.

## 3. M&V Report Forms

The M&V Report consists of eight (8) forms divided into three parts, as follows:

**Part 1. General Information Forms**

- Form 1.1 – Coversheet
- Form 1.2 – General Information
- Form 1.3 – Attestations
- Form 1.4 – Project Sponsor Statement
- Form 1.5 – Disclosure of Greenhouse Gas Emissions Data Reporting

**Part 2. Category-Specific Information and Documentation Forms**

- Form 2.1 – Demonstration of Conformance with M&V Plan
- Form 2.2 – Determination of Emissions Reduction

**Part 3. Independent Verification Form**

- Form 3.1 – Independent Verifier Certification Statement and Report

Note that although some of the forms include embedded instructions, Project Sponsors are advised to consult the accompanying instructions packet for full instructions and documentation requirements.

**Offset Project Name**

**Offset Project ID Code**

**Form 1.1 – Coversheet**

**Project Sponsor (RGGI COATS Authorized Account Representative)**

**Project Sponsor Organization**

**Reporting Period**

**RGGI COATS General Account Name**

**RGGI COATS General Account Number**

Check the boxes below to indicate submission of the following required forms:

- Form 1.2 – General Information
- Form 1.3 – Attestations
- Form 1.4 – Project Sponsor Statement
- Form 1.5 – Disclosure of Greenhouse Gas Emissions Data Reporting
- Form 2.1 – Demonstration of Conformance with M&V Plan
- Form 2.2 – Determination of Emissions Reduction
- Form 3.1 – Independent Verifier Certification Statement and Report

<b>Offset Project Name</b>	<b>Offset Project ID Code</b>
<input type="text"/>	<input type="text"/>

**Form 1.2 – General Information**

**Project Sponsor (RGGI COATS Authorized Account Representative)**

<b>Telephone Number</b>	<b>Fax Number</b>	<b>Email Address</b>
<input type="text"/>	<input type="text"/>	<input type="text"/>

**Street Address**

<b>City</b>	<b>State/Province</b>	<b>Postal Code</b>	<b>Country</b>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**RGGI COATS General Account Name**

**RGGI COATS General Account Number**

<b>Name of Offset Project</b>	<b>Project Commencement Date</b>
<input type="text"/>	<input type="text"/>

**Summary Description of Offset Project**

<b>Project City</b>	<b>Project County</b>	<b>Project State</b>
<input type="text"/>	<input type="text"/>	<input type="text"/>

**Project Sponsor Organization**

**Primary Street Address**

<b>City</b>	<b>State/Province</b>	<b>Postal Code</b>	<b>Country</b>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Brief Description of Project Sponsor Organization**

<b>Telephone Number</b>	<b>Website URL</b>
<input type="text"/>	<input type="text"/>

<b>Independent Verifier (Company/Organization)</b>	<b>States Where Verifier Accredited</b>
<input type="text"/>	<input type="text"/>

<b>Primary Street Address</b>	<b>Website URL</b>
<input type="text"/>	<input type="text"/>

<b>City</b>	<b>State/Province</b>	<b>Postal Code</b>	<b>Country</b>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Point of Contact for Project**

<b>Contact Telephone Number</b>	<b>Contact Fax Number</b>	<b>Contact Email Address</b>
<input type="text"/>	<input type="text"/>	<input type="text"/>

**Contact Street Address**

<b>City</b>	<b>State/Province</b>	<b>Postal Code</b>	<b>Country</b>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Offset Project Name**

**Offset Project ID Code**

**Form 1.3 – Attestations**

The undersigned offset Project Sponsor certifies the truth of the following statements:

1. All offset projects for which the Project Sponsor has received CO<sub>2</sub> offset allowances, under the Project Sponsor’s or project sponsor organization’s ownership or control (or under the ownership or control of any entity which controls, is controlled by, or has common control with the Project Sponsor or project sponsor organization) are in compliance with all applicable requirements of the CO<sub>2</sub> Budget Trading Program in all participating states.
2. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this *M&V Report* and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

\_\_\_\_\_  
Signature of Project Sponsor

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Date (MM/DD/YYYY)

\_\_\_\_\_  
Name of Project Sponsor (printed)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Organization

\_\_\_\_\_  
Notary

\_\_\_\_\_  
Signature of Licensed Professional Engineer

\_\_\_\_\_  
Name of Licensed Professional Engineer

\_\_\_\_\_  
License Number(s)

\_\_\_\_\_  
License State(s)

**Offset Project Name**

**Offset Project ID Code**

**Form 1.4 – Project Sponsor Statement**

The undersigned Project Sponsor hereby confirms and attests that the offset project upon which this *Monitoring and Verification Report* is based is in full compliance with all of the requirements of section 22a-174-31a of the RCSA. The Project Sponsor holds the legal rights to the offset project, or has been granted the right to act on behalf of a party that holds the legal rights to the offset project. The Project Sponsor understands that eligibility for the award of CO<sub>2</sub> offset allowances under section 22a-174-31a of the RCSA is contingent on meeting the requirements of section 22a-174-31a of the RCSA. The Project Sponsor authorizes the Department or its agent to audit this offset project for purposes of verifying that the offset project, including the Monitoring and Verification Plan, has been implemented as described in the *Consistency Application* that was the subject of a consistency determination by the Department. The Project Sponsor understands that this right to audit shall include the right to enter the physical location of the offset project and to make available to the Department or its agent any and all documentation relating to the offset project at the Department’s request. The Project Sponsor submits to the legal jurisdiction of Connecticut.

\_\_\_\_\_  
Signature of Project Sponsor

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Date (MM/DD/YYYY)

\_\_\_\_\_  
Name of Project Sponsor (printed)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Organization

\_\_\_\_\_  
Notary



**Offset Project Name**

**Offset Project ID Code**

**Form 1.5 – Disclosure of Greenhouse Gas Emissions Data Reporting**

Check the box below that applies:

- No greenhouse gas emissions data related to the offset project referenced in this *M&V Report* have been or will be reported to a voluntary or mandatory program other than the CO<sub>2</sub> Budget Trading Program.
- Greenhouse gas emissions data related to the offset project referenced in this *M&V Report* have been or will be reported to a voluntary or mandatory program other than the CO<sub>2</sub> Budget Trading Program. Information for all such programs to which greenhouse gas emissions data have been or will be reported is provided below.

**Name of Program to which GHG Emissions Data Reported**

Check all that apply:

- Reporting is currently ongoing
- Reporting was conducted in the past
- Reporting will be conducted in the future
- Reporting is mandatory
- Reporting is voluntary

**Enter Frequency of Reporting**

**Enter Reporting Start Date**

**Program Contact Information – Address**

**Program Website**

**Categories of Emissions Data Reported**

**Name of Program to which GHG Emissions Data Reported**

Check all that apply:

- Reporting is currently ongoing
- Reporting was conducted in the past
- Reporting will be conducted in the future
- Reporting is mandatory
- Reporting is voluntary

**Enter Frequency of Reporting**

**Enter Reporting Start Date**

**Program Contact Information – Address**

**Program Website**

**Categories of Emissions Data Reported**

Add extra pages as needed.

**Offset Project Name**

**Offset Project ID Code**

**Form 2.1 – Demonstration of Conformance with M&V Plan**

Attach documentation that procedures and protocols specified in the M&V Plan were performed and records specified in the M&V Plan were generated and retained. Each attachment must include a header that indicates it is an attachment to Form 2.1 and includes the offset project name and offset project ID code.

Check the boxes below to indicate that the following required documentation is attached:

- 1. **Documentation of Project Implementation (required only for first M&V Report, if applicable).**  
Documentation of project implementation for projects not completed as of submission of *Consistency Application*, including:
  - A. Final post-installation equipment and materials specifications for as-installed offset project
  - B. Final post-installation building plans and technical schematics representing as-installed offset project
  - C. Final post-installation documentation of ECM installation for as-installed offset project
  - D. Confirmation of application of design intent statement for HVAC installation best practice (as applicable)
- 2. **Quality Assurance/Quality Control (QA/QC) Report.** Report documenting QA/QC of project monitoring and documentation during the reporting period.

**Offset Project Name**

**Offset Project ID Code**

**Form 2.2 – Determination of Emissions Reductions**

Provide documentation of reporting period energy use and CO<sub>2</sub> emissions reductions where indicated in the form or as an attachment, as directed below. Each attachment must include a header that indicates it is an attachment to Form 2.2 and includes the offset project name and offset project ID code.

	<i>Natural Gas</i>	<i>Propane</i>	<i>Fuel Oil</i>	<i>Kerosene</i>	<i>Total</i>
Baseline fuel use	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Post-installation use	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Annual energy use savings	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Emissions factor	116.98	139.04	161.27	159.41	
Oxidation factor	0.995	0.995	0.99	0.99	
Emissions reductions	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Check the boxes below to indicate that the following required documentation is attached:

- 1. **Documentation of Energy Monitoring Approach.** Narrative documentation of energy monitoring procedures used during reporting period to determine energy use for each building included in the offset project. If project eligible for use of representative sampling, copy of sampling protocol (for projects implementing similar ECMs in multiple residential buildings).
- 2. **Reporting Year Energy Use Data.** Documentation of energy use for each building included in offset project.
- 3. **Isolation of Energy Use.** Documentation of isolation of energy use for each end-use or building system targeted by eligible ECMs.
- 4. **Adjustments to Reporting Year Energy Use.** Documentation of adjustments to address operating and weather conditions, as applicable.
- 5. **Total Reporting Year Energy Use.** Spreadsheet documenting calculation of total reporting year energy use.
- 6. **Reporting Year CO<sub>2</sub> Emissions.** Spreadsheet documenting calculation of reporting year CO<sub>2</sub> emissions

**Offset Project Name**

\_\_\_\_\_

**Offset Project ID Code**

\_\_\_\_\_

**Form 3.1 – Independent Verifier Certification Statement and Report**

An accredited verifier and licensed professional engineer must sign and date the form. Attach the accredited verifier report. The attached accredited verifier report must include a header that indicates it is an attachment to Form 3.1 and includes the offset project name and offset project ID code.

**Name of Accredited Independent Verifier**

\_\_\_\_\_

I certify that the accredited independent verifier identified above reviewed this *M&V Report*, including all forms and attachments, in its entirety, including a review of the following:

1. The verifier has reviewed the entire *M&V Report* and evaluated the contents of the report in relation to the applicable requirements of section 22a-174-31a of the RCSA and the required documentation that must be provided in the *M&V Report*.
2. The verifier has evaluated the adequacy and validity of information supplied by the Project Sponsor to determine CO<sub>2</sub>-equivalent emissions reductions in accordance with subsection 22a-174-31a(g) of the RCSA and the required documentation that must be provided in the *M&V Report*.
3. The verifier has evaluated the adequacy and consistency of methods used by the Project Sponsor to quantify, monitor, and verify CO<sub>2</sub>-equivalent emissions reductions in accordance with subsection 22a-174-31a(g) of the RCSA and the Monitoring and Verification Plan submitted as part of the *Consistency Application*.

A verification report is attached that documents the verifier’s review of the items listed above and includes evaluation conclusions and findings.

\_\_\_\_\_  
Signature of Verifier Representative

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Date (MM/DD/YYYY)

\_\_\_\_\_  
Name of Verifier Representative (printed)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Notary

\_\_\_\_\_  
Signature of Licensed Professional Engineer

\_\_\_\_\_  
Name of Licensed Professional Engineer

\_\_\_\_\_  
License Number(s)

\_\_\_\_\_  
License State(s)