

# **LOW-CARBON BUILDING METHOD**

**V4**

TM

## **SUPPLEMENT 1**

*Additional guidance to the Low-Carbon Building Method for assessing  
the carbon reduction performance of building projects*

LOW-CARBON BUILDING METHOD™

SUPPLEMENT 1

© 2016 Guillaume Fabre. All right reserved.

ISBN: NA

Notice of Rights:

All rights reserved. No parts of this book may be reproduced or transmitted in any form and by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the Author.

Notice of Liability:

The Author does not make any warranty (expressed or implied) or assumes any liability or responsibility, to you or any third parties for the accuracy, completeness, or use of, or reliance on, any information contained in this book or for any injuries, losses, or damages (including, without limitation, equitable relief) arising out of such use or reliance.

As a condition of use, you covenant not to sue and agree to waive and release the Author from any and all claims, demands and causes of action for any injuries, losses, or damages (including, without limitation, equitable relief) that you may now or hereafter have a right to assert against the Author as a result of your use of or reliance on this book.

# FOREWORD

The Low-Carbon Building Method™ (the Method™) is a practical tool for people wanting to estimate the whole life embodied carbon of their building projects. This Supplement to the Method provides guidance for estimating the GHG reduction performance of project buildings.

While the Method is built on PAS 2050:2011, this Supplement is mainly based on the GHG Protocol for Project Accounting (free download at [www.ghgprotocol.com](http://www.ghgprotocol.com)).

# CONTENT

## A-GOAL & SCOPE

A1-Purpose

A2-Use of this Supplement

## B-KEY CONCEPTS

B1-Definitions

B2-Normative References

B3-Principles

B4-Additionality

B5-Reporting and Disclosure

## C-METHODOLOGY

C1-Overview

C2-Project Carbon

C3-Baseline Carbon

C4-Carbon reduction Performance

## APPENDIX

# **PART A-GOAL & SCOPE**

## **A1-PURPOSE**

This Supplement to the Low-Carbon Building Method™ (the Method™) shall be used to assess the whole life embodied carbon reduction performance of building projects.

## **A2-USE OF THIS SUPPLEMENT**

This Supplement shall be used alongside the Method. Deviations from this Supplement to reflect particularities of the project are acceptable but shall respect the principles listed in paragraph B3 and shall be justified.

[End of Part A]

# PART B-KEY CONCEPTS

## B1-DEFINITIONS

See Appendices.

## B2-NORMATIVE REFERENCES

- Low-Carbon Building Method™;
- [BSI] British Standards Institution. 2011. PAS 2050:2011 - Specification for the Assessment of the Life Cycle Greenhouse Gas Emissions of Goods and Services (free download at [www.bsigroup.com](http://www.bsigroup.com));
- [WBCSD, WRI] World Business Council for Sustainable Development, World Resources Institute. 2005. The GHG Protocol for Project Accounting (free download at [www.ghgprotocol.com](http://www.ghgprotocol.com)).

## B3-PRINCIPLES

The estimation of GHG reductions with this Supplement shall be done in good faith and shall respect the fundamental GHG accounting principles listed in the GHG Protocol: Relevance, Completeness, Consistency, Transparency, Accuracy, and Conservativeness (see the GHG Protocol for definitions).

## B4-ADDITIONALITY

In this Supplement, GHG reductions are considered genuine and shall be accounted for only if they are “additional”. That means that they would not have “happened anyway”.

Estimating GHG reductions therefore requires the definition of a baseline scenario (baseline building) representative of the “common construction practices” in the region. The GHG reductions of the project building are then determined by comparing the GHG emissions of the project building to the emissions of the baseline building.

Part C-Methodology provides guidance for defining the baseline building and estimating the baseline emissions and GHG reduction performance of the project building.

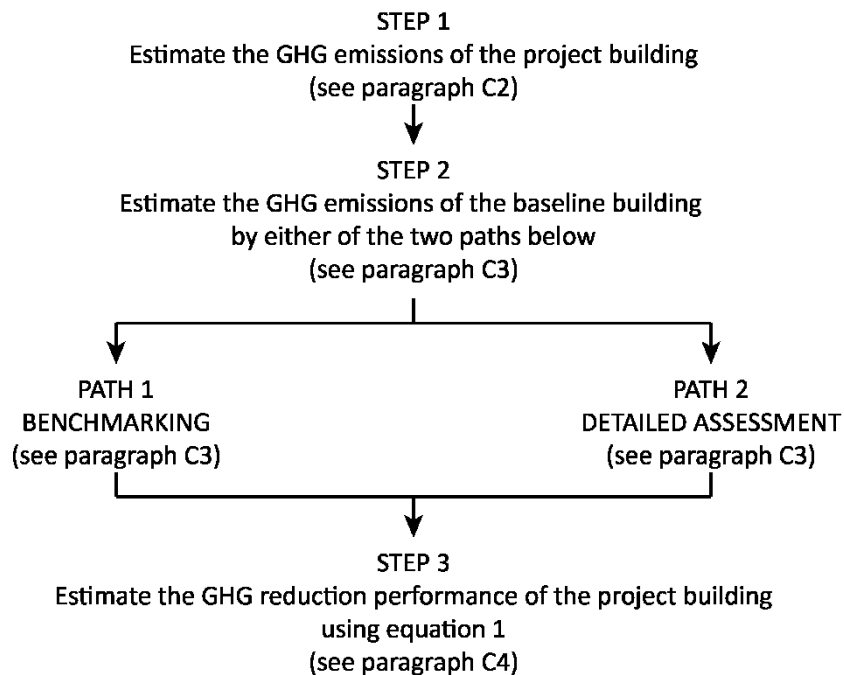


Page 7 is not available for preview

# PART C-METHODOLOGY

## C1-OVERVIEW

The GHG reduction performance of the project building shall be estimated by comparing the GHG emissions of the project building to the GHG emissions of the baseline building (see paragraph C2) as follows:



The baseline building is defined as follows (adapted from the GHG Protocol):

The building that would most likely have been constructed in the absence of “any consideration for climate change mitigation”. The baseline building shall be representative of the “common construction practices” in the region at the time when the project building is constructed.

Paragraph C3 provides guidance for defining the baseline building and determining the baseline emissions



## C2-PROJECT CARBON

Estimate the GHG emissions of the project building by using the methodology in the Method and latest addenda.

## C3-BASELINE CARBON

Estimate the baseline emissions by either one of the two paths below (Path 1 usually requires fewer efforts but has more stringent eligibility requirements).

Note: It is possible to combine Path 1 and Path 2 (if for example benchmark data are only available for part of the project).

### PATH 1-BENCHMARKING

#### Overview:

The baseline emissions are determined based on the GHG emissions of buildings similar to the project building constructed in the region. This approach can be associated to the “performance standard procedure” described in the GHG Protocol.

#### Eligibility requirements:

The project building is located in a region where the life cycle GHG emissions of similar buildings (baseline buildings) have been assessed and disclosed.

Baseline building candidates shall be selected on the following criteria:

Region	Same as the project building.
Year of construction	No more than 10 years before the project building.
Use	Same as the project building. If for example the project building is a residential building, the baseline buildings shall also be residential buildings.
Structure materials	Can differ from the project building. If for example the project building is made of concrete, some of the baseline buildings can be made of wood if this is also a construction material used in the region.

The life cycle GHG emissions of the baseline buildings shall have been assessed with the Method or PAS 2050:2011 (preferred), or other comparable standards.



Pages 10 to 16 are not available for preview