

Summary

The Project Carbon Calculator is a practical tool for project partners to determine where CO2 reduction can be achieved during the procurement and building phases of a construction project. It can be used widely in the infrastructure sector, as well as the residential and non-residential building sectors.

Developers: Royal BAM Group

Applicable sectors						Themes			
All Infrastructure	Buildings	Roads	Water	Energy	Transport	Construction	Materials	Ecology	Wastewater
							Potable Water	Carbon/GHG	Other
Countries	Netherlands					Access	Free to download		
Compatibility with other tools	No specific tool					Guidance for users	<p>The software comes with a <i>User Manual</i> that provides guidance on the structure of the calculator and how it can be used.</p> <p>A publication describing the tool's application in 28 projects can be found on the BAM website.</p>		
Inputs & outputs	<p>The user is given the option to input new emission factors before proceeding to the CO2 calculation.</p> <p>The CO2 calculation requires input of the number of hours that each piece of equipment is used and the quantities of different materials, selected from different inbuilt categories.</p> <p>The calculator enables introduction of values before any reduction measures are taken, and after measures are applied, to enable comparison. If desired, multiple projects can be added.</p> <p>Results are presented in a report that displays the overall CO2 emissions before and after reduction measures, and offers a breakdown of this by category (materials, construction equipment, waste etc.).</p>					Methodology	<p>The Project Carbon Calculator calculates the CO2 emissions of construction by examining the following categories:</p> <ol style="list-style-type: none"> 1. Materials 2. Construction site equipment 3. Personnel 4. Waste 5. Transportation 6. Energy consumption at construction site <p>The CO2 emissions of each category are calculated using the software's inbuilt emission factors and assumptions.</p>		
Database library	The calculator contains an inbuilt database with emission factor values (e.g. CO2/ unit material or CO2/hr of operation).					Data intensity & flexibility	Data flexibility is high as the user can use default values or enter their own. Data intensity is reduced as suggested values are included in the calculator by default.		

Note: "Free to download" does not necessarily imply that it is free for commercial use.