

mainer.co.uk

Mainer Associates

CarbonCentric App



**SPECIALIST
SUSTAINABILITY
CONSULTANCY**



Built with precision and innovation in mind for carbon measurement, our new cutting-edge App reshapes the way we approach building projects, introducing a new era of responsible development.

The Carbon Tool App provides real-time insights and preliminary results through a comprehensive carbon score, empowering intervention and guidance at any stage of the project, even before a single brick is laid.

Enabling better informed and more decision-making, adaptability, accuracy, as well as more coherent and aspirational carbon management, tailored to the client's budget and targets.

The screenshot displays the CarbonCentric software interface. At the top, there are navigation tabs: Project Details, Instruction Form, Summary (selected), Bill of Quantities, One Click Graphs, and Carbon Centric Dashboard. Below the tabs is a key indicating status: Green < 50%, Amber > 50%, and Red > 85%. The main area is divided into 'Procure' and 'Build' sections. The 'Procure' section shows a table of Bill of Materials (BOM) items with columns for CO₂e, % of Total, Sub-Return CO₂e, and % +/-.

Bill of Quantity	CO ₂ e	% of Total	Sub-Return CO ₂ e	% +/-
B1 - Balustrades	9.93	0.08%	8.50	86%
B2 - Metal Doors	99.72	0.76%	265.31	276%
B3 - Joinery&Addendum	41.49	0.31%	0.00	43%
B4 - Blockwork	184.66	1.40%	0.00	21%
B5 - WC&Vanity Units	14.80	0.11%	36.19	22%
B6 - Decoration	17.11	0.13%	0.00	57%
B7 - Ceramic Tiling	37.82	0.29%	0.00	63%
B8 - Soft Flooring	10.02			
B9 - Screeding	7.49			
B10 - Ceilings	20.23			
B11 - Screens	45.46			
B12 - Specialist Finishes	1.09			
B13 - Earthworks	127.80			
B14 - Hard Landscaping	580.52			
B16 - Retaining Walls	179.04			
B17 - Street Furniture	22.36			
B18 - External Services	1.35			
B19 - Drainage	134.11			
B21 - Works Beyond Curtilage	0.55			
TOTAL	13,196.16			
A1-A5 - Site Fuel, Elec	377			
MEP A1-A5 Rate 107 kgCO ₂ e/m ²	2,616			

The 'Build' section shows Final CO₂ and % +/- for each item. Below the BOM table is a 'Project Details' section for 'B2 - Metal Doors A1-A5 Emission Allowance tCO₂e'. It displays a 'Bill of Quantity' of 99721 and 'RESULTS' showing a 'Total kg CO₂e' of 33,240. A 'Carbon Budget Bar' indicates '33% Used' and '66% Remaining'. Below this is a table of material data with columns for Material Data (A1-A5), Material Confirmation, Quantity, Unit, Supplier Quantity, Supplier Unit, Default Max Transport Distance (km), and km.

Material Data (A1-A5)	Material Confirmation	Quantity	Unit	Supplier Quantity	Supplier Unit	Default Max Transport Distance (km)	km
Steel door 60.04 kg/m ² , H 16-1 (T90) (Item name: K2 Freising)	<input checked="" type="checkbox"/> Item Correct	79.94	m ²	239.82	m ²	1500	1
High-speed steel doors, 79.7 kg/m ² , 2.3x2.75 m, Schweißauf Operator unit - Tormentor (EPARELO)	<input checked="" type="checkbox"/> Item Correct	25.21	m ²	75.63	m ²	1500	1
Aluminium frame profile, powder coated, 1.00 kg/m	<input checked="" type="checkbox"/> Item Correct	19.2	kg	57.6	kg	1500	1
Riser door system, 34.01 kg/m ² , Solo - Quadro - riser door (SELO)	<input checked="" type="checkbox"/> Item Correct	834.02	m ²	2508.06	m ²	1500	1
Enclosure cabinet, 32 kg/unit (LEGRAND)	<input checked="" type="checkbox"/> Item Correct	4	unit	12	unit	1500	1
TOTAL		964.37		2893.11			5

Process with the App

A **centralised approach** of obtaining accurate and real-time data on what has been (& will be) procured/installed on-site.

This ensures an **easy & effective liaising process**, communicating with sub-contractors on the client's behalf.

The app enables Mainer to collate data with the desired granularity/detail and narrative for the client, with **greater efficiency**. For instance, if the client requests to compare predicted emissions to actual emissions, the client could login and review such information.

Quantified carbon emissions can also be 'time-lined' as the construction project progresses, rather than a providing a 'snapshot' of total emissions when each report is issued, as previously done.

This **helps the client understand the 'WLCA assessment completeness' of the project.**

Process without the App

Cannot provide a real-time carbon emissions score and compare against predicted emissions (what is yet to be installed)

A longer, more fragmented liaising process, whereby the client may provide data to different colleagues through information requests, long email-threads, and frequent catch-up meetings.

On occasions, the data provided previously has not always been detailed nor conducive enough for Mainer to calculate carbon emissions with complete confidence, including:

- **Generic product descriptions**
- **Default transport distances**
- **Recycled content**

Although normal at early design stage, this often yields a WLCA report that contains **greater uncertainty scores** when feeding this back to the client.



Nottingham Trent University

The time benefits to using the App

We trialled a manual version of the App on our next project at NTU, testing it against the current process of long and fragmented liaising. We sent part populated forms to the sub-contractors and engaged with them to fill their data in.

We found the returned forms contained far more accurate data on what has already been installed, detailing:

- The concrete grade (where applicable)
- Transport distances (both direct to site and via the supplier) and
- More detailed product descriptions

This speed up the process, increased data detail and reduced uncertainty scores for the client.

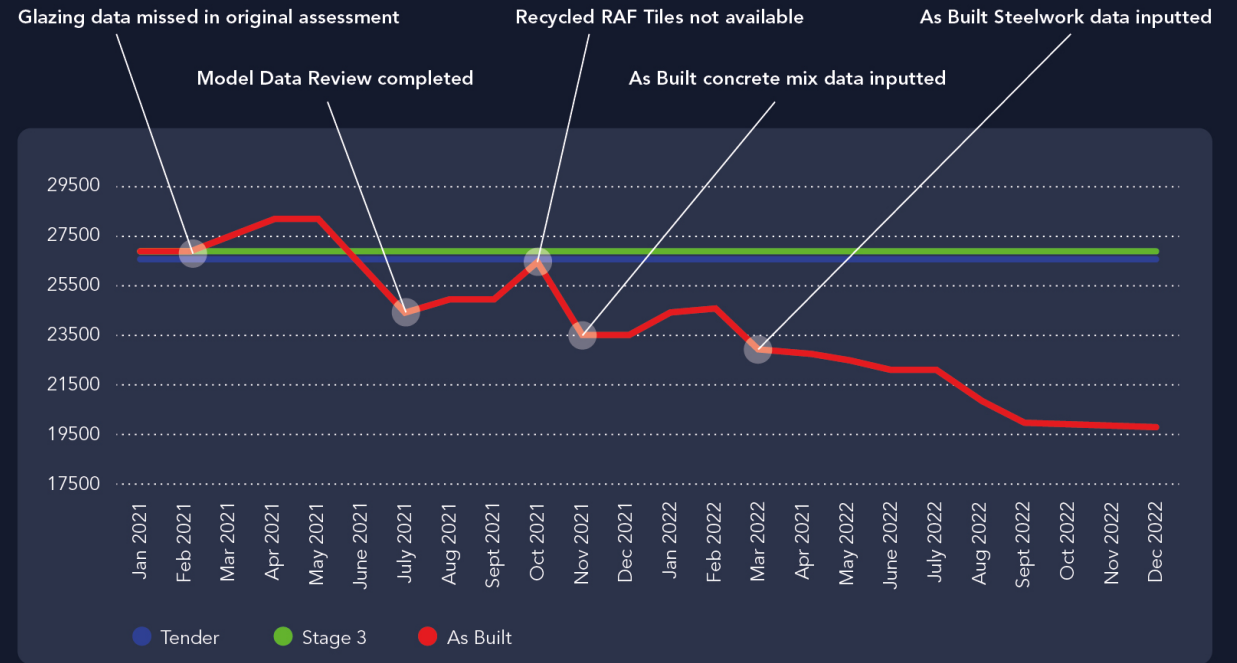
We also found that more than **27 sub-contractors** returned their carbon material forms **within 15 working days**.



The Carbon Centric App ensures systematic swift & simple data collection using a centralised approach obtaining accurate and real-time data.

The App allows for greater data transparency and can help deliver a much more comprehensive embodied carbon assessment.

It reduces the chance of misrepresentation on the true sustainability performance of a project, as well as mis-guided decision-making on assumptions.



Product Deliveries

Project: All | Status: Live | Date: 30/05/2018 to 20/07/2022

Deliveries: 2,754 | Products: 5,035 | Product Units: 1,030,034.00 | Product Weight (tonnes): 3,084.13 | Product Volume (m3): 18,746.26 | Suppliers: 77 | Dispatch addresses: 278 | Avg days to upload delivery note: 25.03

Delivery Dispatch Addresses

Product Units

Product Properties

Number of Deliveries

Clean Supplier Name

Clean Supplier Name	Deliveries	Units	Volume (m3)	Weight (tonnes)	Oflow URL
Jewson	7	158.00	6.89	742.46	
Elland Steel Structures Ltd	55	4,472.00	106.37	462.55	
RightCast Ltd	15	146.00	339.86	325.71	
MCONE BROS EXCAVATIONS LIMITED	587	680,638.93	1,305.57	255.79	
British Gypsum	2	1,188.00	70.15	58.55	
Creagh Concrete Products Ltd	2	38.00	12.59	43.25	
HY-TEN LTD	2	1,323.00	6.91	36.53	
Vale Protective Coatings Ltd	2	55.00		21.99	
Total	2,754	1,030,034.00	18,746.26	3,084.13	

Thank you



hello@mainer.co.uk

01235 854 042

mainer.co.uk

Manchester

Unit 215, Ducie House
37 Ducie Street
Manchester
M1 2JW

Oxfordshire

Milton Park Innovation Centre
99 Park Drive, Milton Park
Oxfordshire
OX14 4RY

**SPECIALIST
SUSTAINABILITY
CONSULTANCY**

