# VMI: 2021 CARBON DASHBOARD AND ROADMAP

May 2022

ARABA



For a better world of energy

## VMI CARBON AUDIT AND NET ZERO ROADMAP

### 2021 CARBON AUDIT

A Carbon Audit was carried out for VMI by Craig Friel of SSE Energy Solutions, in conjunction with Barry Bassett from VMI.

In summary, qualifying as an SME (fewer than 250 employees), VMI has reduced its total carbon emissions, according to the <u>Science-Based Target Initiative</u> from **234TCO2e** to **213TCO2e**, a reduction of **8.9%** compared to the 2019 baseline.

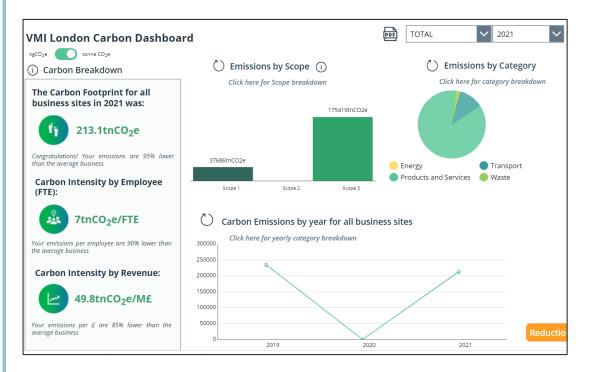
The breakdown of each Scope emissions are as follows

- Scope 1 emissions had reduced from 54TCO2e to 37.6TCO2e
- Scope 2 emissions also reduced from 13TCO2e to nil, as all electricity for 2021 was using exclusively green tariffs.
- Scope 3 (excluding CapEx purchases), increased from 167TCO2e to 175TCO2e

Some of the increase in scope 3 emissions can be attributed to a greater detail of measurement, such as a detailed analysis of employees commuting, which was not undertaken in 2019.

### CARBON DASHBOARD

The below dashboard shows the carbon emissions for both VMI sites, excluding Capex Purchases for which there is no operational control.





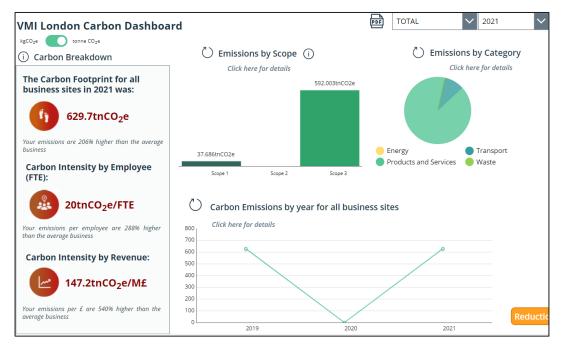
It was also recognised that this is not the entire story, as the £1.6M of capital expenditure purchases were not included in these calculations, as VMI had no operational control over these emissions. There is a commitment to reduce these scope 3 emissions in conjunction with suppliers.

In summary:

Scope 3 emissions unchanged from 635TCO2e 2019-2021, despite an increase in CapEx purchases of 9%.

The overall conclusion of this is recognition that 94% of VMIs emissions are caused by CapEx purchases, and the of the importance to persuade all of our suppliers to apply a net zero strategy, without which, we won't be able to achieve our own net zero by 2030 pledge.

The below dashboard shows the total carbon emissions, including all Scope 3 emissions from capital expenditure





#### Detailed 2021 Carbon Emissions Figures by branch



## KEY MILESTONES ON THE NET ZERO ROADMAP

#### 2018

• All Electricity is 100% renewable

#### 2019

- Benchmark for carbon reduction
- Become a verified London Living Wage Employer.

#### 2020

• Measures delayed due to COVID

#### 2021 APPROX CO2E EMISSION SAVINGS = 16.4T

- Create a company travel policy which minimises air and road travel and promotes video conferencing, rail travel, and discriminates, where possible, between airlines based on fuel and fleet efficiency.
- Ensure heating/cooling system has smart, automated and minimised "on" times.
- Create a company policy that all meals and drinks paid for by the company are vegetarian saving approx. 480 kgs of CO2e (based on current employee count and purchasing levels).
- Banking exclusively with Coop with excellent ESG standards
- Change Bristol's energy to a renewable energy company creating and supporting UK renewable energy and not reliant on REGOS.
- 7-day timer installed for fresh air supply fans to offices in London.
- Replace all lighting in Bristol facility with known Lumens/Watts-rated LED lights. This reduced light-caused energy consumption by up to 90%.
- Waste Audit completed, though only outline figures provided and waste provider unable to supply greater detail.

#### 2022 APPROX CO2E EMISSION SAVINGS = 20T. VMI to be certified Carbon Neutral

- Carbon emissions that the company is creating of across all facilities according to Science-Based Target Initiatives, are to be audited and offset with viable schemes to make VMI Carbon Neutral. This will be charged to clients as £1 for every £1500 of turnover.
- Loft insulation and triple glazed roof lights installed at Bristol.
- 21KW Solar PV array for London and Bristol buildings to be installed.
- Three EV delivery vans and one delivery car ordered for delivery. Note that these were delayed from 2021, due to supply chain difficulties.
- Educate team at both facilities are to be educated on the basics of Climate Change so that they feel informed enough to speak about it and understand the urgency and what we can do about it.
- Create a procurement policy which asks what suppliers are doing to measure and reduce their emissions, and engage with them to provide help and collaboration on their own pathways to decarbonisation; switch where possible, to local suppliers of goods to reduce transport emissions.
- Measure and offset all employee commutes. Analyse the difference in emissions impact between homeworking and office working and adjust accordingly.
- Scope 3 analysation. As part of this the CO2e emissions created by the part we play in productions (our client-created emissions) will be more closely analysed.
- 25% of fleets now EV saving approx. 1705 CO2e emissions from the Bristol facility and 7584 CO2e from London.
- Installation of solar panels (PV) at Bristol facility, saving approx. 132 k CO2e
- Bristol facility fully insulated. We don't currently know what this will save, but if it saves 33% of natural gas emissions, it would save 1952 CO2e



- Assess company against the United Nations Sustainable Development Goals and work towards any improvement necessary.
- Review and assess all recommended changes that have been rated "Medium" on your Bristol EPC Recommendation Report
- Perform a waste audit.
- Review annual supplier list and attempt to find low carbon suppliers for those who supply transport, waste and energy first.
- Review annual supplier list by spend. Concentrate efforts in finding low carbon suppliers for the supplies invested in most heavily

#### 2023 APPROX CO2E EMISSION SAVINGS = 25T

- Financial investments, including pensions, reviewed and if necessary, moved from institutions investing in arms, coal, oil and natural gas.
- Reduction of packaging by a minimum of 10%.
- Further the transition of client consumables into rental/reuse; essentially phasing out consumables.
- Review and assess all recommended changes that have been rated "Low" on your Bristol EPC Recommendation Report.
- Review the feasibility of installing LED lighting, loft and wall insulation, solar panels (PV), MVHR system, Reverse Cycle Heat system (with electric boiler for water), window replacement and eco toilets at the new London facility which we plan to move into in 2024, preferably while it's being built to avoid retrofitting which often creates extra cost and waste.
- Web and cloud hosting: Ensure web, cloud hosts are using 100% renewable electricity in their Data Centres and offices; increase the efficiency of websites to lower the emissions they create.
- All employees are to be given an extra day's holiday to travel by rail instead of air for private holidays. We have already instigated a rail/EV policy for all European business travel. The rate charged for net zero carbon may have to rise slightly to £1 every £4,000.

#### 2024 APPROX CO2E EMISSION SAVINGS = 27T

- All vehicles now EV, saving approximately 5,113 kg more of CO2e each year from the Bristol facility and 22,752 kg from London.
- All local courier and sub-contractor transport supply will be procured from electric or human powered vehicles.
- Review and assess all recommended changes that have been rated "Medium" on your London EPC Recommendation Report.

#### 2025 APPROX CO2E EMISSION SAVINGS = 27T

- Reduction of 50% of 2019 emissions reached!!
- 100% of landfill waste has been eliminated or converted to recycling/circular waste.
- Natural gas dependency has been removed from all facilities based on reviews and implementation in previous years. Saving a further 3905 kgs CO2e each year from the Bristol facility and 10,233 from the London facility.

#### 2026 APPROX CO2E EMISSION SAVINGS = NOT YET MEASURED

- The EPC calculations will change in 2025, thus look to get another EPC rating done in 2026/2027. May make further changes based on this review. 2028 APPROX CO2E EMMISSIONS SAVINGS = NOT YET SCOPED
- Bristol Solar Panels pay off capital investment meaning from now VMI- Bristol largely is electricity cost-free and has possibly created a profit-centre as may be paid for supplying excess generated electricity to the national grid. (Recognise some buy-in from grid may be needed.)



• Upstream & downstream Scope 3 carbon emissions fully audited with changes made in suppliers immediately as appropriate. All Scope 3 emissions have been verified and neutralised by us or by the stakeholder responsible for them.

#### 2030 APPROX CO2E EMISSION SAVINGS = 54T

- Net Zero reached across Scopes 1 & 2
- Working with our supply chain to reduce Scope 3 emissions by as much as possible.

#### 2035

- Continual carbon auditing and residual carbon reductions and offsetting.
- Look to become a Carbon Positive Company by continuing to offset at our 2019 carbon baseline levels.

#### 2040

• Continual carbon auditing and residual carbon reductions and offsetting.

#### 2050

- Celebrate 20 years of continual Net Zero!
- Continual carbon auditing and residual carbon reductions and offsetting.

