


REAL Digital International Carbon Reduction Plan 2021- 2022

Issue No: **3**

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DOCUMENT HISTORY

Issue No	Issue Date	Details
Draft	31/03/2021	Initial draft version for review.
1	01/04/2021	First issue for review and approval.
2	11/11/2021	Update following, business strategy review into Carbon Emissions.
3	11/11/2021	Updated with the addition of Carbon net zero target to 2050.

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1 Introduction

REAL Digital International maintains an accredited BMS (Business Management System) to the following standards:

Standard	Certification
ISO: 9001: 2015	GB09/77024
ISO: 14001: 2015	GB10/79681
ISO: 27001: 2013	GB11/79681
(FSC-STD-40-004) (FSC-STD-50-001)	SGSCH-COC- 003616

REAL Digital International Limited is based in a 70,000 sq. ft., purpose-built facility in Croydon. The organisation's operations includes high speed variable image digital printing presses, providing high quality, state of the art, digital print, fulfilment services and supply chain solutions to our customers.

The directors of REAL Digital International Limited are committed to responsible environmental management.

The REAL Digital International team are committed to protecting the environment, reducing waste and streamlining the production efficiency and reducing its carbon emissions on a year on year basis to achieve carbon net zero by 2050.


2 Scope

Review of internal controls, methods and measures in relation to carbon usage and determine an appropriate carbon reduction plan for 2021.

3 Terms & Definitions

The following terms and Definitions apply to this procedure:


Term	Definition
BMS	Business Management System
RDI	REAL Digital International, sometimes referred to as RDI, both terms are interchangeable.

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4 Referenced Documents

The following are document referenced within this procedure:

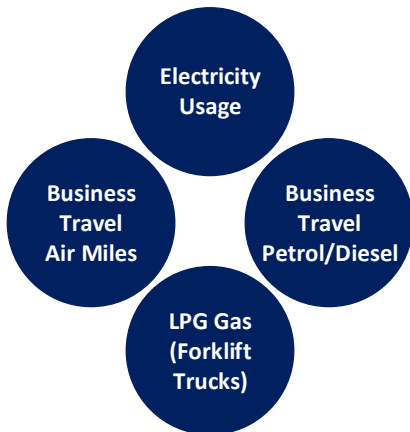
Ref:	Identification	Description
[REF-1]	Electricity analysis.xls.	Analysis file to record month on month energy usage and year on year comparisons.
[REF-2]	Company Van mileage.xls	Analysis file to record the RDI's company Van mileage.
[REF-3]	Mileage Summary.xls	Analysis file to record staff mileage for business purposes.
[REF-4]	Courier Mileage.xls.	Analysis file to record courier mileage for the transporting of products.
[REF-5]	Calor Gas Analysis.xls	Analysis file to record the Calor Gas usage of forklift trucks.
[REF-6]	Air Miles Analysis.xls.	Analysis file to record the Air Miles usage of RDI staff.
[REF-7]	Carbon Footprint Analysis.xls	Analysis File to record the Carbon Foot Print of RDI.

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5 Current methods, controls and measures

5.1 Carbon Sources

REAL Digital International's operations contain the following 4 sources of carbon generating activities:

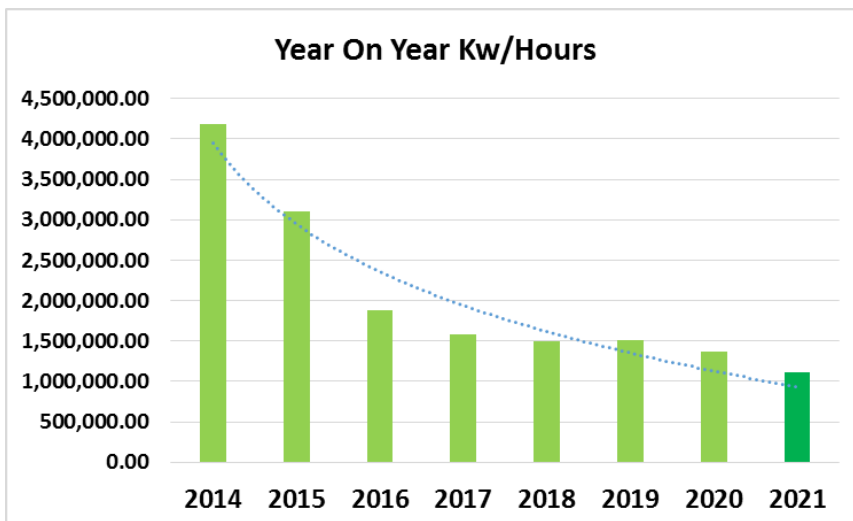


REAL Digital International routinely monitors the environmental aspects and impacts on a routine basis, at least quarterly, and in some instances data is collated monthly and used to calculate REAL Digital's International carbon footprint.

5.2 Electricity usage monitoring:

The current provider of electricity is EON, this was changed in January 2021 from EDF Energy. The nature of RDI business activities (production - printing and packaging) includes the use of large industrial automated equipment running 24hours day to a shift pattern.


Despite the use of automated equipment, RDI has made significant reductions in electricity usage as indicated:



The reduction seen is as a result of year on year investment into newer automated equipment, more efficient and environmentally friendly, bringing both an advantage to production output, increasing reliability of operations and also reducing energy usage.

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The electricity usage as represented in values (Kw/Hours):

Year	Period	Kw/Hours
2014	Jan - Dec	4,182,344.00
2015	Jan - Dec	3,104,282.00
2016	Jan - Dec	1,883,883.00
2017	Jan - Dec	1,575,211.00
2018	Jan - Dec	1,494,942.00
2019	Jan - Dec	1,505,516.00
2020	Jan - Dec	1,370,770.30
2021	Jan - Oct	1,110,419.60

Note: 2021 value as of the 31st October 2021

The electricity usage is monitored and recorded on a monthly basis in accordance with [REF-1] Electricity Analysis.xls, the data is extracted from the electricity bills.

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5.3 Petrol/Diesel usage monitoring

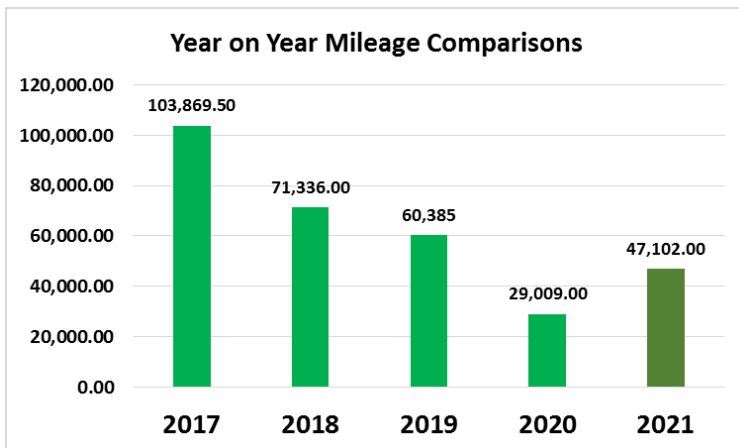
Another source of carbon emissions is Petrol and Diesel as part of business travel, RDI calculates the mileage undertaken by its employees for business activities. The type of travelling monitored include the following activities:

- Visiting customers, clients – using own vehicles
- The mileage of couriers transporting products.
- The mileage used from the company van for visits to RDI's secondary storage location (located 2.9 miles from RDI's main site in Croydon).

The various forms of mileage information is collected across the business:

- warehouse staff recording the company van usage [REF-2] Company Van Mileage.xls,
- Finance / accounts collecting data of personal car usage for business purposes from expenses, [REF-3] Mileage Summary.xls
- Admin staff collecting mileage from couriers, [REF-4] Courier Mileage.xls. The distinction is made between the fuel types and totalled to provide exacting figures.


Data is collected monthly and maintained, collated to provide year on year analysis:



Note: 2021 data provided up to 31st October 2021.

The total mileage continues to reduce year on year and in 2019 the decision was taken to reduce the number of company vans from 2 to 1 which has had a positive impact on the fuel usage.

The dropped significantly in 2020 as a result of the COVID-19 pandemic and the switch to remote working arrangements, the conducting of communication with clients and customers via video calls and general slowdown of business activities.

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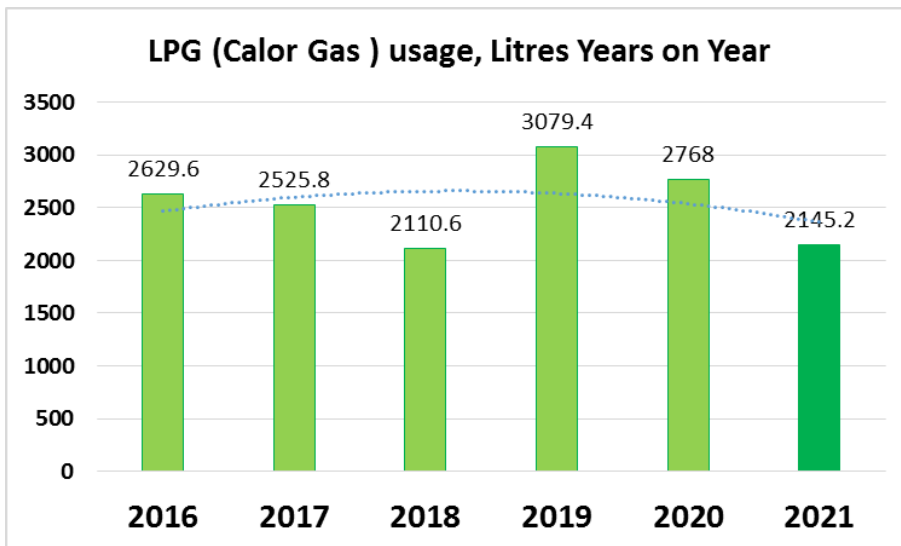
The significant increase in mileage seen in 2021 is attributed to business growth into healthcare products resulting in increased transportation of materials and finished product.

5.4 LPG Gas (forklift trucks) monitoring

REAL Digital International uses LPG gas for the use of its forklifts in the warehouse, for management of stock from material deliveries and stock movements within the warehouse and production locations.


RDI currently maintains 4 forklift trucks, 3 are held at RDI and 1 is held at PF Whitehead, which is a separate RDI warehouse facility.

The LPG gas is provided on contract from Calor gas, and replenishment is approximately every 4-6 weeks dependent upon usage requirements, replenishment is provided in batches of 10 bottles at 18 litres per bottle. The LPG Gas usage is calculated in accordance with [REF-5] Calor Gas Analysis.xls.



Note: 2021 data provided up to 31st October 2021.

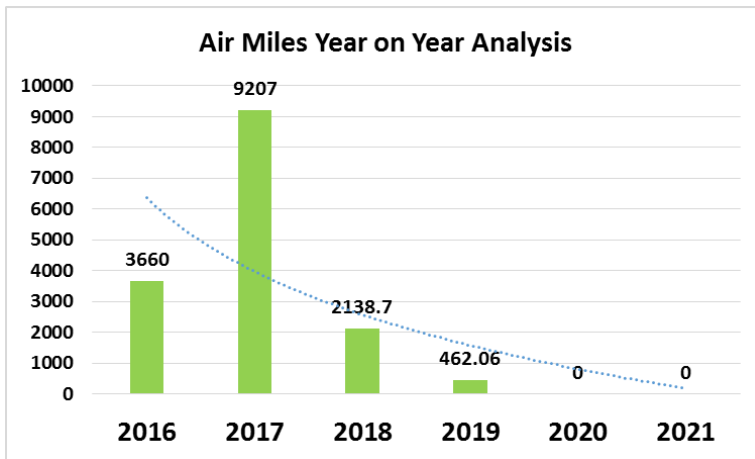
LPG gas usage from year to year is consistent with only small fluctuations.

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5.5 Air miles

RDI records air miles used for business purposes, due to the nature of RDI’s business and the locations of RDI’s customer base and clients, there is not a significant amount of air travel required and hence the carbon usage from air miles is very minimal.

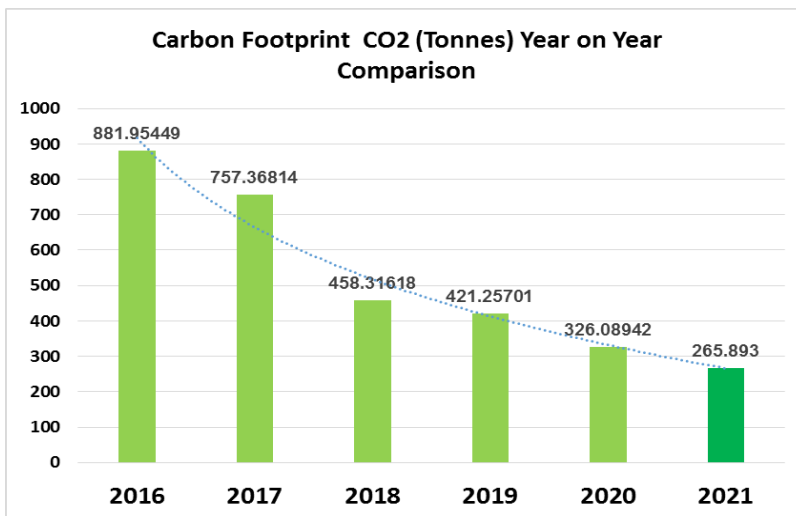
When the need arises for air miles these are recorded by the finance accounting team from the business accounts. The below provides the data of RDI’s air miles year on year. The air miles are recorded in accordance with [REF-6] Air Miles Analysis.xls.




5.6 Carbon footprint

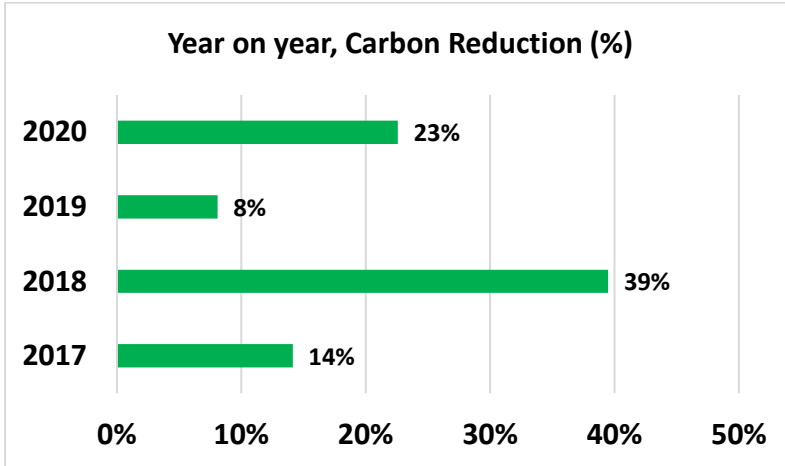
The carbon footprint is calculated from all of RDI sources of carbon emissions using the government factors and industry calculations to provide the total carbon footprint. The carbon footprint is analysed using [REF-7] Carbon Footprint Analysis.xls.

RDI has significantly reduced its carbon footprint year on year, through the effective management of its sources of carbon as described in the sections above. The year on year carbon usage as detailed below:



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The year on year percentage reduction is also recorded as below:




The COVID-19 pandemic would have had a significant impact to the overall carbon footprint as operations were impacted through the following:

- Reduced staff on site, key to production activities only
- Large amount of staff, remote working
- No Air travel
- Little to no travel to clients and customers premises
- Reduced electricity usage.

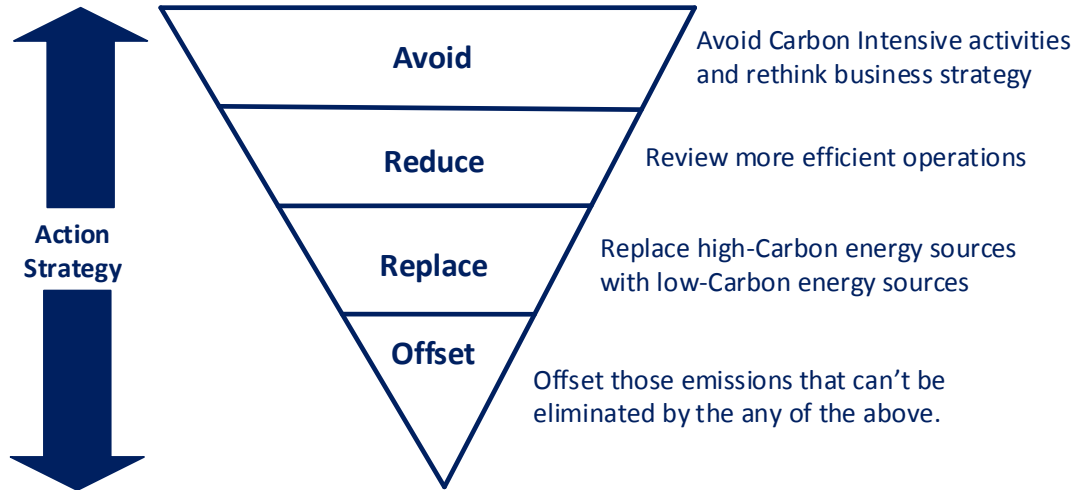
Despite that the analysis shows an ongoing reduction of carbon footprint throughout the preceding years to 2020.

Currently 2021 will see an increase in total carbon emissions due to business growth and transitioning into the healthcare market, however the business is committed to reducing its carbon emissions through year on year commitments as defined in the action plan, section 8.

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6 2021 Carbon Reduction Strategy Review

Carbon reduction plan for 2021 shall utilise the following action strategy:



REAL Digital International shall consider each of the associated uses of carbon and determine an appropriate action based upon these principles:

6.1 Electricity (Carbon Plan)

REAL Digital's core business activities relies on automated equipment and production lines (printing, fulfilment and packaging) which are sometimes running on a day and night shift to meet the production output.


Whilst REAL Digital International has invested in new equipment and production lines in recent years utilising the strategy of reduce and replace this has significantly reduced its electricity usage as demonstrated in section 5.2 of this plan.

One method for offsetting carbon emissions adopted already is through waste management and energy recovery, the regeneration of electricity back to grid from incinerated waste. In 2021 the regeneration of energy back into the grid as significantly increased.

Further reduction in carbon shall be through switching to green / renewable energy sources, through the following:

- Switching energy providers to green energy, review the providers and change by October 2022.
- The installation of solar panels on the roof of REAL Digital's premises is being reviewed and discussed.

REAL Digital International is currently reviewing and is in discussion with providers and installers of solar panels on roof of the building, which would significantly reduce the carbon emissions as well as potentially a cost benefit to the business.

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6.2 Travel (Petrol & Diesel) Usage Considerations

Travelling is undertaken for a number of reasons, therefore the carbon management strategy shall varies according to the purpose:

Visiting customers, clients – own vehicles

The carbon management strategy would be avoid, reduce and replace, since the COVID-19 pandemic, travelling to clients sites has been reduced to almost zero and has been replaced with video call meetings using Microsoft Teams and this has worked successfully and will continue throughout 2021.

The mileage of couriers transporting products.

The mileage used for courier activities shall continue as REAL Digital International's activities require the management of a significant quantity of stock which has to be transported to and from REAL Digital International. The only carbon management strategy available to review the offset of carbon emissions.

Company Van Usage:


The mileage used from the company van for visits to RDI's secondary storage location (located 2.9 miles from RDI main site in Croydon). This activity shall continue as REAL Digital Internationals activities require the management of significant stock which is stored offsite due to limited storage capacity. The avoid management strategy is not viable as is the reduce strategy as the secondary storage location is 2.9 miles from production site. The only carbon management strategy available is the offset of carbon emissions.

6.3 LPG Gas Usage

LGP gas is utilised for the forklift trucks which conduct the important task of stock movement for the following:

- Material deliveries to good inwards
- Materials from goods inwards to stock locations
- Materials from stock locations to production areas
- Finished product from production to despatch
- Goods from despatch to delivery collections
- Waste management transportation from production to waste management areas.

The forklift trucks are essential to the production activities, therefore REAL Digital International is currently planning to replace its gas forklift trucks with electric variants which would reduce its carbon emissions by a factor of 2%.

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6.4 Air Miles

REAL Digital International air travel is monitored, however since the COVID-19 pandemic there has been no air travel undertaken by the business and this is expected to continue for the foreseeable future.

Reviewing air miles prior to the COVID-19 pandemic demonstrates that the air miles was extremely low and not considered to be a significant source of carbon emissions.


7 2021 Carbon related Objectives and Targets

Topic & Target	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Electricity Use 5% Reduction from 2019 (1,430,240.20 Kw/Hour)	347,445.00	349,652.80	413,321.60	
Carbon Footprint 15% Reduction from 2019 (>358,068.46 (Co2 Tonnes))	83,662.640	83,182.384	99,047.98	
Energy Recovery to Grid 5% increase from 2020 values (<29,359.00 Kw/Hour)	12,848.00	5,780.00	7,617.50	

Note: Some targets are derived by a reduction to 2019 values as opposed to 2020. As 2020 values were significantly impacted by the coronavirus and hence provided a false value.

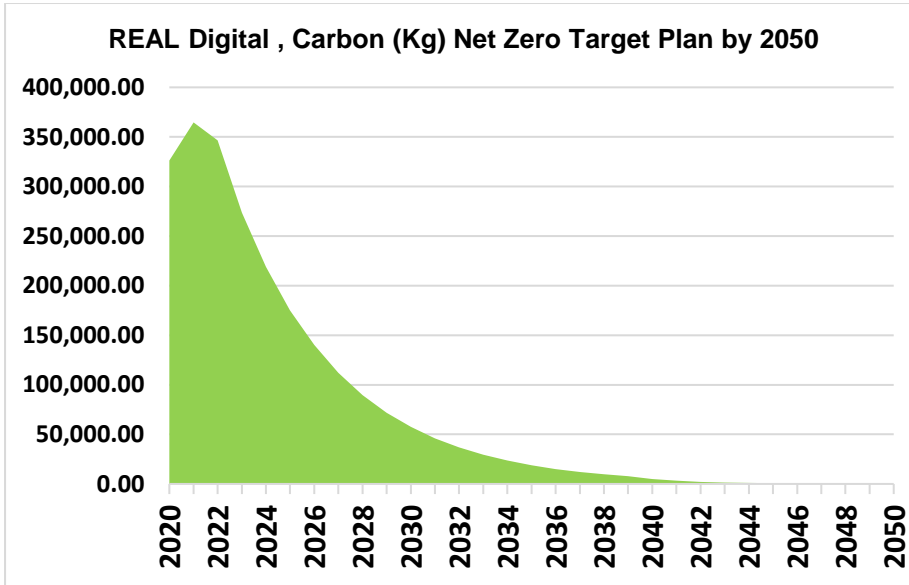
At the time of determining the targets it was based on the assumption the business would return to a level of normal working arrangements and hence 2019 values are a realistic baseline to form a target reduction for 2021.

However these maybe subject to review depending on the changing scenario.


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8 Carbon Net Zero by Year 2050 projected targets

The below graph represents the projected year on year carbon reductions to achieve carbon net zero by the year 2050:



The carbon reduction plan shall be updated yearly to monitor the progress towards the targets, with more specific plans each year to meet the year's target.

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9 2021-2022 Carbon Reduction Action Plan

The following is the derived Carbon reduction action Plan for 2021:

Routine measure in place for 2021:

- 1) Completion of the Carbon Monitoring on a quarterly basis as indicated which includes the monitoring and measuring all sources of carbon emissions.
- 2) Review and consider environmental initiatives for carbon offset
- 3) Continue an appropriate level of remote working, bringing flexibility to staff and also continuing to reduce the staff on site. Reduce the amount of waste and reducing the utilities usage.
- 4) Remote working for client and customer interactions, post COVID-19 Pandemic, continue working closely with customers utilising the remote working technology, maintaining reduced mileage figures associated with client relationships.

Longer term (2022) actions currently under review include the following:

- 5) REAL Digital is in the process of replacing its 4x LPG gas powered Forklifts with electric variants, the contract has been signed and is expected to in place by Mid-2022. This will reduce the carbon emission by approximately 2%.
- 6) The use of solar panels is being investigated and further review, discussion will take place in quarter 1 of 2022 at the senior management level, this would provide a source of renewable energy, reducing the amount provided by current energy provider significantly. The business shall also review other renewable energy sources such as wind turbines as part of this process.
- 7) The current provider of electricity EON shall be reviewed and potentially changed to green energy provider. This is to be reviewed and investigated at the senior management level mid-2022.
- 8) REAL Digital International will continue to review the effectiveness and efficiency of its operations and equipment and where required seek to invest in new technology to benefit the production output as well as minimise the environmental impacts with improvements in environmental performance.
- 9) REAL Digital International to review the usage of the company van to determine the feasibility of replacement to an electrically powered vehicle. This would be a significant investment and therefore subjected to a cost/benefit analysis.