

Quality & Environmental Report

2024

J&A (INTERNATIONAL) LTD

January 2, 2025
Authored by: Steve Lilley

Quality & Environmental Report

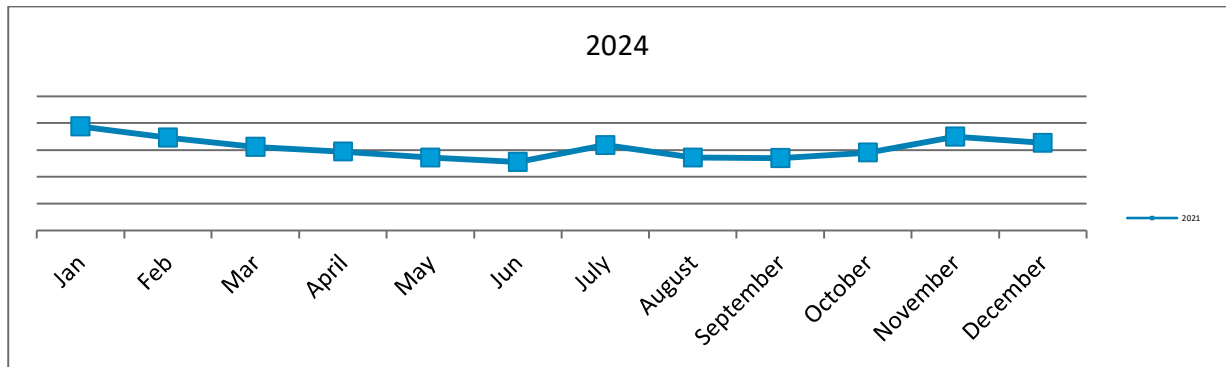
2024

Introduction

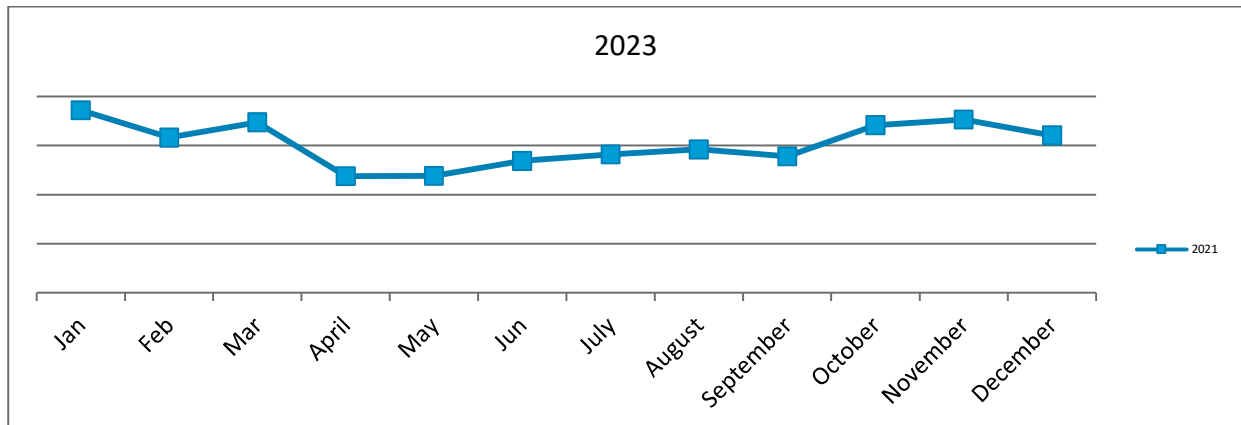
J&A (International) Ltd continued over 2024 to strive to improve its impact on its surrounding environment and increase quality in a demanding marketplace. The company achieving Carbon Neutrality for the first time in its history.

Electricity

The main supply consumption of electric for 2024 is shown below:

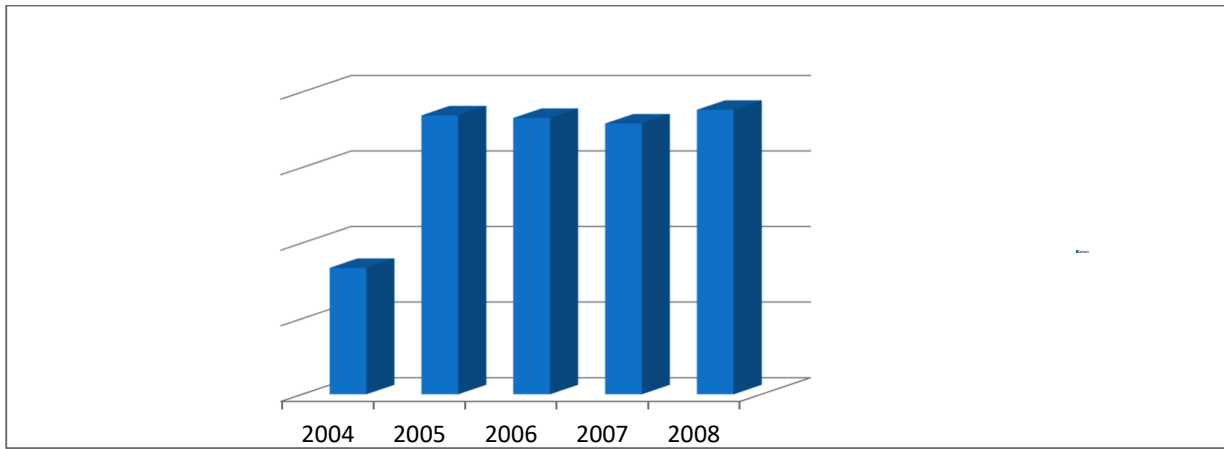


Compared to 2023 is shown below:



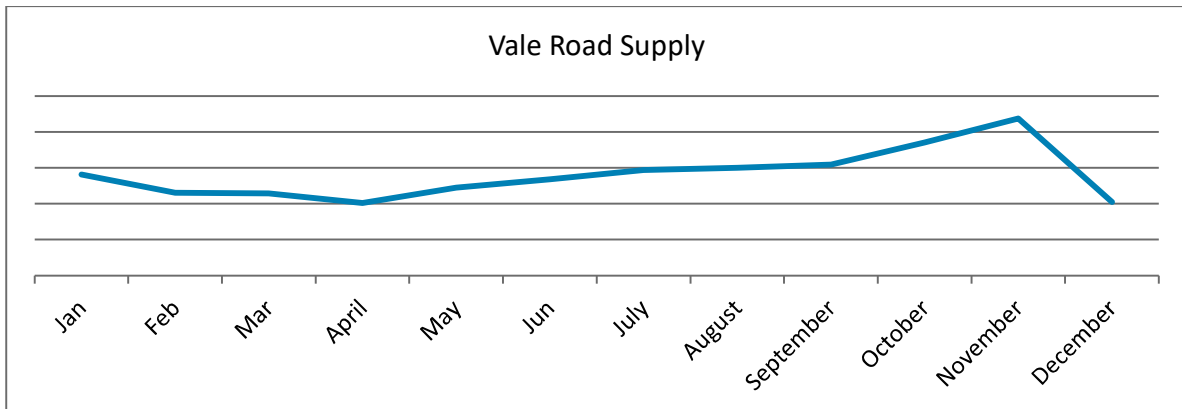
Showing a very similar consumption.

Below shows the consumption of the past few years:



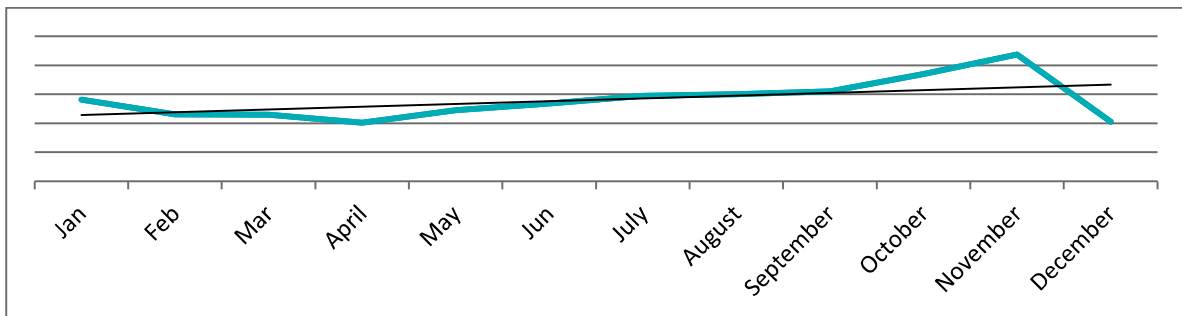
End Warehouse Consumption

The end warehouse is on a different supply to the rest of the building. The consumption here is shown below for the year:



This shows a reduction on the previous year.

2023 Consumption is shown below:

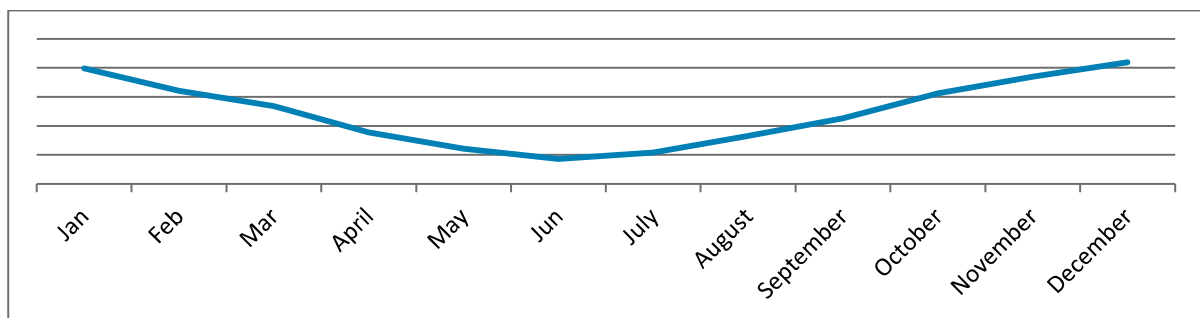


On this supply we installed additional solar panels for the generation of electric. This has reduced our reliance on the electricity provided from the grid since July 2024.

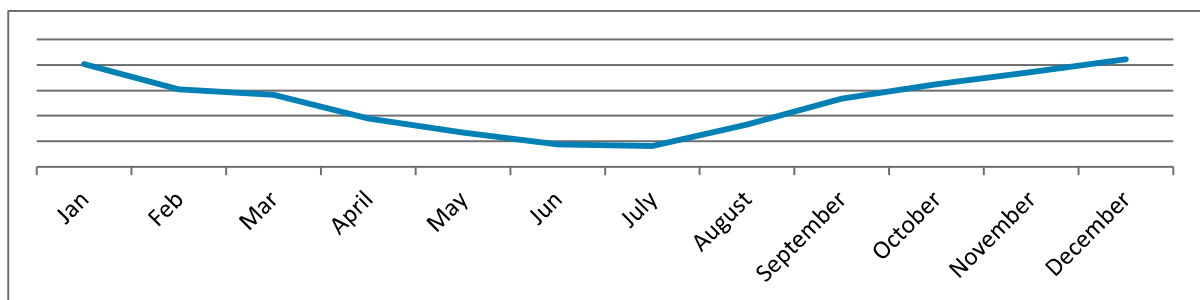


Carpark Consumption

We have a separate supply for the staff carpark. This had the below consumption: over 2024:



Consumption for 2023 is shown below:



This shows the use of car park lighting changing with the seasons.

Compared to previous years showing a slight reduction on last year overall.

EV Supply

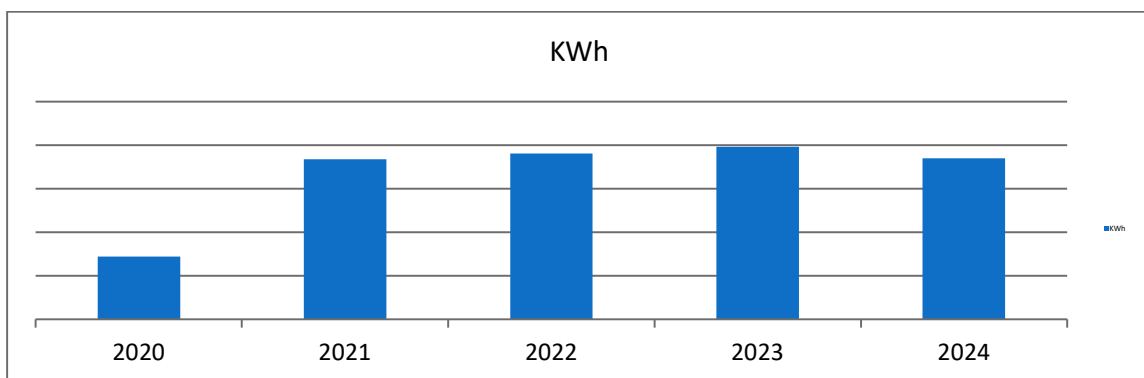


We also had a new supply added to the premises during 2024. This was installing 10 car chargers at 220 Amps each.

This supply is also being used for the new laser and embellishment machine (once installed), so this will start to show an increase in demand.

Overall Total Electric Consumption KWh:

This shows a slight decrease in overall consumption of electric during 2024. Below shown in KWh.



Solar Panels



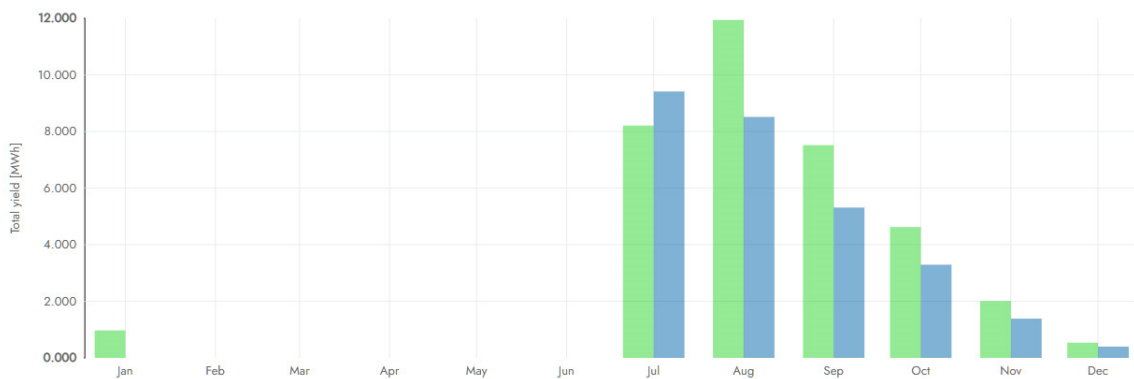
Additional Solar panels were installed in 2024. We are now so we now have x2 arrays.

Array 1 – 408 panels at a peak of 108.75 KWp

Array 2 – 176 panels at a peak of 75 KWp (Completed installation the end of 06-24)

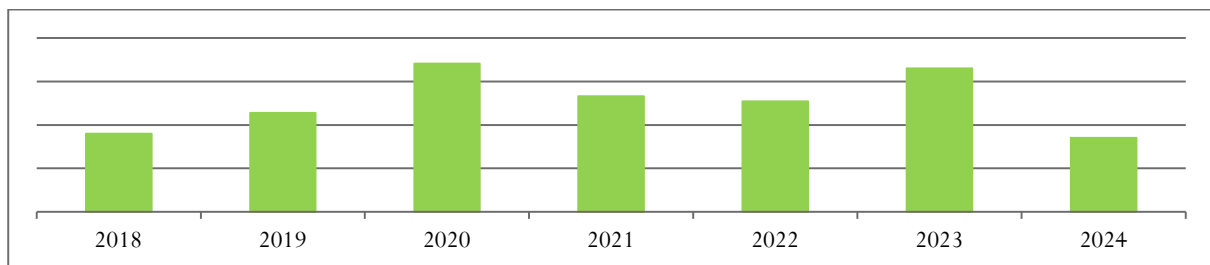
We had issues with reporting to the web for the start of the year, so we have only got the two systems reporting together as shown below.

(Green = Array 1, Blue = Array 2)



Array 1 – Export

Array 1 – Total generation



Environmental & Energy Awareness

This is completed as part of the induction process, being carried out with all new starters to the company.

The monthly cost of water, electric, waste and gas is also added to the company intranet, INFO web site.

Regular updates and reminders are also shown in the company newsletter.

Water Consumption

We hold consents for water discharge to the sewer where the levels allowed are shown below:

Consent 1 – Screen Room Effluent

Our consent to discharge was reviewed this year, and reduced to the below

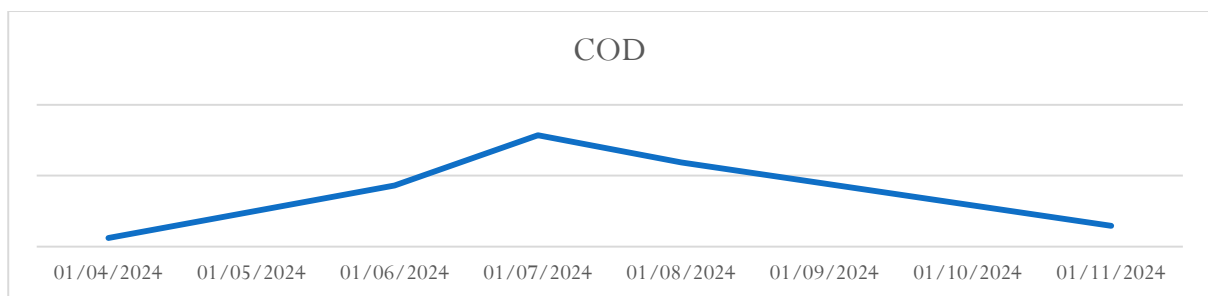
Chemical Oxygen demand (COD): 8700 mg/l

Suspended solids (TSS): 1000 mg/l

PH 6.10

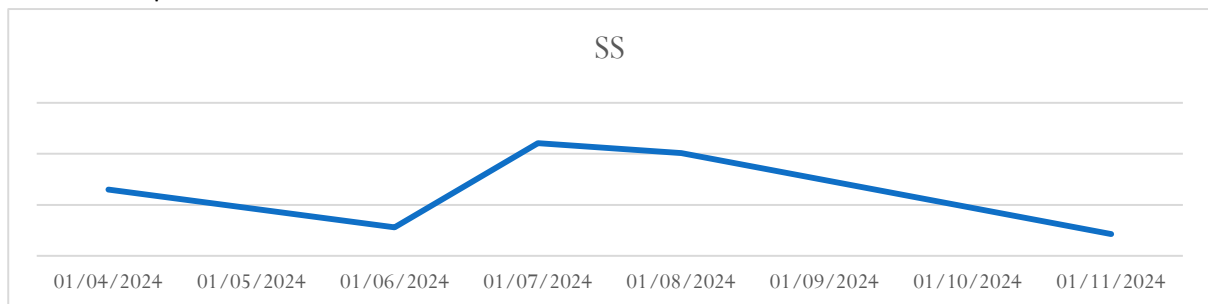
Chemical Oxygen Demand

Below shows the COD levels recorded since the new consent level:

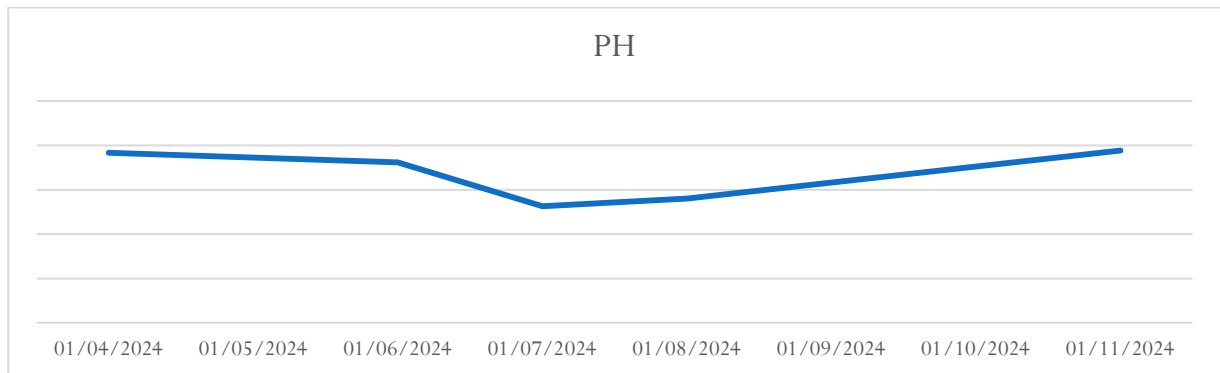


Suspended Solids

Levels of suspended solids from the new consent are shown below:



PH Levels



Consent 2 – R&D Effluent

Consent for the washing machine in R&D. The limits are:

Chemical Oxygen demand (COD): 2000 mg/l (After one hour quiescent settlement)

Suspended solids (TSS): 1000 mg/l

Sulphate (Free, soluble as SO₄) : 1000 mg/l

A sample of this was taken this year, but no analysis results were received.

Consent 3 – Humidity Water softener Effluent

Chemical Oxygen demand (COD): 2000 mg/l

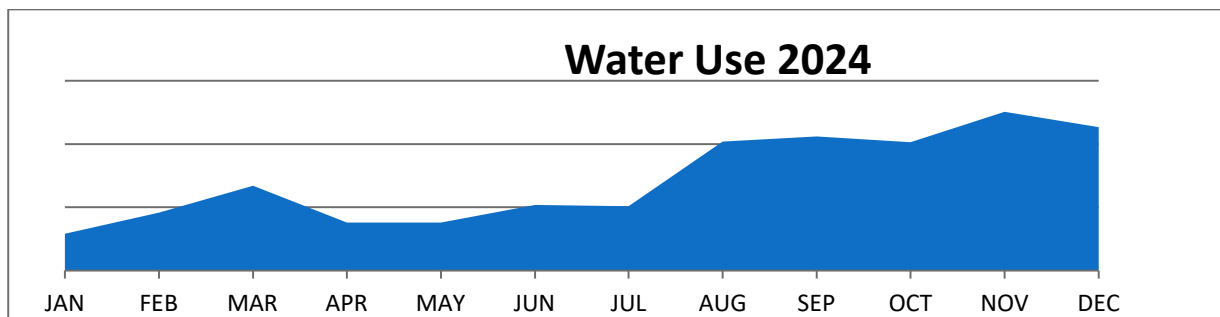
Suspended solids (TSS): 1000 mg/l

Sulphate (Free, soluble as SO₄) : 1000 mg/l

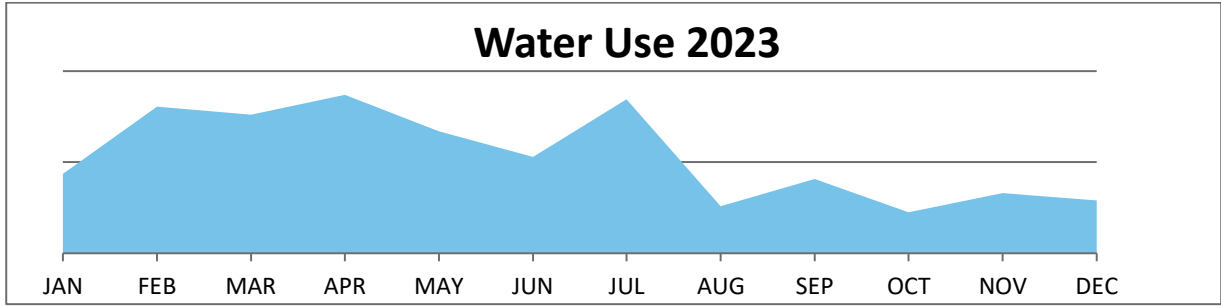
A sample has not been taken of this for analysis yet.

Water Consumption Levels

The total water consumption for the year is shown below: (Shown in m³)

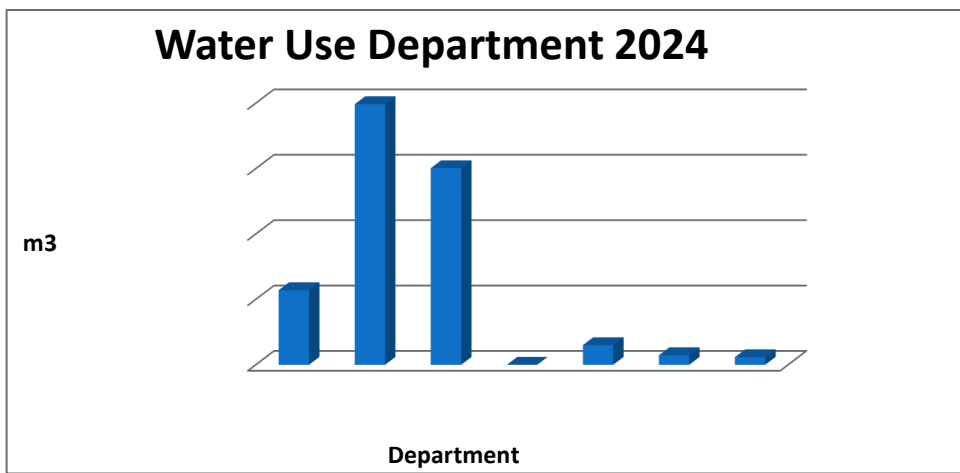


2023 consumption is shown below:

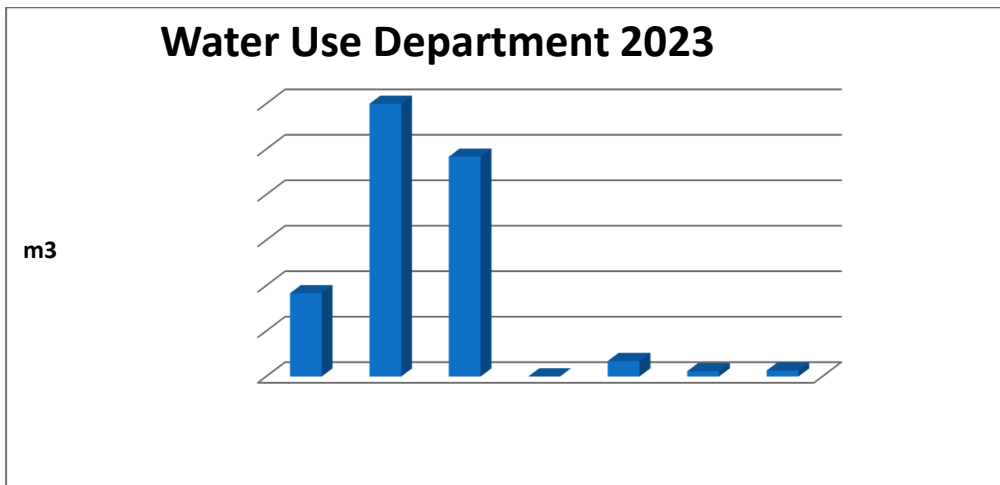


Departmental use over the year is shown below:

2024:



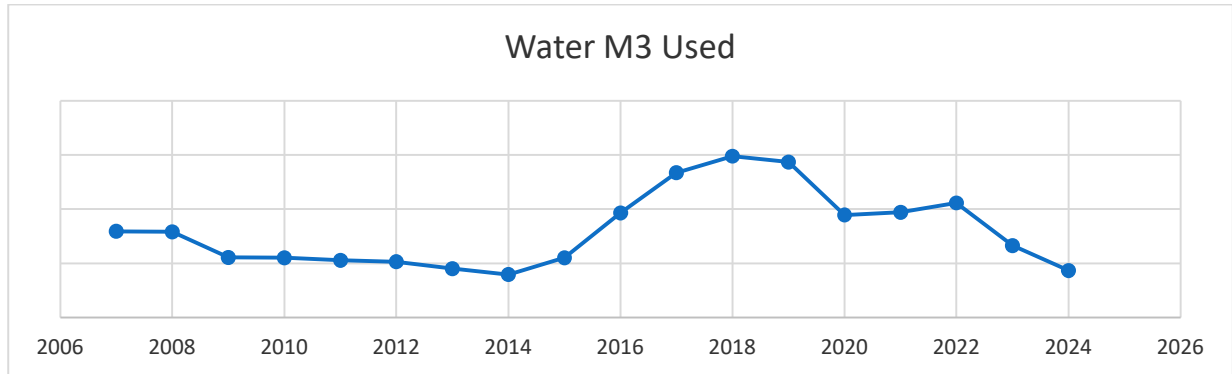
Compared to 2023:



Showing very similar ratio.

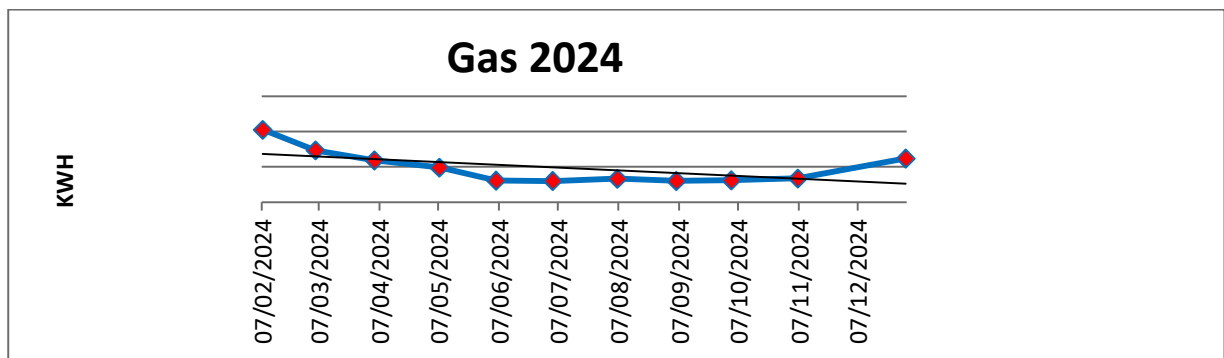


The below graph shows the water consumption over the past 17 years, showing a large reduction over 2024.

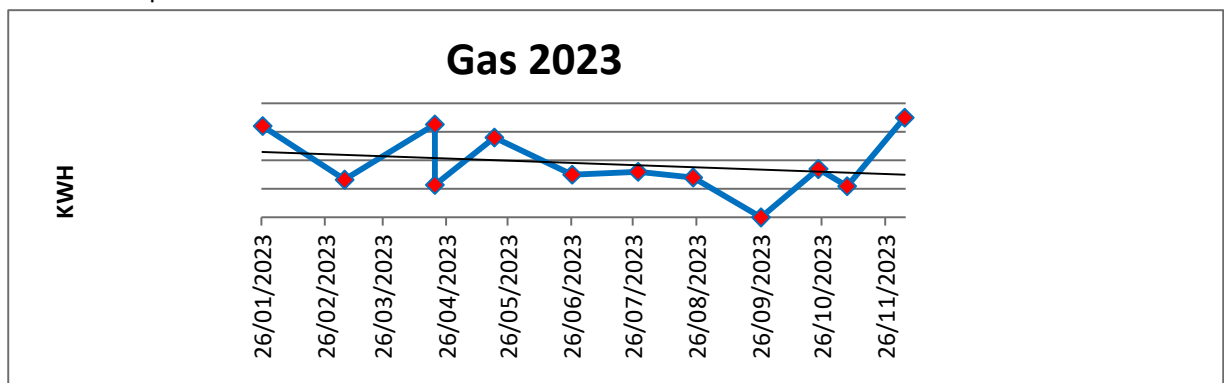


Gas Consumption

The gas consumption for 2024 is shown below:

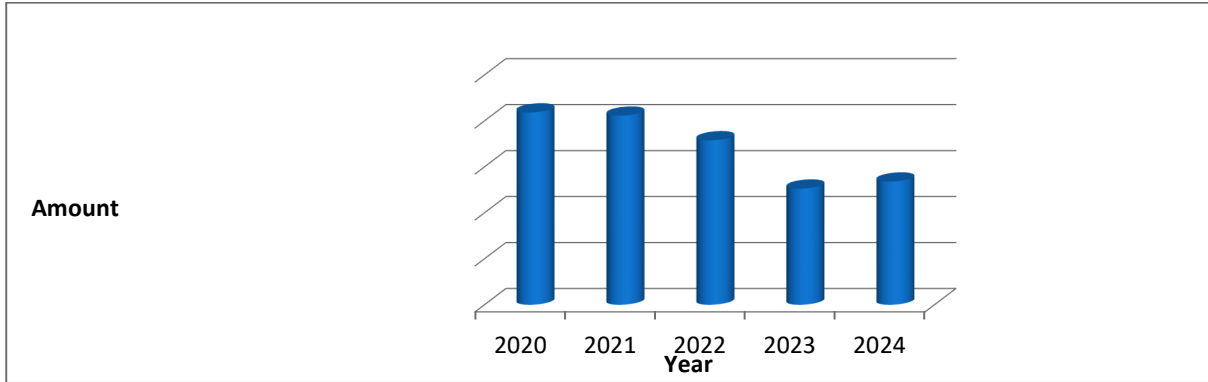


The consumption for 2023 is shown below.

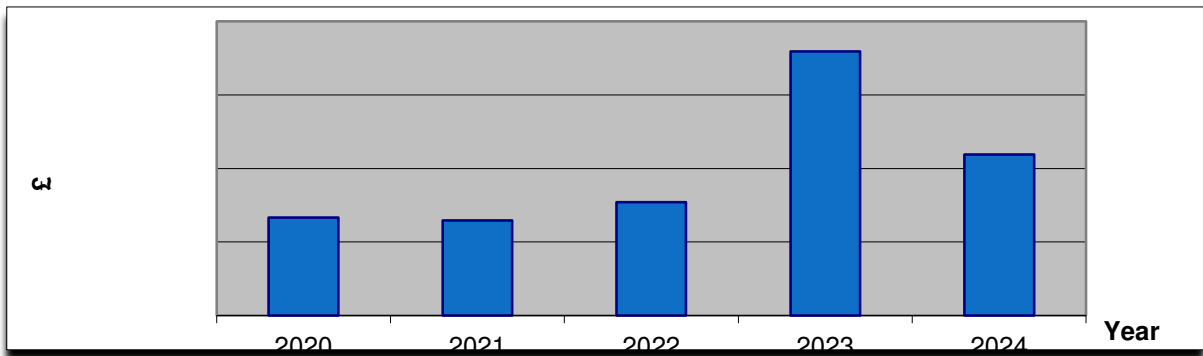


This shows a slight increase over 2024.

The chart below shows the gas consumption over the past few years. (In KWH)



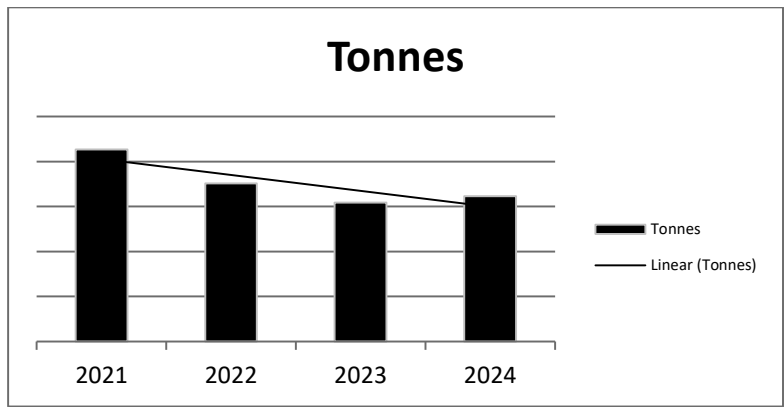
The overall gas cost reduced in 2024, shown below:



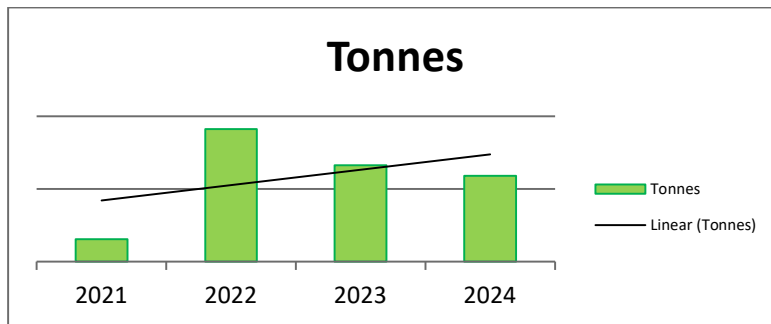
Waste

We have different waste streams taken from the site over 2024. They were the below:

General Waste – Waste to Energy

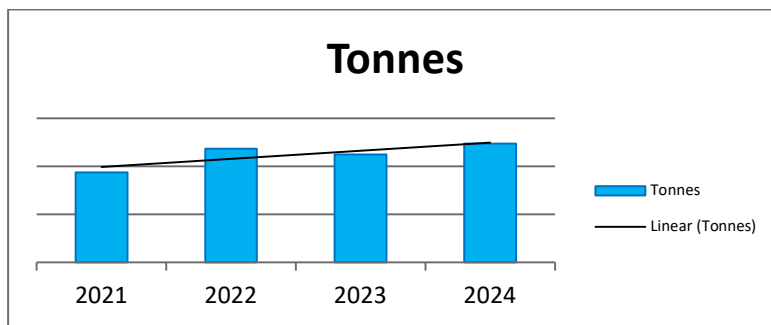


Organic Waste – Any grass, hedging, leaves etc



Showing a decrease over 2024 compared to 2023.

Dry Mixed Recycling – Paper, card, plastics.



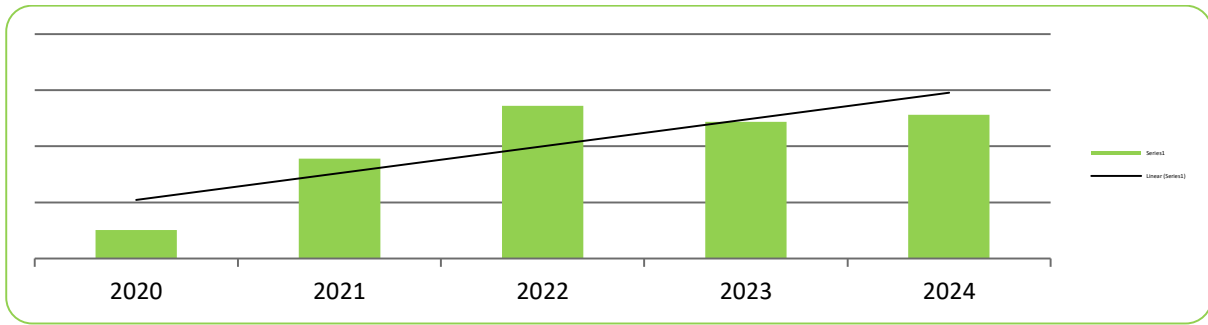
Showing a good increase on recycled materials over the year.

Food Waste

From October 2024 we started to recycle our food waste from the canteen. We currently have a weekly collection shown below:



The graph below compares the total to previous years (In Tonnes). This shows an overall increase in last year's figures.



We will be working to reduce this in 2025.

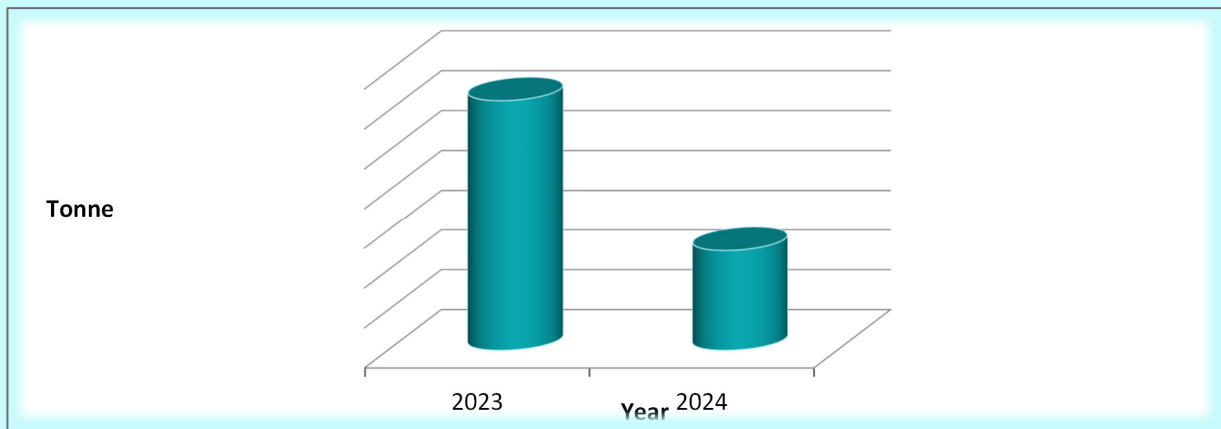
Packaging Waste

Below shows the amount of packaging waste sent to our customers over 2024.

The values are derived from purchasing stock data. This figure now includes empty packaging we print and send to customer (Via Profile Packaging):

The packaging rates were below the 50T threshold for reporting requirements.

The value has decreased from the previous year:



Plastic Packaging Tax (PPT)

We are below the reporting threshold of 10T.

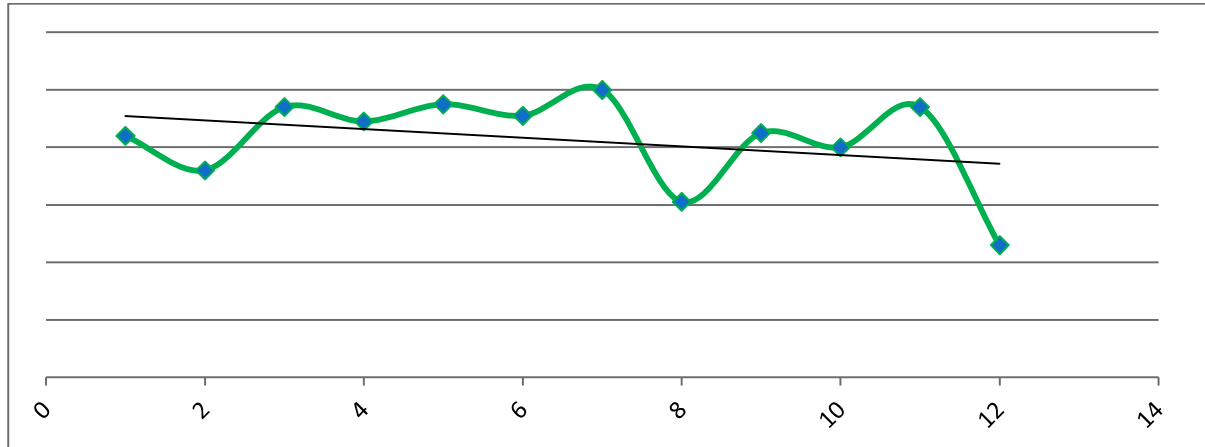
Recycling

Below is the recycling carried out throughout the year:

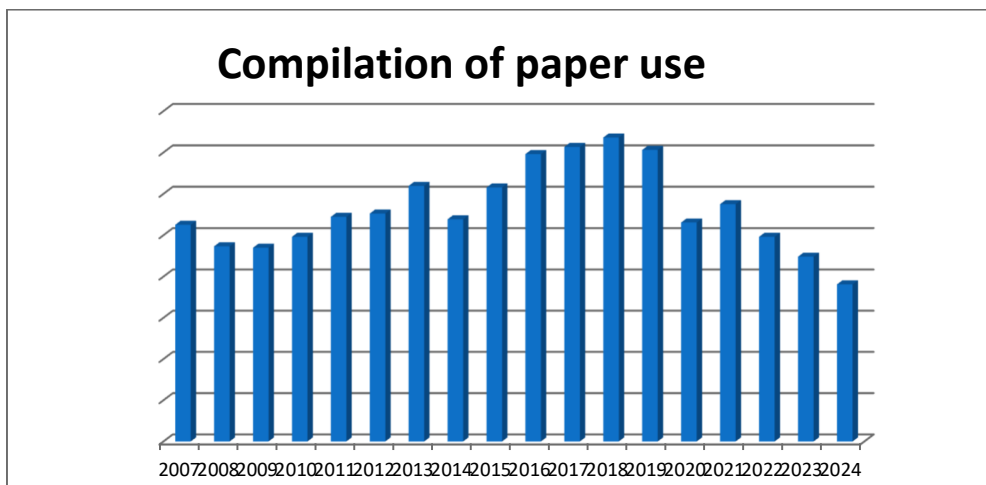
Cardboard & Mixed Paper Recycling

This was carried out throughout the year with no issues. There are no weights available from this service.

A4 copier paper used was measured over the year. (Shown below in reams used per month)



Compared to previous years shown below:



This shows a good decrease and the least we have used since 2007.

Plastic & Tins

These were collected and recycled without any issues.

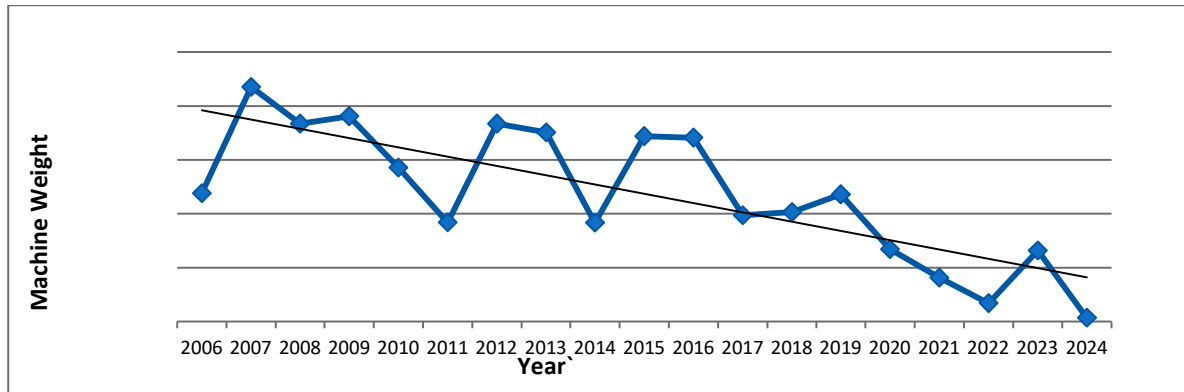
Electrical & Electronic (WEEE)

There were collections of the electrical waste during the year, with no issues raised.

No heat-seal machines were returned to us for disposal.

One heat-seal machine was sold over the year. These machines are now all mainly rental machines.

The amount sold over previous years is shown below:



This is reported to our waste compliance scheme.

Batteries

These were collected and recycled without any issues.

Light Tubes & Bulbs

Recycled with no issues.

Metal

No issues recycling metal.

Ink Cartridges

These were collected monthly with no issues.

The HP take back scheme was utilized for the collection of HP cartridges and oil from the Indigo machine.

Crisp Packets

The crisp packet drop off scheme was ended during 2022. Recycling is still taking place and the packets are taken to the local supermarket for recycling.

Disposable Gloves

J&A are part of the Spontex Recycling scheme to recycle disposable gloves. We have recycled almost a quarter of a million gloves so far.

The recycling of gloves makes a donation to our chosen charity of Lives in Horncastle.

Solvent Print Wipes

These have been recycled with no issues.

Local Authority Permit

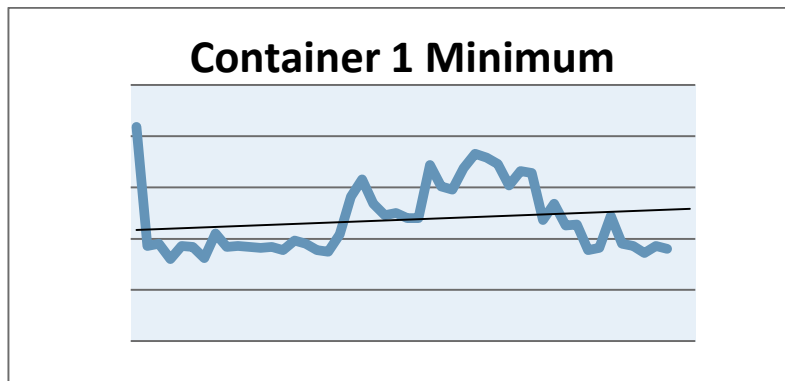
We did have a local authority visit this year. The permit we hold was reviewed where we were in compliance. The permit is going to be renewed with an unannounced visit during 2025.

Container Storage

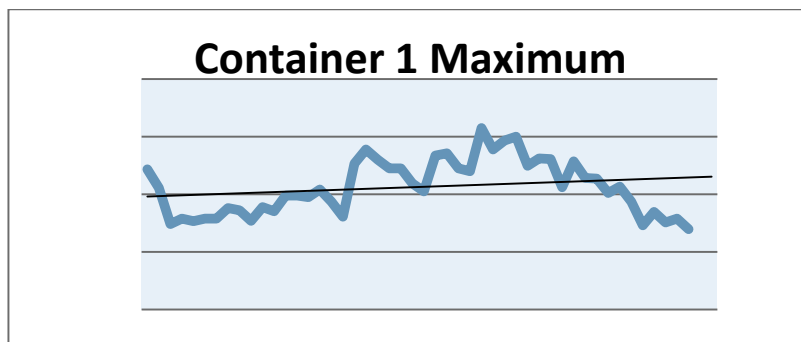
The ink storage containers have to be monitored to ensure they meet the requirement of the ink and products kept inside them.

The temperature range has to be between 5 degrees and 30 degrees C. The chart below shows the readings which are taken weekly over the year.

Minimum reading:



Maximum Reading:



Emissions from the building

This was checked weekly with no concern.

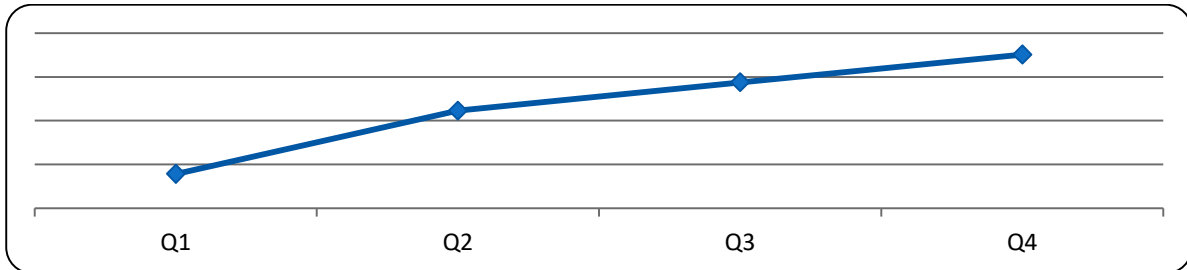
VOC Emissions

These were not measured this year as there is no longer a requirement from our site permit

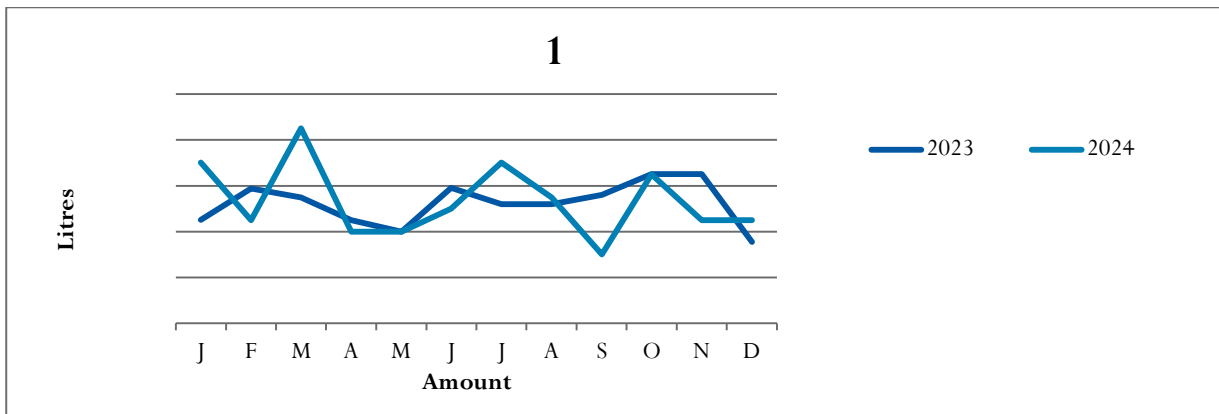
Solvent Management Plan

Our Target emission is well below the requirement.

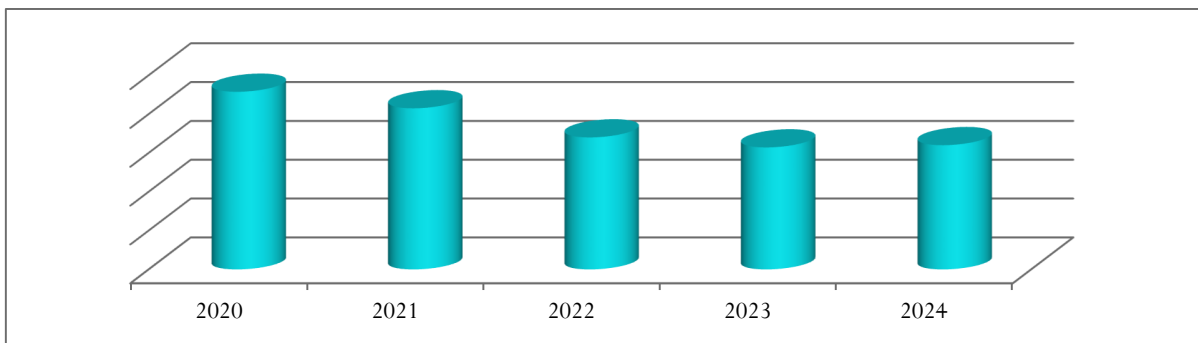
This is checked and recorded each quarter. Below shows the emission at each quarter.



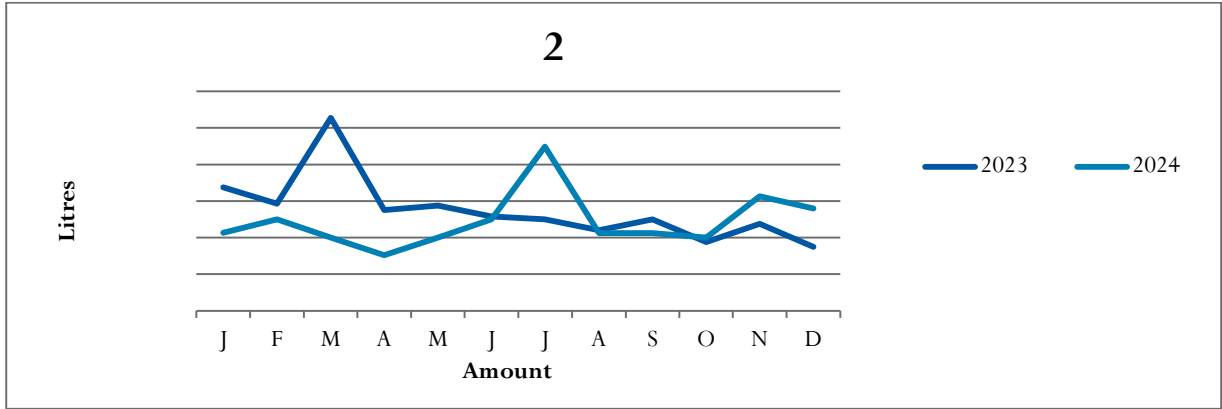
There was a slight increase in the consumption:



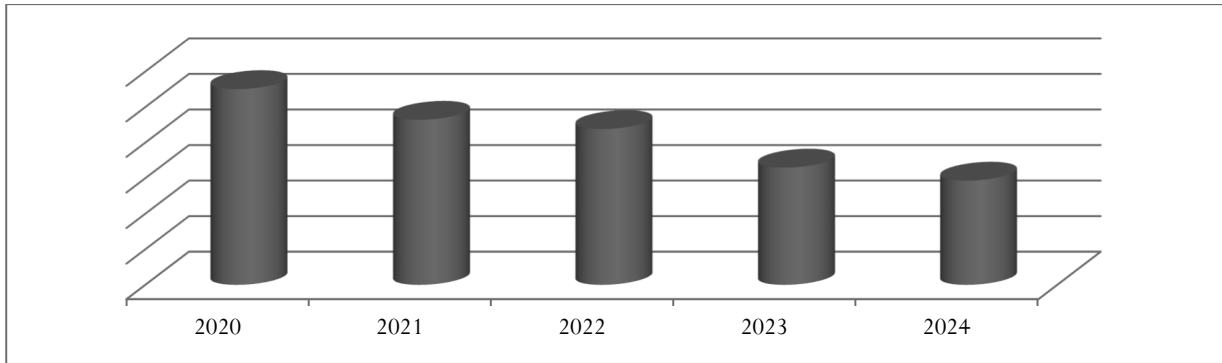
Over the past 5 years consumption is shown below:



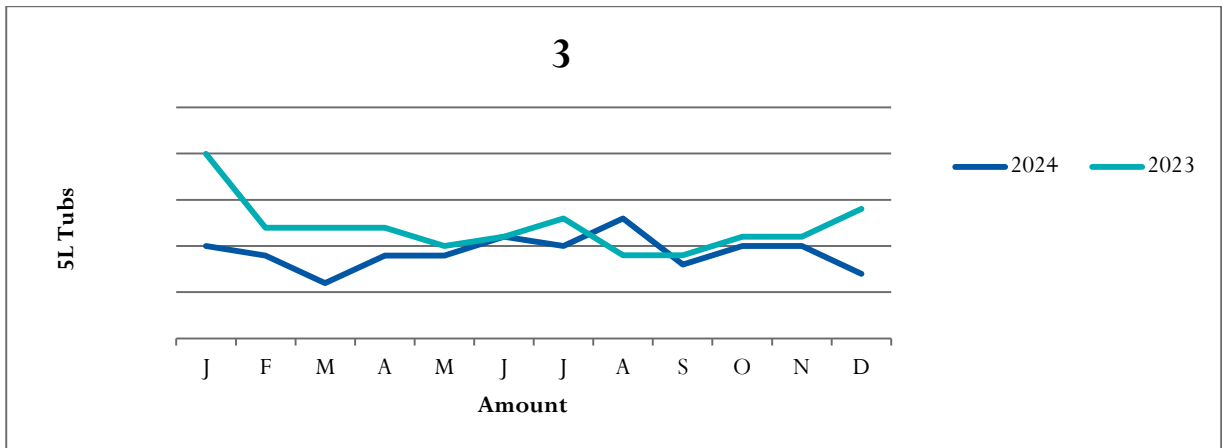
There was a good decrease in the use of the chemical, shown below:



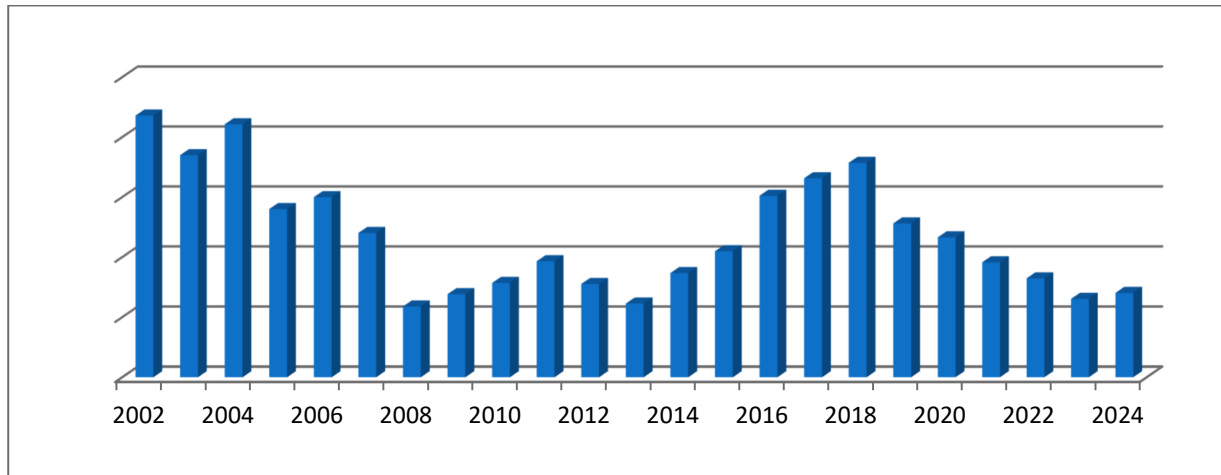
The past 5 years consumption is shown below, showing a downward trend.



Consumption also decreased over 2024, shown below:



Below shows a comparison of totals over the past few years:



Cleaning operation

A cleaning review was submitted to the local authority for 2025 along with other requirements requested for review from ELDC.

Waste Materials

Waste materials are reducing due to improved technology, better nesting of work and better utilization of space.

A move to producing digital based and water based transfers is also reducing waste materials and product consumption.

Environmental Protection Manual

This is combined with the H&S Handbook and is available in hard copy form in every department.

There is a copy available at the Environmental notice board and on the company intranet 'info'.

A copy was also submitted to the local authority.

Staff Training

Carried out throughout 2024 where required.

Performance reviews were continued to be carried out, with further training being highlighted where required.

A Training Needs analysis is also periodically carried out.

Environmental Complaints

There have been no formal environmental complaints received.

It is noted that the permit held has not been signed for authorisation by the local authority.

Internal & External audits

Internal and External audits were carried out throughout the year.

External Audit

BSI Audited on:

There were no non conformances raised.

We have been re-certified for the next 3 year cycle.

Internal Audit

There were 28 internal Environmental and 28 Quality audits completed over the year.

Various other observations were noted with most being actioned and implemented for improvements to the system.

Sustainability & Efficiency Group

The focus of the group this year has been on making the journey to Carbon Neutrality. This has included purchasing land locally to plant 1500 trees, and to support a cookstore project in India.

By October we could declare we were Carbon Neutral.

Environmental Targets – 3 year plans:

ENV1 - To reduce VOC's to below the 2022 target

This target is achieved.

ENV2 - To reduce general waste – to be below the 2019 level.

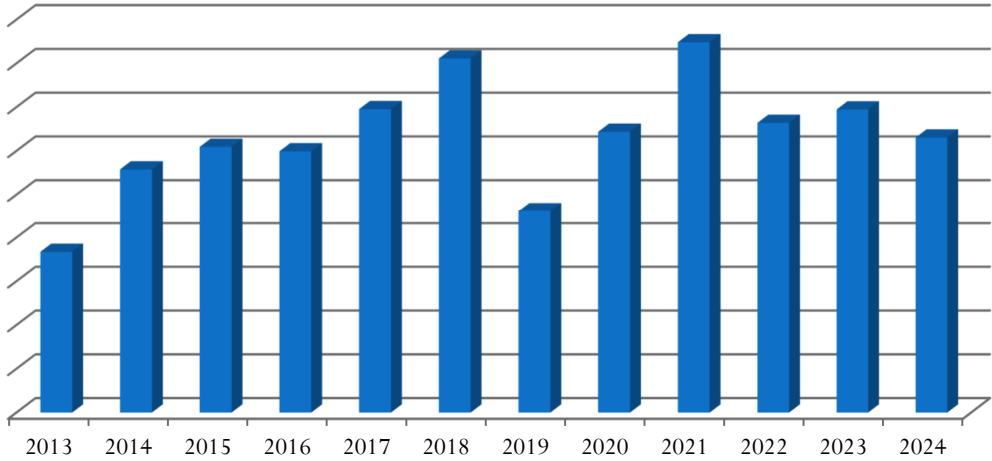
This target is achieved.

ENV3 - To reduce the consumption of solvent based ink

To reduce the consumption of solvent based ink compared to 2022.

Below showing a decrease over 2024.

Total Litres Used

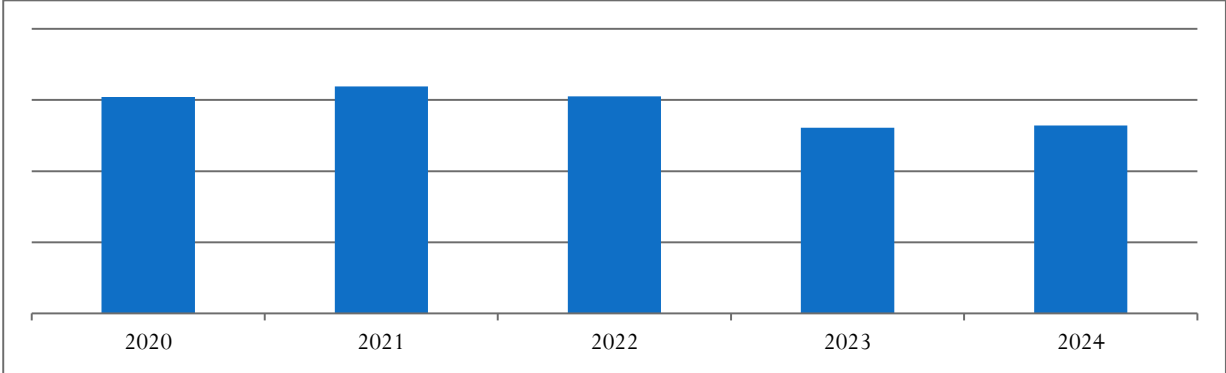


Target Achieved

ENV4 – To reduce the consumption of energy

To reduce the consumption of energy based on 2022

Combined Gas and electric consumption Kwh to show our overall energy consumption is shown below.



This is a reduction on 2022.

Target Achieved



Quality

Below are the performances of quality system items:

Internal Intranet – Info web site

This content is updated on a regular basis.

Machine Manuals

These have been added to the PPM system when they are available.

Inhouse, we have been working on providing work instructions and manuals for each machine.

Skills Matrix

This was updated at regular intervals. The most recent version is available on the info web site.

Calibration

This schedule was run to schedule. No issues.

Training

3 and 6 month reviews were carried out throughout the year.

Performance reviews were carried out for all areas of the business. This highlights any areas for improvement and training needs.

The training records were updated accordingly every couple of months.

Internal training was carried out as required.

Customer Complaints

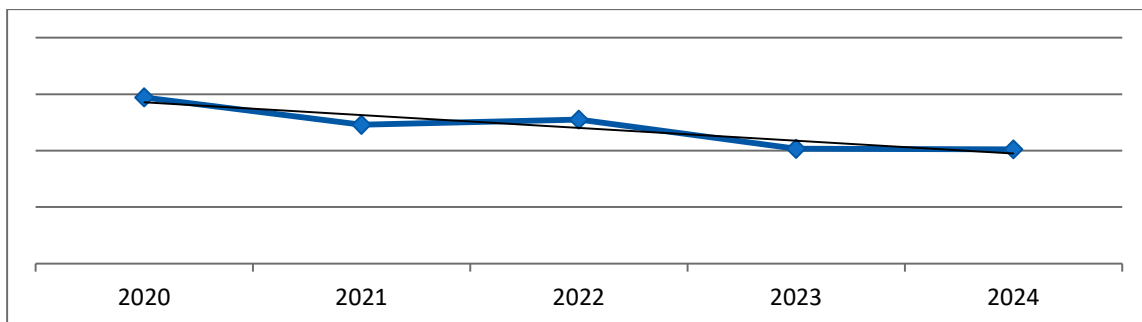
There has been a good reduction of any customer complaints over 2024.

The Customer Complaints reporting requirements are being reviewed in 2025, along with NCR's and reprint reporting and resolution.

Quality Targets – 3 year plans

The below is the status of the current plans:

QUAL1 - To reduce reprints – To reduce compared to the previous year.



This shows a reduction in the total amount of reprints raised.

QUAL2 - To reduce lead times of products – based on 2019 times.

Shown on the below graph compared to 2013.

Target In Progress.

QUAL3 – To reduce customer complaints

To reduce customer complaints based on 2022

Target Achieved.