SWORDS PAVILIONS

2023

Pakman Awards - Business Recycling Champion





Ian Hunter

Swords Pavilions

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COMPANY BACKGROUND

Swords Pavilions Shopping Centre is one of the top centres in Ireland which opened in May 2001 handling over **10 million customers in 2022**. Located in Swords on a **17-acre site**, the main centre is **495,000 sq. ft**. With **101 tenants** anchored by Dunnes Stores, Supervalu, TK Maxx, Movies @ Swords and Zara, the challenge for the management team is influencing **101 managers** and **1,800 employees** to deliver their and their company's part in our journey to **recycling over 75%** off our total waste generated as well as **ensuring 100 % of our waste avoids landfill**. Not an easy task when you consider the turnover in retail store teams!!!

We also must consider the impact of **over 1,000 deliveries per week** with an operation that is **24/7/365** when looking at the overall strategy thus focusing on simple steps to achieve are challenging business target in recycling. Selection of our trusted partner Panda to support our waste journey has been our key to success having **confirmed zero to landfill since 2013** and driving our segregation of waste streams from 5 back in 2019 to our current **12 in 2022**, **a 140% increase!**

Since October 2021, the management team head count has reduced by 25%, but through flexibility, determination, and application to the challenge whilst recognising the economic impact on our **CUSTOMERS** and our business, we have continued to deliver an attractive, safe centre and adding retailers that enhance the mix and **welcoming 10 million customer**, one of the only shopping centres in Ireland that **fully recovered our footfall to pre pandemic levels in 2022**.

SUMMARY OF ACHIEVEMENTS

- No.1 for overall performance 4th year running in portfolio (13 shopping centres in Ireland, UK & France)
- Footfall 10.2 million handled in 2022, +28% on 2021 (Ireland shopping malls were +22%)
- Car numbers 2.8 million cars on site in 2022
- Customers Dwell time was 98 minutes
- Service charge under budget by 1% (€30k) in a year when our energy costs doubled resulting in an overspend of €250,000
- 101 stores as part of scheme- zero vacancy
- **1,800** staff are employed across stores
- Handled 62,000 deliveries to tenants via 3 service yards

SUBMISSION OVERVIEW — AIMS & OBJECTIVES

Our purpose is to create outstanding experiences in unique city locations. This is underpinned by our vision of having exceptional destinations that connect communities, delivering a positive impact for generations to come. We recognise that to achieve our purpose and vision we must of take a proactive, strategic approach to environmental management and strive to be ambitious in doing so. This is facilitated by an Environmental and Energy Management System (EEMS) that enables the targeting and public reporting of our environmental performance. Our business activities have substantial impacts on the natural and built environment at all stages of the property cycle. We have therefore set out two overarching commitments to our stakeholders.

These are:

- To use best practice in the design and planning of our developments to ensure they respect their locations and enhance the built environment.
- To design and build properties using sustainable materials and practices and manage properties under our control
 efficiently, leading to lower consumption of natural resources and to reductions in waste and emissions generated during
 our properties' lifecycles.

We comply with, and go beyond, relevant environmental legislation and other requirements. By conducting regular and independent reviews of our progress, as well as through engagement with stakeholders, we aim to achieve continual improvement within the areas targeted in our EEMS. The annual target setting and monitoring process in place across our business focuses on the following key objectives:

- reducing our carbon footprint
- maximising the efficiency of our use of natural resources
- protecting the environment by preventing pollution and promoting restoration of biodiversity

In 2023, we have continued to invest in our assets and develop innovative projects to reduce our environmental impacts. We are progressing our ESG strategy of working to minimise negative environmental impacts and delivering continual environmental improvement. Group targets have been set against the 2019 baseline as this provides a consistent reporting approach across our owner's portfolio. All colleagues, contractors and stakeholders have a part to play if we are to meet our environmental objectives.

Environmental Policies

Swords Pavilions is committed to being a leading Retail Destination, Some Key Points of Swords Pavilions Environmental Polices are to:

- Minimise waste by evaluating operations and ensuring they are as efficient as possible.
- Minimise toxic emissions through investment in improvements in technology of mechanical & electrical systems and their associated power requirement, ensuring delivery of Net Zero Carbon by 2030.

- Actively promote recycling both internally and amongst our customers, tenants, and suppliers.
- Source and promote the sole use of a product ranges of any cleaning agents used with the requirement that they are nonchemical based to minimise the environmental impact.
- Swords Pavilions will comply with all relevant environmental legislation and will meet or exceed all the said legislation that relates to the Centre.
- Swords Pavilions will measure its impact on the environment and set targets for ongoing Improvement, to include the impacts of customer and the retailer and the impacts of Management and staff.
- Swords Pavilions will encourage the adoption of similar principles by its suppliers.

WHAT WE DID

In partnership with Panda Waste, we commenced our initiative to have zero waste going to landfill by changing our method of waste collection from each unit within the Centre. We commenced a DMR compactor which will produce waste for incineration and all other waste will go through a process for export of renewable energy. Our initiative was a major change and ran the risk if not correctly managed at our re-cycling areas, by putting the onus on the Tenants staff to segregate their waste and bring it to the Recycling area.

Our challenge when it came to the "Retail Recycle Project" was how do we get this across to 101 tenants and over 1,800 employees. The businesses in our centre are very diverse ranging from Kiosk operators of 64sq ft. to Dunnes Stores of 94,600 sq. ft. Our Strategy was to keep it simple, but it did require systems to be implemented and a buy in from all our tenants. We launched the 'Keep Recycling' campaign on an in-house basis with the following principles:

- Keep the system simple colour coded bins, simple and clear signage, convenient location of recycling units in all sectors of the centre.
- Work with retail units producing large volumes of waste to implement reduction techniques and make recycling process easy for them to adapt.
- Monthly reports on all waste streams to allow continuous monitoring and evaluation.
- Reporting on all new recycling markets and initiatives.
- We introduced a quarterly cash incentive for our tenants to help drive good practise across waste segregation which helped drive our recycling rate over 75%

Management of Swords Pavilions have been relentless in driving good practice across our 101 tenants and eateries consistently checking in and ensuring correct waste procedures are being delivered to help drive our recycling to an all-time high of 76%.

This has been done by engaging and educating store managers and staff throughout every store with training packs and posters for all units. This has been challenging with high turnover of staff across our tenants. We have done this while reviewing our contract with our waste provider and reducing staff hours by 12% across the board.

Our team members are also attending courses and seminars on topics such as sustainability, energy and water

conservation, CO2 reduction, and encouraging green initiatives in the workplace.





Reverse Vending Machines

Swords Pavilions shopping centre was the first shopping centre in Ireland to install RVM bottle and can recycling machines. We installed four units across the centre in January 2022 which give our customers an opportunity to win discounts from several of our tenants who support our mission on waste reduction.

RESULTS

Waste Operation

- ➤ 100% of waste diverted from landfill in 2022 (1,224 tonnes of waste)
- > 76% of all waste recycled (930 tons) vs. 49.5% in 2019 or +33%
- ➤ Waste cost centre down 13.9% vs. 2019 even with a 14% overall increase in costs
- 268 tonnes of cardboard recycled, -18% on 2019
- > 10 tonnes of plastic recycled, -43.9% on 2019
- > 20 tonnes of glass recycled, +27% on 2019
- > 175 tonnes of food recycled for Bioenergy, +184% on 2019
- > 265 tonnes of dry mixed waste recycled, +74% on 2019
- > 50 tonnes of steel recycled, +164% on 2019
- ▶ 107 tonnes of pallets (over 4,000 pallets recycled), -47% on 2019







- **3** tonnes of **polystyrene** recycled, **new initiative** in 2022
- > Over **20,000** plastic bottles and cans recycled via our RVM machine, **new initiative** in 2022
- Approximately 6,000 pairs of glasses recycled via Malahide Lions Club, new initiative in 2022
 - Over **1,000,000 hangers** recycled by tenants, never recorded before
- 32 tonnes of landscaping waste recycled new initiative in 2022
- WEEE recycling of light bulbs and batteries

OTHER ENVIRONMENTAL BUSINESS FOCUS

Swords Pavilions is committed to a sustainable way of working, using energy as efficiently as possible, complying with energy legislation, and achieving targets in energy conservation. Our owners Hammerson and Irish Life are committed to delivering for their shareholders as well as achieving industry recognised GRESB ratings.

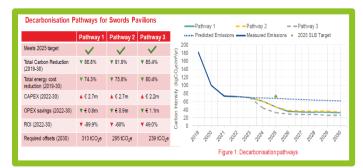
Hammerson have a number of targets that demonstrate their commitment to sustainability and becoming net positive. These are:

- 1. To be at least Net Zero Carbon in emissions by 2030 on a 2019 baseline
- 2. To reduce scope 1 and scope 2 emissions by 60% by 2025 against a 2019 baseline.

Arup have developed our Net Zero Asset Plans (NZAPs) for Swords Pavilions assets which address the historic and current performance and identify the way Hammerson can meet the targets above. The NZAPs are for landlord operated areas only and therefore all retail/tenant spaces are excluded.

Energy data has been reviewed and site audits undertaken with the Swords Pavilions Team to establish the current baseline and opportunities for energy and carbon reduction. The data has been analysed and various intervention measures that could be considered to reduce carbon have been established and tested. Three intervention pathways have been established and reviewed with Hammerson and their stakeholders. The project plan outlines the key interventions and next steps. Hammerson in 2021 issued a Sustainability Linked Bond (SLB) in UK and this has specific dates for delivery of reduction targets with associated penalties for missing these. We have selected pathway 2.

From the review we developed Swords Pavilions business targets and review the appropriate strategy to deliver on these targets.



Targets:

- 1. Remove the need for landlord requirement for gas
- 2. Reduce electricity by 30% on the baseline of 2019
- 3. Focus on Energy with the intention of reducing the Carbon Footprint of Swords Pavilions and achieving savings in operational expenditure and target being carbon neutral by 2030
- 4. Collaborate with retailers on sustainability and environmental performance to drive engagement across the Centre

NATURAL VENTILATION PROJECT

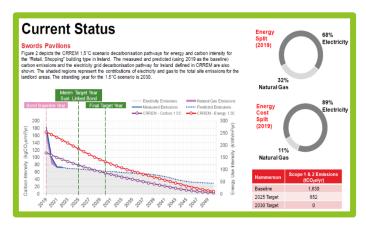
Swords Pavilions management have questioned the need to provide mechanical ventilation at all, particularly to the mall areas. These are large volume spaces, which currently require a significant air change rate, and significant associated heat input if intended to provide indoor comfort conditions.

However, the malls are essentially transient spaces (albeit enclosed), where customers are typically dressed for the outdoors. In addition, the malls benefit from heat 'overspill' from the retail units and lend themselves to natural ventilation by means of high-level ventilators and openings at the mall entrances.

Pavilions management commissioned BDP Consulting Engineers to undertake a feasibility study to review the provision of ventilation to the malls, retail units and landlord areas. The full details of this are included but in summary, it is proposed that:

- The existing air handling units will become redundant and be decommissioned
- The malls will become naturally ventilated spaces
- Ventilation to the retail areas will be rationalised, using two new air handling units, one serving each side of the mall (East and West)

In addition, the replacement of the faulty mall over-door heaters was recommended, and this project has been completed and 3 gas / water supplied overdoor heaters were



replaced with heat recycling overdoor air curtains along with the additional installation of similar units at 3 other door location (completed 2022).

BDP have recommended the installation of 3 new air handling units, together with the reconfiguration of ductwork (re-utilise existing), provision of heat pump DX units and associated electrical and controls works thus replacing 22 gas fire AHU's thus delivering:

- 1. Natural ventilation will be applied by activating existing smoke vents to cool the mall in warmer weather removing the need for active cooling.
- 2. New air handling units will be installed that use air source heat pumps to remove fossil fuels (overall energy reduction of over 80%!)
- 3. Work with the tenants to introduce demand-based air supply to retail units, reducing volumes required by approximately 75%, assisting the tenants in reducing their environmental impact. Tenants' units will also be converted to heat pump-based heating and will be fed from the PV system.

GAS BOILERS FOR HOT WATER IN PUBLIC TOILETS

We have completed in 2023 the removal of the 2 gas boilers and have replaced with 2 Dynamas Max hot water heat pumps which will incorporate our current solar supply into new heat pump. The existing storage onsite is 900l, so we have matched that. We have 25 hot water outlets being served from this supply so at a 3l/min requirement there will be no issue with a 900l storage capacity as there is currently no issues with pipe sizes and the HWSR pipework and pump. (No dead legs).

The result of both the natural ventilation project and the gas boiler project is that Swords Pavilions will be **gas free in 2023!** We will then via gas networks turn off the gas supply to the landlord supplied systems of the building.

ISO ACHIEVEMENT

We will be the only Shopping Centre in the country to hold all 4 core ISO certifications:

ISO 9001 Quality Management Systems - achieved 2021

ISO 14001 Environmental Management Systems - achieved 2021

ISO 45001 Occupational Health & Safety Managements Systems - achieved 2021

ISO 50001 Energy Management Systems - on track for 2023

RESULTS

In 2022 we delivered the following results:

- Electricity usage down to 1.5 MILLION kWh. This represents a 47% REDUCTION in electricity verses 2019,
- High-quality LED lighting fittings installed and will deliver annual energy savings of 1.37million kWh/annum - a reduction of approximately 500 tonnes CO2/annum
- Approximately 80% of the light fittings were recoverable for re-use and/or recycling, while approximately 82% of the lamps were recovered for re-use and/or recycling. Final quantities sent to WEEE Ireland was 5.3 tonnes of fittings and lamps therefore 4.5 tonnes of light fitting and lamps were recoverable for re-use and/or recycling
- Gas usage down to 77,000 kWh. This represents a 94% REDUCTION in gas verses 2019
- Reduction in carbon emission to 460 TONNES CO2e produced that year. 65% REDUCTION in carbon emissions
- 94,668kWh supplied to customer for EV car charging up 130% on 2021
- In 2023 we have already EXCEEDED the landlord SLB target 2 years ahead of plan

We are now gas free in 2023 with no landlord systems requiring a gas supply having used 1.3 million kWh in 2019!

The first centre in the owner's portfolio to do so (13 Shopping Centres)!

