Waste Reduction at Sonae Sierra: An innovative approach to waste management

Sonae Sierra

At Sonae Sierra we are committed to complying with strict waste management practices and we have a strong track record in reducing the amount of waste sent to landfill across our shopping centres. In Portugal, RioSul Shopping achieved a recycling rate of 74% in 2011 - almost 40% higher than the average Sonae Sierra shopping centres - thanks to the combined effort of management, tenants and suppliers. As well as generating savings over €5,000, better waste management practices led to a marked improvement in customer satisfaction and cut the shopping centre's CO_2 emissions by 118 tonnes.

THE CHALLENGE

Shopping centres generate large volumes of waste which, if not managed properly, can end up in landfill. While good waste management practices can reduce our impact on the environment and save money, reducing the amount of waste sent to landfill can be a challenge due to the investment needed in both the manpower and infrastructure needed to separate the wide variety of waste our shopping centres produce for recycling.

The majority of waste is generated by our tenants. As we cannot directly control their practices, close cooperation is vital to identify every available opportunity to reduce waste and ensure its correct separation. Success means we all benefit from lower operating costs and reduced service charges.

OUR OBJECTIVES

We aim to improve recycling rates at all our shopping centres and over the past years have successfully achieved significant reductions in the amount of waste sent to landfill. Our target is to achieve a minimum recycling rate of 53.4% and guarantee that the proportion of waste sent to landfill does not exceed 36.3% by 2012.

These incremental year-on-year improvements are part of our long term objective to obtain a minimum average recycling rate of 55% (aggregated across all Sonae Sierra owned shopping centres) by 2020. We also aim to have a maximum average landfill rate of 30%.

OUR APPROACH

Over the past few years, we have invested significant resources into finding new opportunities to reduce the amount of waste sent to landfill. We have largely focused our efforts on increasing recycling and recovery rates by:

- investing new resources in waste separation
- finding new waste disposal opportunities
- carrying out awareness raising and training activities among our staff, tenants and service suppliers

We continually review and refine our approach and work with tenants to understand the joint challenges we face and communicate the achievements we have made.

Improvements in waste management at RioSul Shopping between 2010 and 2011 demonstrate what can be achieved by developing new approaches that also lead to wider benefits from reduced costs to improved customer and tenant satisfaction. An outreach campaign aimed at tenants coupled with a new waste management strategy at the centre's food court led to a dramatic reduction in landfill waste, improved customer service and much broader environmental benefits.

Improving customer service

In 2009, negative feedback about RioSul Shopping's food court made up 8% of all complaints received by the shopping centre. Complaints focused on a lack of clean tables as used plates and cups were not being collected in a timely manner. The problem was most acute between the hours of 1 and 3 p.m. when the food court was at its busiest.

To tackle this, the shopping centre introduced a number of changes such as reorganising service points and giving cleaner staff specific responsibilities for a particular task such as clearing tables or manning the service points. Tray collection trolleys were modified so they could collect more dirty trays and deliver more clean ones back to the food outlets. Working hours were also adapted so more people were on hand during busy periods.



Figure 1: Paper cup disposal containers

As well efforts to improve customer service, improvements to waste segregation were introduced to speed up the recycling process. New containers for used paper cups (see Figure 1) meant the space inside each service station was optimised and the number of trips to nearby waste disposal areas were reduced. Working with our waste management supplier, we also introduced a new mixed plastics waste category meaning items such as straws and plastic cup covers no longer needed to be separated. This saved staff valuable time enabling them to clear and separate more waste during peak hours (see Figure 2).



Figure 2: Mixed plastic recycling

Working with tenants

While the food court was the focus of activity, the shopping centre also worked with tenants and service suppliers to improve waste segregation and recycling levels across all parts of the shopping centre. For example, we invited comments from tenants and services suppliers on how to improve waste management practices at our regular Safety, Health and Environment (SHE) meetings. These were also used as an opportunity to communicate our recycling performance and increase awareness around the need to reduce waste.



Figure 3: Improvements to tenant waste collection before and after door-to-door training

Door-to-door training was delivered to tenants to reinforce correct waste separation methods and this was supported by leaflets containing information and advice on how and what to recycle. Posters and other communications were used to encourage best practice and emphasise the environmental benefits of recycling.



Figure 4: Recycling awareness raising poster

RESULTS

Despite the relatively straightforward and low cost measures introduced at RioSul Shopping, the impact on waste production was impressive. By adapting existing procedures already in place, the shopping centre avoided the need to invest in additional equipment and staff. Not only was improved waste separation at RioSul Shopping less costly than had been assumed, the changes had a knock-on effect leading to much wider benefits.

The improvements at the food court put an end to the recurring problem of dirty trays piling up on tables leading to an outstanding improvement in customer satisfaction levels. Between 2009 and 2011, the percentage of complaints related to the food court decreased by 74%. Risks to customers were also reduced and incidents prevented as clutter in eating areas was kept to a minimum.

Thanks to the combined efforts of the shopping centre management team, tenants and suppliers, in 2011 RioSul Shopping recycled 74% of its total waste, up from 44% in 2009, making it the fourth most prolific recycler in Sonae Sierra's portfolio. Its recycling rate is almost 40% higher than the average across all Sonae Sierra shopping centres.

In 2011 RioSul Shopping achieved zero waste to landfill by incinerating non-recyclable waste for energy generation. These improvements also led to a significant environmental benefit. By avoiding landfill, RioSul Shopping avoided 118 tonnes of CO_2e in 2011, equivalent to around 26% of its emissions from electricity consumption.

The small additional costs involved in setting up new waste segregation and recycling processes were more than offset by the savings from avoiding landfill costs. Increasing the recycling rate and diverting waste from landfill delivered net savings of €5,300 compared to 2009. Rather than being an isolated success story, the experiences and lessons learnt from RioSul Shopping can be replicated across Sonae Sierra's portfolio leading to similar savings (see feature box).

The Economic Case for Recycling at NorteShopping

NorteShopping is Sonae Sierra's third largest shopping centre in Portugal, yet in 2011 it had the second highest level of waste among all Sonae Sierra shopping centres. The centre carried out a detailed analysis of its waste management procedures to better understand its waste footprint and to identify where the greatest potential for costs savings lie.

The centre already recycles 64% of waste saving close to €64,000 a year. The report found that if the rate of recycling were to increase by 85% (the bar at which current targets are set) then this could lead to further savings of €58,600 (see Figure 5).



Figure 5: Total waste management cost savings from recycling at NorteShopping

The greatest opportunities for cost savings come from PE plastics and organic waste. Only 34% of PE plastic waste is recycled, yet for every percentage point increase, NorteShopping would save an additional €560. Recycling 100% of PE plastic could save the centre €37,000 a year.

CONCLUSION

The steps taken by RioSul Shopping show what can be achieved at a relatively low cost by adapting existing processes and working collectively with tenants and suppliers. As well as the knock-on benefits for customers and the environment demonstrated by the centre's initiatives, the financial benefits from increasing recycling can be significant as the analysis conducted by NorteShopping shows.

RioSul Shopping provides a blue print showing what is possible as we work towards our 2020 objective to obtain a minimum average recycling rate of 55% and a maximum average landfill rate of 30%. But despite the demonstrable achievements from relatively little investment, it is clear that further outreach to tenants and suppliers will be needed in the long term as we continue to target further improvements across our portfolio.

