Back to Black – Reusing Ink Sustainably // Brazil

“We buy a lot of ink – over 178 tonnes,” says Levy Neri Alves, Ink Room Manager at the SK Uberaba plant in South East Brazil, “but we found we weren’t using all of it, so we had to look into that.”

The plant prints over 135 million square metres of paper packaging per year, but every month three tonnes of ink went unaccounted for. Careful research revealed the culprit – ink wastage due to variations in colour. “The inks are standardised colours when we receive them,” says Levy Neri Alves, “but some inevitably become contaminated during the printing process.” Waste ink is a financial loss, but also an environmental one because recycling ink is a difficult and costly process, and usable only with some inks. The Smurfit Kappa commitment to circularity and sustainability made reuse of inks an attractive idea. However, the discarded colours were non-standard, and combining them only produced a poorly-mixed dark colour.

Over to Mr. João and the Paint Preparers to create a new machine – a used ink mixer. Using an old barrel with a perforated compressed air tube across the bottom, the team used air bubbles to agitate the mixture into a near-black. It then needed only a small amount of additional new ink to turn it a standardised shade of black. This ingenious device recycled available equipment, so it required no additional investment and took just a few days to build. It also won an award from the ‘Think Outside the Box’ campaign, run annually in Brazil.

“Sustainability doesn’t always need massive investment,” says Levy Neri Alves. “Sometimes all you need is determination, creativity, and the ability to think outside the box!”

In the Core of Circularity // Italy

As circular economy is at the heart of Smurfit Kappa’s operations, and one example of that is how we participate in the recycling of old boxes to new ones.

With our expanding network of 17 recycling depots in Europe, we play our part in fabricating a responsible producer of packaging. The latest addition to our recycling depots is Marlia, in Italy, which was acquired in 2019. SK Marlia was inaugurated in 2019, and, as Smurfit Kappa’s 3rd European recycling depot, shows our strong commitment to recycling and the circular economy. However, as Stefano says: “A recycling facility is always in a relationship with the local communities and institutions. We used a range of methods to raise awareness about recycling.”

These included:
- a cardboard Noah’s Ark in the central square of the town hall (later recycled);
- school visits and presentations;
- plant employees, 21st local clean up day by cleaning a green area;
- recovery of extra paper grades from hospitals and schools;
- sponsored the local Labour Festival on 1 May; and
- sponsored a balloon for the Montgolfier aly.

Location is just one of the reasons for SK’s Italian Recycling Depot. This area also has the advantage that locally recovered paper can replace raw materials from far away, saving fuel miles and overall CO2 emissions. Furthermore, it gives a good synergy with the region in providing local employment. SK Marlia has been in operation since 2019, and, as General Manager of the SK Marlia recycling facility, Stefano Mazzei, Manager of the SK Marlia recycling facility. The figures support his claim; 40% of Italian containerboard and 90% of Italian tissue had been recovered, with a target of 25-30,000 tonnes for 2020. As General Manager, Recycling Operations Italy, Luca Marroni says, “The new Marlia plant shows our commitment to the circular economy, and will ensure the availability of high-quality recovered paper to meet the needs of all our customers.”

The information campaign was a huge success – by the end of the year, 16,000 tonnes of paper had been recovered, with a target of 25-30,000 tonnes for 2020. As General Manager, Recycling Operations Italy, Luca Marroni says, “The new Marlia plant shows our commitment to the circular economy, and will ensure the availability of high-quality recovered paper to meet the needs of all our customers.”

Recovered paper by the end of 2019 (tonnes)

15,000

Supporting Data Supplementary Information

Table: Packaging Recycling Rate in 28 EU Countries (%)

<table>
<thead>
<tr>
<th>Material</th>
<th>2013</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper and board</td>
<td>64.7</td>
<td>76.1</td>
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<tr>
<td>Metallic</td>
<td>79.7</td>
<td>84.7</td>
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<tr>
<td>Glass</td>
<td>74.3</td>
<td>77.4</td>
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<tr>
<td>Plastic</td>
<td>41.9</td>
<td>74.7</td>
</tr>
<tr>
<td>Average</td>
<td>67.4</td>
<td>74.7</td>
</tr>
</tbody>
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Key: Year 2017 Paper & Board