



Zero Waste Europe was created to empower communities to rethink their relationship with resources. In a growing number of regions, local groups of individuals, businesses and city officials are taking significant steps towards eliminating waste in our society.

CASE STUDY #3



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VRHNIKA SLOVENIAN TRAILBLAZERS

In a country that until 2001 had no national targets for separate collection of waste, the case of the small municipality of Vrhnika in Slovenia shows how a community can make strides towards a Zero Waste objective in a short time.

How did this small area go from landfilling everything to recycling most of its MSW in 20 years?

Without the tradition of recycling boasted by many Western European nations, this area of 18,000 inhabitants has leapfrogged the recycling rates of many better-established programmes around Europe, reaching 76.17% separate collection of municipal solid waste (MSW) and aiming to reach 82% in the next 5 years.

In spite of a national strategy focussing on incineration as a replacement for the country's addiction to landfill, and a separate collection rate of 42%, movements resisting the construction of incinerators have flourished and support for a Zero Waste solution is growing. Ljubljana-based NGO Ecologists Without Borders coordinates efforts around the country and is supporting Vrhnika's transition to a Zero Waste municipality.

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Early adopters

In 1994 the town's landfill facilities were reaching their limits. Costs were rising rapidly to reflect this decreased capacity and the local authorities were casting around for, even if new solutions. Two employees of the public waste management body, KPV (Komunalno Podjetje Vrhnika), set about persuading the town that separate waste collection was the solution, even if no one in Slovenia was thinking about it and there were not even any national targets for separate collection yet.

Although it was the more expensive option at the time, there is no doubt that over the intervening years the path towards Zero Waste has saved the

municipality money. After 2004, landfill fees in Slovenia rose sharply, up to 130 euros per ton. Since 2006, the cost to Vrhnika of landfilling residuals has more than halved thanks to the increase in separate collection.

So, once the town decided to pursue a separate collection model in 1994, the first step was to set up the necessary logistics and legislative framework for this new type of waste management. Initially, activities focussed on the separate collection of recyclable waste (glass, paper and cardboard, plastic and metal packaging), residual waste, organic waste, hazardous and bulky waste and construction & demolition waste.

Recyclable municipal waste was collected from so-called 'eco-islands' on the streets, where residents could take glass, paper and cardboard and other packaging. Residual and organic waste was collected door-to-door. In 2002 KPV started a campaign called KOKO in which residents were encouraged to bring separately collected recyclables directly to a collection centre, where the waste is weighed and residents are rewarded with points that result in a reduction of their monthly waste collection bill. This pay-as-you-throw scheme was the first of its kind in Slovenia and now brings in around 30 tonnes a year of waste without the need for collection services.

Waste generation rates keep going down

Over the last few years, the quantities of hazardous household waste collected have decreased due partly to residents clearing out their old stocks, and partly to the fact that extended producer responsibility has been introduced to some waste streams, such as batteries and accumulators. From 2000 onwards, residents may also dispose of hazardous waste during twice-yearly collection

- **Population in Municipality of Vrhnika : 18,000**
- **From 201 Kg/ capita of residual waste in 2004, to 80 Kg / capita in 2013.**



designated locations throughout the municipality to receive the separately collected hazardous waste. Overall, the number of people participating in hazardous waste campaigns has increased while the collected weight has decreased.

Residual waste has also been reduced over the years. In the early phases, it used to be collected door-to-door once a week. Accompanied with awareness raising campaigns, KPV decreased the frequency of its residual collection to twice a month in 2011 and once a month from 2013. **From 201kg/capita of residual waste in 2004, concerted action has managed to reduce this amount to 80kg/capita in 2013.**

KPV also offered residents the choice between having their organic waste collected door-to-door, from special bins, or receiving home composting kits. Following public campaigns (including a fetching earthworm mascot!) encouraging separate collection, collection rates were boosted. In 2011, KPV began a campaign to promote home composting, something it is looking to intensify in coming years to reduce overall waste generated.

Bulky waste is collected through two methods - residents may deposit it directly at the KPV collection centre, or ask for KPV to collect it from their home. All bulky waste is disassembled and most materials are sent for recycling.

Working with the community

KPV has based its activities around a coordinated awareness-raising campaign, starting with Vrhnika's youngest citizens – school children. They considered this the starting point for any change in citizen behaviour and attitudes. Schools were provided with bins and discounted waste collection fees for sorting their waste at source. Given the savings this system represents, all schools and nurseries in Vrhnika now operate a source-separation of waste system. KPV has held waste-themed events in schools, such as a waste fashion show, organised tours of the collection centre and held drives to collect specific types of waste in schools.

The company also provides educational lectures aimed at 5

different age groups, from nursery school age to university students. These lectures are attended by 1500 children and young people from around Slovenia a year, which, for a country with a population of just 2 million is an impressive figure. In 2006, KPV co-financed a course for primary schools, which included specific training for teachers and special educational materials. The course took a multi-disciplinary approach to teaching a range of environmental issues, including waste, thereby harnessing the pedagogical skills of teachers to reach children and their parents.

Building on this success, KPV moved to work with businesses. It developed special business contracts for waste management, including consultations on how to achieve savings through separation-at-source. Businesses responded positively - some even asked KPV to help them manage their waste flows and organise on-site separate collection. KPV noted a significant decrease in quantities of paper, cardboard and plastic in the residual waste stream. From there, KPV went on to work with businesses outside the municipality with an ISO standard requiring separate waste collection.



KPV also made efforts to change the public's perception of waste as something dirty, smelly and not useful. It painted trucks white with flower motifs, cleaned bins regularly and created an attractive entrance to the KPV collection centre, with a park featuring lawns and flowerbeds. The nearby landfill site was rehabilitated. In fact, the area was so successfully renovated that when a TV camera crew visited to film a story about the centre, they got lost while looking for a dirty site with rubbish. Instead they found nothing but pleasant parkland and a pond with ducks swimming! The camera crew's perception of waste changed for the better that day.

The waste management company has also worked on more traditional ways of reaching out to the public, with the aim of presenting waste as a resource. The collection trucks themselves are printed with short promotional messages encouraging citizens to sort waste, KPV prints a magazine focusing on waste issues, as well as holding lectures and running thematic campaigns. Information about waste collection is broadcast on the radio, sent through the post with waste collection bills, published in local newspapers and on advertising hoardings. Communication is adapted to specific demographic groups and their particular characteristics.

“Businesses responded positively”

The awareness-raising campaigns in Vrhnika have been successful in encouraging residents to think and talk about waste issues and the results achieved in the municipality. The positive atmosphere this awareness has created has driven the municipality's good results and is having a real multiplier effect beyond the district, as Vrhnika residents share their positive experiences with friends and colleagues from other areas.

Waste Prevention

Vrhnika has begun to implement some waste prevention measures. In 2014 KPV launched a reuse centre called DEPO on its collection centre site, to upcycle waste into desirable goods and recover items that would otherwise be sent to landfill. Objects are repaired, upgraded or taken apart for useful parts to be crafted into something else, then sold to the public at affordable prices. The centre has been a roaring success and is planning to move to the city centre in the near future.

In collaboration with Ecologists Without Borders, a crèche in Vrhnika has begun a pilot project to introduce reusable nappies for its little customers, to avoid sending disposable nappies to landfill.



The Future for Vrhnika

In January 2014, the Ljubljana-based NGO Ecologists Without Borders became members of Zero Waste Europe. In February 2014, the Slovenian separate collection champion –Vrhnika municipality – announced their intention to become the first ZW municipality in Slovenia. By 2021 Vrhnika plans to achieve 300 kg of waste generated per capita, just 70 kg of residual waste per capita and 82% separate collection, matching the 1st European town to declare a Zero Waste goal, Capannori (Italy). Given the rapid progress and strong leadership shown so far, there is no reason to believe they won't achieve it.



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Sources

KPV - Komunalno Podjetje Vrhnika, Annual Reports, Zero Waste Plan until 2020
<http://www.kpv.si/>

Društvo Ekologi brez meja / Ecologists without Borders Association - www.ebm.si



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