

The journey of the waste

Every piece of trash that isn't put in special trash cans is considered residual waste: this kind of waste is then brought to the AVR factory to be incinerated. AVR was founded by some Chinese people in 1968 and is active in Australia, the Netherlands and Canada. With the help of this company, in the Netherlands, six billion kilograms of waste are burned in order to produce energy and to be recycled. We visited the biggest treating station in the Benelux (located in Rotterdam) which treats 1.3 billion kg of waste every year.

We will now describe the journey of the waste from our trash cans to its various destinations.



Let's start at the beginning: administrations and companies bring the waste in gigantic trucks, or in barges. The waste at the entrance of the station is weighed in order to calculate the amount of waste (and the bill to pay...). There are approximately 150 trucks a day. What surprised us is the fact that except for a few observations made to control if the waste brought is appropriate for the incinerator (no chemicals or metals)*, the waste is not sorted. It is up to the everyday citizens to put the right waste in special trash cans to get them recycled. But our guide mentioned that new infrastructures were part of the project to sort the plastic in the future, and this project is already a progress.

The residual waste is then put in a special bunker, which can contain up to 12 million kilograms per week end (fun fact: this bunker is filled during the week as the waste is not brought in during the week end). Waste is then transported by two gigantic hooks that will bring them to one of the seven incinerators which, together, can contain up to 5000 kg of waste.



The incinerators are burning 24/7 and produce enough energy for more than 200 000 homes in Rotterdam. It is important to maintain them regularly due to the accumulation of ashes on its walls. They are regularly cleaned, once a month; with dynamites (we were lucky enough to witness it). Every four years, one incinerator at the time is stopped, and then cleaned inside after waiting 36 hours.



The incinerator boils water, which is then transformed into steam, which will then activate turbines and the mechanical energy will be transformed into electricity by alternators.

After being burned, the ashes of the waste is brought to a pile of itself before being taken to others factory's where they will be sorted, and recycled. There, a very powerful electromagnet will take all the ferrous elements, and the rest of the ashes will be molten and changed into pavement tiles.

To conclude, we think that our waste has ended its journey after we put it in our trash can, but in fact its journey just begins. From our houses to the final recycling factories, the waste is being used again to produce energy and to build new things such as roads.

Pierre and Quentin

*it was mentioned that if the waste is inappropriate, the contracts with administrations and companies can be broken