

CASE

Rotterdam Navel Gazing as Success Factor...

It is in the beginning of 2016 and Henk is taking a walk along the river Maas in Rotterdam. The weather is pretty good, almost warm, although it is February and still winter. Recently Henk saw some seals swimming. In the centre of Rotterdam! Isn't that amazing? That is one of the aspects why he loves this beautiful city along this Grand River.

Henk has worked in plastics for much of his life. Plastics became part of his identity and DNA. Recently, however, an important and breakthrough article¹ was published: the Ellen McArthur foundation forecasted that within 30 years there will be more plastics in the ocean than fish! That is of course not what Henk wanted to happen with plastic. That is not sustainable. Henk feels that immediate action should be taken. It annoys him: more plastics than fish. Although he is a 'plastics guy', he enjoys seals and fish much more than plastics when it comes to rivers and oceans! Henk knows that the world is a closed system²: the waste that we as humans produce will last forever unless it is biodegradable or serves as raw material or resource for other production systems. That's why Henk believes in Bioplastics.

Henk started his career in plastics more than 15 years ago when setting up a new business selling bioplastics; plastics made from plants. The idea was great and well received. Everybody seemed to be interested. However, the products were too expensive for one to one substitution. It was like shooting with a scattergun. This changed when he started working for Novamont³ in 2003. His focus was shifted from selling products to providing a total solution for food waste collection from households. Novamont currently is successful because they integrated the product-service system with local available feedstock for producing bioplastics and created together with them multiple benefits. Plants are used to produce ingredients for bioplastics and energy. The residues are used as feed for animals and used to improve the quality of the soil. Like a circle...

Since one year Henk is sector manager Cleantech at Rotterdam Partners. His responsibility is to stimulate the Circular Economy of Rotterdam, this in cooperation with the "government" of Rotterdam. Henk feels the pressure, this is not an easy job. A difficult task. Of course he knows a lot about what a Circular Economy theoretically is and should be, but to put in the day to day practice of a city like Rotterdam is different and challenging.

From a consumer (inhabitant) perspective it seems simple: energy should be available at a low or preferably at zero cost, waste removal should take place against a very low price and last but not least the city of Rotterdam should not be polluted and have clean air and water. This is what the municipality of Rotterdam wants and even

1 <http://www.theguardian.com/business/2016/jan/19/more-plastic-than-fish-in-the-sea-by-2050-warns-ellen-macarthur>

2 <http://www.smart-circle.org/blog/thomas-rau-dont-focus-smart-cities-need-grow-smart-society/>

3 <http://www.novamont.com/eng/>

better: this is what the Rotterdammer⁴ wants! They want clean water, secure energy supply, good infrastructure and no industrial smells. But do companies and inhabitants of Rotterdam understand what this really means, and what it takes to become a company or consumer within a sustainable economy. Will a Circular Economy provide what the Rotterdammer wants? Everything comes with a price. More seals and other wildlife in the river Maas require huge investments. Are they prepared to pay extra for it? Prepared to sacrifice?

Politicians and scientists are talking for years about this so called Circular Economy. Piles of articles have been produced, numerous websites discuss this “new economy”. But what is the result so far? How many real business networks based on Circular Economy principles have been built, if any, and were they successful? What are their and fail- and success-factors? What can we learn from it?

One of Henk’s ideas to stimulate the Circular Economy in Rotterdam is to attract young intelligent people to start their own Circular Economy start-up network in Rotterdam. But what should he do to stimulate these young people to develop new or other business models that are based upon and part of such a circular system? Subsidizing is an obvious political answer to these types of challenges. But that’s not what Henk wants. That is not a circular solution! It should be sustainable and competitive and good for the city of Rotterdam. But how should he attract these high energetic potentials?



4 *a name for an inhabitant of Rotterdam*

Rotterdam Partners⁵

Rotterdam Partners pursues the objective of strengthening the Rotterdam economy. They work for visitors, companies and residents who are either already in the city or are planning to come to Rotterdam or to establish themselves here. Rotterdam Partners has three core areas of work. They act as the link between the city administration, companies and institutions:

1. Rotterdam Partners facilitates in setting up activities, answering questions arising from establishing a presence in the city and dealing with economic issues.
2. Rotterdam Partners also take initiatives to promote the renewal of the Rotterdam economy.
3. Rotterdam Partners bring together supply and demand in the fields of tourism, business events and congresses.

International Trade & Investment⁶

Rotterdam Partners creates and exploits opportunities around acquisition, expansion and the promotion of international trade on behalf of public and private parties in the Rotterdam region. The International Trade & Investment department works towards a stronger social and economic climate for its target groups. These comprise new international companies, large and medium-sized established international companies, internationally orientated companies, and the Rotterdam workforce. The aim is to position Rotterdam as a powerful and dynamic city region where it is good to live and to work. These endeavours are helping Rotterdam achieve a strong position as a business base on the world map.

Blue and Circular Economy

Inspiration for Circular Economy can be found in the Blue Economy⁷. There is no waste in nature. All products are reuse as feedstock for new products. The Blue Economy aims to make better use of advanced technologies, inspired by nature, and to use waste for new production cycles. Often this can create multiple benefits, as in the case of plants grown for bioplastics that are also used for animal feed.

In *Bluecity 010*⁸, mushrooms are grown on coffee waste, while the roots produce energy to charge the mobile phone. At the *SuGu Club*⁹, windmills are being produced to produce local energy, and windmills that can produce clean water.

5 <http://en.rotterdampartners.nl/organisation/organisation/>

6 <http://en.rotterdampartners.nl/organisation/organisation/>

7 <http://www.theblueeconomy.org/Home.html>

8 <http://www.dafne.com/design/congratulations-blue-city-010-getting-tropicana-rotterdam/>

9 <http://www.sugclub.com/>

Epilogue

Henk picks up a plastic bag that is about to be blown into the Maas by the wind. As soon as he will be in the office he will buy a share of the company *WasteBoards*¹⁰ with a kg of plastic. Henk believes in young people, they are fresh enough to make a difference.

He has an idea now: he decides to organize a business model¹¹ competition for young entrepreneurial students, based on the principle of the blue and circular economy, specifically for the Rotterdam area under the following conditions:

- the feedstock has to come from the Rijnmond area, either from households or companies,
- the product has to have a visible positive impact on the 'Rotterdammer' (more simple: used by the majority of the households),
- is has to be fully based on the principles of the blue/circular economy
- and the business should be part of a sustainable network of other business models

Tomorrow, Henk expects full business case¹² presentations of the most ambitious and entrepreneurial student teams...

10 <http://wasteboards.com/>

11 <http://www.businessmodelgeneration.com/>

12 <http://www.businessdictionary.com/definition/business-case.html>

And: http://www.rotterdamclimateinitiative.nl/documents/Documenten/Rotterdam_Duurzaam_2015-2018_spreads.pdf



This case is used in the business competition [Rotterdam 100](#) 2016.

The occurrences and circumstances described in this case are based on reality.

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