

# TACKLING THE TAKE-MAKE-WASTE ECONOMY

## Interview with Robert-Jan van Ogtrop

**Keizersgracht, in the heart of Amsterdam. The bastion of old money, where four hundred years later the rich history of the Dutch East India Company still adorns the walls of centuries-old canalside houses. The canal belt is lined with glistening luxury sports cars, all parked along the too narrow streets like showpieces of the *linear economy*. And this is precisely where we meet Robert-Jan van Ogtrop, an advocate of the *circular economy*.**

In a short space of time, the circular economy has become a household name, with many faces and labels. These include regenerative economy, donut economy and blue economy. But a word of warning: not everything referred to as circular economy is actually worthy of the name. Greenwashing is on the rise here, too, says Van Ogtrop. The circular economy according to Van Ogtrop is fully sustainable and linked to how our planet works. “We live on a planet defined by circularity – even the shape itself – with day and night, the four seasons, and so on. Before we lived on Earth, waste – in the sense of rubbish – didn’t exist. There is no waste in nature; nothing is discarded. Nature works so cleverly that everything which is used is reused.”

Van Ogtrop stresses this point and not without reason. The almost nonchalantly expressed statement ‘waste doesn’t exist’ goes to the very heart of his argument – this notion forms the foundation of the circular economy. In our modern times – in which consumerism reigns supreme and capitalism is groaning under the weight of its own excesses (such as climate change, smog in large cities, waste mountains and plastic soup) – his message is that waste doesn’t exist. Not that there isn’t any rubbish, but that we shouldn’t see it as waste.

### Planetary boundaries

We created the linear economy during the Industrial Revolution, says Van Ogtrop. “Fantastic things have happened since then, let that be clear. But if you create a linear economy on a planet that works in a circular way, sooner or later you reach your own boundaries. We’ve all created the take-make-waste economy, constantly extracting raw materials from the ground. We feed them into a linear growth model, acting as though they are an endless resource – which, by definition, is not the case. And now we’re seeing that in the coming decades, a number of vital resources will be depleted if we continue as we are. What is more, owing in part to the growth of the global population, the linear economy is now creating gigantic mountains of trash, which we are almost literally choking on. We’re reaching all the planetary boundaries.” →



**Robert-Jan van Ogtrop**  
Founder of Circle Economy  
Board Chairman of African  
Parks

# WE TOO EASILY TURN A BLIND EYE TO WHAT'S HAPPENING AROUND US. ME INCLUDED – I'M NO SAINT, EITHER

## Recycling is the last option

A conversation with Van Ogtrop is mainly a question of listening carefully. Every question leads to a passionate mini lecture. But don't think that he's a moral crusader, or an environmental activist. The former CEO of Bols and subsequently Remy Cointreau (and later partner at CVC) is not against capitalism. But he does note that 'we' have a problem and that most people have buried their heads in the sand, while a small portion are attempting – with doom scenarios – to get things moving. Van Ogtrop's approach is a positive one instead. "The good news is that there is a holistic, positive and inspiring solution." Which is? "It is important to convert the current economic model in such a way that we start working circularly again. We decide to agree that waste just doesn't exist."

It sounds easy, but how do you avoid waste in a world of mass production, mass consumption and disposable products? Again, the answer is, in theory, simple. "You can produce whatever you want; there is complete freedom – a free market economy – but when a product that you have produced comes to the end of its life cycle, it's your responsibility as a producer to ensure that it doesn't end up on the mountain of waste. This can be achieved through the use of circular models, or by using the components as input for the next cycle." If you take this idea to the extreme, says Van Ogtrop, you don't have any more waste and you don't have to continuously mine new raw materials. So you prevent planet Earth from becoming depleted. But the circular economy, Van Ogtrop stresses, is much more than recycling. Recycling is only the last option, if reuse, refurbishment and remanufacture are not, or no longer, possible.

## Selling services

Changing our view of how we use products: that is the essence of the circular economy. Selling services instead of products, for example. Van Ogtrop's Circle Economy has done a number of projects with Philips. "When the world switched to LED light bulbs, Philips had a problem because these light bulbs don't need to be replaced every few months. At that point, you could say, 'My business model is broken because these light bulbs last for ten years' or you could move on to selling the service. So, for example, Philips makes a contract with Schiphol to sell light as a service – for the runways, duty-free shops, lounges, everywhere – for a fixed monthly rate. Then all of a sudden, the company benefits from long-lasting light bulbs, because they don't need to keep sending people to climb high ladders and change them. In the words of Johan Cruyff: 'You'll only see it when you realize it.' Or when innovation forces you to think differently.

And it doesn't stop at light bulbs. The same principle applies in the medical industry, for example, with MRI scanners. In the old linear economy, Philips benefited from the launch of a new model every two or three years. Hospitals would then just dispose of the old model, for which they might have paid a few hundred thousand euros, and buy the latest one. "In the circular economy, Philips sells the service or leases the machines rather than selling them. Therefore, it remains the owner of the equipment and thus benefits from its longer service life. Improvements are implemented in a modular way, which means that instead of having to be replaced, the machine is upgraded. So, over time, the value of the equipment increases rather than decreases. The great thing is that Philips also knows when the MRI scanners will eventually be returned (after, say, 20 years), what parts they contain and how many of them can be reused."

## Mental agility

Anecdotes are useful to explain how the circular economy works, but not every industry is equally suitable for that. Circle Economy carries out countless 'circle scans' for companies and, for the past few years, also for cities, to see what is possible within their current linear business models. "The most important thing is that we need to realize that we don't have to keep buying things and then throwing them away in the rampant consumerism of our modern age. Right now we prefer to buy cheap goods in China, have them transported halfway across the world in large ships, throw them away after a short while, and then start again. We think that this boosts the economy, which is true – in the short term. But it's also incredibly shortsighted when you consider how much material is used – not to mention the carbon emissions from those container ships. It is all extremely misguided and incredibly harmful. When you become aware of this, you automatically come to this much more intelligent way of producing and consuming."

And that brings us to the very best news, according to Van Ogtrop. Studies by McKinsey and the Ellen McArthur Foundation have calculated that the transition from the old linear economy to the circular economy represents a business opportunity of EUR 1.8 billion per year – in Europe alone. "But that requires systematic changes. Firstly, it costs money, because you have to convert machines and set up production processes differently. And it has to be financed differently. To return to the example of Philips, they used to sell those expensive medical machines and use the money this brought in to make the new generation of machines. In the new model, they remain the owner of the machines and this is on their balance sheet.

The lease rates are not enough to finance R&D and the production of newer machines, so you need external financing from banks that understand how the business model works. This also requires another kind of mental agility on the part of the bankers and financiers of this world.”

## Five stakeholders

There is no shortage of capital to finance this transition, says Van Ogtrop. But you have to make investing in circular business models attractive for financiers. The biggest share of the pie is held by institutional investors. They also have an interest in sustainable investing, but returns have to be generated – in the short term, too. “But it’s important that large investors be willing to sacrifice some returns in the short term in order to achieve better returns in the long run, and thus also support the SDGs. That’s the hard part of any systematic transition: convincing all the relevant shareholders. And Van Ogtrop knows exactly which stakeholders he’s talking about. He has divided them into five groups: politicians, business, the financial sector, science and education, and media and communication. “If you can get all of these on board and ensure that they embrace the circular economy, with the premise that it doesn’t need to affect long-term returns, you can go a long way.”

There is no fixed hierarchy for these five stakeholders, says Van Ogtrop. “Businesses and politicians have to step up to the plate. They can’t do it without each other. For example, you can promote circularity through taxes. During the Industrial Revolution, governments started to charge tax on employment (which was scarce) and not on raw materials, as these were in abundance. The situation now is radically different, but we never changed the taxes. Now you would have to drastically reduce the tax on employment and increase that on raw materials. Then you’d automatically start making products that last much longer and when they did break, you’d have them repaired instead of throwing them away – which in turn would create jobs in your own country. Governments are needed for this, and that’s slowly starting to dawn on the powers that be in The Hague and Brussels.”

## No saint

The fact that it has taken so long is mainly due to the lobbying of big companies, the biggest culprit being the fossil fuel industry. “This really has to stop now. And then we come back to the institutional investors. They finally have to say: enough is enough, we’re going to stop investing in fossil fuels. Then things could go fast. Everyone gets that transition doesn’t mean you can turn off the tap just like that. On the other hand, we’ve started fracking to extract the last remaining oil and gas from the ground, using a high-pressure mixture of clean water and chemicals – while the sun shines for free all day. But the oil majors can’t build a business model around sunshine. We see the financial world as a partner of the business community and it has always had a facilitating role. Unfortunately, this has degenerated somewhat into an industry itself, with money making becoming an objective in itself.”

People are conditioned in such a way that they don’t like change, says Van Ogtrop. It is always easy to pass the buck for change to the next generation. Yet things, and people, can change. “I’m from that linear economy, and took full part in it as a CEO and in the world of private equity. The world of machismo, money and power. But after experiencing the power of nature, during a trail in Africa, this changed. I had taken a sabbatical to refocus and I asked myself the following question: where am I in life? We live in the middle of paradise, but we don’t see it anymore, because we fill it with office blocks and glass towers. We too easily turn a blind eye to what’s happening around us. Me included – I’m no saint, either. But if we really want to create a circular economy, radical changes are needed.”

## From 8 to 80

Just 8.6% of the entire economy is currently circular. This is according to figures presented at the beginning of 2020 for the third consecutive year in Davos in the Circularity Gap Report, which the Circle Economy draws up in conjunction with the World Economic Forum and World Research Institute. Strikingly, this figure is lower than the 9.1% presented a year earlier. It’s movement in the other direction, which Van Ogtrop largely puts down to the growth of more linear economies in China and India, with their enormous use of raw materials. “We still have a huge amount of work to do,” Van Ogtrop admits. Which he immediately follows by saying that, particularly in the West, many good things are happening.

“Moreover, President Xi understands that things can’t continue as they are, with all the smog and increase in coal power plants. He has to do something if he wants to stay in power. And if a country like that, with its centrally planned economy, hits the circular button, change could happen very fast. Faster than it does here, thanks to our polder model.” Ultimately, the circular economy has to be able to grow to represent 20% of the global economy in around ten years. But Van Ogtrop’s dreams are bigger. “We have to make 80% circular in the end.”

## Think big

Following on from the ‘waste doesn’t exist’ mantra, waste flows can already be converted into hydrogen, which could be used to fuel the polluting container ships. Even the kerosene used to fuel planes can, in theory, already be made from waste products. But the technology for this is relatively expensive at this time. “Technologically, it’s been possible for quite a while, but people clearly aren’t willing enough to invest in it yet. And herein lies the task of governments. If they were to stop providing USD 5.2 trillion in fossil-fuel subsidies worldwide each year and invest that money in new technology, the necessary economies of scale and transition would follow. Oil companies could play a significant role in this, but it isn’t happening because they can’t think beyond the boundaries of their old business model. For fossil fuels, it’s game over.” If there are companies in the industry that do change course, you have to reward them by investing heavily in them, argues Van Ogtrop. “It’s possible, but you need CEOs with vision and nerve. It doesn’t have to be perfect from the outset, but we do all have to go in the right direction. That starts with awareness, with a sense of urgency. And there’s a serious shortage of that.” →



## SUSTAINABILITY AND PROFITABILITY

'In 2010 I started Circle Economy. It is an impact organization based on a dream in which I saw five circles, each representing one of the essential stakeholders that need to work together if we want to achieve long-lasting system change towards circularity: politicians, business, the financial sector, science and education, and media and communication. We have gathered massive amounts of granular data. We use this data to advise companies and cities on how to transition to circularity. Whatever the time and whatever the place, we stress that it is possible to combine sustainability with profitability.'

# WHAT HOLDS US BACK ARE THE VERTICAL LINES OF POWER THAT WE'VE CREATED TOGETHER IN THE LINEAR ECONOMY

## Capitalism

Can capitalism and a circular economy exist alongside each other? Yes, says Van Ogtrop. "But not the excessive capitalism that we have now. You need capitalism with an awareness that we're part of nature, of this planet. Our aim should be an economic model that is regenerative in itself – in other words, not unilaterally exhaustive. Capitalism, liberalism and the free market economy have proven to work more effectively than socialism, communism and combinations of the two. So 'yes' to capitalism, but the financial parameter – shareholder value creation – shouldn't be the only focus; you also need to strike a balance between ROI on the one hand and the social component on the other. Wage inequality has to be dealt with, without going all the way down the Piketty path. I'm not against capitalism, but against some of its manifestations that we see today, in which the short-term shareholder value model reigns. A great deal has gone wrong there."

Van Ogtrop adds that metrics are needed to measure and report the ESG performance of companies to shareholders. "If the hundreds of billions from institutional investors could be used to accelerate this transition, we would really get things moving." The stumbling block is the measuring and reporting; that's currently a huge challenge. "CO<sub>2</sub> is the most concrete factor we measure, but no one seems to have anything to say after that. Our aim should be for companies to measure and report on their degree of circularity. Then you can benchmark companies and, for example, stop investing in them if they stay below 15%. Then things will start to happen."

## Removing bastions

How far are we from this? "It's an uncompromising world. We're a long way from seeing such things in business reports, but I think that we'll start to see the first form of impact investing metrics in the next five years, which also directly relate to circularity." Real progress often needs to be preceded by a shock to the system, but Van Ogtrop hopes for a number of other trump cards as well: technological innovation, disruption and the new generation. That could be the successful cocktail which brings about the big change. "What holds us back are the vertical lines of power that we've created together in the linear economy, including in the financial world and in the world of fossil fuels. It is very difficult to get these bastions to change." Van Ogtrop is quick to avoid pointing the finger. "Not because

they're bad people – I've been one of them, been at the heart, I know how it works. You have no choice but to fall in line: you know that 'these are the rules of the game, that's how it's played.'" And what makes matters even more complex is that the players of that game have close ties with politicians, through all the lobbying, says Van Ogtrop. "The internet is a godsend in that respect – the means to make everything much more horizontal and eradicate the vertical lines of power. There is no stopping the internet-induced horizontalization. You can see this in Kenya – the first country to introduce mobile banking ten years ago. Why? Because there weren't any strong banks that could stop it at the time. Innovation and disruption are essential in that sense."

## Waste beer

Van Ogtrop wouldn't be Van Ogtrop if he didn't end on a positive note. So he takes us to Glasgow, Scotland. "People often ask me how we can achieve a world without waste. We have learned a lot from the 'circle scans' we carry out for cities. Four years ago, we scanned all of the material flows in Glasgow, charted their paths and studied what happened to them. To cut a long story short, the biggest bread factory in the city dumped all of its waste into the river. So, then you analyze all the waste products in the bread factory's waste flow. There's a large beer brewery two kilometers further along. So, you look at which ingredients they need to make beer, and analyze these too. And what did we find? 70% of the waste products from the bakery could be reused as input for the beer brewing. The first beer brewed from that waste was undrinkable. But after some finetuning, they'd made a pretty decent pint."

This anecdote is for Van Ogtrop also a bridge to his visions of the future. "If we were to make a global web-based marketplace on which, with the aid of artificial intelligence, we charted all waste flows – as well as all the components of those waste flows – we would have a database in which we could match material supply and demand. How fantastic would that be?" But Van Ogtrop's dreams don't stop there. "And I'd add another dimension: technology. I could convert these waste components using gasification, fermentation, heat or chemical processes, and combine them with other waste products to create optimum, maximum input for new production processes. Then your dream in which waste no longer exists would be reality." ●