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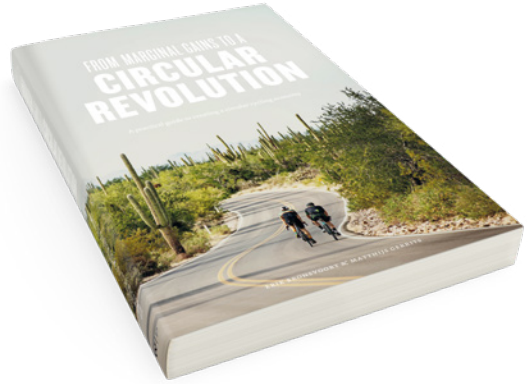
SUSTAINABILITY IN SPORTS: FROM MARGINAL GAINS TO A CIRCULAR REVOLUTION

Optimistic cycling freak with a drive to make our planet a better place. **Erik** managed innovation projects in the construction industry until 2009. Then decided to dedicate his time to sustainability as he realised that solving climate change and resource scarcity needs a business case. Wrote 'From Marginal Gains to a Circular Revolution' to inspire the cycling industry to act.

Sustainability has not been a part of the strategy of most of the companies in the bicycle industry. With increasing pressure on companies to contribute to tackling climate change, (plastic) waste and pollution, now is the time to change the linear economic business model. The transition to a circular economy offers an enormous opportunity for sports goods brands to make a big step in product design, and in their interaction with customers. It will not be easy, but it will be exciting.

'In 2050, we live well, within the planet's ecological limits. Our prosperity and healthy environment stem from an ***innovative, circular economy*** *where nothing is wasted and where natural resources are managed sustainably, and biodiversity is protected, valued and restored in ways that enhance our society's resilience. Our low-carbon growth has long been decoupled from resource use, setting the pace for a safe and sustainable global society.' – European Commission, 2020*[1]



What the European Commission envisages is a wonderful world view. It means we will have solved many, if not all, of the ecological, health and wealth problems that we face today. The effects of climate change will be minimized, and waste and pollution will be a thing of the past – not just in wealthy parts of the world, but everywhere. Realising this circular economy will require a new way of doing business. Current business models, not just in sports industry but almost everywhere, are linear business models. They rely on buying cheap resources, making products at the lowest possible cost, and then selling as many products as possible. Few manufacturers consider what happens with their products after the purchase, let alone think about the waste at the end of the lifetime.

During my work in the construction industry I learned that causing less environmental impact by installing solar panels on top of a concrete building is a good start, but not the solution. Materials are often overlooked in traditional sustainability plans that figure clean energy for the office, cycle to work programs and a reduction of the CO2-emissions of the company cars. The production of materials like cement, steel and aluminium leave big holes

1 European Commission, Environment Action Programme to 2020. https://ec.europa.eu/environment/action-programme/

in the earth where they are extracted, and require vast amounts of fossils fuels to make. Instead of becoming less bad, companies have the opportunity to become a part of the solution. We need to change the way we think about the design of products and how products are offered to users.

What this change looks like depends on the type of product a company offers and its position in the supply chain. I will use the cycling industry as an example in this article because this is the industry I know best. A few years ago, I set up a start-up company called Circular Cycling with a goal to change the industry. We experimented with circular business models in the sports market, building and selling 'new bikes from as many used parts as possible'. We sourced our materials from a box that seems to be present in every cyclists shed: a box with parts that are too good to throw away, but will never be used again. We ran into the limits of reusing parts that are designed for the linear economy.

Over the last decades, the cycling industry has proven to be a very innovative industry, able to deliver better products every season by teams based all over the world. The supply chains are truly global: design is done all over the world, manufacturing mainly in Asia, customisation closer to the customer. The internet makes it possible for brands to interact directly with consumers, who now no longer rely solely on their local bike shops to buy bikes and parts.

Bike innovation has made a huge difference: road bikes have become more reliable through better component design, testing and manufacturing methods. Shifting and gear ratios have improved, ergonomics of handlebars and saddles have made riding a bike far more comfortable, making the road bike accessible to more and more people across the globe. In fact, the design of the road bike has reached such a high level of maturity that the number of radical breakthroughs has been very limited in recent years. It is no coincidence that the term 'marginal gains' has been introduced in the industry, since there are now a lot of tiny steps needed to make a difference.

However, the industry's focus on standing out by introducing marginal innovations in order to sell more products, and sell them faster, is no longer in line with the goals of a circular economy/ sustainable future. This marketing-based sales approach causes too much waste, as more and more products will cease to be used because they are out-fashioned and eventually discarded before they have reached the end of their technical lifespan.

The new marketing 'thing' in the cycling industry needs to become sustainability and there are three incentives to do this. First, more and more customers will start asking for these products as the outdoor apparel industry already showcases. Second, regulation will start to have an impact on the price of materials that have high ecological impact. Finally, and most important, the transition to a circular economy offers an enormous opportunity for bicycle brands to make a big step in product design and in their interaction with customers with the potential to create new revenue. It requires the introduction of radical innovations, leading to a larger market share for the most innovative companies. The introduction of bicycles for a circular economy will be exciting, with a lot of new products and services to choose from.

'IT WOULD BE A WIN-WIN-WIN SITUATION. CUSTOMERS WIN BECAUSE THEY ARE ABLE TO RIDE MORE RELIABLE PRODUCTS THAT REQUIRE LESS MAINTENANCE. THE INDUSTRY WINS BECAUSE IT CAN CREATE EQUAL OR MORE VALUE WITH LESS MATERIAL. FINALLY, THE PLANET WINS BECAUSE THERE WILL NO LONGER BE ANY WASTE OR POLLUTION, AND NATURE WILL GET A CHANCE TO REGENERATE.'

Imagine a bike that has been made from plant-based materials or recycled and reused parts, and that the material wearing from your tyres or brake pads is biodegradable. The lubrication washing down from your chain no longer pollutes the forest you are riding through, but provides valuable nutrients for the plants in it. Sensors tell your cycling computer about the state of the components and warn you when and how to maintain them. You no longer discard your old bike as if it were a piece of rubbish, but return it to the manufacturer so that parts and materials can be reused to make new bikes; the condition of the components has been monitored by the data sensors and collected in the bike's own bike passport. Or, alternatively, you could plant your old bike in your garden for it to become part of the circle of life again.

There will be successes and there will be failures. Bikes will be better – not just better to ride, but better for our planet and our societies. It is time for the cycling industry to adopt business models like 'pay-for-use' and 'buy-back guarantees' and product designs that no longer deplete natural resources, cause pollution and CO2 emissions, and let so many materials end up in a landfill or an incinerator.

To get to a circular economy, we need much more than marginal gains, we need a revolution.

We do not have all the answers to the questions you might be asking yourself by now – no one does. The transition to a circular economy requires changes in the way we think about our current products, about supply chains, about the interaction between manufacturers and users. This complex global system cannot be forced to make the transition by a single organisation, a small group of people with the right intentions, or by writing a book. It will require all of the stakeholders in the cycling industry to contribute.

Read more about the circular cycling economy, business models and design strategies in the practical guidebook 'From marginal gains to a circular revolution', available worldwide as paperback and Ebook on Amazon. (https://www.amazon.com/dp/9492004941/)

https://www.circularcycling.com

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