Transcript for *influencers!* Season 2 Episode 3: Erik Bronsvoort

Phil Latz: Erik, thanks for coming on Influencers.

Erik Bronsvoort: It's a real pleasure to be here. Thank you.

Phil: You live in Utrecht, which I know I can't pronounce correctly. Is there a more beautiful cycling city in all the world than that?

Erik: I doubt it. It is the cycling capital of the world. We've got a lot of cyclists going around, beautiful old canals, but also cycling highways, where you can really get speed up. It's great to live and to cycling, absolutely.

Phil: You co-founded Circular Cycling in 2018 and you started building bikes from boxes, as you describe it. What is a box? What do you mean by that?

Erik: A box, and this is something that every road cyclists, mountain bike will probably recognize, box with bike parts that are too good to throw away, that you will likely never use again. These are perfectly fine parts, which could be resources for new bikes. That's the reason. Well, that was a way to found Circular Cycling as an experiment to see how the cycling industry as a whole could do better when it comes to sustainable material use.

Phil: Well, guilty as charged, I've actually got two cycling boxes. I am an old roadie, so I know exactly what you mean with those alloy stems that you paid so much or the saddle that doesn't quite fit. Unfortunately, you found that building bikes from boxes wasn't sustainable as a business for you. Why? What was the missing link or why wasn't that ultimately sustainable?

Erik: Correct. We started the business because cycling as a mode of transport is sustainable. If you replace a car with a bike, you don't have any CO_2 emissions, good way for society. Road cycling and mountain biking is not that sustainable at all because you buy a lot of parts, bikes, apparel to do sport. You might even fly somewhere to go cycling for a weekend. There's nothing sustainable about this. Our frustration was that we were spending a serious amount of our disposable income on bikes and parts and there was no way to do this in a sustainable way.

That's how we came up with the idea of circular cycling to start experimenting how the cycling industry could do better. We assumed that getting all these bike parts together, we could design new bikes with free use parts based on the assumption that bike parts are compatible with each other. Even for road bikes from the 2000s with bouncy tubes, 10 or 9-speed cassettes which fit on the same wheel set, et cetera, we found that it was very hard to do so.

While we were doing this, 12 speed was introduced, 13 speed was introduced, disc brakes were introduced, companies started to use integrated seat posts, handlebars with cables inside. This became impossible to mix and match these parts and to build new bikes from resources from various different brands. Apart from not being the best entrepreneur, which is an interesting thing to find out as well, we realized that this was just not a good business model, and we needed to try something else to change the industry.

Phil: We'll move to your book now, Circular Cycling, which I guess what year was that released?

Erik: 2020.

Phil: 2020?

Erik: We spent two years trying to build these bikes, the upcycles, as we call them, realized that this wasn't working, and then we sat down and wrote down all our lessons in the book From Marginal Gains to a Circular Revolution. That was two years ago now.

Phil: The first concept that really grabbed me in that book was the concept of the tragedy of the commons. Can you explain what is the tragedy of the commons?

Erik: The commons used to be a shared piece of land where villagers would put their sheep in. As long as you keep the number of sheep to a certain level, the grass gets the opportunity to recover every year, so the sheep have enough to eat. If someone decides, "Hey, I'm going to put in an extra sheep, because I can then harvest more wool.", for example, then the grass will not be able to recover quick enough and eventually, all of the sheep will die, because one person started Scott-free riding, introducing more sheep.

Then his neighbor thought, "Well, he's doing that, so I might as well do that too. I'll put in another sheep." That's the theoretical way if it's the first person that introduces hardy, some 40 years ago, I think now 50 years ago, but it's also the same for doping, for example, if one rider in the Peloton starts using doping, he goes faster and the rest of them say, "This is not good, but I need that too, so I might as well start doing that as well."

The tragedy of the commons, once you start to recognize, it's all around us, and it's a very tough nut to crack.

Phil: There is a chart in the book that shows the amount of energy and the amount of water required for each kilogram of popular frame materials like carbon and aluminum, in particular. Are people that you talk to in your presentations or people who read the book surprised at what that reveals?

Erik: Yes and no, I think we should have even written it down better in the book. If I explain now in the presentation, and Specialized did a lifecycle analysis a few years ago, and I'm not sure if it's perfect, but it gives you a good indication of what's going on, you need about 1600 kilowatt hours of electricity to produce a 1-kilogram aluminum frame. The average household in the Netherlands uses about 3000 kilowatt hours of electricity per year for their lights or TV, their fridges, et cetera.

Half of that is used is required to make a one kilogram aluminum frame.

Phil: Half of that, so 1600?

Erik: 1600.

Phil: Yes, 1600 kilowatts. [crosstalk]

Erik: Just for one kilogram aluminum frame. We often forget that stuff is made somewhere and requires a whole lot of energy to produce it. It's so easy to buy, and also so easy to just throw it away, because certainly, it's just aluminum. When it comes to sustainability, the supply chain, so the way products are made, transported stuff is where the real impact lies.

If you want to clean up your own life, then be considerate about what stuff you buy, where does it come from, and how long do you use it, it's very important to reduce your negative impact on, for example, CO2 emissions.

Phil: What's the story with a kilogram of carbon fiber, how does that compare with a kilogram of aluminum?

Erik: It's probably even worse to produce it, so even more energy intensive. It's also harder or even impossible to recycle. It is a wonderful material for making bikes. It's also a material that can be repaired. If you crash with your carbon fiber bike, there's a good chance that you can get your frame repaired. Whereas an aluminum frame, might be either dented, it's still usable, or might be unusable and unrepairable. There's something to be said, for every single frame material, which one is best for which purpose.

Again, making sure it lasts long is the most important thing to think about.

Phil: It's pretty sobering statistics there for a bike rider to hear that, yes, we're way more environmentally friendly than car driving, perhaps, but we're still consuming a lot of resources in our cycling habit, if you like. You talked about four reasons that bike manufacturing companies should act on your call for a circular cycling economy. Would you like to just very briefly just summarize those four key reasons?

Erik: Yes. The first is a really simple one. Our planet is suffering from the way we consume stuff. Climate change is already happening. From Australia, the bushfires from a couple of years ago, they were bad. Same thing is happening now in Europe again. Temperatures over 40 degrees in the Netherlands are not normal. We want to avoid collectively, I think, global warming to happen. For that, we really need to make sure that our CO2 emissions are going to drop really soon.

Governments are helping. They're getting more regulations in place, CO2 taxes, the way, for example, batteries need to be replaceable in the EU within a few years' time, you will need to supply more information about what is in the products and whether it's recyclable, yes or no, et cetera, so more government regulation. Important one is also the financing. Pension funds, et cetera, start to really think about what company they're investing in, whether they are a sustainable company, yes or no.

Cycling used to be on the sustainable side, but once they start to dig deeper, and they know that the cycling industry is not doing enough on this front, they might soon backtrack and say, "Well, cycling industry is really not such a good investment." Then there is your employees. I think a lot of people really like to work for a company that does something good for the planet, and just building bicycles is no longer enough.

Then there's your customers, which realize that something needs to be done as well, and they will want to spend their money different in the future, if they get the opportunity to do so. That's similar to the outdoor industry. If you walk into a outdoor shop to buy a new jacket, if you go hiking, for example, every single brand has got some sort of labeling on it showing that they do better than the previous product or better than the competition.

You can spend your money differently. That is not possible in the cycling industry at the moment. It's just a matter of time before the first brands will start to do so. If you're not one of them, you're probably going to lose business.

Phil: We are close, but we are not quite there. You're saying it's just a matter of time. Of those reasons, what do you think the one that will prize the door open, what's the one that you should be pushing on or we should be pushing on now that you think will be the most compelling right now to get those bike companies to change?

Erik: I think it's the employees.

Phil: Really?

Erik: Yes. It's really funny. The book made a lot of people realize that something needs to be done, but then what you see is a lot of people working in the cycling are cyclists themselves. They

go out in nature very conscious about what's going on right there. As soon as you give them the opportunity to do something different and really work on creating sustainable products, they live up and they're like, "Wow, this is cool. This is what I want to work for." I'm convinced that all the talent in the cycling industry at some point will want to work for a company that's really making effort on this. If you're after talent, this better be on your agenda.

Phil: Wow. Absolutely. Another chart that's fascinating, you talk about pre-use, post-use value chart. It goes from a €30 worth of materials to a €3,000 finished bicycle, and then potentially all the way down to €2.5 of recyclable material. That's a remarkable transformation. Something people probably don't realize that variation, what would you say-- Another revelation of that also is that recycling, the buzzword, is actually like the last resort, isn't it?

Erik: Yes.

Phil: You don't even want to get to that point, do you?

Erik: No. Even then recycling is not really recycling. What happens if you throw your bike away? Hopefully, you bring it to the local recycling station. Then you stand there and you think, "Okay, I've got this carbon fiber bike with some aluminum and some steel on it, where should it go?" Then the guy at the recycling station says, "Put it in the metal bin."

You do so, but then no one's going to separate these materials. It needs to be the process, assuming that there is a process for recycling to do that for you. They have to be able to separate all the plastics and the metals from the carbon fiber in order to get to a recycling stream that is valuable, worthwhile, actually recycling. This is really tough. There are no machines that are able to separate a carbon fiber rim, brass nipple, a steel spoke, aluminium hub with steel bearings in there.

Separating that is more or less impossible. Even if you think you put it in the right bin for recycling, a lot of that stuff still ends up in an incinerator landfill because it doesn't make it to the end of the recycling process and be melted down into new aluminum or new steel.

Phil: We don't want to get to that point. What should we be doing instead? We as in the whole, the circular economy, the bigger picture, even beyond the individual.

Erik: The first thing is, really make sure that the product lasts for as long as possible by taking good care of it, but also make it possible to take good care of it. Make a bicycle that is easy to maintain and repair, that is upgradeable if necessary, and that is also possible to control the quality if you want to bring it to the next user because at some point you might say, "Well, I want to go from a road bike to a gravel bike."

We want to sell that road bike to someone who's going to use it for another lifetime in a reuse phase. Maybe you need to refurbish that. That's why we did the circular cycling.

We took it apart, we did the full quality check, we replaced some parts, bring it back into the store, refurbishment, or if that's not possible, bring it back to the factory for remanufacturing. For example, a battery or a frameset that could potentially last forever, bring it back to the original manufacturer, strip the paint, repaint it, bring it to the shop as a new product. We try to keep the value of the product at the highest possible level in order to make it a business case to bring the materials back and use them longer.

Phil: I think I might jump to a concept now that you have about the four platforms, or I think you call them platform, powertrain, computer, consumables, all linked to an online passport. This is a pretty radical piece of thinking. A pretty original piece of thinking. Would you like to explain those four elements and this concept of the online passport?

Erik: Yes. In the book, we describe how the circular economy might work for a road bike and a mountain bike or a commuter bike, or a helmet is very different. We're just focusing on the road bike here. What we found is that people want to own something, especially with a road bike, you need it to be exactly your fit and there's no point in sharing it with someone else. It needs to be your bike.

It also is the canvas for your ego. You want your paint job, you want big letters or small letters on top of it, I don't know. You want to buy that, but you don't want to be responsible for the boring stuff, the drivetrain, the wheel-set, because it's more or less standard. You just want it to work. Currently, the manufacturers don't have an incentive to make sure that that will last forever. It's the other way around.

As soon as your chain wears, you need to replace your cassette as well. Top business, selling more stuff. You want to change that around because you don't want more materials, you want less materials because it's less environmental impact. If you could buy your platform, so handlebar, stem, frame-set, seat post and seats, that provides the fit. Then get the rest of all the components in a pay-for-performance basis.

You pay for a monthly basis or per kilometer for the use of your powertrain. The wheels set and the group set. Also, pay for a computer. I'll get to that later. Then you've got the consumables, so your tires, your cleats, your handlebar tape, stuff that needs to be replaced quite often, that should be bio-based, ideally, biodegradable. Stuff that wears off ends up in nature, it doesn't harm nature, but what's really important in the circular economy is data.

We need more data to improve our products, but also to help, for example, replacement parts and repairs. At [unintelligible 00:16:19] the head unit, the computer would collect all sorts of data from the bike. Not just your heart rate and your power, but also the terrain you're riding on, the weather conditions, the wear on your chain, whether your hubs needs a new grease, whether your tire pressure is in order.

Every information to make your bike last longer and give manufacturers more data about how to improve the product, but also the accessibility of spare parts. What seat post goes into this bike, what SKU does it have, if you need to order a new one, can you use digital platform to make that easier for you, easier for your dealer, and easier for the manufacturer. Information is key to make this easier and therefore cheaper, therefore more likely to happen at some point.

Phil: I think you should be congratulated for so many creative ideas. I've never heard that. No one else has ever come up with that concept that I'm aware of. I've never seen it anywhere else. I've been in bike media for a long time. Do you ever get pushback from cyclists saying, "Well, hang on a minute, don't make me feel guilty, I'm already riding a bike, aren't I already doing a great thing, now you want to make me feel guilty?" Do you ever get any pushback in forums or from consumers at all along those lines?

Erik: Of course. No one wants to hear this. It's a very inconvenient truth. It needs to be told, it is important that we as an industry, but we as a cycling world take care of our planet, because this is where we want to spend our time. We want to be out there. If it's too hot to ride or if the glaciers fail in the Alps, then a lot of these scenery where we like to be is not going to be there in the future. We need to take action.

As soon as I explain why I'm doing this, then they soon realize, you might be right and I should change. Then at some point they probably will or not, but as soon as we get enough people moving, then at some point, there will not be another option but to buy a sustainable product.

Phil: You also talk about mobility as a service in your book and in particular, let's talk about bike share and scooter share. How sustainable do you think that model either is now or can be?

Erik: The short-term sharing is not something that's happening a lot in the Netherlands. I don't know very much about it except for the few days here in Frankfurt where I've been using one of the modes. I hate to see all these things laying around the streets and not being taken care of, at least it looks like that. I hear some stories about how long these products actually last before they need to be replaced.

That shocks me because these products are not made to be reused or recycled at all. They're just made to be as cheap as possible, do the job, earn the money. There's a lot of work to be done

with these companies, but the good thing is that they're experimenting with new models of bike sharing. You don't need a bike for everyone, what you need is just one bike for 10 people, which reduces the number of resources you need in the first place.

In the Netherlands, we do have the Swapfiets model. The blue tires are everywhere where you have a subscription-based model, so the bike is not laying around the street for everyone to use, but it's your bike. You see that that is helping to keep the attachment with the product a little bit better. What's happening is that a company like Swap is now still the owner of that bike, but they're also responsible for repairing that, and that delivers them a lot of data, so they've got their own bike passport, digital platform to see which parts work, which don't work, and where to improve on the bike to make this business more valid, because they are responsible for anything that breaks down and not the person that bought the bike in the first place.

I'm quite curious to see which ones will work, which ones won't work, but very important from my perspective is that any of these companies start to think about the way they design the products, so we cut down on the resources that we need to provide this service, but the potential is definitely there. The design creativity could improve.

Phil: Okay. A mixed scorecard at this stage.

Erik: Yes.

Phil: Could be Little Johnny could do better at school. Now, a lot of the imagery in your book and examples relate to road racing in a €3000 bicycle, and you talk quite extensively about policy as of the UCI, the world racing governing body. I just wondered when I was reading that about well, really isn't the volume at the bikes for transport, bikes for leisure market, so why do you focus more on that UCI €3000 road racing bike example?

Erik: I think first is passion for sports cycling. That's where we started, and that's also where we think there's a lot of influence. A lot of people look at the Tour de France and they want to be like the riders in the Tour de France. A lot of the standards that are set there, then slowly trickle down into all the other types of bikes as well, so if you're able to change the way the UCI regulates what is allowed in Tour de France, I believe that they should regulate that there will be more sustainable bikes.

Then at some point you will see the industry putting a lot of innovation power into the bikes that are out there, and then it will trickle down into all the other categories of the bike industry at some point. Yes, that's the main reason.

Phil: What response are you getting from the UCI to your ideas?

Erik: They're really interested. I think the UCI really struggles with what is their role in sustainable development goals in the future, so they have three roles, promote cycling, think about the way races are organized, and also their role in regulating the cycling industry in the sense that, which bikes are allowed to join the races and which are not allowed to join the races, and they've got a huge opportunity there to change the entire industry for the better.

At the same time, I also realize that they have a lot of stuff on their plate already. Adding this is a serious challenge for them, but the industry is pushing them. There's a lot of people within the UCI that want to make this work, the way how is a challenge.

Phil: Well, that's very encouraging. I'm surprised at your answer, to be honest. Having had a few dealings over the decades with the UCI, they're quite a traditional monopoly type organization, so that's quite encouraging, I would've thought.

Erik: They're humans too. They read the newspapers, they live in the Alps, they see what's happening to the glaciers. They realize that they, too, have to take their responsibility and do something about this.

Phil: Very good point. You've set up a foundation called Shift Cycling Culture, would you like to talk to me a little about that foundation, what you're doing, what your aims are?

Erik: Yes. Circular Cycling is the geeky part, talking about bikes and how many spokes and materials and stuff like that, but this revolution that I'm trying to realize is not going to happen if just a few individual companies work on this. We really need to get the entire industry and the entire cyclist community to work together. Together with a couple of others, we set up Shift Cycling Culture as a nonprofit organization to try to bring the cycling world together to get the discussion going on climate change and the way it's impacting our sport.

That's working out really well, because maybe thanks to COVID all of a sudden people were online and we organized a few meetings with people from all around the world, from all sorts of different companies that joined that, and they were the humans that were interested in sustainability, and how to make that part of their daily life or their job. We also came in contact with a number of CEOs who seemed to have an interest in sustainability as well, so we got a small group of them together to talk about, in a very open discussion about where they were with their company on sustainability.

At some point after I think the third meeting, we had some interesting speakers for them to inspire them. They said, it's time for action, guys. How about we reach out to the wider industry to do just what we were doing, basically making a small start, so they came up with this climate commitment, which is an open letter to the industry saying, "Guys, we are not perfect. We need to change this, but it only works if we work together. How about we commit to calculating our own

carbon footprint, making a reduction plan in line with the goals of 55% reduction in 2030, and invite our top 10 suppliers or customers to do so as well."

We launched that last year in November with some of the major brands in the industry, and we're up to about 70, 75 signatories at the moment, so other companies that joined afterwards. My personal mission for this year is to get 222 companies to sign up in 2022, and together really spread this message and getting the conversation started at board level in all of these companies and with suppliers, which is super important to get going.

Eurobike has been a boom for this conversation. It's been on a number of fora, and I think we'll see significant amount of companies signing up soon from smaller and bigger brands, and both are important.

Phil: You're clearly very ambitious in everything you do.

Erik: I am. We need to be ambitious. The climate is changing and if we want to avoid serious catastrophe in the future, we need to act now.

Phil: What's on your agenda for the coming seasons, coming years with your work?

Erik: Yes. Work with a lot of the project teams that are working on new concepts of bikes, and really try to get as many examples out there as possible to inspire the rest of the industry of how things can be done better. I really like to be involved in some of the more ambitious projects on getting a truly circular bike on the world stage. In my book I describe how I would like to see the 2028 Olympics to be the showcase of all of the riders being there riding a circular bike and wearing circular kits.

Bikes made without finite resources, without pollution, and without causing any waste at the end of their lifetime. We've got six years to do that. Talking about ambition, but I think it is an Olympic challenge to get there for the brands, and I think they want to, and if we can get the UCI and the brands to work together on this, we create a level playing field for everyone.

It needs to be a top notch sustainable bike, and it will be an example for the rest of the industry, but also for other sports and other industries out there to see what you can do at an Olympic level.

Phil: Well, you certainly got huge vision. Erik, thanks for being an influencer.

Erik: Very welcome.