



## TRANSCRIPT PODCAST GREEN MOMENTUM

### Time for frugality in a digital era

#### Introduction

**Jérôme Libeskind:** Hello, everyone, this is Jérôme Libeskind and you are listening to Green Momentum. This is the first podcast dedicated to green finance and its role in the global approach of companies and government for a better preservation of our environment. Green Momentum is brought to you by Natixis. Today, we are going to talk about digital technology which, as we don't necessarily know, is a source of carbon emission and pollution. Can technology be more sustainable? How can we reduce its digital footprint? Is it compatible with modern life? Many questions we will answer today with our two guests: Marie Joron-Mélyon, Sustainable Digital Manager at Natixis. Hi.

**Marie Joron-Mélyon:** Hi.

**Jérôme Libeskind:** And Philippe Derouette, who is Enterprise Architect dedicated to Sustainable Digital at the Caisse d'Épargne. Hi!

**Philippe Derouette:** Hi.

**Question:** To open the field, can you give us two or three figures that illustrate the impact of digital technology on our environment?

**Marie Joron-Mélyon:** Sure. There are plenty, but the strongest for me would be the number of 600 kilos. It equals what we call the "eco-friendly backpack". I don't know if you are familiar with this notion.

**Jérôme Libeskind:** Not at all.

**Marie Joron-Mélyon:** Basically, it compares the weight of a finished product against the weight of the raw materials we extracted from the earth to produce it. So, let's say we are speaking about a laptop. To produce this two-kilo laptop, we had to extract from the earth 600 kilos of halieutic resources. And in addition to those 600 kilos, we also need to use 1.5 tons of water and about 20 to 25 kilos of chemicals. When we know that on average, we are using about eight devices per user, the numbers are just staggering. There, the notion of resource depletion takes its full meaning. So yes, for me, sobriety is an absolute necessity.

**Question:** When I have four devices in my bag, I feel very guilty when I hear what you say. Philippe, what other figures would you like to share?

**Philippe Derouette:** Beforehand, Jérôme, what do you think would be more polluting: data centers or user devices like your smartphone or PC?

**Jérôme Libeskind:** Spontaneously, I would say data centers.

**Philippe Derouette:** I'm afraid you are wrong: The right answer is personal devices. Two thirds of the digital impact come from devices like your smartphone or laptop. Data centers only account for 15% in comparison. So, you can make a difference by changing your habits. For example, if you keep your smartphone two years longer, you can save up to 60 kilos of carbon emissions. It is as if 4,000 people deleted one gigabyte of data or emails. So, manufacturing is more polluting than you think.

**Question:** You just gave me the best answer I let my kids know the day they want to change their smartphone, thank you very much! Once we have this in mind, what can we do? Would the first step be reducing the number of devices or extending their lifespan? Can we do both? Can you tell us more about it?

**Philippe Derouette:** In fact, both of your proposals are valid. That's exactly what we should be doing. There are two ways to go. Firstly, use fewer devices. Consider owning one smartphone instead of several. We should avoid producing too many devices. Secondly, extend the devices' lifecycle as it slows down the pace of manufacturing.

**Question:** Let's consider IT platforms. You work for an IT department in a large bank. When you design immaterial systems, how do you work? Do you have to imagine a new way to do it?

**Philippe Derouette:** Yes, the answer is in your question, Jérôme. We have to design simple products and to focus on sobriety at every step of the manufacturing process. Starting with the needs' expression, sobriety helps to avoid waste. It leads to the frugality concept. The two notions are different. Sobriety is about reducing consumption, whereas frugality is tackling the essential needs of the consumption. In our daily life, we can use low tech solutions and eco-design to reach these goals.

**Question:** Eco-design is a very important topic, Marie. Maybe it's a new way to reconsider the architecture and the way we work. You work in a bank: How do you apply eco-design at Natixis?

**Marie Joron-Mélyon:** Sure. I would say eco-design means to do better, more efficiently, and in a more sustainable way. When building digital solutions, it's all about finding the best sustainable ways. And this by challenging our needs, by pulling our infrastructure and without forgetting, of course, the user experience. An eco-design solution must be a useful, practical, and efficient solution. I have in mind a lot of achievements made at Natixis to illustrate it. First, we consider the services: performance and optimization are at the heart of our business strategies. For example, until now, 22 servers were running 24 hours a day even at night, although we only used them at daytime. By rethinking our processes and by optimizing our architecture, we managed to reduce the number of servers from 22 to 10. So, we saved up to 55% of our IT equipment consumption.

**Jérôme Libeskind:** Which is quite important.

**Marie Joron-Mélyon:** Yes, exactly.

**Question:** Philippe, is eco-design consistent to the way you work now, or does it only concern intangible products?

**Philippe Derouette:** I think sobriety changes the way we work. The point is not to change everything, every method, every tool, every process. Above all, we have to change our mindset. You can limit the impact at every step of the process of a product's lifecycle. We want people to be aware of the stakes and to take environmental issues into account, since it is also a question of money. We want to take care of our wallet as well. It's all about collective intelligence and raising awareness to reach a better future. Method and tools can help in reaching this aim of sobriety. And remember, the means shouldn't stand for the final purpose. This is sobriety.

**Question: We will come to the wallet topic later on. As you say, we have to change our mindset. When I listen to you, I wonder about the potential threats: if we don't do anything, what will happen in terms of resources and so on?**

**Philippe Derouette:** We simply risk a fatal deadlock as there will be severe tensions on the resource market: Notably energy, metals, rare earth, and waste. Furthermore, laws will be strengthened to answer citizen concerns and to ensure acceptable sanitary conditions. So, you also need to include political pressures, which are going to increase because of monopolies on water, energy, rare earth materials and semiconductors and so forth.

**Question: Marie, we understood that you were preaching sobriety. Are you telling us that we are all in a situation of, let's say, 'digital obesity'?**

**Marie Joron-Mélyon:** Yes, clearly. The figure of 600 kilos of raw materials for a single laptop helps raise awareness. Owning a laptop does pollute. Using a digital solution is definitely not neutral, even though it is immaterial. Here again, sobriety and doing things differently are crucial. There are three key pillars that mean a lot to me: The first one is awareness – it's important to know. The second one is eco-design: By developing infrastructures in a more sustainable way. And the last one is innovation, by using more low-tech solutions, as Philippe mentioned earlier. And why not running our services with 10-year-old computers, for instance?

**Question: Let's talk about the notion of wallet and the economic aspect. Will digital solutions cost more and more, in an infinite way?**

**Philippe Derouette:** Indeed, there is an economic aspect. Let's highlight this point: IT development has an increasing cost. Despite the lack of environmental or social conviction to slow down this vicious circle, the financial aspect will put a stop to this resource and means provision. At the end of the day, energy costs or rare earth scarcity, waste management, pollution, and climate change will trigger an unbearable cost for all organizations.

**Question: Most interesting; I have another question: Are you idealists? I don't really have the impression, looking at the world, the society we are living in, at my kids, that people are ready for digital sobriety... What do you think Marie?**

**Marie Joron-Mélyon:** Well, I believe in human nature, but I don't really picture myself as an idealist. Society seems rather ready to me. As an illustration, there's the bill that was drafted by our French Senate in the beginning of this year, which aims to reduce the French digital footprint. It clearly puts its finger on projects we are carrying out at Natixis. To me, we are moving in the right direction, be it at the level of citizens or organizations. I'm also fully convinced of the power of awareness. Let's illustrate it with figures. For instance, on average, the amount of end-of-life digital equipment is equivalent to 5,000 Eiffel Towers of waste per year. With such a figure in mind, the question is: Do I want to live in such a world? My answer is clearly no. And this is also why I'm fighting for. I'm fighting to raise awareness about digital impacts and about eco-designed solutions, which is, I'm sure, the alternative for our business.

**Question: Philippe, are you an idealist?**

**Philippe Derouette:** I'd say I am too old for that. More seriously, it's been 10 years that I've been witnessing this ecosystem and its tensions. And, in all modesty, I deeply believe from my experience that ethics and sobriety can serve us. Maybe it is not a visible topic among our fellow citizens yet, but we need to brighten our daily lives by embracing new values of temperance and building a desirable future.

**Question: That's bringing us to the real question that ends every episode of Green Momentum. Are you pessimistic or optimistic for the future, Philippe?**

**Philippe Derouette:** In fact, if you are a pessimist, you perceive life in a negative way and that's too painful to act. So, I would say I am optimistic. I truly hope people will become aware about the issues we are facing to avoid a collapse. I do think I am an optimistic person with a fighting spirit.

**Question: That's a good way to be optimistic. Marie?**

**Marie Joron-Mélyon:** Well, clearly, I'm a great optimist and I'm still bouncing back to awareness. We may not know, but when we do know, it's impossible not to act.

### **Conclusion**

By listening to Green Momentum today, we have figures and we are more aware of the impact of digital. That's the end of this episode of Green Momentum. I hope it has given you food for thought on how you conceive of and how you consume digital. Thank you both for being our guest today. Thanks to you who are listening to us and see you very soon at Green Momentum.

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