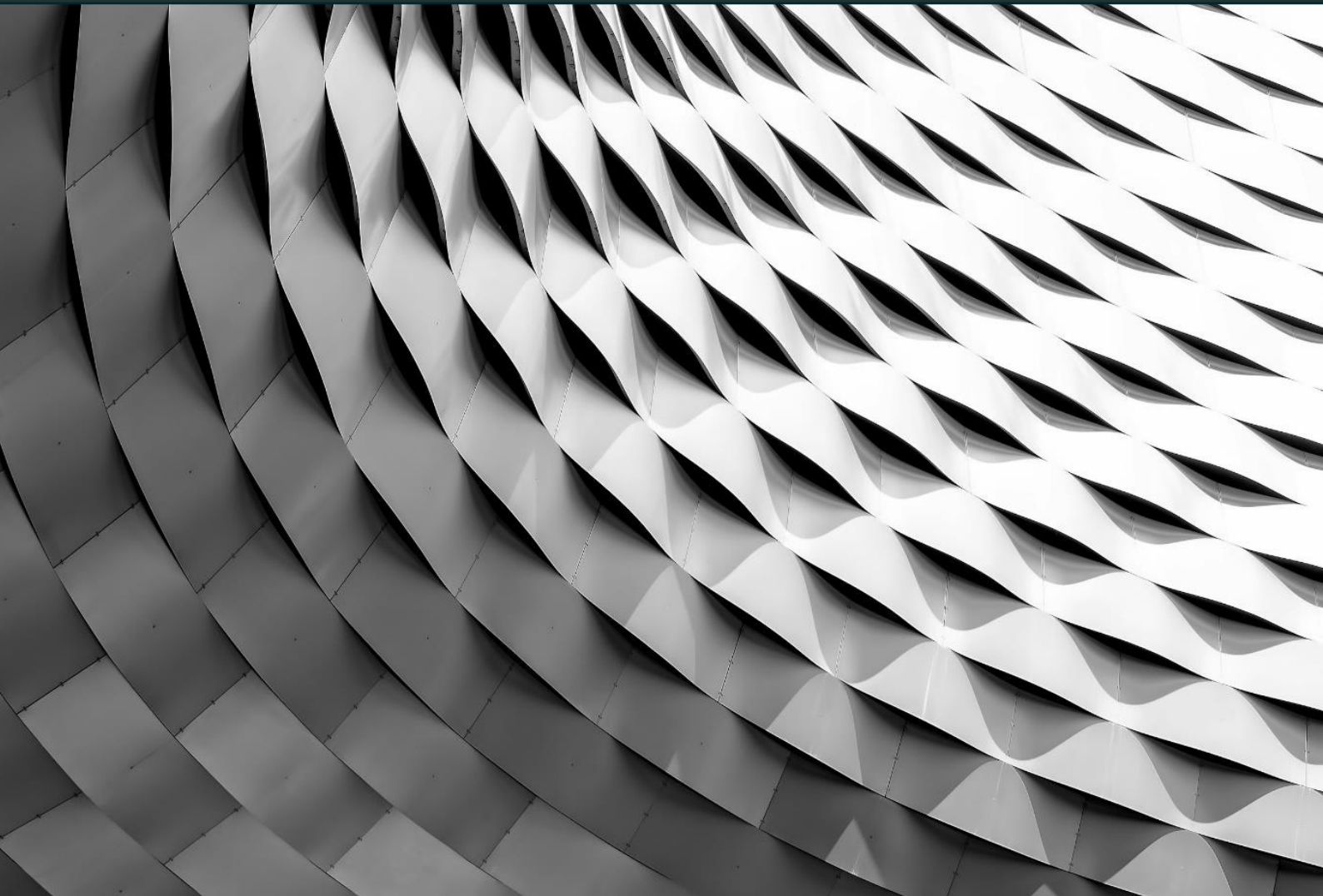




“Value in the Loop. Making Circularity Pay Off”

Climate Week NYC, 23 September 2024

Panel discussion summary



About the Circular Value Institute

The Circular Value Institute is a global non-for-profit organization that helps companies generate economic value from circular business models. It developed the Circular Value Index, a methodology that calculates the circular value of a product with a focus on reuse. The Circular Value Institute aims to create products and business models that generate economic value and that have a positive impact on the environment and on society.

The Circular Value Institute is proud to be one of the winners of the [Circular Buildings Coalition](#) Blueprint Projects. The CBC is funded by the Ellen MacArthur Foundation, the World Green Building Council, the World Business Council for Sustainable Development, Metabolic, the Laudes Foundation, Arup, and Circle Economy.

Panelists



Leela Shanker, Sustainability Director, Design Lab, WAP sustainability.

What is circularity for you? We live in a really interesting time, and there's a lot of new scope that designers and manufacturers and businesses at large are trying to consider. People are grappling with how to achieve decarbonization goals, material health goals, and circular design goals. I certainly see a lot of people really trying to

understand what it means to bring materials or products back and understand what is in their product, what is the energy impact and emissions impact associated with reusing, refurbishing or maintaining these products. We are seeing lots of interesting partnerships and business models forming.

Maxime de Scheemaeker, Head of US, JUUNOO



What is circularity for you?

Well, I basically wake up and I go to sleep with circularity in mind. At JUUNOO, we invented a circular wall system for offices. Traditionally, an office space is built with drywalls and when the tenant is changing, those walls are trashed. Then, they are rebuilt again. At JUUNOO, we use the same materials to rebuild that space. It is also talking about the financial part of it: circular value, for

me, is the marriage between circularity and economic viability. If we pitch circularity that way, we will get a lot more traction than if we “just” talk about circularity.



Valérie Vermaendel, Chief Development Officer,
Whitewood

What is circularity for you? Circularity is a method, a way to build better buildings. This is done by looking at the material flows that happen around construction. For me, the product is the building itself. We see that, on the market, there is a different valuation according to whether a building is sustainable or not so much. However, as far as circularity is concerned, more than money, I believe that we must also look at risk. This is key in a context where materials are scarce. We must learn to work with reused materials, with products that are made for disassembly and that can be implemented in our projects.

Moderator



Fabio Barbero, Coordinator, The Circular Value Institute

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You can find below a summary of the panel discussion. Do you prefer to review the recording? You can access it [here](#).

The Circular Value Index (CVI) measures the circular value of a product. We asked our panelists how the Circular Value Index helps them achieve their circularity goals.

$$\text{Circular Value Index} = \frac{\text{residual value}}{\text{cost of reuse}} \times \text{risk}$$

Leela, as a designer, what does it mean to have a product with a high residual value?



I think it is a very interesting question. Designers are very interested in understanding the cost of the products that they are specifying. The term value usually refers to a value engineering exercise, which is just making the product cheaper. We really want to be having more insights into the potential afterlife of our designs, beyond design intent. For example, it is important to continue the conversation through procurement with contractors and have stronger links between designers and facilities operators right up front. We will need to go beyond our traditional box of BREEAM credits and green building credits and have a longer relationship with the design.

Valérie, how do you consider value in the real estate sector?



In my sector, we are not looking at products, but at buildings in general. For us, the value is the cash flow that a building generates yearly (the rent that you receive yearly), divided by “the yield”, which is a percentage representing risk. For example, 3.5% is a very good yield, while 8% is less good. In this formula, one cannot directly see the materials, which is how the building is constructed. However, what we see is that the more sustainable a building, the more the rent goes up and the yield down. Therefore, you have a double positive effect. Secondly, we must differentiate, at the investor level, what is long-term and what is short-term. After a 3-6-9-year lease, we can dismantle and reuse a circular interior wall and there will be residual value, even

considering the net present value. When you look at 30 or 50 years, this is more challenging.

Maxime, what makes a product of high residual value?



As a manufacturer, it all starts with product design. The key is to create a product that has enough value from the materials it is made of, and where the attached labor portion is smaller. If these two are in the right balance, it is possible to create a product that has a high residual value. Roof clay tiles, for example, are perfectly reusable, but their second-hand value is not high enough compared to the labor cost required to dismantle and reuse them. In that case, even though the product is circular, it does not make sense to reuse it from an economic perspective.

Thanks, Maxime, you hinted at costs. How can you keep them down to encourage reuse?



For me, it's all about creating a win-win situation. When we strike the right balance between material value and labor costs in a product, everyone wins. Of course, it is utopic to think that a developer will always reuse your walls. However, there are smart ways out there. For example, through a buyback guarantee, developers get money at the end of a product's use cycle, while producers can easily reuse the product and boost profits. Why is it a win for a manufacturer like JUUNOO? Because we can directly use the materials that we get back: for example, we can reuse 100% of our metal studs. It is economically interesting as we can resell them again for a higher value, and we can make an extra profit. What is more, it's a win for society because materials are kept in the loop. In the end, a well-designed circular business model can profit everyone.

Valérie, can circularity square the circle between sustainability and affordability?



I think so. However, we are not there yet. Firstly, when we speak about circularity, it is also about daring to reuse structures. When we look at the market in Belgium and in Europe, we see that renovating and constructing new has the same cost. However – and this is what makes it economically interesting – when you renovate your permit often goes twice as fast as when you build new.

On the other hand, when we look at materials and products, I think the market still needs to learn how to reuse materials. We have ambitious projects, but it still takes quite a lot of time and quite a lot of logistics. The price is often quite cheap, sometimes it is five

times as cheap. But it is the whole process that still needs improvements to make reuse more attractive.

Leela, What's the role of the designer when it comes to costs?



I think that the role of a designer isn't just to understand what a material or product could be reused for in its original form, but also to consider that it may have a very different second life. For example, we're seeing very interesting waste products from the building sector that become something that's actually better performing and that returns into the built environment in a different way. To Valérie's point, we are thinking more about refit or adaptive reuse, we are trying to not over specify products, etc. However, there are still lots of questions there, and so many variables to consider. When you try to make sensible comparisons between products and materials, the lack of harmonization on how we measure is a challenge.

I do think that designers can help to reduce the costs associated with the logistics. We can do that by passing on more of the details about the reuse or repair of products and materials – this can be as simple as us including more information in the owner manual that is handed over to facilities operators at the end of our role in construction documents, so that it is easy to find where people should go to in order to recycle or reuse a product. It might not be obvious to the owner or the ultimate tenant and user of the building that a product designed for disassembly was there from the start. We should make sure that it's easy to find those contacts. I think that material passports and digital passports are going to help with that.

Valérie, you talked about risk previously. How do you deal with risk in the real estate sector?



Firstly, I really like the question, because risk is in our core business. But I think that a risk yesterday is not a risk tomorrow. In one of our first projects, which started in 2016, we really wanted to introduce reused materials and materials ready for disassembly. What did we do? We started from fit-out materials. Then, not only did we rise the reuse rate, but we went one step further and expanded the type of materials being reused. When you know where to get your materials and who is selling them, the risk is very much reduced.

Nowadays, we also see technical materials being retested, like raised floors, but also parts of technical installations that are being reused. We go one step further, and reuse the elements of the facade, something that we would never have done six years ago because water tightness and structural elements are very difficult to put in reuse for

insurance reasons. We test that on a smaller project, we take that extra risk. And we know that, in five years, what we now consider risky may no longer be so, because we will have done it a few times already.

What's pushing us to go from a 2% reuse rate to an 8%? We clearly decided to be specialists in renovation and to be front runners when it comes to ESG. Secondly, the EU's Sustainable Finance Disclosure Regulation (SFDR) mandates companies that create funds to undergo quite a thorough reporting on their portfolio of assets. And the European taxonomy also has a criterion on circular economy. Therefore, also legislation is also going in that direction.

Maxime, you're based in the US. What's your understanding of risks there?



In the US, there is a lot of legislation coming for operational carbons (ed.'s note: *the emissions associated with the energy used to operate the building or in the operation of infrastructure*). But if we talk about embodied carbons, at this moment there is not a lot of regulations. We need pioneer companies in that respect, companies which show that this is possible. It is these companies that open the way for others.

Leela, what's your take on risk? How do you factor in risk?



I think it's firstly with performance criteria. It's very true that designers get very excited about innovative materials and do want to support the creation and scaling of those materials, but the reality is that there isn't a lot of proof yet. I think that there is a need for pilot projects where one chooses the right kind of application, and that's probably one that has a shorter life span, whether that's hospitality or retail for example. Pilots will give us some more data about the durability and performance of new materials and circular practices sooner than the traditional built environment times. There is also a need to share cost data anonymously as much as we can. Creating more data also means that we can have capital backing those decisions. It will be very helpful to choose one system, despite the many available, go with it and assemble contractors, facility managers, procurement people, green finance, friends, and developers to test things at a portfolio level rather than on a traditional project-to-project approach.

We talked about the risk of things not going as we'd like to, but what's the risk of inaction?



I think that we need to be outcome-oriented and that we do need to find these partners with whom to move something forward and have clarity on whether the results were better or worse. With a compliance-oriented approach, where no one wants to move until they're forced to, we don't learn anything. And I think that it is important to learn what doesn't work, as much as getting some positive proof that we can move things forward. I have experienced projects where manufacturers and designers were waiting because there was an assumption, for example that greener products are more expensive. In fact, it's very possible in this moment to have substitute materials that are cost competitive. I think that the risk of inaction is that we just continue with these assumptions. We need to bust those myths.



From an investor's perspective, don't always look at costs, also look at income. Because, of course, a project can be more expensive. I'm not going to lie, the projects that we do might be slightly more expensive than the average that is being constructed. However, the prime rents that we get on our buildings are often also higher. I think that a lot of people – and certainly in the European market – prefer to have slightly less surface, but better surfaces. And they are ready to pay slightly more for it. So always take the two sides into account, costs and income.

How we can help you

Do you want to optimize your business models through the Circular Value Index?

Do you want to be part of our network?

Interested in project opportunities with the Circular Value Institute?

Contact us

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