

Audio file

Case study 1 and 2

Transcript

00:00:03 Speaker 1

Good morning.

00:00:06 Speaker 1

Yes, yeah.

00:00:07 Speaker 1

Thank you so much.

00:00:09 Speaker 1

[name of interviewee], so I'm just pleasure to interview with you today.

00:00:14 Speaker 1

So my name is Mohammed and I'm a PhD at the Department of Management built Environment.

00:00:21 Speaker 1

And I work in research with working title of circular building, adaptability and adaptation framework, conception, conception, exploration and operationalization.

00:00:31 Speaker 1

So the aim of this research is to develop and operationalize a framework for the circular building transformation, so I'm conducting.

00:00:41 Speaker 1

This interview with you, owing to your knowledge in this.

00:00:44 Speaker 1

Domain and we saw many amazing projects for [name of a company], so this also interview has two twofold aim.

00:00:52 Speaker 1

The first one is to triangulate.

00:00:56 Speaker 1

Meaning like assessing my theoretical understanding of my first study, then exploring.

00:01:04 Speaker 1

What's going on in practice and we saw the projects that we will talk also about it.

00:01:10 Speaker 1

The first one is [name of the first project] and the second one is [name of the second project] .

00:01:15 Speaker 1

Yeah so.

00:01:16 Speaker 2

Why those two?

00:01:17 Speaker 2

Because we have the [name].

00:01:20 Speaker 1

But this one is is not.

00:01:22 Speaker 2

Transformation, or we moved 8000 year of building to a different location, so it's the most circular building in the world, so we can also talk about that.

00:01:33 Speaker 1

Yeah, it would be nice.

00:01:35 Speaker 1

So thank you so much so because you know like now in Delft just before we have really to ethical statements so we need just to check.

00:01:44 Speaker 1

And and here we have five items that we need to to have your constant first like conduct this interview and life with COVID like in person.

00:01:53 Speaker 1

So if you don't could could we like we should really yeah the second one is to record the audio.

00:02:00 Speaker 1

The third thing is to allow the mentors to have an access or like promoters, Hilde Remoy, Vincent Gruis, I and Tuuli.

00:02:11 Speaker 1

While the the recordings will be anonymized, transcribed and analyzed way, so we'll use it into research right up and publication.

00:02:20 Speaker 1

Like no names will be added.

00:02:22 Speaker 1

So just before we start, so can I take your consent.

00:02:27 Speaker 2

Yes, I agree.

00:02:28 Speaker 1

Thank you so much.

00:02:29 Speaker 1

So [name of interviewee] and from report.

00:02:33 Speaker 1

So yes, so should we start with the questions?

00:02:37 Speaker 2

Or start with the questions and I try to show you some slides if it's related.

00:02:40 Speaker 1

Yeah, yeah.

00:02:42 Speaker 1

Thank you so.

00:02:42 Speaker 1

Much so at the first like it's.

00:02:45 Speaker 1

It's nice to have a kind warm-up.

00:02:47 Speaker 1

Over that we have.

00:02:49 Speaker 1

A nice warm-up and coffee.

00:02:52 Speaker 1

So before we start to talk about still quality and adaptability like it's Nice truly, because now in the Netherlands it's pioneering for operationalizing or like for their their aim for the circular economy transition, yes.

00:03:11 Speaker 1

And they have also vision of like initiative for 2050.

00:03:15 Speaker 1

And so on.

00:03:16 Speaker 1

Just an initially?

00:03:18 Speaker 1

What do you think about the impact of circularity?

00:03:21 Speaker 1

Uh, on your practices as, let's say developers or.

00:03:26 Speaker 1

Or or professionals in the building industry or the real estate market.

00:03:35 Speaker 2

I think before I can answer that question in a right way, it's really important to define what is your clarity.

00:03:44 Speaker 2

Also impact OK so.

00:03:46 Speaker 1

OK, so we like the envelope yeah yeah yeah.

00:03:47 Speaker 2

What do you see as your clarity will impact before I can answer?

00:03:52 Speaker 1

That yeah, I can simplify this circular economy paradigm is the safety.

00:03:57 Speaker 1

To simplify, it is the 0 waste sustainability paradigm.

00:04:01 Speaker 1

Uh, and the Netherlands has a name for that, like keeping all the resources in the in.

00:04:08 Speaker 2

The loop in.

00:04:09 Speaker 1

The loop exactly, so that's my simple.

00:04:12 Speaker 2

Or share client.

00:04:14 Speaker 2

OK so it's only material based.

00:04:17 Speaker 1

Yes, but also for.

00:04:20 Speaker 1

For that reason this research is seeing also another another thing beside the material based, but let's say that's the simple thing.

00:04:27 Speaker 2

This is simple OK, because the way we implement your client is much more complex.

00:04:32 Speaker 2

And we look at the energy part of it we look at.

00:04:40 Speaker 2

Resource of course.

00:04:42 Speaker 2

Green water mobility.

00:04:47 Speaker 2

So there are a lot of different subjects that we connect to circularity because only resources is, in our opinion, not enough to achieve the circular economy.

00:05:01 Speaker 2

OK, so that's the first part, so the definition is really important, and then the in your question you use the word.

00:05:09 Speaker 2

What do you want to know?

00:05:10 Speaker 2

Is it economical?

00:05:12 Speaker 1

Impact no, I mean the effect of those initiatives or those movies on on your practice, like as the yeah.

00:05:21 Speaker 2

That also that impact on my practices can be elaborated in economical impact.

00:05:27 Speaker 2

Am I practices or ecological impacts or talents that we get in our company so impact is again a really broad yeah?

00:05:28 Speaker 1

OK.

00:05:38 Speaker 2

Broad because I can because we are doing the most circular project in the world.

00:05:49 Speaker 2

Removing or.

00:05:50 Speaker 2

Re putting the building we have.

00:05:53 Speaker 2

They mount it as legal and we are building it somewhere else in Amsterdam you get talents from the market that want to work at your company.

00:06:01 Speaker 2

That's also impact.

00:06:03 Speaker 2

OK, so you understand what I'm saying, so impact is really brought to the world for impact.

00:06:04 Speaker 5

Yeah, yeah exactly.

00:06:07 Speaker 2

Has it on my account?

00:06:09 Speaker 2

OK, that's so yeah, to be sure.

00:06:13 Speaker 2

You always have to be really specific in what you want to ask.

00:06:18 Speaker 2

But to go back I try to give a broad answer because the question is really broad.

00:06:22 Speaker 1

Yeah, yeah exactly.

00:06:24 Speaker 2

Uhm, we ought to.

00:06:27 Speaker 2

Idealists, and because of our idealism.

00:06:31 Speaker 2

Circularity has no impact on us.

00:06:33 Speaker 2

We try to move the markets forward by what we do, so it's not the way that the that circularity impacts our business.

00:06:43 Speaker 2

What we do we try to inspire.

00:06:48 Speaker 2

The market they also call us on [name].

00:06:53 Speaker 2

The former.

00:06:54 Speaker 2

A chair of real estate and housing at [name], they often called US idealistic realist's.

00:07:04 Speaker 2

So we try to put realism underneath our idealism and our idealism consists of.

00:07:10 Speaker 2

Circularity in it's total term circularity and adaptability, so in that way you are at the right address here to talk about that.

00:07:16 Speaker 1

Yeah, yeah.

00:07:18 Speaker 2

So we try to do things that have never been done before, like moving a building of almost 9000. It was ten we have.

00:07:28 Speaker 2

Uh, being able to the amount 9000 of it's so the total fossil total floors everything. I show you some pictures a movie later on.

00:07:38 Speaker 2

But in that way we try to.

00:07:41 Speaker 2

Push circularity on a different level if it's possible to move a building in Amsterdam.

00:07:48 Speaker 2

Of 9000 square meter.

00:07:51 Speaker 2

In a linear economy and make it feasible.

00:07:56 Speaker 2

That's what we want to show the world that every transformation is feasible, because if you can move and make it feasible.

00:08:03 Speaker 2

Then you can let it be and transform it on its own location.

00:08:07 Speaker 2

Then it's much more feasible because and you say what impact has the market on your business.

00:08:14 Speaker 2

In our practice, we fight against a linear economy because if we move the building the Nelons bank, we see that we pay again tax for the resources we already have.

00:08:27 Speaker 2

If we transform the building on its own location, it's seen as a transformation.

00:08:32 Speaker 2

If you they mount it and built it somewhere else.

00:08:35 Speaker 2

It's seen as new.

00:08:37 Speaker 2

So you're paying double tax.

00:08:43 Speaker 2

You have two.

00:08:44 Speaker 2

Storage 9000 square meter of building so you have a lot of storage costs in the beginning you need a lot of information about the building.

00:08:52 Speaker 2

You need to know how it's built, how strong it is.

00:08:57 Speaker 2

And if you move it to a different location.

00:09:00 Speaker 2

It's not seen as transformation, but as new then you have to.

00:09:06 Speaker 2

Find then you have to achieve the new regulations on that location for that building.

00:09:11 Speaker 2

So if you transform.

00:09:13 Speaker 2

You're in a transformation regulation term, but if you move it, it's seen as new build, so you have to make it as new so you fight against a lot of linear.

00:09:26 Speaker 2

Regulations in the market that are trying to stop you, but again.

00:09:33 Speaker 2

We are showing that we are still.

00:09:37 Speaker 2

Almost 50% cheaper than a new built building.

00:09:43 Speaker 1

OK.

00:09:45 Speaker 2

Then moving 9000 square meters show again that the MIC doesn't influence us. We try to push the market.

00:09:51 Speaker 1

That's got it.

00:09:52 Speaker 1

I I got the like.

00:09:55 Speaker 1

Like man, interesting thing like you try to move the market, not the market.

00:09:59 Speaker 1

Push you and for that reason like also indicate that you have arguments like you, you, you, you push.

00:10:08 Speaker 1

Let's say the creativity or innovation and then.

00:10:13 Speaker 1

But this will also has an impact on you that you always need a talents and you need also to fight regulations and you reflected on your experience. For instance, on this 9000 square meter project.

What's the name of this project?

00:10:27 Speaker 2

The nail answerbank.

00:10:28 Speaker 2

That's the authority that checking all [name of the project] in Ireland.

00:10:32 Speaker 1

OK.

00:10:33 Speaker 2

The authorised bank is controlling.

00:10:36 Speaker 2

Every [name of a project] are not corrupt or doing the right things.

00:10:40 Speaker 2

It's very against Sears outside the window you see the building with the crane before.

00:10:45 Speaker 1

It, ah, so is this.

00:10:47 Speaker 2

One node farther in the corner in the farm, won't you see a rectangular building or the in front of a large crane?

00:10:58 Speaker 1

Oh yeah, that's OK.

00:11:01 Speaker 2

You simply Lego and like.

00:11:04 Speaker 2

We built and the demount likely, so we.

00:11:06 Speaker 2

Have bought this at least.

00:11:09 Speaker 2

It's called the [name].

00:11:12 Speaker 1

And so now you're demounting it.

00:11:14 Speaker 2

We already the demounted it we are transformed, it refurbished it and it's waiting for its new life.

00:11:20 Speaker 2

Yeah, in north you see the big building there, that's [name of a project] That's a central station, OK?

00:11:27 Speaker 2

On the other side of that building on the water so behind it's the river, yeah.

00:11:33 Speaker 1

The bird bird, bird bird I think is in the river but.

00:11:37 Speaker 2

It's called the API, yeah?

00:11:40 Speaker 2

On the other side of the water, it's going to be rebuilt as three smaller buildings connected to each other.

00:11:46 Speaker 2

It's healed.

00:11:48 Speaker 1

Karen and yeah, but my eyes listen for this.

00:11:52 Speaker 1

This part regarding the.

00:11:55 Speaker 1

Because here is the interesting thing.

00:11:57 Speaker 1

Like I'm, I mean, there are many interesting points that you're you're saying, but you said like, OK, so.

00:12:03 Speaker 1

You have also.

00:12:05 Speaker 1

Uh, like certain.

00:12:08 Speaker 1

Let's say that you call it arguments, but the confusing part that you mentioned that circular and linear, so or like you are facing the linear.

00:12:20 Speaker 2

Exactly we are fighting.

00:12:20 Speaker 1

Uh, yeah.

00:12:24 Speaker 2

Circular in a linear system.

00:12:27 Speaker 1

Huh, so?

00:12:29 Speaker 2

So if you for instance just one thing.

00:12:34 Speaker 2

If you move the building, you pay twice the tax.

00:12:39 Speaker 2

That's a linear system.

00:12:41 Speaker 2

It's not seen as a transformation, but as a new build building that's the problem.

00:12:46 Speaker 1

So, and this is also we are facing this in this.

00:12:49 Speaker 2

Size of building and it's about a lot of 1,000,000 that you lose because you have to pay too much tax.

00:12:55 Speaker 2

That's one of the points so you face financial challenge.

00:13:02 Speaker 2

From tax law, you face challenges.

00:13:05 Speaker 2

From regulations from the municipality, you face challenges from.

00:13:10 Speaker 2

And you have a lot of levels that you face challenges in the linear system.

00:13:19 Speaker 2

Cash flow is a challenge because you start with a lot of investments.

00:13:24 Speaker 2

We already have the building.

00:13:26 Speaker 2

We bought a building, but it's not realized yet.

00:13:30 Speaker 2

So your cash flow is not exponentially.

00:13:36 Speaker 2

It's in the beginning, a lot of money and it decreases exponentially.

00:13:41 Speaker 1

Yeah, so do you mean that like the initial investment, let's say?

00:13:45 Speaker 2

The initial investments are much higher, higher than yeah, and the way you connect specialists is different.

00:13:48 Speaker 1

This is.

00:13:53 Speaker 2

You start with a team of.

00:13:56 Speaker 2

A lot of specialists.

00:13:59 Speaker 2

Because if you have a material twice in your hand, it's not feasible.

00:14:03 Speaker 2

Again, you have to know how to demount in one way, transform it and store it and refurbish it.

00:14:04 Speaker 1

OK.

00:14:11 Speaker 2

So if you add one extra minuscule step in those line, then the building becomes unfeasible.

00:14:18 Speaker 1

Yeah I will.

00:14:19 Speaker 1

Well, really, I think dive in and and the point for the demounting and the challenges.

00:14:24 Speaker 1

This one if we can get along because it's interesting and I will.

00:14:24 Speaker 1

OK.

00:14:27 Speaker 1

I will I will.

00:14:29 Speaker 1

Postpone it till we can come today so the second warm up.

00:14:30 Speaker 1

OK.

00:14:35 Speaker 1

Which is.

00:14:36 Speaker 1

Like it's interesting that I knew that how, how.

00:14:39 Speaker 1

Like you push the market and that's interesting.

00:14:41 Speaker 1

But the second question is, what do you think about the adoption of?

00:14:46 Speaker 1

Circularity in the property market in general and the building industry not in your organization.

00:14:52 Speaker 2

And I think.

00:14:53 Speaker 2

A few talk, so I try to.

00:14:57 Speaker 2

Answer It in the way you have described circularity.

00:15:01 Speaker 1

OK.

00:15:01 Speaker 2

So resource, zero waste of resources that's adapted in a good way.

00:15:03 Speaker 1

Resource resource yes.

00:15:07 Speaker 2

I think.

00:15:08 Speaker 2

In the market a lot of companies are asking for share sustainable materials.

00:15:08 Speaker 1

OK.

00:15:17 Speaker 2

So the adaptation is good.

00:15:19 Speaker 2

I think the.

00:15:20 Speaker 2

The adaptability it's not.

00:15:22 Speaker 1

OK.

00:15:23 Speaker 2

It's not adapted at all.

00:15:25 Speaker 2

People and developers all kinds of parties are sleeping for a lot of years.

00:15:32 Speaker 2

They don't understand that the buildings.

00:15:40 Speaker 2

Yes, because we use the seven layer of bread.

00:15:44 Speaker 2

Stewart Brand is.

00:15:44 Speaker 1

Yes, yeah basically.

00:15:46 Speaker 2

7S layers and if you understand the 7S layers then you also understand that the first layers change all the time.

00:15:53 Speaker 1

Yeah, these canedy these stuff.

00:15:56 Speaker 2

The stuff and the skin and and services and the space plan.

00:16:01 Speaker 2

So the 1st 4 layers 3 or 4 layers they change really fast.

00:16:07 Speaker 1

And the.

00:16:07 Speaker 2

And the market doesn't understand that at all.

00:16:12 Speaker 2

So and if I say the market, I mean really I talked to.

00:16:17 Speaker 2

The biggest CEOs of the biggest companies because they are all like friends.

00:16:23 Speaker 2

I talked to them all.

00:16:27 Speaker 2

Even they don't understand it, yeah, so and Holland is a really educated country, so we are one of the forests in thinking circular and adaptable indeed.

00:16:38 Speaker 2

But in the end there is something in the mind of.

00:16:43 Speaker 2

People that they don't get.

00:16:45 Speaker 2

The value of adaptability.

00:16:47 Speaker 2

I don't know why.

00:16:49 Speaker 2

I think [name of the company] is still one of the only companies everyday fighting for adaptable buildings, yeah.

00:16:57 Speaker 2

Yeah, and we see it happen.

00:16:58 Speaker 2

It's not.

00:16:59 Speaker 2

We see if we look at the center of Amsterdam.

00:17:03 Speaker 2

I lived in a corner house myself.

00:17:06 Speaker 2

The corner house is there 500 years now has changed so many times, all different functions that you can imagine are already there so we see it in front of our eyes.

00:17:18 Speaker 2

Yeah, but when we build we don't think about it yet.

00:17:22 Speaker 2

There is some.

00:17:23 Speaker 2

I I don't know any company that looks here edge we see here outside this is.

00:17:29 Speaker 2

A building of edge technologies.

00:17:32 Speaker 2

Just finished.

00:17:35 Speaker 2

What I've been in the building.

00:17:39 Speaker 2

They have used a layer only officers with multi single installations, so you cannot transform it to the valeting or hotel or something else.

00:17:49 Speaker 2

Then apartments, they are built like apartments.

00:17:51 Speaker 2

You cannot change them.

00:17:52 Speaker 2

So one of the most smart companies in the World edge technology.

00:17:58 Speaker 2

Builds a building that is not adaptable.

00:18:00 Speaker 1

I see.

00:18:01 Speaker 2

On a location S Axis where we know that the [name] is one of the most mixed-use locations in the world.

00:18:11 Speaker 2

We have workers.

00:18:12 Speaker 2

We have lawyers.

00:18:13 Speaker 2

We have people that live.

00:18:15 Speaker 2

We have hotels.

00:18:15 Speaker 2

We have everything here.

00:18:17 Speaker 2

We have the stadium there.

00:18:18 Speaker 2

We have the Emma European Medical Center there, so people work there.

00:18:23 Speaker 2

Come to live here.

00:18:24 Speaker 2

So here you have everything that you can imagine, but the company still doesn't think about.

00:18:31 Speaker 2

Let's make it adaptable.

00:18:32 Speaker 2

So adaptability it's really Greece.

00:18:35 Speaker 1

Say that probably there is no really like the the initiatives, just I'm I'm asking because now you you reflect it on real good examples and so on, even like you.

00:18:45 Speaker 1

Right?

00:18:47 Speaker 1

It mentioned that different challenges you experience, but can.

00:18:51 Speaker 1

I may, could you.

00:18:52 Speaker 1

Could we interpret it in this way like we have circular initiatives for so the market immediately focus on some probability in in the initiatives that we have, they don't look into the S layers or like the adaptability things.

00:19:07 Speaker 1

For that reason, the market is not like conscious.

00:19:10 Speaker 1

Or aware of.

00:19:11 Speaker 1

But could we say that at best?

00:19:13 Speaker 2

I think it's a multidimensional problem, So what you explain is one of the reason, yes, one of the reasons is education.

00:19:19 Speaker 1

One yeah.

00:19:22 Speaker 2

Yeah, we are brought up to to Doppler Raza and design and dwelling or designer office even if they they often have housing you have you.

00:19:33 Speaker 2

You can study on high rise you can study on transformation.

00:19:37 Speaker 2

You can so.

00:19:41 Speaker 2

I think that the main issue, the main problem that we experience in the market can be summarized in one.

00:19:49 Speaker 2

Single term.

00:19:51 Speaker 2

Mono functionality.

00:19:55 Speaker 2

Are everything in this in the society here in Holland is based on the Descartes tests.

00:20:01 Speaker 2

Thinking of.

00:20:03 Speaker 2

Cutting something in parts like you do now.

00:20:08 Speaker 2

To understand it.

00:20:10 Speaker 2

And to have a hold on it.

00:20:13 Speaker 2

And the whole society is like this.

00:20:15 Speaker 2

We if you call.

00:20:18 Speaker 2

The municipality they say.

00:20:20 Speaker 2

Do you want a regulation to live there or do you want a regulation to put an office so it's caught?

00:20:27 Speaker 2

Yeah, if you call a investor they say do you have something for my hotel fund?

00:20:34 Speaker 2

Or do you have something for my healthcare fund so all the funds are separated so the total society is thinking mono?

00:20:47 Speaker 2

And in real set it means monofunctional.

00:20:51 Speaker 2

Mono functionality leads.

00:20:53 Speaker 2

To vacancy, that's what Hilda runway of course studied on.

00:20:59 Speaker 2

If you change if the the the market changes or you have change of use.

00:21:06 Speaker 2

Building becomes empty, empty building, it's becoming.

00:21:11 Speaker 2

A financial.

00:21:14 Speaker 2

Problem in the books and then it's demolished.

00:21:16 Speaker 1

Yeah, so could we also express this also reality adaptability also for mono functional thinking?

00:21:25 Speaker 1

Not multi functional.

00:21:27 Speaker 1

Thinking is also one of those new challenges, yeah?

00:21:29 Speaker 2

Yes, exactly Monofunctional thinking is a better term.

00:21:33 Speaker 2

Yes, I agree.

00:21:34 Speaker 1

Which is the opposite of what you encourage for multifunctional thinking, OK?

00:21:38 Speaker 2

He said.

00:21:40 Speaker 2

So that's a that's a big system flaw, I think in how we have 3 system flaws that [name of the company] has.

00:21:44 Speaker 1

Yeah, although that's.

00:21:49 Speaker 2

Encountered, one is monofunctional banking.

00:21:54 Speaker 2

The second is.

00:22:00 Speaker 2

Although we know what beautiful is, we are able to make really bad areas.

00:22:06 Speaker 2

Even in Ireland.

00:22:08 Speaker 1

The second.

00:22:09 Speaker 2

Bad, ugly areas or areas that we put a lot of same.

00:22:11 Speaker 1

OK.

00:22:15 Speaker 2

People together build low quality real estate at no quality in the environment, so that's the second big system flow and the third is that the government only focuses on carbon dioxide.

00:22:33 Speaker 2

To lower the carbon dioxide while we have much more bigger issues, think about the transition of energy that we cannot.

00:22:42 Speaker 2

Pay for is too expensive. We can cannot. You cannot invest 100,000 in a house at the corner of Holland and expects that the house is going to be more worth so. These are the three.

00:22:54 Speaker 1

Yeah, so yeah, if the first one is the model function or thinking they failed.

00:22:59 Speaker 1

First system flaw.

00:22:59 Speaker 2

It's this.

00:23:01 Speaker 1

Yes, yeah, the second one is the.

00:23:02 Speaker 1

And like the the areas of low quality of living and so on and and I think we have also like I.

00:23:12 Speaker 2

In Amsterdam we have the centre.

00:23:13 Speaker 1

Bilinear, for instance.

00:23:17 Speaker 2

It's around €15,000.10 to €15,000 per square meter. If you want to buy something in the center of Amsterdam.

00:23:26 Speaker 2

Roosevelt, it's 3 kilometers from the center. It's 4000. It's the same city.

00:23:36 Speaker 2

3 kilometers between those two in Amsterdam or World City really, because they have put a lot of people.

00:23:45 Speaker 2

From social return there.

00:23:49 Speaker 2

Not mix them in the city.

00:23:50 Speaker 2

Just put them together.

00:23:52 Speaker 2

Build low quality areas, build low quality buildings so that's the second system flaw that even in really nice places like Amsterdam we are able to make bad areas.

00:24:09 Speaker 2

The system, so I'm now talking about the system in some totality.

00:24:14 Speaker 2

So thinking is the first model, the second one is creating bad areas.

00:24:19 Speaker 1

The third one is.

00:24:20 Speaker 2

It's that.

00:24:20 Speaker 1

As for the focus on reducing the carbon.

00:24:24 Speaker 2

The oxide, because it's easy to measure, it's easy to measure how many wastes and carbon dioxide a company makes.

00:24:31 Speaker 2

So in the politics, because politicians are not the most educated people on the subjects where they.

00:24:41 Speaker 2

Use the politics form and I can say this because.

00:24:46 Speaker 2

[name of the company] as a word of inspiration and one of our.

00:24:50 Speaker 2

Inspirators is the current mayor of flooding and has also been.

00:24:59 Speaker 2

Mayor of Rotterdam and to big politician.

00:25:03 Speaker 2

But politicians are not.

00:25:08 Speaker 2

Real estate.

00:25:09 Speaker 2

Or do I will say it works, etc.

00:25:12 Speaker 2

Or sustainability, they just try to.

00:25:15 Speaker 2

Numbers regulate what they understand, and carbon dioxide is easy to understand.

00:25:19 Speaker 1

OK.

00:25:21 Speaker 1

Yeah, so I got this point.

00:25:23 Speaker 1

So what's the you mean?

00:25:25 Speaker 1

The overlooked is if they say like they focus on disorders so they overlook the other things that we talked about the.

00:25:30 Speaker 2

They overlooked other things.

00:25:32 Speaker 2

Waste way they overlook the energy transition.

00:25:37 Speaker 2

OK, they overlook healthy buildings and healthy areas.

00:25:40 Speaker 1

What's what's your name?

00:25:43 Speaker 2

Healthy are healthy.

00:25:46 Speaker 2

They overlooked the smart and sustainable mobility concepts.

00:25:52 Speaker 1

OK.

00:25:53 Speaker 2

They over and I can recall 10 more things that they overlook in the sustainability sense of the word.

00:25:59 Speaker 1

Yeah, so also we can also think about also like Adam.

00:26:06 Speaker 1

The things that facilitates the.

00:26:08 Speaker 1

Circularity, like adaptability, could we think like back include this among the things that are overlooked or?

00:26:17 Speaker 2

Yes, yes, that's again.

00:26:20 Speaker 2

But that's in my opinion, one of the main flaws of this cult monofunctional thing.

00:26:25 Speaker 1

Ah yeah, so exactly.

00:26:26 Speaker 1

So let's keep it here, yeah?

00:26:33 Speaker 1

Interesting, so those are the three things that you.

00:26:36 Speaker 2

This system flows here that we, as we born as identified, yes.

00:26:41 Speaker 2

Fight against everything.

00:26:49 Speaker 1

OK, thank you so much, it's interesting.

00:26:53 Speaker 1

Kickoff, or let's say warm up because it opens up.

00:26:56 Speaker 2

We're already sweating so.

00:26:56 Speaker 1

So yes, yeah, exactly.

00:27:01 Speaker 1

So now let's talk about like circularity and adaptability, which is really focus, and I'm I'm grateful to you like.

00:27:09 Speaker 1

Also, and I think we will have interesting points because.

00:27:12 Speaker 1

Before I, I started really like I know said to you, you really consider it adaptability and when I even browsed your website so.

00:27:21 Speaker 1

When you say like circularity and adaptability, and I think you mentioned that adaptability is key things and we should say so when you say like circular.

00:27:29 Speaker 5

You too.

00:27:33 Speaker 1

And adaptable building and you.

00:27:37 Speaker 1

And I think you you mentioned that like adaptability is a wave or like say as a means for for circularity.

00:27:46 Speaker 1

But when you say like circular and adaptable building.

00:27:49 Speaker 2

Right?

00:27:50 Speaker 1

How those buildings?

00:27:53 Speaker 1

Look like when I said like circular and adaptable, not only circular, not only resource but also adaptable.

00:27:59 Speaker 1

What are the things that say that makes the building circular or resource as you mentioned?

00:28:05 Speaker 1

Because it's mentioned like it's not only about and also adaptable or multifunctional.

00:28:11 Speaker 1

It's flexible and so on.

00:28:13 Speaker 2

A good question.

00:28:15 Speaker 2

We were, I think the first ones in that area Delft and Mdash Prince was also our mentor.

00:28:20 Speaker 2

Doesn't work anymore at a trade off.

00:28:23 Speaker 2

That realized that we connected these two together.

00:28:26 Speaker 2

Or we I mean new slope, the other C over freeborn, me.

00:28:34 Speaker 2

We connected adaptability as means for circularity, and in English words you can say that adaptability can be seen as durability.

00:28:47 Speaker 2

And circularity can be seen as sustainability.

00:28:53 Speaker 2

Then we go a level deeper.

00:28:57 Speaker 1

Yeah, because I'm I'm.

00:28:59 Speaker 1

I'm really taking so.

00:29:00 Speaker 1

So adaptability is a.

00:29:02 Speaker 1

Means for circularity.

00:29:05 Speaker 1

But also adaptability is about.

00:29:12 Speaker 1

Still designated about sustainability, but adaptability is about also.

00:29:18 Speaker 2

And adaptability.

00:29:21 Speaker 2

Is the means for circularity?

00:29:24 Speaker 2

And we connected those two together because we said.

00:29:28 Speaker 2

I can build today.

00:29:30 Speaker 2

And we do it in whole store nearby, skip over.

00:29:33 Speaker 2

We are building a building and a huge part of it isn't parking.

00:29:37 Speaker 2

But the parkings are the Wellings of the future.

00:29:39 Speaker 1

Ah, OK.

00:29:40 Speaker 2

Because the municipality doesn't want us to.

00:29:43 Speaker 2

Make a lot of parking places.

00:29:44 Speaker 1

Yeah yeah, but also you, when I I noticed that you said like the tool is a means for security and I I like this example.

00:29:53 Speaker 1

But you mean you.

00:29:54 Speaker 1

You you used circularity is for sustainability and adaptable for machine.

00:30:01 Speaker 2

4 durability

00:30:04 Speaker 2

So adaptability is durable.

00:30:07 Speaker 2

That means a journal.

00:30:11 Speaker 2

Then circularity is all the time.

00:30:13 Speaker 2

Yes, yes.

00:30:16 Speaker 2

So adaptability, Asimov said, and we use that statement a lot.

00:30:21 Speaker 2

Change is the only constant factor in the universe.

00:30:28 Speaker 1

OK.

00:30:29 Speaker 2

Change is your constant.

00:30:32 Speaker 2

So adaptability is the basic and circularity changes all the time.

00:30:37 Speaker 1

OK.

00:30:37 Speaker 2

Because, for instance, if you built a building.

00:30:41 Speaker 2

The first 3-4 layers.

00:30:44 Speaker 2

Are really outdated in 15 or 20 years.

00:30:49 Speaker 2

So you can make the most sustainable building and we already have seen it a lot of.

00:30:55 Speaker 2

Times that the most sustainable buildings in the world after 15 years are not sustainable anymore.

00:31:03 Speaker 2

That's why.

00:31:04 Speaker 2

We say you have adaptability as the basis as means.

00:31:10 Speaker 2

For circularity.

00:31:14 Speaker 1

OK, full time yeah so.

00:31:18 Speaker 1

Adult is the means and the basis for circularity and adaptable to change the constant.

00:31:28 Speaker 1

That's what you mentioned I I got it, yeah.

00:31:33 Speaker 1

So and I got it, so do you like, do you believe that like not all circular buildings are adaptable?

00:31:42 Speaker 1

Could we say that or yeah, yeah.

00:31:45 Speaker 2

Because if you build a.

00:31:48 Speaker 2

The building in.

00:31:50 Speaker 2

Let's say you they are building their at the sports fields.

00:31:54 Speaker 2

They are building the highest timber building, an old building.

00:31:59 Speaker 2

It's not adaptive, it's a office.

00:32:01 Speaker 1

OK.

00:32:02 Speaker 2

So if you want to change it, you have two costs and make all kinds of changes and then the insurance is not OK because this would it's not.

00:32:14 Speaker 2

The building services are not correct in the right ways developed in the right way, so all kinds of problems.

00:32:23 Speaker 2

Will mention if you want to transform it to a different function so it's maximum.

00:32:30 Speaker 2

Circular in the way it's it's only timber.

00:32:34 Speaker 2

But not adaptable.

00:32:35 Speaker 1

OK.

00:32:37 Speaker 1

I got it so if we can, before I move the next question because it's related to this, but is there also other features you would like to add about like?

00:32:48 Speaker 1

How more, let's see that in a bit more like because I knew.

00:32:52 Speaker 1

That the filter is the best for security.

00:32:55 Speaker 1

And I shouldn't really interpret it.

00:32:57 Speaker 1

Also, because I'm here to listen from you.

00:32:59 Speaker 1

But also we agree on that.

00:33:01 Speaker 1

I I shouldn't say that, but I have to say that but also.

00:33:05 Speaker 1

Could you likely say?

00:33:07 Speaker 1

Put the key features for the circular and adaptable thing.

00:33:11 Speaker 2

For circular and adaptable circularity.

00:33:13 Speaker 1

Yeah, like.

00:33:19 Speaker 2

Everything that goes in OK should be able to go out OK.

00:33:25 Speaker 2

The zero waste philosophy.

00:33:28 Speaker 2

But we say everything that goes in should go in dry, so don't use wet connections.

00:33:36 Speaker 2

So you can.

00:33:37 Speaker 2

Easily technical.

00:33:41 Speaker 2

And financial feasible.

00:33:44 Speaker 2

Get it out.

00:33:46 Speaker 1

So this is the search quality.

00:33:47 Speaker 2

Circularities like that everything that goes in should go in dry and should be able to go out technical and financial easy out of the building.

00:33:58 Speaker 1

Like Lego

00:34:00 Speaker 1

OK.

00:34:01 Speaker 1

If we add also adaptability for that.

00:34:03 Speaker 2

Adaptability is the.

00:34:06 Speaker 2

In our opinion, not different than the 77 layers of Stewart brand. OK, we connect these seven layers dry to each other.

00:34:19 Speaker 2

Layers can change through time.

00:34:27 Speaker 2

Should I show you to do projects?

00:34:30 Speaker 1

Yes, we can. Also, yes.

00:34:31 Speaker 1

Well, we did.

00:34:34 Speaker 2

Let's go to.

00:34:40 Speaker 1

And you mean by dry like you use like the scroll and the connections, joints and so on?

00:34:44 Speaker 1

Exactly exactly, yeah?

00:34:48 Speaker 2

And one thing I want to add adaptability.

00:34:53 Speaker 2

In our opinion, two things, one is technical, adaptable.

00:34:57 Speaker 2

That's the seven layers of rent.

00:35:00 Speaker 2

And the second one is, you really go adaptable.

00:35:04 Speaker 1

New urinal urinal.

00:35:05 Speaker 2

Eradicable, so we also try to put multiple functions on our buildings.

00:35:10 Speaker 2

All our buildings have multiple.

00:35:18 Speaker 2

I don't know how we exactly call it in English, but it's called.

00:35:23 Speaker 1

We've got multifunctionality.

00:35:25 Speaker 2

I think yes, so in in Holland it's normal that you have only a regulation for living.

00:35:33 Speaker 2

Or working or health care.

00:35:36 Speaker 2

And here's an example of one of our building.

00:35:38 Speaker 2

You can.

00:35:40 Speaker 2

Have a restaurant.

00:35:41 Speaker 2

You can have a hotel.

00:35:42 Speaker 2

You can have office.

00:35:43 Speaker 2

You can put a library, a health care center.

00:35:47 Speaker 2

A even a church or little religious religious building and so on, so.

00:35:54 Speaker 1

Wouldn't be same.

00:35:55 Speaker 2

Within the same regulation we put all kinds of possibilities.

00:35:59 Speaker 1

Yeah, ending is sometimes in English.

00:36:01 Speaker 1

It's still, it's it's it's, it's it's.

00:36:03 Speaker 1

It's general, but there is also multi functionality and sometimes they called the generality like the general across the building is general so it can or so one time it can be office.

00:36:13 Speaker 1

It can be then.

00:36:14 Speaker 2

Exactly now, and we call it juridical adaptation .

00:36:22 Speaker 2

So if you change function.

00:36:23 Speaker 2

The municipality is not long stop.

00:36:25 Speaker 2

Yeah, so may.

00:36:26 Speaker 1

I just review with this you the adaptable tell you perceive it so you see it if you use it.

00:36:31 Speaker 1

The seven layers or plus the.

00:36:35 Speaker 2

Building is your ethical adaptable so you can change it in different functions.

00:36:41 Speaker 2

I will illustrate you what I mean.

00:36:42 Speaker 2

Yeah, this is [case study 1].

00:36:45 Speaker 2

We bought the building held office building Monofunctional building.

00:36:48 Speaker 1

Yeah I have also in different places.

00:36:51 Speaker 2

We transformed it into a.

00:36:53 Speaker 2

We call it functional free.

00:36:56 Speaker 2

Or dynamic building yeah yeah.

00:37:01 Speaker 2

How did we do this?

00:37:03 Speaker 2

Maybe that illustrates.

00:37:06 Speaker 2

Survey model we do it OK.

00:37:09 Speaker 2

The the floor was there.

00:37:11 Speaker 2

The building structure was is the first chair Clare facade in the world.

00:37:16 Speaker 2

We leased it.

00:37:18 Speaker 2

This is going to be the first use 32 apartments, but you can easily change it in 60 hotel rooms.

00:37:27 Speaker 2

Or 50 healthcare rooms.

00:37:30 Speaker 2

With a living room.

00:37:32 Speaker 2

You can go back to office like before what it was or you can change it in a school with classrooms or a infinite.

00:37:42 Speaker 2

Combination between all these functions, so the building can do this technical and the building allows to do this juridical, so if we change it in a school, the municipality is not going to stop us because we already have the.

00:37:56 Speaker 1

Regulations yeah or theoretical like school and and a.

00:38:03 Speaker 2

Office building, yeah, that's.

00:38:07 Speaker 1

Because here I I have I when I read about the builder I know that we can I I will.

00:38:14 Speaker 1

I will review with you, but when I saw like the circular and adaptable things I I ask that you embodied circularity.

00:38:22 Speaker 1

An and adaptability and also you embodied the multifunctionality and I.

00:38:27 Speaker 1

I really you know that I took those comments and also you use efficient energy techniques and so on but.

00:38:35 Speaker 1

So the building, the structure of the building is as it is, but the let's say the filling the facade.

00:38:42 Speaker 1

Everything has been changed.

00:38:45 Speaker 1

But also with with with flexible.

00:38:48 Speaker 2

Yes, because the facade is circular.

00:38:51 Speaker 2

The first circular façade in the world is with [name of a company] and a PhD researcher at the TU Delft.

00:38:58 Speaker 1

OK, is he the one who's opening with [name of a professor]?

00:39:01 Speaker 1

I think I.

00:39:01 Speaker 2

I don't I know exactly

00:39:02 Speaker 2

I can ask my colleague later because that's too much detail for me, but it's the first we set.

00:39:08 Speaker 2

And we had a meeting because they were trying to put this facade in work a lot of years at a meeting and after 7 minutes I said yes we are going to do it and.

00:39:20 Speaker 2

They said but.

00:39:21 Speaker 2

We have to explain I said don't explain.

00:39:23 Speaker 2

Because it's easy to break an idea and we want to do it and we did it as the first circular facade.

00:39:31 Speaker 2

We even financed the [name of the company] and the PhD researcher that was providing this result.

00:39:38 Speaker 2

And now our [name] it's taking over the finance from us.

00:39:44 Speaker 2

So it's going to work and now we are going to do the second building in [name of a project].

00:39:50 Speaker 1

Setting OK another project?

00:39:52 Speaker 2

Another project

00:39:53 Speaker 1

Yeah, so the structure is the building is, it's the.

00:39:55 Speaker 2

Same, it's the same, but the core is the same and the floors is the same.

00:40:00 Speaker 2

The staircases are the same.

00:40:02 Speaker 2

We changed the core a little bit because of.

00:40:06 Speaker 2

Fire regulations.

00:40:10 Speaker 2

And the rest is new.

00:40:12 Speaker 2

The building services is new the facade skin.

00:40:15 Speaker 1

Is new so you you provided the the facade as service like you really stiff as admin.

00:40:22 Speaker 2

The first circular police facade in [name].

00:40:33 Speaker 1

Because this is very, very interesting, but I grew up back to this because I I want really to to stay with folder and [name of the first project] I will.

00:40:42 Speaker 2

Angela bird OK.

00:40:43 Speaker 1

I'll yes, but I will before even I move to them.

00:40:46 Speaker 1

I have some questions related to the understanding, because really, I learned many things.

00:40:52 Speaker 1

I will also.

00:40:52 Speaker 1

Document the strategies that you did in this project and I noticed some of them.

00:40:56 Speaker 1

OK.

00:40:58 Speaker 1

But back to this, when we talked about circle and adaptable and without technical theoretical plus circular, everything going can go out.

00:41:08 Speaker 1

So generally not from this project because we will back to this project.

00:41:11 Speaker 1

But what are the things that these strategies?

00:41:15 Speaker 1

List, delete, cancel are key strategies that.

00:41:21 Speaker 1

Professionals but architects developers.

00:41:24 Speaker 1

Have to make to make to keep to make the building circular and adaptable.

00:41:30 Speaker 2

You know, we discussed that already key strategy is to think from the server layers.

00:41:36 Speaker 1

I, I think those let's say descriptive things here are so I can really so like separate.

00:41:45 Speaker 2

You have to separate the layers.

00:41:47 Speaker 1

In general.

00:41:48 Speaker 2

To look which layer it's already functioning goods.

00:41:52 Speaker 1

OK.

00:41:52 Speaker 2

For adaptable building which layer does not function good.

00:41:56 Speaker 1

OK.

00:41:57 Speaker 2

For instance building services most of the time don't function at all, so they are changed in every project of us.

00:42:02 Speaker 1

Come here.

00:42:05 Speaker 2

They are changed for 100%, but the facades sometimes we can use a lot of fossil parts.

00:42:13 Speaker 2

The building structure.

00:42:14 Speaker 2

Often is reused for 100% or 95%, so we look at the seven layers and see what we can use to make the building adaptable and which parts we have to change.

00:42:21 Speaker 1

OK.

00:42:27 Speaker 1

OK.

00:42:29 Speaker 2

Those part that we have to change, we get out and recycle or reuse.

00:42:33 Speaker 2

And what we bring in we bring in as legal.

00:42:38 Speaker 2

So we bring in so it can change through time.

00:42:41 Speaker 2

That's basically the main strategy you don't have to have much more threads.

00:42:45 Speaker 1

Yes, so those are the basics, the basics.

00:42:46 Speaker 1

That's the basic.

00:42:48 Speaker 2

Then that's the technical basics and the juridical basic case that we.

00:42:54 Speaker 2

Functions this was an office we add loges.

00:42:59 Speaker 2

That means that you can have a hotel or short stay.

00:43:03 Speaker 2

And then added living and then added.

00:43:07 Speaker 2

Social, that means you can also have a health care building or a school.

00:43:11 Speaker 1

OK, so separate layer and brick bring in.

00:43:15 Speaker 1

Uh, yeah.

00:43:16 Speaker 2

Analyze the layers.

00:43:19 Speaker 2

Think about which layer operates goods in an adaptable way.

00:43:24 Speaker 2

Think about, let's say, 500 years.

00:43:27 Speaker 2

The building has to be there for five 400 years or 1000 years. Which layer functions? Goods, which layer does not function good?

00:43:36 Speaker 1

OK.

00:43:36 Speaker 2

Get out what doesn't function and add.

00:43:39 Speaker 2

Add what needs to make the building adaptive organ.

00:43:43 Speaker 2

That's the basic strategy.

00:43:46 Speaker 1

Nice and generally when we when we missed out those key strategies.

00:43:52 Speaker 1

What are the things that facilitates those strategies though the key things spread?

00:43:58 Speaker 1

Now is it?

00:43:58 Speaker 2

Separate layers which facilitates.

00:44:00 Speaker 1

Yeah, like like we can see like.

00:44:03 Speaker 2

Uh, we have a blueprint as [name of the company].

00:44:05 Speaker 2

So we we have some.

00:44:09 Speaker 2

Techniques that we have learned from our previous projects. For instance, you need a ceiling height of at least 2.8 meters, so you have some.

00:44:23 Speaker 2

The laws.

00:44:25 Speaker 2

That you need.

00:44:27 Speaker 2

In order to make the building.

00:44:31 Speaker 2

From proper again yeah, so in the structural layer you need columns not load bearing walls.

00:44:40 Speaker 2

In the structure layer you need floors where you can make different holes or the building services.

00:44:48 Speaker 2

You need a structure of quality that can.

00:44:51 Speaker 2

Live for, let's say, 500 years more so in every layer you have and that's our blueprint in every layer. You have some basic regulations that you need to consider when developing. For instance, if you make an office.

00:45:09 Speaker 2

A apartment you have different.

00:45:13 Speaker 2

Sound regulations, so if the floor is not proper.

00:45:18 Speaker 2

For the sound, if you live you make apartment and.

00:45:25 Speaker 2

Noise is not reduced.

00:45:27 Speaker 2

You have to add.

00:45:30 Speaker 2

Things on your floor or ceiling that to exactly to reduce it, but you then you lose height.

00:45:32 Speaker 1

To isolate.

00:45:39 Speaker 2

So regulations for us.

00:45:42 Speaker 2

It's important to consider.

00:45:46 Speaker 2

To see if it's possible to reuse the building.

00:45:49 Speaker 2

So the main basis is can we reuse the building.

00:45:52 Speaker 1

OK.

00:45:54 Speaker 2

And if the answer is yes, then you go in the 7S and per S. You also have different.

00:46:02 Speaker 2

Questions, yeah.

00:46:03 Speaker 1

So the first thing is the regulations for can I I order regulations?

00:46:10 Speaker 1

Then we can also think in light of this.

00:46:12 Speaker 1

And and and also regulations are fixed by affected by structural thing like.

00:46:21 Speaker 1

Columns not both bearing wall string and so on also.

00:46:25 Speaker 1

So it's a special thing, like you mentioned, ceiling heights.

00:46:29 Speaker 1

And so on.

00:46:30 Speaker 2

Exactly, perhaps you have different.

00:46:33 Speaker 2

A requirement.

00:46:36 Speaker 1

Yeah, so those are the key things that really can.

00:46:41 Speaker 1

Because the next question is.

00:46:43 Speaker 2

Because you you can have a really nice office building that you want to transform, but after ceiling height is let's say 260 so it's not then you have to add some things on the floor to reduce the noise and it becomes 250 or 240.

00:46:59 Speaker 2

It's not.

00:47:01 Speaker 2

Convenient, convenient enough to do such big investments in a building for thousand year when that not nice, OK?

00:47:11 Speaker 2

Unless it's a monumental building, unless it's it has a heritage value, then you keep it because of its heritage.

00:47:19 Speaker 2

So that's the second part.

00:47:21 Speaker 2

I told you that there are three system flaws monofunctional ugly areas and buildings and carbon dioxide.

00:47:29 Speaker 2

Ugly area and buildings.

00:47:31 Speaker 2

If it is a nice building, for instance this one, we bought the building in the center of the 8:00.

00:47:36 Speaker 2

This is the building.

00:47:37 Speaker 1

Ah, I saw this one.

00:47:38 Speaker 1

Yeah, it's not transformation, or is it?

00:47:40 Speaker 2

Yes, we are going to transform it, but we have a lot of.

00:47:46 Speaker 2

In a.

00:47:49 Speaker 2

Problems in this building because it's really old and lot of load bearing walls and so on.

00:47:55 Speaker 2

But we're still going to do it because it has heritage value.

00:47:59 Speaker 2

So heritage value it's even more important than adaptable value, that's why we.

00:48:07 Speaker 1

OK.

00:48:07 Speaker 2

Constructed these three, yeah.

00:48:09 Speaker 1

Because the next question is about what are the obstacles that are.

00:48:14 Speaker 1

That that, let's say face those key strategies we talk about, like the separation of the layer and so on.

00:48:22 Speaker 1

You mentioned that that they enable us like ceiling height, regulations and structure.

00:48:27 Speaker 2

Every has its own, so every requirement that we have it's based on.

00:48:38 Speaker 2

So this year we try to have at least 2.8 ceiling height.

00:48:45 Speaker 2

That's also a restriction.

00:48:48 Speaker 2

We want column free floors.

00:48:51 Speaker 2

If they are not.

00:48:53 Speaker 2

We look sometimes you have one or two load bearing walls, then we can accept, but if the building exists of only load bearing walls.

00:49:01 Speaker 2

Then we cannot accept it.

00:49:03 Speaker 2

I can.

00:49:04 Speaker 2

I will show you now the [name of case study 2] because that's illustrates the problem, yeah?

00:49:11 Speaker 2

This is happening.

00:49:13 Speaker 2

Also a nice transformation.

00:49:16 Speaker 1

But it's happening still under.

00:49:18 Speaker 1

You didn't start the.

00:49:20 Speaker 2

No, it's going to start now.

00:49:21 Speaker 1

Yeah, also the heritage one you show me in Den Haag.

00:49:24 Speaker 2

It's also not start yet.

00:49:25 Speaker 2

Yeah, this one is [case study 2].

00:49:27 Speaker 2

We bought these offices honor Oh yeah, we call it 50 Shades of grey.

00:49:33 Speaker 2

And we transformed it into sustainable new building.

00:49:37 Speaker 2

Yeah care, it's functional, dynamic, but the first uses here.

00:49:42 Speaker 2

This one is building in C.

00:49:45 Speaker 2

The building in the middle was a lot of load bearing walls and the floor was.

00:49:52 Speaker 2

Let me see how.

00:49:54 Speaker 2

I have to show you this picture.

00:49:56 Speaker 2

The building was not able to be reused because the the middle one.

00:50:00 Speaker 2

Because the ceiling was 1 meter difference with the other buildings.

00:50:05 Speaker 2

The floor I mean.

00:50:15 Speaker 2

So we demount that.

00:50:18 Speaker 1

The demount now they.

00:50:19 Speaker 2

Were part of the facade we demount as you see, so the front facade we demand because the building was not.

00:50:21 Speaker 1

Yes, yes.

00:50:26 Speaker 2

Deep enough.

00:50:28 Speaker 2

And we had to add more.

00:50:30 Speaker 1

Mass, yes, so you you when you demount it you don't demount it called like.

00:50:31 Speaker 2

So 50% brightness up.

00:50:39 Speaker 1

Is it like the circular demounting they most likely piece by piece?

00:50:44 Speaker 1

They select selective selective demounting yeah, OK.

00:50:44 Speaker 2

See five piece and share exactly.

00:50:47 Speaker 2

Yeah selected demounting.

00:50:49 Speaker 2

That's why I don't say demolish because we reduced a few materials and we recycled the rest.

00:50:55 Speaker 1

Huh OK, OK.

00:50:57 Speaker 2

So 50% of the facade is there mounted.

00:51:01 Speaker 2

Here is here.

00:51:21 Speaker 2

I try to stand here to show you something.

00:51:32 Speaker 2

Look, you see the facade here was fused.

00:51:37 Speaker 2

Here you have a load.

00:51:37 Speaker 2

Bearing wall OK.

00:51:40 Speaker 2

Here you have a load bearing wall.

00:51:41 Speaker 2

You see we accepted that because it's part we could.

00:51:45 Speaker 2

We could reuse this part of the building.

00:51:48 Speaker 1

OK.

00:51:49 Speaker 2

Here you have a load bearing wall you see.

00:51:51 Speaker 2

In the facade.

00:51:52 Speaker 2

And here so the rest you look at what you can.

00:51:59 Speaker 2

Except, and that was.

00:52:02 Speaker 2

In that way, not much here.

00:52:04 Speaker 2

You have a staircase.

00:52:06 Speaker 2

Also, scare cases are always made with load bearing walls, so you accept that in the construction the building height was good enough.

00:52:15 Speaker 2

OK, that was color free as you see.

00:52:17 Speaker 1

OK.

00:52:18 Speaker 2

So in the structural sense, it was good.

00:52:21 Speaker 2

The facades on the other side we.

00:52:23 Speaker 2

Reused, but they were not good enough, so we added some materials OK to make them good. The other 50% is added. Some materials on the inside and outside to make the.

00:52:36 Speaker 2

Facade even better.

00:52:38 Speaker 1

OK.

00:52:39 Speaker 2

And the ceiling they were they were reused.

00:52:45 Speaker 2

Let's see column 3.

00:52:48 Speaker 2

And then we started two ads.

00:52:51 Speaker 2

Mass is.

00:52:52 Speaker 5

Second, this one.

00:52:53 Speaker 2

Also column free.

00:52:54 Speaker 2

For both learning problems.

00:53:01 Speaker 1

Second mention yeah extension.

00:53:02 Speaker 2

The the process is simple.

00:53:18 Speaker 2

We use click bricks.

00:53:19 Speaker 2

That's a brick that knows no cement.

00:53:23 Speaker 2

No cement and we are the first company in the world that gets 30%.

00:53:30 Speaker 2

He final.

00:53:37 Speaker 2

We are the company that gets 50% of 30% buyback on the click breaks the target liquids.

00:53:46 Speaker 1

Click click.

00:53:47 Speaker 1

Yeah, and why it's not for thermal, it's for environmental things is.

00:53:51 Speaker 2

Because they believe in a circular company.

00:53:54 Speaker 2

They said to bring back the bricks. We made a contract. We get 30% of the of the the purchase price back.

00:54:04 Speaker 1

OK.

00:54:05 Speaker 2

It's also energy neutral, so the building is still the.

00:54:18 Speaker 2

With solar panels, this energy natural and here you see, we added.

00:54:22 Speaker 2

Extended the roof and you don't see.

00:54:27 Speaker 2

Yeah, difference that it was already building, but if you look closely you see that this is the old fossil to see.

00:54:34 Speaker 2

And this is the new facade.

00:54:36 Speaker 1

And the new the new part is may I ask just for this one, is it?

00:54:43 Speaker 1

You used recyclable material or like new material, but are.

00:54:48 Speaker 2

This is a 24% recycled stone because right it's also linearly regulated. They cannot use more they can use, but they are not allowed to use more recycled stone, so it's already a big part. 1/4 is recycled.

00:55:06 Speaker 2

And it can be again recycled to 100%. OK, this loan and this is done in every material in the building.

00:55:15 Speaker 1

OK.

00:55:18 Speaker 1

I see then also in in [name of the second project] .

00:55:24 Speaker 1

Well, you you installed flexible partitions.

00:55:27 Speaker 1

That's what I when I was reading about the project used.

00:55:30 Speaker 1

That looks awesome.

00:55:30 Speaker 2

It's the same as well, no difference.

00:55:32 Speaker 2

Lose all the movie of all time.

00:55:34 Speaker 1

And no, but I actually I I.

00:55:36 Speaker 2

So I show you the the [name].

00:55:38 Speaker 1

Yeah, yeah.

00:55:39 Speaker 2

Here is exactly the same, only the shape is a L, not a rectangular, so that's the only difference.

00:55:44 Speaker 1

OK.

00:55:45 Speaker 1

OK.

00:55:45 Speaker 1

OK.

00:55:46 Speaker 1

But also in [name of the second project] , did you also add PV panel and in at zero energy?

00:55:50 Speaker 2

Yes, look you see the picture here.

00:55:53 Speaker 1

No sorry, in [case study 1].

00:55:56 Speaker 2

Yes, OK, we use PV panels photovoltaic so they are the most sustainable because they use the warmth and.

00:56:07 Speaker 2

The rays of the Sun to create energy neutral things V the warms the wall.

00:56:12 Speaker 1

Do you want and the right the the the the the, the yeah there is.

00:56:18 Speaker 1

So both both.

00:56:21 Speaker 1

Projects are they self generated?

00:56:26 Speaker 1

But is there anything related to water and both projects or one whenever it took?

00:56:31 Speaker 2

Water in Holland is not.

00:56:33 Speaker 2

It's really cheap.

00:56:34 Speaker 2

It's regulated in a really good way.

00:56:36 Speaker 2

Uh, it doesn't.

00:56:39 Speaker 2

It's not feasible to create your own water system.

00:56:42 Speaker 2

We have tried.

00:56:43 Speaker 2

All the options.

00:56:44 Speaker 2

It's not.

00:56:45 Speaker 1

It's not feasible.

00:56:46 Speaker 2

It's not feasible.

00:56:47 Speaker 2

OK, because it's a country rich of water and a really good water.

00:56:51 Speaker 1

System yeah so, but the energy you both are.

00:56:54 Speaker 2

You have to choose your battles.

00:56:56 Speaker 1

Yeah, exactly so both both projects are, let's say, zero energy.

00:57:01 Speaker 2

Zero energy circular sustainable mobility.

00:57:05 Speaker 1

What do you mean?

00:57:07 Speaker 2

We also add sustainable cars in our projects.

00:57:10 Speaker 2

We add sustainable cars so to reduce parking places.

00:57:14 Speaker 1

Ah, OK.

00:57:19 Speaker 2

Sharing cars.

00:57:20 Speaker 1

All sharing costs.

00:57:33 Speaker 1

OK.

00:57:34 Speaker 1

For when we talked about the the obstacles that that that the things called structures saying.

00:57:42 Speaker 1

Because here I have questions last question in this part and I think we answered many questions of the second part, but I would really make sure that related to the things that.

00:57:52 Speaker 1

Because the strategy.

00:57:54 Speaker 1

The key things we mentioned like separate layer, sorry ceiling regulations structure the key things.

00:58:01 Speaker 1

Facilitates the uh or like that judge.

00:58:04 Speaker 1

The building can be circular tool.

00:58:07 Speaker 1

Can I just?

00:58:09 Speaker 1

Propose an answer for the second question, so those three like ceiling height not less than 2.8 meter.

00:58:16 Speaker 1

The structure it shouldn't be load bearing should be column free.

00:58:20 Speaker 1

It should be strong, let's say.

00:58:22 Speaker 2

Column free is not the right word.

00:58:23 Speaker 2

We should use columns like.

00:58:26 Speaker 2

A load bearing point, not load bearing lines or walls, yeah?

00:58:30 Speaker 1

Works exactly OK and also the regulations so.

00:58:34 Speaker 1

The second question about the things that obstruct circular.

00:58:40 Speaker 1

Building a circle and adaptable building development.

00:58:43 Speaker 1

Could we say like those three can be also the the object?

00:58:47 Speaker 1

So load bearing walls?

00:58:49 Speaker 1

A can be an obstacle less than 2.8 meters is an obstacle.

00:58:58 Speaker 1

Could you say that?

00:58:59 Speaker 2

For sure, clarity there is not because you have a lot of materials per layer.

00:59:05 Speaker 1

OK.

00:59:05 Speaker 2

You can use all kinds of.

00:59:07 Speaker 2

For instance, here we use the click brick.

00:59:10 Speaker 2

OK, the click brick was used because the foundation of the building was strong enough.

00:59:15 Speaker 2

[case study 1] has a weak foundation, so we used microballoon that's.

00:59:24 Speaker 2

Micro concrete that's a concrete.

00:59:27 Speaker 2

With whole with a lot of air inside and fiberglass inside so it's really light lightweight, yes.

00:59:38 Speaker 2

OK, so we used lightweight.

00:59:41 Speaker 2

Concrete panels.

00:59:44 Speaker 2

Involved in so uhm.

00:59:48 Speaker 2

You have.

00:59:50 Speaker 2

Your restrictions sometimes also influence the material choice.

00:59:56 Speaker 2

OK.

00:59:57 Speaker 2

For instance here we wanted to have timber in the facade in [name], but it's not.

01:00:02 Speaker 2

I don't.

01:00:03 Speaker 2

We don't believe in timber.

01:00:05 Speaker 2

In the construction and in the facade, because it's.

01:00:09 Speaker 2

Not durable.

01:00:11 Speaker 2

It has a lot of maintenance.

01:00:14 Speaker 2

And so we used a circular composite that looks like.

01:00:18 Speaker 2

Timber or wood.

01:00:21 Speaker 2

But it's circular, so maintenance, so it's not timber, it is.

01:00:22 Speaker 1

OK, let's see how this.

01:00:25 Speaker 2

It's a look like but circular.

01:00:28 Speaker 1

OK.

01:00:28 Speaker 2

So in the circular.

01:00:32 Speaker 2

Kind of sense.

01:00:34 Speaker 2

You have infinite choices, huh infinite?

01:00:37 Speaker 2

Yes, because in the facade you can have infinite choices if you don't.

01:00:41 Speaker 2

If you're not able to make a heavy facade, then you choose a light material and so on.

01:00:47 Speaker 2

So circularity in mine opinion has in the material sense.

01:00:52 Speaker 2

Of the of of the word has no restrictions.

01:00:56 Speaker 1

And it can be, let's say achieved.

01:01:00 Speaker 1

Easily based on the feasibility and so OK.

01:01:05 Speaker 1

But regarding the regulations.

01:01:06 Speaker 2

The only restriction is maybe the resource prices.

01:01:10 Speaker 2

OK, what we experience because of the Ukraine war is now a good example.

01:01:15 Speaker 2

That the prices of steel has increased with 50%.

01:01:21 Speaker 2

And sometimes more so.

01:01:24 Speaker 2

If you choose.

01:01:25 Speaker 2

At a material that you really want to have in the building, then the resource prices can influence.

01:01:32 Speaker 2

That's maybe the biggest.

01:01:34 Speaker 1

Restriction, yeah, so regarding the the biggest restrictions for the the things they said like.

01:01:42 Speaker 1

A bit regulations, but resource crisis also.

01:01:45 Speaker 1

I see I see and.

01:01:49 Speaker 1

And also the the the the the system.

01:01:53 Speaker 1

Plot the system flaws that you talked about.

01:01:55 Speaker 1

Yes, yes.

01:01:59 Speaker 1

OK, now we we really talked I.

01:02:04 Speaker 1

I will also go back to the filter and sorry I need today because both both clauses are interesting for were interesting for me.

01:02:11 Speaker 1

And forgive me if I repeat the questions many times, but I I really learned a lot and I like that, you see.

01:02:14 Speaker 1

Right?

01:02:18 Speaker 1

Like for circularity there is infinite.

01:02:21 Speaker 1

Our choices and those important things because the each project has its own circumstances or features, so it's context specific so answer but for builder.

01:02:35 Speaker 1

I for I will ask about the reasons why both projects were transformed.

01:02:42 Speaker 1

First, Weivoda has been transformed.

01:02:46 Speaker 1

Was it vacant or was it outdated?

01:02:49 Speaker 1

Or both both?

01:02:53 Speaker 1

For the filter.

01:02:56 Speaker 2

Same, it's always the same.

01:02:58 Speaker 1

Yeah, so both are outdated and vague.

01:03:01 Speaker 2

Right or become vacant in a short town, yeah?

01:03:03 Speaker 1

OK.

01:03:08 Speaker 1

Like they they were obsolete and also injected OK.

01:03:13 Speaker 1

The the interesting thing.

01:03:18 Speaker 1

I think I.

01:03:19 Speaker 1

Have the answer because you answered in the beginning for decision, but also.

01:03:26 Speaker 1

[name of the company] always pushed the innovation.

01:03:29 Speaker 1

And think ahead.

01:03:32 Speaker 1

Always yes, but so is that.

01:03:32 Speaker 2

Awesome markets hearing.

01:03:37 Speaker 1

But why those projects?

01:03:39 Speaker 1

Why circularity?

01:03:42 Speaker 1

Was considered in both projects.

01:03:45 Speaker 1

Is that the same thing or like there is something?

01:03:53 Speaker 2

In the wide circularity, I think it's sort of adaptability again.

01:03:59 Speaker 2

In our philosophy or ideology is a better word in our ideology.

01:04:05 Speaker 2

It's important to make a building adaptable in errors.

01:04:10 Speaker 2

As far as you can make it circular, but circularity.

01:04:15 Speaker 2

It's about.

01:04:17 Speaker 2

In our way of the term about resources, about energy, about mobility, about.

01:04:22 Speaker 2

Ecology ecology so green in the building.

01:04:27 Speaker 2

So you try to do your best.

01:04:30 Speaker 2

As far as it's feasible.

01:04:32 Speaker 1

OK.

01:04:33 Speaker 2

OK.

01:04:36 Speaker 2

If you don't.

01:04:37 Speaker 2

Make the building first adaptable.

01:04:41 Speaker 2

By change of the market or change of use you will lose a lot of money.

01:04:46 Speaker 2

Because you also demolish it, yeah?

01:04:48 Speaker 2

So in that way it's also economical, no fuss.

01:04:50 Speaker 1

OK, so could we say like you?

01:04:53 Speaker 2

And not for us for the society, OK?

01:04:56 Speaker 2

So if you built.

01:04:58 Speaker 2

For instance, in a Lancer, bunk was built 30 years ago, is one of the most expensive buildings in Holland.

01:05:07 Speaker 2

After 30 years, they have to do it.

01:05:09 Speaker 2

They wanted to demolish it.

01:05:13 Speaker 2

That you called.

01:05:16 Speaker 2

Capital destruction of the country.

01:05:18 Speaker 2

Because you built and if you cannot reuse it, you demolish it.

01:05:21 Speaker 2

That's touches the economical sense of the country.

01:05:27 Speaker 2

So do more adaptable.

01:05:30 Speaker 2

And you make the more the economy is going to flourish because real estate is a big part of the.

01:05:39 Speaker 2

National product.

01:05:42 Speaker 1

You they said the main driver was to consider security and also adaptability was the economic feasibility.

01:05:51 Speaker 1

Financial, economic, financial financing.

01:05:53 Speaker 2

Economical feasibility.

01:05:55 Speaker 1

True time.

01:05:57 Speaker 1
Through time through time, yeah, exactly.

01:06:03 Speaker 1
So it's like.

01:06:06 Speaker 1
Uh, long term.

01:06:08 Speaker 1
Uh, perspective.

01:06:09 Speaker 2
Long term heritage is the normal financial.

01:06:12 Speaker 1
Yeah, is there any other the same motivation to to consider?

01:06:16 Speaker 2
Yes, if you have the economical parts then you have the.

01:06:21 Speaker 2
Ecological part.

01:06:22 Speaker 1
College football

01:06:24 Speaker 2
So the more you use the building in a sustainable way, the better it is for the planet.

01:06:32 Speaker 2
That's the ecological sense of the word.

01:06:35 Speaker 2
And the last one we call the emotional.

01:06:38 Speaker 2
So we have economic.

01:06:40 Speaker 2
Ecological and emotional and emotional means.

01:06:44 Speaker 2
I if I want to make.

01:06:48 Speaker 2
To have a healthcare building for my city, it should be possible.

01:06:53 Speaker 2
But if there is no healthcare need in my city, but we want a hotel, it should be able.

01:06:58 Speaker 2
So it should facilitate the emotion of the people that are living and are.

01:07:04 Speaker 2
Flourishing there, so in that kind of sense, making a beautiful building that is going to be used for thousand year.

01:07:11 Speaker 2
It's emotion.

01:07:12 Speaker 1
Yeah, so it facilitates.

01:07:15 Speaker 1
Emotional exactly do report, repeat, repeat, but I want really if you can explain again.

01:07:21 Speaker 2
It facilitates the emotional need of the inheritance of the city and the neighborhood where the building is in true time.

01:07:31 Speaker 1

OK, to the people or to leave to the inherited.

01:07:34 Speaker 1

Exactly, yeah.

01:07:39 Speaker 2

Because the building is always the building has a longer life span than the people.

01:07:46 Speaker 2

And it's been used by different generations.

01:07:50 Speaker 2

In different ways.

01:07:52 Speaker 2

And builds up stories, and those stories make the city.

01:07:59 Speaker 1

OK, but also is that emotional thing for also circularity.

01:08:05 Speaker 2

I don't think so.

01:08:08 Speaker 1

OK, now the heritage.

01:08:10 Speaker 1

Yeah, it's.

01:08:11 Speaker 2

Emotional thing.

01:08:13 Speaker 2

Because you use the building.

01:08:15 Speaker 2

But in a material sense of way, no.

01:08:19 Speaker 1

Can I add?

01:08:20 Speaker 1

Also, you consider circularity in those projects also in this way also, like a kind of.

01:08:28 Speaker 1

Innovation or like your ambitions.

01:08:34 Speaker 2

Circle Act is also used as an innovation because a lot of innovations, like bring without cements without wet connection.

01:08:43 Speaker 2

It's an innovation.

01:08:45 Speaker 2

We use photovoltaic panels as an innovation because we involved and we had not much roof area.

01:08:54 Speaker 2

Here we had a lot of room.

01:08:56 Speaker 1

OK.

01:08:56 Speaker 2

And then fill up.

01:08:57 Speaker 1

And you use PP.

01:09:00 Speaker 2

Yeah yeah yeah, we use normal solar panels because we had a lot of.

01:09:05 Speaker 1

Here, here is 0.

01:09:06 Speaker 1

But but in involved with what you did.

01:09:09 Speaker 2

PV panels is called photovoltaic panel.

01:09:11 Speaker 1

Yeah, I know so on those.

01:09:13 Speaker 2

These are solar panels.

01:09:15 Speaker 1

Ah, is there a difference?

01:09:16 Speaker 1

Because I always call them twice PV or solar panels versus.

01:09:19 Speaker 2

Yeah, there's a difference.

01:09:20 Speaker 2

One is only the warmth and one is the warmth and the rays.

01:09:24 Speaker 1

So yeah, so this one is PV.

01:09:28 Speaker 2

This one solar.

01:09:29 Speaker 1

So on.

01:09:30 Speaker 1

And lover, yeah.

01:09:37 Speaker 1

So just.

01:09:37 Speaker 2

It's and [case study 1] it's Pvt.

01:09:40 Speaker 1

Pay Pay Pvt Pvt.

01:09:44 Speaker 1

And the other one is.

01:09:47 Speaker 2

Or PP or solar panels.

01:09:49 Speaker 1

OK.

01:09:51 Speaker 1

Involver days you used Pvt.

01:09:54 Speaker 2

Involved in we use Pvt.

01:09:56 Speaker 1

Involve the Pvt.

01:09:58 Speaker 1

OK, and this one is solar.

01:09:59 Speaker 1

Yes yeah, this one is just V rays use the only delays.

01:10:04 Speaker 2

Ah yes, the warmth.

01:10:05 Speaker 1

I did.

01:10:06 Speaker 1

Right?

01:10:07 Speaker 1

We won't get.

01:10:09 Speaker 1

And the second one is used deep both.

01:10:11 Speaker 2

Also the reports yet.

01:10:14 Speaker 2

I see if you really want to know the details I can connect you to our construction manager then yeah, he can explain you exactly what the difference is, but.

01:10:22 Speaker 1

Yeah, but I got dimensions.

01:10:23 Speaker 2

This is as far as I understand it, yeah.

01:10:26 Speaker 1

Yeah, the circular strategies that you did involve the.

01:10:31 Speaker 1

And the and volverte.

01:10:35 Speaker 1

Yeah, can I go one by one that I not from our discussion and when I was preparing for this interview and since I read about [name of the company] with Hilde and I documented many strategies.

01:10:48 Speaker 1

Uh, for sure like as as.

01:10:50 Speaker 1

Far as you remember like.

01:10:51 Speaker 1

Yeah, so for [name of the first project] .

01:10:56 Speaker 1

What I read, like you used sustainable and circular material like and you mentioned like you used you list.

01:11:06 Speaker 1

Facade and so.

01:11:08 Speaker 1

You used efficient energy systems first, like you used the Pvt.

01:11:15 Speaker 1

But also is there something also in these systems that like energy efficient system and so on?

01:11:21 Speaker 1

Besides, like.

01:11:23 Speaker 2

Yes, of course.

01:11:24 Speaker 2

We start with.

01:11:27 Speaker 2

Trials energetica so we try to reduce the use.

01:11:33 Speaker 1

OK.

01:11:36 Speaker 2

Reducing the use is the way you build the building.

01:11:39 Speaker 2

You will the facade, the way you design the total system of skin and services.

01:11:44 Speaker 2

Skin is room and facade and services, so we try to optimize, reducing the use and then adding sustainable.

01:11:46 Speaker 1

Get insulin sources.

01:11:54 Speaker 2

Resources to provide, and that's a system?

01:11:58 Speaker 2

Yeah, yeah.

01:12:00 Speaker 1

Also, I notice that you focus on embodying flexibility and [name of case 1].

01:12:06 Speaker 1

Yeah, and you the flexibility or even adaptability.

01:12:11 Speaker 1

It can be facilitated by different ways.

01:12:14 Speaker 1

So you spirited delayers for sure, yeah?

01:12:20 Speaker 1

The bruntlett

01:12:23 Speaker 1

The second thing you used, a lightweight material.

01:12:29 Speaker 2

On the basis of.

01:12:30 Speaker 2

What's the construction As for filler?

01:12:33 Speaker 2

Fair, that was not.

01:12:33 Speaker 2

Needed and I'm asking.

01:12:34 Speaker 2

About filled Oval.

01:12:36 Speaker 2

Did vote OK volume.

01:12:38 Speaker 2

We used a light weight because we added two new.

01:12:43 Speaker 2

Floors on the top.

01:12:46 Speaker 2

We added two.

01:12:49 Speaker 2

We they mounted the.

01:12:58 Speaker 2

We demand the short.

01:13:01 Speaker 2

Two layers on the top of the building and we added some more square meters so the building became heavy.

01:13:09 Speaker 1

OK.

01:13:09 Speaker 2

And if the building becomes heavy, then you have to consider the facade the the materials you use.

01:13:15 Speaker 2

In the facade you see the the lights, those are.

01:13:19 Speaker 2

Light weighted concrete shelters.

01:13:22 Speaker 1

Which which is which is a man.

01:13:26 Speaker 1

Yeah, yeah.

01:13:27 Speaker 5

Which is.

01:13:28 Speaker 1

Those yeah.

01:13:29 Speaker 2

Exactly no the other one, the Gray, the Gray lines.

01:13:34 Speaker 2

Vertical and horizontal?

01:13:35 Speaker 5

Ah, this one.

01:13:36 Speaker 2

Yeah yes.

01:13:37 Speaker 2

The other one is steel above.

01:13:41 Speaker 2

A very thin steel panels.

01:13:43 Speaker 1

OK, so those are used also not.

01:13:47 Speaker 1

It's related to adaptability but also for structural.

01:13:51 Speaker 2

We we never used the facade as a structural.

01:13:55 Speaker 1

Ah, no, no, that's.

01:13:56 Speaker 2

We are because we want to be adaptable in the future to boot a balcony or change or portable window or something else.

01:14:00 Speaker 1

Yeah, yeah.

01:14:03 Speaker 1

I see so this one you separated the the delayers.

01:14:09 Speaker 1

Yeah, and you also.

01:14:13 Speaker 1

I noticed that you also embodied the multifunctionality not demano like yeah, so how how you also embodied in multifunctionality in in?

01:14:26 Speaker 2

We put the we make a sheet of all the functions that we want to have in the building that we think that is neat on that location in the future because in the future there's not going to be an energy central or something.

01:14:33 Speaker 1

OK.

01:14:36 Speaker 1

OK.

01:14:42 Speaker 2

It's not going to be a central station, so.

01:14:45 Speaker 2

You understand you focus on what you think that is going to be for, what it is going to be used.

01:14:53 Speaker 2

Most of the time.

01:14:55 Speaker 2

We look at hotel apartments, offices, healthcare schools.

01:15:01 Speaker 1

OK.

01:15:01 Speaker 2

And retail, those are the 5-6 functions that we try to embed. We both put those functions on the basis of the regulations beside each other.

01:15:15 Speaker 2

And we try to choose the most heavy regulations.

01:15:18 Speaker 2

For instance, the facade.

01:15:20 Speaker 2

Is based on living because the noise.

01:15:25 Speaker 2

Of a hotel, it's much more low than the noise that is needed for a facade in the landing.

01:15:32 Speaker 1

OK, OK.

01:15:33 Speaker 2

In a house, because in a house you live permanently in a hotel, you come and go so the regulation is less.

01:15:42 Speaker 2

Although the building is short.

01:15:44 Speaker 2

Stay slash hotel.

01:15:46 Speaker 2

We have put the regulation of apartments.

01:15:49 Speaker 1

Which is higher?

01:15:50 Speaker 2

Which is much.

01:15:51 Speaker 1

Higher so you designed for what we call extra, or overcapacity or surplus capacity OK.

01:15:57 Speaker 2

I think that's what we do, so we try to do that in every layer and in the space layer.

01:16:05 Speaker 2

That's the last layer space.

01:16:08 Speaker 2

We also look at the parking regulations for all the functions.

01:16:12 Speaker 1

OK.

01:16:13 Speaker 2

And we can add or changed.

01:16:17 Speaker 2

Parking places and we also fix it when we cannot fix it like that.

01:16:21 Speaker 2

We fix it with sustainable mobility.

01:16:24 Speaker 5

I see.

01:16:24 Speaker 2

So if you change, use.

01:16:26 Speaker 2

Also, the parking regulations changes so you also have to keep that in mind.

01:16:29 Speaker 1

OK.

01:16:32 Speaker 1

I I know it's that that.

01:16:33 Speaker 2

We put all the functions.

01:16:35 Speaker 1

Together and you get and you design the highest.

01:16:35 Speaker 2

Together choose best thing.

01:16:38 Speaker 1

The toys the highest or like.

01:16:40 Speaker 2

One important notice is that we don't make the installations in the way that it should.

01:16:51 Speaker 2

Cooperates with all the functions because if you have installation that can be a hotel, apartment, office, etc.

01:16:57 Speaker 2

You cannot pay the installations much too expensive.

01:17:01 Speaker 2

So in the building installations I mean building services in the building service layer.

01:17:05 Speaker 2

We look at the current use because the current use is always 10 to 15 years and then the building service are.

01:17:13 Speaker 2

Recycles and new building services are at.

01:17:18 Speaker 2

So in the 1st 3 layers.

01:17:25 Speaker 2

Like the tables.

01:17:26 Speaker 1

Yeah, this stuff and this this best man.

01:17:28 Speaker 2

Page plan.

01:17:31 Speaker 2

The ceiling, the normal room walls and the services.

01:17:34 Speaker 1

Other services.

01:17:38 Speaker 2

We look only at the first use.

01:17:42 Speaker 1

The first use.

01:17:43 Speaker 1

OK.

01:17:46 Speaker 2

But from this skin.

01:17:51 Speaker 2

The structure will look at.

01:17:55 Speaker 2

The coming users in the future and space of nurse from.

01:17:59 Speaker 1

Parking exactly because those are the the, the, the, the implant.

01:18:04 Speaker 1

Those are the most changeable and even this this stuff I think is changed per per less than 45 years and the service about 15 years and this space.

01:18:15 Speaker 1

Plan I think around 10 something like.

01:18:17 Speaker 2

10 or 15 yeah.

01:18:17 Speaker 1

That 10 or 15 so those are designed for the first.

01:18:23 Speaker 1

Choose between.

01:18:24 Speaker 2

We have here, you see the years.

01:18:27 Speaker 2

Staff 5 to 10.

01:18:29 Speaker 2

Spaceplan 10 to 15 yeah services.

01:18:32 Speaker 2

And so on.

01:18:33 Speaker 1

I see so, and you work with that for multifunctionality say that's what you did is therefore surplus capacity except for the first three layers you designed for the current user.

01:18:46 Speaker 1

Is there any any strategy that you did for to embody the multifunctionality in the building?

01:18:53 Speaker 1

Like other other solutions.

01:18:55 Speaker 2

And the structure is important to have a.

01:19:01 Speaker 2

We don't believe in central building services, So what we do is we cut the building is in the most smallest.

01:19:10 Speaker 2

Farts, and that's most of the time hotel or healthcare. Because those units are 25 square meter and every 25 square meter should be able to have its own building services.

01:19:24 Speaker 1

Ah, you're decentralized.

01:19:25 Speaker 2

So we make holes.

01:19:27 Speaker 2

We decentralize the installations.

01:19:30 Speaker 2

The building services by making holes in the construction.

01:19:36 Speaker 2

So the construction should be able.

01:19:40 Speaker 2

To facilitate a decentralized system through time, so the flexibility most people think that the flexibility of building is building services, but it's the structure.

01:19:44 Speaker 1

OK.

01:19:53 Speaker 2

If you have.

01:19:55 Speaker 2

Holes every 25 square meter. You can change the building through time.

01:20:00 Speaker 1

I see.

01:20:04 Speaker 2

Again, that's one of the.

01:20:07 Speaker 2

Requirements on the structural day.

01:20:10 Speaker 2

If I'm not able to make holes in the floor because then the floor collapses, then we don't renovate the building.

01:20:19 Speaker 1

I see is there any other strategy that you did with you list the facade or like operational lease and.

01:20:29 Speaker 1

And and and and voter you but is.

01:20:32 Speaker 1

And you also used PV.

01:20:35 Speaker 1

Is there also other or solutions you did circular and adaptable?

01:20:39 Speaker 1

Like I, I can repeat them immediately so rapidly and error sorry fastly.

01:20:45 Speaker 1

Then you can add and so use sustainable and circular material.

01:20:49 Speaker 1

You used energy efficient systems and you optimized.

01:20:53 Speaker 1

You embodied flexibility.

01:20:55 Speaker 1

You used lightweight material and you.

01:20:57 Speaker 1

Separate the layers.

01:20:59 Speaker 1

You embodied the multifunctionality through through design through listing all possible functions and you design it.

01:21:08 Speaker 1

Then for the top and the the the 1st 3 layers you design for the new host.

01:21:14 Speaker 1

You approach your operational operational.

01:21:17 Speaker 1

At least the facade, and you used PV panel is.

01:21:21 Speaker 1

Is there any other solutions you did involved in?

01:21:24 Speaker 2

Shared levels.

01:21:27 Speaker 2

Any other operations or solutions solutions?

01:21:31 Speaker 2

We have a really innovative installation system that is decentralized centralized.

01:21:43 Speaker 2

Centralized PV PT. Panels on the roof, but they centralise for every apartment.

01:21:47 Speaker 1

OK.

01:21:53 Speaker 2

We have a build.

01:21:54 Speaker 2

A tree in the middle of the building.

01:21:58 Speaker 1

Attrit 3 OK.

01:22:00 Speaker 2

The name is [case study 1] because it's named after the book of [name] and he wrote the book when he was in the.

01:22:06 Speaker 1

OK.

01:22:10 Speaker 2

Wood and standing after burnout wrote the book [name of case study 1], one of the famous books involved.

01:22:18 Speaker 2

It's called after that book, [name of case study 1], but it's also called because it's [name], [name] garden, and the place where the building stands.

01:22:26 Speaker 2

We also dive in the story.

01:22:28 Speaker 2

That's the emotional part and in the place where the building is there was a Asian forest.

01:22:37 Speaker 2

Ancient forest to a really old forest.

01:22:41 Speaker 1

OK.

01:22:42 Speaker 2

They demolished all the the the trees and build the city.

01:22:46 Speaker 2

So we planted the tree in the middle of the building also for air and.

01:22:50 Speaker 1

OK.

01:22:52 Speaker 1

So this one is emotional.

01:22:55 Speaker 2

And most you know.

01:22:56 Speaker 2

And of course also for Hilti to make the building.

01:23:01 Speaker 2

Yeah we have.

01:23:04 Speaker 2

Get all kind of crazy cradle materials in the building.

01:23:10 Speaker 2

We are sustainable tenant tenant that really looks at all kinds of sustainable ways to.

01:23:16 Speaker 2

At least the short stay apartments.

01:23:19 Speaker 1

OK.

01:23:23 Speaker 2

We choose this user because he.

01:23:28 Speaker 2

Create your 32 apartments and he gave back 32 apartments in the city to the city.

01:23:37 Speaker 2

So he combines them here in one building, so we are not.

01:23:37 Speaker 1

OK.

01:23:39 Speaker 1

OK.

01:23:42 Speaker 2

Because there is a shortage in apartments in The Hague in Holland, but also The Hague, we didn't want to.

01:23:45 Speaker 1

Yes, yes.

01:23:50 Speaker 2

Make that shortage even more.

01:23:53 Speaker 2

Buy short stays like a hotel concept.

01:23:57 Speaker 2

And there was a lot of a discussion.

01:23:59 Speaker 2

Why are you making hotel when there is a shortage in apartments?

01:24:04 Speaker 2

You can make apartments so we choose a tenant that makes here 32 apartments, but also give back 32 apartments. So we.

01:24:15 Speaker 2

Actually transformed vacant.

01:24:19 Speaker 2

Office to apartments at the end.

01:24:22 Speaker 1

Yeah, and the idea of short stay I didn't get.

01:24:25 Speaker 1

Was there's different nature?

01:24:26 Speaker 2

Short stays

01:24:27 Speaker 2

So if you were.

01:24:29 Speaker 2

Come here as a politician or something and you want an apartment for six months or eight months you.

01:24:35 Speaker 2

Can rent it.

01:24:36 Speaker 1

OK, so it's effort and and you you deliberately used to make it short.

01:24:42 Speaker 1

Stay not normal apartment.

01:24:43 Speaker 2

They are normal apartments.

01:24:45 Speaker 2

They are used by the.

01:24:48 Speaker 2

Current explorer explorer.

01:24:51 Speaker 2

As for today.

01:24:52 Speaker 1

OK, so the building the functions that are included in the building and builder is apartment or let's say the users that are now involved apartment short stay.

01:25:04 Speaker 2

Uh, yes.

01:25:05 Speaker 2

Living loge means apartments or hotel.

01:25:09 Speaker 1

OK and also hotel.

01:25:11 Speaker 2

It's it's not a hotel because although it's used for one day until two weeks Max.

01:25:11 Speaker 5

And there's.

01:25:18 Speaker 2

Short stay is four months, who rented until nine months.

01:25:22 Speaker 1

Yeah, so short stay apartment here.

01:25:28 Speaker 2

You mean the regulations?

01:25:29 Speaker 1

No no, no no.

01:25:30 Speaker 1

The the use of the.

01:25:31 Speaker 2

Only uses short stay short stay renting apartments offices on the ground floor and in the basement storage in the basement and fitness in the basement.

01:25:44 Speaker 1

Fit gym fitness and.

01:25:49 Speaker 2

4H also.

01:25:50 Speaker 1

So the building is really multifunctional.

01:25:52 Speaker 2

Yes, already.

01:25:53 Speaker 1

So it's not only one use like like there's a short stay, apartment storage, fitness and offices, so it's.

01:26:02 Speaker 2

Combination already.

01:26:03 Speaker 1

And even like, yeah already.

01:26:08 Speaker 1

Moving to [name of project].

01:26:10 Speaker 1

What I documented when I was reading about the project.

01:26:13 Speaker 2

Do you want a coffee before we go to the next question?

01:26:17 Speaker 1

We can't, yeah so.

01:26:17 Speaker 2

Another coffee, yeah.

01:26:20 Speaker 2

You can just put it on, I think.

01:26:25 Speaker 1

Yeah, let's keep it.

01:26:31 Speaker 1

[break].
01:26:33 Speaker 1
[break].
01:26:35 Speaker 2
[break].
01:26:41 Speaker 2
[break].
01:26:44 Speaker 2
[break].
01:26:50 Speaker 1
[break].
01:26:54 Speaker 2
[break].
01:26:55 Speaker 2
[break].
01:26:57 Speaker 4
[break].
01:27:05
[break].
01:27:07 Speaker 2
[break].
01:27:08 Speaker 1
[break].
01:27:12 Speaker 2
[break].
01:27:14
[break].
01:27:15 Speaker 2
[break].
01:27:25 Speaker 4
[break].
01:27:28 Speaker 4
[break].
01:27:30 Speaker 4
[break].
01:27:38 Speaker 1
[break].
01:27:40 Speaker 2
[break].
01:27:42 Speaker 5
[break].
01:27:47 Speaker 4
[break].
01:27:48 Speaker 4
[break].
01:27:49 Speaker 5
[break].
01:27:54 Speaker 5

[break].
01:27:57 Speaker 2
[break].
01:27:59 Speaker 2
[break].
01:28:01 Speaker 1
[break].
01:28:03 Speaker 4
[break].
01:28:07 Speaker 2
[break].
01:28:11 Speaker 2
[break].
01:28:13 Speaker 4
[break].
01:28:14 Speaker 2
[break].
01:28:17 Speaker 4
[break].
01:28:21
[break].
01:28:23 Speaker 2
[break].
01:28:27 Speaker 2
[break].
01:28:31 Speaker 1
[break].
01:28:32 Speaker 1
[break].
01:28:36 Speaker 2
[break].
01:28:38 Speaker 1
[break].
01:28:43 Speaker 1
[break].
01:28:45 Speaker 1
[break].
01:28:51 Speaker 1
[break].
01:28:54 Speaker 1
[break].
01:28:56 Speaker 1
[break].
01:29:01 Speaker 2
[break].
01:29:02 Speaker 1
[break].
01:29:05 Speaker 2

[break].
01:29:08 Speaker 2
[break].
01:29:09 Speaker 2
[break].
01:29:18 Speaker 2
[break].
01:29:19 Speaker 1
[break].
01:29:21 Speaker 1
[break].
01:29:21 Speaker 2
[break].
01:29:22 Speaker 1
[break].
01:29:23 Speaker 1
[break].
01:29:26 Speaker 2
[break].
01:29:29 Speaker 1
[break].
01:29:31 Speaker 1
[break].
01:29:33 Speaker 2
[break].
01:29:34 Speaker 2
[break].
01:29:41 Speaker 2
[break].
01:29:45 Speaker 1
[break].
01:29:47 Speaker 1
[break].
01:29:48 Speaker 2
[break].
01:29:53 Speaker 1
[break].
01:29:54 Speaker 2
[break].
01:29:57 Speaker 2
[break].
01:30:00 Speaker 1
[break].
01:30:02 Speaker 2
Only the.
01:30:03 Speaker 2
[break].
01:30:06 Speaker 1

[break].
01:30:09 Speaker 1
[break].
01:30:10 Speaker 2
[break].
01:30:24 Speaker 2
[break].
01:30:31 Speaker 2
[break].
01:30:33 Speaker 1
[break].
01:30:35 Speaker 1
[break].
01:30:36 Speaker 2
[break].
01:30:39 Speaker 2
[break].
01:30:46 Speaker 2
[break].
01:30:53 Speaker 2
[break].
01:31:09 Speaker 1
[break].
01:31:11 Speaker 1
[break].
01:31:12 Speaker 2
[break].
01:31:18 Speaker 2
[break].
01:31:20 Speaker 2
[break].
01:31:26 Speaker 2
[break].
01:31:28 Speaker 2
[break].
01:31:35 Speaker 2
[break].
01:31:36 Speaker 2
[break].
01:31:38 Speaker 2
[break].
01:31:43 Speaker 2
[break].
01:31:44 Speaker 1
[break].
01:31:44 Speaker 2
[break].
01:31:49 Speaker 2

[break].
01:31:51 Speaker 2
[break].
01:31:56 Speaker 2
[break].
01:31:58 Speaker 2
[break].
01:32:01 Speaker 1
[break].
01:32:03 Speaker 2
[break].
01:32:07 Speaker 1
10 pupils, yeah.
01:32:08 Speaker 2
[break].
01:32:19 Speaker 2
[break].
01:32:24 Speaker 1
[break].
01:32:40 Speaker 1
[break].
01:32:42 Speaker 1
[break].
01:32:43 Speaker 1
[break].
01:32:45 Speaker 1
[break].
01:32:48 Speaker 2
[break].
01:32:50 Speaker 2
[break].
01:32:54
[break].
01:32:55 Speaker 2
[break].
01:32:58 Speaker 1
[break].
01:33:00 Speaker 2
[break].
01:33:02 Speaker 1
[break].
01:33:05 Speaker 1
[break].
01:33:10 Speaker 1
[break].
01:33:15 Speaker 1
[break].
01:33:16 Speaker 1

[break].

01:33:20 Speaker 2

[break].

01:33:23 Speaker 2

[break].

01:33:26 Speaker 1

[break].

01:33:27 Speaker 2

[break].

01:33:29 Speaker 1

[break].

01:33:31 Speaker 1

[break].

01:33:33 Speaker 1

[break].

01:33:34 Speaker 1

[break].

01:33:37 Speaker 1

[break].

01:33:42 Speaker 1

[break].

01:33:48 Speaker 1

[break].

01:33:50 Speaker 1

[break].

01:33:52 Speaker 1

[break].

01:33:52 Speaker 2

[break].

01:33:54 Speaker 1

For [case study 2] we wanted to ask.

01:34:00 Speaker 1

Sorry for asking, but it's interesting.

01:34:02 Speaker 1

I documented many strategies that you did [case study 2].

01:34:05 Speaker 1

Yeah yeah you used old building material in the building facade.

01:34:12 Speaker 1

Yes, that's what I read in the.

01:34:14 Speaker 1

Your website or I think another?

01:34:18 Speaker 1

And so is it, an operational lease or not?

01:34:20 Speaker 1

Not it's not like filled in.

01:34:22 Speaker 2

No, this one is not operational list.

01:34:24 Speaker 1

Ah, so the facade.

01:34:26 Speaker 1

This one is approaching this for related in in Europe side you mentioned like you used the old building material and building facade material with it from the project or from another project.

01:34:37 Speaker 2

We have used, for instance, you see at the right part of the facade.

01:34:42 Speaker 2

This word tells tales.

01:34:45 Speaker 2

We use the tails brackets and incorporated in the new floor and some kinds of buildings so.

01:34:53 Speaker 2

This one material we reused.

01:34:57 Speaker 1

But but in another function and another.

01:35:01 Speaker 2

Application in the building, but the rest of the building was so.

01:35:05 Speaker 2

Immensely poorly built.

01:35:07 Speaker 2

It was the you can see.

01:35:09 Speaker 2

It in the.

01:35:10 Speaker 2

Picture it was really bad built so we could not.

01:35:14 Speaker 2

Use it directly.

01:35:15 Speaker 2

We recycled the materials with our partner Michel Bars.

01:35:18 Speaker 2

Its new horizon.

01:35:22 Speaker 2

A new right and is our partner in demolishing the mounting instead of demolishing.

01:35:27 Speaker 1

Yeah, So what they did?

01:35:30 Speaker 1

For the poorly, uh.

01:35:32 Speaker 2

Recycling it to use it in new materials.

01:35:35 Speaker 1

In another process or OK.

01:35:37 Speaker 2

Other projects.

01:35:41 Speaker 1

So you give it to the demolisher you sell.

01:35:44 Speaker 1

It or what?

01:35:45 Speaker 2

The demolishing costs were not much.

01:35:47 Speaker 1

OK.

01:35:48 Speaker 2

So he incorporated in his price the value of the.

01:35:52 Speaker 1

Material so they demolish it and they will select a.

01:35:56 Speaker 2

Yes, and that's.

01:35:57 Speaker 2

Why they demolish it for a lower price?

01:35:59 Speaker 1

OK.

01:36:14 Speaker 1

But for the facade, because we're adding the facade, use old material also used the old material in the building facade and inside the building.

01:36:25 Speaker 2

We also use a lot in the in the movie, 50% of the facade is reused, so we added materials to the existing facade to make it.

01:36:33 Speaker 1

OK.

01:36:37 Speaker 1

Yeah yeah yeah, the other application is that when you you you reprocess the facade used inside the building to what exactly I forgot.

01:36:38 Speaker 2

New again.

01:36:50 Speaker 2

In the floor and in some interior things like the bar of the kitchen and so on.

01:36:57 Speaker 1

OK, like us, finish it.

01:36:59 Speaker 2

Not much, not much is reused because we had not.

01:37:03 Speaker 2

High quality materials in the building.

01:37:04 Speaker 2

The building.

01:37:05 Speaker 2

Was really poor.

01:37:06 Speaker 1

Yeah, as you use it as when you reuse those those things as finishes like or finishing OK.

01:37:10 Speaker 2

Finishing, yeah.

01:37:12 Speaker 2

Layer, they like the space plane layer.

01:37:15 Speaker 1

Yeah, space.

01:37:15 Speaker 2

Base plan and the stuff layer.

01:37:23 Speaker 1

OK.

01:37:24 Speaker 1

And then you you recycled.

01:37:28 Speaker 1

Is that one the the, the the?

01:37:31 Speaker 1

But also we you in during our session before.

01:37:33 Speaker 1

We we moved there.

01:37:36 Speaker 1

You mentioned that you recycle this stone brick.

01:37:42 Speaker 1

Click yeah, the.

01:37:45 Speaker 1

I I didn't you recycled ah the 100% this one I think.

01:37:49 Speaker 1

This one decrypt it.

01:37:50 Speaker 2

Yeah, the click rate is new but one.

01:37:54 Speaker 2

4th, it's recycled stone.

01:37:58 Speaker 1

1/4 like 25% is.

01:38:02 Speaker 2

More or less.

01:38:03 Speaker 2

Because that's regulated.

01:38:06 Speaker 2

The European regulation.

01:38:08 Speaker 2

They are not allowed to recycle more.

01:38:11 Speaker 1

OK, they click, click and.

01:38:13 Speaker 2

And the clip break can be recycled.

01:38:15 Speaker 2

For 100%.

01:38:18 Speaker 2

So if you recycle the clip brick for 100%.

01:38:22 Speaker 2

25% of it you can use in a.

01:38:24 Speaker 2

New clip where?

01:38:24 Speaker 1

So it's it's 25 of the click. Brick is recycled, yes, but also it can be recyclable and 100% interesting. And is it? Is it the click broadcast has good thermal?

01:38:31 Speaker 2

Disciple 200% against Miss.

01:38:38 Speaker 1
Performance I'm I'm not sure you mentioned that, yeah.

01:38:40 Speaker 2
Yes, every performance is better than a normal brick.

01:38:44 Speaker 1
Yeah, is that one?

01:38:46 Speaker 2
Yes, that one and we also there have one the.

01:38:50 Speaker 2
The yellow yeah there you see the difference, yeah?

01:38:53 Speaker 1
It's just a guess.

01:38:56 Speaker 1
Interesting, yeah it's new for me like to see like because and so we we used the CMU.

01:39:03 Speaker 1
The I'm not sure it's not here in the Netherlands, the concrete messenger block.

01:39:07 Speaker 2
Oh yeah, yeah, I know what you mean.

01:39:09 Speaker 2
And then they put cement on it and yeah, but that's that's a wet.

01:39:10 Speaker 1
Cement it's similar, yeah?

01:39:14 Speaker 2
Yeah, connection and I'm against wet conditions.

01:39:16 Speaker 1
Yeah, so this one is not with connection.

01:39:19 Speaker 2
This is likely go you have a pin or minimum pin.

01:39:24 Speaker 2
You can put inside.

01:39:25 Speaker 2
You let me show you there.

01:40:27 Speaker 2
Only the first layer on the floor.

01:40:31 Speaker 2
You connect wetly.

01:40:33 Speaker 2
And then you go up like Lego.

01:40:35 Speaker 1
So that's.

01:40:36 Speaker 2
So only the the first is with yes.

01:40:40 Speaker 1
OK, and I think even if it's width can be demounted easier.

01:40:43 Speaker 2
Of course just cement.

01:40:45 Speaker 1
Yes yeah, I see.

01:40:48 Speaker 1

So this is interesting.

01:40:51 Speaker 1

Then you also used in [case study 2] installation of flexible partition.

01:40:57 Speaker 1

So I when I was reading about you used flexible partitions to facilitate a special to facilitate spatial flexibility and user related changes.

01:41:14 Speaker 2

That's right.

01:41:15 Speaker 1

Did you do that also [case study 2]?

01:41:18 Speaker 1

Sort of all over after development of older.

01:41:20 Speaker 2

One practical how?

01:41:21 Speaker 2

Long do we need you think because I?

01:41:22 Speaker 1

I think.

01:41:23 Speaker 2

Have to prepare the next meeting.

01:41:24 Speaker 1

Yeah I can.

01:41:25 Speaker 1

We can wrap wrap up.

01:41:26 Speaker 1

I think I have.

01:41:27 Speaker 1

Just I can do it within 15 minutes, so so the installation, the flexible partitions.

01:41:29 Speaker 2

OK, yes.

01:41:33 Speaker 1

Yeah, and both you you use installation flexible partition used in both project yeah.

01:41:37 Speaker 2

Exactly page central, yeah?

01:41:41 Speaker 2

We get the air conditioning from the facade.

01:41:44 Speaker 2

We have a system that is getting the air from the facade.

01:41:48 Speaker 2

And it's cooling and warming the air by the solar panels.

01:41:53 Speaker 2

And the rest of the building services.

01:41:57 Speaker 2

We are decentralized.

01:42:01 Speaker 2

Next to the load bearing points of the columns.

01:42:03 Speaker 1

Yeah, yeah.

01:42:09 Speaker 2

But they are exactly the same, they're centralized.

01:42:13 Speaker 1

This centralized server.

01:42:18 Speaker 1

OK, and and you use the the the solar and you also use you selectively D mounted the facade.

01:42:29 Speaker 1

So I I notice that and also for sure.

01:42:31 Speaker 1

You spread layers.

01:42:32 Speaker 1

OK, yes.

01:42:38 Speaker 1

Is there any other strategies that you did [case study 2]?

01:42:43 Speaker 1

Other than those or those?

01:42:45 Speaker 2

Those are the strategies.

01:42:49 Speaker 1

For quick questions for both questions for both case studies.

01:42:55 Speaker 1

What were the DVD the?

01:43:00 Speaker 1

The thing the the enablers that facilitates.

01:43:04 Speaker 1

The implementation of those.

01:43:07 Speaker 2

Strategies entrepreneurship and idealism.

01:43:11 Speaker 1

OK.

01:43:12 Speaker 2

Because you.

01:43:14 Speaker 2

You're entrepreneur and you take risks.

01:43:17 Speaker 2

You implement things that you believe in because of your idealism.

01:43:23 Speaker 2

And they prove to be.

01:43:25 Speaker 2

Good, because Boeing Fest bought it.

01:43:29 Speaker 2

The building full of fairly for instance.

01:43:32 Speaker 2

Put it in the healthcare fund of 600 million of healthcare buildings and named this as the most circular.

01:43:41 Speaker 2

He'll care building in their health care fund.

01:43:44 Speaker 1

OK.

01:43:46 Speaker 2

And it has to be the example.

01:43:48 Speaker 2

So you take risks you believe in your idealism.

01:43:52 Speaker 2

And then the market adapts it.

01:43:54 Speaker 1

OK.

01:44:03 Speaker 1

OK, is there any other things that really also facilitate the implementation of such innovative strategies beside the entrepreneurship, like, uh, something related to the projects or even?

01:44:18 Speaker 2

I think you need also partners that have the same ideology, or at least believe in your ideology.

01:44:21 Speaker 1

OK.

01:44:26 Speaker 1

OK.

01:44:28 Speaker 2

Not also determinant.

01:44:37 Speaker 1

OK, what else?

01:44:45 Speaker 2

Good examples, so if for example you are as best as your previous example, OK, so examples help to convince people.

01:44:54 Speaker 2

Your own people, but also other people to push farther to make better products.

01:45:02 Speaker 1

Now those are the key enablers.

01:45:06 Speaker 1

What were the things that you really faced difficult when doing those strategies?

01:45:10 Speaker 2

We talked about that in the in the first part.

01:45:14 Speaker 1

Are the the same the mono?

01:45:18 Speaker 2

Multi functional, ugly and we also talked about.

01:45:22 Speaker 1

The the three system flaws and.

01:45:24 Speaker 2

These three system flaws are those.

01:45:29 Speaker 2

Disablers and we also talked about.

01:45:33 Speaker 2

The linear obstacles when you are circular.

01:45:37 Speaker 2

Developing because of the nail on the bunk.

01:45:38 Speaker 1

OK.

01:45:40 Speaker 2

I called a.

01:45:40 Speaker 2

Lot of things like the docs regulation like the all kinds of stuff.

01:45:45 Speaker 1

So following business as usual parity.

01:45:53 Speaker 1

OK, so that's good.

01:45:57 Speaker 1

Were there other other strategies that you you thought because you are always creative that you consider to do on both strategies but you didn't do?

01:46:08 Speaker 2

Infill affair that we wanted to make it the the most smart healthcare building in the world, but you come to know that the health care organization is afraid of change.

01:46:21 Speaker 1

You're smart.

01:46:22 Speaker 2

To make it smart, they have their own system that they monitor elderly people and they didn't want to change that in a new smart.

01:46:25 Speaker 1

OK.

01:46:33 Speaker 2

System, so a lot of things that we want to do in innovation also touches the end user and to change the end user to adapt your innovations.

01:46:42 Speaker 1

OK.

01:46:48 Speaker 2

It's really difficult and a lot of time fails.

01:46:52 Speaker 1

OK.

01:46:53 Speaker 1

OK, so you didn't do these smart monitoring as a system of monitoring and the end user.

01:47:00 Speaker 1

Uh, design?

01:47:01 Speaker 2

Because of the yes, the end user that didn't adapt, it didn't wanted it because at the end they are going to use the building for 15 or 20 years.

01:47:05 Speaker 1

OK.

01:47:11 Speaker 2

And we are not.

01:47:14 Speaker 2

Able to force them use a smart system.

01:47:19 Speaker 2

Because they are using the building nuts, not we.

01:47:22 Speaker 1

OK.

01:47:23 Speaker 2

So innovations that touches the.

01:47:28 Speaker 1

End user.

01:47:28 Speaker 2

End user are always really difficult.

01:47:31 Speaker 1

Oh right, yeah, OK.

01:47:33 Speaker 2

And we just let it go most of the time.

01:47:40 Speaker 1

OK.

01:47:41 Speaker 2

Scylla fed.

01:47:42 Speaker 2

I wanted to to have a electrical drone flying toxic planning building.

01:47:50 Speaker 2

We prepared the building but did not drone.

01:47:53 Speaker 2

There did not achieved it, and we want to achieve it at the next part.

01:47:59 Speaker 2

So that's also something that we did not achieve drawing for.

01:48:06 Speaker 1

Like because still drill.

01:48:09 Speaker 2

Like a helicopter?

01:48:10 Speaker 1

Ah, OK, see.

01:48:14 Speaker 4

Let's say that.

01:48:16 Speaker 1

Uh, uh, yeah.

01:48:20 Speaker 1

We talked about the.

01:48:24 Speaker 1

The the.

01:48:27 Speaker 1

The but the aspects that facilitated those strategies.

01:48:33 Speaker 1

I think we talked about it before.

01:48:34 Speaker 1

Like the UM, the SLA, what?

01:48:39 Speaker 1

What could we say?

01:48:40 Speaker 1

It said that the regarding bowl advert and and and and vault and the the the the enables that that we can say like it's facilitated because in the beginning when we talked about say like.

01:48:56 Speaker 1

The ceiling and so on.

01:48:57 Speaker 2

Exactly exactly.

01:48:58 Speaker 5

It is.

01:48:59 Speaker 1

The same like ceiling.

01:49:01 Speaker 2

Saying we talked about now.

01:49:02 Speaker 1

Ceiling structure

01:49:04 Speaker 2

Yeah, I call it technical.

01:49:05 Speaker 2

You read the code ability and in technical adaptability you have the seven layer of grant and the sale of seven layer of branch.

01:49:13 Speaker 2

You have the 1st 3 layers space structure of skin.

01:49:18 Speaker 2

They have to adapt all kinds of functions and then you have the less layers they adapt.

01:49:25 Speaker 2

The next function yes, and then you have the heretical parts.

01:49:28 Speaker 2

That's where you choose for multi functions.

01:49:31 Speaker 2

That's in a nutshell where we discussed and every layer has its own.

01:49:37 Speaker 1

Yes, uh.

01:49:39 Speaker 2

Restrictions or regulations or yeah.

01:49:39 Speaker 1

Yeah, yeah.

01:49:42 Speaker 1

So in this way, technical and theoretical adaptability, if we think them, if we think about them and work and life for them, it's the main facilitator for adaptability and circularity.

01:49:55 Speaker 2

It's tool time.

01:49:58 Speaker 1

Yeah, yeah.

01:49:59 Speaker 1

OK, we end up working with our key questions just for for, for, for, for closing up.

01:50:08 Speaker 1

We had actually.

01:50:10 Speaker 1

Not not nice.

01:50:11 Speaker 1

Discussion just the small questions like what do you think about the future of adaptable security?

01:50:17 Speaker 1

And also adaptability in the future?

01:50:21 Speaker 2

I think it's the future.

01:50:22 Speaker 2

It's the way I had.

01:50:23 Speaker 2

There's no other route.

01:50:25 Speaker 2

OK, because materials are becoming scarce.

01:50:29 Speaker 2

And expensive.

01:50:33 Speaker 1

OK.

01:50:33 Speaker 2

99% of real estate exists.

01:50:37 Speaker 2

Already there comes 1% of real state every year.

01:50:41 Speaker 2

It's added so at the.

01:50:43 Speaker 2

End we have to reuse.

01:50:45 Speaker 2

The existing part we cannot add more than 1%.

01:50:48 Speaker 2

There's no not enough money to demolish and add, so at the end we have to reuse what we have.

01:50:50 Speaker 1

OK.

01:50:55 Speaker 2

So it's it's also economical.

01:50:58 Speaker 2

No other option than.

01:51:02 Speaker 2

Transform 2 time.

01:51:05 Speaker 2

We as we won't say.

01:51:07 Speaker 2

We don't wait for the perfect time to come, we'll.

01:51:10 Speaker 2

Redevelop through time.

01:51:12 Speaker 1

OK you.

01:51:13 Speaker 2

We redevelop through time.

01:51:19 Speaker 2

So we don't wait for the perfect time to come.

01:51:22 Speaker 2

We redevelop through time.

01:51:24 Speaker 1

Is there any anything?

01:51:26 Speaker 1

Would you like to add in this?

01:51:28 Speaker 1

Regarding the adaptability, circularity and so on?

01:51:37 Speaker 2

No, everything happens.

01:51:39 Speaker 1

OK.

01:51:41 Speaker 1

Lust and lust, lust yes.

01:51:44 Speaker 1

If you don't mind mind and it's voluntarily question that.

01:51:49 Speaker 1

For both cases, like Volverte wanted or also for other cases, do you have?

01:51:55 Speaker 1

Because in my research for studying case studies, also interviewing people, do you have a certain contact or certain projects to to to maybe study?

01:52:07 Speaker 1

In my project that you recommend me to?

01:52:10 Speaker 2

It depends what you do.

01:52:11 Speaker 2

You want to speak someone about the detail of materials?

01:52:16 Speaker 2

Do you want to speak someone that is financially someone?

01:52:19 Speaker 2

So what kind of an interview do you would like to have?

01:52:21 Speaker 1

Let's, let's say let's say the technical things for.

01:52:27 Speaker 2

Like technical things, I can also connect you to our construction manager, can tell you a lot about the technical part of the buildings.

01:52:34 Speaker 1

OK.

01:52:36 Speaker 4

OK.

01:52:36 Speaker 2

Yeah, that's interesting for you, yes.

01:52:37 Speaker 1

Who's in there?

01:52:39 Speaker 2

Yeah, yeah, that's the guy that's walking around here.

01:52:44 Speaker 2

Yeah, it can tell you everything about the DVD's about the building systems, about the materials that are used, all the techniques in the building.

01:52:54 Speaker 1

OK.

01:52:55 Speaker 1

Is there possibility to go for those projects or off by myself voting this has been completed or?

01:53:02 Speaker 2

Yeah, Baldwins completed the interior.

01:53:05 Speaker 2

The party that is renting from us.

01:53:08 Speaker 1

Yeah, yeah.

01:53:09 Speaker 2

It's finishing now.

01:53:10 Speaker 2

The interior interior is almost finished.

01:53:12 Speaker 1

Yeah, he goes there for every once in a while.

01:53:16 Speaker 2

Yeah yeah you can.

01:53:17 Speaker 2

You can.

01:53:18 Speaker 2

I think it's the best to walk involvement with him when he's there to discuss when he's there and appears time you can.

01:53:20 Speaker 1

Yes, yeah.

01:53:24 Speaker 2

Maybe yeah, I can.

01:53:26 Speaker 2

To to show you around in the building?

01:53:28 Speaker 2

Yeah that would be nice because it makes the story a little bit more stronger and technical.

01:53:28 Speaker 1

OK.

01:53:33 Speaker 2

I'll talk about more strategic and sceptical level and it will tell you a lot about the.

01:53:35 Speaker 1

Yes, this is yeah.

01:53:39 Speaker 1

The technical things.

01:53:40 Speaker 2

The technical.

01:53:40 Speaker 1

So I will.

01:53:41 Speaker 1

I will really yoga, yoga, yoga.

01:53:43 Speaker 2

Jelka and opponent.

01:53:46 Speaker 1

OK, I will.

01:53:48 Speaker 1

I will tell him it's also voluntarily to propose other case study or other projects to investigate.

01:53:56 Speaker 2

To investigate you mean circular projects?

01:53:59 Speaker 1

Search close.

01:54:00 Speaker 1

Transformation circular ripple transform axes.

01:54:03 Speaker 2

Only transformation.

01:54:07 Speaker 1

Or a new build.

01:54:08 Speaker 1

A new build.

01:54:10 Speaker 1

Transferable truth.

01:54:14 Speaker 1

Because I saw for instance, so I'm trying to keep in contact with.

01:54:17 Speaker 1

The Elma or llama.

01:54:20 Speaker 1

I think.

01:54:20 Speaker 1

Her name.

01:54:21 Speaker 1

She's she's she's architect and she's design, I I'm I'm seeing here mentioning her name because I saw projects that she always posted in her LinkedIn about green transferable building.

01:54:30 Speaker 1

She's building a new but transferable building, so it's either like several buildings.

01:54:37 Speaker 1

Permission or building that are built to be circular and transferable transferable.

01:55:01 Speaker 2

I have a friend of mine works at the edge technology that and they transformed.

01:55:12 Speaker 2

Hey office to a new office Buckhead.

01:55:16 Speaker 2

I don't know if that's interesting enough for you.

01:55:18 Speaker 2

From old office to a new one.

01:55:19 Speaker 1

OK, so the we called in new.

01:55:22 Speaker 1

Or within use transformation.

01:55:22 Speaker 2

It is transformation.

01:55:25 Speaker 2

That could be, but that's I think that's not exactly what you seek.

01:55:30 Speaker 1

But it's adaptive.

01:55:31 Speaker 2

Yeah, it's circular.

01:55:33 Speaker 2

Yes, but adaptable now it's from office to office so better office.

01:55:35 Speaker 1

Ah, OK.

01:55:37 Speaker 1

OK.

01:55:39 Speaker 2

I don't know many, I don't know really, companies that do what?

01:55:42 Speaker 1

We do, yeah.

01:55:45 Speaker 2

You have companies that transform an office to a.

01:55:48 Speaker 2

Apartment, but that's not adaptable.

01:55:52 Speaker 2

They change the use, but again, in a monofunctional way of the thinking, so I don't know.

01:55:58 Speaker 2

Actually that's what I say.

01:55:59 Speaker 2

It's really weird that the market is not adapting this concept, yeah?

01:56:06 Speaker 1

Yeah, maybe I can talk with hold the letter with each technology and if can I can.

01:56:11 Speaker 2

If it's interesting.

01:56:12 Speaker 1

Yeah yeah, I yeah, I can't talk to her.

01:56:12 Speaker 2

I can connect you to your project manager.

01:56:16 Speaker 1

It might be interesting.

01:56:18 Speaker 1

Yeah, I just think I will consider it so really.

01:56:20 Speaker 1

Thank you so much, Sam, and I'm so sorry for the long meeting.

01:56:24 Speaker 1

It's planned for half an hour, an hour and a half, but we extend it for more.

01:56:30 Speaker 1

So Chris.

01:56:31 Speaker 2

It was interesting, and I think your questions were really to the point.

01:56:35 Speaker 2

So some parliaments.

01:56:35 Speaker 1

Yes, yeah yeah.

01:56:38 Speaker 1

I'm I'm really grateful to you, I learned.

01:56:40 Speaker 1

But and I will keep in touch with you for.

01:56:44 Speaker 1

The findings of this research and we'll keep in touch.

01:56:48 Speaker 1

Also, my first paper got accepted last week with Hilde and Vincent, so we theoretically.

01:56:56 Speaker 1

Investigate adaptability and circularity and the interesting thing back that would initiate our initial understanding of the theories were too theoretical because it was a literature review paper.

01:56:59 Speaker 1

No catch nice.

01:57:09 Speaker 1

But many things as the theory, it's in line with what you.

01:57:11 Speaker 1

Are mentioning so even?

01:57:13 Speaker 1

Technical and so on.

01:57:15 Speaker 1

So once it got accepted we will share it with you.

01:57:18 Speaker 1

Good because we defined what circular adaptability circular adaptability we created a new term.

01:57:26 Speaker 1

So circular circular adaptability and we came up with the.

01:57:31 Speaker 1

So for that reason, the first part of this interview was to assist our first the literature findings and it will be revised.

01:57:38 Speaker 1

But also our initial understanding was a bit.

01:57:42 Speaker 1

Around what what you mentioned about for sure.

01:57:44 Speaker 1

Like the the practices will refine our so however interesting, so hopefully within.

01:57:48 Speaker 2

Interest something.

01:57:52 Speaker 1

I think if it's if the production team moved it fast, so it's going to be.

01:57:57 Speaker 1

Shared with you soon.

01:57:59 Speaker 1

Uhm, our literature review study.

01:58:02 Speaker 1

Uhm, what?

01:58:02 Speaker 2

He needs.

01:58:04 Speaker 1

For sure it will be revised.

01:58:05 Speaker 1

The findings will be revised in the next part.

01:58:09 Speaker 1

So Many thanks you too.

01:58:11 Speaker 2

Let me know if I can help in something else.

01:58:14 Speaker 2

I will connect you to my colleague or the technical part and if I can do anything else in the future, let me know and tell.

01:58:15 Speaker 1

Yes, yeah, I bet.

01:58:21 Speaker 2

Hilda and Vincent.

01:58:22 Speaker 2

If they are here in.

01:58:25 Speaker 2

And around the corner somewhere [location of the interview] let them come here for a.

01:58:29 Speaker 2

Cup coffee, yeah.

01:58:30 Speaker 1

Yes, So actually yeah.

01:58:31 Speaker 2

Yeah, here in our office so they are welcome to come here for a cup coffee.

01:58:35 Speaker 2

They can call me.

01:58:36 Speaker 2

They have my number, so let them know that I really like to have them here just to catch by.

01:58:39 Speaker 1

Will will say that yeah really she she personally asked me just to contact you because they they know.

01:58:49 Speaker 1

So really we learned a lot and like your experience and your knowledge we learned from it.

01:58:56 Speaker 1

So thank you so much.

01:58:58 Speaker 1

I I will end the recording so thank you so much.