

TRANSCRIPTION PODCAST SIEMENSSTADT CALLING #9

- SUSTAINABILITY -

Dr. Christine Lemaitre

We need clear, precise target values that are expressed in terms of CO2 emissions, because that is the currency of our time.

Sarah Tietze

Hello from Berlin and welcome to Siemensstadt Calling. A new urban quarter is being built in Siemensstadt and with it a 70-hectare piece of the future. How we will live and work in the future is therefore also one of the central questions that we explore in our podcast. My name is Sarah Tietze, and I'm always joined in our podcast by Stefan Kögl, who, together with his team, is implementing the future space in Siemensstadt. Yes, Siemensstadt Square is becoming a completely CO2-neutral district. And given Germany's climate goals of being climate-neutral by 2045, that of course sounds quite fantastic and super exciting. So exciting, in fact, that I would like to find out more about it and have lots of questions. What is it like to live in such a CO2-neutral district? What levers do you have to pull to make a district CO2 neutral? Will all German cities be CO2 neutral in 2045 or will a few exceptions remain? And where does urban development stand today? So how important is it to shift into turbo gear now? Lots of questions. I have many more and it's wonderful to have people next to me with all the answers. Today we have three great interviewees, absolute experts in their fields, and first of all I would like to welcome the managing director of the German Sustainable Building Council. Hello Dr. Lemaitre, great to have you with us.

Dr. Christine Lemaitre

Hello, it's great to be here.

Sarah Tietze

Ms. Lemaitre, I've listened to a few of your podcasts and read through some material, and there's one goal that has clearly resonated with you for a very, very long time. That goal is to make the construction industry Future Proof or fit enough to build sustainably. That's definitely a very great goal. So, from that perspective it's great that you're here. You're in exactly the right place.

Dr. Christine Lemaitre

To save the world, I always say exactly. So, a very simple goal.

Sarah Tietze

Saving the world sounds very simple. Rainer Kohns is also involved, and Rainer Kohns also saves the world a to some extent. At least from Siemens' side. Rainer, you've been responsible for sustainability at Siemens for many years, and now you're in the process of adjusting Siemensstadt for sustainability. And you're also an absolute believer in sustainability, making sure that sustainability isn't just on the marketing brochure, but is deeply rooted. Great to have you with us, Rainer.

Rainer Kohns

Yes. Hi Sarah, thank you so much for having me.

Sarah Tietze

Yes, and Stefan Kögl will also be there. Most of the listeners already know Stefan. Stefan and his team run the Siemensstadt Square project, and I would say that you are responsible for ensuring that the topic of sustainability is at the top of the Siemensstadt agenda. It's cool that you're here again.

Stefan Kögl

Yes. Hello Sarah, hello Mrs. Lemaitre, hello Rainer.

Sarah Tietze

I already said at the beginning that I have quite a few questions. I'm also quite curious, so to get a lot of questions answered quickly we'll begin right away with a quick question round. A little game that we've prepared, we call the game "3 minutes future". The rules of the game are very, very simple. Everyone gets five questions and has exactly one minute to answer the five questions. I'll set my stopwatch again, so I know we're going to get this right. Mrs. Lemaitre, I would very much like to take you into the first future minute, if that's okay with you.

Dr. Christine Lemaitre

Sure. Gladly.

Sarah Tietze

I already mentioned this at the beginning. Germany wants to be climate-neutral by 2045. Is that ambitious, or can we save the climate even faster?

Dr. Christine Lemaitre

It must go faster, but at this point the last possible date is 2045.

Sarah Tietze

Germany also wants to become a cycling country. Do you have 3 tips to hand?

Dr. Christine Lemaitre

Well, I don't think I can generalise. I think that this of course always depends on topography and other factors. I think you must be a little careful. You really must consider the traffic mobility mix. Despite the focus on bicycles and public space, this should not be forgotten. It is simply there for people, including people who do not ride bicycles. From that point of view, we should also pay attention to the design of our public spaces, so that a pleasant environment is created, not just with bicycles in mind.

Sarah Tietze

That's very specific. What was the last activity that made you feel bad about the environment?

Dr. Christine Lemaitre

Oh well, I haven't flown for over a year now. That is of course a contentious matter. Of course, traveling is also part of my job and that's when you think... But as I said, for the last 12 months I've only been travelling by train. So, for some time now. Actually, not at all any more.

Sarah Tietze

And if you had a sustainability wish – if you were a wish fairy - what would you wish for?

Dr. Christine Lemaitre

Just start, stop over-theorising and over-complicating the issue. And just start, because I think sustainability very often has something to do with common sense. And we seem to have forgotten that fact over the last few decades. And I think we need to get back to quality and awareness and really do the right thing. That's what I would really like to see and just start. To stop just talking about it and turning the big numbers back and forth, but to really say: everyone in their sphere of influence just starts now.

Sarah Tietze

And if discussing how to begin, would you rather choose Annalena Baerbock or Greta Thunberg for a lunch meeting?

Dr. Christine Lemaitre

Annalena Baerbock. I think Greta Thunberg has... her message is already quite clear...

Sarah Tietze

Stefan, over to you. We read a lot that in the future every house can become a small power plant, which generates energy, stores it and even feeds it back into the power grid.

Is that a realistic future scenario or is it exaggerated?

Stefan Kögl

No, it is possible and feasible today. I think it's more of a challenge for the all the listed buildings that we have. We still need some solutions to develop these buildings into this category as well.

Sarah Tietze

And which sustainable construction project from another city do you find inspiring?

Stefan Kögl

Oh, there are of course many at present, especially in Scandinavia. I'm thinking of Copenhagen UN17, but I'd also like to remind you of Siemensstadt, which is still in use today - it's over 100 years old - the buildings were certainly a very sustainable construction project because they're all still in operation, including the production facilities that we have.

Sarah Tietze

If you walk through Siemensstadt Square with your son in 10 years, what do you think he'll like best?

Stefan Kögl

Well, I think the technologies that will be implemented are certainly interesting and exciting. For the most part, the younger generations deal with them instinctively and expectantly. And in that respect, yes, they are actually just waiting for such things to be implemented. Like autonomous driving or working with holograms or the like.

Sarah Tietze

Would you rather talk to Elon Musk or Luisa Neubauer about these technologies?

Stefan Kögl

Luisa Neubauer's message is indeed clear, but I would like to have a conversation with her, simply because she is still very young. I would ask: What is relevant for her in the city of the future?

Sarah Tietze

Is there an environmental sin you've committed lately... that has made you feel bad?

Stefan Kögl

Since I don't fly at all and haven't flown recently, it's minimal. So, I think flying is certainly one of the aspects that we can change. And we can see that traveling less works very well in some cases.

Sarah Tietze

Didn't order food and get too much waste delivered or things like that?

Stefan Kögl

I think that is within limits, in fact. After all, there are markets, there were, etc.. So that was all relatively doable.

Sarah Tietze

Rainer let's jump over to you. Buildings and sustainability: Which three aspects of sustainable construction really have the greatest leverage?

Rainer Kohns

I would say limit land consumption, because we are still wasting too much land. Consistently use renewable energies, not only in construction but also in mobility, and immediately stop the degradation of biodiversity.

Sarah Tietze

Is there a sustainability showcase from another city that would get you excited?

Rainer Kohns

That's hard to say. I would mention our Crystal in London. An exhibition pavilion and office building that we built for the 2012 Olympics in London and that shows a lot of what we want to implement here in Berlin, for example the principle of the All Electric Building.

Sarah Tietze

That brings us to our key topic. What will be the coolest sustainability projects in the new Siemensstadt?

Rainer Kohns

That's hard to say. So maybe we'll start with urban development, which will be consistently less focused on cars, but also the careful use of land by trying to make the traffic areas multi-modal. But it will also be the sustainably designed buildings, with a lot of photovoltaics, but also a lot of green. And last, but not least, I would perhaps also like to mention that through urban development we have laid the foundation to offer innovative modern forms of mobility a playing field here.

Sarah Tietze

Keyword European or also German climate targets: what will we citizens be able to feel firsthand by the year 2030?

Rainer Kohns

Yes, I hope that by 2030 the effect of the European climate targets will be felt as much as the climate change that is already overwhelming us with great force. We will probably notice the significant growth in electro-mobility, for which we have been preparing for years and which will become established by then, an essential prerequisite for the further consistent use of renewable energies. In either case, the consequences of climate change will also increasingly concern us beyond our energy policy.

Sarah Tietze

Do you have a bad environmental conscience about something you did in the last few days or weeks?

Rainer Kohns

Yeah, I'll come clean. Yesterday I ate a beef steak, to misquote Bible verse; "The spirit was willing, but the meat was just too tasty."

Sarah Tietze

Yes, there is bad news and good news. You probably noticed it yourself, we broke the 3 minute mark. We didn't make it. But the good news is, I think we came a big step closer to understanding what a CO2 neutral district is. In any case, I have learned a lot from the questions, but I still have many, and I would like to ask Dr. Lemaitre again first. On this subject, where do we actually stand?

I once heard Dr. Lemaitre say that the building industry's efforts to become CO2 neutral and climate-friendly are clearly a marathon, not a sprint. If it were a marathon, where...at which section of the route are we today? Where is the construction industry today?

Dr. Christine Lemaitre

Yes, it's like a good marathon, there are some who somehow run it in 2 hours, virtually sprinting through it, and then there are some who then cross the finish line after the rest, many hours later. And I think you can really use that image very well in relation to the construction industry. We have people who are making very dynamic progress, who are already planning, constructing and operating climate-neutral buildings and neighbourhoods.

Dr. Christine Lemaitre

But there is simply still much to do. And, of course, there is too much of the motto: 'This is how we always did things'. Of course, you only have to drive through our German cities to see what is being built or has been built here. From that point of view the field is not very homogeneous, and I believe that this is also the great challenge that we are facing, and that we as the DNB are trying to systematically work out how we can achieve this transformation. Because we can't save the world with a few good examples.

Dr. Christine Lemaitre

We need to move away from great pilot projects and move toward scaling up and broadening our scope. And to do that we also have to - and I think this is even more difficult in Germany than it is on the international stage - achieve these very small structures. You can see this just in the architecture companies. The average architecture company in Germany has, I think, around 7 to 10 employees. So, these are not the large firms that we know from the international arena.

Dr. Christine Lemaitre

We need to reach craftsmen, people who carry out the work. I think we're already on the right track and I think the great thing is, as I said, that there are already buildings in operation that are climate-neutral or climate-positive. That means we can really build the future today. That's not really a vision of the future. And I believe that the construction sector is already well ahead of many other sectors, because they are adopting this view, so to speak.

Dr. Christine Lemaitre

How can that work? Well we really, really need to make it more widespread, because otherwise we'll have the problem – staying with the image of the marathon - that the leading group will break away. And if those running behind are no longer able to find their bearings and just get completely left behind, then it will of course be incredibly difficult to reach them. And I think that's something you can already see in recent years, the big ones who can do this, who want to do this, are very dynamic in their approach. And then there is this tendency for many to say; 'well, how am I supposed to manage all this?' So I think we have to make sure that we take everyone along with us and deal with the issues a bit more pragmatically. Don't over-theorize them, because that naturally also deters people.

Sarah Tietze

How important is the construction industry in terms of CO2 emissions, for example? So how relevant is it to mobilise the masses in this industry to join in the marathon?

Dr. Christine Lemaitre

Yes, well, everyone knows the big numbers. I think around 40 percent of global CO2 emissions come from the construction sector. And then the building sector also... radiates into other sectors. I always say that a building represents the ultimate coupling of sectors. This is because we have building products that are used here which also emit CO2 emissions during production, but these are in fact assigned to the industrial sector. We have the whole issue of mobility, electro-mobility, where the building suddenly becomes a filling station. We have the topic of energy production at the building, so that all aspects converge here. So, of course, building or having buildings has a huge impact on the achievement of climate targets. But I think we must not forget that either, and the cons have already been mentioned. We are in the middle of a climate change, we feel it more and more. And we must develop an understanding for our urban environment, talk about quality and the creation of a built-up environment in which we feel comfortable and well. Because we will have to adapt so much to other things all the time and always just react. And in building, we also urgently need to take action. On the one hand, to achieve the climate targets, but also to create a liveable environment for all of us.

Sarah Tietze

Dear Rainer, what does sustainable building really mean exactly? Is it rather more than climate protection?

Rainer Kohns

So, for me sustainable building means above all a prudent and integral, i.e. holistic building that does not make the building task dependent only on investors, but takes into account the entire life cycle of the building, right through to demolition and, if necessary, the reuse of the building materials. In addition, climate-sensitive construction is becoming increasingly important, because the careful use of green roofs and facades not only prevents overheating in the building itself, but also in the urban space around it. In addition to low energy consumption, climate protection naturally also means the careful use of building materials, and here with preference for renewable building materials such as wood.

Sarah Tietze

Stefan, there are very clear goals. Siemens has set a clear goal of becoming climate-neutral by 2030, while Germany has said that we want to become climate-neutral by 2045. Has the construction industry also defined such a target, or will there be one? Such that there will be a point where you can say - the entire construction industry is 100 percent climate neutral. Can that be achieved?

Stefan Kögl

So, I don't think it's achievable at least in the next 10 years. As Ms. Lemaitre already said, CO2 emissions are currently extremely high. It also has to do with the fact that a lot of construction is carried out with concrete, and we would need other materials very, very quickly. However, some of them are not infinitely available. So even if we were to switch everything to wood tomorrow, we would not be able to build everything in wood worldwide, because there is not that much wood available. That means we need a few other ideas and other materials in the construction industry in order to become truly CO2 neutral. In construction, that is, in operation it is of course a different story.

Sarah Tietze

Don't we need precisely defined regulations if such an ambitious goal of "climate neutrality by 2045" is to be achieved?

Dr. Christine Lemaitre

Yes, definitely. So, I believe, and I just wanted to add this, that the question is always what... what are we talking about when we say climate-neutral? If you are talking about a company being climate neutral, then of course it's also about transport routes, travel, whatever. And then there is also the question of how we generate this climate neutrality. So, at some point we will probably talk about compensation.

There is huge competition going on right now. I was present at the last three climate conferences, and there is now also the great sport of so-called commitments. Everyone commits to becoming climate neutral at some point, and I think you always have to look at what it's all about. And of course, the construction industry, as mentioned, the manufacturers of construction products, their emissions belong to the industrial sector. Construction companies, of course, also have the whole issue of transport routes and other things. As the DGNB, we are currently looking very closely at the context of buildings and neighbourhoods. And I think it has to be said that it is not about climate neutrality reaching zero. In the end, this is a calculation, a balance sheet that is drawn up. What we are advocating is that we actually do better in every construction project. And I think that's what it's much more about, that you really move things forward and make them better in your own sphere of influence. And it's not about any kind of balance sheet or commitment from anyone, because that's also incredibly difficult to grasp. I think we always lose people who are not experts in the field, because they can't imagine anything about it. And I think it's also a little bit like this in the media, where it's going from celebration to deep sadness. So, there are these great commitments about who will be climate neutral by when. There's a lot of hope, and on the other hand there's the news about what's not happening yet and how climate change is progressing and how the temperature records are again being set. And I think we must be sure that we don't overload things in any way, but that we really stay within our sphere of influence. And I think clear goals, such as the topic of "building with wood", that is exactly what we need. We need to finally get away from these efficiency strategies that we have had for many decades, especially in construction, in construction legislation. Towards clear CO2 target values for construction as well as for operation, and even a wooden house does not have zero CO2 emissions on the day of construction completion. It just doesn't. There are foundations in there, other materials. And I think that if we have clear target values, then it will be easier for the industry on the whole to deal with them in some way, because otherwise it's a bit like the Yeti effect. Everyone talks about it, no one has ever seen it, and everyone defines it a little differently. It also generates a lot of frustration and uncertainty, and then it's always this: Well, I'll wait and see. From that point of view, sure, we need clear, precise target values that are expressed in CO2 emissions, because that is the currency of our time. And therefore, also in construction, because that is a part of the construction industry that deals with the construction of buildings. In the operation, there are also other partial actors and other responsibilities. I believe that if we had clear goals for this it would go much faster and this, paired - this is always a very big issue for me - with monitoring.

The reality is that we don't know exactly how much energy all the buildings in Germany really consume, in other words, how much CO2 they emit. We talk about projections and we talk about renovation rates. We must get down to the building level, there's no way around it. And I think clear CO2 target values must be coupled with a monitoring obligation for all, so that we actually know where we stand and where it makes sense to renovate. Where each euro is well invested and where not. I think that would change the whole game and the whole industry, which is already very much characterised by a lack of transparency. We don't have a culture of asking questions, we don't have a culture of measuring what we started in the planning stage against what actually came out later. And I believe that these are the two things that we are working very hard to achieve. I believe that this would very quickly steer the transformation in the right direction and move away from everyone trying to define climate neutrality for themselves.

Sarah Tietze

Clear goals don't sound that complicated to me. Stefan, who would have to define such goals so that everyone sticks to them?

Stefan Kögl

All right. Now you can always point the finger at politics, that's always the easiest thing to do and of course it's certainly an important factor here. But I also believe a bit in development within society and within the value norms. So, at present you can ask the question, what offers are coming from the construction industry itself? From my point of view, they are still somewhat meagre, also because construction is determined by finances. Whoever builds inexpensively, gets the order. But if companies formulate certain goals and make specifications based on their values, this will also effect the construction industry. At least that would be my hope. It's just a question of whether this lever will exist and, above all, when. I think it will be very effective because we see it in mobility, where just a few years ago a loud roaring car was somehow attractive. Today it became more repulsive. Today it's maybe more repulsive. And, of course, people prefer to drive an electric car. I could imagine that there will also be developments in other sectors that will then cross-fertilise each other. Not only goals, but also user requirements.

Sarah Tietze

Yes, 2045 sounds so near to me, somehow close enough to touch. Ms. Lemaitre also nodded. I think you would rather see something a little more concrete, with clear goals or controls.

Dr. Christine Lemaitre

Yes, I think that is really quite dramatic. One must say, when the COP 21 was introduced the world celebrated. The agreement on the famous 1.5 or in the worst case 2 degree goal. In 2005 the COP 21 was also the first world climate conference with a so-called Buildings Day. That is to say, a day with which concentrated only on the build-up of the environment and the achievement of climate goals. But now almost six years have passed. The last world climate conference was postponed due to Corona. Now our hopes are pinned on Glasgow. With that in mind, the emphasis is on starting - I can't emphasise that enough. So we somehow spent six years waiting, as always for the politics to catch up. That's something that I find very difficult, because we at DGNB seek rather to surpass our targets, we just voluntarily do much more than required. We see this also in the Siemensstadt project. On the other hand, politics must of course pave the way and stop controlling the details. They should take a look at the big picture and rather leave room for innovation. And in that respect I find we have a kind of backwards world. The massive detail in some of the laws means that at some point it's no longer fun to try something new. I think that is a reason that fire-safety has such a bad name in the media. Especially with reference to the wood building concept. But none dare, for example, to restructure the energy efficiency or CO2 emission laws. Here the rules do not work together and one often has the feeling that symptoms are being treated, rather than making an effort to attain larger long-term goals. And this turning point is something that I would really wish to happen now. Politics that sets clear goals, whilst still leaving enough room and space for the competence of developers and businesses, to let innovation thrive and to simply get things moving faster. And that the bureaucracy doesn't take away your interest because everyone is only talking about liability. That is by now the number one subject for us. The constant, "Yes, but.. oh, we'll have to see..." We will never progress like that.

Sarah Tietze

I am also interested in how life in such a CO2 neutral district would feel. What would be different to the districts in which we already live?

Dr. Christine Lemaitre

Yes. So what I.. what we hope for and what we see is the planned CO2 neutral area - CO2 is always in relation to the subject of energy - but that it is already being built with a sustainable concept. That means that we see less traffic floorspace. By now we often see it in areas of the mobility hub conversation, the possibility to really bundle mobility such that you no longer have cars parked left and right of the footpaths. Lots of green, and the opening of spaces.

I think this is also very important to ensure that biodiversity is also promoted. If we are talking about CO₂, or even energy, then the planning of the CO₂ neutral area begins with the planning, also of the buildings. They will then all be appropriately optimised such that not only the sun is effectively utilised, but also the natural shade, to avoid excessive overheating. This also helps to avoid the impulse people have to go to the store and buy air conditioning.

Here there is great emphasis, also with reference to the architecture, on a large section of photo voltaic window panels. That means that energy creation within the building is a must, we have to say. In principle it is a mix of efficiency strategies. That means bringing energy consumption down to a minimum. But to function with CO₂ neutrality we must consider the range between summer and winter. If we look over 12 months, then it makes sense to have energy production on the buildings. That means putting photo voltaic cells on the roof and the external walls, which will also help to attain a climate-neutral state. Concerning this, I am not sure. This is of course something that we very much wish for, that such areas have concepts that consider how the later occupants can be brought into the discussion. Especially here we must consider how such positive change in behaviour can be triggered. We know of a nice project in a residential building. They developed a kind of internal communications system with gaming element, such that even the residents are positively motivated to address their energy consumption to avoid letting the consumption in their home become greater.

So I think that goes hand in hand. One is what we provide technically for a neighbourhood like this. But the other is also that we inform the people that live there, take them along, motivate them positively, and don't present the whole issue as too much of a renunciation discussion. That you are then no longer allowed to do certain things, but simply show solutions, how you can also just be a part of the whole. And as I said, we see buildings, neighbourhoods, which today are demonstrably climate neutral or we call it climate positive in the operational sense. Because we have to be honest, we don't have such a high planning precision to get perfectly to zero in 12 months, and the projects that are ambitiously planned and also consistently in operation are usually climate positive. That means they generate more energy than they consume. And I think that is always positive news. Which then also gives us the opportunity to balance out other things.

Sarah Tietze

Stefan, you also know a lot about marketing projects like this. Do you think it's challenging to find a clientele that feels comfortable in a district like this?

Precisely with the premise in mind that as a resident you also have to participate. In other words, you have to promote the issue of sustainability.

Stefan Kögl

So, within this context I think it is always a question of flexibility and comfort. Today's tenants and users have their own living requirements, and should these be met tomorrow in a similar way, then we can say that is okay and interesting. I think there will be things in a climate-neutral district, as you mentioned Sarah, that the user will notice. And things that he simply will not notice at all. The one that they might not even notice is how the energy is generated. So I mean, in the worst case, there are still coal-fired power plants today. But that can of course work with renewable energies. And as Ms. Lemaitre already mentioned, in theory it would also have to have decentralised support from within the buildings. But another important factor is that we don't really know the consumption levels. So the buildings today are partly... So the tenant... as I've said many times, gets his bill once a year and doesn't even know where he stands. And in the same way, often it is only the owner that knows the energy consumption. I know what efforts we have made at Siemens Real Estate in recent years to be able to calculate consumption at all, and to do so on a daily basis via sensors and networking. It's an enormous effort, and it would have to happen in order to be able to grasp such a district at all, wouldn't it? Or an existing city. And then you can certainly use monitoring, as Ms. Lemaitre said earlier, to have a better understanding of where consumption can occur. It is possible, I would say, to use them mutually between buildings, networked buildings. And this alone can generate enormous savings. But what is also essential in such a district is mobility, I think. So if we drive through Friedenau today and the streets are completely congested with cars, it's clear to everyone that that's not so ideal. Probably. And that's where I would like to... We've already had the question of when, how long will the internal combustion engine be around in several discussions. I've been on several panels, including last year, I've had all kinds of numbers. I'm going to go out on a limb and say that we won't have any more combustion cars in 2030. No more combustion engine cars will be sold, I am one hundred percent convinced of that. So you can already see in the automotive industry how the tendency is tipping massively. I simply can't imagine who will still be buying a combustion engine in three or four years' time. And I'm betting that this will lead to enormous changes in the urban districts and also in terms of CO2 neutrality, at least locally.

Sarah Tietze

Do you agree, Dr. Lemaitre?

Dr. Christine Lemaitre

Yes, definitely. And I believe so. We have to, well... So, I also think you will see some things, even as a resident. Others are just the way they are because they're just also technical. That's also just this scenario. Maybe we have the marathon. That's exactly the point, that we have transparency, that we have monitoring, so that we can adjust things and perhaps understand what is going wrong? Where can we maybe retrofit during operation before we start talking about structural measures, especially in the case of renovation? But I also believe that we need to involve people more in becoming caretakers. For the built environment as well. I mean, we see that everywhere. Where people take care of the houses they live in there is, of course, a completely different atmosphere than in districts where this is not the case. And I think we have to get out of our security discussion to some extent, and perhaps also when we talk about biodiversity. And of course we also come from this insane culture of the car city and this security. And if you think about the Vauban quarter in Freiburg 25 years ago, I would say that today it is as topical as it was then, so it really is an example of a sustainable quarter. There were sometimes many discussions, just because they said we don't put the curb here, so that people can simply experience different floor coverings, and then step onto grassland and fear that someone will break a leg or something. They of course also have a slightly crazy discussion there and some measures were also then enforced. Especially in the outdoor area, where fear of vandalism, fear of something or other, leads to the "we've always done it like that" mentality. And I believe that bringing more green back into the cities is something that will reach people in a positive way. But that also means removing some areas and, of course, getting people involved and not just saying that someone else should take care of it. So this caring and understanding, I think that's a very important element and I always find that very unfortunate. I mean, it's our living space. We spend 90 percent of our time around and in buildings. If you look at public buildings and see what kind of effort is sometimes made to somehow combat vandalism and other things, something is not quite right about the way we perceive and value our built-up environment. It's very important for a neighbourhood like this that people understand this as a responsibility.

Sarah Tietze

Yes, participation is a very good keyword. We are currently in dialogue with the people of Berlin and we are asking them: How do you actually want to live in the future? What is important for you to hear, to see. What course should we set for Siemensstadt? And a lot of questions are coming in at the moment.

Some of them are also about sustainability. Here I would like to present two. And Dr. Lemaitre, maybe you can answer them. I'll take a look at my technical colleague and say: roll the sound..

Zuhörer I

Hello, my name is Cita Schäfer. I have lived in Siemensstadt for 10 years and naturally follow the Siemensstadt Square project with great interest. I think it's great to have the opportunity to ask a few questions here. Mine would be: I read that Siemensstadt Square received an award, a sustainability award. I would like to know how one is awarded the prize, especially being awarded it before construction has even started. I look forward to your answer.

Stefan Kögl

Yes, I can perhaps respond to that. Perhaps it has been misunderstood a little. We have a certification, a pre-certification for a very high sustainability standard from two labels, i.e. the LEED and the DGNB labels. This means that the concept is examined by experts, independent experts, not those who planned it, but independent experts, and this is examined very intensively and then, to put it casually, is found to be good or less good. And the concept for Siemensstadt Square was judged to be very sophisticated and of very high quality. And there is now a certificate confirming that this is the case, and now the task is to actually implement it. I'd say that now the work begins.

Dr. Christine Lemaitre

We are also very strict and make sure that everything is adhered to. Exactly.

Stefan Kögl

Perhaps... Excuse me, something needs to be added. Of course, there is also monitoring in the as we progress, then there is the implementation certificate in the next step. And there are also very high standards linked to the control, etcetera.

Sarah Tietze

That means that Siemensstadt Square has set its sights on a marathon in under three hours.

Dr. Christine Lemaitre

Exactly. And then exposed to this transparency, so to speak, that the DNB then also asks critical questions. After one hour, one and a half hours, how things are going? Exactly.

Sarah Tietze

Well, that sounds exciting. Let's see if it works. We have one more audience question or listener question that we're going to play now.

Zuhörer II

Hi, my name is Marc. I am interested in sustainable living and wonder if housing will also become sustainable in the future. Above all, I am interested in whether I, as what you might call a normal citizen, will be able to afford it. I would be very happy to receive an answer.

Sarah Tietze

Will sustainable housing become more expensive?

Stefan Kögl

There are, so to speak, two developments in this regard, that's how I would want to answer it. And one, or rather one question of course, that cities have to answer when a lot of people move into cities - how does housing remain affordable? And one is perhaps costs that are incurred in sustainable construction or for sustainable construction, but the other is of course to what extent such housing is subsidised. I mean, in Siemensstadt, 30 percent of the apartments that will be built there will be rent-controlled, i.e., socially subsidised. In this respect, we need to achieve a balanced mix. And I think these programs, and there will be similar ones elsewhere, or there are throughout Berlin, of course, but also in other cities, certainly. And the discussion about rent caps or suchlike is certainly not yet finished. And certainly, political answers will still have to be found to counteract a, let's say 'rent development' in the cities.

Dr. Christine Lemaitre

Yes, so that's clear. Of course, I think it's primarily a political issue. Generally speaking, sustainable construction is not more expensive as such. Nor should it become more expensive. I think you always have to think about that when it comes to housing: what is money spent on and when? And what does this sustainability issue mean? That's why I flinched a bit when I heard the term "sustainable living". Of course, there's a whole lot in there, right down to some consumer goods or other. If you break it down to the buildings, then you have to say that you can't equate it with blind compliance with any laws, but it's really about certain holistic rights. The right solution for the task or for the context. We have evaluations that show that building sustainability is not expensive or not more expensive. We know many building owners who say quite clearly; we stayed within budget. If you plan it right from the beginning and also plan consciously.

And I believe that in the area of housing - which is of course also a difficult discussion - the efficiency advances we have made over the years have been eaten up by the need for more living space. And then you have to consider whether you can compensate for this with certain concepts. The city of Vienna, for example, does a great job of building smaller apartments, but then providing common areas in the building. In neighbourhood management, they really simply provide high-quality living space outside of one's own apartment. This is something that the residents really appreciate. And I think we have to take another holistic look at this and then also consider what has really been invested in the built space, so to speak, or what am I investing in and what living space can I provide outside the apartment? A measure of quality for myself and many others is whether you can spend time somewhere. So here we are again with the topic of common areas, green places in the outdoor area. I believe that this can compensate a little for what cannot always be translated into square meters of living space.

Stefan Kögl

I would highlight what Ms. Lemaitre says with regard to construction costs per se. This will also develop significantly in the next few years. So the more requests there are for certain concepts, the more economical it will become. And in the cities we have the biggest problem, that there is simply a lack of land. The land is getting more and more expensive and that is actually what drives price in the housing sector. In the big cities, and if this were taken into account in some form or solutions were found for that, then I would say sustainable building is not the.. not the hurdle or the cost factor in the end.

Dr. Christine Lemaitre

So, maybe that's a very brief addition. Well, I think one thing is precisely the question of land. However, I think that the issue of funding modalities is also important. The other thing that has to be said is the question: more expensive than what? And we simply have many years behind us where building was simply of poor quality. That has to be said as well. And that's why I think we have to deal with this issue in a very differentiated way. It doesn't help people who are looking for an apartment and only have certain options. But that's also another question, also for politicians and also for the question of what standards are actually set for what? And I always find this discussion about prices very difficult. I mean, we are talking about our living space, we are talking about uses for 50 and many more years, ideally. And we should really be thinking about what our quality benchmark is when we talk about costs.

Dr. Christine Lemaitre

But in the building industry the motto is, the cheaper the better. And that is not always synonymous with building quality. That's why I always find this.. I always have a problem with people saying, 'Oh, sustainability is expensive'. I always think, we haven't benchmark for non-sustainability. So if sustainability means quality, then we accept in a broad sense that we do not need building quality. But people moving as soon as they can afford something better they move out again also isn't the right solution for people. That is why I believe that we have to talk more about the topic of quality when discussing building and building costs.

Sarah Tietze

Rainer, do you have to be able to afford sustainable housing?

Rainer Kohns

Of course, we will be able to afford it. You can't just look at the construction costs, you have to keep an eye on the entire life cycle costs, i.e. the operating costs. But I think I've already said that. By the way, I always find it interesting that sustainability is seen in contrast to current financial expenditure. Who considers, for example, the mortgage that we leave to the next generation and the one after that as a result of our current actions or those that happened in the past, our short-sighted, ill-considered actions? Nobody considers that. And one should.

Sarah Tietze

Yes. Are there other countries, other cities that do it better?

Dr. Christine Lemaitre

Yes, I think Vienna is a bit of a showcase for social housing. What did Vienna do differently? They didn't sell the land to the private sector many years ago. Instead, they are still building on a large scale themselves, so to speak. And they really do implement a lot of great housing projects that are also quite economically viable. So I think Vienna is like that, at least it was in recent years, I don't know, maybe there's something new now. Vienna has always been a bit of a Mecca, where people have gone and taken a look at what they've done there. But of course the city is also completely responsible. The city is the developer, the city owns the land, and the city builds housing. And that is, of course, an issue for us. And of course it is also inherent in the system. Buildings are one of the number one investment assets. If we look at pension funds, insurance companies, whatever, they invest in buildings. And in some cases there is also a purely economic view of a building. And then they want to try to maximise profits.

I believe that we also have to take this into account for the municipalities. And we are now seeing in Tübingen and other cities in Germany that people are beginning to take on this responsibility again very strongly, that land is being bought back by the city, that the city itself is becoming a developer again and is taking care of this issue beyond any economic interests and constraints.

Sarah Tietze

We talked about the lack of goals in urban development, in the construction industry. Dear Rainer, what are the climate targets of the city of Berlin?

Rainer Kohns

Yes, the city of Berlin like other cities, but also Siemens AG, has set itself a clear goal. According to the Berlin Energy Transition Act, Berlin wants to be climate-neutral by 2050. And since Siemens has already set itself this goal in 2030, Siemensstadt Square fits in very, very well. It also fits in with Berlin's energy transition policy.

Sarah Tietze

When you browse sustainability websites, which I have done in recent weeks, you come across terms that perhaps not everyone is familiar with after all. I would like to ask you to explain these terms very briefly, because they sound very exciting. Dr. Lemaitre: What is a circular economy?

Dr. Christine Lemaitre

Circular Economy is an extended term for the topic of cycle-capable construction or cycle capability based on the Cradle to Cradle principle, where the aim is to design products in such a way that they can be returned to a technical or biological cycle, but also to use business models and take-back obligations to ensure that we stop constantly extracting and using new resources, instead trying to design new things and construct new buildings using existing resources, as far as possible.

Sarah Tietze

Rainer: What is urban mining?

Rainer Kohns

Yes, sure, I'm very happy to explain. That is a city that is a mine - namely that raw materials are kept ready for the next construction generation and more and more construction elements are manufactured and installed so intelligently that they can later be carefully deconstructed and used further.

Sarah Tietze

What is smart grid, Rainer?

Rainer Kohns

Smart grid means that energy can be collected, stored and distributed in equal measure and that this helps to be economical and conserve resources. Here's an example. The building is no longer a consumer, but also an energy producer, and in English this is called a prosumer.

Sarah Tietze

So we've already noticed that there are a few terms that aren't quite so uncomplicated, but in any case a very exciting topic. We've almost reached the end and I've asked the three of you to bring along a small quote. The topic of sustainability was not invented yesterday. There are great and exciting quotes that say a lot. Dr. Lemaitre, have you thought about what your favourite sustainability quote is?

Dr. Christine Lemaitre

Yes, perhaps a bit surprising now, but the issues are too important for us not to measure them. I find that the main credo from Hans Rosling's book, "Factfulness" is something I can recommend to anyone who is an advocate for really looking at things based on data and facts and just not forming judgments based on any outdated sources of information. And I think that's the case with the topic of sustainability, where as you also just said, the trends are getting wilder and wilder. Somehow everything is green, eco, sustainable, blue, I don't know what else, and circulation is now also part of it. I think the topics are too important for us not to measure them, and we have to approach them calmly and systematically because otherwise we will only see more and more trends, but not really make any tangible changes.

Sarah Tietze

I am absolutely convinced. Rainer can you also convince me? Which sustainability quote inspired you?

Rainer Kohns

So, I decided for the quote from Vivienne Westwood: buy less, choose well and make it last. So buy less, choose well what you buy and then use it as long as possible. And I think that expresses sustainability very well. And I'll bring along a second one, from Werner von Siemens, who once said: I won't sell the future for short-term profit.

And I believe that this is also the credo that we at Siemens have been following for a long time, which is why we are also a sustainable company.

Sarah Tietze

Stefan?

Stefan Kögl

Yes, I would want to agree with the fact that many of course say, it doesn't change anything if I what.. if I just live sustainably. I think that's the simplest thing. There is no day X when something starts. It's a long process. I'll say been to today where we're getting in trouble or in trouble climatically. And it's just the same in the other direction. And everybody, everybody can contribute, everywhere, all the time. Everything helps. There's a saying from sports. Try Harder. I would also like to use that, which ultimately has to be the credo.

Sarah Tietze

That is definitely nice. We have to try even more and we also have to live consciously and think about the future. Thank you very much, Dr. Lemaitre. It was a great conversation with you. Thank you, Stefan. Thank you, Rainer. It was really fun. I learned a lot. I definitely have a very good understanding of why cities need to become sustainable for the future. What we can do, where the things can be tweaked for sustainability. And if you dear listeners enjoyed it as well, feel free to subscribe to our podcast or - as you just heard, you can also join us live. Just ask us your questions or send us your vision as a voice message to siemensstadt.de@siemens.com. We'll answer them live here in the podcast or send you a brief email. Thanks for the great conversation, thanks for listening and see you soon in your Siemensstadt. Bye.