

HPH354

Ben Adam-Smith 00:00

This is House Planning Help episode 354. Hi there. I'm Ben Adam-Smith and this is the podcast for you if you're interested in self build or retrofit. I'm exploring what houses we should be building in the 21st century, and tried to break down the major roadblocks that may get in our way. Coming up in this session, my guest is Tilmann Kramolisch, Managing Director of Eco Label Nature Plus. Do you want to use sustainable healthy materials on your project? Well, we're exploring how nature plus certifies products, and whether all eco labels are equal. Tillman is based in Germany, and I've returned from holiday not that far away in Belgium, in my attempt to fly less during each year, so doing a few more land based travels. And the big learning for me was actually Oh, my goodness, this is really close. I'm in the South-East of England anyway, so I just forgotten that the distance wise, we can connect into Europe so easily. So I enjoyed that, enjoyed a bit of the culture. And on the housing side, I was quite surprised to see a lot of new housing, but no sign of developer housing, I'm sure. In parts of Belgium, there may be developer housing, but not where we were in the northeast corner, and just so much variety. And then when you get home, you see on the edge of every town, and village and wonder how we reverse this situation when people are making so much money. But I often hear of these trips onto the continent to explore different ways of producing houses, and I felt like this was my opportunity to see first hand. So let's get to our featured interview with Tilmann Kramolisch of Nature Plus. So when we come to source products for our projects, we want healthy, sustainable materials. But it's not always easy to know, 100%. Are we doing the right thing? Can we believe what we hear? So what they do at Nature Plus is quite thorough. And we're going to talk about that. However, I started by asking Tilmann to tell me a little bit about his background.

Tilmann Kramolisch 02:09

By education, I'm actually an economist, and I studied International Relations and Economy. So when I was very young, I actually thought that maybe I would like to become a politician or somewhere there, to make real change. And then somehow I ended up here at Nature Plus in the construction sector, because really, if you would like to have an impact, and to change something with the environment, and climate change, and so on. So construction sector really is the right place to be.

Ben Adam-Smith 02:39

Well, I am quite similar as well, my background was media. But I too, saw construction, there's a lot that can change, and make a really positive change. So I'm with you on that. Now, what is some of the challenges, we're talking about products today building products? What are some of the challenges when we come to specify them?

Tilmann Kramolisch 03:03

Well, first of all, I would say you should differentiate between building materials and building products. That's at least what we do within Nature Plus. Nature Plus it's an eco label, just saying this, by the way. For example, you have clay as a material and you can make different building products out of it. So you can process clay to make it plaster to make it a board for drywall construction, for example. or you can

also burn it and make it to brick. And then if you have a specific production site, and also fixed recipe, so it's easy to actually classify the building product. And then out of our perspective, being an eco label, it's also easy to assess.

Ben Adam-Smith 03:46

What makes a healthy building product then? So we've talked about materials that are going to be changed and altered and maybe mixed with other materials to make a product. What makes a healthy building product? Or do we actually need to say what is a healthy material to begin with?

Tilmann Kramolisch 04:04

Yeah, I think that's the right way. So what is healthy material as a basic resource, and then we go to the building product. Now let's say we want to have more sustainable basic resources. So topics like reuse of materials are becoming very important, and then the question when we use a material, when we do urban mining, are these materials also healthy? But going back to your first question here, so what is a healthy building product actually is your insurance for a better living and better daily life? So that's the World Health Organisation and they also have classified the sick building syndrome. They say that the construction environment we are living in actually has a very strong influence on human health. So for example, the airtightness of rooms we are in also the emission of harmful substance within the products, all of these things really affect human health. And so it's really, really about having a look on the materials, that they are no pollutants in it, that they don't emit harmful substances, and so on that we have strict minimum values there. I would say a healthy product also is a second thing. It's also a product that is healthy for the planet, in terms of climate, and also in terms of a material extraction. So both a product that doesn't harm nature and human, that is healthy.

Ben Adam-Smith 05:39

That's quite interesting, so is Nature Plus, really about those two aspects? Or is it even incorporating more?

Tilmann Kramolisch 05:48

Yeah, it's about these two health aspects, but our approach is absolutely holistic. But we always talk about three pillars of sustainability. So it would be the health aspect we talked about, and we had split into two. So that's the one. The second is climate protection, and the third is sustainable resourcing. So we really think that you know, that you have to apply, apply a holistic approach, we have very good examples that show that this is really important when you want to construct in a sustainable way, for example, when it comes to asbestos. So this fibre was actually in the first place was really, yeah, that's a good idea to save resources, because thanks to this fibre, you didn't you need this. In those times, you would need less concrete, for example, but then we found out that this fibre actually is very harmful for your health and now if we demolish a building, and it has asbestos, we well, we can't reuse this material, but we have to dispose it. And so we haven't done anything for saving resources, what we actually wanted to do in the first place. So in this example, what they didn't apply was the aspect of healthy materials. So really, when you when you develop a material or plant material, out of our perspective, it's very important that you apply all the three. So healthy accommodation, climate protection and sustainable resourcing.

Ben Adam-Smith 07:24

Does it always work out that the better products can hit the mark on all three of those? Or sometimes will they only do two, how do you work it, do you give it a score out of 100?

Tilman Kramolisch 07:37

All the products we have certified they they can achieve all of the three aspects. We working with minimum values, for example, and also thresholds that the building materials have to fulfil.

Ben Adam-Smith 07:52

So there would be some products that you would just not even consider because they're going to fall short of the mark.

Tilman Kramolisch 08:00

Exactly. Yeah. Yeah, that's, that's true. So we have kind of a golden rule. And we we follow the approach of leave it in the ground, regarding oil, actually. And so we really say that materials that want to become natural plus certified or that are sustainable in our understanding, they have to have minimum 85% of biobased mineral material that is available, or recycled material, not all recycled, but it's a recycled material. And this actually will exclude mainly petrochemical based materials.

Ben Adam-Smith 08:42

And what does the test procedure look like for this when we're giving you our product here? Okay, we know that it's over 85% of bio based materials, what do you do next?

Tilman Kramolisch 08:57

It's actually, well, it is us that is doing it so as always, if you want to have a really reliable system, you have to make the testing independent. I'm the director of Nature Plus Association. It's a nonprofit association and we issue this equal label. However, we don't do the assessment of the building materials. So we just define criteria. And the assessment is done by the Nature Plus Institute. It's a cooperative. So this just maybe as an background information, so we really think that if you have an equal label, it's very good to have a closer look who's issuing the label and other criteria transparent and who's doing the assessment and in our case, like I said it's done by an independent body but coming back to your question, so let's say there's manufacturer for wood fibre insulation boards, they are approaching us and asking well, can we do this certification? We definitely say yeah, let's let's do, let's try, let's go for it. And then we do certain tests regarding these three dimensions. And we just recall the three dimensions I was saying. So it's health, it's climate, it's resources. And so the Nature Plus Institute, actually, they require full declaration of the recipe, of course of the products, getting more information about it. And then doing the specific test when it comes to climate, for example, we do a lifecycle assessment, but not for like the entire lifecycle of this product, we do an assessment from A1 to A3, so from cradle to gate. So where you really have all the well values available, because when you go a little bit further in the lifecycle, it can be for example, if you go in the phase of D, or C, sometimes you will have estimations, and this is something we could estimate but we really want to stay to the facts. And so what we do, we assess A1 - A3, cradle to gate. And there we have limit values per product group. So also we have a limit value for wood fibre insulation boards. And only above average production can be honoured. Well, in terms of CO2 emissions, and also primary energy use, in this

dimension of climates, we will would have a look into the annual energy consumption, we would gather all the info about the building, the construction side, also would have a look at the exhaust gas value of the combustion, for example of a kiln, what fuel is used at the machines, we do a comprehensive energy balance of the company. And it's always the question like how do we get this data, everything is about the data. So for example, if a manufacturer already has an EPD, this environmental product declaration, then we can get the info from there from the background report. If not, we would collect it by ourselves. What we do in any case, is we always do an on site inspection, we really want to see it all by ourselves. And we do it for verification of the documents we received from the manufacturer. And also we want to do an independent sample taking and with this, I actually could go to the next dimension we are testing. So this will be health, healthy accommodation. Really, it's not to be underestimated the role of materials on our health. So there are two questions that are very important. What does the material contain? And second, what actually comes out of the material when we apply it on the building, for example. And again, we were having the what was our sample, it was a wood fibre insulation board, right. So we would go to the production site would take a sample by ourselves and then it would be sent to a testing laboratory. So the Nature Plus Institute is coordinating the entire assessment. But the tests themselves are actually done by equity tated assessment laboratories. So for example, we have in Cologne, I don't know if they've been in Cologne, it's really beautiful city, nice people there. And they also are one of our very important partners, the Eco Institute. That's the name of them. And they do all these tests, for example, VOC, formaldehyde, Besides, stuff like this, I guess in one of your episodes before you have talked about the health aspect already, VOC that's the Volatile Organic Compounds. And if you have them in a certain amount, they also can be harmful for the for the health. So it's very important to take a close look, how much of them like the total value of it and also single values there are emitted by the product you want to apply. So, going back to our sample, we have the sample and then in the Eco institute, they would take the sample, put it into a chamber and then they they actually wait 2 days, 10 days, on all 28 days. And for all these days they would have close look and and this is our much VOC for example, but also formaldehyde is emitted by this sample. And by this we can find out what comes out and the Nature Plus products, they have to fulfil very strict thresholds. So where used that they may not exceed, so we have define them also like it's uh, what we try to apply is a preventive health, understanding. So that also persons that might be more, more vulnerable, that they also can live very nicely and healthy in a building in a room. So that's the approach we apply here.

Ben Adam-Smith 15:31

Well, there's a lot of information, I didn't want to stop you there for a moment. But I do want to ask a few questions now. So this must take a lot of time to complete this. And secondly, what about accuracy? Are you ever wondering about certain parts of the process? Or is this all, for example, in the laboratory checking for VOCs? And things? Is this just something that happens these days? And you can do it really well? Or are there any potential weak points in the process?

Tilmann Kramolisch 16:01

So what helps pretty much I would say, are standards that you have to fulfil? In this part, for example, we cooperate with different laboratories. And so they, of course, keep to the same standards. So it's all about really being very precise with the criteria and the standards, and we have it all in recorded

guidelines, nature plus guidelines for our materials. And if you are precise and accurate with that, then I think this really helps a lot.

Ben Adam-Smith 16:35

And what is going to happen at the end of this? Are we just going to think, oh, it's nature plus I can rely on this product, it's in their database, or are we going to get a very detailed breakdown? Or does everybody use it completely differently? Do they want the detail and some people don't want the detail?

Tilmann Kramolisch 16:54

I think communication is very key. And what we try to do is do it as simple as possible. So this is why we do this very, very big testing. And then we put just a simple to one statement, this product is nature plus, and what we really will try to do or to offer you and architects and all persons that want to apply sustainable products is a label that shows okay, this product really is entirely sustainable. So it's really to make the complex communication as simple as possible. And yeah, we have, for example, a database where all the certified products are listed. If you're looking for a healthy product for a sustainable product, in terms of resources, and climate friendly one, then just go on the Nature Plus database. And well it's a positive list, if you really want to apply this product in a, well in a BIM or somewhere else, then you better go for different databases, I would say. So there's, for example, also 2050s materials where we do cooperate with them. There's also first planet as a database, there's PowerBook, it's an Austrian partner of ours. And there, you really have tools to calculate with the products. For example, if you have insulation material, and you need to certain installation value, then with these data bases, you can work very nicely there. So equal label is one thing we do. The other thing really is, with the knowledge we have about sustainable building products, we try to give a lot of information into the market, try to do awareness raising, also talking a lot with politicians, with persons making the regulations, like we can do a lot by ourselves with our daily decisions, but it's also about big companies, building houses, but also about policymakers that they do regulations that yeah, help to have more sustainable construction.

Ben Adam-Smith 18:58

So, you mentioned you're nonprofit, how does it work as a manufacturer, then are there any costs involved for them?

Tilmann Kramolisch 19:06

Yeah, absolutely. So, um, the assessment itself, we already talked about two aspects. It was on the climate health resources, we also do in terms of resources, we do some tests and where the manufacturer, they have to also do quite some documentation work. There's one requirement for example, that they do the re-naturalisation of quarries, for example, or clay pits, and also that they have conflict for you resources and so on. So it's also quite some paperwork and you're asked about costs. So as a manufacturer, you also have to put a little bit time into it. We really try to keep it as small as possible the time you have to spend. But on the other hand, if you see a manufacturer or product that is labelled, then you really see wow, this manufacturer put a lot of effort into having this eco label. So you really see that they are convinced of what they do, it's not that you just buy it, and then you have it, you also have to really spend some effort in it. So that's also why I think eco label is a good sign if a product has it, and it's an independent testing. And again, this independent testing, you have to pay for that. So

it's around about 8000, euros could be less, depending what tests you have already done. And if you have, for example, or already an EPD (Environmental Product Declaration), then the cost could be a little bit lower. All this is done with the Nature Plus Institute together, then you also pay as a manufacturer, you pay a annual fee. And this fee actually helps us as a nonprofit association to keep the criteria up to date. And then also to do a little bit lobbying for sustainable construction materials, because they they really need more lobby, I would say that's really important. They need more awareness. Yeah. So you have two costs as a manufacturer: assessment costs and licence fee costs.

Ben Adam-Smith 21:12

And I imagine those costs compared to the turnover of their business must be quite small. So I'm also wondering, does this almost only include a certain geographic area? Because if it's an international company, might they be doing something different in their production facility in India or US or whatever it might be? How does that side of things work? Or would you always have to cover the whole picture?

Tilmann Kramolisch 21:42

No, you don't. And yeah, it's a good good point you mentioned. So really production, like you could have the same building product, but the production could differ really a lot, depending where the product is produced. So we are an international association, and also the Eco labels internationally. But to be more precise, we are mainly active in Europe, Central Europe. So the manufacturers we have certified or the products actually, they are mainly from well, Germany, of course, Switzerland, Austria, Belgium, Netherlands, Spain, France, so Italy, also some Middle East European countries. So that's where the production sites are. And this, of course, makes it easier for us because they all have to stick to the rules of the one market of the European Union. This, of course, makes it way easier. But the devil is in the detail. So the bigger the company is, and the more production sites the company has, the more complex that assessment becomes, of course.

Ben Adam-Smith 22:50

And dare I ask the question, is there anything from the UK in Nature Plus?

Tilmann Kramolisch 22:56

Well, we really try to talk with many manufacturers in the UK. We have many Nature Plus certified products in the UK, but not yet a UK company owned product certified.

Ben Adam-Smith 23:12

Probably because we don't make very much I imagine that could be part of it as well.

Tilmann Kramolisch 23:16

Yeah. But to be honest, you have some very, very, very interesting products also over there. And yeah, the production, or the building material industry, let's say is quite a local one, compared to other industries, because well, some of the materials they have just very heavy. And so it doesn't make so much sense to ship them so far.

Ben Adam-Smith 23:43

What else do we need to think about in this conversation about Nature Plus? Is there anything I've missed?

Tilmann Kramolisch 23:50

Well, it's it's maybe an invitation really to get involved. We are really a European network and we are facing very similar problems all over Europe. So we, for example, we have a building stock that really need retrofitting. And we really have to achieve the construction turnaround in order to let the construction sector emit less CO₂. When we ask the question, okay, how can we retrofit our building stock, then it absolutely makes sense to you have to have a European idea exchange and for example, in the Netherlands, there's a very interesting initiative that do the facade installation in a pre produced way. So they have kind of a serious production of the facade and then they, where they are pre-manufactured in the in the factory, let's say, and then they bring it to the house and within some days, really very short construction time they put it in front of the house and this is this is something that is applied with big success in the Netherlands and why don't we copy and paste this system somewhere else? Or another example is we had a very interesting excursion in Turkey and well, it's very good destination for making vacation. That's why we go there, because of the very nice sun. And so since centuries, already, they have found very intelligent solutions to deal with the sun so that they will simply do roof overlap, that is much bigger than we have it in Central Europe. And by this, they keep the sun out in the summertime. And when wintertime because the sun is lower, it still can go inside, or they apply different materials, depending on which direction the wall is. So different insulation, material and clay and thickness is different. And all these ideas is to make a long story very short. And I think that this European exchange is very, very valuable. And this is something we provide with the Nature Plus, our webinars and so on. And we have in every country, we have also organisations that represent nature plus where the UK representative, which is the Alliance for Sustainable Building Products, the ASPP. And where they also they have a nice network, and they do fantastic work, fantastic information. And yeah, it's really, really, really helpful to get connected and to talk and to exchange ideas.

Ben Adam-Smith 26:29

Just a couple of questions that I didn't manage to answer early on, you talked about EPDS, what is the difference between an EPD? And what you get your testing facility, your partners to organise? Or is it does it just amount to the same thing?

Tilmann Kramolisch 26:46

No, not really. That's a that's a very important difference. When it comes to certificates and labels. It gets complicated sometimes, because there are so many really, it's quite quite quite a jungle. But it's a little bit easier if you are aware of what kind of labels or types of labels are out there. And I'll come back to your question. So they're really equal labels like nature plus, or one is called Nordics one, in the Scandinavian countries. So they are type one labels. And the important here is they really do assess a product. So they really in the end, they say, Okay, this product is sustainable, for example, in terms of resources, like 100%, recycled material, for example. So this is also what we do, but in a more much more complex with Nature Plus. Then you have a type to label and these are labels run by the manufacturers themselves. So they also define, for example, a certain content of recycled material, but they do the criteria development by themselves, and also the assessment. And then thirdly, and now finally, come back to your question about EPD, environmental product declaration, you have

declarations. So the big difference here is that you simply have a declaration, they gather all the information, then environmental information they can get about the product. But it doesn't say that this product really is environmental friendly, or not. So it's a very, very important and helpful source for information. For example, if architects planners want to do an LCA by themselves for wall or something. The EPD doesn't say actually that this product is environmental friendly. So it's a type three label, you can say. So behind all these three different type of labels, there are as always, certain international European standards. So it's not that just simply one says, Okay, I'm this or that, but they also follow this standards. Is it more clear now?

Ben Adam-Smith 29:05

I think so. So if I say this to you that any product could get any EPD, whereas any product couldn't get your eco label?

Tilmann Kramolisch 29:14

Exactly, yeah. So really a very harmful product actually could get an EPD. So it's good that they do because at least they are transparent with the information. But yeah, it's not an eco friendly product necessarily.

Ben Adam-Smith 29:31

And do you find for your eco label that there are certain categories of products that you're filling up with, whereas other areas of a building? Maybe not so much? So we've talked a lot about insulation, is that a common one?

Tilmann Kramolisch 29:47

Yeah, absolutely. So we, we have certified about 600 products. Our own goal is always like really, we dream about to build a house entirely out of nature plus certified products. But to be honest, at the moment, this wouldn't really entirely possible. So as said 600 products and mainly insulation - correct - plasters, we have many products certified paints, we have many products certified, KEIM, for example, also very active. In UK we have bricks, many bricks, certified CLT products. So timber wood products, we have quite some products. These are maybe the most important product groups we have, we also have one product that's really I'm very astonished that we have it. Like you, you have a highway, right? And then you have these sound barriers. And there's one manufacturer that actually offers nature plus certified sound barriers. Yeah, it's broad variety of products we have.

Ben Adam-Smith 30:56

As we wrap up now, is there a final thought, either reminding us of something we've already said, or just a natural thought to finish up on to conclude?

Tilmann Kramolisch 31:10

I really like the idea of thinking global and acting local. So very often also, when it comes to sustainable building materials, then maybe you have a clay pit directly next to your house where you could get your material from or from your production site yourself, or maybe also the insulation materials you could get from very close by. So this is something I really like. And yeah, like, if you, well, if you're out there, and you will try to get some orientation? Well, of course, I would say we give you a very good orientattion

with our eco label Nature Plus, but again, for you, I think there are few things to identify a trust for market instrument such as a label. So also, if you, for example, going into the supermarket and want to buy some fruits that are like organic, like good foods, and it has a label, then we'll take maybe two minutes and have a look what interest stands behind this label, are the criteria transparent? And also, is the assessment done independently, you simply have to apply these three criteria. And if these are fulfilled, you really can be sure that well, it's a good label and that you that one can trust.

Ben Adam-Smith 32:33

Well, Tillmann, thank you so much for your time today. Really appreciate it. Thank you.

Tilman Kramolisch 32:37

Yeah, thank you so much.

Ben Adam-Smith 32:40

Get a recap in today's show notes, which you can find online [houseplanninghelp.com/ 354](https://houseplanninghelp.com/354), where you can review the key points. Once again, we give you that summary, or get interactive in the show notes. Just scroll down to the bottom, we'll link you to Nature Plus. [houseplanninghelp.com/ 354](https://houseplanninghelp.com/354). My call to action is to check out The Hub, which is our membership community that we run along with House Planning Help, the idea being to give you access to more resources, more resources that take more work to create. So if you become a member, you help us sustain this. And we're always trying to do more, it also pays for the free stuff. And you can give it a go. We don't hold you captive, you can unsubscribe from the dashboard at any time within a click or two. So just give it a go, give it a test run. In there, you will find things like our in depth video case studies where we've been recording, filming through low energy projects, remembering my background is media. And I run a production company called Regen Media. So we try and make these really high value. Looking at all the decisions that are made along the way for better for worse. Then we've got the courses, similar idea trying to lay things out so you can get straight to what you want to know. Then we bring in some guest experts with our live training calls. Perhaps you want to mingle with other people on similar projects. Well, that's the idea of the forum. Ask the Expert, so we bring experts in for specific topics and then you can just ask a question so you don't have to put up with just me. Or you can chat to me in our office hours, which are every week. Find out more houseplanninghelp.com/join. Next time, Lloyd Alter fantastic. He returns to the podcast. What is upfront carbon and how much does it impact us? Well, that's the focus of Lloyd's latest book, so we'll find out all about it. Thank you so much for listening. The House Planning Help podcast is produced by Regen Media: content that matters.