

## Sustainability in the Country of Turkey with Emre Ilicali | Transcript

- Charlie: [00:58](#) Hi everyone. Welcome to the next episode of the Green Building Matters Podcast. I'm excited to have not only a LEED Fellow with us, actually a newly minted LEED Fellow, but a green building professional from Turkey. So Emre is with us. How you doing today?
- Emre: [01:15](#) Thank you Charlie. I'm great. How are you?
- Charlie: [01:17](#) I'm having a lot of fun. We wrapped up a great 2019 and the Green Building Movement's going strong and I'm having a lot of fun on the podcast, so just appreciate you asking. I always like to start with my guests and say, Hey, where'd you grow up? Where'd you go to school?
- Emre: [01:34](#) Actually I'm from Istanbul, Turkey, one of the, I think great stays in the world. I was born close to Istanbul and I went to school in Istanbul. Then I moved to U.S. For awhile for my graduate studies. I worked there for awhile, then I came back to Istanbul and since then I live here, but I travel a lot all over the world.
- Charlie: [01:57](#) I can't wait to learn more about that. So when you were here in the U.S. You were in New Orleans for a little while, is that right?
- Emre: [02:04](#) Yeah, I lived in New Orleans and Houston
- Charlie: [02:07](#) And Houston, okay, great. And so you have some advanced degrees. So tell us a little bit about your background between engineering, civil engineering even architecture. What were your studies?
- Emre: [02:21](#) My Bachelor is Civil Engineering actually. I graduated in 2001, then I had a Master's Degree in Engineering Management and I am about to complete my PhD in Architecture in Construction Science. Currently I am finishing my dissertation.
- Charlie: [02:39](#) Wow, that's a big deal. Congratulations.
- Emre: [02:42](#) Actually I started my PhD long while ago, but because of work and everything, family, I had to stop at some point, but now I'm about to finish it.
- Charlie: [02:52](#) Well, I mean that's a big milestone, so congratulations. And I see the engineering, but now some architecture influence clearly, Emre, you love buildings. So I was going to ask though, tell us about sustainability and maybe even growing up in Turkey. Did

that have an influence on you? How did you know you wanted to get into sustainability?

- Emre: [03:12](#) Well, I've been into building since I was a little kid, actually. My father is also a civil engineer and he worked as a contractor for awhile. So I literally grew up in construction sites. So when I went to the university that's why one of my preferences was for civil engineering. But when I actually went to U.S., I had my master's degree, and I started working there. That time I saw that there was a need for doing something different, especially in construction sector. At that time sustainability issues were fairly new also in USA, but there's that upcoming movement. So I was first introduced to LEED when I was there. But actually I have to admit that I didn't take it seriously at that time because there were some other priorities. But when I came back to Turkey, I saw that a lot of things that we have been starting to do over there in the States was actually really important for the building sector in Turkey. So after working for awhile in real estate sector, I founded my own company with some colleagues from university and we started working in renewable energy and the green building area.
- Charlie: [04:32](#) Now would you say you were one of the first in your area to do that and become those sustainability consultants? Who did you have as a role model to figure it all out?
- Emre: [04:43](#) Well actually we were definitely the first in Turkey in that area, in green buildings or sustainability in construction. My other colleague [inaudible] who is also a LEED Fellow, he had more experience than me at that time in green buildings. He used to work in Dallas, Texas and they had already completed some commercial buildings and he had already worked in LEED projects. So with him, actually he was one of my mentors, we started a company that is solely focused on green buildings and green certification and all of these energy efficiency measures and renewable energy studies. So we started the company with our background from the States.
- Charlie: [05:33](#) Oh that's fantastic. That's fantastic. And now, did you have any other mentors along the way or anyone that was an influence on you that kind of inspired you along the way?
- Emre: [05:43](#) Well of course, for example, Rick Fedrizzi was one of the important figures at that time because he was the leader of that green building movement, especially with LEED. So he was an important figure at that time. And also USGBC, the institution as a whole was important for us to LEED phenomena. When we say, of course we were talking about the energy efficiency,

renewable energy and green buildings, but why you put a name on it, why you put that brand on it like LEED and also green of course things became more clear and people, investors, people from construction sector, they got more motivated to achieve this award. That's one of the, I think that's the thing that part of the iceberg that is under the sea, the brand name, the value of LEED certification was very important at that time for us to promote green buildings and energy efficiency, sustainability, etc. USGBC as a whole institution also was very important early motivator for us.

Charlie: [06:53](#) Oh, fantastic. Now it sounds like it really carried a lot. That name was recognized. They really help you early on build your company and and so tell us though in your region BREEAM vs. LEED. Are there certain buildings and clients that prefer LEED in your region? Is BREEAM very popular? So tell us a little bit about that.

Emre: [07:15](#) This is actually one of the major questions we get from the clients when we first introduce them to the concept of green buildings. The second is usually the cost of it, of course. Sometimes cost is the first question, but they usually ask which one is better, which is more easier or which is more practical or harder LEED or BREEAM. Actually they are both great systems. LEED has become really very popular in our part of the world, although BREEAM was a little bit older than LEED, but LEED became really very popular, very fast. So currently people often go for LEED because of the name and the popularity, but we also have several BREEAM projects, especially some buildings specific type of buildings like shopping malls and industrial buildings. The green team that was developed for them could be more practical for them. So they did these type of buildings, industrial and shopping malls, commercial buildings. They sometimes prefer BREEAM, but other than that LEED is more popular in our part of the world, which includes Turkey and nearby countries.

Charlie: [08:29](#) Okay. That's good to know. It's such a global brand. I mean the U.S. Green Building Council's done such a good job. I mean two and a half million square feet getting certified every day. It's a lot of multinational companies want it, but it's interesting to see how those two programs are very popular. Now would you say a lot of your clients want to at least do energy efficiency and green best practices? What kind of buildings are going all the way for the plaque? Is that more of like an office building or a hospital?

Emre: [09:01](#) Actually, so far office buildings are the building type that goes for LEED. Usually office buildings are, they prefer certification more than other types of buildings. We do have a lot of residential high rise buildings that are going for LEED certification. Sometimes shopping malls, because of the energy efficiency and water efficiency issues, they prefer going for certification. But sometimes they just ask for just the consultancy, not following any green building certification, but just going for energy efficiency. Sometimes we help them in that way, but office buildings are the most popular type of buildings that try to achieve green building certification and after them second comes the residential buildings.

Charlie: [09:52](#) Yeah, that makes sense. I know we'll talk more about these green building programs in a minute, but I'm curious, you've had a heck of a green building career here. You are a LEED Fellow now. Big congratulations on that. I know you celebrated that at the Greenville Conference in Atlanta recently where I'm based. So tell us though some other milestones. What's on the highlight reel? What are you really proud of?

Emre: [10:14](#) Well, actually of course I'm very proud of being a LEED Fellow, but before that when I turn around and look at the past 10 years, I can see that we have brought green building concepts up to some level in a country like in a developing country like Turkey, which is kind of different and even harder from doing that in a more developed country because there are other priorities as you can imagine. And also there are always good reasons just to skip the sustainability part of it. But there are some of course advantages working in those areas in emerging markets because they need more infrastructure, they need more construction, especially in Turkey there is the risk of earthquake which requires people to build more robust buildings and when you are constructing them, it could be a good opportunity to provide them with some sustainable measures.

Emre: [11:17](#) So there are pros and cons operating in this kind of a country. But when I look at the last 10 years since we have started working in these areas, I can see that we have certified more than 200 buildings, which is equal to around 3 million square meters. I think I'm really proud of that because it is not easy to implement or adopt these measures so easily as you can do in a developed country in Turkey. Because as I said, there are other priorities. There is a lot of drawbacks, but we have achieved that up to a point. I mean I'm a part of it. Of course there are

other people, but being a part of this success is really what makes me proud.

Charlie: [12:01](#) Yeah. I think 3 million square meters. What's that, about 32 million square feet? That is a lot of building area you've gotta be proud of. You and your team. Emre help us. Is there a lot of new construction. Do you do anything on the existing building side?

Emre: [12:19](#) Of course we have new construction projects and also existing buildings. Actually we have a huge potential in existing buildings. But it is what I've seen so far kind of hard to motivate the owners of existing buildings to go for these kinds of certifications because people like start to go so they want to keep it as it is sometimes. But in new construction, in new projects, people are always motivated to do something additional to put some value on it. So it is kind of easier at least in my regional operation. For existing buildings, we have huge potential. We are working on a lot of existing buildings, but there is still way to go there. The reason is what I said, people may not be that motivated because they are living there. The building is, well it's operating. It may not be very efficient but it's still there. They don't have too much problem or they don't want to put anything on it or you need to motivate them to do that. But in new projects, people are more motivated to go for new kind of measures, sustainability and put additional things, make additional things in their project. But in existing buildings you need to push them a little bit. So what we are trying to do is working with local authorities to promote these existing building schemes both in LEED and BREEAM and also add certification.

Charlie: [13:49](#) Gotcha. No, this is good. So tell us what's keeping you busy today and tell us some more about your businesses.

Emre: [13:56](#) Well, we do actually operate in different business lines. We provide of course green building consultancy and assessment services. We are actually an engineering company. We do all the green building engineering, including modeling, daylight modeling, energy modeling commissioning services. We are also an accredited energy efficiency company, Anesco company in Turkey. So we do energy audits. We do EPCs. We issue EPCs. That's a European thing. I don't know if you have it in U.S. It's an energy performance certificate, which is required by law for all buildings issued to them. We do energy or this, we do energy efficiency, the right energy efficiency policies for corporates, for companies. Also we do provide carbon consultancy, carbon footprint management, measurement and management. Also we have a renewable energy consultancy business line. We do

feasibility analysis. We do design in renewable energy, especially in photovoltaic systems. Wow. This is pretty much all we do about sustainability. We try to cover all aspects especially in real estate.

Charlie: [15:05](#) Where do you think you can grow the most? Where do you see the biggest opportunity coming up?

Emre: [15:10](#) Well, for Turkey, I think the biggest opportunity is always in the renewable energy side because we have a huge potential for solar and wind and haven't installed enough photovoltaics systems so far because of some of the paperwork, etc., some of the regulations. But now we have new regulations and it will be a huge potential in this part of the world because of the solar potential. Other than that, energy efficiency I believe is always important wherever you are in the world because energy efficiency, you can always be more efficient than you are today. So we do focus on that and carbon footprint management, especially for corporates, carbon reporting. This is an area where there is also a lot of potential, I believe.

Charlie: [16:02](#) I agree. Now how much does power cost there for like a kilowatt hour? You know, in certain States in the U.S. Like here in Georgia, my commercial building clients, maybe 10 to 11 cents a kilowatt hour, New York state, 18 to 20 cents, California, 24 cents sometimes. Is power expensive? Is it inexpensive in your region?

Emre: [16:25](#) It's expensive. It's around 10 cents more or less with the current rates changing every day and not an exact number in the end, but it's around 10 cents I can say. But it's expensive when you compare it to the income level. Also the fuel, the gasoline and the petrol is very expensive in Turkey. So natural gas also, we do use it a lot here. And natural gas is quite expensive and also it's very, you know, the security issue is very problematic. So Turkey has the huge potential for, as I said, that was one of the reasons I was saying energy efficiency. Turkey has a huge potential for energy efficiency and renewable energy because of the economical reasons, not only the ecological reasons, but also with the economical reasons we have. It's very expensive. The electricity is very expensive. So oil is very expensive here. Natural gas, again, very expensive. So we do have a huge potential and we are striving to meet that potential.

Charlie: [17:28](#) Okay. Well my follow up question is, and this is great discussion, thank you. You know there's a lot of mandates out there to make sure certain cities or States are going to move towards net zero on new construction to make sure we're reducing our

carbon emissions, of course. So how is it in Turkey? Are there some regulations saying, look, you have to save energy, you have to be more efficient. Is that in place or is that coming?

Emre: [17:54](#) We do have some regulations that are in place and we do have some regulations that are coming. It is partly because we are trying to be a part of European union and European union already has some regulations regarding energy efficiency and carbon emissions. So Turkey has to comply with some of them or will be required to comply with some of that. So we do have energy efficiency and bylaws and directives in energy efficiency. Also for carbon emissions. We do have some limitations. We do have building energy performance directive, which requires certain type of buildings to use renewable energy. We do all of these in place, but the problem is the adoption and the implementation on site. There are always problems with that. So what we are trying to do is to make sure that the buildings are starting from the design, the buildings are complying with the standards.

Emre: [18:53](#) Also, as I said, there is the risk of earthquake in Turkey in especially in major cities like Istanbul. So there is a urban transformation program going on, which is a huge program which requires more than 7 million dwelling units to be reconstructed. So there are certain rules and regulations that they need to comply once they are being reconstructed. The older old buildings, they will be demolished and reconstructed. So they have to comply with all these energy efficiency and sustainability laws and which brings us huge work to do actually because it's like millions of buildings to be reconstructed in a certain period of time, of course in like 20 or 30 years. But there is huge potential for energy efficiency, renewable energy, other sustainability measures. We are trying to cover all of these areas under our services.

Charlie: [19:50](#) Good for you man. That's fantastic. Well my next question is let's talk about the future of the green building movement. If you had a crystal ball and you could see the future, what should we be reading up on now? What should me and the listeners here of the Green Building Matters Podcast? What do you think's coming? What's around the corner in this green building movement?

Emre: [20:10](#) Well, I do have some, I think you may call them radical, but I do have some radical ideas about it because so far the green building movement has always been voluntary moments so far. I mean you do have great programs like LEED pre-AP and other programs and you are basically willing good companies,

companies with some corporate social responsibility feeling to comply with all of these requirements and make their buildings green. But at current point, at the point that we have come so far, I think being green may not be or should not be voluntary. It should be some kind of something mandatory or compulsory. I mean it should be really mandated but by some type of authorities because this is different than like doing something else for fun or doing something else for just for the goodness of it for your sake doing something for yourself.

Emre: [21:11](#)

It is for the whole world and the whole people and for the next generations. So I think it is not enough. I mean so far what we have done is very important, very valuable. It's precious but it is not enough so there should be something pushing us to do more and so far we have seen that being optimistic and making voluntary systems and promoting them may not be enough for us. Some of them at this should be compulsory. People should know that they have to comply with them in order to construct the building. In order to do some business, in order to manufacture a car for example, you have to comply with those laws and I think the world is going there. Getting there with all these new laws from European union, new carbon emission requirements, which are really pushing, for example, automotive industry with the electric cars, electric vehicles. I think the world is also going there. There should be some compulsory legislation you can call legislation directives, whatever you say. It should be mandatory. People should know that they have to comply with some issues, some sustainability measures in order to do their daily business. If you leave it to them to their good intentions, this is I think as good as we could go.

Charlie: [22:36](#)

Yeah, that's amazing. And those aren't too radical. I mean it's happening, you see the signs, but I think we all need to realize we have a circle of influence. We can help speed it up. And I appreciate you sharing all that. It sounds like you really have some influence there and in Turkey and you mentioned you do travel the world though. So I wanted to ask where else do you get to travel to to do this work

Emre: [22:58](#)

We don't only operate in Turkey actually. We work in the nearby countries including European countries, former Soviet countries like Kazakhstan, Turkmenistan. We do have projects in Russia. We do have projects in sub Saharan Africa, countries like Uganda, Mozambique, Djibouti. We do have projects in Gulf countries, Dubai, Abu Dhabi, Saudi Arabia, so I travel to those countries for work and for consulting purposes. I visit some sites over there. We go to the designers and we discuss with them



design issues, green building issues, and it's really nice to see that people are really interested in all of these countries and they want to see something different now, not only pouring concrete or like rebars or just construction materials, but they want to see something different than other things they have done so far. They want to include some green measures, some renewable energy, electric charging stations. They want to do their design. They want to put some sustainable measures into their design, to architects to designers. So I think I'm really feeling very happy when I go to different countries and especially developing or underdeveloped countries where people are interested in those type of green certifications. It makes me really happy. So I like to travel a lot.

Charlie: [24:26](#) No, it's very encouraging. Stamp that passport. That's great. Well, let's get into some of my additional questions here. What do you think you're best at? What would you say is your gift?

Emre: [24:38](#) Well, I like communicating with people from different backgrounds. I think this is one of my, not to say gifts, but this is one of the areas that I am good at. So I can communicate with people from different backgrounds. And when you're a consultant for anything, this is one of the things that you must have, because you will need to communicate with people from different backgrounds. And in our line of business you do have projects, as I said, in different countries. We are working with different type of designers, project teams, etc. And we need to communicate all of these requirements to them in a way that they will adopt because some of them may have resistance due to other priorities. So I believe I am good at communicating all of these issues to them rather easily. And also I'm a very technical person, I have an engineering background and I'm also into technical things. So I think I can understand the new technologies or sustainable measures easily and communicate them easily to the project teams. This is, I think, what makes me different. I mean it's, I am ashamed to say that, but,

Charlie: [25:54](#) Oh no, it's very important that you can be a communicator. Like you said, different backgrounds, different skill sets, different knowledge levels. I think some people don't like to admit, they might want to pretend they understand green buildings or renewables or this and if you're a good communicator, you'll not make them feel intimidated, you'll make them feel welcome to the discussion. So that is a great skill set to have. Do you have any routines or good habits that help you stay productive?

Emre: [26:22](#) Well, I like reading. This is pretty trivial, pretty basic, but I like reading things, everything. I like reading everything. So I try to

be very up to date, especially in green building worlds or in building growth. In construction work you need to be really very up to date because there are always new technologies, new issues coming up, new standards. So one of my good habits is keeping myself up to date by using any source of media to reach to the information. So I like my job. So some people, because after you are working for many years on a specific subject, you may get, I don't want to say bored, but you may get tired of keeping track of all of these new standards or all of this information. But I like working on old stuff and new stuff consistently.

- Emre: [27:20](#) And I like keeping myself up to date by reading standards, listening online, webinars, going seminars, workshops, listening to experts on different subjects. Because as you know, green building or green measures or green subjects have a rather large spectrum. I mean you need to know about electric vehicles, you need to know about energy efficiency, transportation, alternative transportation system. So you need to keep yourself busy every day, maybe every day learning about these different stuff. It requires a little bit of multitasking actually, which may not be very efficient, but it requires some of the testing. So I think one of my talents is keeping track of what I have done so far and going after new stuff about my subject.
- Charlie: [28:18](#) That's great. Well, let's talk about reading. So whether you listen to books you like to pick up a book, do you have any books you'd recommend?
- Emre: [28:25](#) Well, I do have a lot of books to recommend. For example, I like to read certain books about urbanization. There's a book I read last. It's the Triumph of the City by Edward Glaeser. It has, for example, it has some controversial ideas in it, but I think it's an important book. I can recommend that one Triumph of the City by Edward Glaeser. Also of course the technical, all of these technical books and I especially like to read scientific articles, journal papers about my areas of interest in new technologies in sustainable construction. I like electric vehicles. We do have a technology project that we have developed and actually it started commercial selling electric vehicle supply equipment, charging station. You do work on that as a buy project. I like reading about electric vehicles. As I said, I'm mostly like reading technical journals actually.
- Charlie: [29:32](#) Oh, thank you for the book recommendation. And naturally as our green building movement changes, you've got to stay up to speed. And on the technical side electric vehicles, I'm a big fan. I had a Chevy Volt for two years and I've been driving a Nissan

LEAF for the last five years. So I've had electric cars for seven years. No Tesla yet, but maybe down the road.

Emre: [29:54](#) Well, when you say electric vehicles everybody comes up with the idea of having a Tesla. But this is diamond. Sometimes I object to that because I mean electric vehicles is not only Tesla. I mean there are different type of more affordable cars and everybody can have an electric vehicle. Everybody can buy an electric vehicle. It may be it's not an issue in U.S., but in Turkey, when you say an electric vehicle, everybody starts thinking about a Tesla. Everybody wants to buy a Tesla. If they are going to buy an electric vehicle, they want to buy a Tesla. But this is not usually the case.

Charlie: [30:32](#) So many car companies are coming out with electric or plug-in hybrid and so you're right, we need to make sure that everybody knows there's lots of good options out there. Well just a couple more things here. I'm a fan of a bucket list, meaning Hey, is there anything you really want to work towards? Maybe some travels, some adventure, maybe still some things to do with the company. Who knows. Is there anything you'd share with us? One or two items on your bucket list?

Emre: [30:57](#) On my bucket list I actually would like to travel. I would like to travel Turkey with my electric car. Actually we do have a Renault Zoe. I'd like to travel Turkey with the electric car and show people that you can use electric car and there is no ranging anxiety actually because we do have a lot of charging stations all over Turkey. This is the first item in my bucket list actually. Because I like to talk actually, I mean we are always talking about electric vehicles and sustainability and transportation, but you need to show people that you can actually use them and you will not have problems or at least as big problems as they think. So this is one of the items in my bucket list. And also, we are actually working on that, but I would like to bring some LEED items or like sustainable measures, and put them in some of the urban transformation regulations in Turkey and they are working and we are a workshop. We have a focus group on that. This is also another item which I want to do. I want to do because it's very important for us. It will affect thousands of buildings. So we have some sustainable measures like renewable energy, electric vehicle charging stations, bicycle racks, construction waste management, items like that. You want to include them in the urban transformation regulation of Turkey. This is also very important target for me. It is one of the items in my bucket list.

- Charlie: [32:35](#) That's fantastic. All right. My last question is kind of two parts. One is, is there anything you wish you'd known earlier in your career?
- Emre: [32:43](#) I have met electric week. Again, I'm going to talk about electric vehicles about the concept of electric because I have met a little bit late in my career, so I wish I was working about them or I had a chance to be a part of the research on them earlier in my career. Also, another thing, I wish I had focused more on software engineering because I'm kind of old now and I'm trying to learn new languages and new programming languages. But at my time when I was in university, I wish I had more interest in additional learning, additional programming languages because nowadays you need to have more experience on them in order to do things better because technology is all around us and you have to be more familiar with those types of technology.
- Charlie: [33:40](#) Absolutely. I love it. I love electric cars too. Solast question though. You've made a great career of green buildings. You continue to be on a good path. For those listening, some have been doing this a long time, but some are newer to this industry. So do you have any words of encouragement here as we wrap up for someone jumping into the green building movement?
- Emre: [34:01](#) Actually, I mean we usually go to seminars and we talk in the workshops in universities and sometimes students ask that. I think, I mean in order to become proficient in green buildings, first of all you need to be proficient in whatever your actual job or proficiencies. I mean, if you're an architect, you need to be a good architect. You need to know a lot about buildings. You need to understand the rule of design and then you try to be more proficient in green buildings because just going forward, becoming a green building consultant or green building professional. Not knowing enough about your day's profession may not be a good choice. This is what I've seen so far about people working in that area because I see civil engineers that do not know enough about buildings but they want to talk about green building measures.
- Emre: [35:03](#) Whereas, I mean people can do that of course, but I think in order to become a good green building professional or in order to apply sustainable measures in an effective way, first you need to know a lot about your own profession or you need to know more about buildings. You could even be a mechanical engineer, civil engineer, an architect, whatever you are, you need to be first of all, more proficient, more experienced in your

own profession and then add sustainability knowledge on top of that. This is how you become a better green building professional. That's what I think.

- Charlie: [35:46](#) Well, I love it. Well, that's some great advice. You heard it here, LEED Fellow coming to us from Turkey and working in multiple countries. I just want to say thank you for being on the podcast today. Keep up the great work.
- Emre: [35:58](#) Thank you very much, Charlie. Nice talking to you.
- Charlie: [36:04](#) I just want to say thank you to our loyal listeners. We actually are celebrating over one year here on the Green Building Matters Podcast. Me and the entire team are stoked and just so glad you continue to listen every Wednesday morning to a new interview with a green building professional here in this industry or just some pro tips that we want to make sure that you are getting straight from us, straight to you.
- Charlie: [36:29](#) Thank you for listening to this episode of the Green Building Matters Podcast. At gbes.com our mission is to advance the green building movement through best-in-class education and encouragement. Remember, you can go to gbes.com/podcast for any notes and links that we mentioned in today's episode, and you can actually see the other episodes that have already been recorded with our amazing guests. Please tell your friends about this podcast, tell your colleagues, and if you really enjoyed it, leave a positive review on iTunes. Thank you so much, and we'll see you on next week's episode.