How Can Georgia Homeowners Lower Their Energy Bills? A Conversation with Nicole Lee

Summary

Why does one room in your house always run hot in the summer, and why do you feel a draft by the window even when it's shut tight? In this conversation, Nicole Lee, founder and CEO of Be Smart Home Solutions, joins host Eriqah Vincent to walk through what happens during a home energy audit, which upgrades homeowners and renters should tackle first, and how to know whether solar is the right next step for your home.

Key Takeaways

- Nicole compares a home energy audit to an annual physical: her team starts with an intake about the home's "symptoms," runs diagnostic tests like a blower door test and thermal imaging, then delivers a prioritized "prescription" of what to fix first.
- Older homes typically need more weatherization work than newer ones, since they were built under older or nonexistent building codes, but thermostat habits, like keeping a house at 68 degrees all summer, can drive up bills in any home.
- Two of the most common misconceptions Nicole encounters: cranking the thermostat down low doesn't cool a house faster, and a ceiling fan cools people, not rooms, so it should be turned off when you leave.
- On a tight budget, Nicole recommends starting with the cheapest fixes first: a digital thermostat and LED light bulbs, both of which renters can do too.
- Roof condition is one of the biggest barriers to solar for lower-income homeowners; about half of early Georgia BRIGHT applicants couldn't qualify because their roofs needed replacing first.

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Eriqah Vincent: Hello, everyone, and thank you once again for joining us for this amazing interview series with Georgia Drawdown. We are so excited to have our guest today. Our guest today is Nicole Lee. Nicole is the founder and CEO of Be Smart Home Solutions. Hi, Nicole. How are you today?

Nicole Lee: I'm great. How are you today?

Eriqah Vincent: I'm doing fantastic. Thank you so much for taking the time to join us. I see that you are on site, and so we'll talk more about the work that Be Smart Home Solutions does. So we will go ahead and jump right in. So thank you again for taking the time. I know you're busy.

Nicole Lee: Oh, thank you so much for having me.

Eriqah Vincent: Yes, of course. So please introduce yourself to our audience and tell us about the work that you do.

Nicole Lee: Well, I am Nicole Lee, as you already mentioned. I'm owner of Be Smart Home Solutions. We work on a journey of connecting our clients on an energy journey, trying to help them make their homes more efficient. Be Smart Home Solutions, we work with a variety of organizations, connecting clients to resources. Some of the resources, they're free, in which we come into the homes and make them more energy efficient by performing different energy retrofits, such as insulating, air sealing, and duct sealing around the property. We also provide customer education so that, one, they understand the work that we're doing and the impact of the work that we're doing, but also to know that the work doesn't work alone, it works when you work with the work. And we also do solar.

Eriqah Vincent: Wonderful. That's wonderful. Thank you for the work that you are doing. We know that there are so many homes in Georgia and around the country that are lacking the weatherization and other retrofits necessary to face what we're dealing with when it comes to climate. So thank you all for the work that you're doing at Be Smart Home Solutions. So how'd your passion for building science and energy efficiency begin?

Nicole Lee: So I have my degree in marketing and accounting.

Eriqah Vincent: Okay.

Nicole Lee: A long way from all things building science, but this literally happened during my senior year as an internship. Previously I worked, we built together a company where we were out learning about all things building science. And then I got the opportunity to work with different utilities, exploring things that they were doing. It started out small because a lot of the utilities weren't offering it, or it was offered, but it wasn't marketed to the clients. And so, over time, we've seen a lot of weatherization work, energy efficiency work grow across the state of Georgia. And so through that internship, that's where I learned that, hey, I actually enjoy traveling, meeting a variety of people, and learning that not every home is the same.

Eriqah Vincent: Of course. And so many people on this show, myself included, did not graduate with a degree in the work that we're doing so pointedly, or so I should say so obviously. But have seen many ways in which our degrees have connected us to the work. So I'm very familiar, and so are many of our guests. So you know, Be Smart Home Solutions, and you yourself have achieved so much since founding this entity in 2022.

Nicole Lee: Mm-hmm. What—

Eriqah Vincent: What's your vision for the business, and how did you set yourself up to be so successful in it?

Nicole Lee: So my vision is twofold. Whereas I wanna create a lasting legacy and a space for my daughter. She's in the process, she graduates this year, so I'm a senior mom. And so I wanna create a platform because she's been following me with this work since she was the age of seven. She's always been in my backseat, in my shadow. Sometimes when we're going into homes, especially new construction, she's always there. She knows how to do all the work herself. And so my goal is to set a stage for her. And so, yes, she wants to go into, be an environmental engineer, and so I wanna make sure that she has a lasting place in which she can come and always grow in. But on top of that, I'm huge on education, and so I want my clients to have all of the information that they need, right down to the fingertips, so that they can make confident decisions when it comes to their homes and not feel overwhelmed in the work that's happening.

Eriqah Vincent: Sure. Number one, I'm familiar with having a mini always in your backseat when you're headed to the things. My mini is a little bit younger than yours was, she's five. And I think that's so important to think about. On this show we talk a lot about emerging leaders. We've had some young people on. And so it's so important to think about how the work that we're doing in the state is continuing with some of our young people. So that's so great that you're seeing that kind of in your own family. That's wonderful. So let's jump right in. I'm familiar with an energy audit, having done a little bit of that work myself in college, very, very minimally, but kind of introducing residents to what energy audits were when I was in school. So for the folks that don't know, or for the homeowners who have never had one, walk us a little bit through what an energy audit is, and what happens when you and your team show up.

Nicole Lee: Okay. So for an energy audit, I always like to compare an energy audit to, like, your annual physical at your doctor's office.

Eriqah Vincent: Okay.

Nicole Lee: To think of your home as your human body. And so at the intake, when we enter the home, we always start by sitting down and asking the client the symptoms of the home. Are there certain rooms that are extra cold? Are there certain rooms that during the summer they're the hottest? Or during certain months are there really unexpectedly high bills that you see? Through that information we follow up with a checkup. During that checkup, we run the diagnostic tests, the blower door test, duct test, and we look at the HVAC system, which is, think of it as the respiratory system of the home. We check the insulation levels to make sure that they're where they need to be, as well as we do thermal imaging throughout the house to get the vital signs, to see where the air is leaking into the home, to see what the duct performance is.

And so from there we lead to the prescription, in which at that point we're diagnosing and we're providing you with a diagnosis of the home. Just like a doctor wouldn't give you medicine without testing everything, we wanna be able to give you a clear and prioritized blueprint of the things that your home needs in order for you to make the decisions that you need for your home to run more comfortably and run efficiently. And so once we give you that diagnostic report, we let you know, this is what you need to start with first. And then we try and run from there to let you know, "Hey, we think the most important thing for you to start with is insulating your home because you have zero to little insulation." Insulating a home can make a huge difference—

Eriqah Vincent: Yeah—

Nicole Lee: —in the comfort of the home. And so if that's the first place that we need to start, then we wanna get you with a running start there in insulating the home. And then we add on the additional things, such as, hey, some of the DIY things that you can do on your own: quickly go through the house and air seal. That's like a weekend warrior job. Get you a caulk gun, go around windows, look under those sinks. And to add the cherry on top of that, if you're tech savvy enough and if you go to YouTube University, and you don't have a digital thermostat—

Eriqah Vincent: Mm-hmm—

Nicole Lee: —these are some of the best digital thermostats for you. Here are places that you can get the rebates if you order them and quickly install them. We feel that having a digital thermostat, you literally control the dollar all the way down to the fingertips. And so you know exactly where your money's going, on top of you being able to track how often your unit is coming on and how long it ran throughout the day.

Eriqah Vincent: I'm curious, kind of in a follow-up question, if you've seen a trend as you've been doing some of these audits for residents in the state. Have you seen trends of, like, years, like, are homes that are newer more insulated, or do they have less of those needs versus homes that are older? I'm thinking about my house, this is somewhat a selfish question. I'm thinking about my house that was built in 1997, but I know that there are some homes, I live on the east side, I know that there are some homes on the east side and on the west side, like down in the West End, that, having gone to school down there and done some of this, like, community outreach around audits, that are older that we found to not have as much insulation. So I'm just wondering, out of curiosity, if you've seen a trend on the types of insulation, and/or if some homes, based on when they were built, are more or less insulated, or is it just kind of like older homes aren't as insulated, but newer homes are more so?

Nicole Lee: Yes. And so that is the situation, whereas older homes aren't as insulated and sealed as a newer home. If you think about it, way back when, there were different building codes, if there were any building codes.

Eriqah Vincent: Sure.

Nicole Lee: Yeah, yeah. And through time, building codes have been added. And so when you go into a newer home, the newer homes don't need the work that we see that older homes need. It could be something as simple as, "Hey, let's just switch over your thermostat to a digital thermostat," and you're good to go. Whereas we've been into newer homes, and we talk to clients, and they're telling us, "Yeah, our bill is high." And then so we have to start asking those questions. When we're sitting there talking, like, "So what do you keep your thermostat at during the day?" And it literally sometimes is what it boils down to, is where they're keeping their thermostat at.

Eriqah Vincent: Got it.

Nicole Lee: And if let's say it's summer, and they're like, "Oh, well I can't keep my house—," I think a client told me 68.

Eriqah Vincent: Mm-hmm—

Nicole Lee: —is where she has to keep her house during the summer, and I was like, "68 is very low for the summer."

Eriqah Vincent: Right, right.

Nicole Lee: And when you're looking at keeping your thermostat at 68, then you have to look at a utility bill that will reflect that 68 that you're keeping your home at.

Eriqah Vincent: Yeah, we have a Nest thermostat in our hallway now, and I'm seeing the difference of, like, programming, and like, okay, we're gonna program the house to be this versus, in the summer, versus this in the winter, and what that means. So that's interesting that you say, like, sometimes it boils down just to where are you keeping it. And so we're looking at both, like, physical things, and I think that's what you mentioned in breaking it down for us. Physical things, as far as insulation and HVAC kind of things, but also best practices. Like what are we doing as residents, as homeowners, to keep this. So what are the most common energy leaks? You talked a little bit about it in our last question, but what are the most common energy leaks that you find in Georgia homes?

Nicole Lee: Thermostats.

Eriqah Vincent: How does our heat and humidity change what you're looking at?

Nicole Lee: It changes often because, you know, during the summertime it's very humid here in Georgia.

Eriqah Vincent: Yes.

Nicole Lee: And even in the state of Georgia, I think we have, like, four or five different climate zones. But I'm all the way in Savannah. And so a humid day in Savannah compared to a humid day in Atlanta are two different things.

Eriqah Vincent: Exactly.

Nicole Lee: So, like, when I'm outside working in Savannah, like yeah, I wanna make sure the house is cool when I come in, just for that moment so that I can quickly cool off because the humidity is so high. Versus if I'm in Atlanta working on a job, I might be like, I'm good working in a sweatshirt 'cause it's not as humid. And I've been that way sometimes because we're also in Virginia, and so sometimes when I'm in Virginia and they're like, "Oh, there's a heat advisory today," or, "This is the highest temperature today, and it's very humid," I'm just shocked because I'm trying to figure out where the humidity is, because I'm used to Savannah, where it's extremely hot and humid, you barely walk outside, and here I am in Virginia walking around in a sweatshirt during summer telling everybody, "I'm great, we can keep going." And so, understanding, yeah, there are multiple climate zones. And so during the scorching Georgia summers, we often see clients cranking the thermostat down to 70. Which is understandable because it's so hot, but thinking it would cool the house down faster is not a reality. Especially if you've been gone all day, and then as soon as you get in, you wanna put it at that 70, it's not gonna reach that 70 as quickly as you want it to. And so having these digital thermostats in place, where it kind of regulates the temperature in the house, where it's not trying to keep up with what's outside, but it's trying to keep the house cool.

I think another thing when it comes to dealing with humidity is, like, when it's hot outside, a lot of clients think that, oh, if I just turn on the ceiling fan, I'm gonna move the air in the house, and that's actually not how it works. The ceiling fan or a fan is there to cool you. When you're sitting in that space, it's there to cool you and provide you with comfort. But as soon as you leave, the ceiling fan has no use. It's just running to run.

Eriqah Vincent: Okay. That's so eye-opening for so many reasons. I'm also thinking about, you're talking about Savannah, and I have spent some time in Savannah. I'm originally from New Jersey, so humid at home is not humid in Georgia.

Nicole Lee: Yeah.

Eriqah Vincent: When folks are like, at home, they're like, "Oh, it's so humid today," and I'm at home in the summer, I'm like, "This is—"

Nicole Lee: —nothing.

Eriqah Vincent: Do you see a difference in the way that people behave when it comes to cooling or heating their homes, or in the ways that different types of symptoms, as you mentioned, react

in the summer versus the winter? So the wintertime we're trying to keep the heat in, or trying to produce heat inside, versus the summer we're trying to keep the heat out and cool down the house. Is there any difference that you're seeing of, like, how things might be more beneficial in the winter versus the summer? Or how the air in the house reacts to those extreme changes? And so I'm just interested, if, when you're insulating your house with the mindset of, okay, I'm trying to keep the house cool, is there other things or different things you need to be doing in the winter to keep the house warm? Or are there different symptoms that you routinely see, or trends that you're seeing, when it comes to stuff like that?

Nicole Lee: So the insulation works twofold. So of course when you're insulating the house, during the summer the goal is for the insulation to keep the cool air in.

Eriqah Vincent: Sure, sure.

Nicole Lee: But it's the same goal for the winter, whereas, hey, we wanna keep the warm air into the home during the wintertime. I know during the wintertime a lot of people talk about, "Well, when I'm sitting by my windows, I can feel the air coming in."

Eriqah Vincent: Right, right.

Nicole Lee: And it's literally basic science. Okay, so of course when you're sitting by the window, that warm heat from your body is transferring to that cold surface of the window. Which causes you this idea that, "Oh, there's air coming in the window, I need to change the windows." And I tell the client, I'm like, "Even if you have the newest windows, you're still gonna feel that."

Eriqah Vincent: Okay.

Nicole Lee: Those are a huge investment. You know, and a lot of clients, mainly that's the main thing here in Georgia when we talk to clients, is they all wanna change out the windows. And I tell them, I'm like, "I'm happy if you do, but I want you to understand it's a huge investment. There are no programs for it." But when I explain that, "Hey, it's basic science, you're sitting by the window and there's a transfer happening," and so when we plug up the blower door test, I'm gonna tell you to go sit back by that window to see if there's air coming in and out that window. And then once I get you to see that there's no air coming out that window, then you fully understand that, "Oh, it is that." And so it's more so being cognizant, because if I have my bed stationed by the window, I will always be cold during the wintertime versus if I had it sitting on another side of the room where it isn't by the window. And the same thing goes during the summer, like that heat is still coming, you've got those rays still coming in the window, and so right there by that window it will be warm.

Eriqah Vincent: Right. Oh, Nicole, you are teaching the people today. Thank you for that. I'm like, "Yeah, that makes sense, I ain't thought about that before." So speaking of upgrades, speaking of retrofits, speaking of audits, if someone can only afford one or two upgrades this year, where should they start?

Nicole Lee: I would say start with the very basic things that don't cost a lot of money. And that would be changing out your thermostat.

Eriqah Vincent: Mm-hmm, okay.

Nicole Lee: Switching out those light bulbs, if you haven't already switched those light bulbs out to the LED bulb.

Eriqah Vincent: Mm-hmm, okay.

Nicole Lee: Switching out those, because those old bulbs produce heat. And so of course, like during the wintertime, that would be a good thing, it's producing heat, you're sitting by your lamp by a window and you're feeling warm, it's like a twofold type of effect. But during the summertime, you're sitting by that same lamp and you're feeling that same heat—

Eriqah Vincent: Hmm.

Nicole Lee: —coming from that light bulb that you're running.

Eriqah Vincent: Mm-hmm.

Nicole Lee: So I would say the easiest things to do would be, one, changing out your thermostat, and two, going out and switching out those bulbs.

Eriqah Vincent: Wonderful, great, thank you so much for that audit conversation. Because some of the things you mentioned also can be done for folks that don't own their homes. Obviously, we know that not everyone owns their homes. And so the things you mentioned, some of the things you mentioned are just stuff that people who are renting can do. And so that's very helpful, so thank you for that. I wanna switch gears a little bit and talk about solar. That's very exciting. Many people are wary of solar, and of solar sales pitches. How do you build trust with homeowners who have been burned or are just skeptical when it comes to solar? I am admittedly, I'll preface this also by saying I'm interested in solar, but I don't even know where to start when it comes to the house. So, also just wanting to know, how do you build that trust with folks as they're talking about solar, and as they're thinking about that, and it becomes a bit overwhelming? The thought of it becomes a bit overwhelming for me, for sure.

Nicole Lee: It basically comes down to being relatable and strictly honest.

Eriqah Vincent: Mm-hmm.

Nicole Lee: I treat every homeowner's property as if it's my own, or somebody, you know, family. If I wouldn't do it in my own home, I wouldn't recommend it to you. I don't pretend to know every answer on the spot. And so if it's something that I don't know, I always let my customers know, like, it's something that we can find out together, just to make sure that this is the right decision for you and your home. The "let's find out together" answer always shows the transparency that helps you build the trust. And I think it's far better than the aggressive sales pitch. Because if I go to a home, and I see your home is covered with trees, but you're telling me that another salesperson called you and was like, "Oh no, solar would be great for you," I'm gonna be brutally honest and let you know, solar isn't the best for you in this situation, unless you're looking to cut down trees, and then I'm not an advocate of cutting down trees unless it's necessary.

Eriqah Vincent: Sure, yeah, absolutely. Yeah, I think when it comes to solar, it's still so foreign for some folks, even though solar is more, certainly more, you know, of a routine conversation, or less of a foreign conversation than it was, you know, 10, 15 years ago. And so that honesty of, like, "Solar is not gonna work for your house," or, you know, let's think about other solutions, because solar might not be the best solution for you.

Nicole Lee: And that's where we end up at. Because if it isn't the best solution for you, then let's find a program that your home would qualify for when it comes to basic weatherization upgrades. Whereas I know some clients still don't have the money for that, but if your utility is offering discounts or programs in which you can get into, we'll help you sign up for those programs so that you can come and have those energy efficient upgrades added to your home, and that's free of charge or at a discount.

Eriqah Vincent: Wonderful, perfect, fantastic. So Be Smart also worked with Georgia BRIGHT.

Nicole Lee: Mm-hmm.

Eriqah Vincent: The Georgia BRIGHT program on solar installations for low income homeowners, which is fantastic. Solar, obviously, as we know, can go a long way to reduce energy bills for low income families. But about half of those early applications couldn't qualify because of the condition of the roofs. And I have heard so many advocates, so many building science folks talk about roofs, new roofs, roofing installation. How does your roof contribute to the weatherization of the home? I think about this roof often, it just got changed before we bought the house, thank God, but I think about it often 'cause I know it's gonna be something we're gonna have to deal with. Can you talk about this, and other equity issues around rooftop solar? And what are your experiences working in that space?

Nicole Lee: Being in that space, I would say that my experience is a lot of times when we do go into the home, if the roof isn't in great condition, like less than 10 years old, it makes it hard to do solar. We try and work with clients in which they're able to quickly get a quick turnaround, because we do take stock of the home when we go in. And so let's just say, "No, I haven't had a roof leak, but my roof is 15 years old." We know the life expectancy of a roof is, like, 15 to 20 years old, and so the last thing we would wanna do is install solar, and then next thing you know you have a roof leak, and now we have to take it off for you to put a new roof on. And so that's one of the things that you try and get the clients to work with, which is kind of like a barrier of entry. Because if you're going into these LMI communities, and within these communities some of the homeowners have never changed their roof since they've been in their homes.

Eriqah Vincent: Right, right.

Nicole Lee: And so, you know, they don't know the first step in going to get the process, or they just don't have the funds to do it.

Eriqah Vincent: Yeah, roofs are expensive.

Nicole Lee: Which makes it hard for us to do solar. Another thing is, like, upfront costs. When it comes to traditional solar, that was the main barrier for many LMI communities. But beyond the price tag of the panels, again, like we said, the structural hurdles of roofing, electrical upgrades, shading, multiple trees, if we have to have trees cut down, it really stops a lot of clients from getting into the program. I think many families are working multiple jobs as well too, and so if we're talking about adding solar to your home, sometimes it just, again, if I wouldn't do it to my home, I wouldn't let you do it. And if I see that, yeah, we're trying to get you in, we're collecting all this information, but I see that you're working multiple jobs, I'm gonna ask you, "Do you really think this is the best decision for you right here in this moment?"

Eriqah Vincent: Yeah, absolutely.

Nicole Lee: Because that's the last thing I wanna do, is add another bill to what you're already doing.

Eriqah Vincent: Mm-hmm, mm-hmm.

Nicole Lee: And so, once you get to a moment in which you have that one main dedicated job, then it's the moment that you can circle the block and then talk about solar again.

Eriqah Vincent: Awesome, thank you for that. That is, because solar is expensive, and it can be, and it's cheaper than it was, but it's still not accessible for everybody. I'm wondering, what would you tell a young person, obviously you said that your daughter is interested in environmental engineering, which is fantastic, what would you tell a young person thinking about a career in energy efficiency or solar in Georgia?

Nicole Lee: I would tell them to do both.

Eriqah Vincent: Mm-hmm.

Nicole Lee: They both work in the same realm. They're two sides of the same coin. When you understand the home, the starting points of the inside of the home, how it holds heat, how the air moves within the home, you become better at understanding the design of the outdoor solar system. It only helps you grow more. It's an incredible career path. You get to solve practical puzzles when you're inside, in everyday homes. Nothing beats the feeling of seeing a family's bill drop when they know that you've helped them make their home safer as well as healthier, either through energy efficiency or solar, or even both.

Eriqah Vincent: Mm-hmm. I am such a huge proponent of trades, of folks being skilled in trades, whether you're going to go to a four-year institution or not. So I just wanna amen corner what you just said, and just say that whether you're gonna go to a four-year institution or not, whether you're gonna go to trade school or not, both and. I mean, if you have the time and the space and resources, could make a world of difference for you. We are so lacking, I think, in this country, in folks going into different trades that have routinely been very well staffed, that aren't as much anymore. And things like solar installation and other types of trades are so important for the way that our industries are growing. And so I'm really glad that we've gotten a chance to talk to you today about some of this, because I think trades, and encouraging folks, young, or mid-career, or whatever, to go into trades or think about trades when it comes to energy efficiency and building science is so important and can be so lucrative for everyone. Because I tell everybody, yes, I'm an energy auditor, but the same energy auditor, I need plumbing, HVAC—

Nicole Lee: Yes, exactly—

Eriqah Vincent: —electrical and carpentry.

Nicole Lee: Exactly. If you have those trades under your belt, and you know how to do those jobs, like you're a major component to my work.

Eriqah Vincent: Absolutely.

Nicole Lee: It's something that I'm always looking for.

Eriqah Vincent: Absolutely. And as a homeowner, those are folks that I always need.

Nicole Lee: Yes. Homeowners always need, especially in the rural areas in Georgia, any rural areas, it's hard to find any one of those trades that will be able to quickly get to you without charging you the extra fees of traveling to you.

Eriqah Vincent: Right, right.

Nicole Lee: —to do the work.

Eriqah Vincent: That's a great point. This has been really eye-opening and something for myself to think about as a homeowner in Georgia. And so I really appreciate you again for being on with us, and I know that our audience will probably feel the same. Whether you're a homeowner or a renter, I think that a lot of the things that you've mentioned today many of us can take away and use. So thank you so much, Nicole, for being here. I'm gonna ask you my last question, which is my favorite question. What is giving you hope around climate in Georgia?

Nicole Lee: What gives me hope is seeing the shift towards a future where energy affordability and clean power are more accessible to everyone, not just a select few. As community programs expand, awareness grows, and you start seeing the local workforce opportunities open up. And so just knowing that we're building a more resilient Georgia from the grassroots up gives me hope.

Eriqah Vincent: Awesome, I love that. Well, again, you are on site on the job, so we will let you get back. Thank you so much again, Nicole, from Be Smart Home Solutions, for being with us today. Congratulations, number one, to your daughter for being about to graduate, good for her, but also to you and to the work that you have done and to the way the business has expanded. I've known of you and of the work that you have been trying to do for a little bit of time, so I'm really glad to see it flourishing so much. So congratulations to you once again, and thank you for being here.

Nicole Lee: Thank you so much for having me.

Eriqah Vincent: Absolutely. And thank you all for joining us once again for this Georgia Drawdown interview series. We will see you next time.