

## #WeSpeakCondo Transcript:

### Jon England of Parity in conversation with Nicholas Chirametli&Ari Soroka of City Sites Property Management

- Ari: Ladies and gentlemen, boys and girls. Hi, how are you? We're back again for another exciting episode of #WeSpeakCondo. Uh, our guest today is Jon England. Uh, creativity runs rampant in your family in terms of last names. I see that. Um, and he is the vice president of sales. Now, I looked at this initially when this was first proposed to me. I said, this is going to be a great episode because I'm looking at it. He goes, his company's name is party. Go. And I'm going, wow, you finally got us a good one. But actually it's Parity. Right. Welcome to #WeSpeakCondo. I'd like to open our session and talk a little bit about Parity, give me the elevator speech. What's your company? What's it all about?
- Jon: Sure. Thanks. All right, thanks Nicholas for having me on. Um, yeah, unfortunately we're not party go. I can't help you there. Uh, we focused on energy and, and really what we do is we've simplified the way that condominiums can reduce their energy consumption. So we offer a no upfront costs, guaranteed solution that's turnkey, specifically designed for condos.
- Ari: Damn, that was rehearsed. That was really good. It's like he's a vice president. It's like, oh, there's that. I don't know. Crazy, crazy man. So, uh, in his, in his part time, he sells life insurance. So really it's, it's ultimately all the things you do in a nutshell. You Save condos money. Absolutely. That's the bottom line, isn't it? So let's explore quickly what different areas you're looking at there, where those savings are generated from, uh, generated as a pun. I just wanted to throw that in. It's a little, it's a little leftover from a previous episode.
- Jon: There's no shortage of energy puns that can be made for sure. Ah, so there's a lot of things that you can do to reduce energy and the most common ones would be, you know, your LEDs. Uh, maybe you want to look at exhaust fans in your garage. And those are all great that we would call those low hanging fruit. That's what everybody does, isn't it? Right, right. There's a thousand vendors out there that are gonna focus on those areas that, I'm going to ask you the million dollar question, but keep going. Uh, where we're focusing on is a little bit more complicated but not too unreasonably complicated. It's the mechanical system. So it's everything in the building that's required to generate comfort for the residents who live there. So heating, cooling, fresh air, domestic water, and all the systems that support
- Ari: that level of comfort. Well that's a great way to put it. System's designed to provide comfort. I've never heard it that way. I am writing it down as we speak.
- Nicholas: That's great. So I think that's perfect segue because we just covered a whole bunch on the domestic hot water and the water. Um, and we talked a little bit about HVAC. We should probably pick up at that point. So we've, we've already talked about what they do in terms of water efficiencies and water savings and unless there's anything else you want to talk about specifically on that subject.
- Jon: It might make sense to talk about some of the challenges that are just common in industry, um, that condos, property managers, board members face and that have actually prevented I think, um, looking into energy savings and there's a number of, normally industry towns

- Ari: You mean people are actually reticent about saving money. Yeah, I know. It's, it's crazy. Wow. You should see he's shaking his head like a, like a, a a bobble head on Blue Jays on game day. So, uh, why w why on earth would they be reticent to, to Save Money? What, what do you think psychologically is stopping them?
- Jon: Well, I guess just overall, um, there's a lot of noise in the market. And so if you look at, well first of all, actually seven back a condo is an ecosystem that involves a number of key personas. So you have your board of directors, you have a property manager at the local level, you have a regional manager, you've got a mechanical contractor involved, you've got engineers who you look to for advice, you've got lawyers and you've got all these different personas supporting one, one building. And right there, you've got it. Just a number of voices sharing with you. Here's what's good, here's what's bad. And that sometimes there can be even competing interests. I'm involved now with that said
- Ari: There is a storm of sound. Yes. You just, everybody throws their voice and, and, and ultimately the decision maker is the board. Correct. And so from I hear you correctly, they're throwing their shoulders up and going, who the hell do we listen to? This guy says, one thing this guy says, and then not only that there's in your field competitors where one will say do this and the other one will say do that. That's, Yep.
- Jon: And to make it even more complicated is that board of directors are volunteers and they usually have a full time job and they have, you know, busy lives. And on top of it they said, I want to be a good steward for my building. I want to represent the owners and I'm going to make sure that over the longterm we want to make sure our investments are safe. And so you've got a very well intentioned board. Um, they might not be an expert in one area.
- Ari: For the most part, they're not experts in that particular field, whatever they are. Every once in a while you'll luck out and you get an engineer or a mechanical contractor that sits on the board of their condo. But for the most part in the over 10,000 condominiums, Ontario, it's rare.
- Jon: Absolutely. And so you get a number of voices, you have a varying level of experience or expertise in an area. And then third, with the number of people that need to decide to move a project or any idea forward, it can become very complicated. And a lot of times things down actually ended up getting done.
- Ari: So I'm gonna throw it out there that your job as VP sales is to make the complicated simple.
- Jon: I wish I had paid you to say that. That was perfect. That teed me up. Um, yes, it's, our idea is make it as easy for all the parties involved and it really comes down to, well, how does it benefit you? How, how does saving energy for the board benefit the property manager? How does the same data we're collecting to drive energy savings, help mechanical contractors service the building more effectively. And so it's, can we join all the parties together at one mutual place, which is the board meeting and have everybody agree that this is the direction we should go toward? Or sorry.
- Nicholas: Do you find it challenging though when you're looking at a big project? Because the nature of your work, you know, I imagine the dollar figure, the t the dollar figure assigned to what work you do is high. It's not like a \$10,000 job. You're looking at a a hundred thousand dollars plus for these

kinds of machinery that we're talking about. Um, so do you find it very difficult to have board of directors willing to write that check? Um, even though that they are saving money over the long term?

Jon: Yeah, you might think so. Traditionally that has been a challenge in the condo industry. Uh, but in, in regards to money, it's, it has been very challenging for boards to make the investments they need to make because again, their only source of income is a, is their maintenance fees. Generally.

Ari: Maybe you have some commercial space, you can lease it out at the bottom of your building, but by nature they're supposed to be the nonprofit. All right. Uh, however, there are some that do bring in some ventures too. Great. Some type of, you've got a party room rental, you've got a guest suite, a rental, I, it's not the proper word, but that is the word. Uh, you have in some condos they have, uh, ATS, which generates an income for them.

Nicholas: They also have interesting things nowadays with airbnb where they have agreements with some condos with airbnb where they can have certain units being listed, a short term rental, but the condo gets a portion of the income. I think airbnb actually started that. So those are rare ways that the condo can generate extra income from its maintenance fees. But yeah, it's primarily the maintenance fees are the sole source of income for the majority of condos out there. Yeah. And, and because of that, every year go through budgeting, you've a reserve fund study done.

Jon: He know what you need to allocate into reserve for major replacements or projects in the future. You've got an operating budget where half of that is your expected utilities. Uh, it depends on the Condo, but up to half of your operating is going to be your electricity, gas, and water. The other half is on services that are essential to the building, property management, cleaning, security, et cetera. And frankly, there's not a lot of room to move in those areas that those don't really get much cheaper, um, costs of labor mainly. Right, right. Yeah. It's just particularly cleaning and security are heavily weighted towards man hours in labor. That's, that's their only major cost predominantly. So, yeah. All right. So it means cutting back. If you wanted to save money out of that budget or have money to spend, um, you're gonna need to cut back somewhere or you're going to need to wait and plan for the future and maybe raise more money in fees. Um, but the reality is most people could have heard a good idea even if they liked it and they said, fantastic. I love it. All right, we're going to have to do this two years from now. Um, or you know, in a new fiscal year, uh, because we just don't have the money to allocate towards the project right now. And so knowing that what we've done is we've created a model that, um, we can actually guarantee an outcome conservatively. And what that means is through, uh, an assessment of the building, we can understand, well, how much can we actually reduce electricity consumption and how much can we reduce gas consumption? What dollar amount does that equal at your current rates, at the buildings pain? And all of a sudden we can say, okay, well we could free up one of your biggest operating expense, \$60,000. And the board says, oh well that's fantastic. And then what we do is we actually take the costs of that project and we spread it out over five years. So that from the very beginning of the project, your savings, which are your utility reductions plus your incentives that you actually received from electro or Toronto Hydro and Enbridge after the save on energy program, um, those are always going to be greater than the costs of having to implement the project and pay for it.

Nicholas: So instead of doing a hundred thousand dollar capital project on day one and paying you for the whole project, you're splitting this over several years and the savings are being used to pay for

this project plus something the condo spends plus money. They are getting back from the government for doing these green initiatives to reduce their energy load on the province. So is that how you manage these big expenses? You make them smaller and more manageable for these these condos?

Jon: Absolutely. And it's really about, one is making it manageable, but it's impacting the bottom line in the current year that the project starts. And so we can save you, um, probably two to three times more than the cost on a monthly basis. Meaning the difference between the utility savings and the cost to achieve those savings gives you, you know, maybe four or \$5,000 in that month that can be reallocated somewhere else in your budget. And that's completely up for the board and the property manager to choose how to allocate.

Nicholas: You're saying, you're saying that you get positive cashflow within the first year of using this?

Jon: That's important is because at the end of the day money kind of talks and people are interested in having the ability to use their, their budget more wisely. And so our model enables that board to say, Hey, well we've just netted out an extra maybe 30, \$40,000 and oh, we didn't want to renovate the party room or we did have another project we wanted to do. Could we reallocate that? Could we now budget more accurately in the future years.

Ari: But here, here's the question and I don't know if this throws a fly into the ointment, but that's my job. Um, are you in essence financing the project over five years?

Jon: Um, I guess you could classify it as that. So, but we, we merged as a company wouldn't be. So who is financing it? So we have in our, our whole model is based on um, strategic partnerships and so for the boards who would like to use this model? So some actually, by the way, some boards do purchase upfront and that's because the, uh, the condo act had changed, uh, really it was last summer that you can allocate portions of your reserve fund for energy efficiency projects. And if you're a financially healthy board and you've got more cash than you know what to do with, uh, it's a better, it's a faster return on investment and you can use your, your reserve and that.

Ari: So that happens all the time. Third Party company that will finance this hundred, \$200,000 project. So my question to you then is where, cause we're talking about boards also being reticent to do this, for that to happen, they need to have a boring bylaw and then now they have to go to the community and say for those who don't know, that's a, so a bylaw has to be passed that gives the board of directors power to approach a type of any type of institution to borrow money in the corporation's name. So how do you work? Do you work around that or do you include that as part of your presentation?

Jon: Um, we definitely include that as part of our presentation because every board is different. Every board has adopted certain bylaws, especially a borrowing bylaw. Um, and I, I guess the, the real answer is, it's always case by case. Every building we work with we go through a process that helps the board evaluate is this a good fit or not? And part of that means we need to cover several different areas of consideration that you have to actually about before you can sign a contract and move forward with any projects. So you need to know from an engineering perspective, does this work from a financial perspective and boring? Does this work? Can we do this? Um, is the board supportive of this type of initiative? We need to understand, will there be

effects on comfort based on the proposed changes that we'd like to make in essence to put together a feasibility study? Yes, that's a good way to put it. I, I've never called it a feasibility study. Um, but it's very much so it's, we take the customer through kind of a journey where we say, let's build the foundational blocks of determining if this will work for you. And that starts off with a site assessment to understand what, what type of equipment do you have?

Nicholas: Well, to summarize, you're doing this feasibility study. You're, you're coming in, you're looking at all the equipment, you're saying you're consuming x energy. We can get you to consume y. This is how we do it. This is how much it's gonna cost. And then you give options. One, you could pay for this entire project now, and then you're going to get a return on your investment.  $X - y = \text{savings}$ , right? Yeah. And you'll get, you'll get your money back within however long if you pay it all upfront. And the second option is we finance it through our strategic partnerships. And you're going to get your money back over a few years.

Ari: No brainer. Yes. Yeah. So why, what is, why are you here? Why aren't you busy running around doing these, uh, journeys?

Jon: Oh, we, we are, uh, first of all. So, um, I'd say over the last nine months especially, we've been through 200 buildings in the GTA. Um, and we are in that journey with all those buildings right now. And so it's not always, uh, an immediate overnight decision. And I think decision making and boards as both of you know, is, is, is a process and every board is slightly different. So as we're being maybe the Sherpa for these board members and saying, hey, we're going to guide you through, you need to know, um, there's other considerations to make. We need, if there are absolutely major projects that are like mission critical to maintaining this building's value, that's gotta be done sometimes.

Ari: I love all these illusions journey Sherpa. I've got the, the Edmond, Sir Edmund Hillary of energy in front of me here. It's pretty cool. I like it. We've discussed ad Nauseum, the big picture. Let's get to the nitty gritty, cause I'm sure there's some board members listening, maybe some managers listening, they'll go, okay, we've got all the ethereal talk about we can save you money, we can do this, we can do that. Everything is wonderful. Now let's put the pedal to the metal. What the hell do you really do? Where does that come from? We talk about these systems, that comfort systems. Well let's get more detail on that. So now I put it to you. Give me an example of that system or the systems and I don't know if it be giving away trade secrets where you create the savings, but without doing any detrimental, uh, damage to the, uh, the forthcoming growth of your company. Please explain.

Jon: So I can actually get pretty in depth here. It's great. I don't think I, a lot of this, what we're doing in a building is actually been refined over years in the commercial industry based on sound engineering practice. Uh, and so from the actual, how do we save or control this equipment that is a industry standard practice. Um, just to tee it up a little bit, why there's even a challenge here is important to understand. And if you look at any building that's been developed and wonder, well how did they design that building and why did they design the building in the way it is? Uh, they have to engineer your mechanical system to deliver the maximum amount of comfort in the worst case scenarios. So we'd call those degree days. So in the summertime, can our chiller or cooling system deliver enough air conditioning for all the suites and the residents to hit their, you know, level of comfort. And in, in the winter, it's minus 25 of worst days. That's cold as can our boilers actually help achieve the level of heating needed to be comfortable in the building. So right off the bat, that building is designed to produce heating and cooling in the worst possible

cases, which is great because we need that sometimes. But when you look at what actually happens over the course of 365 days, those extremes aren't very frequent. But you've got equipment designed to produce that level of comfort, meaning it's gonna use more electricity than it needs to because you're oversupplying heating or, or you're burning more gas than he needs about efficiencies. Right. And so the, but the first understanding is that there is a lot of extra being used that's maybe not necessary. Now the next challenges will construction companies don't necessarily have an incentive to equip the buildings with what's needed to vary that speed of this equipment or make this dynamic.

Ari: So you are talking about developers, builders, yes. Not specifically with the construction company. I just want to clarify hardhats come over and say, hey, you said that that's wrong. You know, so, okay, let's clarify this so that now on shows up at your doors at this office, but, and I apologize guys or girls in hardhats.

Jon: Yes. Um, so it just, but there's not a lot of incentive and it makes complete sense when you're developing or designing a building, you want to be the most effective. You're not gonna maintain this asset or it's next over its lifetime. You know that it will be passed off to a board who accepts this building and then is in charge of managing it. Um, and it's really up to the board of that point to say, well, what can we do to reduce this energy consumption? Um, technology's come a long way as well. And so let's, maybe even 10 years ago it was, you know, there's a lot of buzzwords that get thrown out there, you know, the Internet of things or big data and what does that really mean? How do we apply it? Um, but that became popular because we just didn't have information at our fingertips. We didn't have information flowing to us over the Internet that I can pick up and look at on my phone. Uh, we didn't know how to use that information. And where we are today is we can collect information about the building usually, you know, temperature and comfort related actual measures that are numbers. So we can measure comfort in terms of numbers and we can use that data to now control this equipment, which is oversized and reduce it at key times to where we don't have lots of demand. And the difference between those low periods of demand and the maximum demand, that's where we find savings because of that equipment uses less electricity and it uses less gas. The other key component is that it's dynamic and so that as you demand more fresh air, for example, uh, well we don't want to be able to have, you know, poor quality air naturally, right? So you're saving money when you have very low CO2 counts and hallways. But as soon as you know, time of day, maybe it's dinner time, there's lots of CO2 in the air. We know that we need to ramp up that fan. We're going to choose to use more energy at that time. And it's the balance though, of dynamically changing this equipment to meet what the residents need to be comfortable. And the difference between the high and the low point is really where you're gonna find those savings. Cause you're gonna use less of energy of the energy units, electricity or gas from your utility providers.

Ari: My familiarity with this current comes from booster pumps and all the companies that are out there that are really basically doing your efficiency tests cause your booster pumps are on 24 seven two you need your PRV valves to regulate and but demand varies

Nicholas: And a booster pump just for those of you who don't know is it pump in your building that keeps the water pressure going from the entire building that keeps it relatively steady. So you don't have lags within certain areas of the building because of how the water is going up and down through the pipes. It maintains a constant pressure for demand in the building, right.

Ari: However, demand changes and right. So when three o'clock in the morning, nobody's taking showers, doing laundry, washing dishes, those pumps are still running like wild. And then they're being tempered by the pressure reducing valves, but there's no demand as opposed to a six 30 or seven o'clock when everybody's given the kids baths. The dishwasher is running somebody through a load of laundry in and the, and so now those pumps are still going at the limit that they're there. They're needing. So what these companies do, and I, I'm assuming something similar to what you propose is to install what's called a very, a variable speed drive or a variable drive. So the pumps are now more electronic and they are set up in such a way as to change the pressure with the requests for demand. All right. But you're looking at doing that with all kinds of other systems as well?

Jon: Yes. And by the water is the perfect example. Um, it really does change based on demand. And I think that if, if you don't have a variable frequency drive or speed drive, uh, depending on what you want to call it or a package system, there are some great incentives out there to help you in that area. Um, you should look into it. But what Parity is doing is we would include that in our scope or what we look at. All of this mechanical system needs to work in concert together and they actually influence each other on how their efficiency runs. Um, the how we would actually be different though than uh, a variable speed drive. Yeah. It's either or choose your moment, your most of the time they'd be referred to as VFDs, variable frequency drives cause you're, you're changing the frequency of the actual motor itself. But otherwise that's changing is also speeds. Yes. And it's all, it's the same to me just just to split hairs. We'll call them variable drives. All right. Um, so one of the challenges with a variable drive, which is a control, this actually allows you to change the speed of a motor. And if you're running the motor slower, you use less electricity. Uh, very common sense. Um, uh, challenges. You have to program them. And so you get them installed, you program them and you put them on a schedule. A variable drive does not itself dynamically change based on changes in pressure.

Ari: And so it's not really a smart drive is what you're saying.

Jon: Right. It's, it's I've said okay from 7:00 AM until 10:00 AM just uh, cause I'm going to cast a wide net here. I'm going to run this booster pump at near full capacity because that's mostly when water's consumed. And then in the rest of the day I'm going to schedule it to automate down to maybe a 48 hertz, maybe lower. It depends on the building, but I'm just going to choose that a, a safe gas in a wide net would help us find some savings because I think we can probably get away with it.

Ari: Yeah. It's like how I set my thermostat at home. I program it for when nobody's home, the house is cooler and when people come home at night in the winter time we ramp up the heat. So people have a greater level of comfort.

Nicholas: And you do that automatically as part of your system.

Jon: Yes. So, so what we're doing is one is dynamically moving the speed of that boost your pump to reflect how much pressure is needed throughout the entire building.

Ari: So how there's the question, how do you know? I think also the magic trick, I guess. Yeah. And I think also what's the difference between just having your standard HVAC contractor come in and put in a new VFD versus what you guys are doing?

Jon: Right. So it comes down to I guess, um, functionality and monitoring. And so what parity is at core software company. And so you can essentially, um, there's maybe, let me rephrase this. One way to manage a variable drive is to have your mechanical contractor or a, you know, a human being go there and physically change the speed and use the interface on that drive to change the hertz or reprogram it or set a schedule.

Ari: Just so you know, Hertz is the frequency of a motor runs at and a 60 hertz, 48 hertz that hertz is also referenced as the speed.

Jon: Yes. And to make it easier to 60 hertz is on 100%. Right. Maybe even confusing it because you think maybe they would measure it out of a different number, but 60 hertz is 100% or full speed. A 54 Hertz is actually 90% and so, so forth. Um, so if you want to change the speed from a hundred to 90%, you would go and physically change that turn a switch or press a button. And someone who was um, skilled or educated in the area would say, well, before I'm going to change the speed of this motor, there's a couple things I need to check. And that would be kind of engineering work. They'd say, well we need to maintain this of pressure. There'd be somewhat of a study or essentially math done to determine what speed is appropriate and won't sacrifice comfort. And that's kind of a manual process. Um, and, and for the most part it's, it's been casting a wide net that safe. What we're going to do is track data in near real time on pressure and we automate all those calculations.

Ari: So that would require the installation of quite a few sensors, I would assume. Yeah, quite a few. Well, how do you monitor a building? The demand for water is increasing. Is there like a lag? So we can see that, you know, more people are turning their taps on. Oh, we better ramp up the, the pumps. So how?

Jon: On every building as part of that, that journey or you know, that I'm guiding you through and our team has guiding you through is the first step is knowing what equipment and controls you already have. And the second would be assessing what specific pieces of equipment would be necessary, um, to achieve that result or have that realtime data that can be used to make the decisions. And the third is, well, what controls are in place where need to be in place to then use the data and then control that motor or boiler. And so we assess that on a case by case basis. And so it's really, it's kind of like Netflix, you could have a subscription to Netflix and I think it's like \$8.99 a month.

Ari: That's for the single \$11.99.

Jon: Oh, I must've gone up. I think I've got a legacy. Yeah.

Ari: Not that I have any time to watch Netflix.

Jon: Um, yeah. If you have a subscription, you still need a device to watch it on. Um, I know it's a very simple example, but you need to either buy a TV, you need to have an internet connection, you need to either have a tablet, whatever it is. And so in this case, the building needs to have certain hardware installed. It needs to also have a modem that we put up in the upper mechanical room to send data to our cloud based software. And those are some of the prerequisites. And so we're actually extracting, uh, the key data points that our algorithms need from all over the building in the common areas. And we're processing that in our software and sending the information back



to the building where it's actually controlled in near real time. And so the, this calculation happens in, sometimes it's a matter of seconds and for some purchases, you know, every 15 minutes, it really depends on, on what we're affecting. Water, domestic water can actually change every couple of seconds based on how the equipment has been commissioned, uh, at the building at the local level.

- Ari: Hmm. So as you heard him say algorithms, right, that's going Facebook, they're going to have trouble with that, didn't they? I just want to make sure you're not going to divulge all the secret water information to everybody about how much water I use.
- Nicholas: I liked that though. That your, the Netflix of air conditioning and heating.
- Ari: There you go. Um, so that, so if we've talked about water, alright, where else do we go from here on our journey? So let's look at, um, you got heating, cooling, fresh air and the key system predominantly water as well. Yes.
- Jon: Yeah, I think boilers are heating up water. And then with the difference though that we've got a different set of pumps that are pushing this heating through the building. So, uh, Nicholas and I were talking about this a bit earlier. If you imagine your building as a rectangle where there's a loop in the building, um, the boilers are heating up water and then there's usually two pumps. And again, it depends on the building called hydronic pumps. And those are actually taking hot water and they're circulating it through a loop. Now at each suite, whether you're a heat pump building or you are, um, a fan coil building, let's let us take fan coils. For example, there's a valve and the valve opens up when the temperature in that suite is not reaching the thermostat temperature and it allows hot water to flow through there where the fan blows over that coil and he comes into the suite. Right now when the, um, sweet is at the right temperature, a valve shuts. That loop keeps going and it ultimately returns back to the boilers where it was previously heated up because it's loss of heat. Yes.
- Speaker 1: Through the water's gone from being nice hot water to heat up my, uh, my family room, the sunroom in my condo, now it's, it goes through, it's given up that heat to me so I can enjoy my level of comfort. And it goes back on it's journey all the way around back to the boiler.
- Speaker 2: Right? So if, if I was to tell you that 60 degrees Celsius was a supply temperature and it came back at 45 degrees, what would that mean?
- Nicholas: You lost 15 degrees of heat?
- Jon: Yeah, lots of people are drying heat it, but if it comes back at 59, it's a pretty warm day. Yeah. There's not a lot of heat is really needed at that suite level. So off the bat, and that's really standard practice everywhere. Is that, what's the difference in that supply and return? And that's nothing proprietary. I hope my bosses don't fire me for divulging that, but there's many other variables at stake, whether is a huge influencer of temperature that we need to supply at, um, the speed at which the hydronic pumps are pushing fluid through the building. It matters as well. Um, pressure matters. And so there's a number of these variables that are all taken into consideration to determine how to run the boilers and in what sequence at what speed to run the hydronic pumps. And maybe we have a system with the lead and the lag pump. Uh, we need to know about outside air temperature. We also need to know about the temperatures coming

through from the makeup air in the hallways being sentenced suites and all in all it needs to be balanced together so that we're not um, that nets out into, into savings because we're able to deliver exactly the amount of heat that needs to be absorbed into the suites, um, at any given time. And what's really interesting, cause people ask this all the time, if we install this or we have Parity as a solution, does that mean I'm not going to be able to reach the temperature I want answers. We have no effect on that. You have, you control the thermostat and simply the thermostat's going to open your valve.

Ari: It's just sending you guys a different set of data. Right. Really that's all they do. You're an observer. You're an observer, your company, your software, your algorithms are observers and they will let the system know the demand is greater or less and make allowances between all components of it. Yes,

Jon: Correct. It's kind of like having a, an engineer looking over your building, like Guardian engineer determining how to run these systems and this work that would be done 15 years ago. And you might say, Hey, we want an engineering group to come in and we want them to look at how our boilers are running or big trend. We want a group to come in and look at how our chillers are running. Uh, maybe we need to recommission that chiller and the condenser pump and all the pumps associated with that. And those are typically individual projects that take a long period of time when they come back to you and they say, here's our 10 recommendations on how this piece of equipment could be run. Here's the cost of making each of these changes. Do you want to continue? We're in a sense automating a lot of the studying aspect of this and within, you know, reason controlling equipment based on the manufacturer's specs of that equipment.

Nicholas: And so if you found issues with the equipment where they might need to be fixed or placed, you'd, you'd advise the board about that management? Yeah.

Jon: Yeah. And so something that's outside of energy, say energy is like the most tangible benefit because it hits your bottom line.

Ari: All right. So are you familiar with passive house? No. Okay. So passive house is a new certification that's coming in. You've heard of lead? Yes. Right. We've talked about that in other episodes. So passive house is really new, but it's all about energy savings and it sets criteria and standards ultimately for new construction or retrofit in terms of having a building be considered or certified passive house. So I can see how this meshes with that as well. Um, the other question I had that I was talking about and thinking about while you were speaking is saving energy in the suites and the heat levels and the comfort. How this work with buildings that are sub-metered for electricity, sub metered for water and some metered for hot water. How does that connect? How does that work into your system?

Jon: Um, so we work with buildings that are both sub-metered and non sub metered. Uh, we focus on the common element spend, uh, first and foremost. So what we're looking to do is reduce the corporations spend on those utilities. Now the sub-metered spend, if you're in a newer building and you have water sub-metering that's great and that, that's awesome because water is so, so expensive and we don't really have a good way to reduce water consumption outside of behave, changing behavior. Um, but on the electricity side, what we're able to do is those mechanical rooms are common and owned by the corporation and that's going to be felt directly on their budget. If you like to keep your lights on in your suite and it's sub-metered well that tenant or resident is just going to be paying for that. So it doesn't really affect things. Um, except for when

it comes to smart thermostats, which is something that we haven't talked about yet. Um, we're the first vendor out there and software company that's put in both, um, Ecobee, which is and Nest. So we worked with both Nest and Ecobee and in some of our earliest projects that are, um, I guess were implemented two and a half years ago. Um, they've gone on to use the same model, no cost up front. We put in smart thermostats and every single suite in the building. Um, we then, you know, got with the permission of the building, use that data to further regulate the mechanical systems and drive more savings, then we guarantee that savings members the suites themselves, right? So the corporation gets more savings from it's mechanical equipment because we gave every resident a free smart thermostat and we've done several projects already throughout the GTA. Um, it's a, the building that I'm thinking of in particular on our first project a and, and it's always relative to the size of the building, but we saved them \$40,000 and then we put in smart thermostats and saved them another \$30,000. Um, so in total from their baseline before they did any work with us, it's a \$70,000 difference.

Ari: The thermostats provide you with additional data of the usage in the units, but they are the sub-metered units.

Jon: So in this case they are, they are sub-metered but if they were not sub-metered then the corporation has more to benefit.

Nicholas: Either way they save on money, they saved money either way. Yeah.

Ari: But your, your Overwatch of the Ecobee or Nest smart thermostats in no way allows you to adjust the climate, the temperature settings in the units themselves.

Jon: Exactly. So they still have full control. Um, it becomes a uh, behavioral, uh, challenge where we say, Hey, let's teach you to program the thermostat and the way you like by default it's a Google, which is Nest and um, Ecobee have modes that are like eco mode and they have a sensor. And if you're not there, it does dial it back. It starts to learn your patterns. So this has nothing to do with parody. This is just the hardware. At this point. It starts to learn what are the patterns, what is like, yes algorithms. And, and what we find is that we don't need everyone to adopt that programming. And some people say, I know I don't like that feature, I'm just gonna want to control it myself. But enough people in buildings are saying, yes, that sounds like a great idea. I'm gone from nine to five. I don't need my suite to be at 23 degrees, even though that's my desired temperature. But two hours before I come home, my fan coil valve is going to open up and my suite's going to start heating up. And that also just helps save energy off the fan coil and off the boilers.

Nicholas: So some condominium corporations do own the fan coil or the heat pump units inside of the suites. Sometimes they're owned by the unit owner. It depends on what the declaration says about who has the maintenance and repair obligations for that. But I suppose what you're saying is that in any condominium corporation that has multiple units with HVAC, fan coil heat pumps, you can come in potentially save a lot of money on the consumption of these, these energy, um, these energy offerings, all of these utilities. So it really is a smart way to reduce the costs overall for a building. Have you ever gotten a building to a level that they might be considered a LEED building?

Jon: Um, we have not, but we haven't put much effort at all into that's mostly moving structure.

- Ari: Yeah. LEED. And I've had the pleasure of managing some LEED gold buildings at the time I was managing, there was only six in the province and I was managing one of them. Um, uh, leadership in energy and environmental design. So LEED is not just the energy, but it's uh, using, uh, the specific, uh, environmentally friendly materials and a no VOC, low VOC kind of substances as well. So it's, and it's also about procedures and how you, how you're cleaning your wet handle, your waste. So it's not just the energy. However, passive house is more relevant.
- Jon: I'm going to have to look into that. Yeah. It's very interesting. Yeah. Very interesting.
- Ari: Yeah, if you listen to one of our, uh, one of our back episodes with a, we have a couple of engineers from a pretty imprint IOM, right? Uh, Jennifer and Anthony, they talk about it extensively.
- Jon: Very interesting. So it is good like industry-wide or through associations, various standards, uh, being set. It's only gonna benefit condo boards. I think that if there can be a framework that the board can understand that property management companies can easily adopt. They don't have to reinvent the wheel per se. And so that, that does help. So, um, it's good as this is all rolling out all across North America and each region is really kind of having their own standards or, uh, programs put in place. And obviously utility companies are really pushing this type of agenda as well.
- Nicholas: And it's a really an investment in the community because if you're investing your money in GICs, I use this analogy in one of our previous episodes, but if Condo Corp invests in a GIC, they're restricted to a very, very low interest rate. You're lucky to get 2% and you can only invest a hundred k at a time if you want to have that secured. So if you do that, you're making 2% on two, three years. However, if you put that hundred k into a project that can save the building energy in excess of that. Perhaps, maybe it's more over the long term, you're making a big investment for the community over the long, over the long term you can save even more money than you might make on an investment.
- Jon: Yeah, that's another way to look at it. It's if your costs for achieving the savings are, let's say \$60,000 in year one because you chose to finance this project, but you're recouping in that year one a hundred thousand dollars and you've now netted out \$40,000 extra, I mean where else are you going to get that type of return?
- Ari: The problem is you're dealing with people in general that even though that makes perfectly good sense, these are the same people who will fight for their investments or bank accounts to save a quarter of a percent here or a quarter percent here, but they go like crazy to the ATM and the cost for taking money works out to 13% or 14% of what they're removing from the ATM.
- Nicholas: Sowhy do you think that is? I think it's the lack of education. I think it's a lack of understanding of what the benefits are.
- Ari: Yeah, pretty much. I, I, they don't really know the numbers. I don't think anybody realizes if you go to an ATM and you, whether it's your own or your other or another branch, you take out \$20, \$40, and there's a \$2 and 50 cent charge plus the charge that the a your own bank, whatever it is, \$4 on a \$20 withdrawal. Wow. You know what that rate is. So, yeah. Eh, but they argue for a quarter of percent on an account.

Nicholas: Yeah. So, Jon, how did you get into this business? Because I don't think you, you started in HVAC and software development.

Ari: You were a male model first?

Nicholas: Uh, hardly a plus sized, uh, handsome boys.

Ari: Oh, there we go. Keto diet again. We're going back to that.

Jon: Nah, not at all. I was, I've been in software for quite some time. Um, I had the pleasure of working with, um, probably the fastest growing software company out of San Francisco and I grew with them until they were fortune 500 company. Um, I wanna drop a name. You could, or salesforce kind of hurt them. Yeah, I've heard of salesforce. Have you heard of that? You're a company. You do some things that are around time's cool. Uh, it was a great experience. It was run around with like with, uh, uh, Luke Skywalker cause he was made a sales force be with you. I know you must've heard a lot of, uh, Star Wars jokes that would get made, but I never personally ran around with one of those signs cause you're asked as we know, we know. I am, we know that. Um, but it was good exposure. First of all. Like in that, at that role I sold to, AH, manufacturing companies, high tech companies all over the U S Canada. And what I really started to learn and and enjoy was, well, every business, no matter what industry you're in, you have certain challenges and there's a way that technology is gonna help, uh, help you become more efficient and help you grow your company, uh, et Cetera. And it always came down to that as well. How is this going to benefit me? And taking that over the many years at that company, I realized, well, this is something that I want to do on a different scale, not as part of a giant corporation where I'm a widget and machine. And I said, well, what are the big challenges that I can be involved in solving? And the co founders of Parity, a somewhat visionary and saying like their challenge was that buildings represent more CO2 emissions than automobiles. And I was like, whoa. First of all, I didn't really understand the impact that buildings in the built environment had on global warming. And I thought that was really an environmental crusade to something. It started with an environmental crisis. The core of this is that if we can reduce the energy consumption of building urban footprints, yeah, our footprint gets lower. We can do right by the world. We can make the world a better place. I know that sounds kind of hippy, but we all truly believe that it's very much in our control and that we can do a lot of goods here. And I saw that challenge and I said, okay, let's, let's break this down. Why is that the challenge? Why are condominium specifically using this much energy? Why hasn't anyone done anything about it? And if they have, why have those other solutions failed in the more and more? I, I unwrapped, uh, the industry and I started researching, I realized that this business itself was solving a major challenge in a way that was taking the best of all the other solutions out there wrapped into one nice neat package.

Nicholas: Which is nice to say because I initially thought when we were talking that you were just discussing a standard bas system building automation system. But for discussing with you, you have to use the whole nine yards. It's like that on steroids, but it's a bigger picture.

Ari: I see what it is. What I see here, I think you're challenged predominantly is of communication. All the parts fit together like a puzzle. But nobody realizes they can't see the whole picture after all the puzzle pieces are together or they haven't been shown it because you've got heating guys over here, you've got automation over here, but nobody's taken all these individual puzzle pieces and made a nice big picture. Say we are the world. We can save the world and save you money at the same time. So in essence, that challenge comes from you communicating this or your

company and providing information to boards to directors. And ultimately we always know that knowledge is power in this case, knowledge saves power.

Jon: Wow. I'm, I'm actually really impressed with how you wrapped it into that. That was good. Okay, great. You're right. Um, this is for a bigger picture. And, and my philosophical belief is always that if you're gonna drive change in the world, um, the best way to do that is actually through business. You can provide value to someone that purchases something that does result in an impact because it's benefiting them and lots of people are going to jump on board. Um, one thing that we haven't really dug into is that savings, when we talk about who benefits from energy savings directly, I'd say that's the board the board gets. And, and with all these different parties involved and the biggest challenge is getting everyone on the same page. And so the question is what, what's in it for you? And we've identified that, uh, the major parties that we need to provide value to and we, we are, are the property managers at the local or site level, property managers at the head, office level, um, and really mechanical contractors that are servicing these buildings, uh, and have contracts with these buildings. And so beyond the energy savings, we're taking an immense amount of data in real time about these buildings that is now being visualized for property managers. So if it comes to any sort of administrative task like your board might ask you, can you give us a report on how our energy spender utility spend is doing or why, why was our utility bill during the month of January, especially gas, why was it so much higher? We budgeted for Y dollars and it ended up at Z. So we've simplified the way to report on that and understand why the energy was spent the way it was. And usually it comes down to correlations with weather. Um, well these are all things that on top of all the other tasks,

Ari: a change in costs for the, for the actual utility, uh, in your reports for example, um, you know, the, the price of water goes up. Consumption is the same, but we spent more because the price went up.

Jon: Yes. So we track every unit of energy and then as things change, um, you, it can reflect that. So typically it's, we're using what your current rates are today. Um, but if you know about a price increase or something changing, then we reflect that in, uh, in the reports. And then this becomes all live, uh, through your phone on any, as long as you have the internet, you can log in, you can see how your energy, gas or electricity is doing. You can see overall water, uh, numbers and it makes it easy to report on. So we reduce administrative task. Uh, the other aspect of what helps a property manager specifically is that because our software is now monitoring the building, we have alerts set up for machine failure. So at the very first sign of something breaking down, we get an alert. Now, depending on what it is, we can, uh, classify severity of alert. And this is something that is started off in the building automation side, but it's executed really poorly. And so, um, what we've simplified though as well, what are the immediate things that need attention now? Can this just be triaged and can a truck be sent on the road from your mechanical contractor? Cause we are not mechanical contractors, but can we supply that information to them so they can do their job and service you better. And ultimately if we get ahead of issues, let's say it's boilers or chiller, there is a lag between when the equipment fails and when the residents actually notice. And if we can shorten that gap, we're going to reduce the amount of complaints that your property manager is going to receive. Not in all cases. But we get a headstart. And so the idea is can we one from administrative perspective reduce the work off the property managers back or off their table. Um, can we be that expert they can call on to, can we actually help them avoid a circumstances where, oh man, domestic water shuts off and your phone is going to blow up. Alright. Or email, it's going to fill up. And so if we had an alert right

away and your mechanical contractor knows that's a highpriority thing cause it's gotta be fixed now.

- Ari: With communication technology, you can advise the community. Yeah. And everything brings down the temp, the temperature of the, of the residents per se. They aren't so hot and bothered there.
- Jon: Yeah. And for the actual company that's working with all the individual property managers, how do we support them on a, on a portfolio basis. So you need information about your buildings, you want to understand how your customers are doing, you want to serve your boards better budgeting time, advising, and you're really a strategic advisor for your boards. And the more you understand about their building and can easily use this data to say, hey, based on what you spent last year and how you consumed and how the weather was, uh, here's how what you gotta do. Now, the third part, and I'll, I'll be briefer on this, this aspect, but the mechanical contractor, they're our best friends in the building. Um, they are the ones that get in there to get a wrench on the ground, boots on the ground. Um, we actually have full diagnostic tools for every piece of equipment. So this data flowing through, we now visualize it for the, the technicians as well as the head office so that they can understand how their customers are doing. They can diagnose a problem faster, they can prescribe the solution. So we can identify what's actually wrong with this piece of equipment. so therefore they can,
- Ari: So that would reduce repair costs because if it's T&M (time and materials), you've helped reduce the time and materials to figure out what's wrong.
- Jon: Absolutely. And they love it because they get remote access. Sometimes you don't need to dispatch a truck.
- Ari: The one thing we didn't touch on and don't want to think we missed out on it. We talked about water, we talked about electricity, we didn't talk about gas, but gas predominantly is for those running those boilers that heats the water that goes through the loop. That right?
- Jon: Yes. And then the makeup air unit. So either directly gas-fired or boilers are also used to heat up, um, water that's essentially has glycol added to it. It's running through the makeup air. Either way your, your air is getting heated up as it's coming into the building, whether it's directly through gas or indirectly.
- Ari: Is there a separate system or does it mesh in with yours? If there is a shared facility and they have a whirlpool and they have a swimming pool and there's heaters involved there, there's a, there are all those systems where the, where the water circulation pump is running all the time for the filtration system of this very large swimming pool. Um, all these things, how does that mesh into it?
- Jon: Mm, that's a good question. Um, so we've actually recently decided to focus not on pool systems. One is because they're not at every building and we're trying to standardize the way that we serve our customers and then we would look at them as a little bit of an outlier. However, if there is a case and there's large enough pumps that are running or separate boilers, um, we would on a case by case basis include them into a scope. It's really the economics of it though. If it costs Y to

deliver, to set up the solution and it's only going to give us these savings, we might decide not to include it or you might decide it's a no brainer. Let's, let's include this.

Ari: Do you have any questions here?

Nicholas: No, I just going to say, I absolutely love this product and what you guys are able to achieve by all of these systems and this monitoring that you're doing. I mean, it just seems like such a revolutionary introduction to this industry and try to make things more efficient. So I'm really excited to see what you guys are doing. And, uh, you know, one day, well maybe you'll be as big as Salesforce and you'll be in Europe and the US.

Ari: I envision your company kind of as NASA's Mission Control Center for buildings because they keep track of all the systems and the environments of all the rocks and the shuttles and everything else and they know firsthand. They know if something's going wrong, we can tell somebody, we can get on it right away. And I probably feel, you know, I'm envisioning your, your office has like, you know, 25 guys with pocket protectors sitting, looking at screens going, okay, look at this, this condo here. They've got a problem here at quick dispatch. So I, I'm excited.

Nicholas: It's nice. Alright. It's not the case. They've got a lot of interns.

Jon: Yes, there's, there's a lot of coffee being delivered. Um, now a couple of people have pocket protectors. Uh, yeah, it's an exciting place. Come down to our office sometime.

Ari: We've, uh, we've got to share this time with Jon England, uh, vice president sales for, uh, ParityGo as we said. Um, uh, I want to, on behalf of Nicholas and myself and our listeners, thank you for sharing your vision and your information. Your contact information is: Jon@paritygo.com. Your website is www.paritygo.com. I can say from us here at #WeSpeakCondo. It's been a real party and it's time to go.