## **Trane Technologies (ticker TT)**

March 16, 2023

## **COMPANY PARTICIPANTS**

Dave S. Regnery - Trane Technologies, Chair & CEO Christopher J. Kuehn - Trane Technologies, CFO & EVP OTHER PARTICIPANTS

C. Stephen Tusa - Analyst

## C. Stephen Tusa

Great. So moving right along here with Trane. We have CFO, Chris Kuehn; and CEO, Dave Regnery. Thanks for joining us, guys. Really appreciate it. A lot of HVAC content here at this conference. Maybe just to start higher level, what are you seeing out there broadly, and then we'll kind of dig into the businesses, maybe just a preamble of high level what you're seeing out there.

## Dave S. Regnery

Sure. Well, first of all, thanks for having us, Steve. So, it's a great conference and thanks for everyone for joining us. I think it's still morning. I'm checking the time zone that I'm on. But look, we had a very strong 2022. Our organic revenue growth was up 15%. Our EPS growth was 21%. Strong free cash flow conversion. Fourth quarter was very strong. Organic revenue growth was up 16%. We ended the fourth quarter with a backlog that was approximately three times what would be normal. So it's close to \$7 billion. And we're seeing growth really on a global basis. Commercial HVAC businesses are doing very well right now and we continue to execute at a very high level.

**Question – C. Stephen Tusa:** When you – maybe just starting with the largest business on commercial, talk about some of the trends there and what you're seeing by the various parts of US applied, global applied light commercial equipment?

**Answer – Dave S. Regnery:** Yeah. So if you think about the \$7 billion of backlog, the majority of it is in our commercial HVAC business. So a very strong demand. We're seeing really growth across many verticals. Okay. Think of it as high-tech industrial, think of it as education, think of it as health care, think of data centers, which is included in office. Those continue to be very, very strong verticals for us. In Europe, we're seeing growth there really with our thermal management systems, which is really a way that – I think you've probably all

heard me before, but if you think about the way heating and cooling was done before, you would have a chiller plant, and you would have a chiller plant — or on your chiller plant, you would have a boiler plant, and those two would not interact. And what we've been able to do is combine that into one system. And when you combine it into one system, you eliminate the need for fossil fuel for heating. And so our business there, really on the back of innovation, is growing at a very nice rate.

In the fourth quarter, we had revenue growth of 40% – over 40%. Now, we don't anticipate that every quarter, but it was a very strong year for us again in Europe. For the full year, the revenue was up north of 20%, organic. So very strong there, a lot of demand for our solutions.

In Asia, our business in Asia in 2022 did very, very well. I mean, it was up 12% organically and that's despite having the lockdown situation that occurred throughout the year in China, and China is about half of Asia for us. So despite that, we still performed very well.

Part of our commercial HVAC business, on a global basis, is our Service business, and our Service business continues to execute at very high levels. For the last six years, we've had compound annual growth rate of high-single digits. Last year, that was 10%. And by the way, that compound annual growth rate includes the pandemic year, which we were – we had a lot of restrictions on as to even having access to buildings and the business was flat. So our Service business which, today, represents about a third of the company's revenue continues to perform at a very, very high level.

**Question – C. Stephen Tusa:** How fast do you think the European market has grown in the last, call it, off the base of 2019, and how fast has your growth been, like, how much market share do you think you've gained?

**Answer – Dave S. Regnery:** Yeah. I don't think the market – you could argue whether the market's grown at all in Europe. I'd tell you our business last year was up 20%. What was it? The – since 2019 – you'd have to help me out with that, Chris, but...

**Answer – Christopher J. Kuehn:** I would certainly say probably high-single digit over that time, if not stronger.

Answer - Dave S. Regnery: Yeah.

Answer - Christopher J. Kuehn: Commercial HVAC.

**Question – C. Stephen Tusa:** And you're saying you guys have a – your product versus the competitor's product, where – how are you – how do they stack up and how are you winning there, that's a pretty significant difference in growth, obviously, versus the market?

**Answer – Dave S. Regnery:** Yeah. I think it really is based on the fact that our thermal management system which eliminates the need for fossil fuel, and it's a unique solution that we have in the marketplace.

**Question – C. Stephen Tusa:** Can you talk about just how that works and the...

**Answer – Dave S. Regnery:** Yeah. I mean...

**Question – C. Stephen Tusa:** ...the value proposition versus perhaps a competitor that's providing a different solution. Like, what is the competitor providing?

Answer – Dave S. Regnery: So about five years ago, we used to talk about – maybe seven years ago, we used to talk about this is on applied systems. Okay. We used to talk about heat recovery systems. About six years ago, we acquired a company called Thermocold in Europe, and they had what we called four-pipe chillers, which was simultaneous heating and cooling. So we moved from heat recovery to simultaneous heat recovery – simultaneous heating and cooling. And now we've moved to thermal management systems which is really that simultaneous heating and cooling. But we've developed ways to elevate the leaving water temperature, so you could have heating in all climates.

**Question – C. Stephen Tusa:** And right. And so the competing product for somebody else would be what would that solution be in...

**Answer – Dave S. Regnery:** Yeah. It depends on the competitor, but they're probably selling some heat recovery system or potentially what they would call a heat pump. But this is actually able to get – basically, think about we now have the ability to eliminate fossil fuel in all geographic climates. And in the past that wasn't possible.

And when we start talking about decarbonizing the built environment, you think about 15% of all greenhouse gas is for heating and cooling of buildings, 15%. The majority of that is heating. The reason why the majority of that is heating is the efficiency you get out of heating and the fact that it's fossil fuel. When you start using a vapor compression cycle which is used in HVAC, you have a coefficient of performance or the energy performance of the unit, the

efficiency of the unit that could be 3 to 4 times that of a conventional boiler. That's the innovation that we've been able to drive in the marketplace.

**Answer – Christopher J. Kuehn:** And we just installed that, Dave, in one of our facilities in the fourth quarter.

**Answer – Dave S. Regnery:** Yeah. We have a facility in France and we've eliminated the need for fossil fuel. And that we also do process – we do painting in that facility. So, think about it, this is process heating as well, and we've eliminated the need for fossil fuel there.

**Question – C. Stephen Tusa:** What is so complex about this technology that you guys – I'm trying to kind of connect the dots.

**Answer – Dave S. Regnery:** Yeah. It's sophisticated controls, number one. Number two, it has to do with the way you cascade the system to able to – for your ability to achieve these higher temperatures. So we used that – if you were doing a turbine in the cooling job, right, you used to run chillers in series, right, so you'd go through one chiller, you'd get one temperature, you'd go through the next chiller, you'd get a different temperature, either higher or lower, depending on which way you're going.

We took some of that technology embedded into these thermal management systems. We call it a cascading system. But that – but it's more – it's not just the physical components of the system, it's how you control the system. And the controls is really where the secret sauce is.

**Question – C. Stephen Tusa:** And the brand of this product, it's – just remind us of what the brand is, like how you – how – what's the go-to-market name? Is it...

**Answer – Dave S. Regnery:** It's – well, it's a Trane technology product.

**Question – C. Stephen Tusa:** Yeah. Right. Got it. And what – as far as this technology and its use in North America, first of all, what applications is it being used in vertically in Europe? And then talk about how you bring that technology to North America?

Answer – Dave S. Regnery: We could use it in all applications, okay? Anywhere where you have a need for heating, it could be used. So we're using it in hospitals. We're using it in our own manufacturing location. So it obviously works in the industrial space, office buildings, for sure. As far as North America goes, North America is a little bit further behind, but this technology is scalable on a global basis. We acquired a company in North America about, it was about four

or five years ago called Arctic. They have some of that capability. So we're taking some of our controls capability and moving it to North America. So this becomes an option here for our customers here in North America.

**Question – C. Stephen Tusa:** So can you talk about the North America market? What are you seeing in various verticals? And where's the growth in commercial HVAC equipment? On the large stuff first.

Answer – Dave S. Regnery: Yeah. As I said, we've seen strength across many verticals in North America. Education was very strong for us in 2022. Some of that is fueled by the policy with the ESSER funding. Our equipment business in the education vertical – incoming order rates last year were up 40%, 40%. We're also seeing a lot of nice activity in data centers. Think of the high tech industrial, so think of EV battery plants, as well as chip manufacturing. And by the way, there's still policy in front of us as far as IRA goes that will help that as well as The CHIPS and Science Act.

**Question – C. Stephen Tusa:** And just for people's knowledge, how do you break your business down between commercial and institutional type markets?

**Answer – Dave S. Regnery:** Yeah, for the equipment side, it's – we would say it's about 50/50.

**Question – C. Stephen Tusa:** And how big is data center now for you guys as a vertical?

**Answer – Dave S. Regnery:** Yeah, data centers is one of those – it's not a vertical, technically, okay? It's part of office. And we don't break it out, but we're actually helping. We're trying to influence others to break it out as a separate vertical.

**Question – C. Stephen Tusa:** When you think about the commercial real estate fundamentals here in the US, especially on the office side, I think people are getting a little more nervous, obviously, with what happened last week. How do you see those playing out into your business?

**Answer – Dave S. Regnery:** As far as residential or...

**Question – C. Stephen Tusa:** Commercial fundamentals? Are there any risks around commercial real estate? It sounds like everything is great. So are there any risks?

Answer – Dave S. Regnery: If I looked at office as a vertical, obviously it's not as robust as it once was. I think we all understand what's happening with what central banks are doing with interest rates. I think we all understand that we're going through a transition and what the future of work will be in the coming years. I do believe that hybrid work structures will become more the norm, which is great for work-life balance. But with a hybrid work structure, you still really need a lot of the same space that you have. Actually, what happens is it often gets reconfigured, so it's more geared towards teaming. We see that happening in some areas, but we'll see how that plays out in the long term.

**Question – C. Stephen Tusa:** So when you – and then on the light commercial side, any major differences in the trends there. What are you seeing versus in North America applied growth rates and light commercial growth rates?

Answer – Dave S. Regnery: We had strong growth in both applied and unitary in 2022. So I think everyone is aware of that, in the light unitary space, we had – the light unitary space was impacted by the SEER change that went very smoothly for us. We added a lot of features to our product through that change. We now have a feature in light unitary where, in the past, we only had this on certain sizes, but we now have the option within all light unitary to have it be a hybrid product. So what that means is it has the capability to have dual fuel capability. So you could run the unit in a heat pump mode and based on the ambient temperature on the outside, you can move it to fossil fuel if you so desire. So if you think about it, if you're in Buffalo, New York, you could, if it got to maybe 10 degrees F outside, you might switch it to fossil fuel and then you could optimize that vis-à-vis the control algorithms within the system. So I really believe this is going to be a feature that our customers are really going to like.

I mean, think about it. You could run in heat pump mode for the majority of the life of this unit. And again, you think about that 15% of all greenhouse gas from heating and cooling, this is just another innovative solution that will allow us to reduce that.

**Question – C. Stephen Tusa:** The split between your business now between applied and unitary, is it still roughly 50/50 in North America?

Answer - Christopher J. Kuehn: I think that's about right, yeah.

**Answer – Dave S. Regnery:** That's about it right. I mean, you got to remember, 30% – think about – if you think about our commercial HVAC business, 50% in the Americas, 50% is services.

**Question – C. Stephen Tusa:** Yes.

**Answer – Dave S. Regnery:** Okay. 50% is equipment.

**Answer – Christopher J. Kuehn:** Equipment.

**Answer – Dave S. Regnery:** Take the equipment, 25% applied, 25% unitary.

**Question – C. Stephen Tusa:** Got it. And then as far as lead times there, I know that some of the industry has had problems supplying. Where do you guys stand in the light commercial supply chain and how you're managing through that?

**Answer – Dave S. Regnery:** Yeah, Let me start with lead times. I think lead times in the entire industry are extended right now, and we're no exception to that. So – and it really depends on the product as to what the lead time is, but they're extended right now. We watch it very closely. We're very competitive, but they're extended. As far as supply chain goes, as I said on our fourth quarter earnings call, supply chain is getting better. It's getting better slower than any of us want. Our team does a great job managing it, but it's going to be several quarters before supply chain gets back to what I would call normal, several quarters. Okay.

**Question – C. Stephen Tusa:** And so the lead times for light commercial, I mean, there were some, we were talking too in the channel, we're saying it's like 50 weeks, which is like a – it's kind of like a fake lead time, right? I mean nobody is going to wait 50 weeks for a light commercial product. But I would assume those have come in significantly better, still extended.

**Answer – Dave S. Regnery:** I don't know if we were ever at 50 weeks, but they're extended from what would be normal.

**Question – C. Stephen Tusa:** Yeah. And normal would be like a couple months?

**Answer – Dave S. Regnery:** It depends on the product. Okay. Light commercial could be a pretty broad category, so depending on the sophistication that you have in the product, but they're extended. I mean, if it was eight weeks, it could be 12 weeks.

**Question – C. Stephen Tusa:** And do you think that that market, when the growth rates you're projecting for this year, how are you thinking about that market growing, the US light commercial, like Carrier said mid-teens? How do you guys see that market growing this year?

Answer – Christopher J. Kuehn: Look, we see growth in terms of our revenue growth. Steve, when we thought about commercial HVAC both in Europe and in the Americas, we see that as high single-digit growth for the year and really it's constrained from a supply chain perspective, right? We expect that to get better each quarter, just like we saw in 2022. So could it be stronger than high single digits? Maybe. But right now, as we sort it out the year with our guidance beginning of February, we see both Europe and Americas commercial HVAC up high single digits.

**Question – C. Stephen Tusa:** And when you think about that backlog you guys have in commercial and on the equipment side, is light commercial, how does it break down between light commercial and applied? I would assume the applied is obviously larger just the longer term projects?

**Answer – Dave S. Regnery:** I don't know if we have the exact break down.

**Question – C. Stephen Tusa:** Not, but just like extent of difference in the...

**Answer – Christopher J. Kuehn:** I wouldn't, to your point, Dave, I don't think, a, we haven't broken it out. But I don't think it's that much different from what we've seen in the past in terms of the order rates coming in. Both sides applied and light commercial are seeing extended lead times, right, and that's playing into the backlog.

Answer - Dave S. Regnery: Yeah.

**Answer – Christopher J. Kuehn:** The backlog is weighted towards applied for sure.

**Question – C. Stephen Tusa:** Got it. How do you think about your controls approach on the solution side? What do you guys – how do you guys differentiate both?

Answer – Dave S. Regnery: Yeah, I think controls is one of those areas that is often confusing for people. Right. So let me just try to break this down. Think about controls at a unit level. So those would be controls on the product itself. It's the intelligence of the products. Then you would think about controls at a system level. Think of that as like a chiller plant and then you would think of controls at a building level. That's a building management system or BMS as referred to.

So we play in all three of those areas. And as far as – I'll start with the BMS side of it. But that's where, 12 years ago, I think it's I'm dating myself a little bit here, we were not very competitive in that space. And I was running our commercial

HVAC business at the time, and I said, I'm going to invest more in my controls business than I am in my equipment business. And people thought we were crazy, but I knew we had it to be — I knew we had to be different. And what we did was we developed wireless technology, which is leading in the marketplace today. And we also knew that we wanted to be open protocol. So we didn't want to have this proprietary protocol that the customer would always have to come back to us for service. That may sound good, but it wasn't really compelling to the customer. So we invested in this. And today, we're absolutely the leader in wireless technology. We lead with that, okay? We don't — pulling wires through the ceilings of buildings is the past, so that's not who we are.

Our meshing system in our wireless is leading, right? It's really creative what our engineers have been able to develop there. And it's open protocol. So our BMS system is – it's been very successful. It's – and there's a theory out there that if you get the BMS system, you get all the systems underneath it. That's false, okay? We often get the BMS system, and I'd love to say 100% of the time we get the chiller plant system, but that's not always the case. But – and by the way, there's some pretty big competitors out there that only sell the BMS side of things. So, obviously, they don't even have many of the sub systems.

If you're going to create a BMS system with – to network it together or dashboarding it's referred to in the industry, usually use middleware to connect different systems to that dashboarding to make the operator of the building more knowledgeable. But don't – we don't lose orders to people because we don't have the BMS and vice versa.

**Question – C. Stephen Tusa:** What's the brand for your BMS? Like what do you typically go to market as in the BMS? Is that building advantage? Building advantage is something...

Answer - Dave S. Regnery: We haven't used building advantage for years...

Question - C. Stephen Tusa: Right.

Answer - Dave S. Regnery: ... Steve.

**Question – C. Stephen Tusa:** So what is the brand...

**Answer – Dave S. Regnery:** Oh, we have – it's our – it's Trane – everything's Trane technology. Or, Trane, okay, but then you have subsystems and the sub names underneath it.

Question - C. Stephen Tusa: Got it. Okay. So, the Trane-branded BMS.

Answer - Dave S. Regnery: Absolutely.

**Question – C. Stephen Tusa:** Okay. And then on the other controls front, any innovation there on the actual chiller plant in the chiller unit level come in the last several years?

Answer – Dave S. Regnery: We're always looking to optimize and we're always looking to have our product more connectable coming out of the factory. So, think of all of our unit controllers now, we use Symbio on our unit controllers, but they're all connectable out of the factory. And we've always been a leader in factory-mounted controls on all of our products. We've now taken it to a new level now because we want it not only to be the intelligence for the unit, but we want to make sure that we connect to it remotely.

And obviously, when you think about – just to go back to the 15% of all CO2 is for heating and cooling buildings, a lot of that is because the building's not operating the way it's designed. And by being connected to that, you could always ensure that the building is, in fact, operating at the engineered levels.

**Question – C. Stephen Tusa:** So, pivoting from that front to services, how are you guys differentiating yourselves there? I mean, you're growing – you said high-single digits. That industry is growing maybe not that fast, but how are you guys managing to take market share there or grow faster than the market?

Answer – Dave S. Regnery: Yeah. We have a very sophisticated – think about our business operating system. We have a business operating system around our service business. And it's very detailed as to how we manage our service business. And when you think about all of our service technicians, our company employees, they're all trained in our factories. There – it's – we give them the best tools to be the smartest in front of their customer, how they interrogate a machine, the software that they use – it's – our service business is geared towards our applied systems. Okay. We're not pulling wires through ceilings. Okay. We're out there with applied systems. Now, what's changed is as you become connected to more assets, you become even more intelligent. And what was happening, well, say, five or six years ago, was a service technician we get called because something was – think of it as on or off not working. Today, service technicians get called in many cases because energy consumption is wrong within the building. So that's kind of the migration that's happening within the service business.

We have a very detailed program to run our service business. If you ever went to one of our sales offices, you would see the MDI, managing daily improvement around service. And it's very – it's vast. It's anywhere from how we train our

service technicians to how we renew a service agreement. And it may sound simple, but it's not. And you just need – there's a process that you go through to really enhance your ability to win in the future.

**Answer – Christopher J. Kuehn:** One of the point of differentiations there, Dave, you mentioned service agreements. We do not include service agreements, multiyear service agreements in our backlog. So think of it as primarily equipment backlog contracting, but one-, two-, three-year service agreements, those are not in the backlog.

**Question – C. Stephen Tusa:** Right. So on the services side, can you talk a little bit about your infrastructure there? Like, whether it's field offices, service reps, like...

**Answer – Dave S. Regnery:** No service reps. That's all company employees.

**Question – C. Stephen Tusa:** Sorry. Your company – like, what's the – how many guy – how many – what's the feet on the street for that business or what's the...

**Answer – Dave S. Regnery:** It's always changing. But think of it in the 5,000, 4,500 range on a global basis.

**Question – C. Stephen Tusa:** And is that growing over time or is that something you...

**Answer – Dave S. Regnery:** Absolutely. Because our installed base is growing. So, we're always recruiting technicians and always training technicians. They're all deployed geographically within a – wherever we have an office, we have service techs that are attached to it. And there'd be a – think of it as a service coordinator for so many service technicians. And they would be deploying where those service techs should be operating.

**Question – C. Stephen Tusa:** And any stats around the fleet that you're monitoring and servicing? Like what's the – what's kind of the installed base that you're in? Otis gives us some numbers, very interesting to kind of like look at and analyze. What – is there a number of...

**Answer – Dave S. Regnery:** I mean I think we have...

Question - C. Stephen Tusa: ...connected fleet that you have or...

**Answer – Dave S. Regnery:** Yeah. We have over – I believe it's over 30,000 connected buildings now. We have well over a million assets that are

connected. So I don't have the exact numbers, but that would be the magnitude that we're talking about.

**Question – C. Stephen Tusa:** And this is an industrial conference. But I guess I have to bring up AI. Are you – how are you guys applying AI to improve.

**Answer – Dave S. Regnery:** It's a great question.

**Question – C. Stephen Tusa:** It's a good CEO question.

**Answer – Dave S. Regnery:** Yeah, it's a good CEO question, but...

Question - C. Stephen Tusa: We have 15 minutes left. So...

Answer – Dave S. Regnery: Let's talk about this for 10 minutes. I was just down in one of our larger offices in Texas. And we have great controls team there. And they were showing me what they're doing with their connected buildings and how they're using AI to improve building performance. And it's – it is so cool what they're doing. I mean, literally, if you think about it, if you're connected to these assets, right, and you're metering different aspects of what's happening in the building, with AI, you have so much more capability of understanding what to move when to optimize performance. And it's simple things like it's 62 degrees outside, you should be using this much energy in your building, you're using too much energy in your building, derive the fact that your dampers aren't working on your air handling system right?

Why would you ever be using this amount of energy if you're – you should be relying on free cooling. We understand the logic that was installed there. We know how it was engineered. Free cooling isn't working. Call a technician. Let's get out there. Let's take a look at it. Let's understand. We don't have a sensor on the dampers. Okay, we derive that through our intelligence. So that's where that market is moving to.

It was just really excited to be in Dallas because they were so excited about it. First of all, it was 45 degrees in Dallas, so they were very excited about – they all had winter jackets on. But it was just so much fun being with the team there and seeing what they're doing and how they're really taking intelligence and bringing it to a new level.

And when we go out and we do energy audits, we learn so much about what doesn't work properly in a building and then we take that and we build it into our Al algorithms. And you'd be shocked what doesn't work in a building. And sometimes it's just knowledge that the operator of the building has. But we're

able to now take that. We could derive it. We could run formulas around it to understand how a building should be performing. So think of it as the digital twin, but the digital twin using AI for building performance.

**Question – C. Stephen Tusa:** On the residential side, what's your latest thinking around the cycle and how the next few years are going to play out here with the refrigerant regulation coming along?

**Answer – Dave S. Regnery:** Yeah, I mean, I think we've been pretty clear. We think residential in 2023 will be down in the mid-single digit range. By the way, residential is 20% of our business. I'll start with that. We think it'll be down the mid-single digit range from a unit volume standpoint. From a dollar standpoint, think of it as plus or minus low-single digits. We'll see how it plays out during the year.

As far as the SEER change, everything happened as planned. We've spent a lot of time with our independent wholesale distributors which is about half of our residential business, making sure that they didn't end up with stranded inventory just because of the way that legislation was rolled out. So I think we're in pretty good shape there.

As far as the – there is a refrigerant change that's going to happen. It's 2025. We've been dealing with refrigerant changes for a long time. I think the first one maybe you and I, Steve, met on was probably back in 2013, okay, when we were changing from 123 in our applied space. So, refrigerant change is not foreign to us. In fact, we have a lot of scientists that work actually with the OEMs of the refrigerant and making sure we understand how it's going to perform in our product and optimize it so that in the past that used to be thought of that if you had a next generation refrigerant that had a lower GWP, you would aggregate the performance of your equipment. We reverse that. We enhance the performance of our equipment with low GWP refrigerants. So we like pushing the envelope and challenging what's possible there. So from a technical standpoint, we're not concerned at all about the refrigerant change.

From a pre-buy standpoint, I think it's a little bit too early to call that. The next refrigerant that will be used in the resi space, and by the way, the way the industry works there, you typically have one refrigerant in that space. It's classified as an A2L so it's slightly flammable and that would require different sensors on the equipment to make sure if there was a leak, it would become detected. So we'll see what happens with the pre-buy. I think it's a little early to call that, if there is one at all.

**Question – C. Stephen Tusa:** And, I guess, when it comes to product development, there have been varying degrees of approach to innovation. Some tried to combine this year change with the refrigerant change. Others have basically said that they're providing just a part of the system that they think is a better solution at least for the near term. Where do you guys land in all this?

**Answer – Dave S. Regnery:** From the SEER change?

**Question – C. Stephen Tusa:** Yeah. How much more wood do you have to chop technology-wise to bridge from the new M1 product to...

**Answer – Dave S. Regnery:** Okay, I got you.

**Question – C. Stephen Tusa:** ...the refrigerant, to one that can handle the new refrigerant. There are some claiming they have more modest tweaks to go versus others that are claiming the industry has a lot of work to do. Where do you guys coming up on this?

Answer – Dave S. Regnery: Yeah. First of all, the SEER change, a lot of our portfolio already hit that SEER change, so it wasn't a big change for us. But obviously, when we do any kind of a change, we're always – we always have lots of creative ideas in our pipeline. So we bring – we pull a lot of those forward if we have any regulatory change and add them to the products.

I talked a little bit about what we did on the light unitary side with a hybrid system now for that entire portfolio or dual fuel system. In the residential space, we certainly looked at opportunities there to simplify our product offering, add intelligence, okay. We have some really cool systems now, especially on the variable speed products within residential.

So, one of the biggest – and I'll answer your question in a minute – but one of the biggest questions on or one of the biggest problems on a residential is the install because of the variability of the dealer that's doing the install. We developed a system now for the high-SEER products with variable speed. We actually get a report card. So as the homeowner, you would get a report card from your dealer saying that all the systems are operating as the way they were designed, and we'd be looking at static pressure, we'd be looking at leaving air temperatures, etcetera. So, it's a really cool way to make sure that the installation is, in fact, occurring the way it is.

As far as the refrigerant change, like I said, we're not – yeah – I'll be on the modest side as to what work has to be to make sure that we're ready for that. It's – there's some work on the product, but we got that figured out. And then there's

obviously some work on the factory side just to make sure that you could safely charge these units in the factory.

**Question – C. Stephen Tusa:** Got it. And as far as the cycle is concerned, what's your take on how this looks over the next call it, three to four years in resi HVAC?

**Answer – Dave S. Regnery:** We've been saying for a long time that we look at over time, we look at our residential business as a GDP plus business. So there'll be cycles. And obviously as you raise interest rates, new construction is going to go down, existing home sales will go down. But over time, look at this business as a GDP plus business.

Question - C. Stephen Tusa: Right.

**Answer – Dave S. Regnery:** But we continue to push innovation there, too. I mean, a lot of times it's like this link system that we have out now where you get a report card as to making sure the dealer that I hired install this product the way it was designed is very, very important.

**Question – C. Stephen Tusa:** On the transport refrigeration side, you have a pretty good backlog. I think we're at a relatively high level just cyclically, but not too far off of what you think is normalized. Maybe talk about what you're seeing there. And you guys put out a chart, I guess, in line with ACT that shows it's going to be down next year. What's the level of visibility on that?

Answer – Christopher J. Kuehn: Yeah, sure. So ACT North America, calling 2023 roughly flat, maybe up a point in terms of the trailer market, Steve. I think the bias there may be things shift more to the right throughout the year. That's kind of been the history as we've seen it. We like those charts. We've been adding them in the earnings presentations because it really shows our outgrowth versus the markets over the last couple of years, both in EMEA and in North America. And a lot of that is the innovation that we've driven through the portfolio and the investments we've made well over time.

You're right, ACT is calling 2024 down, I think 10% to 11% and then they're calling 2025 up 10% to 11% thereafter. So it looks to be at least from that North American trailer market, the bellwether for broader markets, it's going to be a 40,000-plus unit market for a long period of time. The last seven of nine years, it's been 45,000 units, plus or minus 10%. Those are really healthy markets. So we think that we've got the right innovation. We certainly have the right teams in both of those regions, and the innovation just keeps coming. When you think about electrification of that portfolio, one of the reasons why we got a little bit

higher investment this year, one of those components is electrification in the portfolio, which we've started with hybrid products and ultimately testing now on the West Coast with some customers fully electrified transport refrigeration units.

**Question – C. Stephen Tusa:** So kind of a flat market that bounces around but you guys outperformed essentially. Is that – that's kind of...

**Answer – Dave S. Regnery:** I think we've demonstrated that, for sure, in the last two years if you look at our results.

**Question – C. Stephen Tusa:** Right.

**Answer – Dave S. Regnery:** The need to transport perishables isn't getting smaller, okay? I mean, look at what's happening in the pharmaceutical space, right? Next year's flu vaccine will be an mRNA vaccine, right? Precision temperature control required for transportation. If you have anything that requires precision temperature control for transportation, it's right in the sweet spot of our Thermo King business.

**Question – C. Stephen Tusa:** Turning to the margins, maybe talk about what you're seeing on inflation and, on the flipside of that, pricing? What's the outlook for that?

**Answer – Christopher J. Kuehn:** Well, what I would say that we're targeting for 2023, 20 to 30 basis points price over cost, Steve. That's been our typical target before we went through the last couple of years of significant inflation. So we're targeting the 20 to 30 basis points improvement.

On the price side, look, we're comping against very high levels in 2022. We realized 9.5 points of price in 2022. When you think back pre-pandemic, a good year for price would be 50 basis points or less. So I think we've led in pricing over the last couple of years. We like the performance each quarter in 2021 and 2022, price over cost on a dollar basis. So we're seeing revenue guide of 2023 at 6% to 8% organic. Estimates maybe in that 2 to 2.5 point range of that 6% to 8% is going to be really coming from price. And again, tough comps on a year-over-year basis and this includes what we've got for any type of price increases here in that first month of January. But let's see how it plays out throughout the year.

**Question – C. Stephen Tusa:** And as far as your raws, what you're thinking as far as raw materials are concerned?

Answer - Christopher J. Kuehn: Sure.

Question – C. Stephen Tusa: Relatively stable, I think, is what you said.

Answer – Christopher J. Kuehn: Yeah. We went in and said, look, we don't expect any incremental inflation or deflation on the year. Certainly, we've been watching the markets as we see – let me step back. We have a hedging strategy as we think about our Tier 1 componentry. So copper, aluminum, we're hedging four quarters out. Think of that as 75% hedged the first quarter out, then drops down to say 60%, 50%, 40% as you get to four quarters out. We continue to execute through that strategy and it smooths out a bit of the glide path when you see inflation and it smooths out if deflation were to incur.

Steel, we lock in for about six months in terms of price. So any deflationary effects in the first quarter, we'd really see that starting in the third quarter. Think of that size of spend is around \$750 million for us on the Tier 1. Okay. Tier 2 components, that spend is around \$5 billion. Okay. That's where we're seeing certainly more inflation coming from labor inflation from our suppliers, energy inflation from the supply base. And I'd say then the third component — componentry is really around freight and logistics, those costs we have seen coming down. So when we bundled it all together, we just really saw a flattish environment on incremental inflation for the year and ultimately still targeting for the 20, 30 basis points of price cost.

**Question – C. Stephen Tusa:** Any other parts of the bridge investments, what are you doing on the investment side?

Answer – Christopher J. Kuehn: Yeah. So, think of a normal year investing 30 to 40 basis points on investments. It really drives that market out growth. We love that example on Thermo King to really show market performance versus our performance. So, that's a good example there. This year that we're taking that 20 to 30 basis points of price over cost and we're adding it to the investment incrementals as well.

So, think of incremental investments in that 60 to 70 basis point spread. That's allowing us to do further around electrification, decarbonization, factory automation, supply chain resiliency. And we can still drive at or above our long-term incremental target. 25%-plus is our guide for the year. So, we're able to drive some higher investments and also commit to 25% or better incrementals in 2023.

**Question – C. Stephen Tusa:** So, when it comes to the mix because the rest is kind of volume mix that drops out. When it comes to the actual mix impact, is that pretty stable on the year or is it or is that positive because of what's happening with SEER change?

Answer – Christopher J. Kuehn: SEER change is a small piece of that and we're trying to just to get the margin neutral on that price increase on the residential SEER change. And so, that's kind of our guide for the full year. Let's be margin neutral there, not trying to make any more or less, but let's see how mix kind of plays out. I think we've certainly seen services being strong on a year-over-year basis that we like that services business. And we do think that those volume mix drive strong incrementals, let's call it in that 30% range, which then we're putting 5 points back into investments that get us – gets us to the math of the 25% or better incrementals.

**Question – C. Stephen Tusa:** Right. That makes sense. Just lastly, on capital deployment. You've made a couple of technology acquisitions that have really worked out well. Obviously, the one in Europe you were talking about. Anything out there that you feel like you need to have, or you'd want to do on from an acquisition perspective or just buybacks?

Answer – Dave S. Regnery: Yeah. I would say, first of all, we like being a pure-play. It took us a long time to become a pure-play. So we like being a pure-play. But we're always looking at technologies, and we have great channels, right? At the end of the day, we don't have to do anything, right? We have a great portfolio of products. We have a great service business. We have great controls business. We have great channels to market on a global basis. We don't have to do anything. But we'll always look for technologies or how we could augment our channel to make it even stronger going forward. And as a major global player in HVACR, we get to see everything. So we'll be very disciplined in our approach.

Great. I think that's it. Thanks, guys.

All right.

Thank you.

Thanks, everyone.