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# Johnson Controls International Plc (JCI)

Q3 2021 Earnings Call

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## MANAGEMENT DISCUSSION SECTION

**Operator:** Welcome to the Johnson Controls Third Quarter 2021 Earnings Call. Your lines have been placed on a listen-only mode until the question-and-answer session. [Operator Instructions] This conference is being recorded. If you have any objections, please disconnect at this time.

I will now go in and turn over the call to Antonella Franzen, Vice President and Chief Investor Relations and Communications Officer.

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**Antonella Franzen**

*Chief Investor Relations Officer, Chief Communications Officer & Vice President, Johnson Controls International Plc*

Good morning, and thank you for joining our conference call to discuss Johnson Control's third quarter fiscal 2021 results. The press release and all related tables issued earlier this morning, as well as the conference call slide presentation, can be found on the Investor Relations portion of our website at [johnsoncontrols.com](http://johnsoncontrols.com).

Joining me on the call today are Johnson Controls' Chairman and Chief Executive Officer, George Oliver; and our Chief Financial Officer, Olivier Leonetti.

Before we begin, I would like to remind you that during the course of today's call, we will be providing certain forward-looking information. We ask that you review today's press release and read through the forward-looking cautionary informational statements that we've included there. In addition, we will use certain non-GAAP

measures in our discussions and we ask that you read through the sections of our press release that address the use of these items.

In discussing our results during the call, references to adjusted earnings per share, EBITA and EBIT exclude restructuring and integration costs as well as other special items. These metrics, together with organic sales and free cash flow, are non-GAAP measures and are reconciled in the schedules attached to our press release and in the appendix to the presentation posted on our website. Additionally, all comparisons to the prior year are on a continuing ops basis.

Now let me turn the call over to George.

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**George R. Oliver**

*Chairman & Chief Executive Officer, Johnson Controls International Plc*

Thanks, Antonella, and good morning, everyone. Thank you for joining us on the call today.

Let me kick things off with a brief update, spotlighting a few specific areas related to our strategic initiatives and Olivier will provide a detailed review of Q3 results and update you on our forward outlook. We will leave as much time as possible to take your questions.

Let's get started on slide 3. Another quarter of solid results with demand accelerating across most of our end markets as a robust recovery continues to expand. Q3 represents our easiest comparison of the year but I am encouraged to see the underlying sequential improvement experienced in the first half continue to accelerate in the third quarter, with many of our businesses back to operating at pre-pandemic volume levels.

Non-residential construction markets continue to recover, led by the ongoing strength in retrofit activity tied to demand for healthy building solutions. New construction is also beginning to show signs of stabilization and the inflection in order trends for our longer cycle project businesses sets us up well as we look to next year and beyond.

Our service business has recovered and we continue to transform this business through our digital service strategy to drive higher levels of recurring revenue and an improved growth profile. This recovery has not been without its challenges. We have managed through significant headwinds related to persistent supply chain disruptions, component shortages, labor constraints and continued inflation.

While these dynamics have created some revenue pressure which will continue near-term, the pace and composition of order growth in the quarter provides confidence that we will remain on track over the medium and long-term.

Our teams have done an excellent job navigating these challenges and I'd like to acknowledge and thank them for the tremendous amount of time and effort dedicated to meeting our customer needs, particularly over these last several quarters. As you may recall, in an effort to mitigate the severe impact of the volume declines during the height of the pandemic, we implemented significant cost actions last year. These actions provided a material boost to profitability in the prior-year period and led to best-in-class decrementsals.

Lapping that difficult comparison and managing the return of some of those variable costs, coupled with navigating current capacity constraints and supply disruptions, has resulted in significant margin pressure. That said, we were able to deliver better than expected margin expansion in the quarter and remain on track to meet our targets for the full year, which is a remarkable accomplishment in the current environment.

At the same time, we remain laser-focused on executing our strategy, which is driving continued share gains. As we will discuss over the next few slides, we continue to advance our efforts to deliver innovative solutions to help customers enhance building performance and reduce costs while achieving their net zero carbon and renewable energy goals. This will be accomplished through our ongoing digital transformation enabled by OpenBlue and accelerating our offerings to deliver the outcomes our customers need.

Please turn to slide 4. Continuing our trend to highlight a few notable achievements over the past quarter, recently, we launched the latest offering under our OpenBlue platform, Net Zero Buildings as a Service. I will spend more time on this announcement in a few minutes, as this represents an important step forward in enabling our customers' achievement of decarbonization and sustainability commitments. We have now filed our 200th US patent application and received 90 US patents for our OpenBlue energy optimization innovations.

We announced another strategic partnership with DigiCert, which will allow us to leverage their IoT Device Manager and industry-leading automated digital certificate platform to encrypt data and authenticate the identity of users, devices or services within a building. This will further expand Johnson Controls' already robust capabilities around cybersecurity risk management, providing our customers peace of mind and resilient solutions that ensure hardware, software and communications remain trusted throughout the building lifecycle. Together with the announcement of our partnership with Pelion last quarter, OpenBlue solutions users will have confidence that their devices are safely and securely connected to the network.

About two weeks ago, we launched the Community College Partnership Program aimed at expanding and advancing associate degree and certificate programs in HVAC, fire and security, and digital building automation systems across the US. Over the next five years, Johnson Controls will grant \$15 million to non-profit community colleges in support of academic programs that train and develop the next generation of skilled trades technicians. In addition to the funding, Johnson Controls employees will be increasing their support through volunteer and mentorship programs and also provide a pathway for student internships and entry-level employment opportunities.

Lastly, we are proud to have received additional recognition for our efforts to ensure we create a diverse and inclusive work environment, recently being named as one of the best companies for multicultural women by Seramount. We are also proud to be a part of the Forbes 2021 list of Best Employers for Diversity as well as the Financial Times' European Climate Leaders list, further demonstrating our commitment to sustainability.

Before I move to the next slide, I wanted to welcome Vijay Sankaran, our Chief Technology Officer to the team. Vijay is transforming our software organization, strengthening our engineering development processes and expanding the solution set of our OpenBlue platform. We are excited to have Vijay onboard. He is already having an incredible impact internally, and you will hear more from him at our upcoming Investor Day.

Let's move to slide 5 for a brief update on trends in our service business. As we have shared with you over the past couple of quarters, accelerating growth in service has been a strategic initiative underway since well before the pandemic. Ultimately, the actions we are taking are designed to drive 200 or 300 basis points of above-market growth, which would place us firmly in the mid-single digit annual growth range for the entire \$6-plus billion in revenues.

Our approach is multifaceted, simultaneously focusing on increasing our contractual service attach rate, reducing attrition and driving higher revenue per user while transforming our offerings through digital. Enabling higher

digital content and connecting our installed base compounds our ability to create higher levels of recurring revenue over time.

In the quarter, service revenue increased 11%, in line with the rebound we expected with double-digit growth across all three regions. Order growth also accelerated as expected, up 13%. And our attachment rate year-to-date has now improved close to 400 basis points, already achieving our guidance range for the full year. We expect to continue this pace going forward again, again aided by our digital service and solutions, which were up mid-teens in the quarter.

Please go to slide 6. I referenced our new OpenBlue offering, Net Zero Buildings as a Service, back on slide 4, and I thought I would spend a few minutes highlighting the importance of this launch. Not only does this offering fulfill an immediate need as expressed by our customers, it also represents the next phase in the evolution of our digital smart buildings offerings, which will drive our shift towards increased deployment of higher recurring as-a-service revenue models.

Our broad building systems portfolio and market-leading capabilities and expertise in ESCO projects, combined with the OpenBlue software platform, uniquely positions Johnson Controls to provide customers with guaranteed outcomes and risk management models to achieve their emission reduction commitments.

Based on our high level of customer engagement and the extensive market-backed research conducted leading up to the development of this solution, the need for a trusted partner to deliver a one-source seamless roadmap to net zero and the urgency to reduce carbon emissions is clear.

What is also clear is that digitally-enabled solutions that tie together the IT and OT in the built environment are the only ways to provide these roadmaps. At nearly \$250 billion, sustainability and decarbonization is a once-in-a-generation opportunity and we are excited about our role in leading these critical trends.

Net Zero Buildings as a Service includes a full portfolio of sustainability offerings tailored to schools, campuses, data centers, healthcare facilities as well as commercial and industrial verticals. It leverages a game-changing new solution, Net Zero Adviser, which delivers turnkey, AI-driven tracking and reporting of sustainability metrics and helps building operators ensure improved carbon reduction and renewable energy impacts of their buildings.

We also leveraged the full OpenBlue suite of connected solutions and services offered through flexible risk-sharing models that enable tailored deal structures where end users pay for outcomes rather than assets.

Turning quickly to slide 7, just a few examples of customer wins tied to the theme of decarbonization and net zero. I won't go through each of these. But in every example, Johnson Controls is providing unique solutions to solve the outcomes our customers are looking for.

Some of these new relationships are borne out of our digital partner ecosystem while some are long-standing relationships where we are converting existing building automation systems to OpenBlue or advancing customers' ongoing sustainability initiatives. In all of these, we are driving energy efficiency, reducing energy consumption, driving cost savings and emission reductions.

Before I turn things over to Olivier to review our financial performance in more detail, let me conclude my opening remarks by saying I remain extremely encouraged by the demand patterns playing out across our portfolio. Our teams remain dedicated to achieving top-tier performance despite some of the short-term challenges we are facing.

We are watching closely the resurgence of COVID cases and the potential impacts renewed lockdowns and supply chain constraints may or may not have on project activity. And from a supply chain perspective, we are confident in our ability to manage access to critical materials and components.

Although lead times and conversion cycles are stretching, we believe conditions will begin to improve over the next couple of quarters. We are successfully leveraging our pricing capabilities to offset inflation, and we still expect to remain price cost positive for the year.

At the same time, we are making tremendous progress on our strategic initiatives to accelerate top line growth and improve profitability, including indoor air quality, decarbonization, smart buildings, digital services, and our productivity program and we continue to reinvest in our portfolio, both organically and inorganically. We believe we are extremely well positioned to outperform throughout the next cycle.

With that, let me turn it over to Olivier to go through the details of the quarter.

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## Olivier Leonetti

*Chief Financial Officer & Executive Vice President, Johnson Controls International Plc*

Thanks, George, and good morning, everyone. Continuing on slide 8, our organic sales accelerated in Q3, up 15% overall, in line with the guidance we provided last quarter as growth in Global Products and our field businesses accelerated.

The strength in Global Products was across the board from continued high level of demands in residential end markets, including both our global HVAC equipment and security products to the anticipated rebound in Commercial HVAC and Fire & Security.

Segment EBITA increased 21% versus the prior year and segment EBITA margin expanded 30 basis points to 16.2%. Better leverage on higher volumes, the benefit of our SG&A actions and strong execution more than offset the significant headwind from the reversal of temporary cost reductions and a modest headwind from negative price cost.

EPS of \$0.83 increased 24%, benefiting from higher profitability as well as a lower share count. On cash, we had another strong quarter. Free cash flow in the quarter was \$735 million, flat versus the prior year despite the planned uptick in CapEx. I will review further details of our performance later in the call.

Please turn to slide 9. Orders for our field businesses increased 18% year-over-year, accelerating at a faster pace than expected, led by continued strength in retrofit project activity, which we include in install, but also stabilization in new construction activity.

Service orders recovered above pre-pandemic level, up 13%, led primarily by improving conditions for our transactional service business. Backlog grew 7% to \$10 billion with service backlog up 5% and install backlog up 7%.

Conversion rates in our service backlog continued to accelerate. Our install backlog flow is improving, particularly given the rebound in retrofit activity, which turns more quickly.

Turning to our EPS bridge on slide 10. Let me touch on a few key items. Operations were a \$0.16 tailwind versus the prior year, driven by higher volumes and favorable mix, partially offset by price cost and the reversal of prior-

year mitigating cost actions. Just to further emphasize the magnitude of the headwinds from the temporary actions, excluding this impact, underlying incrementals in Q3 were just over 30%.

We're on track with our SG&A productivity program, which equated to a benefit of around \$0.03. Since we spoke last time, we have already begun taking some of the necessary actions to achieve the savings related to our COGS program, which will begin impacting the P&L in fiscal 2022. We are well on track to achieve our savings targets for fiscal 2021 and beyond.

Let's turn to slide 11 to discuss our segment results in more detail. My commentary will also refer to the segment end market performance included on slide 12. North America revenues grew 8% organically with solid growth in both service and install. Service revenues were higher in all domain, driven by a sharp rebound in our transactional service business, which increased nearly 30%.

Install demand, which is the area of our business that was most impacted by supply chain disruptions, continues to be driven by shorter cycle retrofit and upgrade projects in addition to easier prior-year comparisons. By domain, Commercial Applied HVAC revenue grew mid-single digits, while Fire & Security increased low double digits in the quarter.

We had another strong quarter in Performance Infrastructure, which also grew revenues low double digits. This business has a leading position in the ESCO market which is well positioned to address customers' decarbonization needs.

Segment margin decreased 70 basis points year-over-year to 14.7% as North America experienced the most headwinds from the reversal of temporary costs given a majority of the action in the prior year related to furloughs and other employee compensation-related expense.

Orders in North America accelerated on a sequential basis and grew 18% versus the prior year with mid-teens growth in Fire & Security and Performance Infrastructure.

Commercial HVAC orders were up over 20% overall, driven by strong retrofit activity, with equipment orders up over 50%. Backlog to \$6.2 billion increased 6% year-over-year.

Revenue in EMEA/LA increased 17% organically, led by strong recovery in install activity. Non-resi construction grew more than 25% in the quarter, with most verticals returning to 2019 levels led by increased demand for energy-related infrastructure projects.

Fire & Security, which accounts for nearly 60% of segment revenues inflected sharply, growing at a mid-20s rate in Q3 and surpassing 2019 levels. Industrial Refrigeration grew 20% and Commercial HVAC & Controls grew high single digits.

By geography, revenue growth in Europe accelerated to nearly 25%, while the Middle East declined low double digits and Latin America increased 10%. Segment EBITA margins increased 250 basis points driven by volume leverage and the benefit of SG&A actions.

Orders in EMEA/LA accelerated further, increasing 22% in the quarter with strong growth in Fire & Security and Commercial HVAC. APAC revenues increased 14% organically with install and service increasing by the same amount.

Commercial HVAC & Controls revenue grew mid-teens, primarily driven by the enduring recovery we are seeing in China. EBITA margins declined 380 basis points year-over-year to 11.8% as the benefit of volume leverage was more than offset by the significant temporary cost mitigation actions taken in the prior year and geographic mix.

APAC orders grew 14%, driven by continued strength in Commercial HVAC in China and recovery in controls business in Japan. Economic conditions outside of China remain mixed with uncertainty increasing as ongoing and renewed lockdown restrictions across parts of Southeast Asia, Australia and part of Japan follow a rise in COVID cases and continued delays in the rollout of vaccines.

Global Products revenue grew 21% on an organic basis in the quarter, in line with what we initially expected despite incremental headwinds related to COVID lockdown in Asia and the short-term supply chain disruptions. In aggregate, we continue to gain share across most of our portfolio.

Our global Residential HVAC business was up 16% in the quarter, with strong growth in all regions. North America resi HVAC grew mid-teens in the quarter, slightly ahead of our expectations, benefiting from a stronger sell-through demand, particularly in April and May.

Our JCH Residential HVAC business was up high teens, led by strong share gains in Japan and Taiwan as part of a successful effort to attain the number one residential share position in those markets. Although not reflected in our revenue growth, our Hisense joint venture grew revenue 44% year-over-year in Q3, expanding our leading shares in China.

Commercial HVAC sales improved significantly, up more than 20%, with our indirect applied business up more 25%, light commercial industry up over 20%, led by the recovery in North America, and VRF up high single digits.

Fire & Security products growth was above 30%, led by continued strength in our security business, which grew over 40% in the quarter. Commercial fire detection and suppression products were up low to mid-20s on easier year comparisons and the stabilization in key vertical markets.

EBITA margin expanded 140 basis points year-over-year to 20.9% as volume leverage, positive mix, increased equity income and the benefit of SG&A actions more than offset the significant temporary cost actions taken in the prior year as well as current price cost pressure.

Turning to slide 13. As expected, corporate expense increased significantly year-over-year off an abnormally low level to \$70 million. For the full year, we now expect corporate expense to be in the range of \$280 million to \$285 million, slightly below the low end of the prior guide. For modeling purposes, we have included an updated outlook for some of our below-the-line items. I would point out that amortization expense now reflects the impact of Silent-Aire.

Turning to our balance sheet and cash flow on slide 14, starting with the balance sheet at the top of the page. Similar to last quarter, no significant changes versus the prior period, other than the net reduction in cash due to the closing of the Silent-Aire transaction. Our balance sheet remains healthy with leverage of roughly 1.8 times, still below our targeted range of 2 to 2.5 times.

On cash, we generated \$735 million in free cash flow in the quarter, bringing us to nearly \$1.7 billion year-to-date. This is a significant improvement compared to our normal year-to-date seasonality and has been driven by solid trade working capital management and the timing of CapEx and order payments. We expect a much lower

conversion level in the fourth quarter given the reversal of some timing benefits. For the full year, we expect free cash flow conversion to be approximately 105%.

During the third quarter, we repurchased a little more than 5 million shares for roughly \$340 million, which brings us to around 19 million shares year-to-date, completing our \$1 billion [ph] program. (00:26:58) We expect to repurchase an incremental \$350 million of shares in Q4.

Please turn to slide 15 for a look at our updated guidance. For the full year, we're raising our guidance once again and now target adjusted EPS in the range of \$2.64 to \$2.66. This puts the midpoint at the high end of our previous EPS guidance of \$2.58 to \$2.65.

Based on our strong performance year-to-date and the continued underlying momentum we are seeing in most of our end markets, we continue to expect organic sales growth in the mid-single digits. Segment EBITA margins are tracking towards the high end of our most recent range, and we now expect 80 to 90 basis points of expansion for the full year, which includes a 10 basis point headwind related to the acquisition of Silent-Aire.

Based on the full year guide, Q4 adjusted EPS is expected to be in the range of \$0.86 to \$0.88, which assumes mid-single digit organic revenue growth and 30 basis points of segment EBITA margin expansion.

Before we get into your questions, just a quick update on our Investor Day plan for September 8. We made the decisions to host the event virtually. Registration details will be available over the next couple of weeks.

With that, operator, we can open the line for questions.

## QUESTION AND ANSWER SECTION

**Operator:** Thank you. We'll now begin the question-and-answer session. [Operator Instructions] Our first question comes from Joe Ritchie of Goldman Sachs. Your line is open.

**Joe Ritchie**

*Analyst, Goldman Sachs & Co. LLC*

Thanks. Good morning, everybody.

Q

**George R. Oliver**

*Chairman & Chief Executive Officer, Johnson Controls International Plc*

Good morning, Joe.

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**Antonella Franzen**

*Chief Investor Relations Officer, Chief Communications Officer & Vice President, Johnson Controls International Plc*

Good morning, Joe.

A

**Joe Ritchie**

*Analyst, Goldman Sachs & Co. LLC*

So, maybe just starting off, I just would love to maybe just talk about the cost pressures and talk about inflation and how that impacted the business this quarter. And also, just thinking about what's embedded for the temporary

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cost actions as we head into 4Q, how much does that step down from 3Q into 4Q, clearly recognizing that there was a pretty big headwind this year from the furloughs reversing?

**George R. Oliver***Chairman & Chief Executive Officer, Johnson Controls International Plc*

A

Joe, let me take that, and then I'll turn it over to Olivier to give you some additional color on a year-on-year basis. When you look at the year, the way that we set up the year and made sure that we were anticipating the inflationary pressures and ultimately making sure that we're driving the proper level of price as well as continuing to drive productivity, we've built that into our model. And so, every step through the year we've been staying ahead on pricing and we've been ultimately driving additional productivity to offset some of these headwinds.

And I would say from a pricing standpoint, over the last couple of years, we've built a lot of strong strategic capability across our businesses. And that has played out extremely well during this period of time. And so with the inflationary environment, we knew that that was going to be a challenge in second half, and we anticipated that. And as we probably have about 2 points of price flowing through the top line, which given the timing of that, that has created some headwind here in the third quarter. But with the work that we've done here, we're going to be set up still to be able to continue to deliver on the 80 to 90 basis points of margin expansion for the year. And so, I think the team has done an incredible job. From where when we first set the year up and then ultimately how we've executed, we've executed extremely well. Olivier?

**Olivier Leonetti***Chief Financial Officer & Executive Vice President, Johnson Controls International Plc*

A

No, absolutely. Good morning, Joe. So at a high level, we mentioned this, so 30 basis points of EBITA margin increase in the quarter. We had the impact of Silent-Aire for about 10. So it's a 40 basis point increase in Q3.

Going through some of the elements, you asked specifically about productivity. The impact of our temporary actions from last year, net of our ongoing productivity program is about 160 basis points in the quarter. If you look at price cost, the impact in Q3 is around 40 basis points. We believe we will be in price cost positive for the second half. So of course, Q4 will be positive.

And last piece of your question, the headwind from temporary actions in OpEx, net of our ongoing productivity actions, in Q4, the impact would be about 50 basis points negative.

So we are posting improvement in margin rates, despite two major headwinds which are temporary in nature. And we feel good about our ability to keep improving the profitability of Johnson Controls.

**Joe Ritchie***Analyst, Goldman Sachs & Co. LLC*

Q

That's very helpful and clear. Thank you. And then maybe just my follow-on question. I know that you probably don't want to preview too much exactly what we'll hear on September 8 but if you could give us any kind of color on how you're planning to organize the Virtual Investor Day and the key topics that you'll be focused on.

**George R. Oliver***Chairman & Chief Executive Officer, Johnson Controls International Plc*

A

Yeah, Joe, I mean, we're setting that up very much in line with the strategy that we've communicated with all of our key growth vectors and how we're not only reinvesting in products and technology, OpenBlue, but also making sure that with that, we're positioned to be able to capitalize on big growth vectors as we build out our

digital services, as we capitalize on the trends in decarbonization, as we capitalize on the significant market that's being developed with Healthy Buildings.

And then, making sure that that is coming together in supporting the core, because at the end of the day, we have a unique position here with the combined portfolio to truly lead the future of buildings, as we're thinking about healthy buildings, not only healthy people, healthy places, healthy planet.

And so that will be core to the strategy. And then supporting all of that will be all of the strategic priorities that we're executing on operationally that ultimately delivers on acceleration of growth and above-market growth while we're continuing to deliver best-in-class as far as margins and being able to close the gap that we've had there through our cost-out programs. But we're extremely excited about the progress we've made and really looking forward to laying that out in detail on September 8.

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**Joe Ritchie**

*Analyst, Goldman Sachs & Co. LLC*

Great. Thank you. I look forward to it.

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**Operator:** Thank you. Our next question comes from Josh Pokrzywinski of Morgan Stanley. Your line is open.

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**Joshua C. Pokrzywinski**

*Analyst, Morgan Stanley & Co. LLC*

Hi. Good morning, guys.

Q

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**Antonella Franzen**

*Chief Investor Relations Officer, Chief Communications Officer & Vice President, Johnson Controls International Plc*

Good morning, Josh.

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**George R. Oliver**

*Chairman & Chief Executive Officer, Johnson Controls International Plc*

Good morning.

A

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**Joshua C. Pokrzywinski**

*Analyst, Morgan Stanley & Co. LLC*

Morning. So Olivier, thanks for all the color there on some of the margin drivers in 4Q. I know price cost is always a bit of a moving target, and it seems like you're getting on top of that. So I guess it leaves net productivity as maybe the biggest factor for getting all those actions to drop to the bottom line and the overall EBITA leverage. But when does that 50 basis points of net headwind kind of slip more acutely, either based on the comparison for the temporary items or just the productivity deck ramping up?

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**Olivier Leonetti**

*Chief Financial Officer & Executive Vice President, Johnson Controls International Plc*

So thank you for your question. The main impact of the headwinds is in Q3 by a wide margin. And that's true, by the way, for the full fiscal year. And our ongoing productivity actions have an equal weight in Q3 and in Q4.

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**Joshua C. Pokrzywinski**

*Analyst, Morgan Stanley & Co. LLC*

Q

Got it. And then, George, a question for you just on the overall cadence of demand or mix of drivers here. I think across the building space there's this pretty heady cocktail with cyclical recovery and some of these secular drivers that you talk about, whether it's IEQ or building efficiency infrastructure, all that. It does seem like there's some order momentum but when do we see these tailwinds kind of stack up where you get the cyclical and secular at the same point? Like do you think that those can actually overlap or the secular stuff maybe takes a little bit longer?

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**George R. Oliver**

*Chairman & Chief Executive Officer, Johnson Controls International Plc*

**A**

Josh, let me say that in all the time that I've been in these businesses, I've never seen as fast of a recovery to get back to where we were as I've seen with this cycle. And if you look at why that's true with our business, the general macro conditions continue to improve, although they're not linear across all the regions, as Olivier laid out. We're seeing continued momentum in construction-related indicators and that's beginning to accelerate. So, we're actually seeing that come through, and that's supported by ABI continuing to be very strong. Dodge construction starts are improving sequentially. And what we're seeing is we're very active in the earlier shorter cycle projects, which is really outperforming right now. And for us, a lot of that is focused on Healthy Buildings, and that's been really critical to how we've filled in our backlog through the course of the year.

Retrofit right now in these smaller turn projects continue to ramp. In North America, they were up – year-on-year were up over 30%. And so that has been a big driver of our install business. And when Olivier talked about our backlog, we were up – we've got a record backlog. We're up 7%. And so as you play out fourth quarter, we don't see any slowdown. And so as we begin to set up 2022, that is where we've had a lot of the pressure here in 2021, and that's come back nicely.

You can go through different verticals that are driving that, healthcare, education, the data centers, we're seeing good activity there. Real estate is coming back. And so I think, overall, when you ask about the cycle, this – not only the short cycle demand, as well as the longer cycle.

And then with services, with now these new demands and new outcomes that our customers are looking for, we have an incredible opportunity now as we're digitizing our existing service business to now take the new technologies and to be able to create new outcomes which ultimately has given us a recurring revenue stream. And that is another dimension that we didn't have before as we get into more of a change in the market and being positioned to be able to now capitalize on those changes.

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**Olivier Leonetti**

*Chief Financial Officer & Executive Vice President, Johnson Controls International Plc*

**A**

Let me give you, Josh, some additional statistics. We gave some of those in our prepared remarks. So what is the proof point about the decarb market, right? It's a market we believe which is going to be around \$250 billion worth over the next 10 years. If you looked at the best proxy for this at Johnson Controls, it's our Performance Infrastructure contract. This business is year-to-date growing at about 15%, 1-5. Last year, this business was growing too. So it's really a business which is taking altitude.

On the indoor air quality, if you pass in install order growth between retrofit and new, in retrofit, which is a byproduct of indoor air quality, the order growth was in the quarter 29%, close to 30%. On the two-year stack, plus 10%. And we said that last quarter we see this retrofit really accelerating, it is, and we said we are starting to see an inflection point in newbuild. We said that last quarter. It's happening this quarter. Newbuild install up 16%, 1-6 in the quarter. Then you speak about services, and George mentioned some of the statistics already. So we have clear indicators that we're getting traction.

**Joshua C. Pokrzywinski***Analyst, Morgan Stanley & Co. LLC*

Thank you both for all the color. Really appreciate it.

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**Operator:** Thank you. Our next question comes from Nigel Coe of Wolfe Research. Your line is open.

**Nigel Coe***Analyst, Wolfe Research LLC*

Thanks. Good morning. Bit of a shame about the virtual thing for September 8. I was actually looking forward to coming to Milwaukee. But understandable, I guess.

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**George R. Oliver***Chairman & Chief Executive Officer, Johnson Controls International Plc*

We were also looking forward to it, Nigel.

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**Nigel Coe***Analyst, Wolfe Research LLC*

Damn that Delta variant. I just wanted to fully understand the APAC margins because it seems – I mean, I understand the temporary cost comment, but it does feel like there's a bit of a mix issue as well. I'm just wondering, is that China outgrowth primarily? You did call out country mix there. And thinking about the price cost, Olivier, you mentioned price cost was – this is the toughest quarter from a price cost perspective. Does that hit more in APAC than other regions? Just curious there.

Q

**Olivier Leonetti***Chief Financial Officer & Executive Vice President, Johnson Controls International Plc*

So you're right, Nigel. The two impacts for APAC are: one, country mix, China particularly, point one; and point number two, also the actions we took last year to reduce our OpEx base. It's difficult to read the quarter because of those phenomenons. You have data impacting APAC, you have data impacting also North America. Structurally, the margin profile of the business is improving across the portfolio. That includes also the regions, Nigel, net of those one-off.

A

**George R. Oliver***Chairman & Chief Executive Officer, Johnson Controls International Plc*

And Nigel, there is a little bit of mix there across the region where we've had continued pressures there with volumes that's playing through there. But that's beginning to come back also as we see our Japan business and the business that we have in Hong Kong and the like. So there's some mix there also.

A

**Nigel Coe***Analyst, Wolfe Research LLC*

Okay. Thanks, George. And then on OpenBlue, the patent filings, all very encouraging. How do we measure OpenBlue success and momentum from an external perspective? Is this really just the cadence on inflations and services or are there other metrics that you can call out to give us a sense on how we're progressing here?

Q

**George R. Oliver***Chairman & Chief Executive Officer, Johnson Controls International Plc*

A

Yeah, let me frame it up for you, Nigel. OpenBlue now is being incorporated. We're leveraging OpenBlue with all of our services, with getting all of our installations connected, being able to now extract all of the critical data and then apply AI and analytics to that data to create new outcomes.

And then, if you advance forward, not only doing it with the core business, but now as we're building out new capabilities across all of our digital platforms and bringing them all together into one architecture. I talked about Vijay Sankaran coming onboard. We've been able to bring Vijay in and he's got an incredible reputation and the ability now to be able to take all of what we've done and really put that together so that not only it enhances our core, but it accelerates the pipeline of digital content that is ultimately now being deployed in everything we do.

And so a good metric is when you look at our digital revenues, our digital revenues, today, we don't segment that. But if you were to look at all of our digital revenues, we're up strong double digits across all of our – whether it be our platforms and/or through our digital services. And so another way to look at it is when you look at our pipeline. So, as we're building pipeline across all three regions, there's a much more significant digital content that's being now built in the solutions that we're deploying because we're now differentiating the value that we're bringing to our customers with new offerings. And so that pipeline is well over – I think we've talked about this in previous quarters, is now well over \$1 billion going forward.

So those are the ways you kind of look at how it's being deployed and the amount of impact that it's having not only in the core, but now as we look to really lead what I would call autonomous buildings of the future, which is a little bit more forward-looking, we'll have all of the pieces that come together to be able to now support these big outcomes.

And Olivier said it, decarbonization is going to be a \$240 billion market. Healthy buildings is \$10 billion to \$15 billion and the digital content is what enables us to bring leadership solutions to that. And so as we – and then smart buildings will be a little bit longer term. But we showed some examples today where deploying OpenBlue not only takes all of our core, enhances our core, but then positions us to be able to get incremental revenue above that.

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**Nigel Coe**

*Analyst, Wolfe Research LLC*

Q

Thanks, George. I'll leave it there.

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**Operator:** Thank you. Our next question comes from Jeff Sprague of Vertical Research. Your line is open.

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**Jeffrey Todd Sprague**

*Analyst, Vertical Research Partners LLC*

Q

Hey, thanks. Good morning, everyone. Just two for me. Could we drill in a little bit on actually kind of what's going on in your resi and light commercial business? Thinking maybe some production or supply chain disruptions there. You characterize resi as in line with your expectation but the market looked like it was stronger than that in the quarter. So give us a little bit of color on what's going on in that business, and do you have the ability to maybe uncork some more volume out of your facilities there?

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**George R. Oliver**

*Chairman & Chief Executive Officer, Johnson Controls International Plc*

A

Yeah, Jeff. So when you look at our light commercial, it includes not only the light commercial unitary rooftops, it also includes VRF. And as we said earlier, VRF, we're continuing to perform extremely well.

When you look at the Unitary business, we've been launching new products. So we've got a product lineup now of three new product launches. We've been expanding the capacity with those launches. And now with this strong recovery, we've been working to keep up with the recovery of the market. Our orders, when you look at our orders in that space, we're up about 75%. So we didn't get the pull-through here during the quarter. But we're continuing very strong with the new products that we've launched and we've got a backlog that now is up 3 times from what it was a year ago. So a lot of this is just the cycle time of conversion and while we're continuing to expand the capacity for the new products that we've launched.

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**Jeffrey Todd Sprague***Analyst, Vertical Research Partners LLC*

Q

Understood. And maybe you could give us a little update on Silent-Aire now that you own it. Obviously, you haven't owned it for long, but initial customer response, how you plan to pull the business around the globe, any change in customer behavior or anything like that since you took the keys to the asset?

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**George R. Oliver***Chairman & Chief Executive Officer, Johnson Controls International Plc*

A

Yeah, Jeff, so let me comment on that. I mean, I couldn't be more excited. And as things have opened up, I've also had the opportunity to visit our Silent-Aire team in a couple of sites, and out in Phoenix here recently, and I couldn't be more excited about how this is going to fit into our portfolio and align to our priorities. And so when you look at this, it's bolt-on technology. It's filling out white space that we didn't have capability in. It also enables us to be able to build out an increased installed base where we haven't had a significant level of service there, but there's tremendous opportunity to build service on top of those offerings.

And then the whole digital content, being able to take what they do so well, working with all of the data center operators, that really is innovative. It takes the technology, it configures the technology in a way that truly differentiates how they work with each of these data center operators. And now you throw digital into that, it really becomes a game-changer. And so I believe that as we look at data centers and how we're going to be able to leverage this, not only with the Silent-Aire capability but also with our core capabilities, I couldn't be more excited. Now, with any integration and the like, there's a lot of work. But having been with the team and really taken a pulse on where we are, that's going to play out really nicely for us.

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**Olivier Leonetti***Chief Financial Officer & Executive Vice President, Johnson Controls International Plc*

A

One additional color on your first question on resi, in North America, we have been at capacity from a manufacturing standpoint now for few months, few quarters and we are adding capacity at the start of our fiscal year, so – very soon, and we believe we're going to be able then to change that trajectory. We're adding a fair amount of capacity actually.

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**Jeffrey Todd Sprague***Analyst, Vertical Research Partners LLC*

Q

Great. Thank you for that color.

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**Operator:** Thank you. Our next question comes from Deane Dray of RBC Capital Markets. Your line is open.

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**Deane Dray***Analyst, RBC Capital Markets LLC*

Thank you. Good morning, everyone.

Q

**George R. Oliver***Chairman & Chief Executive Officer, Johnson Controls International Plc*

Morning, Deane.

A

**Deane Dray***Analyst, RBC Capital Markets LLC*

Start off with a question with Olivier. The performance on trade working capital is pretty impressive in a quarter when many of your peers are needing to add lots of buffer inventory and you kind of see the trade working capital moving against you. I did see inventory was up \$7 million. But could you talk us through where it stands today, just overall trade working capital and how you're navigating through this period?

Q

**Olivier Leonetti***Chief Financial Officer & Executive Vice President, Johnson Controls International Plc*

Deane, thank you for your question. So, remarkable performance on trade working capital, 11% of revenue in the quarter. We were at about 13.5% same quarter a year ago.

A

All the levers are actually playing in our favor. Let me speak now in terms of days. So DSO down 9 days year-on-year is structural. We have now in place a strong mechanic to really do a good job on DSO. That's a structural improvement, and we have not reached our best game here. If you look at DPO, improvement year-on-year by about 4 days, again, structural. We have various programs in place to make our DPO even better for Johnson Controls. And last one, in terms of inventory, also good job. That's a byproduct also of strong demand. So, some of the inventory improvement, so it's 15 days in total, is structural, some of it is temporary.

But we feel good about the free cash flow generation of the company. We said before, Deane, that we were a 100% free cash flow organization, would be at 105% including restructuring. So really, the run rate is in 115%, and we feel strong about our cash flow generation in our company, Deane.

**Deane Dray***Analyst, RBC Capital Markets LLC*

Look, that's all great to hear. And it's such a difference between where the company was a couple years ago on working capital management, free cash flow and being comfortably above 100% is – congrats to the team there.

Q

And then just second question for George. Just put this Net Zero Building as a Service that you're highlighting today, put it in context. It's encouraging to see a SaaS business being added to this. But where does it stand in the priority stack in terms of, let's say, indoor air quality? And are there any regulatory oversight that's going to come into the industry on how these calculations are being made, because obviously, this feeds into each of your customer's ESG rankings and so forth? There's a lot of focus on it. Just how does this all develop from here?

**George R. Oliver***Chairman & Chief Executive Officer, Johnson Controls International Plc*

So Deane, let me start with healthy buildings' indoor air quality because that's front and center as we sit here today because of the significant demand. And as I said, we sized that market up to be \$10 billion to \$15 billion,

A

double-digit CAGR. We have secured well over \$300 million to-date. And we have a pipeline that's well over \$1 billion that we're working on, and that has been continuing to accelerate because of the reopening and return to work plans and the like.

And a key space for us within healthy buildings is K-12. We've got an incredible position within schools across 6,000 school districts across the US and as well as 1,900 higher ed. So overall, it's been our ability to be able to not only from a pure equipment – doing a pure equipment upgrade, it's really taking the combined capabilities that we have within a building that ultimately then creates the best outcome as you think about healthy buildings or indoor air quality. So that is front and center today.

When you think about decarbonization sustainability, we've been in that space for years with our Performance Contracting business. And really, that business has been focused on reducing energy consumption, reducing the carbon footprint. Now with the commitments that have been made pretty broadly now to get to zero net carbon emissions, the capabilities that we can bring now without just a one narrow solution, we can bring a full solution to a building that enables us not only to optimize the equipment, but how the equipment operates within that building with the occupants that ultimately then creates the best outcome, which is ultimately reducing energy and achieving the decarbonization goals.

We believe over the next decade, this will build into a \$240 billion market, and that's above the \$300-plus billion market that we serve today. And I think when you look at our now, not only the products and the building systems that now we have brought together, and now when you layer on OpenBlue and the digital capabilities, it is what is required to get to the best outcome as you're looking to make a building most efficient and then with the remaining demand, how you drive towards renewables as far as supply. So that is going to play out a little bit longer term, Deane, but a very attractive space for us.

**Deane Dray**

*Analyst, RBC Capital Markets LLC*

Q

Terrific. I bet we'll hear more about that on September 8 too. Thanks.

**Operator:** Thank you. Our next question comes from Steve Tusa of JPMorgan. Your line is open.

**C. Stephen Tusa**

*Analyst, JPMorgan Securities LLC*

Q

Hi. Good morning.

**George R. Oliver**

*Chairman & Chief Executive Officer, Johnson Controls International Plc*

A

Morning, Steve.

**Antonella Franzen**

*Chief Investor Relations Officer, Chief Communications Officer & Vice President, Johnson Controls International Plc*

A

Morning.

**C. Stephen Tusa**

*Analyst, JPMorgan Securities LLC*

Q

On the services revenue growth of 11%, I think it was, how do you see that going forward? I know it's a confluence of events of comps being a little bit easier but also some momentum in your initiatives. How do we think about that growth rate into the next 18 months, 18 to 24 months?

**George R. Oliver***Chairman & Chief Executive Officer, Johnson Controls International Plc*

A

We've talked a lot about this, Steve. We've made incredible progress here in taking our \$6 billion business and then as we look at how we can fundamentally differentiate that business, and it's pretty simple. For us, we believe that when we deploy our digital capability with our core capability and get everything connected, that in itself is going to be a big uplift, and we're seeing that. We're now up to – we made the 400 basis points of improvement on attach.

And so everything we deploy, we attach and then we get a contract. And then the ability to differentiate the type of services that we ultimately perform with the data that is extracted from the systems that we deploy to optimize the overall operation. So that with the increased installed base, the attach, the additional services and then now as we think about some of these new opportunities with healthy buildings and decarbonization, all of those converge into our ability to be able to deliver, as we've committed, 200 or 300 basis points above the market. And I think as some of these trends continue to accelerate, I think there's opportunity beyond that.

And so a lot of it is the connection, the additional services, utilizing data, the retention of customers and creating outcomes that historically haven't been achieved because it's been more of a mechanical service versus a digital service.

**C. Stephen Tusa***Analyst, JPMorgan Securities LLC*

Q

Got it. And then just on your orders, you mentioned the light commercial orders being up a lot. What were the applied orders up in the quarter for your applied equipment?

**George R. Oliver***Chairman & Chief Executive Officer, Johnson Controls International Plc*

A

Yeah. So when you look at our Commercial HVAC business, Steve, I'm extremely pleased with the performance that we've seen. It's a combination of the new products that we've continued to launch and we're gaining share and we're seeing that pretty much across the board. And then we're also – what's enabling this connectivity is we're embedding technology within the product that enables us to easily connect for service, for the long-term service. How that plays out, the orders, we were better than 20% globally for the quarter, broad-based across all three regions. I think Olivier said that in North America applied equipment as part of the overall 21% increase was up over 50%.

So we feel really good about the backlog we've built and how that's going to play out and then the continued pipeline that we're seeing build that we're positioning to be able to go after. So that has played out, from a revenue standpoint was high single digits, pretty much across the region seeing growth – varying levels of growth across all three regions. But Steve, that is a strength for us. And I think as we look at our strategies, not only within the equipment, but then the ability to be able to build a base for service with connectivity, we're really going to be positioned well.

**C. Stephen Tusa***Analyst, JPMorgan Securities LLC*

Q

Right. Okay. Thanks a lot.

**Operator:** Thank you. Our next question comes from Scott Davis of Melius Research. Your line is open.

**Scott Reed Davis**

*Analyst, Melius Research LLC*

Hi. Good morning, guys. And good morning, Antonella.

**George R. Oliver**

*Chairman & Chief Executive Officer, Johnson Controls International Plc*

Good morning, Scott.

**Scott Reed Davis**

*Analyst, Melius Research LLC*

Just most of my questions have been answered, but just to clarify a couple of things. I mean, when you talk about being on the right side of price versus cost by 4Q, is that materials, labor and logistics or more just kind of material side of it?

**Olivier Leonetti**

*Chief Financial Officer & Executive Vice President, Johnson Controls International Plc*

It's mainly material which is the big headwinds we are looking at. So if you look at, for example, copper and aluminum, the pricing are declining. Steel is still up but with steel mills starting to catch up, the lead time has been reduced by 75%. And if you look at some of the analyst report on this important commodity, analysts are predicting that the price of steel by December, so it's very soon, should be able to go down significantly. So we believe that the worst is behind us in commodity.

**Scott Reed Davis**

*Analyst, Melius Research LLC*

Okay. And I know your Fire & Security business is a little bit more labor-intensive than the HVAC side on the install. Are there labor shortages that concern you? Do you feel like you've got the capacity to be able to handle ever-rising orders here?

**George R. Oliver**

*Chairman & Chief Executive Officer, Johnson Controls International Plc*

Yeah, Scott, we're anticipating that we're going to have challenges as the recovery started to heat up and recover. So we've had what we'd call PMOs pretty much across all of our key markets that is solely focused on labor and making sure that we're getting more than our fair share as far as labor.

And I would tell you, at our manufacturing sites, in the field with the work that we've done, we talked a little bit about that in my prepared remarks with the different programs that we've launched to be real attractive to technicians and the like coming to work for our company. So what I would say here today, although we've had – as we've ramped up, it's been a significant ramp up, we've certainly had some pressure, Scott. But I feel very good about the progress we've made and where we are to be able to continue to support the recovery and ultimately the growth that we're projecting.

**Olivier Leonetti***Chief Financial Officer & Executive Vice President, Johnson Controls International Plc*

A

And stating the obvious, our guide includes obviously consider the current environment.

**Scott Reed Davis***Analyst, Melius Research LLC*

Q

Yeah, understood. Thank you. Good luck, guys.

**George R. Oliver***Chairman & Chief Executive Officer, Johnson Controls International Plc*

A

Thanks, Scott.

**Olivier Leonetti***Chief Financial Officer & Executive Vice President, Johnson Controls International Plc*

A

Thank you.

**Operator:** Thank you. Our last question will come from Julian Mitchell of Barclays. Your line is open.

**Julian Mitchell***Analyst, Barclays Capital, Inc.*

Q

Hi. Good morning. Just wanted to follow up on the margin point. So I just wanted to clarify, I think, Olivier, you've talked about a 40% baseline incremental in the medium-term, leaving aside portfolio changes. So I just wanted to make sure your confidence in that figure amidst the current cost environment. And also, when we look very short term at the Q4 margin, by segment, do we expect broadly similar trends to hold as you just saw in Q3?

**Olivier Leonetti***Chief Financial Officer & Executive Vice President, Johnson Controls International Plc*

A

Julian, thank you for your question. So, we feel confident about our ability to meet our productivity goals. Our programs now are well on track. SG&A, we start to deliver on those. We are slightly ahead. COGS will have mainly an impact next fiscal. We are very pleased with where we are. And what we said before is the \$550 million of net drop of profit to the bottom line, we're still very bullish about this and our ability to achieve 40% incremental over the next two years, we feel bullish about this as well based upon where we are.

Again, we talk about some of the trends going on, commodity and labor. We gave a lot of colors on commodity. We believe we will be able to achieve the goals we have mentioned in productivity with those – despite those trends in commodity and labor.

**Julian Mitchell***Analyst, Barclays Capital, Inc.*

Q

Thanks very much. And then, just when you're thinking about the Fire & Security field business, I realize that JCI's approach is to have a broad offering, the services pulling through the product. Clearly, you've seen peers have a somewhat different view, most recently demerging an F&S field business from product, for example. Maybe help us understand, George, how substantial or significant do you think those revenue synergies are from having a strong F&S field business pulling through on the product side and helping you perhaps build up that service activity as well.

**George R. Oliver***Chairman & Chief Executive Officer, Johnson Controls International Plc*

A

Sure. So let's look at Fire & Security in the quarter. Although it was a little bit lagging the recovery, it's come back really strong, not only in our products being up over 30%, but now converting with new installs in the field and building backlog. And then, recognize that with that backlog – or with that installed base that we create, it does spin off very attractive service.

And so when you look at your question, how do we compare to the others and ultimately strategically how this contributes to our growth, when you look at our Fire & Security field business, it's about \$7 billion in revenue. And it's one of our highest margins BUs in our portfolio. And then, when you look at Fire & Security products, that's another roughly \$2 billion. And then, with this installed base is what ultimately spins out a very attractive, what I would say more traditional service business. And now as we think as we go forward it's going to ultimately then be much more digital and be contributing to not only the Fire & Security aspect, but also to the overall smart building aspect of the building.

So it is going to be an important part of the overall ability to be able to now capitalize on these big trends. We talked about decarbonization. We talked about healthy buildings.

And so when you look at ours compared to others, there are some similarities. There are major differences. I think you need to look at the geographic mix, the product and solution mix, the customer mix. I would say that we have a significant advantage when it comes to scale and overall portfolio maturity.

And then, as I said, really, as you look at the future and the ability to be able to now take all of the multiple systems within a building and bring those together into one architecture with one data platform that enables – it ultimately, longer term, enables an autonomous building. But as we step our way from where we are today to where we go, we should see incremental growth as that begins to transform.

And so, I truly believe the work that we've done and how it's been integrated and how it's enabling not only services, our service, being able to deliver service growth above market as well as being able to really capitalize on what we see to be accelerating trends in our space, it does become a competitive advantage.

**Julian Mitchell***Analyst, Barclays Capital, Inc.*

Q

Great. Thank you.

**Operator:** Thank you.

**George R. Oliver***Chairman & Chief Executive Officer, Johnson Controls International Plc*

All right, operator, then we'll close out the call. I want to thank everyone for joining our call this morning. And as I mentioned earlier, we've had a very strong third quarter, and the momentum that we are seeing across our portfolio and key verticals, coupled with our strategic focus and improved execution, gives me high confidence in our ability to keep outperforming as we move forward.

We look forward to speaking to many of you and hope to see you virtually at our Investor Day that's coming up on September 8. So on that, operator, that concludes our call.

**Operator:** Thank you for your participation in today's conference. You may now disconnect at this time. Have a wonderful day.

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