VODCAST

ABB Decoded: Why the Energy Efficiency Movement is a ‘win-win’ for industry

Mike Umiker, Managing Director of the Energy Efficiency Movement, explains why joining the movement can help industries achieve sustainability goals through greater efficiency.

Anthony Rowlinson: Hello and welcome to ABB Decoded that podcast that tries to press pause on our fast- moving lives and make sense of the technology and trends that are shaping our world. I'm your host, Anthony Rowlinson. And we're joined for this episode by Mike Umiker, who is Managing Director of the Energy Efficiency Movement. Founded by ABB in 2021, the Energy Efficiency Movement has the goal of bringing together stakeholders to innovate and act for a more energy efficient, regenerative and adaptive world. Now, those might sound like lofty goals, but in simple terms, it's about harnessing technology to use energy more efficiently, reduce bills and cut emissions. And to explain what that means in practice we will hand over to Mike to fill in some detail.

Mike, welcome to ABB Decoded. You've recently been appointed to the role of managing director for the Energy Efficiency Movement. So, could you tell us a bit more about what that is and how it came about?

Mike Umiker: Thank you very much, Anthony. So, the Energy Efficiency Movement is a forum that brings together like minded stakeholders to focus on energy efficiency. We aim to become a voice of industry.

AR: What's the relationship between ABB and the Energy Efficiency Movement

MU: for ABB has been a thought leader in the space of energy efficiency. And it's great to have a large corporate company that supports the journey of the movement as such, so it has to start somewhere the movement and AB was one of the founder. And we are now really excited also looking into the third phase, how we call it that the Energy Efficiency Movement becomes an own association. So the first phase was about driving the awareness. The second was about onboarding companies, which we may speak later about it. And the third one is now driving it

to its own independency.

AR: Excellent. And since 2021, the movements gained more than 400 member companies or movers, as we call them, and what are your key aims for these movers?

MU: I think what really makes me proud of is that the movement as such, also invites competitors, competitors, who can cross the aisle, so it's ABB's competitors, but it's obviously also others' competitors. The mission of it is to save energy, reduce cost, and obviously, also reduce C2. And then we do this through representation of the private sector, representing businesses. And we want to become the knowledge platform to address the how of energy efficiency. And with this global knowledge sharing platform, we want to really support the voice of an industry when it comes to energy efficiency, because that's one of the biggest levers to meet the climate targets by 2050.

AR: Okay, and I think you've touched on this already with your last answer, but just in case, what exactly does it mean to be a mover in the Energy Efficiency Movement? And what are the companies signing on to do?

MU: It's actually very simple in that sense to join. So, you basically give your own pledge on terms of energy saving, or CO2 saving within your own facilities or within your ecosystem through your products. And, and then it's about bringing this message even further, that the importance around energy efficiency. And it's great today, we have large corporate companies like Microsoft, DHL, T-Mobile, Alfa Laval, who really kind of also walk the talk and give their commitment to support the journey. But beside even the big companies, we have a lot of small, medium, enterprises, which make an equally important contribution to the whole movement. At the end. It's about being recognized as a thought leader around this topic around energy efficiency, get access to a forum of like-minded stakeholders, and proudly share solutions that are today already available on how you can save energy.

AR: You've mentioned some great names there. Could you give some examples of what these companies are doing with regard to the Energy Efficiency Movement and practical examples maybe.

MU: So, if I take for example, Alfa Laval who is a market leader also in the space of heat exchangers, so they have helped and worked with us on our latest research the case for industrial energy, where they provided with their domain expertise and contribute with their knowledge and their team on this very important topic. Or Microsoft, for example, around the data center and moving data to cloud, what is the impact and also the gains that you can get out of it? But we also have then supporters where we get expertise. For example, from the IEA, the International Energy Agency where we have tried to have a very close collaboration as well, just also to make sure that we are in the same direction and at the end supporting on one and our mission, but obviously also supporting their missions to strive for a

more energy efficient world.

AR: Now, you mentioned the IEA, they've recently picked up on this idea of energy efficiency being the first fuel. Could you explain what that idea means and how that plays out, in practical terms with companies that might be part of the energy efficiency movement.

MU: You know, so in very short, it's really kind of that you look at energy efficiency as a source, a source of energy, and that you basically from the demand side, you then start optimizing on how you're going to use your energy. It's also part of the European regulations. And it's a great vehicle. It's besides just the word play it really kind of makes you think about it, what does it now really mean? And how can you optimize the energy that you're using? It's very strong in Europe, across the countries in that sense. And but it's also a very nice term that you can use in other countries in other regions.

AR: Now, the whole point of the energy efficiency movement is to be efficient about energy, clearly, and how does that contribute to the net zero targets of the Paris Agreement?

Basically, what it's saying is that we need to double the energy efficiency over the next seven years, so by 2030, and, and keeping this in mind, especially the industrial space has a CO2 emission of more than one third. So, it's a very important element to make the impact. If you look at it from a bigger scale, besides obviously, renewables and so on.

AR: And last year, the Energy Efficiency Movement published the Industrial Energy Efficiency playbook, which contains 10 key actions for companies to put into practice quickly. Are you able to outline those 10 key actions or maybe some of them?

MU: I think the easiest is really to summarize it in three pillars. So, the first pillar is about building the foundation. The second pillar is about drive efficiency returns. And the third one is about drive efficiency insights. So, in other words, the foundation speaks about auditing and right asset sizing. The second is about whether you can obviously then use equipment like high-efficient motor, or you make the maintenance on the heat exchanger. And the third one is about building management. And it's talking about also moving data to cloud. So that's really in a nutshell, what, what it's covered, and then in the end it entails.

AR: So, these sounds like quite grand things to do in some ways. But if you're if you're the, I don't know, MD of a medium-sized company and think, maybe here's this podcast and thinks, “Well, what can I do?” What would that person do to try and move themselves towards a more energy efficient model for their business?
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MU: Yeah, absolutely, I would really start with building the foundation. So that's in our, in our playbook, it's basically action one and two. So, it's about making an assessment. And then assessment can be done in very easy ways. You can walk through your facilities, and whatever you see, you can also go to the next level where you start also consulting, technical data, or maybe your energy bills, and so on. So, it's really about just making the assessment. And then the second is about also right sizing of your assets, by and through connecting it also making it ready to connect it to the IoT environment. And with that, you already can just optimize without even doing something on top, you can optimize it within this space. So, I would really start with building the foundation.

AR: Right. And in October, the movement released another report called The Case for Industrial Energy Efficiency-Economic and Climate Impacts. But that raises the question, why do we need to make the case for energy efficiency? Isn't it just obvious that we should be more energy efficient?

MU: You may think so. Yes, absolutely. And it's also great that for coop energy, made it together with industry on the on the agenda, but quite often things are not so trivial. And what we have also seen by the discussion with many companies is really kind of the economical and climate impacts. So, what are now the numbers, what is the business case behind that. That was really a big part which was missing because at the end energy efficiency is a win-win for both, for the company, for the environment. But also, for how you want to be seen as a company because at the end you save energy and you reduce CO2. And that's kind of the research is really what brings it down to paper and says look, these are the areas where we can save today, through your investment, energy costs and reduce your CO2.

AR: Just going back to the report or focusing on it for a moment, what actually went into it? And what were the key findings.

MU: So what we did is we collaborated and connected with the development of Economix, which is an independent assessment provider, based in the UK, just also to make sure that the data that we're using are in that sense, correct. Besides this, we consulted, also other experts like the IEA, or from the mover space, as mentioned already earlier. And at the end, the kind of the output is really an executed report that can be just applied today. And that's for everyone. Easy, understandable. And with the numbers, they speak for themselves.

AR: And if you were to think of the top 10 actions for reducing carbon emissions, what might they be?

MU: So basically, it's not even about all the top 10, if I just would like to highlight three. So the biggest contributor with more than 30% is the IoT, so the Internet of Things and making your assets ready for connection. The second is about smart buildings, which has contributed to almost 20% of its own contribution. And the

third one is about the industrial heat pumps, which is around 18%. So actually, already these three, they sum up to almost 70%. And I think that's kind of the big number we are speaking here. And the rest, motors, drives and so on, they will obviously follow and make an equally important contribution to it.

AR: How does making a device or a product ready for the IoT? How does that help with energy efficiency?

MU: At the end, it allows you to have the data and the performance of the equipment on time available, and then you can start accessing it. And I do usually compare those in with the following…in the past when it come when the topic was around IoT. We were more talking about data gathering for digital twins and so on. But I think now you can leverage this data and really start to understand how is this equipment in the greater picture of a process or of an application, how is it contributing and working? And where can you start improving and adjusting just to use less energy at the end of the day? Or you may see it's oversized.

AR: So the data insights give you much better control and insight into the product itself and the usage?

MU: Absolutely. Yes, exactly. Exactly.

AR: Okay, great. And moving on to the electrification of industrial fleets. That's relatively small in terms of impacts. Why, is that?

MU: I mean, on one hand, what we see in our private life is that the commercial vehicles, they are already strongly electrified. On a global scale, it's still a very small one-digit percentage number. On the other hand, also, when we look into the data that is already today, available, quite many, even from the IEA, they look more towards the impact will or cure 2030 and beyond. And our research work had a strong focus towards 2030, because that's kind of the most important milestone to go back on track, to reach net zero by 2050. And we see it in the light to heavy vehicle, there are already industries that are more advanced, like the mining, for example, where this becomes more and more a topic. But it's not yet there that the return is on the big scale.

AR: Great. And that perhaps takes us to the future, and what might be next for the Energy Efficiency Movement. And what are your plans specifically for 2024?.

MU: For us, it's really kind of the first one is that we have a smooth transition into becoming an association. That gives us really kind of this the opportunity to invite even more competitors to cross the aisle. Secondly, is about continuing to onboard also new companies, movers, to really become a voice of industry. And thirdly, for me, it's really important that we can leverage the knowledge from all these companies even stronger so that we can get the stories shared, what have they done for their customers or within their facilities. And besides this, obviously,

we're also already planning to work on the next research topics.

AR: And COP 28 is coming up later this year. What will be the goals there perhaps for energy efficiency or the gains that we might see for energy efficiency at COP 28?

MU: I think it's a great opportunity. On one hand, we expect that the narrative will be more negative, but it's great that energy, made it to the agenda and even energy efficiency made it to the agenda on December 5. And the report that we also just launched is really speaking for its own. And so the numbers speak for the for its own, it's doubling down on the reason why energy efficiency is so important. And is, today already available, it doesn't require a lot of political agreements. Every company can do it just right to date the technology is available. And report is really helping industry leaders to also set and define the priorities and set the numbers they are, they're huge. So, the report talks about potential of more than four gigatons CO2 savings, which is equivalent to around three-fifths of combustion engine cars. And I think that's just a massive number. And I really hope that that at COP or towards COP, companies pick up on the report and just go from talking into actioning.

AR: It's been said before, energy efficiency seems to be almost a no brainer.

MU: Absolutely. I mean, it's really there. It's technology is there. Just as an example, if you want to, for example, also improve your efficiency on a motor. If you go from a lower to a higher efficient motor, you can easily say up to 40% of energy. And I mean, that's, that's just the technology that is today around.

AR: Thank you, Mike. That's a that's a great summary. But again, if there's a listener out there, who thinks how can I get more information about the new research and perhaps even become a mover? Where should they look?

MU: It's actually very easy. Just typy in the web energy efficiency movement.com Or actually follow us on LinkedIn. And there you will find all the information. e really tried to be transparent. So, what we know also, our readers and interested companies should be able to have access to it.

AR: Great, it couldn't be easier. That's surely all the encouragement you need. So thank you, Mike, thank you very much for your time and for being a guest on ABB decoded.

MU: Thank you, Anthony.

AR: And on that note, we'll conclude this episode of ABB decoded, but if you're keen to find out more about the Energy Efficiency Movement, and perhaps become a mover yourself, just type energy efficiency movement into your web browser, and you'll find lots of information. You can learn much more about

abb@new.abb.com. And if you've enjoyed the conversation, don't forget to like, share and subscribe wherever you get your podcasts. Until next time.