

Hitachi Energy is a global technology leader with a combined heritage of almost 250 years in the electricity field



GIUSEPPE PETRELLI

Global Head of Marketing and Sales, Transformers business at Hitachi Energy

As announced recently, the former Hitachi ABB Power Grids is now Hitachi Energy. Please, tell us the vision of the company going forward and what can be expected in practice.

I will start with an overview of the energy industry and our role in it.

Humanity faces global challenges which require global solutions; climate change and despoiling of ecosystems are key examples connected to our industry. As technology and market leaders, we have an obligation to find solutions.

Electricity has improved our standards of living since its invention more than two hundred years ago. Going forward, higher levels of electrification will significantly enhance sustainability in the world's energy systems.

Analysis of multiple recent studies on the evolution of the world energy system indicates that global electricity consumption will more than double, from 20 % (today) to over 40 % of total energy demand by 2050.

On top of that, there is a need to support decarbonization across all industry and commercial sectors and certainly within

the energy space, which is the largest contributor of carbon emissions.

And here is where we can add value: with the combined heritage of Hitachi and ABB of about 250 years, Hitachi Energy is a global technology leader in the electricity field. Transformers are a critical component for electricity generation, transmission, and distribution and can play a key role here as enablers for sustainable energy, including the most pressing shift to renewables' integration.

In addition, as technology leaders, we also need to continue exploring emerging technologies and pushing technology boundaries—in a variety of segments, such as electrification of infrastructure and transportation—which will create new and more sustainable possibilities all across. Further development of energy storage is also crucial. Predominantly, batteries with long-duration storage technologies—such as hydrogen and pressurized air—will require extensive research and development. Reliable and greener transformers will be needed here and everywhere.

In fact, as leaders of the market, Hitachi Energy Transformers will have a key role in co-designing the grid of the future.

However, we are not only designing new solutions and "greener products." There

are actually two transversal macro trends within the energy transition: Digital and related services which are intertwined in the future of the grid.

We believe that digitization can also optimize the operations, maintenance, and life cycle of all these assets: When sensors and computing are placed at the source, such as power transformers, the control room operators can receive data faster and make decisions in real time.

Therefore, to finally answer your question, Hitachi Energy is advancing the world's energy system to be more sustainable, flexible, and secure.

When it comes to our vision, we definitely want to **collaborate with customers and partners to enable a sustainable energy future – for today's generations and those to come** with co-creation as the way to deliver true value through innovation – for the business, for their customers, and for society at large. And this is very much in line with the social innovation focus of Hitachi Group.

And finally, speaking to younger generations and talents to come, if I had to summarize with a compelling and inspiring statement: **'Electricity will be the backbone of the entire energy system' and of course, the leader of the market, Hitachi Energy, is the right place to be!**



Electricity will be the backbone of the entire energy system' and of course, the leader of the market, Hitachi Energy, is the right place to be!

Hitachi Energy has a portfolio of solutions along with our transformer technologies to support the sustainability of our customers, but "one size does not fit all," and co-creation and collaboration will be clearly the way forward

You have commented about sustainability and co-creation. Please, explain that in more detail, especially with regards to transformers.

Sustainability is one of the key pillars of the energy system of the future, and we need to go through that process together with our customers and industry stakeholders.

In transformers, it is a journey that started many years back, with energy efficiency being one of the key elements of transformers' technology enhancement and the related performance evaluation (with the TCO concept, Total Cost of Ownership, being the paradigm).

But it is not only that, we also understand sustainability in the broader sense to help our customers to improve the performance of their transformers, contributing to decarbonization, enhancing human safety, protecting surrounding ecosystems, and responsible use of resources.

Those are the four pillars of our EconiQ™ transformers offering.

Now, acknowledging that our customers have their unique sustainability roadmaps, Hitachi Energy Transformers is providing them with co-created sustainability solutions that will support our partners' journeys towards a sustainable future.

Please, explain to us more about the concept of EconiQ™ transformers and how they will bring benefits to users and the transformers industry.

Hitachi Energy has a portfolio of solutions along with our transformer technologies to support the sustainability of our customers, but "one size does not fit all," and co-creation and collaboration will be clearly the way forward.

We realized that being relatively a new topic of discussion, the actual sustain-

ability impacts of the transformers were in many cases not yet totally understood and, most importantly, quantified.

For that reason, one of the first benefits of the EconiQ offering, is to provide quantifiable, evidence-based transparency on environmental impacts using scientific methodologies such as Life Cycle Analysis followed by best-in-class solutions to improve sustainability performance looking at the whole transformers value chain.

A few examples of such a quantification associated to our EconiQ transformers are the reduction of 20 % equivalent carbon emissions, coming from the application of an enhanced TCO concept looking at sustainability aspects, but also from manufacturing with fossil-free electricity in our factories.

Another example is the protection of surrounding ecosystems, with noise reduction techniques or the reduction of eutrophication and water toxicity impacts, by using biodegradable fluids, which also contributes to safety with a higher flash point.

In addition, we offer diverse solutions to further contribute to enhanced safety, such as our TXpand explosion-proof tank design and the use of dry bushings.

Finally, we will facilitate responsible use of resources by providing guidance for recycling and waste disposal at transformer end-of-life. To this end, we will deliver all our EconiQ transformers with an LCA (Life Cycle Assessment) and a disassembly manual.

In relation to the markets, we have seen in 2021 a huge rise in the price of commodities. Can you explain how you are managing that and what reactions you are receiving from the market?

First and foremost, we aim to protect our customers and avoid supply chain interrup-

tions. The last thing we want is to let our customers down in our commitments.

In addition, we also have the obligation of reflecting in a fair way the value chain contributions. Quality, delivery, and business continuation need to be preserved across the industry value chain, and our sub-suppliers must be protected too.

In practical terms, our offer validity cannot be over-extended due to current commodity volatility, and for long delivery times, we need to negotiate price adjustment clauses which are neutral instruments to reflect commodities fluctuations within our cost structure for a complex product like a tailor-made transformer.



Price is, in the end, a consequence of global and regional balances between supply and demand, and we need to manage it in a fully transparent way towards our customers.

COVID has posed many challenges to all the businesses, and specifically related to marketing and sales activities where face-to-face interactions are important. How did you manage that, what are your learnings, and how do you see the future as we are slowly going back to a new normal?

Almost two years ago, when the pandemic kicked in, within the Marketing and Sales team at Hitachi Energy, we quickly switched into "Working from Home" (WFH) mode almost everywhere. Throughout the year, depending on the

Price is, in the end, a consequence of global and regional balances between supply and demand, and we need to manage it in a fully transparent way towards our customers

different resurgences of the virus and the countries' protocols, in some cases, we returned to face-to-face interactions.

However, our first priority was and is to protect our people and our customers; as a matter of fact, back in November 2020, we organized our customer flagship event, the Transformer Days, completely remotely for the first time with a great attendance that included over a thousand customers and partners from around the world.

In 2021, we have repeated the virtual experience, opting for the same format by regionalizing the concept around the Americas, further customizing the topics, and adapting to the region time zone

and languages, with sessions and keynotes held in English, Spanish and Portuguese.

We can confidently say that during these almost two years of pandemic period, we have successfully organized two virtual Transformer Days in a row as a demonstration of our ability to interact with customers closely, even virtually.

In the meantime, we have implemented remote factory acceptance test capabilities to allow our customers to attend factory acceptance tests without the need to travel.

Other innovative solutions introduced include TXpert remote transformer service driven by digitalization and remote



Going forward, we believe we are well equipped to provide our customers with a balanced mix of traditional and virtual marketing activities and support leveraging digital technologies

guidance supported by the augmented reality that we are using to provide quick access to resolve site problems without the need of traveling and with no special tools or complex software.

Therefore, at Hitachi Energy Transformers, we strongly believe that the future of Marketing will be hybrid.

Moreover, according to a new McKinsey survey on the future of work across industries and geographies, there is evidence that in the post-pandemic world, a majority of the organizations will combine remote and on-site activities.

In short, going forward, we believe we are well equipped to provide our customers with a balanced mix of traditional and virtual marketing activities and support leveraging digital technologies.

Finally, tell us something about yourself.

I am in Italian, happily living in Cordoba, Spain. I am very blessed to be married to my wife who is my first mentor too, and to be growing along with her a thirteen-year-old son.

I am a rather simple person who values very much basic things, like Health, Family, Friends, and stillness / reflection time for myself. I believe in serving people while breaking down silos and status quo situations are part of my DNA.

Having lived in three countries and traveled to more than sixty (plus the fact that I can speak five languages), I believe has contributed to developing a rather open-minded mentality, a gift I try to protect every day. I have several hobbies, but if I have to pick, I love jogging and reading.

Finally, I believe that having a clear philosophical and moral framework can

contribute significantly to a life well-lived, equipping us for whatever life might throw at us.

I would like to give a sense of this by providing as final message a few quotes.

The first one from the most controversial stoic philosopher who also served as Nero's tutor during the 1st century in the Roman Empire, Seneca, who, by the way, was born in Cordoba. The quote helps to develop clarity in life and recognize our most important asset, which is our TIME.

"If one does not know to which port one is sailing, no wind is favorable."

"It is not that we have a short time to live, but that we waste a lot of it."

And the other one comes from one of my preferred strategy gurus, Clayton Christensen, the so-called Gentle Giant of Innovation, who answered the ONE question about the PURPOSE.

"How will you measure your life?":

I came to understand that while many of us might default to measuring out lives by summary statistics, such as number of people presided over, number of awards, or dollars accumulated in a bank, and so on, the only metrics that will truly matter to my life are the individuals whom I have been able to help, one by one, to become better people.

When I have my interview with God, our conversation will focus on the individuals whose self-esteem I was able to strengthen, whose faith I was able to reinforce, and whose discomfort I was able to assuage—a doer of good, regardless of what assignment I had".

These are the metrics that matter in measuring my life.

