The Joint Venture between ABB Power Grids Business and Hitachi will leverage synergies to create new customer values around social innovation – a central pillar of Hitachi’s strategy.
What are the main new opportunities and challenges emerging in the transformers market, anything new that customers are looking for?

The global energy demand is expected to grow significantly in the coming decades with electricity being a major contributor. At the base are about 950 million people in the world that still lack access to electricity, mainly in Sub-Saharan Africa and Asia. Providing access to modern energy to all is one of United Nations Sustainability Development goals and, with transformers being critical components in a grid, playing our part in this is important for us.

In addition, there are the mega challenges we collectively face such as global warming and increasing environment degradation.

Combating all these challenges is an opportunity for global technology leaders, like us, with vast domain expertise and a commitment to sustainable development.

We are innovating transformer technology for applications such as renewables integration and distributed generation, higher levels of energy efficiency, regional and country grid-interconnections to tap clean energy from remote locations and for new-age sectors like electrical mobility and data centers. At the same time, we pursue sustainable design to solve issues such as resource scarcity and getting the transformers ready for a circular economy.

Last but not least, we need to make the digital revolution work for us. Already the growing synergies between digital technologies and transformer intelligence are catalyzing all of the above and will be an important driver to help our customers ‘do more with less’.

What is ABB’s Transformer business long-term strategy and vision?

We are the global market leader in transformers industry with many trusting customers across the globe. Today, we face a complex market environment, with opportunities emerging from new needs and demands as explained above. Our unquestionable human capital knowledge is grounded on solid foundations coming from a hundred-year heritage of technology leadership; we are determined to use this strong base as a spring-board to outpace market growth.

Our long-term vision is to ensure we provide maximum value to our customers and maintain our market leadership position based on cutting-edge technology and innovation. Therefore, we will continue to invest significantly in R&D. We will enable our customers to utilize digitalization for improving their business performance and develop new business models to provide them end-to-end solutions in transformer operations and maintenance.

Other important pillars of our strategy are investing in the development of digitalization, converting data into actionable intelligence to “do more with less” by having better knowledge and understanding of the asset.

Laurent Favre has been the Managing Director of Transformers Business Line within ABB’s Power Grids Business since October 2018. Laurent came to ABB in 2018 from the Benteler Group, Germany where he was Chief Executive Officer (CEO) of the Automotive division. Prior to being CEO, he was Chief Operations Officer and head of the Chassis and Modules business. Laurent has over 20 years of international experience in the automotive industry. He has also worked in consulting roles and has considerable expertise in the Quality field. Prior to joining Benteler in 2012, he held management positions in Gestamp and ThyssenKrupp Presta. He holds an Engineering degree from ESTACA (École Supérieure des Techniques Aéronautiques et de Construction Automobile), Paris.
“Do more with less” explicitly means more availability with less maintenance costs, more power output or overloading without loss of lifetime, more knowledge about the condition of the asset for lower inspection costs

What learnings do you bring from the automobile sector that will be useful for the transformer industry?

The two sectors, automobiles and transformers, face similar challenges of complex and volatile markets. Continuous improvement for operational excellence with a sense of speed and agility are the key. Still being relatively new in the transformer industry, I am focused on how we can further improve our execution – and that is quality and on-time delivery performance.

The automotive industry is mature and highly cyclical, facing increasing competitive pressure. This has enhanced the speed and agility of execution resulting in a higher degree of operational excellence. On the other hand, although the transformers industry has been, until very recently, a more traditional industry, complex global markets and the intensification of competition demand more and more agility in operations. In this, I see several opportunities to take and apply a few practical learnings from the automotive sector.

How does ABB's Transformer strategy fit in with the ABB Power Grids business Joint Venture with Hitachi?

Hitachi and ABB's transformer businesses are completely aligned in our long-term growth strategy of out-pacing market growth. Furthermore, the Joint Venture (JV) will leverage synergies between the ABB Power Grids Business and Hitachi to create new customer values around social innovation – a central pillar of Hitachi’s strategy. In the power sector, there is a trend toward re-convergence of power generation, transmission and distribution business and the JV will enable having all these under one roof, providing access to long-term financing for such projects. The JV also has a lot to gain from the combined access to global markets including the power sector market in Japan.

In the end, we aim to be partners in transforming the future of energy, by running the world without consuming the Earth.

our people and operational excellence. We are committed to continuous improvement in our Health, Safety, Environment and Integrity performance and consider that our license to operate.
provider and thus serve our customers with new business models, including the realization of society 5.0 where the benefits of new digital technologies and the fourth industrial revolution become wide-spread.

Having said that, I would also like to reiterate that we will continue to be a part of ABB till mid-2020, after which ABB will continue to hold about 20% ownership for the next 3 years. The JV is based on ensuring total continuity in our operations and for our customers and no change is expected in the footprint and the management organization of ABB’s Power Grids business due to the JV.

As a global leading supplier of transformers could you give us a peak preview into the future of transformer technology?

Transformers are immersed in the energy transition journey, from the largest to the smaller units. Innovation is playing an important role to fulfill the needs of an evolving grid and new market demands - enabling stronger, smarter and greener power grids.

The main game-changing technology trend is digitalization, converting data into actionable intelligence to do more with less by having better knowledge and understanding of the asset.

This means more availability with less maintenance costs, more power output or overloading without loss of lifetime, more knowledge about the condition of the asset for lower inspection costs and transitioning to condition-based maintenance. All this is already available today, complying with demanding cybersecurity standards, from individual assets level up to the fleet level.

In the future, we will collaborate more and more with our customers to analyze real life data so we can predict load and remaining transformer lifetime by using advanced analytics including machine learning, artificial intelligence and digital twins. The ultimate step will be to use real life data to design and manufacture transformers that exactly match the actual service needs of our customers. Digitalization will also enable new business models such as providing power transformation as a service.

Digitalization will also enable new business models such as providing power transformation as a service

Bold new transformers technology will take us, along with our customers, on an exhilarating journey into the future of energy.

As I mentioned, ABB has a portfolio of innovative transformer solutions to enable stronger, smarter and greener power grids, but we haven’t talked about them in detail here because readers will have the opportunity to find out more in dedicated articles in Transformers Magazine.

In this issue, these articles will review our ‘smarter’ solutions, and in coming issues, the ‘stronger’ and ‘greener’ solutions. I invite you to read them to know about our breakthrough innovations.

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