



# FERNANDA ALVES

## Global Product Manager for Transformers Service at Hitachi Energy

Only a few weeks back, we had the opportunity to meet Fernanda Alves, the newly appointed Global Product Manager for Transformers Service at Hitachi Energy.

Hitachi Energy and Transformers Service are about a combined heritage of over 250 years in manufacturing and servicing transformers, the 'industry's largest transformer installed base and experienced and knowledgeable teams across the globe, only to cite a few reasons.

With a global footprint of service locations, Hitachi Energy is a trusted life cycle partner for many transformer users, supporting maintenance and life cycle management operations. Servicing transformers is critical due to their long lifetime but also to address some of today's challenges like ageing fleets, rising energy demand, new operating requirements from integrating renewables, etc.

**Hello Fernanda, congratulations! Please tell us about yourself, your experience and your new role.**

I joined ABB 22 years ago and have enthusiastically been part of the transition to Hitachi Energy.

During my childhood, I lived close to the company's headquarters in Osasco, Brazil. I had the dream of working one day for that company that was so praised and desired by many engineering students and professionals. Not without effort, that young student's dream came true in

2001 when I started my career as an engineering intern at the age of 23. I had huge motivation and career expectations to grow professionally and as a person. My aspirations were related to doing something that made sense to me as an engineer while contributing to society and the environment around me.

Hitachi Energy is a genuinely global and multicultural company like few others. Being with them gave me many opportunities to work in multiple areas like quality and supply chain management, serve as Plant Manager and develop international experience in the company's various businesses like Grid Integration, Grid Automation and Transformers. My journey in Transformers began in 2016, leading the Components business in Brazil. Two years later, I joined the Service business, thus becoming responsible for Transformers Components and Services in Brazil. This past summer, I started as Global Product Manager for Transformers Service, which I am thrilled and excited about.

**What are your expectations and challenges in this new role?**

One of my main goals is to support the Transformers team by being close to our

customers to understand their challenges and pain points as one of the keys to continuing to provide superior quality transformer services.

What I like about the role of the product manager is that it combines the external perspective (industry trends, market, customers, competitors) with the company efforts (R&D, operations, functions) to manage the life cycle of our products and services, aiming to keep them competitive and relevant by addressing the needs of our customers. Doing that globally allows you to be in contact with and help many people, which is an enriching experience.

As a Global Product Manager for Transformers Service, one of my challenges is to develop and manage a broad portfolio that includes a range of conventional services (spare parts, installation, maintenance, diagnostics, repair, refurbishment) and digital services (remote monitoring, asset management). Aligned with my colleagues, I have the mission of translating market needs into business opportunities, bringing to life a compelling value proposition and driving the success of the Services product line in close collaboration with our organization, customers, and partners.

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## We have recently launched Hitachi Energy's EnCompass™ Agreements, an important milestone to simplify and structure how we partner for success and drive energy excellence with our customers in the service field

### How is Transformers Service contributing to a sustainable energy future?

At Hitachi Energy, we are championing the urgency of a clean energy transition through innovation and collaboration to support scalable, flexible, and secure energy systems.

That is interrelated with investments but also requires attention to the existing infrastructure. It is there where servicing the existing installed base becomes essential across the entire asset life cycle, ensuring resilient operations and reducing operational costs.

Transformer service's role is evolving, combining traditional and digital services with an integrated life cycle view to help our customers reach sustainable operations and minimize environmental impact.

Some examples in practice are related to how we support customers to maximize operational life by extending the transformer lifespan through diagnostic and maintenance services, bushings and tap changer upgrades, oil regeneration and reclaiming, repairs, refurbishment, and life extensions, but also by fully managing transformer replacement at the end of life, providing end-of-life guidance for disposal or recycling of materials.

### How do you see the digitalization of transformer services evolving in the future? Which are Hitachi Energy's solutions to support service digitalization?

The digital future is already here. Digitalization, both in general and for transformers, is becoming essential for asset management and increasingly important

to support sustainability, as I mentioned before.

The TXpert Ecosystem is Hitachi Energy's approach to simplify transformer digitalization and unlock its full potential with an open and vendor-agnostic solution for any transformer regardless of its size, application or manufacturer. The next-generation TXpert HUB, launched early in 2023, is the core of the ecosystem, which integrates and collects data from different sensors to drive action.

But it is really through our knowledge and expertise in servicing the largest transformers installed base that Hitachi Energy brings digitalization and the associated services to the next level with our asset performance management software (APM) or through the TXpert services, backed up by a team of experts to provide actionable insights and enable more efficient predictive maintenance, early fault detection and optimized operation.

We metaphorically call "the intelligence of a thousand transformers" all the service experience from which our APM software benefits. All that data is combined with the power of artificial intelligence-driven algorithms to identify patterns, predict failures, and optimize transformer performance (for example, through "pattern repeating" models that learn from data, improving accuracy and efficiency over time).

Digitalization, enabled by remote monitoring and control of transformers, also eliminates the need for physical inspections. Together with the customer, we can access real-time data, diagnose problems remotely and propose necessary adjustments or repairs.

We call those remote services, combining transformer digitalization, remote consulting and troubleshooting, and

even remote guidance using augmented reality, allowing a faster response time to an alarm or incident resolution and associated carbon emissions. The results of this win-win approach are faster, more efficient and sustainable operations.

Overall, the digitalization of transformer services leads to increased reliability, reduced downtime, optimized performance, and improved safety, and it is transforming the way transformers are managed, maintained, and operated.

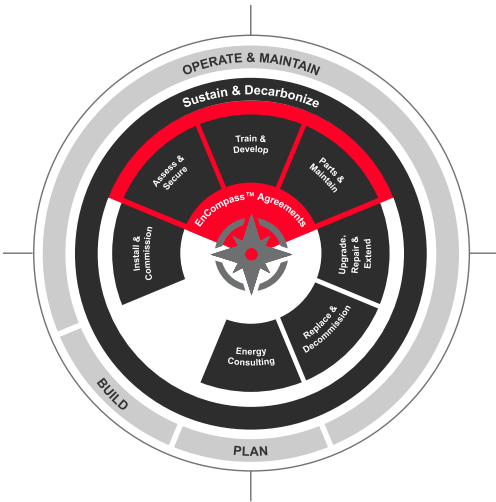
### Can you mention some recent achievements to inspire our readers?

We have recently launched Hitachi Energy's EnCompass™ Agreements, an important milestone to simplify and structure how we partner for success and drive energy excellence with our customers in the service field.

EnCompass is a convenient framework to access our services via frame and service agreements, and it is already helping some of our customers to cut complexity, simplify the procurement process, control costs, and maximize value. The scope may include a 24/7 support line, agreed terms and conditions, discounted rates, fast response service, site inspections and lifecycle reports.

One practical example is a multiyear service agreement with an industry in South America handling five power transformers critical for their operations. The EnCompass transformer service agreement in place includes the TXpert digital services, the APM software and remote and on-site assistance. Our team regularly follows up on the transformers' status and provides a monthly update, thus reducing the risk of an unplanned outage.

We can also mention an exciting project in Europe to fully refurbish a large power transformer using our TrafoSite Repair concept. The transformer was approaching its end of life, and a complete refurbishment, including new windings and main components, was the optimal solution from the time and cost perspectives. The work of our team was exceptional in managing the complexity of such a project.



## Superior life-cycle performance

Our EnCompass™ Agreements pave the way for sustainable and resilient end-to-end support, covering products, and systems, and accessing specialized services tailored to your needs

### EnCompass™ Frame

When time is critical, EnCompass Frame is your vehicle for faster and easier access to services you need now.



#### Benefits

- Accelerated response
- Simplified administration
- Financial security
- Established point of contact
- Continuous technical assistance

#### Components

Easy contracting and procurement

##### Terms & Conditions

A pre-agreed framework ensuring all our transactions run smoothly and swiftly, with no surprises.

##### Rates & Pricebook

Get access to clear, fixed hourly rates for any additional services, providing transparency and predictability.

##### Contract Manager

A dedicated expert is assigned to manage all your service agreement needs, ensuring personalized and efficient interactions.

##### Round-the-clock access to expert support 24/7 Customer Connect Center

Anytime access to our expert tech support team. Each request gets a unique reference for easy follow-up and quick resolution.

### EnCompass™ Service

Your agreement of choice to ensure that your energy system performance requirements are fulfilled now and in the future.



#### Benefits

-  EnCompass™ Frame benefits
- Priority expert assistance
- Established On-Site Response
- Single point of contract management
- Customizable services

#### Components

##### EnCompass™ Frame Agreement components

##### On-Site Assistance

When you need us in person, our Hitachi Energy Technicians deliver fast on-site help. Costs are transparent, based on service rates and spare parts availability.

##### Technical Remote Support

Benefit from immediate, professional help through phone or AR tools. Our yearly 'hour bank' gives free support, ensuring swift troubleshooting responses.

##### Shopping Cart of Additional Included Services

Flexibility is key. Choose additional services during your agreement period. Enjoy the freedom of choice with the assurance of stable pricing.



Assess & Secure



Train & Develop



Parts & Maintain

**“The young generations are standing out to address climate change and today’s environmental challenges. The role of transformers supporting electrification, energy efficiency and the reduction of carbon emissions is an essential element of how Hitachi Energy is advancing a sustainable energy future for all”**

**And finally, we see a challenge across the industry to attract the younger generations. What can you tell them to raise their interest in transformers and the energy industry?**

I can talk about my personal experience. The Transformers business at Hitachi Energy has been where I had the most opportunities for career growth, learning and exchanging experiences.

More important than growing in my career, I have always pursued to find the “right place to be.” At Hitachi Energy, I found that place, an incredibly supportive and welcoming environment, where I am respected and recognized for my work, with diversity being one of the most valuable pillars and where we work for a purpose to generate a positive impact in society.

The demand for transformers is growing due to the Energy Transition. Clean energy, renewables, and electrification are driving the need for more transformers, and they are contributing to a sustainable energy future from generation to consumption across all industries.

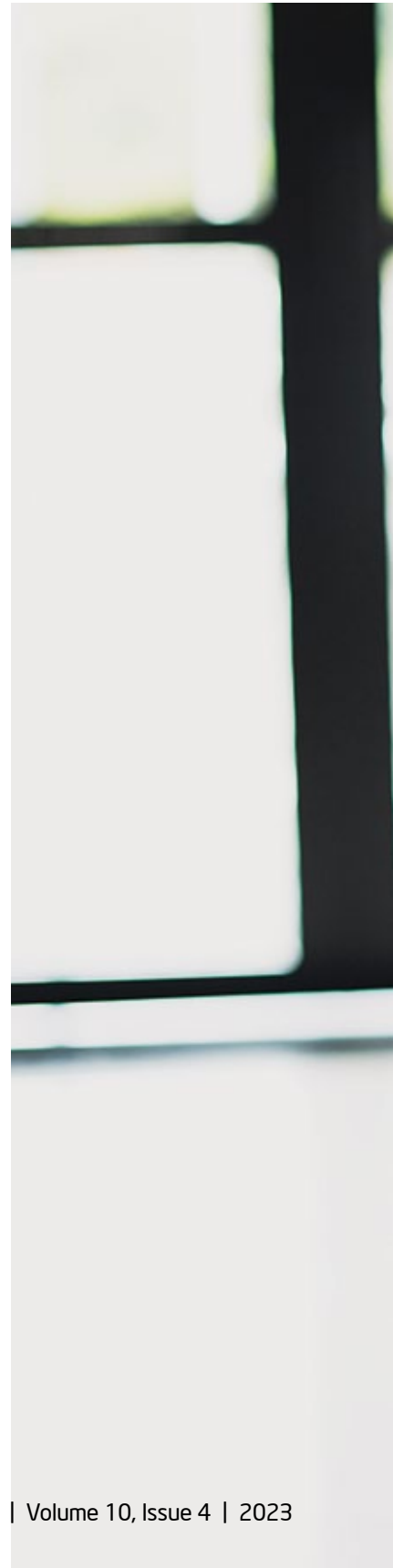
Attending an increasing demand also implies improving and growing our business, which may come via optimization, productivity improvements and new investments that come together with the

need to reinforce our teams with qualified and skilled people. Today, multiple career opportunities are available in the transformers business at Hitachi Energy, from R&D, engineering and design to maintenance, operations, and service, offering exciting challenges, professional growth and the chance to make a difference in the world.

The young generations are standing out by addressing climate change and today’s environmental-related challenges. The role of transformers supporting electrification, energy efficiency and the reduction of carbon emissions is an essential element of how Hitachi Energy is advancing a sustainable energy future for all.

What inspires me the most about working at Hitachi Energy is to count on the team’s diversity to deliver superior business results. As a leader, I engage people by showing them their contribution to the outcome. The diversity among our people allows us to achieve our goals by considering different points of view in the best possible way – we see this every day in our Business.

I see Hitachi Energy taking diversity seriously and improving female representation at all levels. The focus, for me, is on education from the base, preparing girls and women to grow with no limits, showing them success stories and helping them find the right place to be, as I found mine at Hitachi Energy.



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