Your trusted partner of choice throughout the transformer life time

Transformer Services
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Due to the long lifetime of transformers, service and lifecycle management are highly critical to ensure reliable operation and the longevity of your assets.

**Supporting you in your daily business:**
- Over 100 years of experience in manufacturing and maintaining transformers, bushings and tap-changers
- Global footprint of service locations enabling fast response to your needs
- Skilled local service engineers trained and certified by factories
- Access to factory domain knowledge and support
- Customer connect center available 24 hours a day, 365 days a year

**Your partner over the full transformer life:**
- We are by your side supporting you by addressing your specific needs throughout the complete life of your transformer
- We ensure you get the specific help you need by accessing original technical information on our global installed base

**In all segments:**
- Offshore renewables
- Industry
- Data centers
- Utility and power generation

We are always there to support our customers to manage and service their transformer fleet. For this, we leverage the unique experience of our great team members around the globe, and our ability to innovate and cocreate service solutions – at any stage of the asset lifecycle!

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**Helmut Bockshammer**
Global Product Group Manager
Transformer Components and Service

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Hitachi Energy provides services throughout the complete transformer lifecycle.
By your side addressing your needs

More than 100 years of experience helping you secure reliable transformer operation.

Over time the risk of transformer failure grows. Therefore it is important to undertake recommended inspections and tests to provide early warning of deteriorating condition.

Hitachi Energy can support you in planning and executing the right maintenance actions at the right time:

- Maintain your transformers using our factory trained and certified service engineers
- Reduce downtime using our global service network
- Avoid unplanned outages using our wide experience in transformer diagnostics to help you understand your transformer condition and risk
- Maximize operational life with our recommended maintenance

Advantages of our services:

MAXIMIZE RELIABILITY
of your transformers with factory recommended maintenance

OPTIMIZE YOUR MAINTENANCE SPEND
with our condition assessment capability providing maintenance priorities for your fleet

MINIMIZE RISK
utilizing our transformer diagnosing tools and monitoring systems to provide early warning of deteriorating condition
By your side and helping the planet

Together with customers and partners, we are accelerating the transition to a sustainable energy future – for our generation and generations to come.

Maximize a transformer’s lifetime
Hitachi Energy offers maintenance services to secure long term reliable transformer operation – the longer your transformer performs, the more sustainable it becomes.

- Life extension: Mid-life refurbishment and upgrade
- Bushing replacement: Conversion from oil to dry type
- Tap-changer upgrade: Conversion to vacuum
- Oil reclaiming / regeneration maximizing life of insulating oil
- Cooling system upgrades: Extend life or allow higher ratings

Minimize the risk of failure
Our transformer diagnostics and monitoring systems provide early warning of deteriorating condition – avoiding failure and supporting sustainable operations.

- TXpert sensing and monitoring: systems to detect and avoid failures, maximize life, and improve maintenance efficiency
- Consulting services for transformer diagnostics
- Condition assessments: fleet screening to identify aging transformers and mitigate risk
- TXplore inspection service: internal inspection with reduced HSE risks

Replace your old technology
Once end of life is reached, we can support you to safely dispose and recycle your old unit – maximize sustainable use of precious raw materials

- Turnkey offering to decommission, safely dispose and reinstall new transformer
- Conversion to dry type transformers to eliminate oil for distribution applications
By your side on your digital journey

The shift to a sustainable energy future demands greater flexibility, efficiency and resilience in electricity networks, it requires a digitalization of your transformers.

Our open, scalable, manufacturer-agnostic TXpert™ ecosystem for digitalization of transformers is designed to drive data-driven intelligence and decision making for operation and maintenance.

TXpert Hub is the cornerstone of our monitoring system and is applicable for all transformer brands. Our monitoring system can be installed on new transformers or retrofitted on site.

Online monitoring enables TXpert services such as remote consulting and trouble shooting to improve reliability.

Advantages of digitalization:

ONLINE MONITORING
provides early warning of any developing faults
avoiding unplanned outages

DIAGNOSTIC TOOLS
can prioritize maintenance requirements making the most of your maintenance budget

MAXIMIZE THE LIFE OF YOUR TRANSFORMER
by accurately understanding condition, and using this information to make the best decision on when to replace
Flexible range of services adaptable to your needs

To avoid failures, Hitachi Energy offers a broad range of transformer services, providing the most comprehensive coverage and care for transformers.

Throughout the complete transformer lifecycle and in all formats

**EARLY LIFE**
- Installation
- Commissioning
- Training

**OPERATIONAL LIFE**
- Maintenance
- Spares
- Condition assessment
- Remote monitoring

**UPGRADE**
- Repair
- Upgrade and retrofit

**END OF LIFE**
- Disposal
- Replacement

1. Individual preventive, or corrective services
2. TXLife Service Packages on demand (short-term packages)
3. Transformer Care long-term service agreements

We help our customers achieve reliable and sustainable operation of their transformers. From commissioning and startup, to end of life.

Stephen Pearce
Global Product Manager
Transformer Service
Early life

**Installation and commissioning**
Get trouble-free startup with installation and commissioning done by factory-trained experts and qualified technicians.

**Training**
Get on-site knowledge transfer on correct operation and maintenance ensuring your new asset operates as expected.
Operational life

Preventive maintenance
Regular inspection and testing according to the manufacture recommendation provides early detection of any evolving failure and allows timely outage planning to diagnose further and repair as necessary.

TXpert™ services
Digital monitoring improves reliability of the assets by constantly keeping a watchful eye on the most critical transformer components. Whether it is remote condition monitoring or diagnostics.

Get access to real-time condition information with our TXpert Services based on data and intelligence of the transformer TXpert Ecosystem and assure you can plan and act before faults occur.

Spare parts management
Have critical spare parts such as bushings, tap-changer contacts, relays, gaskets and other components on hand and significantly reduce downtime of your transformer.

TXLife Packages
Regular inspection and testing according to the manufacture recommendation provides early detection of any evolving failure and allows timely outage planning to diagnose further and repair as necessary.

For example:
- Inspection and test
- Bushing diagnostics
- Tap-changer maintenance
- Mid-life refurbishment

Transformer Care
Transformer Care long-term service agreements offering four levels of care: rapid response, lifecycle management, performance improvement and nursing
**Repair**

Repair or refurbish a transformer instead of replacing it – be it directly at site or in-house, at one of our dedicated transformer workshops. Rely on our leading technology site repair capability.

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**Upgrades**

**Bushing and tap-changer maintenance**

Maintain or upgrade to the latest technology to mitigate risk. Rely on our expertise in maintenance and condition assessment to ensure reliable operation.

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**Upgrade and retrofit**

Improve efficiency and sustainability with upgrades such as mid-life refurbishment, cooling system upgrade, component change to prolong the life of your asset.

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**Disposal and replacement**

Safely dispose and recycle your aged transformer and install matching design replacement with our packaged service solution: TX Life Replace.

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**End of life**
Transformer Care service agreements
Meeting your long-term needs

Together, we determine which of the four long-term service agreements meets your specific need, to cut complexity, control cost, and maximize your capital. Starting with a condition assessment, if desired.

Let’s get started – choose the right Transformer Care service agreement

A. RAPID RESPONSE

User case: Aluminum producer in Norway needed faster response time for corrective maintenance. We meet that need with RAPID RESPONSE. Fast and flexible service response to maximize equipment availability.

Included services: 24/7 support line, agreed terms and conditions, discounted rates

Customer benefit: Higher availability

B. LIFECYCLE MANAGEMENT

User case: Utility in Canada needed transformer expertise, yearly fleet assessments and reduced spending on corrective maintenance. We meet that need with LIFECYCLE MANAGEMENT providing knowledge and expertise to optimize and extend equipment life.

Included services: Rapid response services, on-site inspection, annual condition assessment report.

Customer benefit: Optimized maintenance spending

C. PERFORMANCE IMPROVEMENT

User case: Utility in USA needed preventive maintenance, advanced insights and continuous monitoring. We meet that need with PERFORMANCE IMPROVEMENT. Increased productivity through advanced digital tools and asset utilization.

Included services: Lifecycle Management services, sensors and Asset Performance Management software

Customer benefit: 60% reduction in risk of failure

D. NURSING

User case: Chemical plant in Canada needed to keep operating a critical transformer that was failing. We meet that need with NURSING. Extended the operation of a sick transformer with online monitoring and expert reports.

Services include: Nursing unit, condition assessment report, Rapid Response services and consulting

Customer benefit: Delayed shutdown and continued operations
Your trusted lifetime partner for transformer service
Global presence
24/7 availability of our experts