TÜVNORD

Certificate

TÜVNORD
TÜV NORD CERT GmbH
TSE.STANDARD
Energy Efficiency
tuev-nord.de 6950.26

The certification body of TÜV NORD CERT GmbH
hereby awards this certificate to the company

Stadt Zürich
Organisation und Informatik
Albisriederstrasse 201
8047 Zürich, Switzerland

to confirm that its security area

OIZ Data Center Hagenholz

fulfils all requirements of the Criteria Catalog

TSE.STANDARD V2.1
Energy Efficiency - Maturity Degree 4

of TÜV NORD CERT GmbH. The requirements are summarized in the appendix to the certificate.

The appendix is part of the certificate and consists of 5 pages.

Certificate ID 6950.26

valid from 2026-02-25 until 2027-02-28

To Certificate

Dr.-Ing. Pedersen

Essen, 2026-02-25

Certification Body of TÜV NORD CERT GmbH

TÜV NORD CERT GmbH
Am TÜV 1, 45307 Essen, Germany
tuev-nord-cert.com

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Certification scheme

The certification body of TÜV NORD CERT GmbH performs its certifications based on the following certification scheme:

- German document: “Zertifizierungsprogramm für IT-Zertifikate (nicht akkreditierter Bereich) der Zertifizierungsstelle der TÜV NORD CERT GmbH”, D503-CP-001, Rev. 00/09.24, TÜV NORD CERT GmbH

Evaluation report

- German document: “Evaluierungsbericht – Trusted Site Energy Efficiency (TSE.STANDARD), OIZ Rechenzentrum Hagenholz”, version 1.0 as of 2026-02-20, TÜV NORD CERT GmbH

Evaluation requirements

- “TSE.STANDARD Criteria Catalog“, TSE.STANDARD V2.1 as of 2024-07-01, TÜV NORD CERT GmbH

The evaluation requirements are summarized at the end. Not applicable requirements are printed in grey.

Evaluation target

Evaluation target is the security area „OIZ Data Center Hagenholz“ of Stadt Zürich. It is detailed in the evaluation report.

Evaluation result

The evaluation result is “Energy Efficiency Maturity Degree 4”.

Summary of the Evaluation Requirements

Evaluation requirements for Trusted Site Energy Efficiency (TSE), TSE.STANDARD V2.1:

Maturity Degree 1 – Energy Efficiency READY

The following requirements have to be fulfilled for the Maturity Degree 1:

Energy Management System (MGM)

- MGM01.1 Energy Management Handbook
- MGM02.1 Energy Assessment – Energy Sources
- MGM03.1 Energy Assessment – Areas with High Energy Use
- MGM04.1 Energy Assessment – Variables with Significant Influence
- MGM05.1 Energy Assessment – Potential for Improvement
- MGM06.1 Energy Assessment – Energy Baseline
- MGM07.1 Establishing Energy Goals
- MGM08.1 Action Plans – Developing Templates
- MGM09.1 Designation of Responsibilities
- MGM10.1 Internal TSE Audits – Developing a Template
- MGM11.1 Management Review – Developing a Template

Information and Communications Technology (ICT)

- ICT01.1 Inventory – Developing a Configuration Management Database (CMDB)
- ICT02.1 Procurement – Developing a Template
- ICT03.1 Monitoring – Concept

Infrastructure (INF)

- INF01.1 Documentation for Energy-Efficient Operation
- INF02.1 Inventory – Method

- INF03.1 Energy Efficiency Monitoring – Concept
- INF04.1 Energy Performance Indicators – Definition
- INF05.1 Best Practices – Selection

Maturity Degree 2 – Energy Efficiency IMPLEMENTED

The following requirements have to be fulfilled for the Maturity Degree 2:

Energy Management System (MGM)

- MGM06.2 Energy Assessment – Energy Baseline Validation
- MGM07.2 Energy Goals – Resource Planning
- MGM08.2 Action Plans – Measures Are Planned
- MGM09.2 Responsibilities – Interfaces of ICT and Facility Management
- MGM10.2 Internal TSE Audits – First Execution
- MGM11.2 Management Review - Initial Execution and Assessment
- MGM12.2 TSE Maturity Degree – TSE Maturity Degree 1 Attained

Information and Communications Technology (ICT)

- ICT01.2 Inventory – Complete the CMDB
- ICT02.2 Procurement – Guidelines
- ICT03.2 Energy Efficiency Monitoring for ICT – Measurements

Infrastructure (INF)

- INF01.2 Regular Updates of the Documentation for Energy-Efficient Operation
- INF02.2 Inventory of Essential Systems
- INF03.2 Energy Efficiency Monitoring for the Infrastructure – Measurement and Recording
- INF05.2 Best Practices – Implementation Degree for Maturity Degree 2

Maturity Degree 3 – Energy Efficiency IMPROVED

The following requirements have to be fulfilled for the Maturity Degree 3:

Energy Management System (MGM)

- MGM06.3 Energy Assessment – Showing the Increase in Efficiency From the Baseline
- MGM07.3 Energy Goals – Review
- MGM08.3 Action Plans – Measures Are Implemented
- MGM09.3 Responsibilities – The Process for Coordinating ICT With Facility Management
- MGM 10.3 Internal TSE Audits – Regular Execution
- MGM11.3 Management Review – Regular Execution
- MGM12.3 TSE Maturity Degree – TSE Maturity Degree 2 Attained

Information and Communications Technology (ICT)

- ICT01.3 Inventory – Consolidation of the ICT Components
- ICT02.3 Procurement – Energy-Efficient Product Design
- ICT03.3 Energy Efficiency Monitoring for ICT – Baseline Progress Report

Infrastructure (INF)

- INF01.3 Regular Updates of the Documentation for Energy-Efficient Operation
- INF02.3 Inventory – Energy Efficiency Data
- INF03.3 Energy Efficiency Monitoring of the Infrastructure – Baseline Progress Report
- INF05.3 Best Practices – Implementation Degree for Maturity Degree 3

Maturity Degree 4 –Energy Efficiency EXCELLENCE

The following requirements have to be fulfilled for Maturity Degree 4:

Energy Management System (MGM)

- MGM06.4 Energy Assessment – Integrated Analysis of the Energy Performance Indicators
- MGM07.4 Energy Goals – Review
- MGM08.4 Action Plans – Integrated Measures
- MGM09.4 Responsibilities – Integrated Planning of ICT and Facility Management
- MGM10.4 Internal TSE Audits – Regular Execution
- MGM11.4 Management Review – Regular Execution
- MGM12.4 TSE Maturity Degree – TSE Maturity Degree 3 Attained
- MGM13.4 EnMS Reports for Stakeholders

Information and Communications Technology (ICT)

- ICT01.4 Inventory – Consolidation of Services
- ICT02.4 Procurement – Considering IT Performance
- ICT03.4 Energy Efficiency Monitoring for ICT – For Groups and Components
- ICT05.4 Life Cycle Costs of ICT

Infrastructure (INF)

- INF01.4 Regular Updates of the Documentation for Energy-Efficient Operation
- INF02.4 Inventory – Data Center Infrastructure Management
- INF03.4 Energy Efficiency Monitoring for the Infrastructure – Allocation
- INF05.4 Regular Review of Best Practices
- INF06.4 Life Cycle Costs of Infrastructure