TRANSFORMERS MAGAZINE'S
INDUSTRY NAVIGATOR

INVESTMENTS, ARTIFICIAL INTELLIGENCE AND SUSTAINABILITY

CONFERENCE 2024

Transforming together the future of energy

Enabling the energy transition and the expansion of electrification while leading collaborative efforts in sustainable energy transformation

Julia Däumer

June 13, 2024

SGB-SMIT Group

TRANSFORMING TOGETHER
THE FUTURE OF ENERGY

SGB-SMIT Group

TRANSFORMING TOGETHER
THE FUTURE OF ENERGY

SGB-SMIT Group at a glance

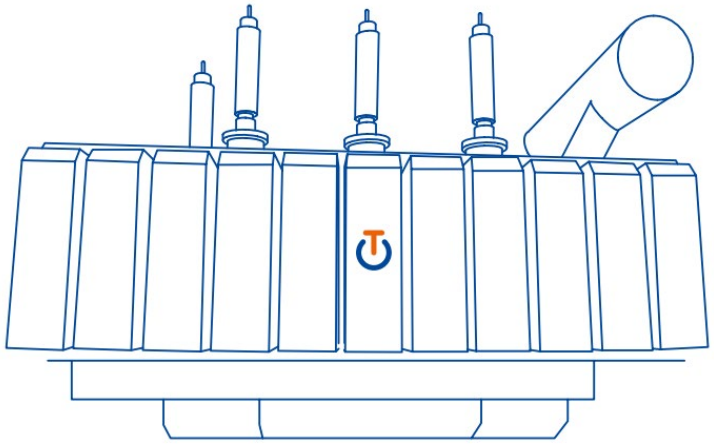
- Since 1947
- More than 3.300 dedicated employees
- Transformers for the complete energy chain

No. 1 pure-play transformer manufacturer from Europe with locations worldwide.

OUR ENVIRONMENT

OUR PEOPLE

OUR GOVERNANCE



SGB-SMIT Group

OUR COMMITMENT

Committed to reliable, efficient, and sustainable solutions


SGB-SMIT
Group
NASA Earth Observatory images by Joshua Stevens, using Suomi NPP VIIRS data from Miguel Román, NASA GSFC 2016

TRANSFORMING TOGETHER THE FUTURE OF ENERGY

OUR WHY

SGB-SMIT Group

As advocates for sustainable energy, we support with all our initiatives the transition from conventional to renewable energy sources.

Advancing reliability and efficiency within transformer technology while enhancing sustainable practices is our top priority.

Statista, 2023

TRANSFORMING TOGETHER THE FUTURE OF ENERGY

OUR WHY

SGB-SMIT Group

RELIABLE & SUSTAINABLE POWER TRANSMISSION

Embracing the energy transition and leading the way towards sustainability means embracing a significant expansion in reliable power generation.

TRANSFORMING TOGETHER THE FUTURE OF ENERGY

THE HOW

SGB-SMIT Group

What is the price of reliable & sustainable power transmission?

How we approach sustainability: our GREEN program

We have redefined the word GREEN

GOVERNANCE — Business Ethics - Compliance and Code of Conduct - Data management and Information security

RESPONSIBILITY — Responsible decisions on resources &raw materials consumption to achieve a circular Economy

EQUALITY — Equal opportunities - Diversity and Inclusion within our teams

EMPLOYEES — Health and Safety - Good working conditions, Trainings - Relationships build on trust and Integrity

NET ZERO — Commitment to the global target of maximum 1.5°C

OUR PROGRAM

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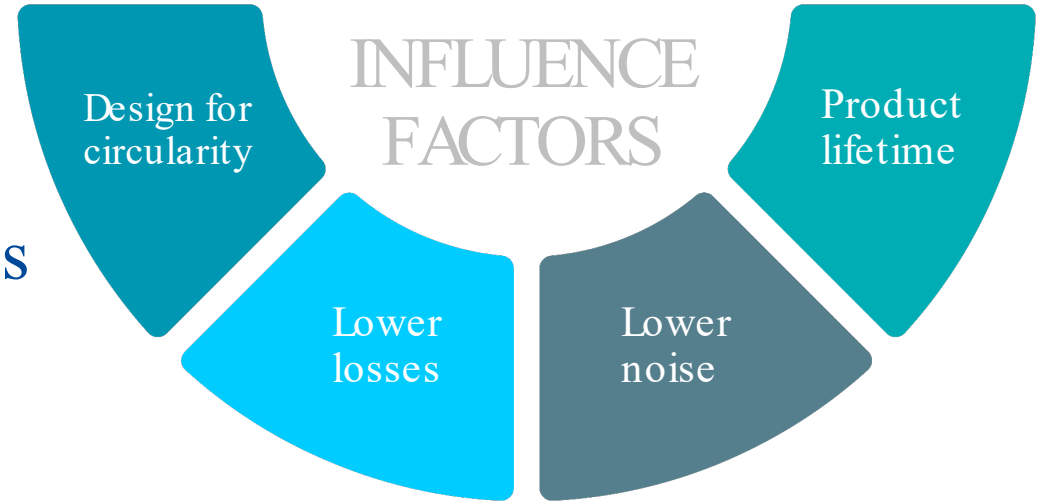
Optimizing Circular Decisions: from design to end-of-life material applications



G OVERNANCE

R ESPONSIBILITY — Minimum environmental impact of products and services across the value chain.

E QUALITY

E MPLOYEES

N ET ZERO

OUR COMMITMENT

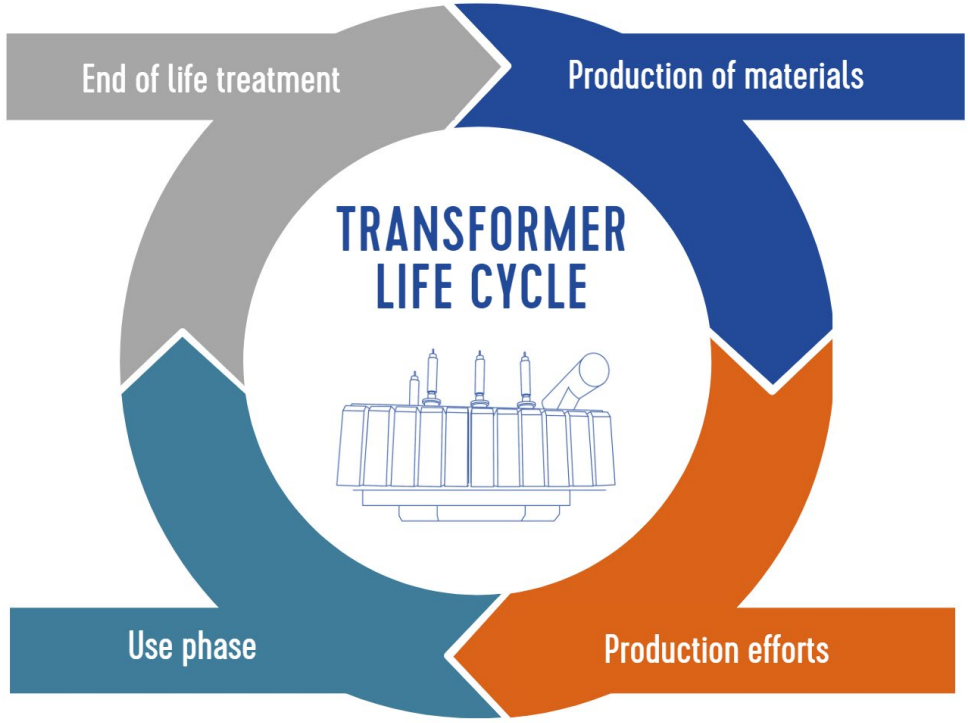
SGB-SMIT Group

LCAs, driving transparency and informed decision making

Understanding the environmental impact of our products

Fostering transparency in relationships with our customers

Valuable insights into the complete life cycle of our products.



ecoinvent
Our database

EBP
Our partner

OUR COMMITMENT

SGB-SMIT Group

Circular Product Design, emphasizing energy efficiency and alternative material integration

Advanced simulation solutions in transformer modelling

- ✓ Real-world conditions
- ✓ Unique customer requirements
- ✓ Minimizing environmental impact
- ✓ Scalability, and collaboration capabilities

CLOUD BASED SOLUTION

digital twin simulation software

OUR COMMITMENT

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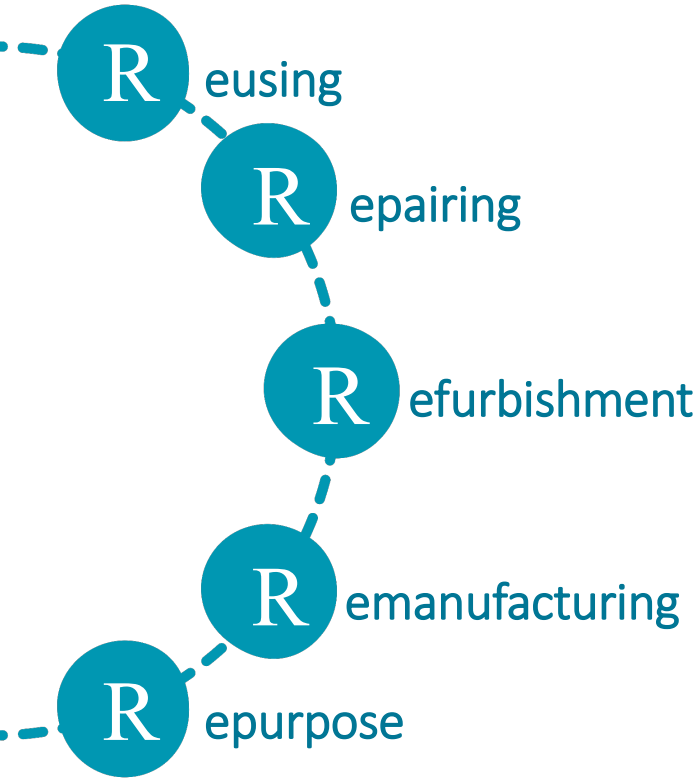
Circular Business Models and Circular Waste Management



Waste prevention and reuse take priority over recycling and waste processing.

Enhancing circular approaches for lifetime extensions must be pursued from a collaborative approach, together with all stakeholders.

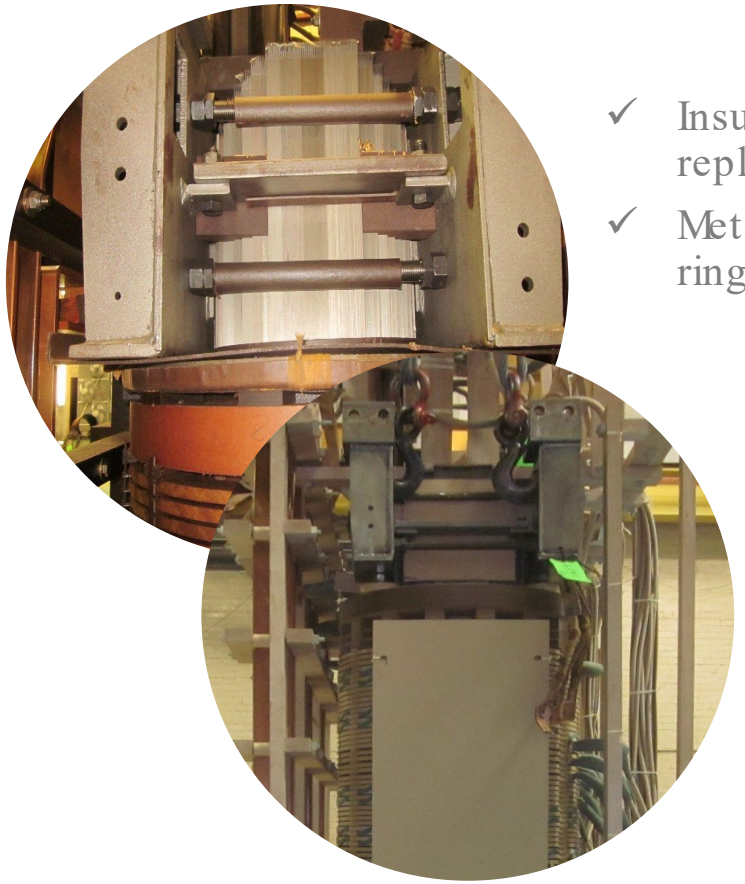
- Transformer Health Assessment
- Preventive maintenance
- Refurbishing options
- End-of-Life Recycling support

SPECIALIZED SERVICE TEAM

OUR COMMITMENT

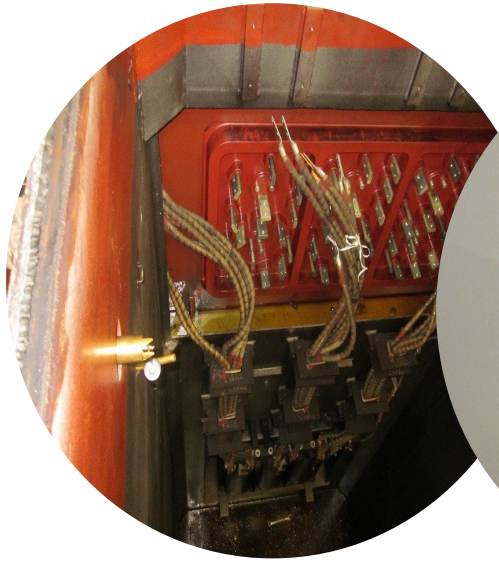
SGB-SMIT Group

Lifetime extension: Repairing

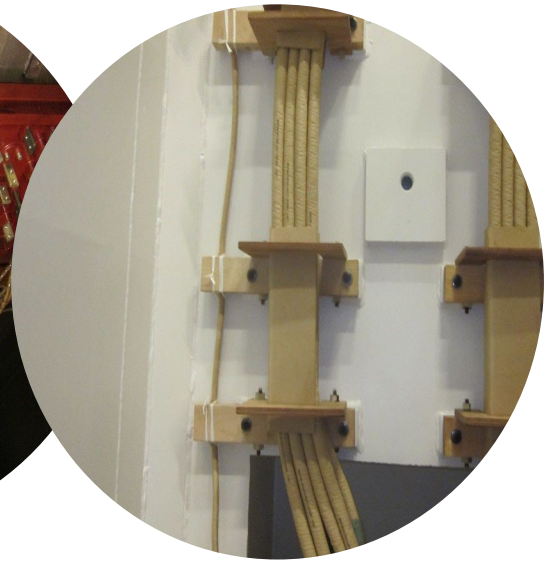


- ✓ Insulation replaced
- ✓ Metal clamping ring eliminated
- ✓ Barrier added

BEFORE



AFTER



- ✓ New internal paint
- ✓ Insulation replaced

OUR SOLUTIONS | SGB-SMIT Group

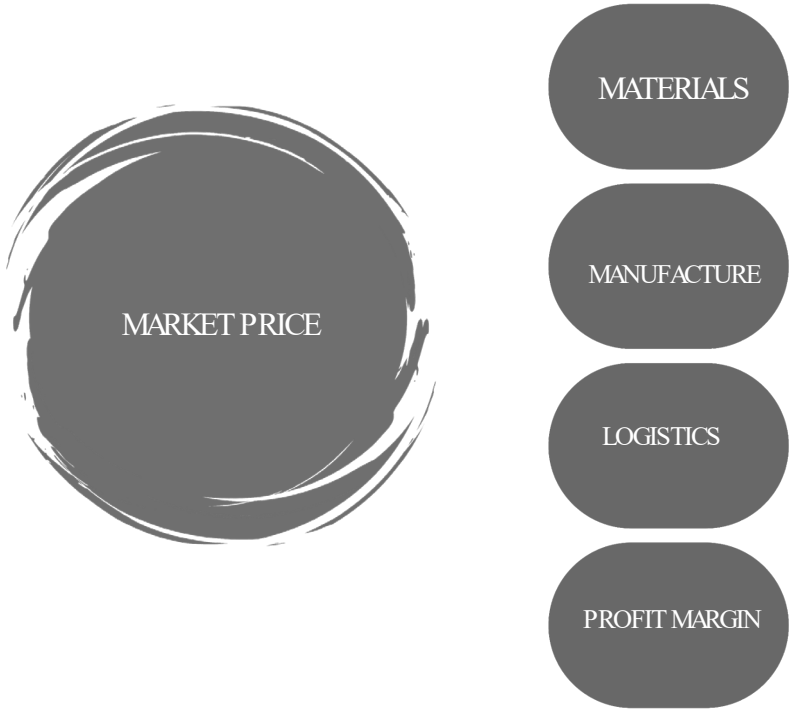
The Real Price of a Transformer: Unveiling the True Costs

The actual cost of a transformer extends far beyond its purchase price

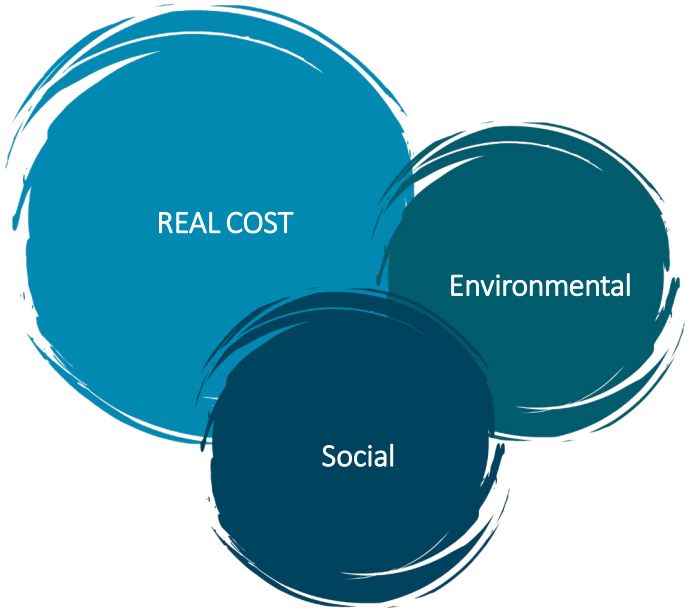
Components of Market Price

Breakdown of the traditional cost factors.

- **Materials**: Copper, GOES, steel, insulating materials, fluids.
- **Manufacturing**: Labor, technology, and production processes.
- **Logistics**: Transportation and installation costs.
- **Profit Margins**: Manufacturer and retailer profits.



The Real Price of a Transformer: Unveiling the True Costs



The actual cost of a transformer extends far beyond its purchase price

Environmental impact at each stage of a transformer's lifecycle

Resource Extraction: Mining of copper, iron, and other materials.
Manufacturing Process: Energy consumption, emissions, and waste.
Operational Phase: Efficiency losses, noise, cooling requirements, and potential leaks.
End-of-Life Disposal: Recycling, hazardous waste, and landfill impact
Availability of skilled labor (diversity needed)

THE TRUE COST | SGB-SMIT Group

The Real Price of a Transformer: The Barriers

Barriers

Low expertise

Risk-averse customer

Additional costs

THE CHALLENGE

SGB-SMIT Group

GOVERNANCE
RESPONSIBILITY
EQUALITY
EMPLOYEES
NET ZERO

1 Understood the importance of sustainability and committed to the SDGs

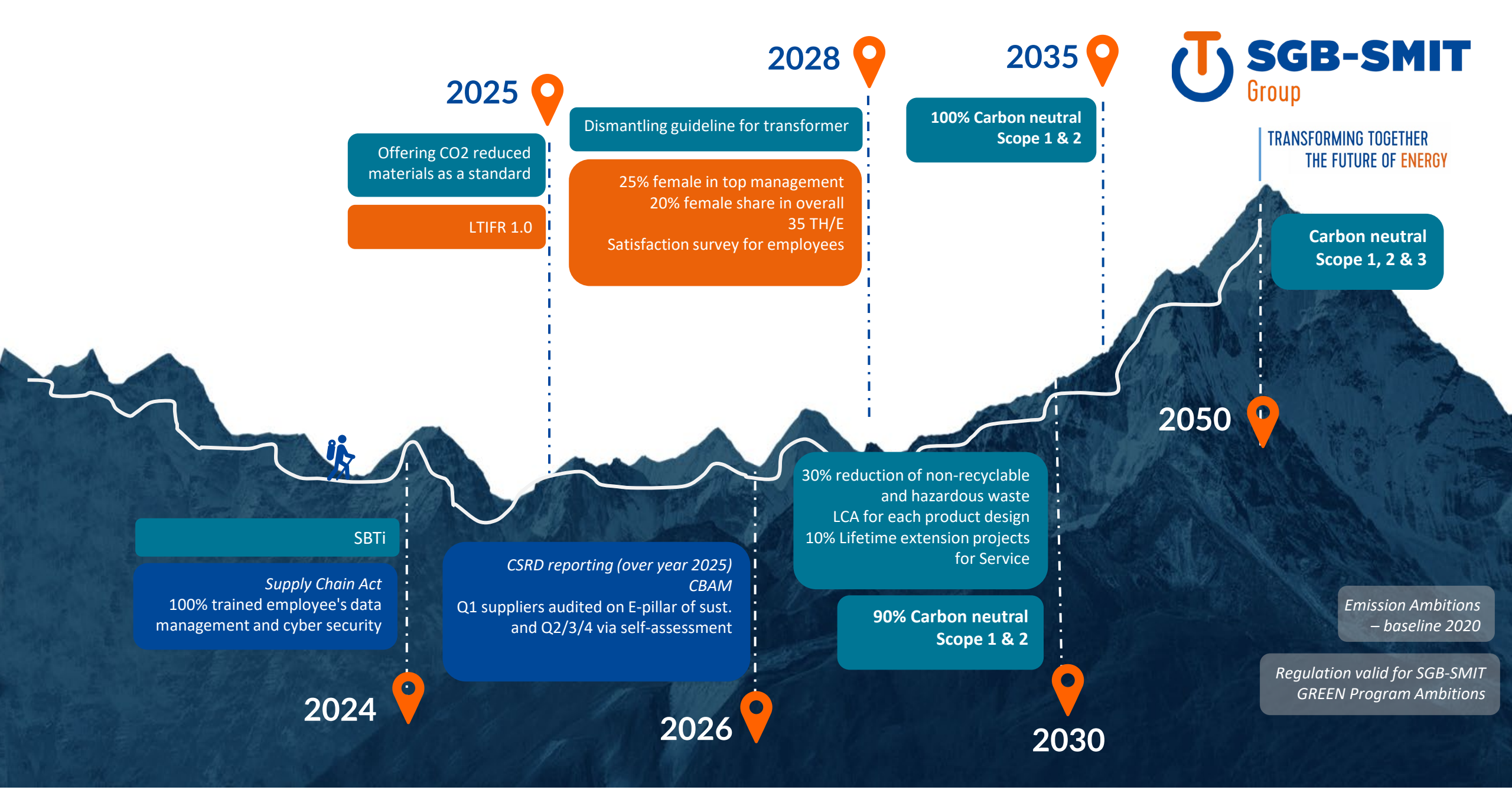
2 Adjusted our vision and set a sustainability strategy

3 Set our ambitions for 2028 for each area of our program

4 Defined KPIs to measure our performance

5 Defined a roadmap to achieve our goals

Completed steps of our sustainability transition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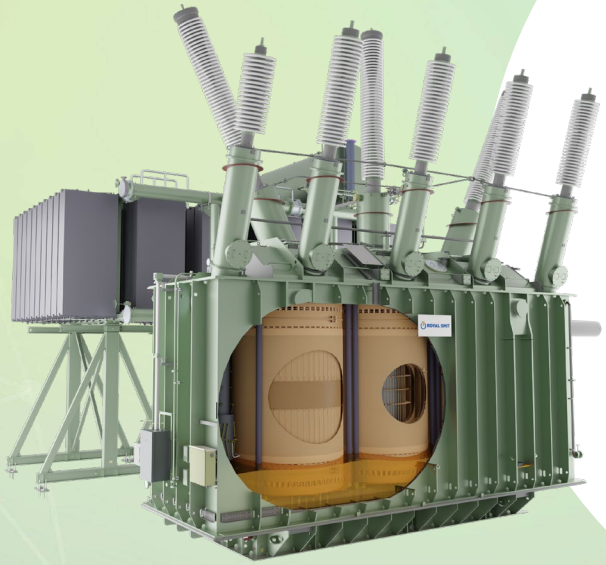
2024
SBTi
Supply Chain Act
100% trained employee's data management and cyber security
2025
Offering CO2 reduced materials as a standard
LTIFR 1.0
2026
CSRD reporting (over year 2025)
CBAM
Q1 suppliers audited on E-pillar of sust. and Q2/3/4 via self-assessment
2028
Dismantling guideline for transformer
25% female in top management
20% female share in overall
35 TH/E
Satisfaction survey for employees
30% reduction of non-recyclable and hazardous waste
LCA for each product design
10% Lifetime extension projects for Service
90% Carbon neutral Scope 1 & 2
2030
2035
100% Carbon neutral Scope 1 & 2
2050
Carbon neutral Scope 1, 2 & 3
Emission Ambitions – baseline 2020
Regulation valid for SGB-SMIT GREEN Program Ambitions

Powering Progress: driving renewable energy integration and electrification expansion

Help our customers accelerate the transition from conventional energy sources to renewable alternatives and the expansion of electrification by offering custom solutions.

OUR COMMITMENT

SGB-SMIT Group



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THANK YOU