



Sustainability Report 2024

Focusing on resilience





Focusing on resilience

Dear readers,

Our role in the global energy transition is more crucial than ever, especially in light of geopolitical challenges and the urgent need to reduce the global carbon footprint. However, the energy transition is not only a decisive building block for a sustainable future; it also entails numerous growth opportunities.

Over the past years, Siemens Energy has made significant progress on our journey toward a sustainable future. Our commitment to the UN Global Compact remains strong. We have set up a comprehensive Sustainability Program and built a solid foundation that allows us to embed our initiatives across all our operations. The integration of ESG criteria into our long-term incentive systems and sustainable financing structures is a testament to this. We have established a Sustainability Council that decides on the strategic sustainability agenda, and sustainability is a regular topic in our Supervisory Board meetings. ESG is an integral part of our business strategy.

In fiscal year 2024, we concentrated on the consistent implementation and steady progress of our existing programs. A particular focus has been on decarbonizing our portfolio. With our Climate Neutral Program, we are

well on track. And we already achieved 24% women in top leadership positions. One thing I am particularly proud of is that Siemens Energy reduced its pay differences between men and women for the second year in a row, leading to an adjusted Gender Pay Gap of 3% in fiscal year 2024. These successes would not have been possible without the dedication and hard work of our employees. For this, I extend my heartfelt thanks to all involved.

In the years to come, we will focus on increasing the resilience of energy systems while supporting our customers in their energy transition. We will continue to advance the strategic integration of sustainability and focus on our future climate roadmap that aligns our business goals with our sustainability ambitions.

I am proud of what we have achieved so far and look forward to taking the next steps toward a sustainable energy future together with you.

Best regards,

Christian Bruch

Chief Executive Officer and Chief Sustainability Officer Siemens Energy AG

Our sustainability performance

Decarbonizing our business

Performance indicator	Unit	2024	2023
Greenhouse gas emissions			
Scope 1+2 emissions			
absolute	1,000 metric tons CO ₂ e	197	180
thereof SF ₆	1,000 metric tons CO ₂ e	21	32
thereof fleet	1,000 metric tons CO ₂ e	40	38
Scope 3 downstream emissions¹			
absolute	1,000 metric tons CO ₂ e	1,333,642	1,098,370
intensity	metric tons CO ₂ e/ € order intake	0.027	0.022
Scope 3 upstream emissions²			
absolute	1,000 metric tons CO ₂ e	9,238	9,230
intensity	kg CO ₂ e/€ PVO spent	0.408	0.414
Energy			
Energy consumption	million gigajoule	5.93	5.48
Share of green electricity	%	100	100

¹ Includes category "use of sold products" only (well-to-tank emissions are included, biogenic emissions have been excluded). Siemens Gamesa's emissions equal zero.

² Includes categories "purchased goods and services" and "transportation and distribution" only.

³ Total Recordable Injury Rate: Number of recordable injuries (TRI) x 1,000,000/work hours performed. Recordable injuries are accidents that result in lost time, restricted work, or medical treatment.

Responsible operations



Performance indicator	Unit	2024	2023
Research & development			
Research & development expenses	million €	1,209	1,123
Sustainable supply chain management			
Supplier sustainability risk coverage rate	%	44.5	n.a.
Waste			
Waste recycling and recovery rate	%	87	82
Water			
Water consumption	million cubic meters	2.57	3.25
Product stewardship			
Portfolio coverage by Life Cycle Assessments (LCAs)	%	75	73
Employees			
Share of women in overall workforce	%	21	20
Share of women in top leadership positions	%	24	26
Training hours per employee	no.	13.0	12.0
Occupational health and safety			
Total Recordable Injury Rate (TRIR) of employees and contractors ³	no.	2.35	2.67
Donations	million €	3.36	2.59

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Strategic partnerships for sustainable energy

A photograph of two men in business attire. The man on the left is middle-aged with short grey hair, wearing a dark blue suit jacket over a white shirt. He is smiling and gesturing with his hands as if in conversation. The man on the right is seen from the back, wearing a dark blue suit jacket and a purple lanyard. The background is a blurred office setting with yellow and white panels.

We've set ambitious sustainability targets across the entire value chain and defined the key levers for decarbonization. We have the technology, innovations, and people – now it's time to keep pushing the boundaries of what's possible and affordable in the energy transition through mutually beneficial partnerships with our customers. We can't do it alone. Plus, Dieter Vollkommer offers some insights into his role as Head of Corporate Sustainability at Siemens Energy.

Worldwide energy demand is going to dramatically increase in the coming years, making sustainability in the energy sector a matter of urgency. So urgent that in twenty years' time, probably nobody will highlight that a product is sustainable – it will be a given.

This is the future energy landscape our customers will face, driven by stakeholder demands and increasing sustainability regulations that require energy providers to pivot away from “business as usual” in favor of new markets. In this new landscape, sustainability will be one foundation for growth – accompanying our customers step by step on the road there will be key.



Our biggest levers for decarbonization

When it comes to decarbonization, we aim to be the partner of choice for our customers. This also means that we take care of our own emissions to serve as an example. In fiscal year 2024, with our Climate Neutral Program, we reduced emissions of CO₂ equivalents (CO₂e) within our own operations by 55% compared to 2019, reaching our target for 2025 earlier than anticipated.

But this isn't enough.

More than 99% of the company's greenhouse gas emissions come from the customers' use of our products. Clearly, it's here we have the opportunity to make a major difference – and we're already building new partnerships and working collaboratively with our customers to achieve this.

Our goal is to reduce these Scope 3 downstream emissions significantly. The SBTi framework asks us to reduce them by 28% by 2030 from a 2019 base year. In fiscal year 2023, we achieved a reduction of 27%. In fiscal year 2024, however, increased order intake made reaching our target trajectory more challenging, leading to an increase of Scope 3 emissions compared to fiscal year 2023. As a company, we need to stay profitable and at the same time contribute to limiting global warming. Shaping the energy transition is an enormous task, and we can only do our part if we're profitable.

Our biggest levers in getting us there are strengthening energy efficiency and digitalization, increasing renewables and electrification, and enabling the fuel shift to low-carbon and carbon-neutral fuels as well as the expansion of new emission removal technologies.

Beyond 2030, we expect to see emissions from sold products to go down further, once technologies like green hydrogen and carbon capture mature and scale. But in the meantime, the shift from coal to natural gas is already making rapid cuts. For example, in fiscal year 2024, we helped Cooperative Energy convert its Morrow Power Plant in Mississippi from coal to gas with an SGT6-9000HL gas turbine, reducing their CO₂ emissions by 2 million metric tons per year.

Grid technology: An alliance to decarbonize the supply chain



Our goal is to reduce supply chain emissions by 30% by 2030, for example with the use of recycled copper in transformers.

We're shaking up energy's purchasing world by working together with the European grid operator TenneT to decarbonize our joint supply chain for grid infrastructure. In July 2024, Siemens Energy and TenneT entered a partnership to reduce emissions from our shared supply chain activities by 30% by 2030. The declaration signals our commitment to go beyond legislative requirements in decarbonizing the value chain. Measures include working to conserve raw materials and introducing other base materials including recycled or greener copper, steel, and aluminum. By joining forces with TenneT, we'll have a major impact on lowering the carbon footprint of power grids. Just in Germany, TenneT plans to add around 12,000 kilometers of grid expansion: “We're talking about immense quantities of steel, copper, and other raw materials that we need for the energy transition,” says TenneT's Chief Operating Officer Tim Meyerjürgens. To start decarbonizing raw materials, we've identified ten actions over the next five years, starting by supplying TenneT with transformers made with 100% recycled copper – this action alone will save around 6,500 tons of emissions.

Driving sustainability and profit in tandem

Our efforts are part of our intense cooperation with our customers, who require a wide range of products to meet the needs of a rapidly growing electricity market. Our grid and gas turbine business in particular is benefitting from this momentum, multiplying order intake at Gas Services in fiscal year 2024 and reaching a record order backlog in both our Gas Services and Grid Technologies.

At the same time, the energy sector is quickly evolving, and customers need to feel confident that the assets they're investing in today won't be stranded tomorrow – predictability matters! A transformer typically has a lifetime of twenty to thirty years. With proper maintenance, a gas turbine can remain operational for as long as forty. Can we widen their role in the energy transition?

As carbon-free hydrogen production scales, we offer customers like Morrow a decarbonization pathway to operate our gas turbines on 100% hydrogen by 2030, making their assets not only viable in a net-zero energy system but central to maintaining grid stability now and in the future. For hydrogen to truly become a game changer though, it will have to be available in large quantities at competitive prices. In fiscal year 2023, in a joint venture with industrial gases provider Air Liquide, we opened our Gigawatt Electrolyzer Factory as part of the ramp-up to a hydrogen economy. In fiscal year 2024, the factory increased its production of electrolyzer stacks from one to two gigawatts.

On the materials side, in September 2024, we signed an agreement with the grid operator TenneT to provide transformers with a lower carbon footprint by using 100% recycled copper for their windings. If recycled copper were used for all power transformers required worldwide to expand the electrical grid by 2040, it would save around 14 million metric tons of greenhouse gas emissions. There's a tremendous opportunity here – for our business and for the planet!

We're proud and confident of our role in enabling the energy sector to evolve, but we can't do it alone. What we need now are climate-smart regulatory frameworks that offer predictability and stability for investors, while we continue to build new partnerships and collaborations with our customers and key industry players around the world, working and innovating together for a sustainable energy future.

Dieter Vollkommer on pursuing sustainability

As Head of Corporate Sustainability, Dieter Vollkommer is responsible for integrating environmental, social, and corporate governance (ESG) priorities into Siemens Energy's strategy.

What does sustainability at Siemens Energy mean for the business?

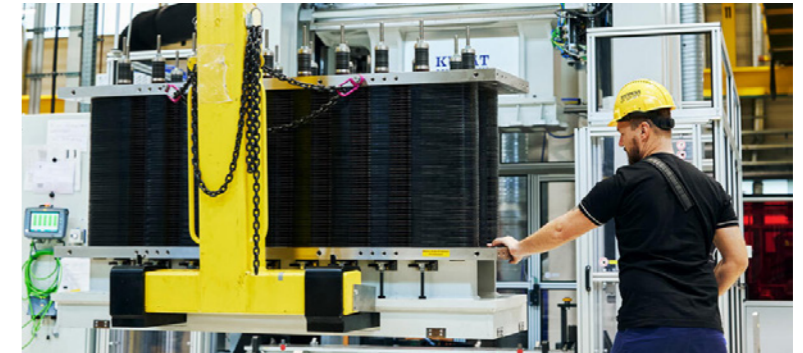
Sustainability is really about grasping business opportunities and reducing risks. That includes minimizing our climate footprint in our own operations and manufacturing, as well as the emissions from the use of our products. We consider sustainability in the decisions we make, from the innovations we pursue to the way we're trying to conserve resources. Sustainability touches our entire company culture. It's reflected in our health and safety targets. It's in our diversity goals. We're striving to be a fair and inclusive company, one where everybody can be themselves at work.



How is Siemens Energy reducing the company's carbon footprint?

Our goal is to be climate neutral within our operations by 2030. One lever is that we're only using renewable electricity in all our facilities around the globe, a remarkable target we reached in fiscal year 2023. We're also focusing on reducing energy consumption and increasing electrification in our processes and buildings, and we're transforming our entire car fleet to 100% electric vehicles. Of course, while we push for climate neutrality in

Electrolyzers: The future of hydrogen tech manufacturing



The industrial production of electrolyzers will help to supply high quality products at GW-scale for renewable hydrogen projects.

Demand for hydrogen reached more than 97 million metric tons per year in 2023. To date, nearly all hydrogen consumed is gray hydrogen, produced from fossil fuels. But demand for clean hydrogen is rising and projected to increase between 125 and 585 million tons per annum by 2050. This year, our new Gigawatt Electrolyzer Factory in Berlin, Germany, ramped up production of electrolyzer components. A joint venture between Siemens Energy and French partner Air Liquide, the factory uses high-tech robots, automation, and digitalization to manufacture electrolyzer stacks at an industrial scale. Electrolyzers use electricity to split water into hydrogen and oxygen and are thus the central technology in producing low-emission hydrogen. By making them available in large scale, we're helping to decarbonize industries such the maritime, road transport, chemicals, and refining industries. Starting with one gigawatt of production capacity, the factory can provide three gigawatts of electrolysis capacity from 2025 if the market requires it. With an installed capacity of three gigawatts, 300,000 tons of hydrogen could be produced – enough hydrogen to reduce emissions equivalent to a city of 280,000 inhabitants. "With the Gigafactory, we can reliably deliver and support our customers in the successful realization of even large-scale projects," says the plant's Head of Manufacturing Axel von Levetzow.

our operations, the biggest challenge is to push decarbonization up and down the value chain. If you look at our company footprint, around 99% of it comes from Scope 3 emissions from the use of sold products.

What measures are being taken to cut the company's Scope 3 emissions?

We aim to reduce Scope 3 downstream emissions by 28% by 2030 compared to 2019. This is really ambitious if one considers the way Scope 3 is calculated: In the year we sell the respective product, we calculate the emissions for the entire lifetime. As our business grows, it's quite natural that our CO₂ footprint goes up. But we can still influence Scope 3 emissions through various levers: The first one is efficiency gains with improved products and digitalization. The second is offering GHG-free products and products supporting the shift to hydrogen – this will be a huge lever. A third is enabling technologies like carbon capture and storage (CCS) to mature in the coming years; we're already seeing projects combining gas turbines with CCS that are close to climate neutral. Also, since November 2020, we no longer offer new coal-fired projects, which made up a significant part of our overall CO₂ emissions. And last but not least, by bringing more renewables into the system, we expect our customers will operate their gas turbines less and less in the future. All these elements come together to bring down our emissions. From a purely technological perspective, we're on the forefront of what's possible in the energy transition.

In addition, we've collected and processed ESG data for around 90% of our Scope 3 downstream emissions for strategic forecasting with our ESG data management solution. I think this shows our commitment to understanding and calculating Scope 3 emissions and how serious we are about managing them. This is going to become more and more relevant going forward with the new Corporate Sustainability Reporting Directive (CSRD). And as more ESG data flows into this data management system, we'll have an entire sustainability data pool for the company in the future.

Gas turbines: Forward-thinking power generation



Morrow Repower increases the production of cleaner power and provides the flexibility needed to complement renewable energy.

The switch from coal to natural gas is opening up a new era in the energy transition, offering far cleaner electricity and paving the way for the energy transition. For example, in Mississippi, USA, Cooperative Energy, a generation and transmission cooperative, converted its existing coal-fired power plant to natural gas in its Morrow Repower project. The goal was to increase flexibility and reduce emissions, and to do this, Cooperative Energy chose to use our cutting-edge SGT6-9000HL gas turbine. Together with a steam turbine retrofitted from previous coal plant operations, the new plant is capable of producing 550 megawatts of electricity and uses thermal power from the new turbine in its existing thermal plant system, making it as efficient as a new combined-cycle plant. The project was so successful that it won Power magazine's 2024 Reinvention Award. The new plant reduces CO₂ emissions by up to two million metric tons per annum compared to the coal-fired plant. And it's helping ensure that people in the region of Mississippi will benefit from safe, reliable, and affordable power for years to come. What's more, the SGT-9000HL is already capable of running on a volume of 50% hydrogen today and 100% hydrogen by 2030.

Wind: Pioneering turbine recyclability



Our RecyclableBlades leaving for the Kaskasi offshore development.

We aim to produce 100% recyclable wind turbines by 2040. With the rate of expansion for wind power expected to double by the end of the decade, recycling wind turbine components – or “wind circularity” – is high on our agenda. There are already established practices for efficiently recycling most turbine parts, but recycling the blades has presented a greater challenge. Usually made of fiberglass and resins, long-lasting composite materials are created that are not easily recycled. We're changing that with our pioneering RecyclableBlade technology, the first comprehensive recycling solution ready for commercial use. All materials used for the blade can be recycled and reused in other industries, thanks to the use of a new resin. The first blades were already installed in 2021 at the offshore wind farm Kaskasi off the coast of the Germany. Eighty-one meters long, the blades can be recycled at the end of their lifespan, lowering our lifecycle emissions and giving the industry a chance to improve its footprint.

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Siemens Energy at a glance

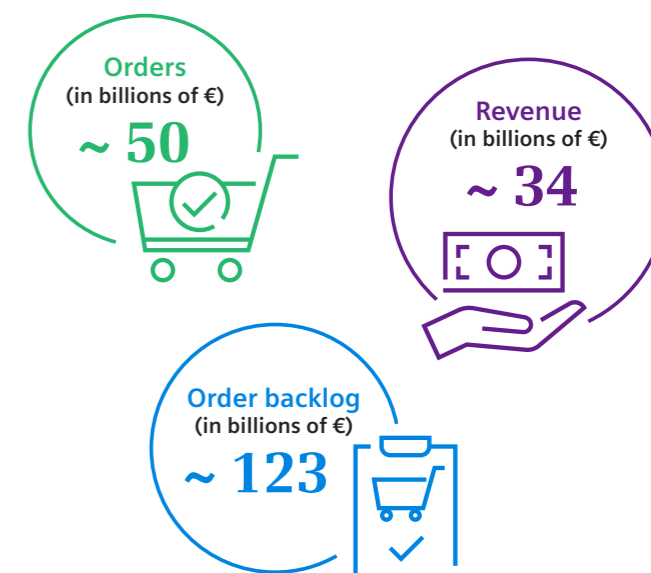
Our mission is to support our customers in transitioning to a more sustainable world based on our innovative technologies and our ability to turn ideas into reality. All our efforts are directed to our central goal: to be a valued partner and driver of the energy transition. Our portfolio, extensive energy experience, and ambition to decarbonize the world's energy systems reflect this.

As one of the largest providers of advanced technology in the energy and electricity sector, we are committed to supporting the full spectrum of the global energy market. Our comprehensive portfolio of products, solutions, and services spans nearly the entire energy value chain – from low- or zero-emission power and heat generation, transmission, and storage to reducing greenhouse gas (GHG) emissions and optimizing energy consumption in industrial processes. In addition, we provide a robust range of training and service offers, reinforcing our dedication to a more sustainable energy future.

Key financial indicators (in billions of €)	Fiscal year	
	2024	2023
Orders	50.2	50.4
Order backlog	123.3	111.6
Revenue	34.5	31.1

Ready to adapt to different speeds at which the energy transition is moving forward, we are aiming for more energy resilience on a global scale. Our people are the engine of this mission. As of September 30, 2024, Siemens Energy employs about 99,000 people in more than 90 countries worldwide.

Key financial indicators



Our company structure

Since the start of fiscal year 2023, Siemens Energy has been strategically aligned into four Business Areas: Gas Services (GS), Grid Technologies (GT), Transformation of Industry (TI), and Siemens Gamesa. GS, GT, and Siemens Gamesa are reportable segments, while TI reports on a voluntary basis. This structure allows us to address the evolving demands of the energy sector with focused expertise and innovation.

- The Business Area **Gas Services** (GS) bundles all business activities related to gas turbines, large steam turbines, large generators, and heat pumps, including auxiliaries, instrumentation, and controls. The portfolio includes products, solutions, and services for central and distributed

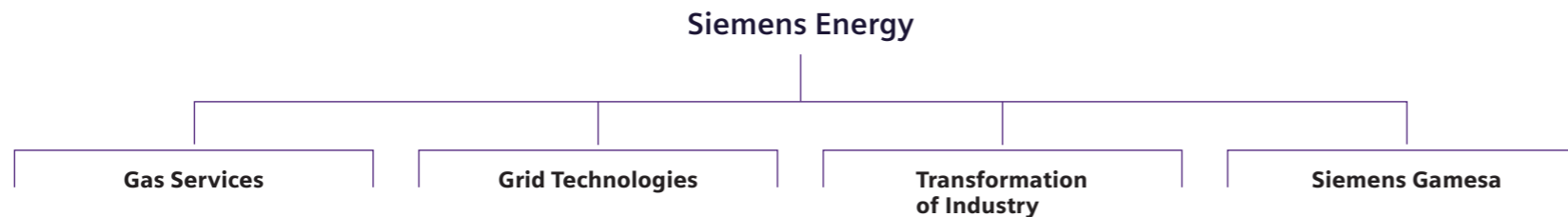
power generation. GS supports its customers all the way from installing new units to servicing the installed fleet, with a comprehensive service portfolio that covers maintenance services, modernization and upgrades, operations services, digitalization services (e.g., cyber security), and professional consulting.

- **Grid Technologies** (GT) focuses on increasing connectivity, resilience, digitalization, and decarbonization of power grids all over the world. Through its products, systems, solutions, and services, GT enables transmission grids to cope with growing energy demands and the increasing complexity of grid infrastructures resulting from the integration of renewables. Its portfolio includes high-voltage direct current transmission systems, offshore windfarm grid connections, flexible AC

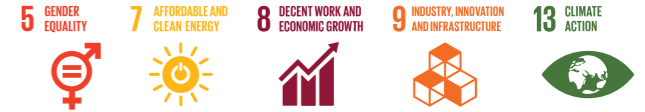
transmission systems, high-voltage substation solutions and products, air- and gas-insulated switchgear, transformers, storage solutions, as well as digital and service offers.

- **Transformation of Industry** (TI) comprises four non-reportable operating segments – Industrial Steam Turbines & Generators (STG), Compression (CP), Sustainable Energy Systems (SES), and Electrification, Automation, Digitalization (EAD) – that are presented voluntarily as if they were a single reportable segment. TI supports industrial customers in reducing their carbon footprint and achieving their individual decarbonization targets. Its portfolio includes products (e.g., compressors, steam turbines, generators, automation systems, sensors, and electrolyzers), digital offers (e.g., remote monitoring), integrated systems and solutions, and services (e.g., field service, modernization and upgrades) for various process industries and the maritime sector.
- The Business Area **Siemens Gamesa** offers onshore and offshore wind turbines as well as services over the entire life cycle of wind turbines.

Our company structure



Strategic focus



Affordable and sustainable energy remains key to overcoming the climate crisis as well as a critical driver for future growth and prosperity for global societies. That is why we have made sustainability a core part of our company strategy.

Our world faces an ever-increasing need for a reliable and affordable energy supply to support economic development and ensure stable societies. At the same time, the climate crisis is still far from being solved and it is becoming less and less likely that we will meet the goals of the Paris Climate Agreement. This demonstrates the urgent need for investment in renewable energy on a global scale, offering potential business opportunities for companies like us. The World Energy Investment 2023 report¹ by the International Energy Agency states that global energy investment is picking up, and the rise in clean energy investment since 2021 is leading the way, outpacing the increase in fossil fuel investment by almost three-to-one.

With our broad portfolio that spans the entire energy value chain and our global presence, we are well positioned to drive the energy transition forward. Our solutions play a critical role in supporting the decarbonization of the energy system, helping to create a more sustainable and resilient energy future.

Our strategy for the energy transition

Global electricity and energy markets are changing significantly in terms of energy demand, regulation, and underlying generation technologies to support decarbonization. We are committed to supporting our customers and society in this ongoing transformation toward a low-carbon future by focusing on sustainable solutions in our portfolio and operations.

We believe in a future energy system that prioritizes renewable sources, a robust grid infrastructure, and improved energy efficiency in industry, while also utilizing low-emission conventional power with the potential for decarbonization.

We are continuing our journey toward a sustainable portfolio, driving profitable growth based on our three strategic pillars:

- Low- or zero-emission power generation
- Transport and storage of electricity
- GHG footprint and energy consumption reduction in industrial processes

Our focus is on developing new products that support our customers in their energy transition, based on their future revenue and profit potential:

- **Expand renewables:** We are convinced that wind power is a core solution for zero-emission power generation that allows governments to pursue their decarbonization targets. We are committed to turning around our Business Area Siemens Gamesa, focusing on core markets in Europe and North America. Additionally, we will continue advancing the circular economy with our RecyclableBlade and GreenerTower technologies.
- **Transform conventional power:** We support an energy transition that includes conventional generation – complemented by decarbonization solutions – to ensure grid stability and meet peak demand. Our Gas Services Business Area contributes to this through efficient combined-cycle gas turbines (CCGTs), the goal of 100% H₂ co-firing by 2030, and carbon capture technologies.
- **Strengthen electricity grids:** We remain committed to strengthening global grids to support renewable energy and electrification for a carbon-free future. Our focus is on developing new products, services, and solutions for the transportation and storage of electricity.

¹ International Energy Agency (IEA), World Energy Investment 2023, <https://www.iea.org/reports/world-energy-investment-2023>

- **Drive industry decarbonization:** We support our process industry customers in their decarbonization journey by offering them sustainable concepts for existing and new facilities. In particular, we are focusing on electrifying industrial processes and implementing circular economy approaches. We have developed electrolyzers and integrated energy systems to support the ramp-up of the hydrogen economy.
- **Secure supply chains:** In a persistently unstable environment, we have bundled supply chain expertise in our Global Functions to ensure access to critical components and minerals, to monitor and manage supply chain risk exposure, and to control our products' upstream emissions.

To boost effectiveness, we have streamlined our organization for faster decisions, closer customer engagement, and better project execution. We have reduced hierarchies, clarified roles, unified our go-to-market setup, and created a dedicated Project Entity to uphold global standards, including sustainability.

Our market view

We expect our addressable market to grow by 9.3% (CAGR) from €246 billion in fiscal year 2023 to €419 billion in 2029. As a result of investment programs in the U.S. and the EU, we anticipate that the North American and European markets will continue to make up more than 50% of our addressable market until 2029.

To ensure we remain a resilient, profitable, and sustainable business, we have included climate considerations in our market evaluation and strategy process. We use three market scenarios with the resulting climate outcomes for our market evaluation. In addition, we have developed a detailed annual forecast of the Scope 3 downstream CO₂e emissions for products sold per Business Area, with the forecast going up to 2030 and building on our business planning (see chapter [Decarbonization](#)).

A total of \$3 trillion is set to be invested in energy globally in fiscal year 2024, of which around \$2 trillion are expected to go to clean technologies – including renewables, electric vehicles, nuclear power, grids, storage, low-emission fuels, efficiency improvements, and heat pumps – according to the IEA's latest World Energy Investment report.¹ At Siemens Energy, we aim to be in a leading market position in each of our Business Areas, with a clear focus on innovation to develop new technologies that foster the energy transition. Over the past three years, we spent roughly €1.1 billion on R&D each year (see chapter [Customers and innovation](#)).

Our progress

Several key business parameters demonstrate the success of our strategy:

- We have reached a record order backlog of €123 billion
- We have increased our revenue by 11% comp.² versus fiscal year 2023
- We are actively shaping our portfolio by allocating 25% of the R&D expenditures of Siemens Energy (excluding Siemens Gamesa) to our current field of actions (see chapter [Customers and innovation](#))
- 42.9% of our revenue in fiscal year 2024 was EU Taxonomy-aligned (see chapter [Decarbonization](#))

Across our businesses, we remain focused on driving the sustainability of power generation, the coal-to-gas shift, the decentralization of energy supply, the transformation of existing infrastructure to support industries with energy efficiency, and decarbonization.

In fiscal year 2024, Siemens Gamesa has reviewed its mid- and long-term strategy to turn around its financial performance, aiming to break even in fiscal year 2026. We aim to lead the business toward sustainable and profitable growth.

Reaching for net zero

In 2022, we set ourselves the long-term ambition to achieve net zero across the value chain for all greenhouse gases (see chapter [Decarbonization](#)).

This requires portfolio changes, including more SF₆-free products, a shift to green hydrogen, and climate-neutral supply chains. While we no longer bid on new coal-only plants, we will fulfill existing commitments. CO₂-reducing services, solutions, and CHP projects will also continue. Additionally, we are working with our suppliers to reduce Scope 3 upstream emissions.

To mitigate the impact of climate change, we must begin to decarbonize our energy systems and electrify industry. Natural gas will continue to play a central role, particularly in the near term. With our gas turbine business, we support our customers with low- or zero-emission power generation technology. For example, two of the world's largest and most efficient combined cycle power plants in Saudi Arabia with HL technology will generate 4 gigawatts of energy, which can save up to 60% CO₂ emissions compared to oil-fueled power plants. Also, the world's first power plant with an H₂-ready TÜV certification in Leipzig, Germany, operates two SGT800 units as combined cycle. A lever for existing power plants to reduce their emissions will be the hydrogen co-firing modernization product, which Siemens Energy is testing and certifying for various collaborations with our customers. In Vienna, we successfully field-tested 15% hydrogen co-firing in an SGT5-4000F frame with Wien Energy, and we will continue this partnership in an effort to achieve 30% co-firing.

We are committed to shaping our future portfolio by strategically reallocating R&D capital to solutions that help reduce GHG emissions from the use of sold products, as part of the strategic portfolio management process.

¹ Source: IEA World Energy Investment 2024

² Comparable: excluding currency translation and portfolio effects.



Our impact on the Sustainable Development Goals

SDGs on which we have a medium or high impact.

Digitalization

Digitalization is one of the key levers to speed up industry transformation. At Siemens Energy, we are building a digital ecosystem that can connect various customer assets to gather operational data that can help in analyzing performance and developing new value-adding applications or services. Examples of such solutions are:

- An asset management solution that improves reliability and reduces maintenance costs by tracking operation, predicting potential failures, and recommending preventative actions
- A performance improvement solution that improves efficiency and reduces emissions. This solution also allows our customers to run their plants more flexibly in changing market conditions
- An energy management solution that guides customers in better managing their fossil-fired assets using artificial intelligence and machine learning. In one example, this solution helped a customer reduce emissions while improving their position in dispatch merit order to the network
- Protection from cybersecurity threats using technology that detects and responds to cyber attacks

The common thread is our ability to simulate impacts of external influences on complete energy systems. This allows us to design energy systems that meet demand with minimal emissions by intelligently combining renewable and fossil fuel sources, while minimizing the degradation of equipment units.

More sustainable decisions

Integrating environmental, social, and governance (ESG) criteria in our decisions is essential for us. We have included a mandatory sustainability component in our qualification for suppliers with a purchasing volume above €10,000 for Siemens Energy (excluding Siemens Gamesa) and within high-risk countries for Siemens Gamesa. Furthermore, we conduct ESG due diligence in sales (see chapter [Customers and innovation](#)).

In fiscal year 2023, we developed ESG guidance that informed the strategic R&D planning process and applied our ESG scoring methodology to R&D projects. We have made progress in our approach to evaluating venture activities, which includes ESG criteria such as climate impact and an external benchmarking process to identify potential future partnership opportunities or avenues for continued internal development. Furthermore, in capital expenditure (CapEx) projects at Siemens Energy (excluding Siemens Gamesa) involving a large investment sum, it is a mandatory requirement to evaluate the projects' GHG impact using a CO₂ shadow price of €100 per metric ton of CO₂ equivalents (CO₂e).

Our commitment to sustainability

We remain committed to integrating sustainability into our corporate strategy by incorporating sustainability considerations into our strategic planning process. The United Nations' Sustainable Development Goals (SDGs) guide and inspire us to maximize the impact of our effort. We have identified five SDGs as key focus areas:

- To achieve SDG 5, "Gender Equality," we strive to create equal opportunities – in the firm belief that not just our company but society as a whole can benefit from inclusion and diversity.
- By providing reliable, cost-effective, and sustainable energy for our customers, we contribute to SDG 7, "Affordable and Clean Energy."
- We address SDG 8, "Decent Work and Economic Growth," through the innovative power of our global operations, which stimulate economic development in many countries and create decent, future-proof jobs.

- Our products, services, and solutions for decarbonizing energy systems worldwide support the achievement of SDG 9, which is focused on “Industry, Innovation and Infrastructure.”
- We are committed to achieving SDG 13, “Climate Action,” by assisting our customers in reducing GHG emissions and working toward a net zero goal across the value chain.

We also acknowledge a medium impact on SDGs 3, 4, 6, 11, 12, 14, and 17.

Our Sustainability Program

Our Sustainability Program is designed to address the most pertinent issues, enabling us to become a sustainability leader in the industry while contributing to selected SDGs. It is also aligned with our company’s purpose, “We energize society.”

To establish the Sustainability Program, we conducted a materiality analysis in fiscal year 2020 to identify topics of relevance for business and society by engaging in dialogue with selected internal and external stakeholders. We regularly update this materiality analysis to seek input from relevant external stakeholder groups such as customers, investors, and partners.

In fiscal year 2023, we conducted a double materiality analysis to reflect the upcoming requirements of the Corporate Sustainability Reporting Directive (CSRD). We mapped the topics along the entire value chain and conducted surveys and interviews with external and internal experts to identify and assess the material topics. This confirmed that the most relevant topics for Siemens Energy are energy use and efficiency as well as greenhouse gas emissions. Those two are followed by several topics that we see as enablers to drive decarbonization. The results are used for our

present reporting in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (GRI). Applying a threshold of 1.5 on the impact assessment leads to a smaller selection of topics that are of relevance for the GRI: energy use and efficiency, greenhouse gas emissions, responsible sourcing, and innovative partnerships and collaborations.

For the remaining topics below the threshold, we then interviewed internal experts in the respective fields to cover strategically relevant topics that mirror our sustainability ambition and ensure continuity in reporting. Based on the experts’ judgment, we identified six additional material topics (see table below).

In fiscal year 2024, we re-evaluated the double materiality assessment with internal experts. The list of topics remains unchanged for this year’s reporting.

Impact materiality

- Energy use and efficiency
- Greenhouse gas emissions
- Responsible sourcing
- Innovative partnerships and collaboration

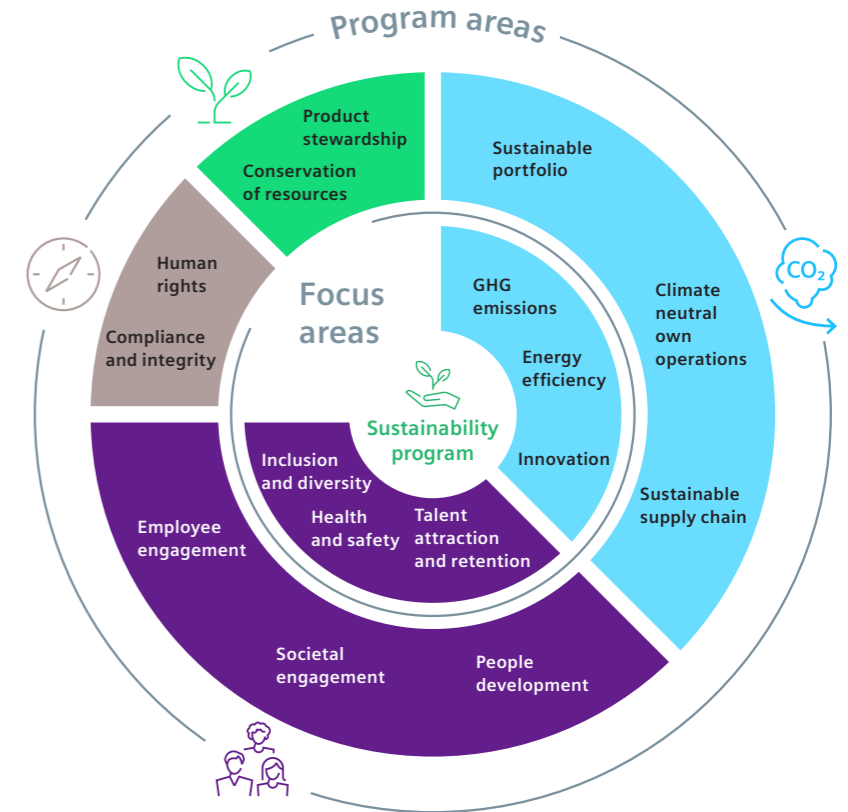
Strategic positioning and business reporting continuity

- Talent attraction and retention
- Equity, inclusion, and diversity
- Occupational health and safety
- Human rights
- Business conduct/compliance
- Business resilience

Our new program graphic showcases the six focus areas as well as the wider program areas.

Our Business Areas, regional entities, and Functions are responsible for implementing the Sustainability Program with a special eye on the six focus areas that we consider most strategically relevant.

Our Sustainability Program



Responsible operations



Decarbonizing our business



Implementing and managing the Sustainability Program

Our Chief Sustainability Officer (CSO), who is also the CEO of our company, leads all sustainability activities. Sustainability is a regular topic on the agenda of Executive Board meetings, Supervisory Board meetings, and in wider leadership meetings.

Since the beginning of fiscal year 2023, we have a dedicated committee within our Supervisory Board: the Sustainability and Finance Committee (formerly Innovation and Finance Committee), chaired by Joe Kaeser, Chairman of the Supervisory Board of Siemens Energy AG. The committee addresses sustainability issues and prepares resolutions of the Supervisory Board on the company’s financial situation and resources, especially on the annual budget, on investments, and on financial measures. It resolves certain transactions and measures for which the Executive Board requires approval. It also regularly addresses the company’s naming, branding, and design concept.

Our Sustainability Council meets every quarter and consists of decision-makers representing Business Areas, Regional Hubs, and Functions. The Sustainability Council strategically oversees the implementation of the Sustainability Program by making decisions, setting priorities and focal points where needed, providing resources for implementation, and serving as sustainability ambassadors both inside and outside of Siemens Energy. The Council reviews and approves the material topics and our voluntary non-financial disclosures. Our CEO, Christian Bruch, chairs the Council in his role as CSO.

The Vice President of Sustainability manages the Sustainability department, responsible for driving sustainability within Siemens Energy and for coordinating company-wide sustainability activities, programs, and measures. The Sustainability department is part of the “Strategy & Sustainability” Function that reports directly to the CEO/CSO, who also reviews and approves the annual Sustainability Report.

To ensure that sustainability measures and initiatives are anchored in our organization and business activities, the respective organizational units have nominated Sustainability Business Partners who implement the global Sustainability Program in their areas of responsibility.

With a view to collecting and processing ESG data for strategic forecasting and reporting, we are setting up an ESG Data Management Solution to help implement sustainability across the company and increase transparency on our performance. We are confident that this will reduce the manual effort required to gather data, increase data quality, and allow for internal benchmarking, as well as steering to reach our sustainability targets. The pilot project focuses on Scope 3 downstream emission data in the business, because we consider this to be our most impactful use case (see chapter ↗ [Decarbonization](#)).

Relevance of ESG performance in sustainable financing and ESG ratings

Increasingly, ESG performance indicators are being used in sustainability-related financing constructs, such as Green Bonds or Revolving Credit Facilities. Siemens Energy has issued a Revolving Credit Facility and a Green Bond as well as a Revolving Guarantee Facility. In fiscal year 2024, we updated the trajectories for the ESG performance indicators included. In addition, we committed to implementing an additional performance indicator before March 31, 2025, for the Revolving Credit Facility to better reflect our carbon footprint.

The growing importance of ESG is also mirrored in our pension investments, with ESG now being a selection criterion when awarding mandates. With the ongoing development of the asset portfolio, an active investment was made in the area of “impact” and a first adaptation of passive investments to an ESG-optimized benchmark was initiated and successfully implemented for one of our mutual funds.

Our long-term equity-based compensation reflects the importance of sustainability to Siemens Energy. It is granted to the members of the Executive Board and selected senior executives in the form of stock awards for reaching non-financial targets in strategic ESG areas of Siemens Energy operations (for more information, please see our ↗ [Siemens Energy Annual Report 2024, Compensation Report](#)).

Various ESG rating agencies rate us, such as ISS ESG, Sustainalytics, MSCI ESG, and CDP. We welcome these ratings as assessments of our organization and as a means of identifying areas for improvement. For more information on our ESG ratings and rankings, please visit our corporate website.

Rating scores

ISS ESG → **B- prime**
 1st decile in industry
 2023: B- (1st decile)

SUSTAINALYTICS → **#5 of 315**
 a Morningstar company
 in industry low risk rating:
 11.3 top industry list
 2023: #8 of 276
 low risk rating: 13.6

MSCI → **BBB**
 ESG Research
 scale of AAA to CCC
 2023: A

CDP → **A**
 DISCLOSURE INSIGHT ACTION
 scale of A to D
 2022: B

FTSE Russell → **3.7**
 scale 1 to 5
 FTSE4Good index member
 2023: 3.9

ecovadis → **Gold**
 75/100
 2022: Gold (69/100)

Stakeholder engagement and collaborations

We are convinced that sustainable development can only be achieved if a wide range of stakeholders collaborate. Regular dialogue about issues affecting our business and society is central to our sustainability strategy. This approach is aligned with SDG 17, which calls for a global partnership that brings together governments, civil society, the private sector, the UN, and other stakeholders.







Working together on complex challenges can lead to better innovation and business outcomes. Siemens Energy participates, for example, in the Hydrogen Council, a global CEO-led initiative with the ambition to successfully ramp up the hydrogen economy and foster the clean energy transition. Using its global reach to promote collaboration between governments, industry, and investors, the council provides guidance on accelerating the deployment of hydrogen solutions around the world.

We aim to promote the ramp-up of green hydrogen and economy-wide decarbonization through a joint venture between Siemens Energy and Air Liquide. The partnership came into force with the opening of the new electrolyzer production facility in Berlin on November 8, 2023, one of the first gigawatt-scale electrolyzer factories in the world. Together, we operate electrolyzer production, implementing modern robots and digitalization for highly automated production processes, thus fast-tracking sustainable manufacturing and the renewable hydrogen economy. Siemens Energy has also signed a Letter of Intent with its partner TenneT to drive the decarbonization of the transmission industry. Together, we aim to reduce their combined grid business CO₂ footprint by 30% by 2030. To reach this goal, roughly ten joint initiatives have been identified across the value chain, including transformers using 100% recycled copper or green steel. We aim to use more sustainable materials, decarbonize our factory network, adopt innovative technology, and assess the potential for circularity models in Grid Technologies.

With markets and technologies still needing to mature and scale, collaboration is key to meet the needs of the energy transition. Siemens Energy and Saudi Aramco have signed an agreement to build a Direct Air Capture (DAC) demonstration unit, which aims to explore competing DAC technologies. This unit is intended to lay the groundwork for a larger pilot plant capable of capturing over 1,000 tons of CO₂ per year.

In China, the International Forum of Insulation and Vacuum Technology for Eco-friendly High-Voltage Switchgear was successfully concluded on May 23. This event was co-organized by Siemens Energy and jointly hosted by CMIF and the Global Environmental Institute. Over 100 expert representatives from China's main grid operators, research institutions, universities, overseas power enterprises, and switchgear manufacturers gathered for in-depth discussions held on policy trends, R&D, and the application of eco-friendly technology and equipment.

Stakeholder engagement

Stakeholder group	 Shareholders and capital market	 Employees	 Customers	 Suppliers	 Politics, associations, civil society	 Banks, financial institutions
Formats of engagement	Quarterly earnings calls, Annual Report, annual shareholder's meeting, regular roadshows and conference participation, investor relations website	All-hands meetings, open sessions between leaders and employees (ask me anything), location visits, letters by board members, emails, training sessions, Viva Engage communication, awards	Conferences, trade fairs, bilateral engagement, questionnaires (e.g., EcoVadis, NQC)	Initiatives (e.g., Responsible Minerals Initiative), supplier days, workshops, bilateral engagement	UN Global Compact, industry-specific forums and conferences, local engagement, participation in One Young World summit, industry associations, direct governmental contacts (ministries, parliament, etc.)	Mandatory reporting and information (e.g., Annual Report, Sustainability Report), bilateral meetings (know your customer process)
Topics we engage on	Sustainability Program and targets, sustainable portfolio, energy transition, social engagement, and corporate governance topics	Health & safety, culture, inclusion & diversity, innovation, employee development, company strategy, and organizational topics	Decarbonization roadmaps, Sustainability Program, product-related topics, project due diligence	Sustainability risk and performance, decarbonization, responsible minerals sourcing	Sustainability, decarbonization, energy security, global challenges, business support	Sustainability performance, specific KPIs for ESG-linked financing

Sharing knowledge through these engagements creates value on all sides and reduces risks. We regularly analyze existing partnerships and memberships and establish new relationships with investors, customers, suppliers, employees, communities, policymakers, media, non-governmental organizations, business organizations, and academia. We are a signatory to the [UN Global Compact \(UNGC\)](#), pledging our commitment to its Ten Principles, and are a member of econsense, the German sustainability network.

We are a core partner of the Energy Resilience Leadership Group (ERLG), aiming to connect climate tech startups, corporate CEOs, political leaders, and financial institutions at the technology frontier. We launched the group alongside Breakthrough Energy at the 2023 Munich Security Conference with the goal of enhancing Europe's energy resilience by rapidly bringing emerging climate technologies to scale and deploying commercially viable projects within 24 months.

We engage with political bodies, such as selected government think tanks and intergovernmental organizations. In Malaysia, for example, Siemens Energy will join a taskforce to implement the new National Energy Transition Roadmap (NETR) and Hydrogen Economy and Technology Roadmap (HETR), highlighting that the grids' preparedness for renewables adoption is critical to guarantee a reliable and secure energy supply. Furthermore, as part of our partnership with the International Renewable Energy Agency (IRENA), Siemens Energy participates in the Alliance for Industry Decarbonization. The objective is to foster industry-level dialogue and increase cooperation to help companies develop sound decarbonization strategies and implementation plans.

Societal engagement

One form of stakeholder engagement is our societal engagement. Siemens Energy is committed to fostering a sustainable and inclusive future through various initiatives. Our actions empower diverse groups, drive innovation, and enhance community resilience, contributing to a more equitable and sustainable world.

Our commitment combines a global engagement framework with autonomy for local implementation in the countries in which we operate. To focus our activities and increase our impact, our framework defines three focus areas based on our strategic context, our core competencies, the global targets for sustainable development, and the influence that various global megatrends (demographics, urbanization, climate change, globalization, and digitalization) have on our industry and our business. The focus areas are:

- **Driving the Energy Transition:** supporting clean energy projects and climate education
- **Access to Education:** promoting STEM skilling
- **Sustaining Communities:** providing disaster recovery – especially related to electricity supply

Since social projects are often driven by individuals, we encourage our employees to volunteer for specific programs. Our volunteering system encourages employees to opt for various company-endorsed initiatives.

In the "Driving the Energy Transition" area, we draw on our core competencies and broad portfolio to support clean energy research and sustainable development. Our main project is "Forests of Siemens Energy and Siemens Gamesa," a sustainable development initiative with the goal of mitigating climate change and reducing CO₂ emissions. Since its inception in fiscal year 2021, 36 forests and approximately 168,000 trees have been planted by volunteers in 16 countries, contributing to the removal of 23,900 metric tons of CO₂. In fiscal year 2024, we increased our support for our balsa tree forest in Ecuador by planting 21,375 new trees.

An important aspect of the "Access to Education" field is, for example, to extend educational and research opportunities with the aim of inspiring, engaging, and stimulating younger generations in STEM subjects and deeper knowledge in the sustainable energy transition. We focus on helping to train students in the use of technology through "Planet Rescuers," a video game on energy and sustainability developed by Minecraft Education. In fiscal year 2024, we also launched, together with the World Association of Girl Guides and Girl Scouts, "Girls for Green Energy," a competition aimed at empowering girls to apply their STEM knowledge, skills, and mindsets. The initiative will take place in Taiwan, Hong Kong, and Singapore during the 2024/2025 school year.

As for the "Sustaining Communities" field, we are committed to, among other things, providing relief and recovery assistance to areas affected by natural disasters, particularly when the energy supply is affected. In late September 2023, a devastating earthquake struck central Morocco, causing widespread damage. In response, Siemens Energy, together with the High Atlas Foundation, launched a partnership dedicated to the recovery and resilience of earthquake-affected communities in the Ouarzazate region. The partners installed 26 solar panels and a 7.4 kW solar pump to ensure reliable water access for irrigation, supporting the village's agricultural activities and tree planting and benefiting approximately 500 families (3,000 people).

In fiscal year 2025, Siemens Energy will launch a new strategy for social projects for the next three to five years. This project will focus on ensuring that we make a maximum impact within our sphere of influence. For this purpose, we have assessed the impact of existing programs, gathered stakeholder expectations, reviewed best practices, and defined new initiatives that are aligned with our strategic objectives.

Business resilience

We deem it important to acknowledge the risks and opportunities that arise from our exposure to the challenges of the current business climate, the accompanying disruptions, and their effects on our business. In this context, we aim to mitigate and adapt to climate change risks (both transitional and physical) through resilient business and a sustainable portfolio.

Sustainability-related risks and opportunities

To ensure business resilience, we analyze risks and opportunities by combining bottom-up and top-down approaches. The management teams of our organizational units identify sustainability-related risks and opportunities. With our Enterprise Risk Management (ERM) system, we take a net-risk approach and aim to ensure that the Executive Board and the Supervisory Board are fully informed about significant risks on time.

For fiscal year 2024, the following risks and opportunities with a significant relevance to sustainability were reported within the ERM system:

Risks:

- Threat of business interruption and data leakage due to cyber attack
- Critical supply chain
- Technology/portfolio gap compared to competitors
- Requirements arising from ESG standards
- Climate change and decarbonization trend
- Market and price development (including the shift from conventional to renewable energy in the markets)
- Unavailability of key personnel
- Adverse environment, health, and safety (EHS) events
- Potential compliance violations

Opportunities:

- Decarbonization portfolio
- Market development
- Public and governmental funding support for investment spending

For further information on these risks, please refer to the [➤ Siemens Energy Annual Report 2024, Report on the internal control and risk management system and material risks and opportunities](#). You can find a detailed description of climate-related risks and opportunities in our Task Force for Climate-Related Financial Disclosures (TCFD) section in the [☞ Annex](#).

We continually take steps to mitigate and reduce our sustainability-related risks while capturing opportunities within the organization and across the value chain. We aim for early identification, evaluation, and response to risks and opportunities that could materially affect the achievement of our strategic, operational, financial, compliance, and climate-related objectives.

In order to keep abreast of ongoing developments in national and international reporting, we collaborate both internally and with external partners on analyzing new regulations and standards, voicing our position on them in cross-industry associations, and assessing their importance for and effects on Siemens Energy. One example of this is our participation in the Sustainable Finance Advisory Committee of the German Federal Government, which aims to turn Germany into a leading location for sustainable finance.

2 Decarbonizing our business

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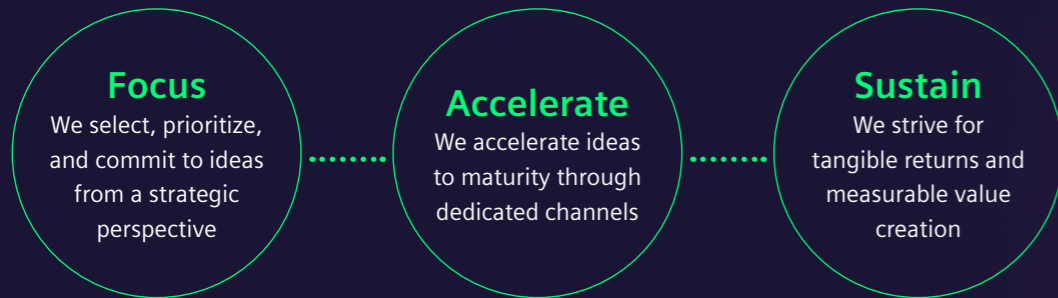
Summary page

Customers and innovation

Innovation is key to creating the future. We value co-creation and partner with our customers to decarbonize energy systems.



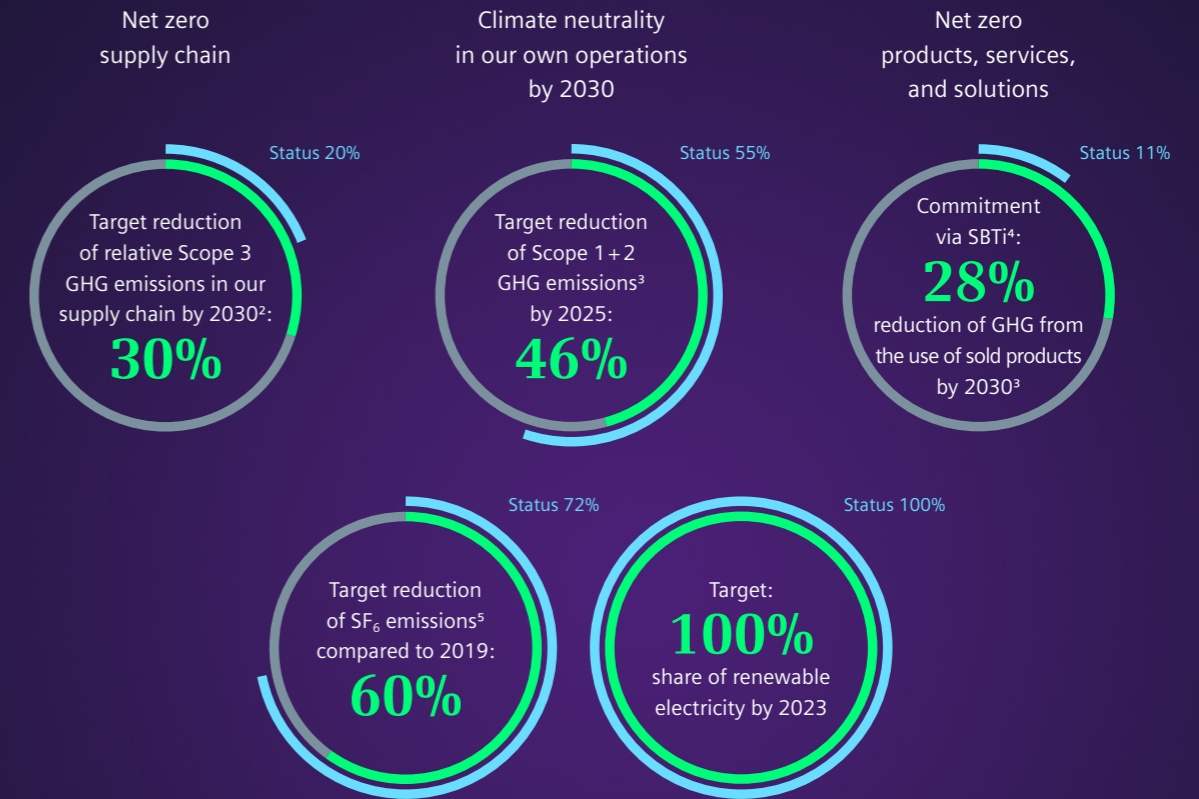
Innovation is the core of our business. Our simple, fast, and unified approach to R&D has three elements:



¹ Index measuring willingness of customers to recommend a company's products or services to others, Siemens Energy (excluding Siemens Gamesa).

Decarbonization

Our strategy to decarbonize global energy systems is based on our aspiration to reach net zero across the entire value chain.



² kg CO₂e/€ PVO spent, base year 2018. ³ base year 2019. ⁴ SBTi = Science Based Targets initiative, Siemens Energy (excluding Siemens Gamesa). ⁵ Target year 2030.

Customers and innovation



Partnerships and collaborations play a crucial role in developing a broad range of innovative technologies. These provide our customers with tailor-made and cost-effective energy solutions while contributing to the energy transition.

- **Company culture based on innovation for the benefit of customers and the planet**
- **R&D based on strong cooperations both within Siemens Energy and with external partners**
- **Cybersecurity management aims to ensure that our products, solutions, and services meet the highest demands**

The global energy sector is transforming, with many of our customers facing long-term, disruptive changes to their business models that benefit from sustainable energy supply. It remains our mission to empower our customers in their transition. We do this by providing technologies that help advance affordable and reliable energy supply, including renewables, and by our ability to turn ideas into reality. In addition, the need for decarbonization, increasingly decentralized energy production, and advancing digitalization are leading to more competition, more complexity, and less predictability throughout the industry. As a result, we are pursuing new business opportunities in electrification, renewable energy, green hydrogen, grid modernization and resilience, energy storage, and Power-to-X technologies.

In taking this action, Siemens Energy contributes to the following SDGs: SDG 7 “Affordable and Clean Energy,” SDG 8 “Decent Work and Economic Growth,” SDG 9 “Industry, Innovation and Infrastructure,” SDG 12 “Responsible Consumption and Production,” and SDG 13 “Climate Action.”

Solutions that keep serving our customers

We support our customers along the entire energy value chain with our integrated energy technologies and our ability to connect the dots between our offers, regions, and industries. We bridge a wide range of industries and foster the transfer of know-how between them – from power generation to transmission and storage.

We are continually enhancing our focus on customers. Our account management system and go-to-market strategy have been fully integrated into our processes and system landscape. This approach delineates clear responsibilities for Business Areas, Regional Hubs, and Corporate Functions, thereby fostering transparency, streamlining processes, and accelerating our service delivery (see chapter [Siemens Energy at a glance](#)).

Siemens Energy uses the Net Promoter Score (NPS) to measure customer satisfaction by asking the question: “How likely is it that you would recommend Siemens Energy to a colleague or business partner?” In fiscal year 2024, we conducted a total of approximately 4,300 NPS interviews and received an NPS result of 62 (the 2023 result was 57).¹ We are pleased with the clear progress demonstrated in our NPS score, which indicates improved customer satisfaction.

¹ NPS ranges from -100 to +100, subtracting % of scores between 1-6 (Detractors) from % of scores of 9-10 (Promoters), Siemens Energy (excluding Siemens Gamesa), see [page 21](#)

The individual businesses evaluate the specific responses, follow up with the customers personally, and take the necessary steps to improve the customers’ experience (e.g., process amendments, training measures).

To foster responsible business practices in our customer projects, Siemens Energy has implemented an ESG due diligence approach early in the sales process. This helps identify and evaluate human rights and environmental risks in our projects, while also determining appropriate risk mitigation measures.

Innovation that makes a difference

The world and our customers need innovative, sustainable solutions for the energy systems of the future. At Siemens Energy, we are developing a set of criteria to screen our innovation portfolio for sustainability risks and business opportunities. These criteria are based on EU Taxonomy criteria, our focus on SDGs, and further internationally established frameworks, such as the Paris Agreement.

Two recent examples illustrate our innovation strategy. In October 2023, MVV Energy AG in Mannheim, Germany, commissioned a large heat pump that utilizes the Rhine River’s water to generate climate-neutral district heating for approximately 3,500 households. Even during winter, the thermal energy from Germany’s largest river will be sufficient to meet the heating needs of Mannheim’s district heating network.

Another technical solution is the first-ever hybrid grid stabilization and large-scale battery storage plant at Shannonbridge in Ireland. This pioneering project combines two technologies into a single grid connection to enhance grid stability and optimize the use of renewable energy. The proven synchronous condenser technology employs a generator with a flywheel, essentially a large “rotating mass,” to provide a power reserve that instantly compensates for frequency fluctuations, thereby strengthening grid stability. Simultaneously, a large-scale battery energy storage system can store or release excess renewable energy as needed. With a capacity of around 160 MWh, this battery energy storage system can supply power to approximately 9,500 households for an entire day, ensuring that renewable energy use is maximized even when the wind is not blowing.

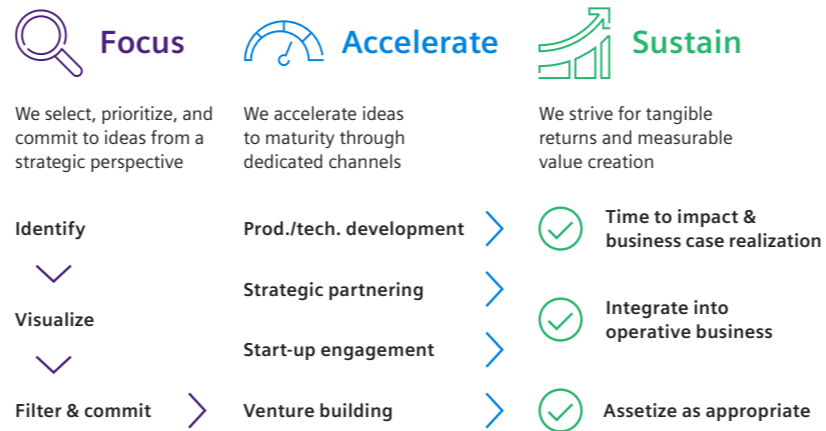
Strengthening the core, growing from the core, and transforming the future continue to be the three main aspects of the innovation strategy of Siemens Energy. We are continuing to develop our current fields of action, focusing on energy landscape transformation and decarbonization:

- **Decarbonized Heat and Industrial Processes:** Power-to-heat with electrified industrial heat, turbo heater and rotating olefins cracker, and industrial waste heat recovery
- **Carbon and Product Circularity:** Power-to-X technologies with direct air capture and CO₂ electrolysis plus eco-resilient technologies and methods
- **Resilient Grids and Reliability:** grid digitalization, disruptive grid elements, high-density energy systems, and hybrid grids
- **Condition-based Service Interventions:** digital twins to enable profitable decarbonized operations along the lines of energy management, system reliability, and autonomous operation
- **24/7 Carbon-free Energy:** multi-day energy storage as well as energy management with forecasting systems and enabling technologies

We have aligned our fields of action with customer interests, extending Carbon and Product Circularity beyond Power-to-X and the energy technologies in our 24/7 Carbon-free Energy solutions. We have identified and selected technologies for short-term, mid-term, and long-term research and development within these levers to build business in support of our three strategic pillars (see chapter [↗ Strategic focus](#)).

The Innovation Council meets quarterly with all Executive Board members, overseeing our activities and expenditures in the current fields of action, our technology fields, and R&D in general. The council is still dedicated to the former GP business. The main elements for successful innovation remain unchanged and are key to the implementation of our innovation approach:

Three elements for successful innovation



At Siemens Gamesa, R&D is focused on developing the next generation of technology that will lead to improved and more cost-effective products, solutions, and services. Siemens Gamesa endeavors to develop reliable and efficient wind turbines for both onshore and offshore applications to reduce the Levelized Cost of Energy (LCoE) and integrate them into the power system to help utility customers optimize the use of renewable energy. We aim to ensure a fast response to market developments by utilizing modern innovation and design principles such as Agile, SCRUM, and Design Thinking.

As part of this, Siemens Gamesa also considers its products’ environmental footprint. Two prominent examples are GreenerTower, which lowers the CO₂ footprint of the related steel production by more than 63% compared to conventional production, and RecyclableBlade, which was introduced in 2021 and allows blades to be recycled at the end of their life. Customer demand for RecyclableBlade continues to grow: So far, more than 300 RecyclableBlades have been sold to projects in the UK, Denmark, Germany, France, and the Netherlands.

To strengthen our competitiveness, we are continuously improving our products to reduce the LCoE and/or increase annual energy production. For example, Siemens Gamesa has started up production of the SG14-236. This new turbine, based on the proven DirectDrive design, targets the global offshore markets and yields 30% more power than its predecessor.

In fiscal year 2024, across all Business Areas, Siemens Energy invested €1,209 million in R&D (fiscal year 2023: €1,123 million). The resulting research intensity, defined as the ratio of R&D expenses to revenue, was 3.5% (fiscal year 2023: 3.6%). Additions to capitalized development expenses amounted to €173 million (fiscal year 2023: €190 million) in fiscal year 2024. Around 19,200 (September 30, 2023: 18,700) patents were held by Siemens Energy as of September 30, 2024. On average, we had about 4,200 (fiscal year 2023: 4,300) R&D employees in fiscal year 2024.

Innovation beyond our company borders

We know that we cannot achieve our mission on our own. Our external partnerships are valued for their potential to meet future business needs. This is why we strive to involve research expertise both within Siemens Energy and beyond.

Collaboration allows us to collect expertise, co-create new technologies, and broaden our stakeholder and customer base. We expand our open innovation ecosystems by partnering with universities, attracting external funding, and supporting selected ventures and start-ups. To co-create with customers and partner with start-ups, industrial partners, and universities, we have set up four Global Innovation Centers in Berlin, Orlando, Abu Dhabi, and Shenzhen. They explore early-stage R&D topics, prototypes, and pilot applications, utilizing new skill sets, methods, and tools.

The Global Innovation Centers focus on

- accelerated innovation,
- co-creation with customers and partners, and
- closing technology gaps and accessing new business models as part of the newly established partnership framework.

The certification of low-carbon products, such as ammonia or hydrogen, is a focus within the Power-to-X area under the Carbon and Product Circularity field of action. In the Innovation Center in Abu Dhabi and at test sites in Europe, we have demonstrated that our blockchain-based approach

is capable of tracking green molecules under market-based certification conditions.

Siemens Energy continues to cooperate with eight of the top 25 world-ranked universities. Working together with scientists at top universities and research institutes worldwide, we aim to advance technologies that contribute to sustainable energy systems of the future, both in bilateral research and publicly funded research projects. For example, we are working with RWTH Aachen University on the H₂Giga flagship project. The aim is to develop automated production of PEM electrolyzers to enable production capacities in the gigawatt range. Siemens Energy is leading three sub-projects in this consortium, which includes more than 120 partners from industry, research institutes, and universities.

Founded in 2020, Siemens Energy Ventures (SEV) builds, pilots with, and invests in startups that can help deliver a more sustainable, reliable, and affordable energy system for the world. Operating at the intersection of Siemens Energy and the startup ecosystem, SEV focuses on accelerating the commercialization and scale-up of startups working on cutting-edge decarbonization and digitalization solutions. In May 2024, SEV also completed a venture clienting pilot with U.S. startup Heat Source Energy to explore how waste heat can be captured and converted. Siemens Energy's power transformers efficiency is greater than 99%. The pilot demonstrated that, when paired with the HSE Heat Engines, the transformers become dual-purposed, generating electricity alongside transforming the electrical signal. The electricity produced can then be used locally to power needs on site or can be scaled to aid during peak demand.

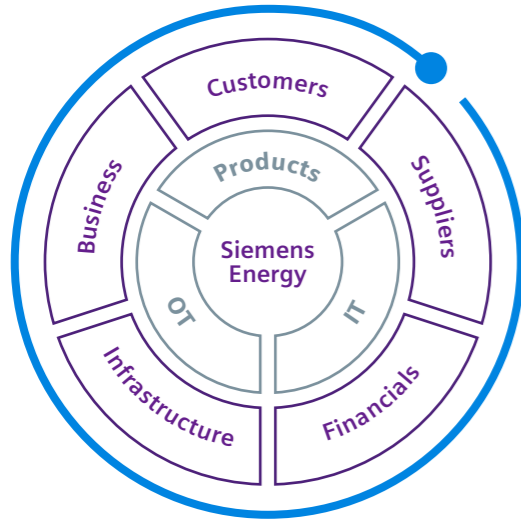
The startup ecosystem continues to be important to SEV, so in June 2024, it partnered with Carbon13 for its latest venture builder cohort in Berlin. The program targets founders who can build emerging climate technologies to drive the energy transition. Our partnership is a combination of financial support and targeted mentoring for female climate tech founders. Female climate tech founders are underrepresented in climate entrepreneurship, with just 2% of funding from venture capital going to female-led startups. In this cohort, SEV is supporting seven female founders. The team also continues to receive external recognition, with two of our team members being named "Emerging Leader" and "Rising Star" by the organization Global Corporate Venturing.

Siemens Gamesa also takes part in R&D initiatives for product and technology development, partnering with universities, customers, competitors, suppliers, design consultants, and certification bodies. The aim is to identify or enhance business opportunities and create win-win situations. The focus countries are Denmark, Spain, Germany, the UK, France, Norway, the Netherlands, and India. Our University Relations Dashboard shows more than 50 collaborations that started or were ongoing in fiscal year 2024. Compared to fiscal year 2023, these focused more on core competencies of our collaboration partners and specific business needs. The cooperations range from individual PhD programs to long-term strategic cooperations with leading universities in order to cross-utilize knowledge and gain access to talent.

Cybersecurity

Siemens Energy’s cybersecurity aims to protect our business operations, information assets, data, and our infrastructure for information technology (IT) and operational technology (OT). In addition, its goal is to ensure that our products, solutions, and services meet generally accepted product and solution security practices. This includes the global obligation of compliance with our cybersecurity rules and regulations.

Our cybersecurity approach



Cybersecurity is the responsibility of every employee and thus a collaborative task, with the degree of involvement and responsibility depending on individual roles and functions. Cybersecurity management at Siemens Energy is organized according to a management system with relevant

certifications in the areas of IT security and overall cybersecurity (for example, ISO 27001, IEC 62443), which differ depending on site- and task-specific risks. It is headed by our Cybersecurity Function whose principal tasks consist of defining and monitoring requirements and demanding status reports from the Business Areas and Functions for the company-wide implementation of cybersecurity. The Cybersecurity Function also provides quarterly cybersecurity status and risk reports to the Executive Board. In addition, the third-party cybersecurity risk management process (TPRM) is used to ensure that outsourced solutions and services as well as suppliers are assessed for cybersecurity risks throughout the vendor life cycle, that control gaps are addressed, and that clauses are included in vendor contracts.

The goal of our cybersecurity activities is to provide our customers with appropriately secured products, solutions, and services as well as dedicated cybersecurity support. All of this is based on secure internal IT and OT and is designed to protect all relevant assets from cyber threats, managing the associated risks. This is supported by the following strategic objectives:

- Business enablement: Cybersecurity enables our business to protect adequately against cyber threats and helps us create business opportunities.
- Operational excellence: Cybersecurity continuously improves resilience through clear and holistic accountability and ownership.
- Technology & innovation: Cybersecurity develops and adopts leading technologies and leverages the Siemens Energy ecosystem.

In this context, key activities include executing our cybersecurity strategy, delivering adequate cybersecurity services for identification, protection, detection, defense, and response capabilities to threats and incidents, as well as building up cybersecurity intelligence to mitigate risks (see chapter [Compliance and integrity](#)). This enables us to lay a strong foundation for our cybersecurity vision: “To be the most cybersecure energy technology company and bring the highest value to our customers!”

A strong management focus with close cross-business collaboration supports the integration of cybersecurity into our company and innovation strategy. The Innovation Orbit allows the cybersecurity organization to explore technology trends and ideas that are relevant. These trends and ideas can be rated in collaboration and can be converted into projects if needed. Thus, the platform is helping us get closer to a proactive cybersecurity strategy definition.

In October 2023, we launched Siemens Energy’s first dedicated Security Operations Center (SOC). This marked a significant milestone in establishing a centralized organization to continuously monitor and improve Siemens Energy’s security posture. We have partnered with an external provider as our new Managed Security Services Provider (MSSP), which has helped us accelerate the implementation of a unified cyber approach. Since Siemens Energy is the target of numerous cyber threats, our SOC plays an important role in defending against attacks.

As part of its cyber resilience efforts, Siemens Energy has established a mandatory web-based training and awareness program to raise employee awareness. The program includes a global employee Cybersecurity Awareness Month in October with panels, podcasts, workshop sessions, news articles, and multimedia learning content.

Cybersecurity training	Fiscal year	
	2024 ¹	2023 ²
Share of active employees that completed web-based training in cybersecurity	80.6%	99.6%

¹ Figures including Siemens Gamesa. Siemens Gamesa’s training roll-out was not completed in fiscal year 2024.

² Siemens Energy excluding Siemens Gamesa.

Direct current circuit breakers make power grids more robust

Matthias Foehr
Vice President Lead Engineering – Grid Solutions,
Siemens Energy

Matthias Foehr and his team know the power of cross-cultural collaboration for innovation. By combining German and Japanese engineering know-how, they're paving the way for direct current (DC) power grids with fewer losses, fewer emissions, more affordability – and a lot more renewable energy. Matthias tells us how.

I'm going through my notes after a meeting with our partners at Mitsubishi Electric. My journey at Siemens Energy began as a working student, followed by a doctorate and various roles in engineering and technology consulting. Now, I lead a team that's pioneering the future of power transmission, and my days are filled with meetings involving cross-continental collaboration and strategic planning to develop revolutionary new DC grid solutions.

Our goal with Mitsubishi Electric is to create complementary DC circuit breakers that enable the use of high-voltage direct current (HVDC) grids with multiple connection points. It's a key piece in transforming renewable energy transmission over long distances – making it more robust and affordable.

11:00 a.m.

Tokyo, Japan

I'm going through my notes after a meeting with our partners at Mitsubishi Electric.



But the technical challenges are big. Traditional point-to-point HVDC connections are common enough – creating a hub with multiple HDVC connection points, however, requires sophisticated DC circuit breaker technology.

So at Siemens Energy, we’re developing ultra-fast power electronic breakers that interrupt current flow within less than 0.1 milliseconds, while Mitsubishi Electric is focusing on hybrid circuit breakers with lower power losses. Both systems have their advantages, but taken together they make operating large-scale renewable energy resources far more efficient.

For example, back in Europe, we’re planning on putting the first HVDC grid hub into operation by 2032, in collaboration with German transmission system operators – and the impact will be huge, reducing transmission losses by some 30 to 50% compared to an alternating current (AC) system.

This combined approach between Siemens Energy and Mitsubishi Electric marks a departure from conventional industry practice, where companies typically develop closed systems for the market. As power grids evolve, our work exemplifies how collaboration and complementary technological solutions are more than just the sum of their parts – and it’s partnerships like these that are going to get us to a more sustainable world.

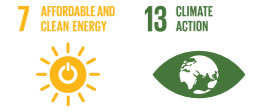
I’m captivated by Japan’s ability to blend cutting-edge technology with traditional values – an appreciation that’s proved valuable in my trips to Tokyo. But the partnership also has an impact on my life outside work. In my free time, I’m currently learning to speak Japanese. And I’m assembling a LEGO model of – what else? – a Japanese castle.

I’m captivated by Japan’s ability to blend cutting-edge technology with traditional values – an appreciation that’s proved valuable in my trips to Tokyo.

Watch the video:



Decarbonization



Achieving climate neutrality along the entire value chain is an ambitious goal. We are aware of the urgency of addressing climate change and at the same time need to ensure that our decarbonization efforts align with our business goals and market needs.

- We support our customers on their way to realizing nationally and internationally agreed climate goals by offering suitable solutions
- We give special attention to Scope 3 emissions from the use of sold products and work with our suppliers to help them reduce emissions
- With our Climate Neutral Program, we drive the decarbonization of our own processes and sites

The impact of climate change, coupled with the world's rising demand for energy, pose an increasingly daunting challenge. Meeting increasing demand with conventional sources of energy would result in even higher emissions of greenhouse gases (GHG) such as CO₂. With the impact of the energy sector far greater than that of any other sector, our task as an energy company is clear: to meet the growing need for energy while taking action to shape the path to decarbonization. This poses risks and opportunities for our company, which we manage through our Enterprise Risk Management (see chapter [↗ Strategic focus](#)).

We aim to decarbonize global energy systems. With innovative solutions, products, and services that help reduce emissions, we support our customers in their transition to a more sustainable world. This transition is an immense task, and we know that we cannot do it alone. It will require all

stakeholders from politics, business, and society to work together more closely to achieve this vision.

As part of our journey to “energize society,” we are decarbonizing our business activities across our entire value chain. In doing so, we are contributing to the UN SDGs, in particular, SDG 7 “Affordable and Clean Energy” and SDG 13 “Climate Action.”

Decarbonization is an essential part of our strategy

From our supply chain to our own operations to the use phase of our products, we are committed to decarbonizing our entire value chain. We have science-based 2030 targets, and we aspire to reach net zero across the value chain following the 2015 Paris Agreement.

The Science Based Targets Initiative (SBTi) validated the absolute GHG reduction targets of Siemens Energy – not only for our own operations (Scopes 1 and 2) but also for the use phase of our sold products (category 11 of Scope 3). It confirmed that the following targets are in line with the Paris Agreement:

- For Scope 1 and 2 emissions, the SBTi confirmed our commitment to a 46% reduction by fiscal year 2025 (from a 2019 base year). Our target to source 100% renewable electricity by fiscal year 2023 was achieved, and we continue to source electricity from renewable sources.
- For our Scope 3 target, the confirmation relates to our plans to reduce absolute Scope 3 emissions from the use of sold products by 28% by 2030 from a 2019 base year.

The SBTi also verified the emissions reduction targets in place at Siemens Gamesa. Those targets will be integrated in the Siemens Energy targets.

As part of its Green Deal, the European Union (EU) has implemented a classification system – the EU Taxonomy – which aims to direct investments toward sustainable projects and activities. The taxonomy lays down criteria for the definition of sustainable economic activities, with the purpose of providing companies, investors, and policymakers with consistent and comparable criteria for assessing which economic activities can be considered sustainable. For further information, please refer to [↗ Siemens Energy Annual Report 2024, EU Taxonomy](#).

EU Taxonomy (%)	Fiscal year	
	2024	2023
Share of revenue from EU Taxonomy-eligible activities	74.2	73.4
Share of capital expenditures from EU Taxonomy-eligible activities	83.5	72.2
Share of operational expenditures from EU Taxonomy-eligible activities	80.8	83.1
Share of revenue from EU Taxonomy-eligible and -aligned activities	42.9	37.5
Share of capital expenditures from EU Taxonomy-eligible and -aligned activities	64.7	51.0
Share of operational expenditures from EU Taxonomy-eligible and -aligned activities	41.9	40.4

The climate goals at Siemens Energy are also part of our Long-Term Incentive plan and hence firmly anchored in top management compensation (see chapter [↗ Strategic focus](#) and the [↗ Siemens Energy Annual Report 2024, Compensation Report](#)).

To facilitate the implementation of sustainability across the company, we are setting up an ESG Data Management Solution (DMS). This enables us to collect and process ESG data and use it for strategic forecasting. The goal is to reduce the manual effort required for data collection, increase data quality, and enable internal benchmarking and steering to achieve our sustainability targets. In fiscal year 2024, we piloted the automated calculation for our Gas Services (GS) and parts of the Transformation of Industry (TI) Business Areas. Implementation of the DMS for the other Business Areas will follow in fiscal year 2025. As an added benefit, this process will enable us to forecast future emissions and thus better manage them against our target (for more information, see chapter [↗ Strategic focus](#)).

The greatest potential to reduce GHG emissions is in our products, solutions, and services. To underscore our strategic focus of providing innovative technology for our customers’ energy transition, we have defined fields of action to decarbonize our portfolio and at the same time ensure business resilience and growth (for more information, see chapter [↗ Customers and innovation](#)).

With a focus on sustainability, we will continue to transform our portfolio of products, solutions, and services, and we will focus on building the company based on our three strategic pillars (see chapter [↗ Strategic focus](#)):

- Low- or zero-emission power generation
- Transport and storage of electricity
- Reducing GHG footprint and energy consumption in industrial processes

Decarbonization at our customers

To reflect the importance of our products and solutions for decarbonizing energy systems worldwide, at Siemens Energy (excluding Siemens Gamesa), we have integrated the use of our sold products into our carbon footprint calculation as part of the SBTi commitment to create transparency for our stakeholders. Sold products account for over 99% of our overall GHG emissions.

The bulk of these emissions shall be reduced through measures such as portfolio adjustments, fuel shifts, and emission removal technologies. We expect most of our reductions in emissions from sold products to happen after 2030, since we believe that markets and technologies still need to mature and scale. Some of our customers in Germany, Austria, France, and China are already starting to enable their plants to run on hydrogen (H₂) rather than natural gas, starting with co-firing H₂ at different shares, from 30% to 100%. This will provide unique opportunities to our business as a transition enabler.

We are committed to monitoring progress on climate action and reducing our exposure to climate-related risks. Therefore, we conducted an analysis of future markets based on three scenarios that include climate implications. On this basis, the climate implications of our business planning until 2030 were evaluated for the base case scenario. We also evaluated and decided on emission reduction levers (for more information, see chapter [↗ Strategic focus](#))

Our Scope 3 emissions from the use of sold products have been calculated based on GHG Protocol standards. The main sources of the emissions are:

Products that directly consume energy (fuels or electricity) during use

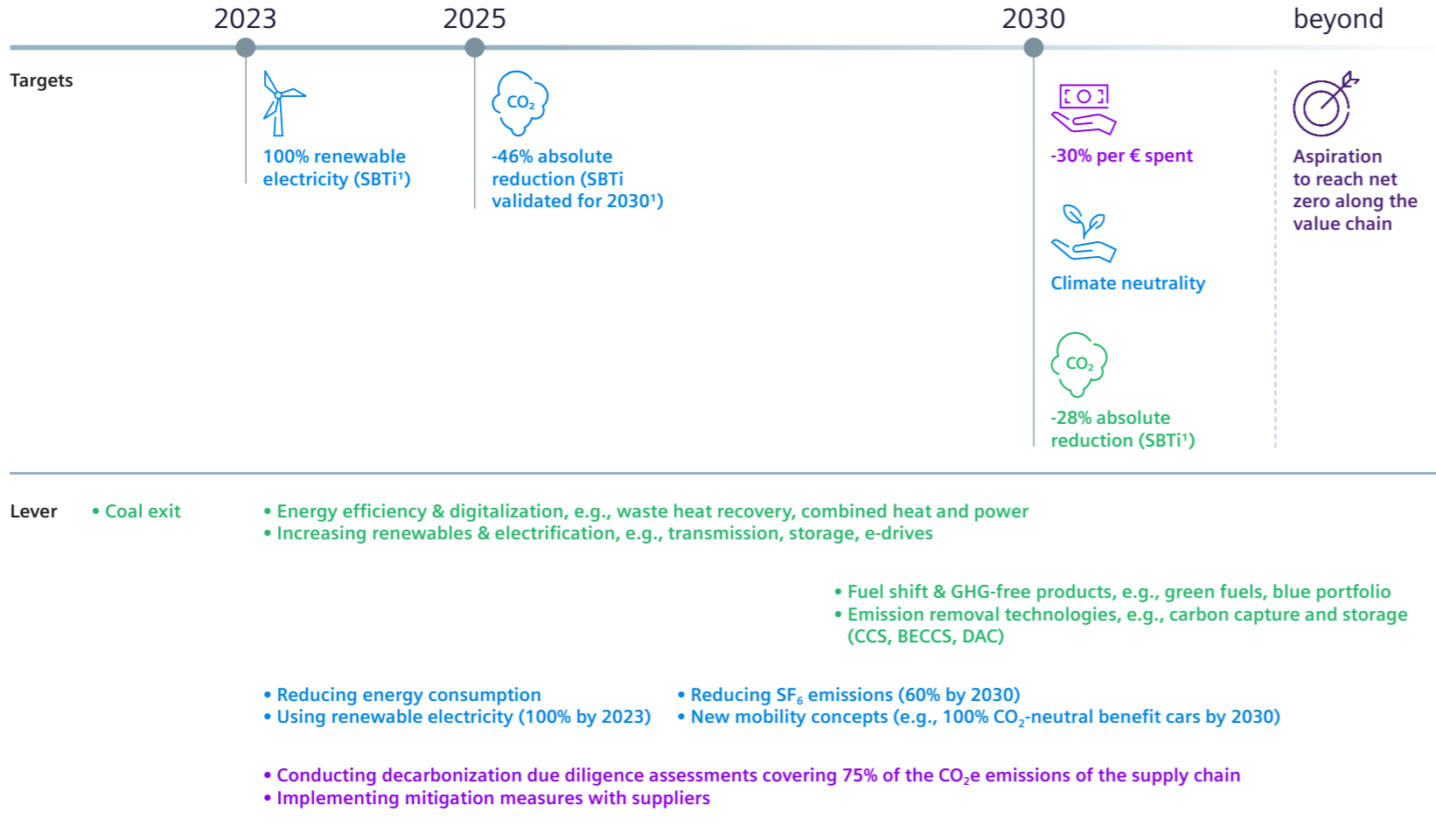
- CO₂e emissions generated through the combustion of fossil fuels (e.g., natural gas in a gas turbine): the amount of CO₂e emissions varies depending on the type of fuel (e.g., natural gas, coal, hydrogen), the energy efficiency of the product (gas turbine, steam turbine, etc.), the operating hours, and the expected lifetime.
- CO₂e emissions generated by large electrical consumers (e.g., motors, drives, pumps) or from power losses (e.g., transformers) of the used products.

Products that contain or form greenhouse gases that are emitted during use

- To a minor extent, the transmission portfolio might be emitting CO₂e due to SF₆ gas leakages during maintenance or operational use at customer sites.

The calculation methodology for Scope 3 emissions from the use of sold products comprises the emissions from our products resulting from new business in fiscal year 2024 over their expected use phase and the expected operating hours per year. When an order is received, the respective total lifetime emissions are determined and reported. GHG emissions that occur

Our climate roadmap



● Supply chain (Scope 3 upstream) ● Own operations (Scope 1 and 2) ● Portfolio (Scope 3 downstream)

¹ Siemens Energy (excluding Siemens Gamesa).

during other phases of a product’s life cycle, such as in the supply chain, during production, or upon end-of-life disposal, are not accounted for or reported in Scope 3 downstream (use of sold products). Biogenic emissions are reported separately, outside of our Scope 3 downstream inventory, as required by the GHG Protocol. They occur when our customers use biomethane or biomass as a fuel (e.g., a biomass power plant or biomethane in a gas turbine). Service business is not included in our Scope 3 emissions from the use of sold products. We do not disclose emissions reductions resulting from efficiency increases through service upgrades (of power plants, for example). While not part of our Scope 3 footprint calculations, we are aware that reducing the footprint from our installed base is important to reducing global CO₂e emissions. To learn more about our calculation methodology, please refer to our annex.

Updates of our calculation parameters

As markets are changing, we aim to make sure our calculation parameters reflect reality. When a customer buys an H₂-ready gas turbine, this is not proof that it will actually operate on H₂. Therefore, we consider co-firing H₂ only if customers share a specific time plan and indicate to what extent they will use H₂. From fiscal year 2023 onwards, we have applied a new expected lifetime of our turbines. While gas turbines have historically been powered by fossil fuels throughout their lifetime, this will change in the future. Many countries, including our most relevant customer markets, have committed to a net zero economy in 2050 and a net zero electricity system even earlier. We adapted our calculations accordingly, assuming the turbines we sell from now on will not be operated on unabated fossil fuels after 2050. The expected lifetime in the base year was 30 years; for fiscal year 2024, our calculations are based on 26 years. This does not affect the baseline (fiscal year 2019) but has an impact on the numbers for fiscal year 2024.

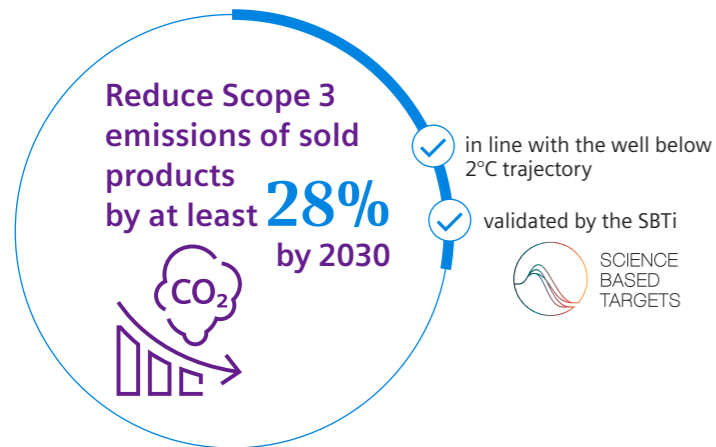
Siemens Energy’s total Scope 3 emissions from the use of sold products during the reporting period amounted to 1.334 billion metric tons of CO₂e (base year 2019: 1.5 billion metric tons), with energy consumption projected to total 3,683 TWh over the expected lifetime. Compared to fiscal year 2023, there is an increase of 0.235 billion tons in absolute numbers and a decrease of 11.1% compared to the base year 2019. Intensity has

increased by 22% in fiscal year 2024 compared to fiscal year 2023. The main reason for this is an increase in order entry for all Business Areas. This is already an indication of how challenging it will be to reduce emissions while at the same time serving our customers.

While our absolute Scope 3 downstream emissions from the use of sold products are the primary basis for measuring and managing Scope 3 emissions, they do not fully reflect the potential positive effects of our business activities on climate change mitigation. With products and solutions that help our customers avoid emissions, we support the decarbonization of energy systems around the globe.

Scope 3 emissions reduction target

Our GHG emissions reduction target for Scope 3 emissions for Siemens Energy (excluding Siemens Gamesa) applies to sold products only, with the aim to reduce absolute Scope 3 emissions from the use of sold products by 28% by 2030 (from a 2019 base year):



To demonstrate and estimate such benefits, we are developing a company-wide methodology to calculate avoided emissions outside of our Scope 3 downstream inventory.

Scope 3 downstream emissions ¹ (1,000 metric tons CO ₂ e)	Fiscal year	
	2024	2023
Total¹	1,333,642	1,098,370
Intensity (t CO ₂ e/ € of order intake)	0.027	0.022

¹ Includes category "use of sold products" only (well-to-tank emissions are included, biogenic emissions have been excluded). Siemens Gamesa's emissions equal zero.

Emissions from biogenic fuels ¹ (1,000 metric tons CO ₂ e)	Fiscal year	
	2024	2023
Total¹	137,323	323,900

¹ Reporting outside of Siemens Energy's Scope 3 downstream inventory.

Decarbonization of our operating processes

Becoming climate neutral in our own operations is an integral part of the sustainability journey for Siemens Energy. With our Climate Neutral Program, we aim to be climate neutral in our own operations by 2030 – with a focus on reducing emissions wherever possible and compensating for any remaining hard-to-abate emissions from then on. This includes the reduction of absolute Scope 1 and 2 GHG emissions by at least 46% by 2025 from the base year 2019. This is an even greater ambition than our initial target year, which was originally 2030, as validated by the SBTi. In the reporting period, we achieved a reduction of 55% compared to the base year 2019, while our emissions increased by 9% compared to fiscal year 2023.

The strongest levers to achieve climate neutrality are:

1. Using renewable electricity

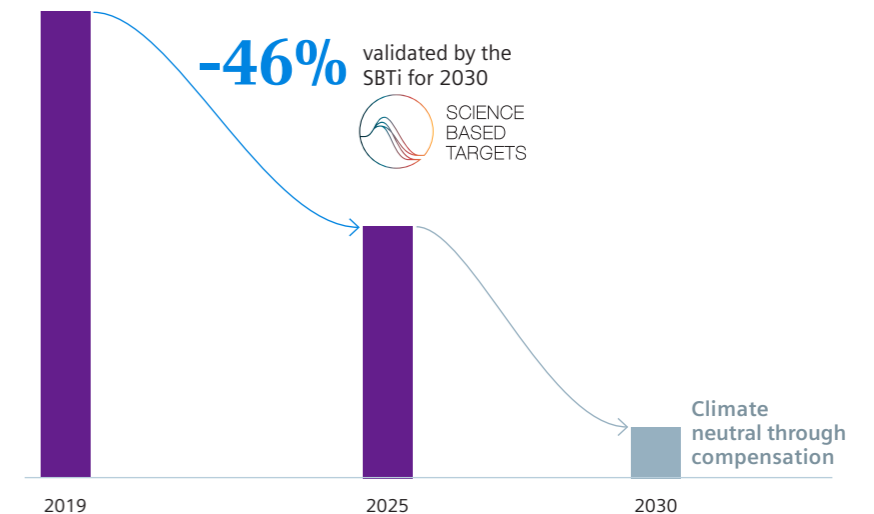
Given that Siemens Energy (excluding Siemens Gamesa) had met its target of sourcing 100% of its global electricity from renewable sources in fiscal year 2023, we worked on increasing the amount of electricity produced at our own sites in the reporting year. In fiscal year 2024, Siemens Gamesa also converted its electricity generation to 100% renewable energies.

2. Reducing energy consumption and electrification

We have energy efficiency projects in place at various locations for buildings and process optimization. These include the installation of LED lighting with dimmers and motion sensors, the installation of smart meters to increase transparency, and building automation systems (e.g., heating, ventilation, air conditioning). The production scope includes, for example, an improved production process for transformers, achieved by installing heat recovery systems and vapor phase ovens that reduce the drying time.

Scope 1 and 2 emissions reduction target in line with 1.5°C trajectory

Our GHG emissions reduction target for Scope 1 and Scope 2 emissions for Siemens Energy (excluding Siemens Gamesa):



3. Reducing SF₆ emissions

SF₆ emissions in our operations originate from products in our Business Area Grid Technologies. With the expansion of our Blue Portfolio, together with the stringent measures in our facilities, we have set a target of reducing SF₆-related emissions by 60% by 2030 compared to a 2019 baseline. Due to our continuous work in all our operations to improve technical standards, increase data transparency, and raise awareness of the greenhouse effect, in fiscal year 2024, we achieved a reduction of 72% compared to the base year and of 35% compared to fiscal year 2023.

Our SF₆/F-gas-free Blue Portfolio is based on technical air insulation and vacuum switching technology. With its zero global warming potential, the portfolio enables net zero power grids.

4. New mobility concepts

Siemens Energy (excluding Siemens Gamesa) is aiming for 100% CO₂-neutral benefit cars by 2030 by implementing its car policy globally. In Germany, for instance, employees receive financial support when they choose a battery electric vehicle, whereas they pay for conventional fuel or diesel cars themselves. Since this bonus/malus scheme has been introduced, order rates for all-electric vehicles have increased, leading to reduced emissions in the near future.

Siemens Energy fleet	Fiscal year	
	2024	2023
Number of vehicles	~7,200	~6,600

Siemens Gamesa has implemented various projects on this lever, such as starting to replace forklifts worldwide with low-carbon alternatives to reduce the company's Scope 1 (direct) GHG emissions or the Siemens Gamesa Employee Mobility & Transport Benefits Policy, in combination with the policy to support the reduction of the company's Scope 3 (indirect) GHG emissions.

5. Use of biomethane

Many of Siemens Gamesa's sites in Denmark use methane from the gas grid, with a minimum of 100% biomethane. In Finspång (Sweden) and Montreal (Canada), we use biomethane to reduce the carbon footprint of our combustion test sites. In Finspång, we reached a share of 14.0% biomethane; furthermore, we can conduct combustion tests with green hydrogen at the site. The hydrogen we produced locally at the site is green hydrogen. Montreal switched to 100% renewable natural gas for testing and site heating in May 2024 and achieved a biomethane share of 38.2% in the test gas for the entire fiscal year 2024. At our test site in Berlin-Ludwigsfelde, the Clean Energy Center, we have the possibility to perform combustion tests with green hydrogen.

6. Installation of heat pumps

The Grid Technologies Business Area has installed heat pumps at some of its transformer manufacturing sites to replace natural gas in drying processes. Due to the use of green electricity, the new drying ovens are considered climate neutral.

Internal CO₂ pricing

CO₂ pricing is a further steering mechanism for achieving climate neutrality, and we believe binding CO₂ price signals can support our reduction target. These price signals encourage the use of the best technologies and business models available. Internally, Siemens Energy implemented a policy in

fiscal year 2022 to consider GHG emissions in our CapEx decisions and ensure that new investments support our Climate Neutral Program. To support low-carbon investment in our own operations, we are using a shadow price of €100 per metric ton of CO₂.

In Brazil, Siemens Energy has implemented an internal carbon fee. Each Business Area pays a specified carbon fee into an investment fund, which is then used to invest in low-carbon projects. The carbon fee is designed to evolve based on decarbonization goals achieved over the years: from fiscal year 2020 to fiscal year 2022, the price was static at \$40; for fiscal year 2023, there was a +30% correction and from fiscal year 2024 onward, the price will be adjusted by +10% per fiscal year until fiscal year 2030. In the first phase, the internal carbon fee is collected from the Business Areas (based on their previous emissions) and reverted to the fund. The project campaign then collects project ideas linked to energy efficiency and sustainable operations. The selected projects pitch their ideas to the Neutral CO₂ Steering Committee to grant the investment for implementation.

Energy use and efficiency

To calculate the energy consumption of our offices, testing sites, and manufacturing facilities, we added primary and secondary consumption of fuels and electricity. In fiscal year 2024, we continued to improve the quality and frequency of our operational data reporting, which was achieved by continuous improvement of our global EHS reporting tool. Another lever for managing the complexity of global reporting lies in automating the collection of data directly from primary and secondary sources and transferring the data into our reporting tool.

In fiscal year 2024, we included fleet fuel consumption in our primary energy data consolidation, since this consumption is part of the vehicles that are controlled by our organization.

Energy consumption (1,000 GJ)	Fiscal year	
	2024	2023 ¹
Primary energy	2,500	2,031
thereof natural gas & liquid petroleum gas	1,604	1,225
thereof fuel oil, coal, gasoline, diesel	231	217
thereof biomethane	91	63
thereof fleet consumption	548	521
thereof other	16	4
Secondary energy	3,433	3,445
thereof electricity	2,842	2,893
thereof electricity from renewable sources	2,842	2,893
thereof district heating	591	552
Total	5,933	5,476
Intensity (GJ/€ of revenue)	1.72×10 ⁻⁴	1.76×10 ⁻⁴

¹ Figures for 2023 have been changed due to deviations in data calculation.

Share of renewable energy (%)	Fiscal year	
	2024	2023 ¹
Share of renewable electricity (of total electricity)	100	100
Share of renewable energy (of total energy)	49	54

¹ Figures for 2023 have been changed due to deviations in data calculation.

Siemens Energy's total energy consumption during the reporting period was 5,933 million gigajoules (GJ), resulting in an intensity of 1.72×10⁻⁴ GJ/€ of revenue. Compared to fiscal year 2023, this is an increase of 8% in absolute energy consumption, which is mainly caused by testing of gas turbines and compressors and also due to the additional fleet coverage.

Over the reporting period, we collected the following data regarding the level of Scope 1 and 2 emissions related to business activities. Our reporting tool enables us to increase the collection of actuals and reduce coverage calculation.

Energy efficiency

We are continuously working on improving our energy efficiency, for example by implementing energy management systems and energy efficiency measures in the areas of operation and maintenance. All our new buildings, expansions, and major renovations are mandated to achieve zero Scope 1 emissions from heating systems, utilizing 100% electricity-powered heating equipment like heat pumps or other alternative zero-carbon energy sources. Scope 2 emissions have been reduced by sourcing green electricity and acquiring district heating that meets stringent standards. The overall reduction has partly been set off due to the shift to electrification in our manufacturing processes.

In fiscal year 2024, our Scope 1 and 2 emissions increased by around 9% or 17 metric tons, resulting in a Scope 1 and 2 intensity of 5.71×10⁻⁶ t CO₂e/€ of revenue in 2024 compared to 5.78×10⁻⁶ t CO₂e/€ of revenue in 2023. The rise in emissions was mainly caused by more gas turbine testing (mainly prototype tests) and more compressor testing (mainly factory acceptance tests). Additionally, minor impact has come from heating. Both the tests and the heating were reduced in fiscal year 2023 due to ↗ **government regulations** because of the Russian war against Ukraine to save natural gas.

The total energy consumption and the resulting Scope 1 and Scope 2 figures for fiscal year 2023 have been adjusted to correct individual location-specific input errors as well as to reflect the calculation and coverage of fleet data.

Scope 1 and 2 emissions (1,000 metric tons CO ₂ e)	Fiscal year	
	2024	2023 ¹
Scope 1	175	160
thereof natural gas & liquid gas	89	69
thereof fuel oil, gasoline, diesel	17	16
thereof SF ₆	21	32
thereof fleet emissions	40	38
thereof other emissions	8	5
Scope 2 (market-based)	22	20
thereof electricity	0	0
thereof district heat	22	20
Total	197	180
Intensity (t CO ₂ e/€ of revenue)	5.71×10 ⁻⁶	5.78×10 ⁻⁶

¹ Figures for 2023 have been changed due to deviations in data calculation.

Consumption from biogenic sources (1,000 GJ)	Fiscal year	
	2024	2023
Biogenic sources	91	63

Atmospheric pollutant emissions

Other atmospheric pollutant emissions also have negative impacts on the environment. These include volatile organic compounds (VOCs) and ozone-depleting substances (ODSs). VOCs contribute to the formation of ozone close to the earth’s surface. Solvents, paints, and adhesives are examples of substances and materials that contain VOCs. ODSs are monitored to comply with the Montreal Protocol, the international convention on the protection of the ozone layer, as well as with country-specific regulations. There was a slight increase in VOCs due to increase in production and a decrease in ODSs due to replacement of a specific gas used for testing with high ODS potential.

In calculating nitrogen oxides (NO_x), we have assumed typical combustion conditions in relevant thermal processes.

Atmospheric pollutant emissions (metric tons)	Fiscal year	
	2024	2023
VOCs	326	257
ODS (in R11 equivalent)	0.0000043	0.007
NO _x	69	66

Decarbonization of our supply chain

Our suppliers are an important part of the value chain, and we encourage them to take climate protection measures. Emissions reduction is an integral part of our suppliers’ supply chain management (see chapter [Sustainable supply chain management](#)), and we keep urging them to increase their efforts.

We run our Carbon Reduction@Suppliers Program in cooperation with an external service provider offering an economic model based on an input/output analysis that identifies the CO₂e emissions of all suppliers. With the procurement volume and the material-country combination, the model calculates CO₂e emissions in the supply chain based on official statistics and studies by the OECD, World Bank, IPCC, U.S. BEA, and the U.S. and European environmental agencies (spend-based method).

For Siemens Energy, we set an ambitious target within our supply chain of reducing our relative Scope 3 GHG emissions from purchased goods and services, as well as transportation and distribution, by 30% per procurement volume unit (€ spent) until 2030 based on fiscal year 2018.

The calculated upstream footprint for fiscal year 2024 is 9,238 kilotons of CO₂e, resulting in an intensity of 0.408, which is 0.1% higher in total emissions but 1.3% lower in intensity compared to fiscal year 2023.

To further increase transparency regarding supplier engagement for decarbonization in fiscal year 2024, we encouraged more than 3,400 suppliers – corresponding to more than 75% of the carbon footprint in our supply chain – to participate in our decarbonization due diligence assessment (DDA) and report on their measures. These assessments will be considered as we track progress on our targets in the future.

Scope 3 upstream emissions (1,000 metric tons CO ₂ e)	Fiscal year	
	2024	2023
Total	9,238	9,230
thereof category “purchased goods and services”	8,395	8,456
thereof category “transportation and distribution”	843	775 ¹
Intensity (kg CO ₂ e/€ of purchasing volume)	0.408 ²	0.414

¹ 325 kilotons of the 775 kilotons of CO₂e emissions were calculated using a consumption-based method.
² Reduction compared to base year 2018: 19.6%; baseline calculation was partially extrapolated.

3 Responsible operations

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Summary page

Zero Harm Framework

We promote a strong Zero Harm culture that aims to prevent injuries and adverse effects on people and the environment.



Occupational health and safety

Providing a safe and healthy working environment for all employees, partners, contractors, and suppliers is our utmost priority.



¹ Number of recordable injuries (TRI) x 1,000,000/work hours performed.

Conservation of resources

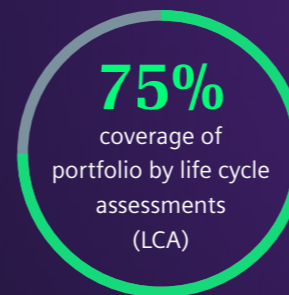
We aim to minimize our impact on the environment. Our environmental management systems are founded on the principles and elements of the international ISO 14001 and ISO 50001 standards or energy audits.



² Excluding construction and other waste.

Product stewardship

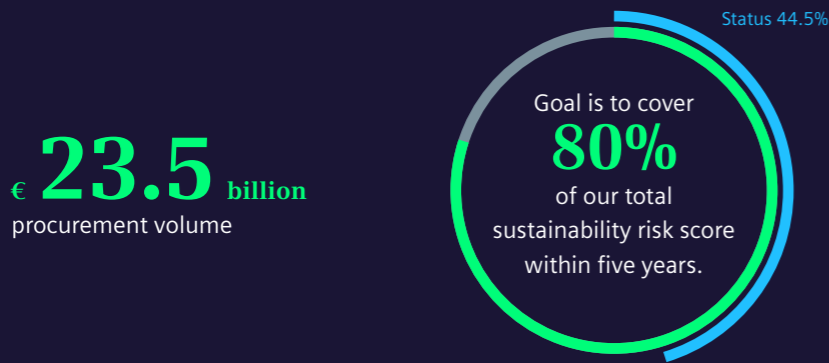
Our approach to product stewardship includes all environmental aspects, with a strong focus on climate change adaptation and resource efficiency.



Summary page

Sustainable supply chain management

We apply stringent environmental and social standards to contribute to a sustainable supply chain.



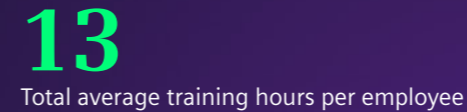
Working at Siemens Energy

Our People Agenda promotes a thriving environment, game-changing leaders, and a vibrant workforce.

Share of females

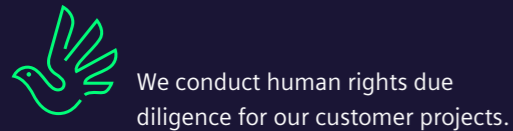


Training hours



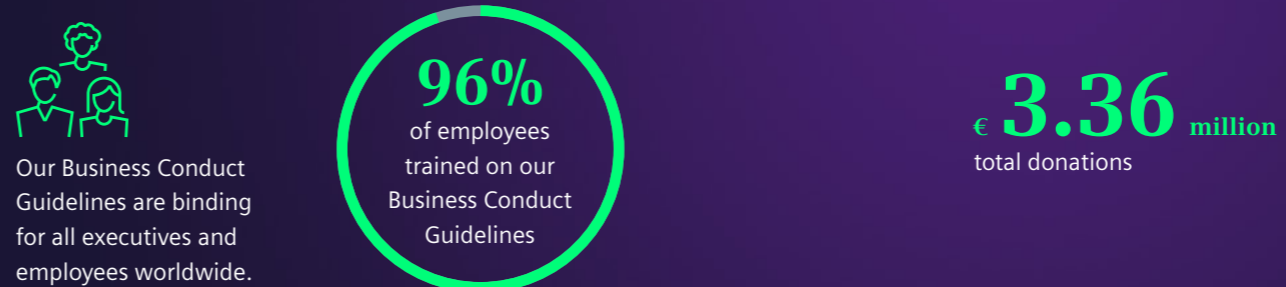
Human rights

We are committed to ensuring respect for human rights along the value chain within our sphere of influence.



Compliance & integrity

Our company-wide zero-tolerance approach aims to ensure a strong culture of business ethics and compliance.



Occupational health and safety



As a responsible employer, we are committed to providing a safe place to work and to keeping people healthy. We see this as a precondition for a productive workforce and key to the resilience of our company. We systematically identify risks, work toward avoiding incidents, and promote employee well-being.

- **Prioritizing prevention and communication is essential to implementing effective health and safety systems**
- **Strong Zero Harm culture promoted through awareness training and monitoring**
- **Health-related training courses reflect local needs and conditions**

Providing a safe and healthy working environment for all employees, business partners such as contractors, suppliers and further partners is important to us. Investing in such an environment may reduce workplace accidents, boost employee productivity, and lower costs related to injuries, insurance, and legal liabilities, ultimately enhancing operational efficiency and the company's reputation. With our occupational health and safety approach, we contribute to two SDGs: SDG 3 "Good Health and Well-Being" and SDG 8 "Decent Work and Economic Growth."

Our environment, health, and safety (EHS) standards are anchored in all our business practices and are aligned with our EHS Principles and Core Responsibilities as well as our Business Conduct Guidelines, which principally state that all workers are free to remove themselves from dangerous work situations. They provide the foundation for developing our EHS management systems and processes.

Our EHS Policy aligns with our company principles and behaviors, demonstrating

- strong leadership, ownership, and commitment,
- promotion of good health and safety conduct,
- commitment to continuous improvement,
- hazard identification, risk assessment, and prevention, and
- compliance with principles, standards, and behaviors.

Siemens Energy continues to build on the Zero Harm culture that recognizes and reflects our societal responsibilities for environmental protection and the health and safety of our employees, business partners, and other stakeholders who may be affected by our business activities. The appointed Vice President EQS implements EHS governance requirements throughout the company and supports the Executive Board in fulfilling its EHS duties. The Business Area Functions EQS or EHS are responsible for supporting the appointed Business Area Executive Vice Presidents. At Siemens Energy, the EHS Policy – as part of the Integrated Management System – is further supported by the **Zero Harm Framework**, which aims to embed Principles, Behaviors, and Essentials at all levels of the organization (see chapter **Occupational health and safety**). In this way, the Business Areas address the relevant risks across the organization.

To ensure global alignment, there is a formal monthly committee meeting in the form of the EHS Collaboration Board Call with members of the Corporate EHS team, the EHS Leads of the Business Areas, EHS Hub Leads, and the lead country EHS Leads convening to discuss EHS topics.

In addition, we organize regular environmental, health, and safety calls with our EHS Leads in the countries and Business Areas. We engage via a monthly newsletter and our internal Viva Engage community. Participation is encouraged through open communication, which aligns with our "develop locally and share globally" philosophy.

In the reporting year, we implemented a global review process of Lessons Learned (LLs) for all recordable incidents and high-potential near misses. The LLs are reviewed for completeness and applicability for other areas of the business. If deemed applicable, a global action is assigned via the reporting tool. All LLs are stored in a central repository, which is accessible to all employees.

Formal management systems

Alongside the EHS Policy, the ISO 45001 standard provides guidance so that international and local regulations, laws, standards, and practices are observed and complied with wherever we operate. This standard provides a basis for effective management, identification of potential risks, and internal audit and review.

Siemens Energy aims to have a certifiable management system covering all workforce types worldwide. Each operational business within Siemens Energy operates under a relevant and maintained integrated management

system covering quality (ISO 9001), environment (ISO 14001), and health and safety (ISO 45001).

During fiscal year 2024, we continued to integrate 59 standalone management systems (with multiple external certifying bodies) into the multi-site certificate that covers all three standards ISO 9001, ISO 14001, and ISO 45001.

The remaining 56 standalone systems are currently being integrated into the Siemens Energy multi-site certificate. The Business Areas perform internal audits within their organization to prepare and maintain certifications.

Zero Harm at Siemens Energy

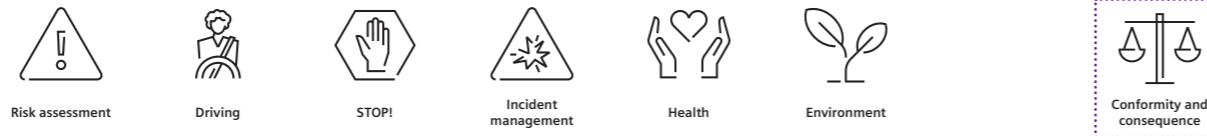
Principles

Foundation for strong and well-connected governance and assurance at all levels in our organization



Behaviors

To be demonstrated by everyone in our company, no matter the type of work



Essentials

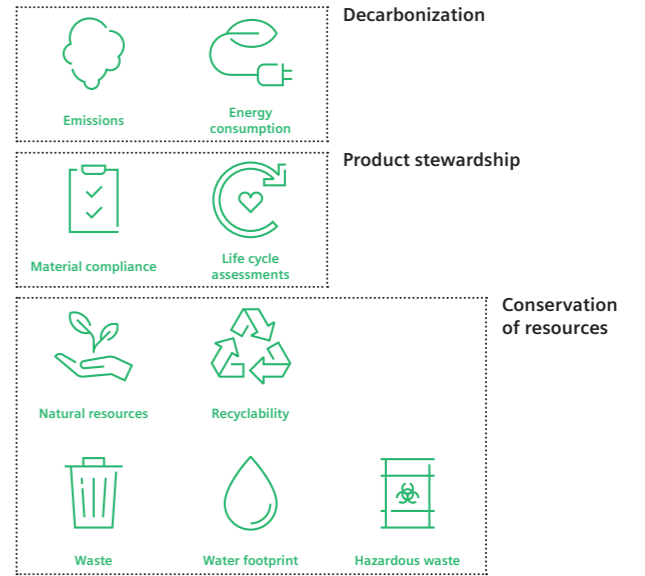
Must be complied with by everyone performing this type of high-risk activity



Building blocks for local programs

Used by managers to establish a local Zero Harm Program based on work activities and the individual need

- Mandatory
- Safety
- Health
- Environment
- Contractor management and temporary workforce
- Security



Contractors and temporary labor are expected to work to the same standards as Siemens Energy employees. Contractor incidents are shared with the Business Areas and Global Functions for discussion, lessons learned, and the identification of opportunities for improvement. We also hold direct meetings with our contractors and suppliers to discuss high-impact and high-potential incidents and improvement opportunities.

In fiscal year 2024, further improvements in the quality of our contractor management approach included developing the Zero Harm engagement app to cover onboarding and induction of temporary labor into the local working environment. This is supported by a new Zero Harm building block for temporary labor. We also reviewed the general EHS requirements for contractors and developed new instructions that encompass all Business Areas.

Health and safety culture provides the foundation

Siemens Energy is committed to protecting the environment and managing the health, safety, and well-being of its employees, partners, and other stakeholders who may be affected by its business and operational activities. That is why our priority is a strong Zero Harm Framework, which is driven by our principles, essentials, behaviors, and building blocks (see graphic on Zero Harm).

This framework sets minimum expectations, placing responsibility on each local manager to develop and implement the principles, discuss elements that will be included in their program with their teams, and then reinforce them in the course of the daily work.

With our global EHS reporting tool, we can monitor concerns raised by employees, with each case treated locally according to our reporting process. Siemens Energy utilizes a new global software solution covering environmental, health, safety, security, and product safety incidents.

Siemens Energy has expanded its Zero Harm Day to Zero Harm Week. The event started on Earth Day on April 22 and concluded on World Day for Safety and Health at Work on April 28, 2024, with a variety of formats to engage with such as webinars, local events, and skill training.

Siemens Energy is now in year two of its Champions League competition. Teams that are committed to living Zero Harm best practices share their outstanding initiatives. We saw a 76% increase in participation in fiscal year 2024. The winners were announced on the last day of Zero Harm Week and shared their excellent practices with colleagues.

In addition, we have implemented a training platform that provides employees with the opportunity to develop individual and team-based EHS skills and knowledge to meet regulatory requirements associated with their job roles and the minimum standards established by the Zero Harm Framework. EHS training has been aligned to provide a core set of courses directly corresponding with the EHS elements of the Zero Harm Framework.

Health and safety performance under review

To increase the effectiveness of safety risk management at manufacturing, service, and project sites, Siemens Energy completed internal occupational safety (OS) audits related to a location’s risk factors on site and across organizational levels. In fiscal year 2024, the assurance audit team shared with the EHS organization over 70 best practices found at various sites, which other locations shall use to improve their safety systems. OS audits and their results will continue to be quantified, providing details for optimization measures, lessons learned, and continuous improvement recommendations.

Preventing incidents

Health and safety performance at Siemens Energy is managed via internal processes that define the requirements for the classification, recording, and investigation of incidents.

In fiscal year 2024, the incident rate for our temporary labor was more than double the incident rate for Siemens Energy’s own employees on a global scale. We therefore pay special attention to the onboarding of temporary labor and have created a new building block to set minimum standard rules. One specific rule that will be enforced at all factories worldwide as a first step is a formal EHS induction for temporary labor, specific to the location at which they are working. A predefined onboarding questionnaire as well as a mobile app were created for this purpose.

In fiscal year 2024, our Business Area Siemens Gamesa continued to use the Proactive KPI Index to monitor and promote expected safety-related behaviors across the business (refer to the Sustainability Report 2023, chapter “Occupational Health and Safety,” for details on the calculation). The KPI is made transparent via a dashboard and regularly discussed at management meetings to reinforce the expected actions and behaviors. This helps identify areas with excellent safety performance and others where the safety culture may need to be improved.

Our focus is on the Total Recordable Injury Rate (TRIR) and serious incidents, details of which we share with the Executive Board on a monthly basis. At the end of the fiscal year, the overall TRIR of employees excluding contractors stood at 2.33, and the LTIFR of employees excluding contractors at 1.28.

Total Recordable Injury Rate (TRIR) ¹	Fiscal year	
	2024	2023
TRIR of employees ²	2.33	2.61
TRIR of contractors ³	2.42	3.03
TRIR of employees & contractors	2.35	2.67

¹ Total Recordable Injury Rate: number of recordable injuries (TRI) x 1,000,000/work hours performed. Recordable injuries are accidents that result in lost time, restricted work, or medical treatment.

² Incl. temporary labor; excl. contractors.

³ Contractors are service providers carrying out work activities in a work environment under the control of the company. Siemens Gamesa captures all contractors; Siemens Energy (excluding Siemens Gamesa) captures contractors in projects with a volume >€5 million and classified as complex during the bid phase.

Our key objective is to prevent incidents, including high-consequence incidents, during the performance of work activities. The Zero Harm Framework supports our efforts to reduce the severity of injuries. In fiscal year 2024, we had 13 high-consequence work-related injuries (fiscal year 2023: 8).

Regrettably, we also had six work-related fatal accidents (fiscal year 2023: two). Three fatalities were related to an explosion, one person died from an electric shock, one person was killed in a car accident while on a business trip, and one person was crushed by a moving platform. Each serious event or fatal accident causes grief for families, friends, and colleagues. As a com-

pany, we thoroughly investigate and assess the circumstances and consequently derive measures to prevent such accidents from happening again.

We are vigilant that employees are not exposed to occupational illnesses or work-related diseases while performing work activities. The Zero Harm building block “Safe from Workplace Exposure” at Siemens Energy is therefore an essential part of our Zero Harm Framework. This building block provides a set of rules to eliminate exposure hazards in the work environment.

Risk assessment is a key Zero Harm behavior. Each employee is required to identify hazards and carry out risk assessments for all work activities and workplaces to identify and implement controls. Employees are not to start a work activity without an approved risk assessment and an understanding of the controls.

Lost Time Injury Frequency Rate (LTIFR) ¹	Fiscal year	
	2024	2023
LTIFR of employees ²	1.28	1.34
LTIFR of contractors ³	1.27	1.70
LTIFR of employees & contractors	1.27	1.40

¹ Lost Time Injury Frequency Rate: number of lost time injuries (LTI) x 1,000,000/work hours performed. LTIs are accidents that result in at least one lost day of work.

² Incl. temporary labor; excl. contractors.

³ Contractors are service providers carrying out work activities in a work environment under the control of the company. Siemens Gamesa captures all contractors; Siemens Energy (excluding Siemens Gamesa) captures contractors in projects with a volume >€5 million and classified as complex during the bid phase.

High-consequence injury rate ¹	Fiscal year	
	2024	2023
High-consequence injury rate of employees & contractors ²	0.052	0.033

¹ Serious work-related personal life-threatening or life-altering injuries as well as injuries with more than 180 days of lost/restricted work. Excluding fatalities.

² Number of high-consequence work-related injuries x 1,000,000/work hours performed. Incl. temporary labor and contractors.

Fatalities ¹	Fiscal year	
	2024	2023
Employees	2	0
Contractors	4	2
Total	6	2

¹ Excluding cases beyond Siemens Energy's influence (e.g., force majeure, third-party violence) or outside of Siemens Energy's scope of responsibility. Includes all fatalities.

Occupational illnesses ¹	Fiscal year	
	2024	2023
Occupational illness frequency rate ² of employees ³	0.29	0.25

¹ Illnesses declared as an occupational illness and recognized by an external authority/insurance company or by a physician.

² Number of occupational illnesses x 1,000,000/work hours performed.

³ Incl. temporary labor; excl. contractors.

Promoting health and resilience

Within the overall management approach for occupational health and well-being, prevention is our key strategy for the promotion of employee health. Each country organization, in cooperation with the relevant Business Areas at Siemens Energy (excluding Siemens Gamesa), is required to identify and implement health management programs that focus on healthy working and healthy employees – reflecting local needs and conditions.

As part of the Zero Harm Framework at Siemens Energy, managers are required to establish programs and activities covering the following health-related building blocks:

- Fit for Work
- Health on Project Sites

- Healthy for Life
- Pandemic Management Plan
- Resilient for Work
- Safe from Workplace Exposure
- Traveler Health

These include training courses on topics such as exercise, nutrition, stress, physical well-being, psychological health, and work-life balance.

We also carried out our annual global health management survey in fiscal year 2024, which provides transparency on the health management status in each country as well as areas for improvement. This includes establishing whether defined health-related building blocks have been implemented by the countries. Furthermore, Siemens Energy continued its global initiative on mental health with the motto “Mental health is a Team Purple priority – Let’s make it better!” In line with the set strategy, we introduced a mental health app, a specific SharePoint, and a Viva Engage community.

Siemens Gamesa runs a centralized health management program combined with initiatives deployed at regional levels, including team challenges and virtual sports clubs. This Business Area provides corporate initiatives covering the same health priorities and topics as the rest of Siemens Energy through the Health at Heart Pathway. In addition, Siemens Gamesa has developed a strategy based on the advice of its Mental Health Scientific Advisory Board and measures different global health KPIs, such as stress levels and trends, in its global health surveys. Every three years, the Business Area carries out a global psychosocial risk assessment – the last one in fiscal year 2023 – and implements action plans to mitigate the risks. There is a training program in place for managers to address psychosocial risks and create effective measures.

When considering global approaches, EQS (Environment, Health, Safety, Quality, and Security) specialists (including mental health experts) from the countries in which Siemens Energy operates collaborate as a virtual team with dedicated key members.

We prioritize people to achieve Zero Harm

Alexandre Costa
Work Safety Technician,
Siemens Energy Brazil

His job saves lives. Alexandre Costa has spent decades working as a safety technician, among dangerous chemicals, flammable gases, and cranes lifting massive machines. The key to accident prevention? Alexandre tells us why the company always focuses on people first.

I've just started the late afternoon-to-night shift, which means I wake up around 4 p.m. every day and go to bed around 8 a.m. – with a “lunch” break at 1 a.m. We're dealing with heavy machinery and hazardous, fire-prone gases like acetylene and oxygen, so carefully planning ahead is absolutely essential.

For over two decades, I've been working as a work safety technician, and in all these years I've taken part in building and assemblage projects for a whole range of industries – chemical plants, refineries, thermal power stations. In all those industries the policies and protocols around safety culture are important, of course, but the really crucial thing is focusing on people first. If you lose sight of what is needed to protect them, accidents are more likely to happen.

18:00 p.m.

Cañuelas, Argentina

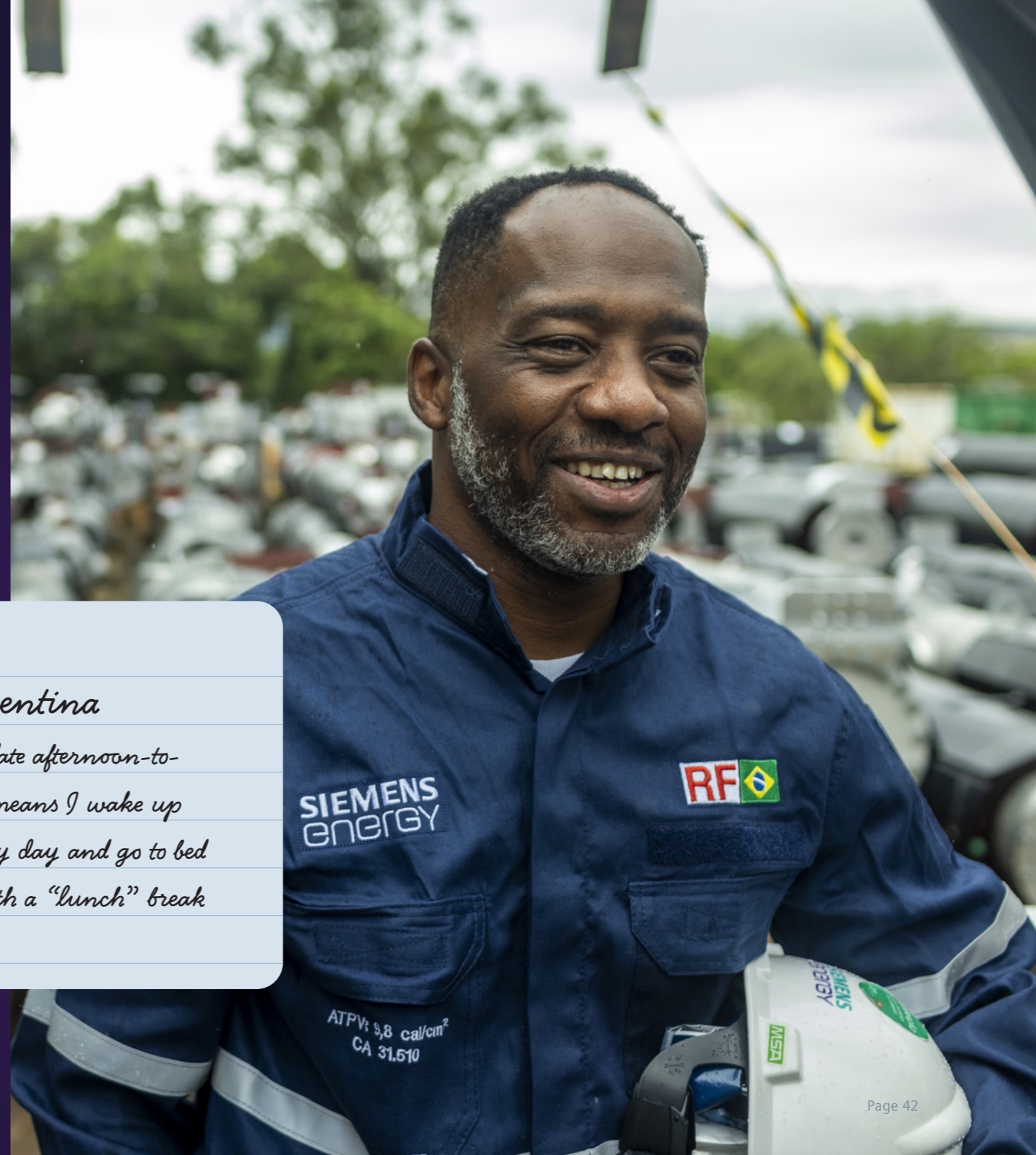
I've just started the late afternoon-to-

night shift, which means I wake up

around 4 p.m. every day and go to bed

around 8 a.m. – with a “lunch” break

at 1 a.m.



My current project involves servicing a thermal plant here in Cañuelas, Argentina, where our 45-day deadline includes disassembling major equipment, doing maintenance work, replacing parts as needed – and then reassembling everything again. My job is accident prevention and risk analysis, collaborating with the whole team in three different places: at the heart of the plant where the main turbine is located and in two support and storage areas that are a little under two kilometers apart from each other.

For me, one of the most important tasks of the day is our daily safety dialogue (DSD), when we discuss specific situations and the risks associated with them, always in partnership with supervisors and field engineers. In our line of work, small oversights can lead to huge risks and even severe accidents. So we need to take every task and the correct use of every safety item into account.

Since I'm Brazilian, from Rio de Janeiro, in Argentina I also have to consider linguistic and cultural differences during our DSDs and focus on solid, clear communication. Based on my experience, accidents occur at work two to three hours after a task has started, the time when people become habituated to an activity. The DSDs happen just before that critical window of time, making sure everyone pays more attention to their own and others' safety.

But the most challenging part of prevention work is dealing with people's priorities. Everyone has deadlines and productivity schedules, and at times this makes people forget to take care of the most precious assets: themselves and those around them. With the DSDs, we can help them take a step back and not forget that.

São Paulo, Brazil

For me, the most important task of the day is our daily safety dialogue (DSDs), when we discuss specific situations and the risks associated with them, always in partnership with supervisors and field engineers.

Watch the video:



Conservation of resources



We aim to use natural resources responsibly and avoid negative environmental impacts in all our operations and projects. By applying circular economy principles, we are shaping the future of resource management.

- Environmental management is embedded in our processes as part of the Zero Harm Framework
- Increased waste management ambition: Targeting zero landfill waste and achieving a recycling rate of over 90% by 2030
- Climate change risks have been assessed for major locations and mitigation measures are being implemented
- Increased internal transparency with more automated reporting on metrics

Global environmental challenges are increasing rapidly: climate change, biodiversity loss, water shortages, increased waste generation, and other factors lead to more complex environmental requirements and demand intensified approaches toward a circular economy.

At Siemens Energy, our goal is to minimize our impact on the environment by, for example, managing freshwater withdrawal and emissions, protecting biodiversity, and reducing waste. With our Integrated Management System (IMS), we aim to comply with applicable laws, regulations, and stakeholder expectations. Through our environmental protection measures and management systems, we contribute to SDG 6 “Clean Water

and Sanitation,” SDG 7 “Affordable and Clean Energy,” SDG 12 “Responsible Consumption and Production,” and SDG 13 “Climate Action.”

Our IMS is based on the principles of the international standards ISO 9001, ISO 14001, ISO 45001, and ISO 50001 or energy audits as per national legislation. These are either certified or aimed at implementing a certifiable management system (see chapter [Occupational health and safety](#)). An objective of these systems is, for example, to continuously improve environmental performance, lower environmental impacts, and increase energy efficiency (for more information on energy consumption and emissions, see chapter [Decarbonization](#)).

As part of our EHS management system in larger projects, we use environmental aspect assessments to evaluate potential impacts related to our business activities. They include impact severity and probability, providing information for management action and improvement opportunities as well as for monitoring compliance with globally applicable basic requirements such as the IFC World Bank Guidelines. We use our company-wide Idea Management program 3i to foster ideas, initiatives, and innovations that contribute to improving EHS aspects and can result in energy savings and cost reductions.

Meeting environmental management standards

With our Zero Harm Framework, we aim to meet the increasing environmental protection requirements imposed by both regulators and customers. We are guided by the logic embedded in the ISO 14001 environmental management standard to identify environmental aspects of our business operations and minimize or mitigate negative impacts. Our main objectives focus on improving environmental performance in the areas of energy, air, water, and waste, including:

- Increasing energy efficiency by using energy management systems at our sites
- Controlling air-pollutant emissions by replacing ozone-depleting substances and reducing solvents
- Assessing climate change risks, including water risks, and implementing local mitigation and prevention strategies
- Reducing waste
- Achieving zero waste to landfill and a recycling rate higher than 90% by 2030

Climate change risk assessment

As climate change progresses, we assess the risks that could impact our business. Climate-related risks such as flooding, extreme temperatures, or hurricanes may cause an evacuation of personnel, disruptions of supply chains, or damage to facilities. We have conducted physical climate change risk assessments for 95 major manufacturing locations according to size and energy consumption to evaluate changes in physical climate parameters, plan resources, and manage climate risks. This baseline assessment is used to identify direct financial impacts and to pinpoint and quantify mitigation measures as part of the local management systems. We also perform local risk assessments to evaluate EHS impacts and define emergency response measures at selected locations. In addition, we are working on developing instructions to analyze levers during product design that can reduce the exposure to climate change risks.

Resources management

Resource management and circularity drive cost savings, enhance supply chain resilience, and create new revenue streams by maximizing the value of materials and reducing dependency on finite resources. In our approach, we pay particular attention to the topics of waste and water management.

Waste

Effective waste management reduces operational costs, minimizes environmental liabilities, and enhances brand reputation by promoting sustainability and regulatory compliance. The environmental relevance of waste depends upon the type of waste in question and the methods used to dispose of it. Hazardous and non-hazardous waste fractions are divided into recyclable waste and waste for disposal. Waste from construction or demolition work is reported separately, since this type of waste material arises independently from production.

We have categorized waste across all global reporting locations, and this is reflected in the environmental reporting tool for all of Siemens Energy (see chapter ↗ [Decarbonization](#)).

Waste recycling and disposal¹

(1,000 metric tons)

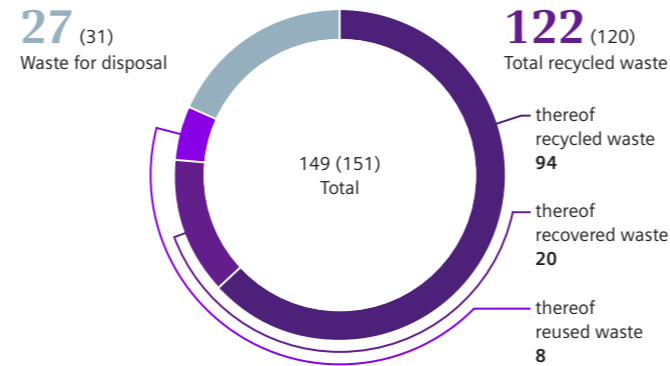


Figure for previous year in brackets.

¹ Excluding construction and other waste.

Waste recycling and disposal¹

(in 1,000 metric tons)

	Fiscal year	
	2024	2023 ¹
Waste for disposal	27	31
Total recycled waste	122	120
thereof recycled waste	94	98
thereof recovery	20	20
thereof reuse waste	8	2
Total	149	151

¹ Excluding construction and other waste.

Fiscal year 2024

Our waste intensity in fiscal year 2024 was 4.47×10^{-6} metric tons per € of revenue. The total amount of waste remained at the same level compared to the previous year and the intensity decreased by 9%.

To achieve “Zero Waste to Landfill” we have set the ambitious goal of sending no waste to landfills and recycling more than 90% of all waste by 2030, excluding waste originated from remediation and construction.

Waste	Fiscal year	
(1,000 metric tons)	2024	2023 ¹
Non-hazardous waste	122	122
Hazardous waste	17	24
Construction waste	14	6
Total	154	154
Waste intensity (metric tons/€ of revenue)	4.47×10^{-6}	4.94×10^{-6}

¹ In fiscal year 2024, the categories of Siemens Gamesa were aligned with the rest of Siemens Energy, resulting in the other waste categories being removed, which amounted to 1,850 metric tons in fiscal year 2023.

Recycling	Fiscal year	
(%)	2024	2023
Share of total recycling¹	87	82
thereof recycled	67	67
thereof reused	6	1
Share of recycled hazardous waste	46	34

¹ Excluding construction and other waste.

Water consumption

(million cubic meters)

Fiscal year 2024



2.6
Total

2.3
Fresh water use

0.5
thereof ground and surface
water for cooling

Water

Responsible water management continues to be important for Siemens Energy. We aim to carefully manage the use of fresh water in our operations as well as the impact of our projects on water resources in the surrounding areas. At Siemens Energy, water is mainly used for cooling and sanitary purposes.

Water risks are analyzed as part of the climate change risk assessment, making it easier to identify sites in high water risk areas. This supports locations in planning and implementing effective water management strategies, considering factors such as water stress, water pollution, and flooding. Our locations aim to reduce water usage, consumption, and related risks through their IMS or by means of individual mitigation plans.

Water consumption (million cubic meters)	Fiscal year	
	2024	2023
Fresh water use	2.29	2.73
thereof ground and surface water for cooling (returned to receiving water body, chemically unchanged, but warmed)	0.45	0.50
Other water	0.28	0.52
Total	2.57	3.25
Water intensity (cubic meters/€ of revenue)	7.44×10^{-5}	1.04×10^{-4}

At Siemens Energy, the volume of water abstracted over the reporting period equates to 2.57 million cubic meters (fiscal year 2023: 3.25 million cubic meters). Water intensity in fiscal year 2024 was 7.44×10^{-5} cubic meters per € of revenue. This is a decrease of 21% in absolute water consumption and 29% in water intensity compared to fiscal year 2023. One factor that influenced the decrease is the greater transparency that we have achieved by implementing our global EHS reporting tool, as well as discontinued operations at several locations.

Wastewater from our facilities and manufacturing processes amounts to 2.47 million cubic meters (fiscal year 2023: 3.27 million cubic meters). Wastewater intensity in fiscal year 2024 was 7.17×10^{-5} cubic meters per € of revenue. This is a decrease of 25% in absolute wastewater and 32% in wastewater intensity compared to fiscal year 2023.

Wastewater (million cubic meters)	Fiscal year	
	2023	2022
Wastewater from employee facilities	1.12	1.45
Wastewater from manufacturing processes	0.20	0.20
Other (incl. losses)	0.29	0.24
Conditioned cooling water discharged as wastewater	0.86	0.65
Total wastewater without chemically unchanged cooling water	1.61	2.60
Cooling water (returned to receiving water body, chemically unchanged, but warmed)	0.45	0.53
Total	2.47	3.27
Wastewater intensity (cubic meters/€ of revenue)	7.17×10^{-5}	1.05×10^{-4}

Biodiversity

Biodiversity supports ecosystem resilience, which can mitigate environmental risks and enhance long-term operational stability for energy infrastructure and our supply chains. Siemens Energy uses natural resources (such as water and fuels) at its offices, production facilities, and project sites. Local ecosystems, habitats, and species could be adversely affected by this interaction with the environment.

Therefore, the conservation of biodiversity is integrated into our environmental management systems as well as into instructions for both manufacturing locations and project sites to minimize the negative impacts of our operations.

There is also a product-related aspect to consider. We analyze and translate the requirements identified in our customers' environmental impact

assessment studies as well as in regulations and standards, incorporating them into our project-specific EHS plans and site instructions in order to manage and reduce negative impacts to a minimum.

As part of our societal engagement activities, our employees have identified many local biodiversity initiatives worth supporting. Siemens Energy employees can lend their support to projects such as tree plantings, hives for wild bees, roof greening measures, and the creation of nature pools.

Environment-related incidents

Environmental incidents resulting from our business activities, including product-related incidents, may cause damage to our natural environment and surroundings.

During fiscal year 2024, there were no significant environmental incidents related to Siemens Energy (fiscal year 2023: one).

Product stewardship



When designing and producing our products, we take quality, environmental, health, and safety criteria into account at every stage of the products' life cycle. We aim to minimize any negative environmental or social impact of our products.

- **Developing circularity potentials and concepts for our products**
- **Focusing on eco-design to optimize overall environmental impact**
- **Implementing EU Taxonomy criteria based on existing processes**

As a signatory to the UN Global Compact, our product stewardship activities aim to contribute to the achievement of the UN SDGs, especially SDG 12 "Responsible Consumption and Production," which seeks to couple economic growth and development with sustainable consumption and production patterns. Our products' design is aimed at minimizing adverse effects that may result from their production, use, or treatment at the end of their life.

Our product stewardship approach includes all environmental aspects with a strong focus on climate change mitigation, resource conservation, and efficiency – and therefore circularity. We consider all life cycle phases, including product development and design, manufacturing, operation, service, and end of life. Measures and methods include eco-design criteria for product development, life cycle assessments (LCAs), environmental product declarations (EPDs), component upgrades, and lifetime extensions, as well as recycling at the end of product life. By analyzing our products, solutions, and services according to business needs such as customer

requirements, quantifying their impacts, and determining areas for improvement, we are building the foundation for deriving and implementing measures that contribute to a circular economy.

Product stewardship at Siemens Energy follows the principles of circularity and the key standards of the ISO 14000 series, with individual approaches for each Business Area. The approaches are centrally supported by the respective global EQS functions.

Product stewardship is also an integral part of our Zero Harm Framework (see also chapter [Occupational health and safety](#)). At Siemens Energy, product stewardship is covered by the Zero Harm building blocks "Material Compliance" and "Life Cycle Assessments." The Material Compliance building block provides guidance on the management, analysis, and tracking of restricted and regulated substances in products, services, and solutions. The LCA building block defines the process for evaluating the environmental impacts of our products, systems, and materials over the entire life cycle. A detailed LCA process description is available, providing instructions to ensure a harmonized approach across the company that is in keeping with the ISO-standardized methodology. See also chapter [Circular economy](#).

Managing environmental risks

As part of our comprehensive product stewardship approach, we prioritize managing environmental risks. Our approach is based on the minimum standards set by the International Finance Corporation (IFC) for projects reflected in our EHS plans, internal EHS guidelines, specific EHS processes and checklists for product development, and other ESG criteria from external stakeholders.

Our risk management includes an ESG due diligence approach for customer projects, and we screen our products, projects, and services against a list of relevant ESG criteria. Training will be provided to increase awareness and expertise regarding these criteria.

This ESG risk management combines a due diligence and a risk mitigation process. The questionnaire used is also part of our approach to implement the requirements of the EU Taxonomy's DNSH criteria (DNSH: Do No Significant Harm). We have identified all relevant existing processes at both the corporate and Business Area or location level and completed the mapping of all requirements. In particular, our [Zero Harm Framework](#) with its underlying building blocks serves as a reference for implementing the requirements (see chapter [Responsible operations](#)).

During project execution and the delivery of products and services, we utilize available environmental impact assessments, or alternatively the global IFC EHS guidelines, to identify measures regarding environmental protection. This encompasses energy consumption, energy efficiency (including our own GHG footprint), air emissions, noise, water conservation, waste management, and hazardous materials management. Furthermore, our integrated management approach includes the identification and management of physical, chemical, and radiological hazards at our locations or project sites.

We collaborate with suppliers, contractors, customers, and other interested parties to meet product-related environmental key business requirements whenever possible. In each Business Area, customer requirements and related resource requirements are continuously assessed, and coordinators for product-related topics have been appointed. We are working on several pilot projects to further increase transparency on additional Scope 3 upstream categories, combining location-specific views and product-specific accounting to establish a solid baseline and identify further reduction potential. The supplier contract conditions have been updated and the related topics are part of ongoing exchanges with suppliers to create awareness and prepare for any additional in-depth data provisions necessary.

Circular economy

Adopting a circular economy model can help increase profitability by reducing resource dependency, cutting waste, and unlocking new market opportunities through sustainable product innovation and lifecycle extension. It is also a means of reducing GHG emissions. To this end, we need to understand the impacts of our products and solutions. We use life cycle assessments as a tool to assess measures following “R” strategies such as reduce, repair, or recycle, with the aim of increasing the circularity of our products and solutions.

In our wind power business, RecyclableBlades – the world’s first wind turbine blade that can be recycled at the end of its life cycle – are an important step toward the goal of making turbines fully recyclable by 2040. The first RecyclableBlades are operating at RWE’s German offshore windfarm Kaskasi and at Vattenfall and BASF’s offshore windfarm Hollandse Kust Zuid in the Netherlands. Agreements have been made to supply RecyclableBlades for EDF Renewables’ offshore windfarm in France as well as RWE’s offshore windfarm in the UK, the Sofia project, and the Danish project Thor, as well as a first customer project for onshore wind turbines in Finland. In addition to the existing supplier, we have qualified another resin supplier for RecyclableBlades. GreenerTower is another innovation that increases the use of recycled steel in the towers of wind turbines (see chapter [Customers and innovation](#)).

We continued identifying circularity potentials with our research collaboration on the Circular Energy Transition funded by the German Federal Ministry of Economic Affairs and Climate Action, which included a doctoral thesis on the identification of circularity potentials based on Life Cycle Assessments, as well as several conferences at which we presented and discussed our findings.

Life cycle assessments and environmental product declarations

We have adopted a sustainable management approach by conducting life cycle assessments (LCAs) and publishing environmental product declarations (EPDs). The LCA and EPD approach is managed globally by the EQS Function and is closely linked to organizational teams dealing with product-related environmental protection. We have developed and published our internal LCA instructions to further standardize and align our approach and respond to customer requests. LCA-related background information, like an overview of standards and links to tools and tutorials, is available on a dedicated LCA and circular economy intranet site.

The results from LCAs are used to

- identify opportunities to improve environmental performance in all life cycle stages, from the design of the product to its end of life – for example, improving material selection and resource consumption, optimizing manufacturing processes, and considering further circular economy aspects throughout all life cycle stages of a product; and
- communicate environmental performance and improvement potential to internal and external stakeholders.

To increase transparency on the environmental performance of our products and facilitate dialogue with our customers and stakeholders, Siemens Energy uses EPDs that are based on ISO 14021 for Type II product declarations and labels that address environmentally relevant information for customers, mainly based on full-scale LCAs. When requested, we verify our LCAs externally.

We continuously review our LCAs and EPDs. The table below provides a summary of the number of LCAs (full-scale and screening) and EPDs. The number of LCAs increased in fiscal year 2024 because all Business Areas continuously work to cover more of their products with LCAs as customer requests increase.

LCAs and EPDs	Fiscal year	
	2024	2023
LCAs (no.) ¹	363	346
Portfolio coverage by full-scale LCAs (%) ²	75	73
EPDs (no.)	263	251

¹ Full-scale LCAs adopt a comprehensive approach, covering the environmental impacts over the entire lifecycle.

² The share of full-scale LCAs is calculated based on the business segment structure. One business segment is considered to be one portfolio element. All portfolio elements containing material products have been determined to be relevant for this performance indicator. If full-scale LCAs are available for products of a portfolio element, this portfolio element is considered to be covered. The share represents the percentage of covered portfolio elements relative to the total number of relevant portfolio elements.

To make our LCA knowledge tangible for internal and external stakeholders, we use our LCA-based Siemens Energy EcoTransparency application, which allows us to visualize the environmental impact of our products and solutions throughout the entire life cycle. By identifying hotspots in the life cycle and comparing developed improvement scenarios, we can highlight improvements and therefore respond to customer requests. Our sales team uses the application to help our customers understand the environmental footprint of the products they order and make decisions accordingly. At the same time, our product designers use it to integrate circularity into our products by identifying areas for improvement. New features added over the last year include a circularity function that highlights suitable circular economy measures in the life cycle of the product.

Eco-design

To enhance the circularity of our products from the outset and ensure compliance with environmental regulations, we place a particular emphasis on comprehensive eco-design concepts. Our eco-design approach serves several purposes including EU Taxonomy requirements. Therefore, our approach has been aligned with the structure of the EU Taxonomy's DNSH criteria. The eco-design decisions we make today need to consider future legal and EHS requirements as well as the implications of resource scarcity.

The Business Areas prioritize the review and analysis of our products, based on customer and market requirements. The EcoDesign instructions have been finalized and pilot projects for the EcoDesign questionnaire are underway. The results of the detailed eco-design evaluation will be incorporated into the product lifecycle management (PLM) process and considered during the product development and improvement stages.

Material compliance

A large variety of materials and substances are used in our products, manufacturing, and services. Only a few are subject to closer scrutiny (e.g., chromium, lead, PFAS, etc.). The nature and quantity of substances and materials used in products are becoming increasingly relevant, especially if parts of the product or materials are being reused or recycled. Furthermore, the European Commission has published a list of critical raw materials that is subject to regular review and updates. Materials and substances transparency is one of the key enablers for a circular economy, as are the upcoming EU initiatives for sustainable product design and the digital product passport (DPP), among others. We have begun to integrate all these requirements into our processes.

We aim to comply with all legal requirements, such as REACH (Registration, Evaluation, Authorization and Restriction of Chemicals), RoHS (Restriction of Hazardous Substances), our SAP systems, and similar international requirements. Siemens Energy uses globally standardized materials and substance registers for restricted and declarable substances and products. The updated ECHA list identifies any substances that need to be declared for each product (ECHA = European Chemicals Agency). As part of the Siemens Energy supplier assessment and qualification process, suppliers are required to identify whether any of their products or components contain substances that need to be declared according to the specific legislation. Suppliers then need to provide a detailed declaration should any such substances be used within their design and manufacturing activities.

We encourage our suppliers to use the industry substance management platform BOMCheck to share declarations for Substances of Very High

Concern (SVHCs) and link this information to our IT systems. In this way, we can actively manage risks related to substance restrictions. The implementation of the Substances of Concern in Products (SCIP) reporting requirement, a database established under the EU's Waste Framework Directive that registers products containing SVHCs, has been set up in a Sharepoint for data collection.

Furthermore, all our Business Areas have developed a cross-functional material compliance approach in cooperation with the Procurement department, and implementation is ongoing. We achieved increased transparency regarding substances in our products during supplier qualification. The approach focuses on full bill-of-materials (BOM) data provision with substance management. The coverage of the value chain has progressed. We have begun modelling the new data structure in our new SAP system to cover more material compliance aspects and improve information regarding product compliance. For recent projects, we have evaluated BOMs for compliance with REACH Lists of Declarable Substances and compiled BOM-based declaration information for our internal partners. We have started reviewing the material data landscape for the new SAP platform to also support substance management compliance in engineering. For projects, any declaration of substances, e.g., regarding SVHCs, is available as required.

Transparency on materials and substances across our product portfolio is key to a sustainable energy supply and to making informed decisions about material selection and related impacts. Furthermore, the industry is currently facing the challenge of providing more detailed reporting on GHG emissions from materials (as part of the eco-design approach) to meet the requirements of the EU Green Deal.

Product safety

Product safety encompasses the safety of all products, solutions, and services manufactured, provided, and/or sold by Siemens Energy. These products, solutions, and services are developed according to the latest technical knowledge and comply with applicable legal requirements to ensure that they do not pose an unacceptable risk to life, health, property, or the environment. Product safety is a fundamental and indispensable principle at Siemens Energy. Our product safety strategy includes a framework with key processes, which are published in our internal Process House (e.g., Risk Assessment or Product Safety Issue (PSI) Handling). The framework is complemented by rules and regulations and an organizational set-up with clearly defined roles and responsibilities, principles for awareness, skills, and know-how.

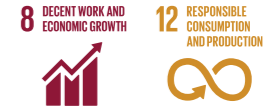
The Siemens Energy product safety approach focuses on both the technical and organizational aspects of product safety. Its effectiveness undergoes continuous evaluation and improvement. In fiscal year 2024, improvement

measures included the introduction of product safety issue handling and risk assessment procedures at the corporate level as well as continued product safety awareness training (approximately 4,600 colleagues had participated in this training by the end of the fiscal year). Numerous workshops have been held to analyze our strengths and weaknesses and collaborate to better serve our customers, both internal and external.

During fiscal year 2024, two significant product safety incidents were reported.

One incident was related to safety issues in the design of service lifts in some Siemens Gamesa wind turbine types. The issue is being addressed in accordance with our TE function through the implementation of design changes and retrofits. The other is still under investigation, after the explosion of gas dryer equipment in September 2024. We sent a warning to all customers with this equipment and will consider lessons learned for design and development.

Sustainable supply chain management



Responsible sourcing requires sound supply chain management with sustainability in mind. We work in partnership with our global suppliers to meet international standards for responsible supply chains.

- **Integrating sustainability considerations can make supply chains more resilient and reliable**
- **Risk awareness and strategic measures are cornerstones of our supplier management**
- **Systematic audits foster compliance with increasing international regulations**

The sustainability of our operations depends not only on us, but also on our approximately 30,000 suppliers in 139 countries around the world. Negative impacts in our supply chain, whether environmental or social, can quickly reflect back on us, affecting our operations, reputation, and ultimately our financial performance. With a procurement volume of €23.5 billion in fiscal year 2024 (fiscal year 2023: €23.5 billion), it is crucial that we manage our supply chain in a sustainable, transparent, and responsible way to make it more resilient. For these reasons, responsible sourcing is one of the material topics in our sustainability approach. Our goal is to achieve the sustainable implementation of our principles of our Code of Conduct through strong relationships with suppliers who share our values and are equally committed to the protection of human rights, fair labor practices, anti-corruption measures, and the environment.

By embedding sustainability criteria in the selection, qualification, assessment, and development of our suppliers, we also contribute to the UN SDGs. We see our biggest impact in SDG 8 “Decent Work and Economic Growth” and SDG 12 “Responsible Consumption and Production.”

To contribute to these SDGs, we carefully consider labor conditions throughout the upstream production process and closely monitor the impact of our activities. We have also launched a global supplier decarbonization program to further increase transparency on carbon emissions in our supply chain (see chapter 2 **Decarbonization**), and to address climate change mitigation within our supply chain. This, in turn, addresses SDG 13 “Climate Action.”

While it is evident that climate change will have a major impact on global supply chains, it is vital to be prepared for other risks. For example, the combination of several impacts – including geopolitics and macroeconomics (e.g., the conflicts in the Middle East and between Russia and Ukraine, the sanctions on Russia, or the trade war between the USA and China) as well as capacities and logistics – continues to pose a risk of supply chain disruptions, capacity bottlenecks, extended delivery times, and

unavailability of materials. Siemens Energy Procurement has been working together with operations and our project teams to mitigate the effects and safeguard customer commitments. By establishing a systematic supply chain resilience and crisis management procedure, we have been able to detect risks early on, prepare preventive action, and define mitigation measures to reduce risk exposures.

An important factor in our risk management is the relationship with our suppliers. We therefore have processes and policies in place that aim to ensure that suppliers meet specific ESG requirements. Therefore, in fiscal year 2024, we implemented a global ESG dashboard with Key Performance and Benefit Indicators that enable us to set targets and monitor their achievement.

Binding Code of Conduct for Suppliers

All suppliers and third-party intermediaries of Siemens Energy must sign the Code of Conduct (CoC) for Suppliers and Third-Party Intermediaries. The CoC is based on the Business Conduct Guidelines (BCG) and Principles of the UN Global Compact (UNGC). The CoC requires specific environmental, compliance, and labor standards to be established across all countries of operations. It includes all aspects of the German Supply Chain Due Diligence Act and covers the following topics:

- **Human rights:**
 - › Prohibition of forced labor
 - › Prohibition of child labor
 - › Non-discrimination and respect in employment
 - › Freedom of association and collective bargaining
 - › Working hours & wages for employees
 - › Life, health, and safety of employees
 - › Impact on communities
 - › Security forces
- **Environmental and climate protection, protection of natural resources**
- **Fair operating practices:**
 - › Anti-corruption and bribery
 - › Fair competition, antitrust laws, and intellectual property rights
 - › Conflicts of interest
 - › Anti-money laundering, terrorist financing
 - › Data privacy and cybersecurity
 - › Foreign trade regulations
- **Responsible minerals sourcing**
- **Grievance mechanism**
- **Compliance with the CoC principles in the supply chain of the supplier**

Comprehensive supplier management

Siemens Energy’s supply chain management approach defines strategic procurement processes to sustain the company’s long-term success. They are overseen by the Head of Procurement, who reports to the Executive Board. The approach includes purchasing materials and services cost-effectively, ensuring high quality standards, and identifying and exploiting opportunities to create value by fostering compliance and sustainability along the entire supply chain.

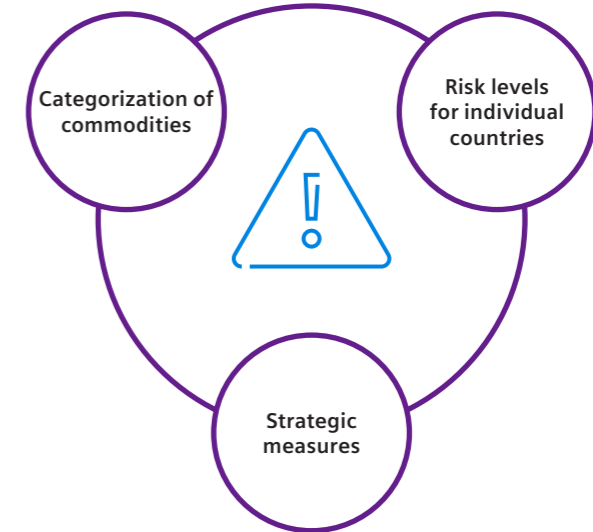
The supplier management process includes a comprehensive set of processes and tools to provide transparency and awareness regarding expenses, supplier data, and related risks and opportunities. It helps managers leverage the potential of our supplier network. The Siemens Energy procurement process includes criteria such as financial stability, quality, and availability, as well as sustainability criteria such as contractor safety, substance declarations, and sustainability and cybersecurity self-assessments. As part of Siemens Energy’s overall approach to decarbonize its operations throughout the value chain, we actively encourage our suppliers to reduce their own carbon emissions as well (for more information, see chapter [Decarbonization](#)).

Risk awareness

Using our sustainability risk analysis system, we systematically identify potential risks in our supply chain every year. The cornerstones of this system are:

- Identification of risks and categorization by commodities related to certain industries
- Establishment of risk levels for individual countries (determined using sustainability indicators for key areas such as collective bargaining, worker safety, human rights in the workplace, etc.), making use of information supplied by internationally recognized organizations
- Suppliers with large procurement volumes

Cornerstones of our risk analysis system



To strengthen Siemens Energy’s supplier sustainability risk management system, we calculate the risks of our suppliers and their scope of supply by considering all risk categories that are addressed by the German Supply Chain Due Diligence Act. This risk indication is not limited to country risks, but also includes commodity-specific risks. It additionally supports buyers through the prioritization and nomination of high-risk suppliers for conducting external sustainability audits.

Supplier sustainability risk score



Supplier assessment

We use sustainability self-assessments (SSAs), covering major aspects of the CoC, as part of the supplier qualification process that is regularly reviewed and updated as necessary to reflect new standards and regulations. Potential new suppliers undergo a qualification process, while existing suppliers are re-evaluated every three years.

As for most countries the Agora Project was finalized in fiscal year 2023 the number of new SSAs decreased by 37% to 4,300 in fiscal year 2024.

Part of the Agora Project is the migration of Siemens Gamesa legacy vendors to Ariba where the SSA must be completed during the onboarding. Therefore, until the end of the Agora project the SSA completion in Ariba was conducted for the respective Siemens Gamesa legacy vendors in addition to new vendors during their onboarding. Whereas in fiscal year 2024 it was only conducted for new vendors.

Furthermore, we conduct quality audits that include questions about sustainability, covering major aspects and requirements of the CoC. In fiscal year 2024, we conducted 546 on-site audits worldwide, compared to 740 supplier quality audits in fiscal year 2023.

We see external sustainability audits (ESAs) as the most effective means of reviewing our suppliers' sustainability performance. Focusing on quality and objectivity, external audit partners conduct the ESAs. We assign repeat or follow-up audits if necessary. In fiscal year 2024, Siemens Energy conducted 152 ESAs. This number decreased from 194 audits in fiscal year 2023, while we accepted 754 ESAs and equivalent assessments of suppliers that were conducted by other companies and that confirm the supplier's management system. We only accept assessments that fulfill our requirements and where the full audit documentation is provided to us.

To monitor overall performance, we have implemented a new performance indicator that indicates the coverage rate of our total sustainability risk score in the supply chain, which we evaluate for every supplier in our supplier base. As a risk-based approach, our mid-term goal is to cover 80% of our total sustainability risk score within five years. For this fiscal year, we aimed to cover 40% of our total sustainability risk score and achieved a coverage rate of 44.5%.

Throughout the supplier assessment processes, we remain committed to the partnership with our suppliers and to helping them improve. However, if problems persist and/or the suppliers do not show a willingness to take necessary corrective action, we remove them from our list of approved suppliers. All local instances of blocked suppliers are reported to Corporate Procurement, which discusses and decides on the need for a worldwide block. In fiscal year 2024, no supplier was dismissed, since all suppliers with negative results are collaborating and implementing corrective actions.

In addition to the processes described above, we have a Central Warning Message system in place. This facilitates a fast, efficient response to violations of the CoC requirements. The responsible procurement departments at Siemens Energy are authorized to agree on a series of remedial steps with the supplier. Potential misconduct can be reported via the whistleblower hotlines "Speak Up" at Siemens Energy (excluding Siemens Gamesa) and the "Integrity Hotline" at Siemens Gamesa (for more information, see the chapter [Compliance and integrity](#)). To inform Siemens Energy employees and suppliers, a global training campaign has been initiated.

Supplier quality audits with integrated sustainability questions	Fiscal year	
	2024	2023
Number		
Europe, C.I.S. ¹ , Africa, Middle East	232	334
Americas	168	266
Asia, Australia	146	140
Total	546	740

¹ Commonwealth of Independent States.

Sustainability self-assessments (SSAs) ¹	Fiscal year	
	2024	2023
Number		
Europe, C.I.S. ² , Africa, Middle East	2,288	3,604
Americas	1,047	1,442
Asia, Australia	965	1,773
Total	4,300	6,819
Improvement measures³ agreed upon		
Legal compliance/prohibition of corruption and bribery	1,066	1,407
Respect for the basic human rights of employees	221	667
Prohibition of child labor	0	0
Health and safety of employees	1,105	1,393
Environmental protection	1,526	1,940
Supply chain	364	1,110
Responsible minerals sourcing	140	161
Total	4,422	6,678

¹ Siemens Energy (excluding Siemens Gamesa): To be conducted by all newly onboarded suppliers with a purchasing volume > €10,000 p.a.; Siemens Gamesa: To be conducted mainly by suppliers from non-OECD countries (referred to as high-risk suppliers). Questionnaires initiated and completed in the year under review.

² Commonwealth of Independent States.

³ Improvement measures agreed with suppliers relate either to actual deviations from the Code of Conduct for Suppliers and Third-Party Intermediaries or to structural improvements to management systems and a lack of specific processes and guidelines at the supplier.

External sustainability audits (ESAs)	Fiscal year	
	2024	2023
Number		
Europe, C.I.S. ¹ , Africa, Middle East	73	77
Americas	16	21
Asia, Australia	63	96
Total	152	194
Improvement measures² agreed upon		
Legal compliance/prohibition of corruption and bribery	548	941
Prohibition of forced labor	20	33
Prohibition of child labor	26	23
Health and safety of employees	704	811
Environmental regulation	42	39
Supply chain	97	97
Unfair remuneration	450	529
Collective bargaining	21	9
Discrimination	37	26
Land rights	0	0
Harmful pollution	41	10
Security forces	0	0
Total	1,986	2,518
Accepted ESAs and equivalent assessments	754	71

¹ Commonwealth of Independent States.

² Improvement measures agreed with suppliers relate either to actual deviations from the Code of Conduct for Suppliers and Third-Party Intermediaries or to structural improvements to management systems and the lack of specific processes and guidelines at the supplier.

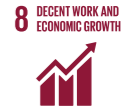
Responsible minerals sourcing

We are committed to preventing the use of minerals from conflict-affected and high-risk areas in the supply chain, in accordance with the risks defined in Annex 2 of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. To this end, we have adopted a Responsible Minerals Sourcing Policy to provide a consistent, company-wide standard for supply chain management. To determine the use, source, and origin of these minerals in our supply chains, we investigate the smelters involved. Siemens Energy is part of the steering committee of the Responsible Minerals Initiative (RMI), which provides an assessment program for smelters, the Responsible Minerals Assurance Process.

When surveying our approximately 1,300 (fiscal year 2023: 1,400) relevant suppliers, we use the RMI's Conflict Minerals Reporting Template to obtain information on smelters producing tin, tantalum, tungsten, and gold (3TG). We are involved in the Responsible Minerals Assurance Process by screening smelters for eligibility and encouraging uncertified smelters to take part in the RMI's assessment programs. All newly reported smelters are shared with the RMI.

Based on risk sources identified by the EU, which cover armed conflicts, weak governance, and human rights abuses, Siemens Energy also conducts a specific mineral risk assessment to identify other relevant minerals apart from 3TG. Following cobalt, copper, rare earths, and mica, we added lithium, nickel, graphite, and iron ore to our supply chain due diligence processes according to the 5-step framework of the OECD Due Diligence Guidance. In addition to our RMI membership and strategic collaboration with the European Partnership for Responsible Minerals, where we chair the governance board, we are involved in Copper Mark, an assurance framework promoting the responsible production of copper.

Human rights



Upholding human rights in our own operations and business relationships is a fundamental responsibility for us as a global company.

- Compliance with international conventions and principles
- Human rights anchored in our Business Conduct Guidelines, Respect for Human Rights and Environmental Protection Policy Statement, and Code of Conduct
- Human rights due diligence mitigates risks along value chain

As a globally operating company, we are aware of the impact our business has on people around the world, especially from our large-scale energy projects. We are dedicated to responsible business conduct and committed to ensuring respect for human rights within our spheres of influence. Identifying and managing our human rights impacts and mitigating risks along our entire value chain is therefore imperative.

Our actions go beyond compliance with applicable laws and regulations, since they are based on our commitment to the following conventions and principles:

- **International Bill of Human Rights**, consisting of:
 - › Universal Declaration of Human Rights
 - › International Covenant on Civil and Political Rights
 - › International Covenant on Economic, Social, and Cultural Rights
- **European Convention on Human Rights**
- **ILO (International Labour Organization) Tripartite Declaration of Principles** concerning Multinational Enterprises and Social Policy
- **ILO Declaration on Fundamental Principles and Rights at Work** (in particular on the following topics: elimination of child labor, abolition of forced labor, prohibition of discrimination, freedom of association, the right to collective bargaining, and fundamental freedoms)
- **UN Sustainable Development Goals**, specifically SDG 8 “Decent Work and Economic Growth,” which we have defined as one of our priority SDGs
- **United Nations Guiding Principles on Business and Human Rights (UNGPs)**
- **OECD Guidelines for Multinational Enterprises**
- **Principles of the United Nations Global Compact (UNGC)**, to which we are a signatory
- **Global Framework Agreement (GFA)** on fundamental rights of workers

Identified human rights risk areas

Our risk analysis has identified the following human rights risk areas for our own business operations as well as our suppliers. The results of the risk analysis flow into our corporate decision-making processes and help us identify appropriate preventive measures.



Anchoring our commitment

Our commitment to respecting human rights is anchored in the Siemens Energy and Siemens Gamesa Business Conduct Guidelines (BCG). Both BCGs are binding for all executives and employees worldwide. To enforce the BCG commitment, employees are trained in the respective requirements of the BCGs and are requested to acknowledge them as part of their conditions for employment (see [☞ Compliance training program](#)).

Our Group Compliance Officer, who is also the Human Rights Officer, monitors human rights compliance and reports to the Executive Board at quarterly Compliance Review Board meetings and on an ad hoc basis.

The Siemens Energy Policy Statement on Respect for Human Rights and Environmental Protection is published on the global Siemens Energy website. It has been communicated to our employees, thus further raising awareness for human rights.

Dimensions of human rights



We maintain regular exchanges with networks such as econsense, a German sustainability network of internationally operating companies, especially regarding new legal developments such as the European Corporate Sustainability Due Diligence Directive (CSDDD).

Respect for human rights in employee relations

We are committed to human rights in our employee relations. For more information, see chapter [☞ Working at Siemens Energy – Thriving environment through inclusion and diversity](#), and for safe and healthy working conditions, see chapter [☞ Occupational health and safety](#).

Respect for human rights in the supply chain and in business partner relations

Our business partners are required to comply with the Siemens Energy CoC for Suppliers and Third-Party Intermediaries, which is based on the principles of the UNGC and the ILO but contains more requirements, such as those related to security forces, fair competition, conflicts of interest, anti-money laundering, data privacy and cybersecurity, foreign trade regulations, and responsible minerals sourcing. The CoC places particular emphasis on respect for the basic human rights of employees, including fair remuneration, freedom of association, health and safety standards, and the prohibition of discrimination, forced labor, and child labor, as well as the impact on communities, security forces, and protection of natural resources. To support our suppliers, we continue to provide training on sustainability in the supply chain.

In line with our implemented sustainability risk management system, we systematically identify potential human rights risks in our supply chain and conduct supplier assessments. For more information, see chapter [☞ Sustainable supply chain management](#).

Human rights due diligence in customer projects

We have a dedicated team that conducts human rights due diligence on customer projects. This is mandatory in the sales phase for projects that meet defined risk criteria, and the process conforms to the UNGPs. Here, we rely on external ESG databases focusing on country-, customer-, and project-related risks. The results of the due diligence process, including recommendations for mitigation measures, guide the project’s decision-making. We are continuously striving to improve our due diligence process, and have expanded our compliance tool (COSON) to conduct and document tool-based human rights due diligence.

Transparency and human rights-related query channels

We are aware that some of our business activities take place in difficult business environments and are a controversial topic of discussion among our stakeholders. We conduct ad hoc risk analyses if there is an alleged violation or if there is a notable change in the risk landscape of the supply chain. Any results of these ad hoc risk analyses will be reported annually to the German Federal Office of Economic Affairs (BAFA) as of January 2024. The report to BAFA for the 2023 fiscal year was published in January 2024 on the global [↗ Siemens Energy website](#). Any violations of human rights within our areas of influence can be reported via our grievance mechanisms, including communication channels such as our “Speak Up” reporting system and ombudsperson. Please see the chapter [☞ Compliance and integrity](#) for more information. Our rules of procedure for the handling of complaints via our grievance mechanism are available on [↗ Siemens Energy’s global website](#).



Compliance and integrity

We are committed to ensuring that our actions are consistent with our values. Compliance is a company-wide responsibility that starts with a clear tone from the top of the organization and is based on integrity and robust risk management systems.

- **Our motto: 100% Energy, 100% Compliance**
- **Strong ethical culture supported by digital tools, awareness activities, and ongoing communication**
- **Zero-tolerance approach toward compliance violations**

Given the scale of our global operations with customers from a wide range of industries in the private and public sectors, we are confronted with complex regulatory requirements coupled with increasing stakeholder expectations regarding integrity and risk management. In this context, we are committed to a strong culture of ethics and compliance. We pursue a zero-tolerance approach toward corruption, unfair competition, and other breaches of law. When such instances occur, we take immediate action.

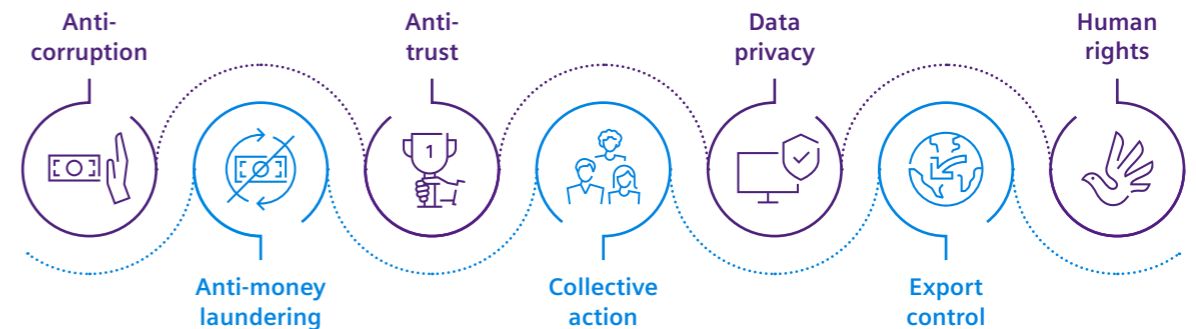
We support international organizations that strengthen responsible business practices, including the United Nations Convention against Corruption and the Anti-Bribery Convention of the OECD. Moreover, we contribute to the achievement of SDG 16 “Peace, Justice and Strong Institutions,” which calls on companies to reduce bribery and corruption in all forms. This in turn promotes fair competition – which benefits innovation-driven companies like Siemens Energy. Anti-corruption measures combined with

strong compliance systems protect companies as well as their employees and shareholders from the risk of possible misconduct. Countries also benefit from stopping corruption, since corruption impedes economic growth and hampers sustainable societal development.

For Siemens Energy, compliance means more than adhering to laws and the internal regulations detailed in our Business Conduct Guidelines (BCG).

Compliance is the foundation for our decisions and activities. Our motto is: 100% Energy, 100% Compliance. This applies worldwide and at all levels of the organization. Consequently, compliance is a top management priority. The Legal and Compliance department reports directly to our CEO. Moreover, our Group Compliance Officer reports on Siemens Energy compliance matters to the Executive and Supervisory Boards on a quarterly and ad hoc basis.

Compliance focus areas

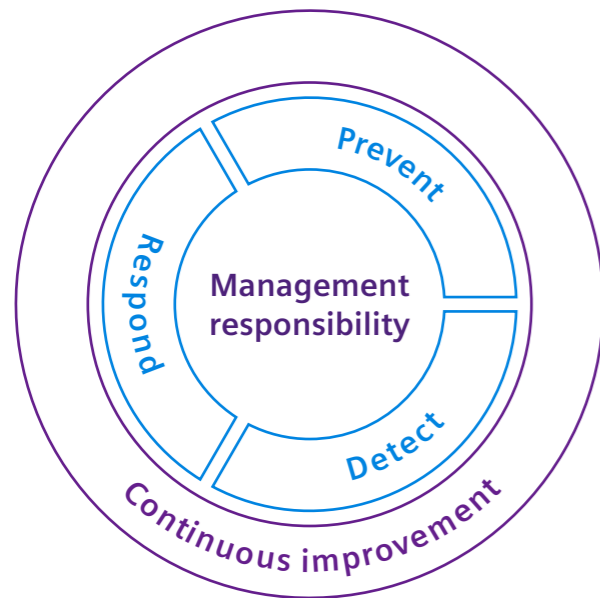


The compliance system is essential for a company-wide zero-tolerance approach

Our zero-tolerance approach requires a robust compliance system of measures to ensure that business is carried out in accordance with the law and our internal rules. The Siemens Energy-wide compliance approach is based on three levels of action: prevent, detect, respond. It is rooted in management responsibility and consists of several focus areas. These are expanded upon in our BCG.

Siemens Gamesa is fully integrated into the compliance system of Siemens Energy, and its BCG comply with Siemens Energy’s standards. Since June

Our compliance system: Management responsibility is the focus



2024, the Siemens Energy Compliance Handbook has superseded that of Siemens Gamesa. The Siemens Energy compliance system therefore also applies to Siemens Gamesa, with a few minor exceptions.

Preventive measures include the Siemens Energy training program, whistleblower and reporting channels such as the “Speak Up” reporting system or the ombudsperson, our compliance risk management system, and the respective BCG.

The BCG for Siemens Energy outline our internal regulations. They express our values, compliance-related responsibilities, and behavioral framework for all managers, employees, and Executive Board members worldwide.

Internal investigations, including regular and ad-hoc audits, are essential for detecting and clarifying misconduct. Misconduct is met with a clear response and immediate consequences.

Moreover, we continuously refine our compliance system to mitigate challenges and risks arising from changing market conditions and our business activities.

Holistic implementation of the compliance system

Our compliance system combines central governance with the work of qualified compliance officers who aim to ensure its worldwide implementation.

The entire management team is required to commit to compliance. We strive to make our business decisions and activities in accordance with the relevant legal requirements and follow our values in alignment with our company policies.

We expect the same commitment from all our employees and conduct regular surveys on integrity to obtain their feedback. For example, compliance and integrity issues were again part of our global employee engagement survey this year.

Compliance training program

Our global compliance training program targets all managers and employees in positions with a specific risk profile. Those selected are required to complete mandatory compliance training.

Compliance training ¹	Fiscal year	
	2024	2023
Training on Business Conduct Guidelines		
Number of targeted employees completing the module	77,407	72,807
Percentage of targeted employees completing the module	96	95
Training on antitrust²		
Number of targeted employees completing the module	57,041	52,406
Percentage of targeted employees completing the module	96	95
Training on export control		
Number of targeted employees completing the module	77,067	72,044
Percentage of targeted employees completing the module	95	94
Training on data privacy		
Number of targeted employees completing the module	77,213	72,203
Percentage of targeted employees completing the module	96	94

¹ Siemens Energy addresses the same overarching topics, but the detailed content may vary. Figures contain employees who were trained in the respective modules, incl. prior years.

² Excluding Siemens Gamesa.

We maintain ongoing compliance awareness through various means. This included a refresher course on our BCG training, and a virtual instructor-led training on the risk of diversion for a specific target group during the reporting period. Dedicated compliance and integrity topics are communicated across the Group through continuous messaging on corporate social media (e.g., Viva Engage) and through integrity dialogue events, which provide a forum for managers to discuss current compliance issues with their teams.

Compliance risk management

Reliable compliance risk analysis is key to the success of our business. By identifying risks early, we make informed decisions on how best to avoid or mitigate them. We design and integrate bottom-up and top-down processes as well as tools to identify potential risk scenarios and take rapid and consistent action.

An annual assessment of compliance risks was again carried out in fiscal year 2024. We addressed identified risks through local and central measures and monitored them in dedicated workshops and IT tools. Compliance risk management is an integral part of the quarterly company-wide ERM that creates further transparency throughout the entire risk environment.

Collaboration with business partners

Siemens Energy can be held liable for the illegal actions of our business partners. As a result, Siemens Energy diligently reviews, selects, and carefully monitors business partners throughout their life cycle. We oblige our business partners to adhere to our Code of Conduct (CoC). The CoC is based on the Ten Principles of the United Nations Global Compact (UNGC) and is mandatory for all Siemens Energy business partners. It covers legal compliance in general as well as our anti-corruption policies,

including provisions against anti-competitive practices and conflicts of interest. Our approach is based on transparency and risk mitigation. The underlying principles and procedures are defined in our BCG.

Our compulsory company-wide Business Partner Compliance Tool supports the implementation of the process. Moreover, it ensures the documentation of relevant information and actions. We continuously enhance our business partner due diligence process by systematically reviewing complex data sets, using dashboards, and harnessing analytics to improve risk management.

Channels for reporting misconduct

We offer all employees and external third parties various confidential channels for reporting potential violations. This helps identify and eliminate misconduct. It also protects whistleblowers and the company from damage that may result. Such channels include:

- Managers
- Group Compliance Officer
- Compliance department and Legal department
- Human Resources department
- “Speak Up” whistleblower channel and Integrity Hotline
- Ombudsperson
- Employee representatives

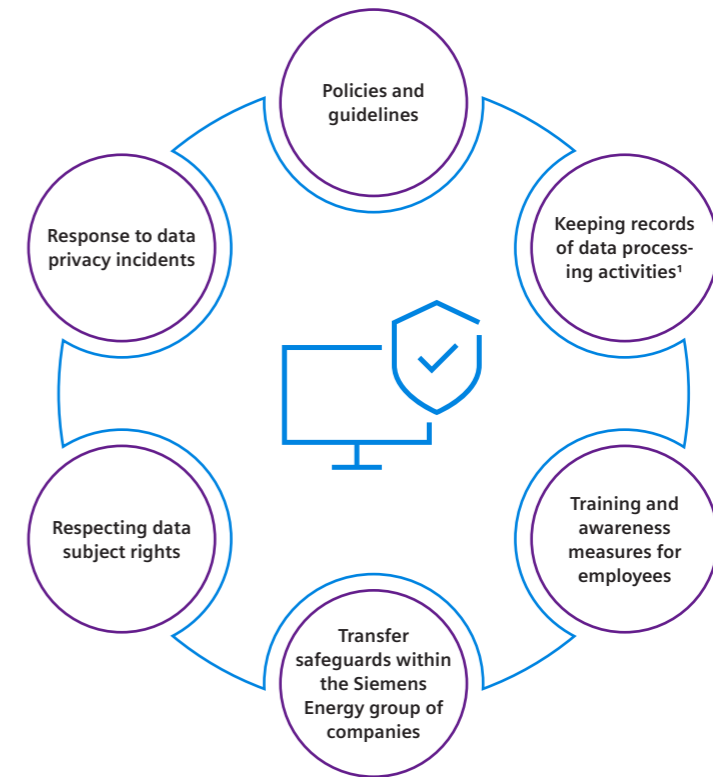
Information on possible violations can be given confidentially and anonymously. We do not tolerate retaliation against complainants or whistleblowers, and any attempt at retaliation will be treated as a compliance violation. The same principles apply to any reports of wrongdoing brought forward by third parties.

Our Compliance department investigates relevant reports and takes appropriate action in accordance with formal company-wide processes.

Data privacy

The protection of personal data plays an important role in our digitized world. We aim to handle it carefully and responsibly, respecting the privacy of the individual. Personal data is processed confidentially and only for legitimate, predetermined purposes.

Data privacy management system



¹ Documentation of the purpose, risk, and security safeguards for processing activities within the group.

To comply with data protection laws, including the General Data Protection Regulation, we have implemented the Siemens Energy data privacy management system. This system aims to ensure the protection of our customers', business partners', and employees' personal data. We predominantly operate in a B2B environment where our customers are not end consumers. Nevertheless, we process business-related personal data, such as customers' and partners' employee data (e.g., business contact information).

We are not aware of any substantiated complaints made in this reporting period relating to the protection of customer data.

Compliance indicators	Fiscal year	
	2024	2023
Compliance cases ¹ reported	147	126
Disciplinary sanctions ²	104	75
thereof warnings	30	41
thereof dismissals	67	28
thereof other ³	7	6

¹ Compliance cases include, but are not limited to, cases related to our focus areas of anti-corruption, anti-money laundering, antitrust, data privacy, export control, and human rights.

² Numbers for disciplinary sanctions in a fiscal year do not necessarily correspond to cases reported during that period: sanctions are frequently not implemented in the same year in which the case was reported or the investigation – which follows a defined process – was completed. In addition, a single case may result in multiple sanctions, or none at all.

³ Includes loss of variable and discretionary compensation components, transfer, and suspension, but not the revocation of signatory rights.

Key compliance indicators

We respond to any alleged violation of external or internal rules in accordance with established company-wide processes. If a violation is proven, we take appropriate disciplinary action. Once we have completed a compliance investigation and identified a compliance violation, our internal processes provide guidance to ensure we take appropriate action with those involved. We also evaluate and determine appropriate consequences through disciplinary processes and systematically monitor their implementation.

Our internal reviews as part of our compliance risk management, including the findings of compliance investigations and audits performed by our internal audit function together with the evaluation of case statistics, indicate that our compliance system is well designed and effectively implemented. Based on the nature of our businesses, the environments in which we operate, and the wide range of different geographical regions, we do not regard the number of incidents as unusual.

To date, apart from a single legacy matter with respect to Siemens Energy, Inc. mentioned in the chapter 3.6 Notes to the Consolidated Financial Statements, Note 18 Legal proceedings of Siemens Energy Annual Report 2024, there have been no significant issues of non-compliance that have resulted in material monetary fines or non-monetary sanctions like the withdrawal of trading licenses or licenses to operate in highly regulated industries.

With regard to the process for identifying significant issues of non-compliance and further information on non-compliance matters, please refer to chapter 2.8 Report on the internal control and risk management system and material risks and opportunities, as well as chapter 3.6 Notes to the Consolidated Financial Statements, Note 18 Legal proceedings, both part of the Siemens Energy Annual Report 2024.

Achievements

Siemens Energy made progress in the year under review. Achievements included

- expanding our compliance tool (COSON) to include third-party risk assessment covering anti-money laundering, business partner and human rights due diligences, as well as case management; and
- celebrating an Integrity Week across Siemens Energy to raise awareness of compliance and integrity.

We remain committed to harnessing the potential of digitalization to achieve additional efficiency and to further strengthen our compliance monitoring system.

We will continue to tailor our compliance system to the unique risks and opportunities of our business and the organizational structure of Siemens Energy in general.

Working at Siemens Energy



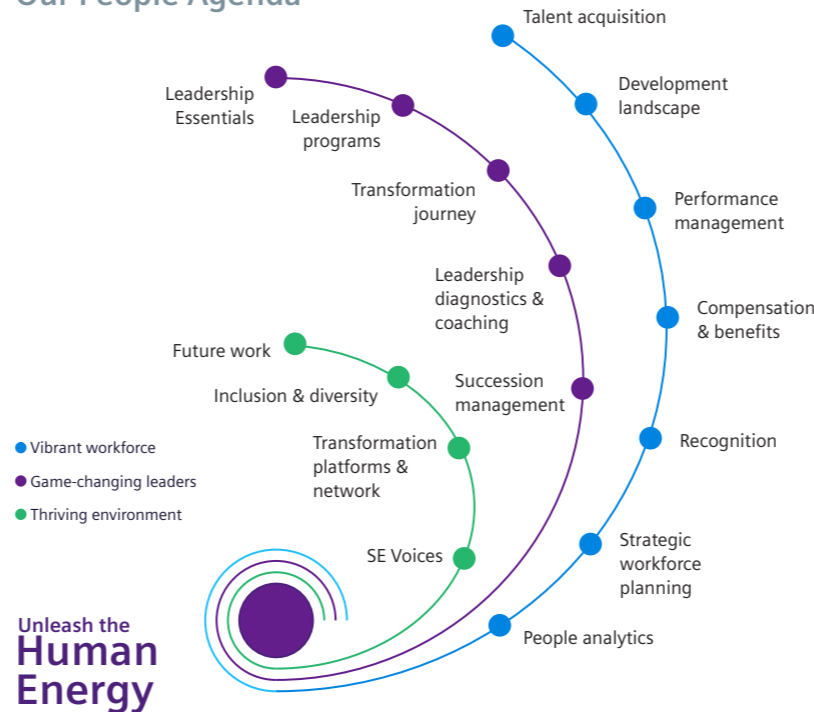
With our People Agenda and our corporate culture as a foundation, we aim to be the differentiator in the market for our customers, investors, suppliers, partners, employees, and society.

- We act along a clearly defined strategy, our People Agenda, which is aligned with our company strategy, values, and behaviors
- We strive to be the employer of choice in the energy industry, attracting, developing, and retaining a future-ready workforce
- We focus on creating diverse, inclusive, and welcoming workplaces where people can unleash their full potential

Through our human resources (HR) activities, Siemens Energy contributes directly to SDG 4 “Quality Education,” SDG 5 “Gender Equality,” SDG 8 “Decent Work and Economic Growth,” and SDG 10 “Reduced Inequalities.” We do this through our People Agenda, our HR Strategy designed to prepare the company for the future and drive the energy transition from a people perspective.

The People Agenda, including its programs and strategic initiatives, is founded on three main building blocks: “Thriving environment,” “Game-changing leaders,” and “Vibrant workforce.”

Our People Agenda



In the spirit of “Just Transition,” a concept that is part of the EU Green Deal, we are committed to making the transition employee-friendly, socially fair, and acceptable. We do this by mirroring the political efforts in the regions affected by the shift from fossil to renewable energy with its associated evolution in the job market. We drive strategic workforce planning to obtain organizational transparency on the structural evolution and needs in the job market, and hence our workforce, and seek to offer adequate training and provide fair conditions, such as wages and benefits.

To underline that people are a top management priority for Siemens Energy, the human resources (HR) organization is led by the Labor Director, Tim Holt, a member of the Executive Board. The Global Head of HR has operational responsibility for all HR policies, processes, and products. A team of Global and Regional HR Business Partners and Global Competence Centers ensure implementation and execution of the People Agenda and its defined activities across Siemens Energy globally.

Thriving environment

Our objective is to foster an environment that encourages self-direction, responsibility, and a sense of purpose in one’s work. We facilitate this through the implementation of our Inclusion & Diversity Framework, applying new ways of innovative working practices, and the establishment of cross-organizational networks.

Fostering inclusion & diversity

We want everyone to bring their whole self to work and reach their full potential. Our workplace environment is open to everybody regardless of their ethnic origin, religion, world view, age, disability, skin color, gender, sexual orientation, gender identity, or gender expression. We strive to offer our employees equal treatment in a non-discriminatory work setting. To emphasize the relevance of inclusion & diversity (I&D) for Siemens Energy, our Chief Financial Officer, Maria Ferraro, is also Chief I&D Officer and leads our global I&D Decision Board.

On a local level, we have several I&D regional councils that serve as forums for sharing ideas and best practices and providing insights to help the company better achieve diversity, equity, and inclusion.

In addition, our employee resource groups are central to our commitment to I&D, bringing together employees from diverse backgrounds and perspectives. These groups include networks for women, persons with disabilities, LGBTQIA+ people, and people from various racial, ethnic, and cultural backgrounds.

In fiscal year 2024, we took a number of measures to promote and support I&D, in addition to the measures established in past years, such as mandatory diverse interview panels to reduce bias in the hiring process. For example, we implemented a group-wide I&D Policy that establishes the foundation of our I&D strategy and represents our commitment to responsible business. We published a "Preventing Harassment and Discrimination at Work" instruction, which reinforces our commitment to a workplace where everyone feels safe, respected, and valued. We conducted a voluntary and anonymous self-identification survey to provide employees with the opportunity to share personal information – such as their ethnicity, disability status, gender identity, and sexual orientation. The results provided valuable insights, allowing us to tailor our programs. In Germany,

we started a career support initiative for Ukrainian refugees in collaboration with the Federal Job Agency. The initiative aims to support employment and social integration, and has already resulted full-time contracts, internships, and temporary work contracts being offered.

We also extended our strategic partnerships by joining the International Labour Organization's Global Business Disability Network and by supporting the UN Standards for Tackling Discrimination against LGBTQIA+ People and the UN Women's Empowerment Principles. We developed an Accessibility Sharepoint, which bundles accessible technology and solutions to provide our employees with the tools that best support their individual needs.

In addition, we supported several specific events such as the following:

- Global Diversity Awareness Month, to promote cultural intelligence for an inclusive workspace through global training
- International Women's Day, 54 virtual and face-to-face events conducted globally
- Pride celebrations, with several events hosted to address bias and provide tools for better allyship
- International Day for Persons with Disabilities, to help develop assistive technology training and celebrate the contribution of people with disabilities around the world

Our Inclusion & Diversity pillars

We embed inclusion & diversity in everything we do by using a holistic frame built around 4 strategic focus areas.

Our core behavior "Be open & inclusive"

<p>1 Equity</p>  <p>We recognize the unique needs of each individual or group and remove barriers and create opportunities under which everyone can participate on equal terms.</p>	<p>2 Belonging</p>  <p>We make our mix work by creating an inclusive culture where people feel respected, engaged, and able to speak up and be themselves.</p>	<p>3 Society & partnerships</p>  <p>We work together, internally and externally, with customers and partners to support us in becoming more diverse and inclusive.</p>	<p>4 Accountable leaders</p>  <p>Our leaders are accountable and internally and publicly champion diversity, equity, and inclusion.</p>
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We use "diversity" to describe our commitment to recognizing and respecting the differences between people while valuing the contribution everyone can make to our business, without any tolerance for discrimination or bias of any kind.

Valuing Inclusion

We use "inclusion" to describe our commitment to being an open and inclusive company, striving to create safe, welcoming workplaces with a culture that encourages equality and belonging.

Valuing Diversity

Siemens Energy aims to reach a share of 25% women in top leadership positions by September 30, 2025, and a share of 30% women in top leadership positions by September 30, 2030. As part of the integration activities, Siemens Gamesa has adopted the gender targets of Siemens Energy. Progress toward these goals will therefore be reported jointly from this year onward. In fiscal year 2024, the share of women in top leadership positions was 24% (fiscal year 2023: 26%).

Apart from increasing the share of women in top leadership positions, ensuring equal pay for equal work is highly important for Siemens Energy. Our goal is to comply with all local regulations for measuring and reporting on equal pay. In fiscal year 2022, we began using a standardized methodology to identify potential gender differences in pay among employees across Siemens Energy, taking into consideration factors such as country, seniority, and job family. As a result, in addition to the simple difference in average pay, known as the unadjusted pay gap, we can also report the adjusted pay gap. The calculation methodology is regularly evaluated to align with regulatory requirements and reporting conventions. In fiscal year 2023, we started using Hourly Total Actual Direct Compensation (FTE) instead of Annualized Total Target Direct Compensation (FTE), computed using payout ratios for the previous fiscal year. For fiscal year 2024, we improved the calculation methodology further to provide more accurate results and calculated the adjusted pay gap based on logarithmic pay values, resulting in a 3.09% gap.

In December 2023, we were certified by the Fair Pay Institute (fpi), which granted Siemens Energy the status of Fair Pay Analyst.

Equal pay ¹	Fiscal year	
	2024	2023
Adjusted pay gap (%)	3.09	4.81
Unadjusted pay gap (%)	3.42	4.57

¹ Figures relate to Siemens Energy, taking into consideration all employees with active employment contracts and complete data available as of the end of each financial year. An unadjusted pay gap refers to the difference between the earnings of men vs. women (mean male vs. female FTE Total Direct Compensation in € using actual payout values based on incentive payout ratios from the previous fiscal year converted to hourly rates) that could arise from differences in a number of factors, for example, job families, geography, relative value of the position, seniority, or gender. An adjusted pay gap refers to the part of this difference between the earnings of men vs. women that is attributable solely to gender. The pay gap KPI is expressed as the difference between the mean male pay vs. the mean female pay, divided by the mean male pay. A positive pay gap KPI is one in favor of men, a negative one in favor of women.

On September 30, 2024, Siemens Energy employed about 1,400 people with a disability in Germany (September 30, 2023 about 1,400).

Global employee engagement survey

At Siemens Energy (excluding Siemens Gamesa), our global employee engagement survey gives all employees worldwide the opportunity to share how they perceive our company, culture, leadership, team collaboration, and work environment.

In fiscal year 2024, this survey was conducted once, with a response rate of 81.5% and approximately 67,000 comments provided. All survey scores increased or remained stable on a global, company-wide level compared to the previous year’s survey.

The multi-question engagement factor increased to 79% (Q3 2023: 76%). It was introduced in fiscal year 2023 and measures the weighted average of four questions: pride, willingness to stay, motivation, and taking action.

The improvement area from last year, “Active Engagement,” which measures the extent to which employees feel their team took actions to create positive change after the last survey, increased by 4 percentage points compared to the previous one, reaching 65% (Q3 2023: 61%). We plan to integrate Siemens Gamesa in the next employee engagement survey in fiscal year 2025.

Game-changing leaders

Leaders need to provide clarity and direction in uncertain conditions. Their task is to bring new strategies, new mindsets, and business transformation to life, triggered by outside market changes, and role model our Leadership Essentials.

Our six Leadership Essentials (see graphic on the next page) help Siemens Energy leaders grow, perform, and deliver our strategic goals. They define the qualities we expect of our leaders across all leadership levels and provide the language we use to hold one another accountable for shaping our culture. In fiscal year 2024, we started implementing our Leadership Essentials within our Business Area Siemens Gamesa, with a rollout plan including communication and training.

Leadership Essentials



Leadership development

In fiscal year 2024, Siemens Energy launched its leadership development landscape with several leadership development programs, targeting leaders at different stages of their career. All programs are designed around our values, behaviors, and Leadership Essentials. They are the foundation for building a strong and diverse leadership pipeline and enhance the overall quality and maturity of the leaders across Siemens Energy.

Succession

With our succession risk management, we strive to ensure business continuity and robust internal succession pipelines for the most critical roles across Siemens Energy.

The Executive Board regularly reviews the key roles and the quality and robustness of the succession pipelines. The process is supported by KPIs that provide transparency on the diversity of the succession lists and succession ratios. We have introduced executive development reviews for top management succession candidates to assess their readiness for future

roles and to provide a basis for detailed development discussions with the respective succession candidates. We aim to include Siemens Gamesa in the succession process in fiscal year 2025.

Vibrant workforce

Our ambition is to become the employer of choice in the energy industry. In a competitive and volatile environment, competing for talent remains a key challenge. Therefore, attracting, hiring, onboarding, developing, and retaining a diverse talent pool is key to our future success.

We are doing this by investing in our vibrant workforce. All elements aim to contribute to the implementation of our strategy in an employee-friendly and fair manner.

Siemens Energy protects basic working conditions and promotes fair cooperation among management, employees, and employee representatives.

Siemens Energy’s principles and values for compliance and integrity are summarized in our Business Conduct Guidelines (BCG). Siemens Energy commits to safeguard the fundamental rights of employees. This includes adhering to all applicable working-hours regulations around the world, ensuring adequate compensation, upholding the freedom of association and collective bargaining, and maintaining zero tolerance for discrimination or harassment (see chapter [Compliance and integrity](#)).

Employer branding

Our employer brand, internally and externally, is crucial for our company’s success. It aims to attract top talent, foster employee engagement and retention, enhance our competitive advantage, and demonstrate what we stand for and can offer as an employer. In fiscal year 2024, we were recognized as “Best Place to Work” by Glassdoor in the U.S. We focus on further strengthening our employer brand through several activities, including

- conducting an annual brand health assessment to determine brand awareness among potential talent and to understand drivers for consideration;
- releasing our comprehensive Employer Branding Playbook that includes messaging, tips and tricks, audience profiles for Manufacturing, Engineering, Field Service, IT, and Corporate roles, etc.;
- targeted global and local advertising campaigns to create awareness for Siemens Energy in markets with significant hiring demands;
- building a strong social media presence on LinkedIn, Facebook, and other channels with targeted recruiting campaigns;
- tracking key performance indicators and benchmarks to measure and optimize targeted employer branding initiatives; and
- utilizing the Employee Referral Program to enable and encourage employees to refer external candidates to join Siemens Energy.

Promoting early careers

We strive to attract young talents to our workplaces and encourage them to contribute to our thinking while also promoting positive collaboration and dialogue among different generations.

An example of what we offer is vocational education. With our vocational training programs in Germany, we aim to attract school graduates. As of September 30, 2024, there were 2,088 (September 30, 2023: 2,112) trainees and students enrolled in work-study programs. In addition, we had 1,256 (September 30, 2023: 1,104) internals and 832 (September 30, 2023: 1,008) externals from other companies. In fall 2024, a total of 500 (fiscal year 2023: 408) graduates began an internal apprenticeship or a work-study program, and we had 268 (fiscal year 2023: 238) external trainees. We also offer vocational training in several other countries.

In recruiting apprentices, we have pursued a new approach since fiscal year 2024. Rather than relying on media advertisements for specific job openings, we invite applications through an online questionnaire focused on passion, team ability, engagement, and motivation. We aim to provide modern and up-to-date vocational training and are constantly developing our training concept. In fiscal year 2024, we introduced a new education concept, which is focused on GenZ and GenAlpha.

The global Siemens Energy Graduate Program is a two-year experience designed to develop, grow, and retain talented young university and doctoral graduates. It includes one international assignment as well as various development modules and training courses. Participants are hired on a permanent contract with all rights and responsibilities of an employee.

People development and retention

Siemens Energy's goal is to continuously develop and retain a robust workforce that is prepared for the challenges of the energy transition. People development and retention is one of our top strategic priorities, since it not only benefits employees on a personal level but also propels the company forward, fostering a culture of continuous improvement and innovation.

Strategic workforce planning

Strategic workforce planning (SWP) addresses structural workforce changes at an organizational level and is intended to ensure that critical roles and future-relevant skills are distributed appropriately across all levels and locations. We strive to close skills gaps and build a robust workforce by specifically focusing on:

- **Build:** upskilling and reskilling our existing workforce in strategic growth fields
- **Buy:** strategic hiring from the external market
- **Borrow:** focused contracting to balance peaks
- **Bind:** retaining mission-critical skills

In fiscal year 2024, SWP was integrated into the overall strategic planning process and was a key topic in Board-level strategy meetings. We standardized our approach and the SWP outputs across all Business Areas and Functions. Our focus was on creating transparency on strategic business drivers, as well as on regional and country-level workforce shifts, skills gaps, critical roles, and future demands to provide a comprehensive overview for Siemens Energy. SWP is not yet rolled out in our Business Area Siemens Gamesa. During the upcoming integration, we will plan the potential rollout.

Performance and growth

The performance management approaches at Siemens Energy are designed to accelerate individual development and create high-performing teams. They are open to all employees and built around constant dialogue and feedback, individual goals, responsibilities, and regular check-ins throughout the year.

We strive to establish a growth mindset throughout the entire organization that helps our employees individually and the company as a whole to thrive in a dynamic business environment. In this way, we want to enhance performance, foster a positive work culture, and attract talent. Our regular processes include dialogues about personal development and growth.

In fiscal year 2024, we launched our new Talent Development approach. Employees were identified based on their potential, ambition, and readiness to accelerate their development as either specialists or leaders. This aims to build a robust talent pipeline and prepare for critical roles in the company within two years. Through talent pools and personalized development plans, we focus on increasing our talents' visibility and fostering their learning and growth.

Learning and training

Developing employees in their current roles and for their future careers is critical to the success of our business. We strive to promote lifelong learning, upskilling, and development.

At Siemens Energy, learning takes place at a wide variety of levels – on the job, by means of peer learning through communication and collaboration, and in virtual and in-person internal or external learning activities. Our learning opportunities include the following areas:

- Professional skills relevant to specific functions such as sales or project management
- Technical skills with regard to our energy technologies, products, and solutions
- Digital skills, potentially relevant for all functions, such as data analytics or cybersecurity
- Personal skills, relevant for all employees in all functions and roles, such as problem-solving, communication, or self-direction
- Self-reflection tools for employees, from simple checklists and self-assessments on skills to multi-source feedback
- Transition assistance programs to support continued employability or the management of career endings, e.g., through coaching, counseling, or a specific qualification initiative in Germany

In fiscal year 2024, we continued to establish functional learning academies. Training courses are selected and developed with internal experts from our businesses and functions and offered on our learning platform. We introduced a dashboard to monitor and measure our progress in the area of learning and development. A global communication campaign to promote continuous and self-directed learning and development was also launched in fiscal year 2024.

Our learning platform offers employees worldwide access to e-learning modules as well as trainer-led learning options and coaching in different languages. In fiscal year 2024, the Siemens Energy learning platform was rolled out in our Business Area Siemens Gamesa. Here, the Wind University remains the functional training center. It enables learning by delivering a variety of solutions through different learning platforms.

Siemens Energy spent about €91 million on training activities in fiscal year 2024 (€80 million in fiscal year 2023). Our employees spent an average of 13 hours (fiscal year 2023: 12) on formal learning activities.

Training	Fiscal year	
	2024	2023
Spend on further education (€ million)	91	80
Spend on further education per employee (€)	933	856
Total number of training hours	1,274,677	1,126,608
On-site	970,726	863,356
Web-based	303,951	263,252
Total average training hours per employee	13.0	12.0
On-site	9.9	9.2
Web-based	3.1	2.8

Training (hours)	Fiscal year	
	2024	2023
Gender¹		
Female	214,868	171,364
Male	1,059,026	948,637
Job families²		
Customer services	373,840	111,561
Engineering	178,076	106,549
Finance	59,220	36,396
Information technology	60,280	43,256
Internal services	52,300	50,576
Manufacturing	240,331	50,729
Project management	52,919	30,374
Sales	51,266	31,374
Supply chain management/procurement/ supply chain logistics	56,549	27,173
Others	149,896	69,433

¹ The difference is mainly due to the above-average share of product training in male-dominated areas, such as technicians working in customer service, maintenance of turbines, and manufacturing. In fiscal year 2024, 782 additional training hours are attributed to employees who prefer not to disclose their gender.

² 2023 figures relate to Siemens Energy (excluding Siemens Gamesa).

Rewarding our workforce

Siemens Energy strives to offer benefit programs based on local market practices that are attractive, fair, and inclusive, considering accessibility for a diverse workforce. Some examples of our benefits are:

- We offer market-competitive retirement plans in 60 countries to around 60,000 employees focusing on fairness and flexibility for different employee groups and their needs.
- We aim to include local benefit initiatives that are environmentally friendly, e.g., subsidies for public transport systems or electric benefit cars. Long-service awards are provided to recognize dedicated work by employees and loyalty of service to our company.
- We seek to offer a range of opportunities to our employees to tailor their working times and locations to their needs, such as part-time and remote working.
- We aim to foster a family-friendly environment that supports our employees at crucial moments in their lives. We decided to set a global standard in this area and developed a global life-event policy in fiscal year 2024 that grants all our employees worldwide a minimum number of days off in the case of the following life events:
 - › Childbirth or adoption
 - › Death of a close family member
 - › An employee's close family member requiring care or support for serious medical reasons

This new global life-event policy was implemented in fiscal year 2024 in Central and South America and the Middle East. The remaining countries will follow by the end of the next fiscal year (September 30, 2025).

The benefits are not yet harmonized with our Business Area Siemens Gamesa. During the upcoming integration planning, we intend to identify harmonization opportunities and plan a potential rollout.

About 3,300 employees (September 30, 2023: about 2,900), or 3.3%, worked part-time, and around 2,100 (September 30, 2023: about 2,200) were on leave of absence.

Siemens Energy continuously strives to provide competitive and fair compensation levels to attract, retain, and reward talents. To this end, we consider a variety of internal and external factors that are consistent with our corporate culture and values, such as internal pay equality, external competitiveness, and a strong link between pay and performance. Hiring agency workers is common, and in many cases, contracts are governed by similar or comparable wage policies to those enjoyed by company employees.

Once a year, during the global Merit Round, we review employees' salaries in a structured process to identify potential needs for adjustment. We regularly monitor the market competitiveness of our compensation in terms of compensation levels and compensation structure. In fiscal year 2024, the review again showed that our pay levels are competitive worldwide. Industry wage agreements – which Siemens Energy adheres to – supersede the national minimum wage in many countries. Compensation structures depend on local market practice and the respective position value or class.

In fiscal year 2024, variable pay at Siemens Energy was governed by a global framework, which defined five incentive schemes, leveraging financial KPIs from our external financial reporting and a performance multiplier. Siemens Energy reports the ratio between the average salary of a median employee versus our highest-paid person. For fiscal year 2024, this ratio stood at 52 (fiscal year 2023: 86).

Additionally, we offer a range of share plans for employees at every level. They offer our employees the opportunity to invest and benefit from our company's long-term performance. Our share purchase program for all employees at every level is called "Direct Match Program." In fiscal year 2024,

it was offered in 42 countries to approximately 95,000 employees at every level – from shop floor to top management, including Siemens Gamesa.

Our senior managers and other employees receive stock awards through a ratable vesting scheme as an essential element of the remuneration package. In addition, performance-based share awards have been granted to senior executives in positions deemed to be of particular importance to the company, the achievement of which is linked to specific KPIs, such as a sustainability target set in the areas of environmental, social, and governance (ESG). This reflects the importance of sustainability for Siemens Energy, not only for members of the Executive Board but also for senior managers.

Recognition and celebrating success

We know that our employees are our greatest asset. That is why appreciation of our employees and a culture of recognition are important to us.

Our Share Thanks And Recognition (STAR) online platform gives an equal voice to our employees. They can show appreciation to anyone in the organization through personalized messages, e-cards, or the awarding of points. The platform was rolled out in August 2021, and as of today can be used by more than 72,000 employees in 86 countries worldwide. We plan to implement this tool at Siemens Gamesa in fiscal year 2025. Meanwhile, Siemens Gamesa will keep the non-monetary Thank You Awards, where employees can nominate peers, team members, and managers for acting as role models in line with the company values.

Siemens Energy recognizes and celebrates outstanding contributions and achievements within the company through its yearly Passion for Energy Awards. The awards highlight individuals and teams demonstrating exceptional dedication, innovation, and impact in their work, in line with Siemens Energy's mission and values.

Employee representation

At Siemens Energy, we highly value employee representation and participation as provided by national laws and regulations.

Across the globe, we have established a regular dialogue between company management and employee representatives. At the European level, employee representation takes place in the Siemens Energy European Works Council based on the German Act on European Works Councils and the Siemens Energy European Works Council Agreement. The agreement covers all employees of Siemens Energy and its consolidated subsidiaries within the European Economic Area plus the UK. In fiscal year 2024, the management of Siemens Energy and the employee representatives on the Supervisory Board signed an international framework agreement to further encourage and foster social dialogue on a global level.

In Germany, trade union representation is through the Industrial Union of Metalworkers, and in many other countries by domestic trade unions. In addition, in-house employee representation is based on national regulations. At German locations, employee representation is based on the German Works Constitution Act and is realized through various employee representation bodies, in particular central works councils, combined works councils, and local works councils, which are elected by the employees. In many other countries, this is based on domestic law. The Supervisory Board of Siemens Energy also contains employee representatives as full board members who are – depending on national law – either delegated by employees or appointed by the trade union. In other countries, we engage with the respective employee representatives, as national laws stipulate. This includes, but it is not limited to, works councils, trade unions, and employee committees.

Employee structure

As of September 30, 2024, Siemens Energy had about 99,000 employees worldwide (September 30, 2023: 96,000), about 30,000 (September 30, 2023: 29,000) of whom worked for Siemens Gamesa. The average number of employees during the fiscal year stood at about 98,000 (fiscal year 2023: 94,000).

Women accounted for 20.6% (September 30, 2023: 20.2%) of the workforce and 22.3% (fiscal year 2023: 23.3%) of all new hires. We expect 10.6% of employees to retire within the next five years (fiscal year 2023: 10.5%). The share of employees with permanent working contracts is 95.9% (September 30, 2022: 95.0%). The worldwide average working week at Siemens Energy was 39 hours, with no changes in comparison to fiscal year 2023. The average employee age was 42.5 (fiscal year 2023: 42.6). At Siemens Energy, about 62% of employees (fiscal year 2023: about 61%) are covered by collective bargaining agreements worldwide.

Number of employees

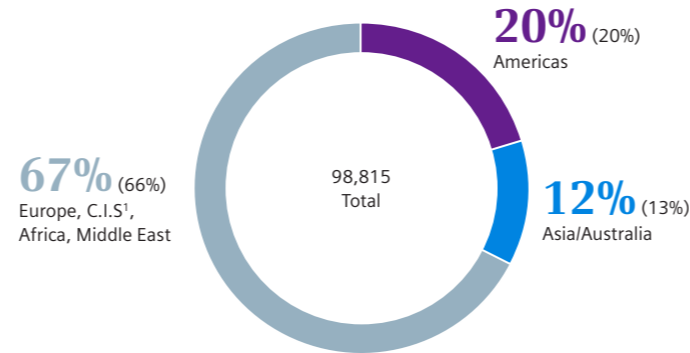


Figure for previous year in brackets.
¹ Commonwealth of Independent States.

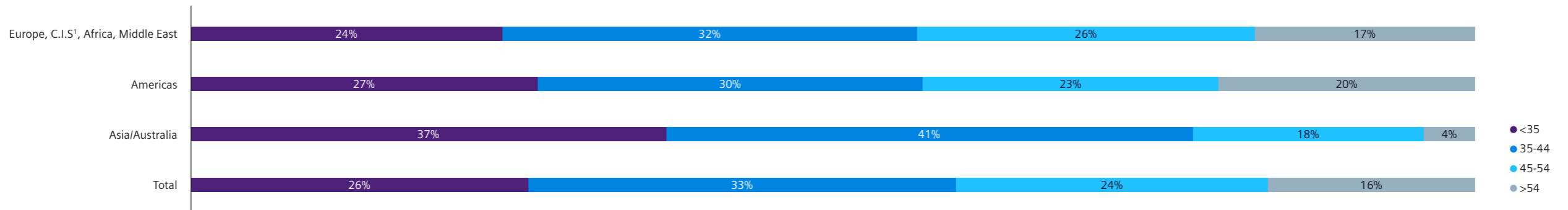
September 30, 2024

Working contracts

	Fiscal year	
	2024	2023
Employees with permanent working contract	94,778	91,191
Employees with temporary working contract	4,037	4,239
thereof female employees	834	927
thereof male employees	3,203	3,312
thereof EMEA	2,043	2,248
thereof Americas	145	90
thereof Asia/Australia	1,849	1,901

Age and regional structure

September 30, 2024



¹ Commonwealth of Independent States

Employee fluctuation – hires	Fiscal year	
	2024	2023
Hires (thousands)	13.5	13.5
thereof women (%)	22.3	23.3
thereof Europe, C.I.S. ¹ , Africa, Middle East (%)	64.9	59.9
thereof women Europe, C.I.S. ¹ , Africa, Middle East (%)	21.4	23.3
thereof Americas (%)	22.7	25.4
thereof women Americas (%)	23.7	23.2
thereof Asia/Australia (%)	12.3	14.8
thereof women Asia/Australia (%)	24.3	23.4
thereof age <35 (%)	58.0	56.7
thereof age 35–44 (%)	27.0	27.0
thereof age 45–54 (%)	11.1	12.0
thereof age >54 (%)	3.9	4.3
Recruitment rate² (%)	13.8	14.4

¹ Commonwealth of Independent States.

² The recruitment rate is calculated as the number of new employee hires at Siemens Energy during the fiscal year divided by the average headcount.

Employee fluctuation – exits	Fiscal year	
	2024	2023
Exits (thousands)	8.7	8.9
thereof dismissals ¹ (%)	10.9	9.5
thereof women (%)	17.9	20.3
thereof Europe, C.I.S. ² , Africa, Middle East (%)	55.5	60.0
thereof Americas (%)	23.1	25.7
thereof Asia/Australia (%)	21.5	14.4
thereof age <35 (%)	36.5	35.7
thereof age 35–44 (%)	28.0	28.8
thereof age 45–54 (%)	14.6	14.9
thereof age >54 (%)	21.0	20.6
Turnover rate³ (%)	8.9	9.6
Turnover rate – voluntary (%)	4.4	5.0
Turnover rate – other reasons (%)	4.4	4.6

¹ Siemens Energy (excluding Siemens Gamesa).

² Commonwealth of Independent States.

³ The turnover rate is calculated as the number of voluntary and involuntary (all other) exits at Siemens Energy during the fiscal year divided by the average number of employees.

Employees on parental leave ¹	Fiscal year	
	2024	2023
Total	762	811
thereof women	253	283
thereof men	509	528

¹ Figures relate to Siemens Energy (excluding Siemens Gamesa) employees in Germany only.

Contractually agreed weekly working hours (average)	Fiscal year	
	2024	2023
Europe, C.I.S. ¹ , Africa, Middle East	38	38
Americas	41	42
Asia/Australia	40	40
Total	39	39

¹ Commonwealth of Independent States.

Working hour programs (%)	Fiscal year	
	2024	2023
Employees working full-time	96.7	97.0
Employees working part-time	3.3	3.0
Women working part-time	1.9	1.9
Employees on leave of absence	2.1	2.2

Inclusion and diversity lead to more innovative solutions

Marta Jimeno
Head of Inclusion & Diversity Program Office,
Siemens Energy

How to create a better workplace? It's a question that Marta Jimeno tries to answer in her work for the Siemens Energy Inclusion & Diversity Program, and one thing is clear: It's going to take people and ideas from all parts of society to make it happen. Marta explains how the company is doing it.

This morning I'm preparing for a meeting with my colleagues in Real Estate to discuss strategies on how we can improve accessibility in key locations.

Since the anonymous Self-Identification survey taken in February 2024, projects like this are becoming more effective. We now know a lot more about the ethnicity, disability status, gender, and other aspects of our workforce around the world. This information is helping us to be more specific in our goals, and it's uncovering new opportunities for growth and improvements we hadn't known about before.

For example, some respondents who self-identified as having a disability shared that they sometimes struggle with access to specific resources. This survey data has allowed us to specifically identify where accessibility could be improved.

09:00 a.m.

Bilbao, Spain

This morning I'm preparing for a meeting with my colleagues in Real Estate to discuss strategies on how we can improve accessibility in key locations.



Employees identifying as LGBTQIA+ showed that they wish for increased awareness of the topic within Siemens Energy. As an action, we're preparing awareness courses for all employees to help prevent discrimination and harassment.

In order to address specific I&D topics in different regions of the world, we've created 14 regional committees in our branches consisting of employees and managers. And it's not just lip service. These committees address their ideas directly to Maria Ferraro, who is both Chief Financial Officer and Chief Inclusion & Diversity Officer at Siemens Energy. The engagement of our employees grows year after year thanks to our I&D program.

The truth is that when our employees feel comfortable and integrated, this also impacts our company's success. It helps us attract and retain talent and leads to more creative and innovative solutions to challenges. What's more, customers can better identify with our company and products when served by local employees with the same cultural and linguistic backgrounds. In that regard, inclusion and diversity offer us a competitive advantage. And, frankly, it's going to take perspectives from all parts of society to innovate for a sustainable world.

As I see it, inclusion and diversity goes beyond the walls of our company. Encouraging respect and openness to diversity and other identities at Siemens Energy improves the larger society we're living in. This is also personal concern of mine. I have a son and daughter, and I want to help make the world of work and the world in general a better place for them.

As I see it, inclusion and diversity goes beyond the walls of our company. Encouraging respect and openness to diversity and other identities at Siemens Energy improves the larger society we're living in.

Watch the video:



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The company and reporting method

Siemens Energy AG is incorporated as a stock corporation (Aktiengesellschaft) under German law, with its registered office in Munich, Germany. The company is entered in the commercial register of the Munich local court (Amtsgericht) under HRB 252581. Siemens Energy AG is the parent company of the Siemens Energy Group.

The Executive Board of Siemens Energy AG is the body with overall responsibility for the management of the business in accordance with the German Stock Corporation Act (Aktiengesetz).

Siemens Energy's reporting structure in fiscal year 2024 comprises four Business Areas: Gas Services (GS), Grid Technologies (GT), Transformation of Industry (TI), and our wind power business, Siemens Gamesa (SG). The organizational structure and detailed product offerings are described in the chapter ["At a Glance."](#)

Reporting method

Sustainability is an integral part of our company strategy. In our Sustainability Report (hereinafter referred to as the "report"), we publish key information on our sustainability activities, including aspects such as strategy, organization, initiatives, programs, management systems, and goals. As of fiscal year 2024, our reportable segments are GS, GT, and SG;

TI is reporting voluntarily as if it were a reportable segment despite some differences in its economic characteristics. While the strategic direction of the Business Areas is comparable, management approaches and programs may differ. We indicate deviations from a common approach in the relevant chapter.

This report has been prepared in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative ("GRI Standards," see [GRI Content Index](#)). We use the UN Guiding Principles Reporting Framework and its narrative guidance as a guide when reporting on our human rights activities.

Reporting period and reporting boundaries

This report is based on activities carried out during Siemens Energy's fiscal year 2024 (October 1, 2023 to September 30, 2024). Any exceptions are designated as such. We report annually on our progress.

In general, the report covers all of our fully consolidated companies. Possible exceptions regarding the data pool used are indicated. Minority equity investments are not included in the report. To ensure comparability, indicators from previous years may be adjusted where necessary, which will be indicated accordingly.

Data collection

Given Siemens Energy's size and global presence, data collection requires the use of a distributed IT and data environment. Non-financial data captured may adhere to local rules and regulations, which can deviate from the Group's reporting requirements. To ensure that the Group's non-financial reporting is consistent, the data collected is reconciled and adjusted to comply with the Group-wide reporting requirements. Any information presented in this report that is subject to significant data limitations is identified as such. The non-financial data published in this report is collected through various internal reporting systems, which, for the most part, are different from those applicable to financial information. Such data may be subject to less extensive internal documentation, data generation, and auditing requirements, including requirements related to the IT systems used and the general control environment. To ensure data quality and preserve the value of the information, we identify and evaluate data restrictions in accordance with our internal guidelines. Where necessary, for example with a view to consistency, this may include the exclusion of affected data sources. As a result, our figures may not be comparable with the data published under the same or similar designations by other companies.

Due to rounding, the figures presented throughout this report may not add up precisely to the totals provided, and percentages may not precisely reflect the absolute figures.

Environmental reporting and collection of environmental data

Siemens Energy uses an environmental information system to collect and analyze reports from all relevant sites in all relevant countries. Reporting criteria have been defined based on the size of a location. Our major sites and offices report the full scope of parameters such as energy use, resource consumption, and emissions. Minor sites report only selected parameters that are applicable to the location. We report environmental data for continuing operations. The data has been extrapolated to 100% to ensure completeness and global coverage. We monitor our environmental impact for all office and production sites of environmental relevance, using environmental data that is gathered monthly.

Independent assurance review

We prepared our Sustainability Report in accordance with high quality standards. Consequently, we commissioned an independent auditor to conduct a limited assurance engagement of this report for the reporting period. You can find the assurance statement of KPMG AG Wirtschaftsprüfungsgesellschaft on [page 88](#).

Task Force on Climate-Related Financial Disclosures (TCFD)

Sustainability and climate action play a key role in our decision-making processes. We are committed to making an important contribution to the global economy's decarbonization and supporting our customers in transitioning to a more sustainable world. Our aspiration is to reach net zero across the entire value chain. Siemens Energy has already implemented GHG emissions reduction initiatives along the entire value chain: in the supply chain, in our own operations, and through the goods and services we provide to our customers.

To create transparency on our climate actions, we disclose how we address risks and opportunities arising from climate change. Our disclosure is consistent with the recommendations by the Task Force on Climate-related Financial Disclosures (TCFD). Please also see our TCFD Index in the [Siemens Energy Annual Report 2024, TCFD Index](#).

Climate change governance

Board oversight

At the start of fiscal year 2023, the highest governing body at Siemens Energy, the Supervisory Board, established a Sustainability and Finance Committee (formerly Innovation and Finance Committee), chaired by Joe Kaeser, Chairman of the Supervisory Board of Siemens Energy AG. Responsibilities of the committee include addressing sustainability issues, preparing resolutions of the Supervisory Board on the company's financial situation and resources, especially on the annual budget, investments, and financial measures, resolving certain transactions and measures for which the Executive Board requires approval, and regularly addressing the company's naming, branding, and design concept. In August 2023, the Supervisory Board completed training on sustainability topics.

Mapping of recommendations for climate-related financial disclosures

<p>Governance</p> <p>Disclose the organization's governance around climate-related risks and opportunities.</p>	<p>Strategy</p> <p>Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.</p>
<p>Risk Management</p> <p>Disclose how the organization identifies, assesses, and manages climate-related risks.</p>	<p>Metrics and Targets</p> <p>Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.</p>

The Executive Board of Siemens Energy is responsible for the company's strategy and targets, including its aspiration to reach net zero across the entire value chain, as well as its GHG emissions reduction targets along the entire value chain: in the supply chain, in our own operations, and through the goods and services we provide to our customers.

Each quarter, the Executive Board is informed of climate-related risks and opportunities and aligns the reporting of all significant risks and opportunities throughout the company, including those related to climate issues.

Climate action is also a regular topic on the agenda of Executive Board meetings, since sustainability is a cornerstone of our business strategy. Topics covered include adapting our business model to offer sustainable solutions to our customers as well as the progress toward achieving our SBTi commitments.

The Executive Board defines the Group-wide risk policy with the aim of managing risks and opportunities appropriately. This includes taking mitigation measures to reduce the potential impact of risks on the company to an appropriate level. The Executive Board is regularly updated and informed of the overall internal control and risk management system, audit results, and significant risks and opportunities.

All sustainability activities are led by our Chief Sustainability Officer (CSO), who is also the CEO of our company. This includes Siemens Energy’s sustainability program, which is fully integrated into the company’s strategy.

Management’s role

To reflect the importance of sustainability and climate action, we have established the Siemens Energy Sustainability Council. It holds quarterly and ad hoc meetings and consists of decision-makers representing Business Areas, Regional Hubs, and Functions.

The Sustainability Council strategically oversees the Sustainability Program’s realization by making key decisions to progress the program and the implementation of sustainability, setting priorities and focal points

where needed, and acting as sustainability ambassadors both inside and outside of Siemens Energy. Our CEO chairs the council in his role as CSO. He receives regular updates on the status quo of the Sustainability Program and the integration of sustainability within the company’s strategic and business decision-making.

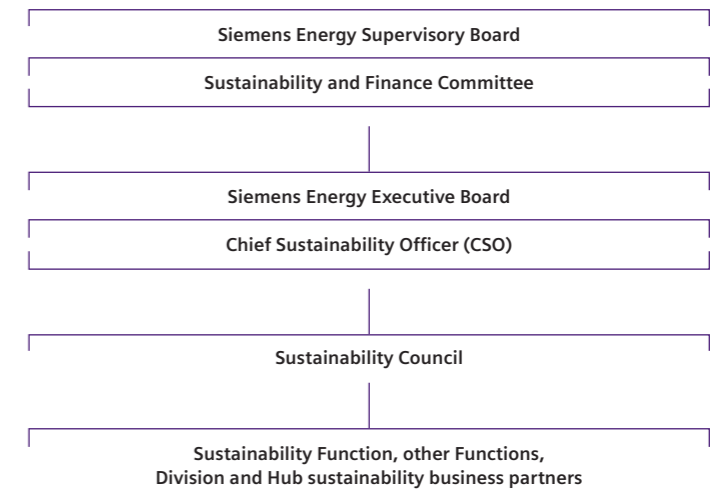
The Vice President of Sustainability manages the Sustainability Function, which is part of the Strategy Function, and is responsible for driving and supporting the integration of sustainability within our strategic and business decision-making, embedding sustainability in business processes through incentives and initiatives, governing the Sustainability Program and its implementation in the business, and coordinating company-wide sustainability activities, programs, and measures. The Vice President of Sustainability also monitors business-relevant sustainability trends, identifies potential sustainability-related risks and business opportunities, and strategically assesses the impact on the company as well as the company’s influence on the external environment.

The Executive Board has established a risk management and internal control organization, led by the Head of Risk Management and Internal Control, to oversee the risk management process and further drive the integration and harmonization of existing control activities and align them with legal and operational requirements. To allow a meaningful discussion at Group level, this organization aggregates individual risks and opportunities with a similar cause and effect into broader risk and opportunity topics.

The Head of Risk Management and Internal Control reports quarterly to the Executive Board on matters relating to the implementation, operation, and oversight of the risk and internal control system and assists the Executive Board in reporting to the Audit Committee of the Supervisory Board.

Our risk management process aims to identify relevant business risks throughout the organization as potential deviations from our corporate objectives. The management of each of our defined organizational reporting units is responsible for providing all relevant risks for the respective unit.

Organization of our sustainability governance



Strategic approach

The impacts of climate change might have significant effects on our company throughout the entire value chain, including effects on markets, technologies, policy and legal matters, or reputation, as well as climate-related physical impacts on our sites, portfolio, or supply chains (e.g., from increasing extreme weather events). These changes will take place gradually over several years or decades. In particular, the trend toward decarbonization of the energy market has a significant impact on the strategy, organizational setup, and portfolio of Siemens Energy.

The markets in which we operate are experiencing rapid and significant changes due to the introduction of innovative and disruptive technologies to meet the accelerating demand for sustainable energy. Driven by global sustainability efforts, many market scenario outlooks have the following in common: electricity demand will grow faster than GDP, generation capacity will grow, grid investment will rise significantly, and energy efficiency will be a competitive criterion in industry.

In response to these market observations, we have based our strategy on the following pillars:

1. Low- or zero-emission power generation
2. Transport and storage of electricity
3. Reducing GHG footprint and energy consumption in industrial processes

We are continuously developing new products and technologies that have either zero emissions or significantly lower emissions than comparable technologies, while also driving our existing portfolio more toward sustainability (e.g., Blue Portfolio without SF₆ gases in Transmission). To achieve this, we focus on the following levers: expanding renewables, transforming conventional power, strengthening electricity grids, driving industry decarbonization, and securing supply chains (see chapter ↗ [Strategic focus](#)).

In parallel, we have set up fields of action that will drive innovation within the strategic pillars and thus form the basis of our transformation. The fields of action cover technology development in the short term (e.g., battery energy storage), medium term (e.g., industrial electric heaters, industrial waste heat recovery) and long term (e.g., direct air capture, rotating olefins cracker). We expect the addressable market of the fields of action to continue to grow by around 20% CAGR until 2030. Consequently, we are increasing our R&D efforts and expect our revenue potential to reach the billion range in the same time frame.

We have developed a Climate Neutral Program (CNP) with the target of climate neutrality by 2030 (in our own operations). Through the CNP, we have developed reduction pathways for Scope 1 and 2 emissions, including specific Business Area targets. The strongest levers identified are:

1. Reducing energy consumption
2. Using renewable electricity
3. Reducing SF₆ emissions
4. New mobility concepts

CO₂ shadow pricing is a further steering mechanism for achieving climate neutrality, and we believe binding CO₂ price signals can support our reduction targets. These price signals encourage the use of the best technologies and business models available. Internally, Siemens Energy (excluding Siemens Gamesa) implemented a policy in fiscal year 2022 to consider GHG emissions in our CapEx decisions and ensure that new investments support our Climate Neutral Program. To support low-carbon investment in our own operations, we are using a shadow price of €100 per metric ton of CO₂ (see chapter ↗ [Decarbonization](#)). With SGRE's integration into Siemens Energy in fiscal year 2024, SGRE has also been working with the SE CapEx standards since May 2024 and thus also uses the CO₂ shadow price.

Physical climate risks

The assessment of physical climate risks in our operations is managed by the EHS department in cooperation with external expert consultants.

In fiscal year 2023, Siemens Energy conducted physical climate change risk assessments for all of its major manufacturing locations around the world to assess the consequences of climate change using up-to-date climate models from Jupiter Intelligence's Climate Score Global v2.6 (sourced April 2022). These assessments considered aspects such as hazard peril, hazard level, return period, criticality, and vulnerability. In fiscal year 2024, we extended the scope to include all SGRE manufacturing locations with the same methodology.

All perils were reviewed, including changes in weather patterns (causing fires, hurricanes, high winds and seas, blizzards, flooding, and extreme temperatures), the frequency and/or severity of extreme weather events, and other environmental manifestations of climate change such as sea-level rise.

- Fluvial/coastal: flood depth 100-year return period
- Wind: three-second peak gust
- Heat: days exceeding 35°C
- Drought: consecutive months of drought events
- Hail: hailstone diameter per square kilometer
- Precipitation: heavy rainfall intensity (in mm) over 24-hour precipitation
- Thunderstorm: days on which severe thunderstorms are probable
- Tornadoes: three-second peak gust
- Cold: cold spell duration in days
- Sea-level rise: elevation above sea level
- Storm surge: height measure of water depth above ground

These risks could impact Siemens Energy's business through physical damage to sites, equipment, or stock, as well as disruptions to operations, including internal and external supply networks and employee safety, among other impacts. Such impacts could result in the evacuation of personnel, the curtailment of services or suspension of operations, inability to deliver materials to job sites in line with contract schedules, loss of or damage to equipment and facilities, supply chain disruptions, and reduced productivity.

With these assessments, the company is able to identify the physical climate change risks to which the locations are likely to be exposed in the future, such as climate perils (floods, extreme heat, droughts), so that it can identify and implement mitigation measures, e.g., invest in resilience measures, in an attempt to further reduce and manage its risk exposure.

Using the latest climate assessments, we reviewed both short-term (2030) and mid-term (2060) time horizons: each with Shared Socioeconomic Pathways, as defined by the IPCC, of SSP1-2.6 (below 2°C warming by 2081–2100), SSP2-4.5 (2° to 3°C warming by 2081–2100), SSP3-7.0 (3° to

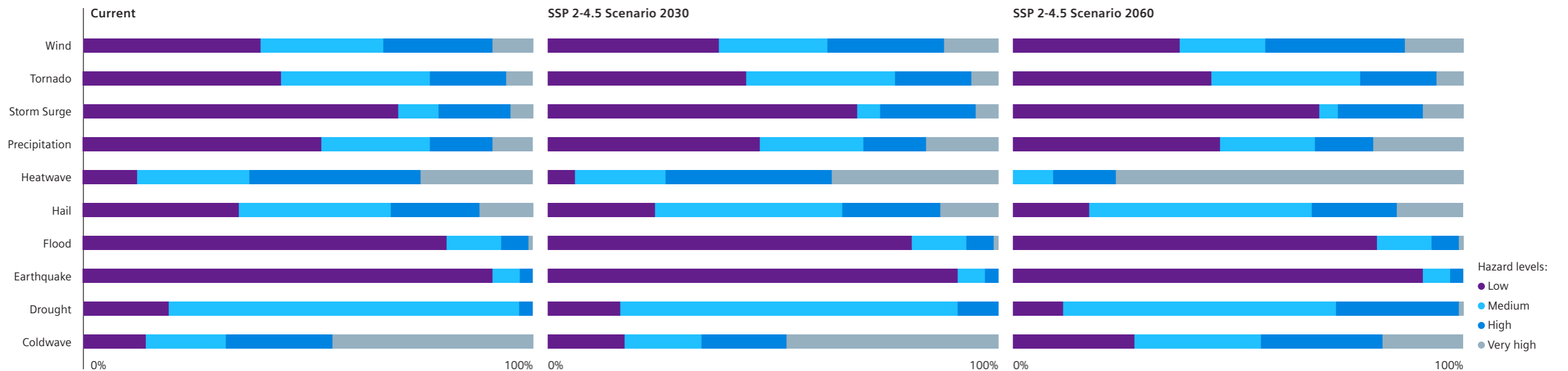
4°C warming by 2081–2100) and SSP5-8.5 (above 4°C warming by 2081–2100) global warming climate scenarios. The four scenarios reviewed showed that, from a global perspective, only heat, drought, and precipitation are likely to reach high and very high hazard levels.

Siemens Energy sites have been ranked based on the predicted risk exposure, with action plans being put in place where needed. Actions include infrastructure retrofitting, increasing firefighting capabilities, removing uncovered stock, installing water reservoirs, and taking flood prevention measures.

In addition, our insurance department provides a natural hazard risk analysis for each new building project, driving the selection process for new site areas. The data and information collected allow us to identify geographical areas of particular interest to us.

To cover the risk exposure in the supply chain, we have introduced a risk analysis procedure to systematically identify potential risks in the supply chain. Please refer to the chapter [Sustainable supply chain management](#).

Physical climate risk assessment results for major manufacturing sites



Due diligence

To raise awareness of ESG risks in our projects, we have introduced an ESG check early in the sales process to ensure risks are managed appropriately. We epitomize responsible business conduct and make sure to implement auditable levels of Do No Significant Harm (DNSH) criteria. A sustainability expert works alongside the sales project manager, EQS, and regional experts to ensure the risks are evaluated and any necessary mitigating actions are put in place in a timely manner.

The due diligence process also covers human rights issues.

Climate-related financing strategy

While macroeconomic uncertainties remain, we are expecting our addressable market to grow by 9.3% (CAGR) from €246 billion in 2023 to €419 billion in 2029. Due to investment programs in the U.S., namely the Inflation Reduction Act and Bipartisan Infrastructure Law, as well as the EU's Net Zero Industrial Act and REPowerEU, the EU's energy security strategy, we are expecting the North American and European markets to make up >50% of our addressable market by 2029.

Increasingly, ESG performance indicators are being used in sustainability-related financing constructs, such as Green Bonds or Revolving Credit Facilities. Siemens Energy has issued a Revolving Credit Facility and a Green Bond as well as a Revolving Guarantee Facility. In fiscal year 2024, we updated the trajectories for the ESG performance indicators included. In addition, we committed to implementing an additional performance indicator before March 31, 2025, for the Revolving Credit Facility to better reflect our carbon footprint.

Scenario analysis

Scenario analysis allows analysts to develop an understanding of how various combinations of climate-related risks – both transitional and physical risks – may affect businesses, strategies, and financial performance over time. At Siemens Energy, climate scenarios have various facets and are used for different purposes to support our business and prepare us for requests from customers looking to achieve the Paris Agreement goals of limiting global warming and avoiding climate change impacts.

1. Corporate strategy

While we mainly use S&P Global Commodity Insights Inflections for our global strategic assumptions, we also include IEA STEPS and Net Zero by 2050 (NZE 2050) in our analysis. They are applied by all businesses – for example, to deduce assumptions about fossil energy additions, investments, policies, and regulations. The time span until 2040/2050 reflects long cycles of energy investments. The results are used to inform management about potential opportunities and threats if the scenario “compliance with climate goals” materializes. They are also helpful for corporate strategy development, the planning process, the sales targets of our regional managers, and as a basis for our annual management decisions. Scenarios highlight the need to counterbalance fluctuating renewables and ensure the stability of the electricity grid.

2. Business strategy

For our business strategies, we use climate scenarios to be able to compare, challenge, or complement our strategic mid- to long-term sustainability-related planning processes. They also help us identify new business opportunities, such as investments in hydrogen and energy storage. Here, we use S&P Global Commodity Insights Inflections, as well as IEA STEPS,

with the following rationale: S&P Global Commodity Insights Inflections, for example, is used for our Gas Services business with customized data for market planning. Our regional strategy is based on individual NDCs. Data provided includes, for example, power generation, installed capacity, retirements, and gross capacity additions by technology and fuel type, along with further macroeconomic indicators. IEA STEPS is used to incorporate a multitude of societal (e.g., push for decarbonization) and economic indicators (e.g., GDP, inflation, population growth) and power generation-specific predictions. Based on this market model, strategic business decisions (e.g., footprint, portfolio adaptations, marketing strategies) are made, for example, to predict the evolution of the power generation market in the next 5–10 years. We also use external scenarios for investment (CapEx/OpEx) projections. We compare how the markets react to extreme parameters and adjust our strategic outlook monitoring and/or our deduced strategic rationales accordingly. The results of the analysis performed in fiscal year 2024 confirmed our strategy and the resilience of our business.

3. Decarbonization strategy

We are committed to monitoring progress on climate action and reducing our exposure to climate-related risks. We have therefore incorporated climate considerations in our market evaluation and strategy process. This included the use of three market scenarios (S&P Connect Inflections, Green Rules, Discord) with the resulting climate outcomes for our market evaluation process for the first time in fiscal year 2023. In addition, as another first during the same fiscal year, we developed a detailed annual forecast of the CO₂e emission footprint of products sold per Business Area, with the forecast going up to 2030 and building on our business planning. We also evaluated and decided on emission reduction levers.

Management approach to climate-related risks and opportunities

Enterprise risk management (ERM) sustainability-related risks and opportunities are analyzed as part of our specific ERM process as well as other operational processes, e.g., environment, health, and safety (EHS). The ERM methodology, including its reporting functionality, is designed to provide a comprehensive overview of business risks and opportunities across Business Areas and Functions, e.g., corporate sustainability, EHS, supply chain, and financing activities. This provides a unique perspective, allowing any deviations from the company's objectives to be detected across the entire organization.

Our risks and opportunities are categorized in a five-dimensional plan, capturing the most significant challenges to our business. They are categorized as "Climate," "Strategic," "Operations," "Financial," and "Compliance," with each category covering a broad spectrum of underlying associated topics.

Risks and opportunities are prioritized in the dimensions of impact and likelihood, considering both quantitative (financial, defined as potential loss of pre-tax profit) and qualitative impact perspectives (non-financial, defined as either business objectives, media/reputation, regulatory bodies' activities, or management time/attention). In this context, impact describes the potential adverse effect on our objectives while likelihood refers to the probability of occurrence.

The impact and likelihood of climate-related opportunities and risks are assessed on a short-term (up to 3 years)¹, mid-term (3–5 years)², and long-term (5–30 years)³ basis, giving us an understanding of climate-risk development over multiple time horizons. Multiple time horizons are particularly critical in building business resilience, understanding vulnerabilities (i.e., the susceptibility of a company in terms of its adaptive and coping capacity regarding a specific risk) and velocity (speed of a specific risk impacting the organization upon occurrence). This is especially relevant for transitional and physical climate-related risks.

Both impact and likelihood are measured on a scale ranging from 1 to 9, with the most critical scoring highest, and are used to calculate an overall exposure score for each risk and opportunity. The exposure score is used to rank the risks and opportunities, with the most critical again scoring highest, and categorize them as "low," "medium," "high," or "major." Impact represents a financial magnitude ranging from "marginal" (up to €10 million) to "major" (exceeding €125 million). Likelihood ranges from "unlikely" (below 20%) to "certain" (above 80%).

Each risk and opportunity in the context of ERM (irrespective of the exposure level) must have a response plan to either mitigate the risk or pursue the opportunity. All response plans are agreed upon by the management level concerned and are founded on the general response strategy of "Avoid," "Reduce," "Transfer," "Watch," and "Retain" (for risks) or "Pursue" (for opportunities).

Climate-related risk and opportunity management and review

The Vice President of Sustainability hosts quarterly risk and opportunity reviews for the climate-related risks captured using the ERM reporting functionality, thus tracking changes in regulations, market shifts, and updates from across the business. High-level risk and opportunity owners are expected to join the review. This ensures a robust management review process and allows us to identify new risks and opportunities as well as any potential changes to existing ones.

An annual external audit is performed on the ERM system, including climate-related risks and opportunities, to ensure industry and regulatory standards are upheld.

Risk and opportunity reporting

All responsible risk or opportunity owners are required to update their reported description, evaluation, and key mitigation measures instantly if significant changes occur. On a quarterly basis, following the quarterly closing procedures and communicated reporting deadlines, a summarized risk and opportunity register is reported to, reviewed by, and released by the Executive Board.

Each defined organizational reporting unit reports its updated risk register to the next higher organizational level for further evaluation and analysis. Therefore, risks and opportunities with a similar cause and effect are aggregated bottom-up into broader risk and opportunity topics. The resulting aggregated topics form the basis for the evaluation of the company-wide risk and opportunity situation and allow for a meaningful discussion of risks and opportunities at Siemens Energy Group level. Climate change is integrated into this process in that it influences risks and opportunities across the different organizational units.

The ERM reporting process is mandatory, company-wide, and includes all risks and opportunities, i.e., both climate-related and non-climate-related risks and opportunities.

¹ Siemens Energy defines a time horizon of up to 3 years as short-term, since for short-term analysis, the market can be derived from a bottom-up analysis of the pipeline of projects in development (while for longer-term views, we have to rely on a top-down approach).

² Siemens Energy defines a time horizon above 3 and up to 5 years as medium-term. Market developments for this horizon are typically derived from outlook scenarios as provided by third parties (e.g., S&P Global Commodity Insights, IEA, Bloomberg). Even if the market development may not end up being the most likely scenario, this gives us a rather conservative view that enforces reasonable planning robust enough to withstand potential deviations from the scenario assumed.

³ For the long-term horizon, we are preparing holistic long-term energy concepts for countries by using various scenarios such as S&P Global Commodity Insights, IEA STEPS, IEA APS, or IEA Net Zero by 2050. The aim is to better assess the consequences and robustness of the current and alternative energy plans we may be proposing. This helps us identify the most reasonable plan of action while maintaining adequate robustness if real-world developments differ from the assumptions made. Beyond this horizon, any predictions are subject to high uncertainty and are unlikely to have much impact on today's business. Nevertheless, we are using state-of-the-art climate models (SSPs by IPCC on the basis of the AR6) to account for any potential risks beyond this horizon.

Climate-related risks and opportunities

If we fail to adapt our business model and our product portfolio to specific regional demand, or are too slow in doing so, this may have a material adverse effect on our business, financial position, and results of operations. We are constantly screening climate-related developments – e.g., decarbonization programs of our customers, investor requirements, or regulatory frameworks – and identifying critical projects through a

sustainability check to determine risk exposure. Relevant findings are shared with the Sustainability Council.

We have identified the Gas Services and Transformation of Industry Business Areas as the most affected by climate-related risks and decarbonization trends. They are therefore being continuously monitored through our risk management process.

Based on the common TCFD risk categorization, the table below describes both the risks and opportunities arising from climate change for our business.

Climate-related opportunities

Opportunity driver	Identified potential impact	Opportunity realization measures								
<p>Products and services</p> <p>We see the opportunity to significantly accelerate Siemens Energy's growth by developing a green product portfolio that meets the market trend toward net zero emissions.</p> <table border="1" data-bbox="149 805 616 933"> <tr><td>Exposure score:</td><td></td></tr> <tr><td>Short-term</td><td>High</td></tr> <tr><td>Mid-term</td><td>High</td></tr> <tr><td>Long-term</td><td>Major</td></tr> </table>	Exposure score:		Short-term	High	Mid-term	High	Long-term	Major	<ul style="list-style-type: none"> We strengthen our decarbonization portfolio and grow markets while we continuously adapt our business models and our product, service, and solutions portfolio to the changing customer and market behavior. New products/projects comprise, e.g., H₂ production, SF₆-free high-voltage equipment, decarbonized heat, H₂-fired gas turbines, or energy storage for our clients in existing power plants – as standalone solutions for grids and in combination with renewable energies like PV or wind. It is expected that many countries will increase their (financial and regulatory) support for climate-friendly technologies and solutions to reach climate neutrality. 	<ul style="list-style-type: none"> Continuous monitoring and adaptation of our portfolio based on customer and market needs, supported by close observation of the market and regulatory developments. Constant screening of the technology landscape to identify (early-stage) technologies that might be crucial in the mid and long term to sustain and accelerate Siemens Energy's future business. Investment in targeted R&D activities that support our three strategic pillars and fields of action. The four global Innovation Centers will play a major role in realizing the energy transition in the regions together with our customers and our partnering ecosystem (industrial partners, academia, research institutes, start-ups). Through the Innovation Centers, governmental programs like the Inflation Reduction Act (IRA) in the U.S. or RepowerEU in the EU are being addressed within the fields of action to maximize external funding for ongoing and new developments.
Exposure score:										
Short-term	High									
Mid-term	High									
Long-term	Major									
<p>Markets</p> <p>The opportunity that SE may increase operating earnings and/or profitability due to favorable market developments, such as positive macro-economic developments, faster market shift toward decarbonization, or additional public support for energy-related infrastructure.</p> <table border="1" data-bbox="149 1220 616 1252"> <tr><td>Exposure score:</td><td>High</td></tr> </table>	Exposure score:	High	<ul style="list-style-type: none"> Policies currently proposed by the European Commission, including the Net Zero Industry Act and a proposal to reform the European electricity market, may lead to increased demand for our offers. Existing governmental programs and policies may also create more market demand than we currently expect. The increasing need for energy security and autonomy presents further opportunities for SE to expand operating earnings and profitability. This could include investing in energy infrastructure in countries that are seeking to reduce their dependence on imported energy sources. Market shifts toward renewable energy are expected to have a positive impact on various aspects of our business, including wind power with incentives and government-funded investments becoming available across the globe (i.e., IRA bill). 	<ul style="list-style-type: none"> SE market opportunities are monitored through the SE market evaluation process along with regular competitor analyses. SE market evaluation considers alternative market scenarios, including accelerated decarbonization, portfolio management, and R&D planning processes. Opportunity-based capital allocation is enabled through the consideration of accelerated decarbonization market scenarios. Key policy and funding initiatives identified alongside thorough guidance on funding instruments and political support on interaction with relevant authorities. 						
Exposure score:	High									

Climate-related risks

Risk driver	Identified potential impact	Risk mitigation measures								
<p>Transitional – Technology</p> <table border="1"> <tr> <td>Exposure score:</td> <td></td> </tr> <tr> <td>Short-term</td> <td>High</td> </tr> <tr> <td>Mid-term</td> <td>Major</td> </tr> <tr> <td>Long-term</td> <td>Major</td> </tr> </table>	Exposure score:		Short-term	High	Mid-term	Major	Long-term	Major	<ul style="list-style-type: none"> Climate change triggers significant changes in our markets and customer requirements (e.g., decarbonized energy systems). Our operating results depend on our ability to adapt to those changes and to optimize our cost base accordingly. Even if we succeed in developing innovative technologies, our competitors may be able to commercialize similar technologies faster or more successfully than us. 	<ul style="list-style-type: none"> Analysis of our Group portfolio, identifying three areas of focus – core, growth, and transformation – to address and enhance identified technology needs in the R&D planning process and beyond. R&D guardrail and consistent decision-making for R&D reallocation reflecting strategic (transformational) focus of the company. The fields of action are the main tool to drive transformative technology developments at SE (Siemens Energy). Their most essential task is to shape SE's (green) technology portfolio of the future (e.g., power-to-X, heat pump) to suit future energy market demands and satisfy future customer needs (e.g., H₂ production, energy storage, resilient grids, decarbonized heat, H₂-fired gas turbines). Four Innovation Centers have been established across four regions to bring SE's innovation activities closer to the customer and leverage regional partner ecosystems, ensuring SE's developments fit customer and market needs. Furthermore, leveraging our regional partner ecosystem (industrial partners, academia, research institutes, start-ups) in these four regions will ensure efficient and focused portfolio development.
Exposure score:										
Short-term	High									
Mid-term	Major									
Long-term	Major									
<p>Transitional – Market</p> <table border="1"> <tr> <td>Exposure score:</td> <td></td> </tr> <tr> <td>Short-term</td> <td>High</td> </tr> <tr> <td>Mid-term</td> <td>High</td> </tr> <tr> <td>Long-term</td> <td>Major</td> </tr> </table>	Exposure score:		Short-term	High	Mid-term	High	Long-term	Major	<ul style="list-style-type: none"> There is a risk that, due to the sustainability trend in the energy markets (e.g., the shift from fossil fuels toward renewables, intensified competitive behavior, low demand for hydrocarbons), unexpected geopolitical developments, or changes in customer preference, we may face reduced demand for certain parts of our products and services (e.g., fossil-based portfolio, countries depending on high oil prices may reduce their investment in energy infrastructure and/or default on payments). Due to the rapid rise of these trends, we may not be able to adapt our business model and product portfolio to such disruptive developments. 	<ul style="list-style-type: none"> Monitoring of market risks through the Siemens Energy common market evaluation process along with regular competitor analyses. Individual response aspects are addressed for all SE units (Divisions and Corporate Functions). Risk responses include intensive divisional cost-out efforts, tracking of and tailored responses to competitor attacks in service, capacity adjustment to market conditions, and product cost-out. Constant screening of climate-related developments in the decarbonization programs of customers and investors, to derive risk exposure and share relevant findings with the Sustainability Council for further action in the respective area of responsibility. To raise awareness of ESG risks in our projects, we have implemented an ESG check early in the process and work closely with the relevant Functions/Divisions to ensure necessary mitigation actions are identified and implemented in a timely manner.
Exposure score:										
Short-term	High									
Mid-term	High									
Long-term	Major									
<p>Transitional – Policy and legal</p> <table border="1"> <tr> <td>Exposure score:</td> <td></td> </tr> <tr> <td>Short-term</td> <td>Medium</td> </tr> <tr> <td>Mid-term</td> <td>Medium</td> </tr> <tr> <td>Long-term</td> <td>Medium</td> </tr> </table>	Exposure score:		Short-term	Medium	Mid-term	Medium	Long-term	Medium	<ul style="list-style-type: none"> The markets of our Gas and Power business are affected by changes in national energy regulations, such as support of renewable energy, carbon pricing, and climate change targets, as well as the modernization of energy and electricity markets. These will provide an incentive to adapt current products and develop sustainable solutions leveraged by supporting regulations. Risks arising from non-compliance with the Code of Conduct or with legal, contractual, or (emerging) regulatory requirements might affect Siemens Energy, e.g., through legal requirements on emissions. CO₂ taxes, financing restrictions for GHG-emitting technologies, or declining subsidy levels might affect the financial sustainability of some of our business segments. As an example, the EU Taxonomy legally requires Siemens Energy to publicly disclose sustainability-related financial figures, potentially affecting future investment decisions by external investors. 	<ul style="list-style-type: none"> Monitoring current and emerging regulations in our major markets. Raising awareness of these new regulations across the business to assess the impact that regulation can have on our offerings. Informing affected businesses as early as possible to create room for timely portfolio adaptations (products and services). Where applicable, informing on emerging regulations either directly through contact with the relevant regulatory bodies, via associations, or together with similarly affected companies to avoid or lessen the foreseen impact.
Exposure score:										
Short-term	Medium									
Mid-term	Medium									
Long-term	Medium									

Risk driver	Identified potential impact	Risk mitigation measures								
<p>Transitional – Reputation</p> <table border="1"> <tr> <td>Exposure score:</td> <td></td> </tr> <tr> <td>Short-term</td> <td>High</td> </tr> <tr> <td>Mid-term</td> <td>Major</td> </tr> <tr> <td>Long-term</td> <td>High</td> </tr> </table>	Exposure score:		Short-term	High	Mid-term	Major	Long-term	High	<ul style="list-style-type: none"> Increased public pressure around the decarbonization trend might cause reputational damage for our company if the portfolio transition and the reduction of our environmental impact is not executed quickly enough or not at all. This would result in adverse effects on our business (e.g., loss of tenders, discontinuation or adaptation of certain products at an earlier time than expected) and financial condition (e.g. unattractive investment opportunity for investors, divestments of ESG-oriented investors). Increasing public pressure (e.g., media campaigns, boycotts) may accelerate the shift from fossil-based energy generation toward renewables. If the strategic implementation deviates from what has been communicated, this may result in a lack of credibility for external stakeholders and partners. 	<ul style="list-style-type: none"> Implementing a climate action program, including targets, to create transparency on decarbonization levers and aim to decarbonize our portfolio. Regularly performing a double materiality analysis to understand changing stakeholder expectations. Constantly screening climate-related developments in the strategic programs of our customers and investors to derive risk exposure and share relevant findings with the Sustainability Council for further action in the respective area of responsibility. ESG risks in projects are addressed at different stages of the process from early bid management through to project execution involving various expert teams across the company. We work closely with Project/Customer Finance & Sales to discuss the identification and implementation of mitigation actions. Creating transparency on ESG performance for stakeholders, e.g., through the Sustainability Report, and contributing to relevant ESG ratings and standards.
Exposure score:										
Short-term	High									
Mid-term	Major									
Long-term	High									
<p>Physical risk – Acute Increased severity of extreme weather events</p> <table border="1"> <tr> <td>Exposure score:</td> <td></td> </tr> <tr> <td>Short-term</td> <td>Medium</td> </tr> <tr> <td>Mid-term</td> <td>Medium</td> </tr> </table>	Exposure score:		Short-term	Medium	Mid-term	Medium	<ul style="list-style-type: none"> Severe weather, such as fires, hurricanes, high winds and seas, blizzards, and extreme temperatures, may lead to an evacuation of personnel, curtailment of services or suspension of operations, inability to deliver materials to job sites in line with contract schedules, loss of or damage to equipment and facilities, supply chain disruptions, or reduced productivity. Readiness for these emergencies will lead to increased resilience. We may face the risk of failing to identify all global climate risks (e.g., floods, storms, etc.) due to changes in climate conditions that result in damage to property, an impact on business continuity, or the need for investment in preventive measures. 	<ul style="list-style-type: none"> Continuously evaluating and monitoring changes in physical climate parameters based on global studies, weather statistics, and trends based on the international experience of insurance companies. Performing local risk assessments based on our EHS emergency management and developing protection concepts where necessary. Our insurance department provides a natural hazard risk analysis for each new building project that supports the selection process for the respective site areas. The data and information collected allow us to identify geographical areas where we need to pay special attention to risks from changes to physical climate parameters. Constant improvement of our EHS Emergency Response Management System and the supply chain response. 		
Exposure score:										
Short-term	Medium									
Mid-term	Medium									
<p>Physical risk – Chronic Longer-term shifts in climate pattern</p> <table border="1"> <tr> <td>Exposure score:</td> <td></td> </tr> <tr> <td>Long-term</td> <td>High</td> </tr> </table>	Exposure score:		Long-term	High	<ul style="list-style-type: none"> Long-term shifts in climate patterns (e.g., longer and warmer seasons, extreme cold, drought) may affect our and our customers' operations and could result in the development of new markets and business models. This would require changes to our product portfolio and project execution. We may face the risk of failing to identify all global climate risks (e.g., floods, storms, etc.) due to changes in climate conditions that result in damage to property, an impact on business continuity, or the need for investment in preventive measures. 	<ul style="list-style-type: none"> Creating transparency on environmental stressors and impacts to evaluate, e.g., water stress on locations. We are analyzing the potential impacts on our locations at a global level using different pathways and taking into consideration the total insured values. Based on this baselining, we are implementing preventive measures, supported by integrated management systems and insurance risk reports. Consistent improvement of our EHS Emergency Response Management System. 				
Exposure score:										
Long-term	High									

Metrics and targets

The impacts of climate change, coupled with rising global demand for energy, pose an enormous challenge to all stakeholders if we want to meet the Paris Agreement goal of limiting global warming to well below 2°C and pursue efforts to limit the temperature increase to 1.5°C. Siemens Energy aims to do its share to decarbonize the energy sector and aspires to reach net zero emissions across the value chain.

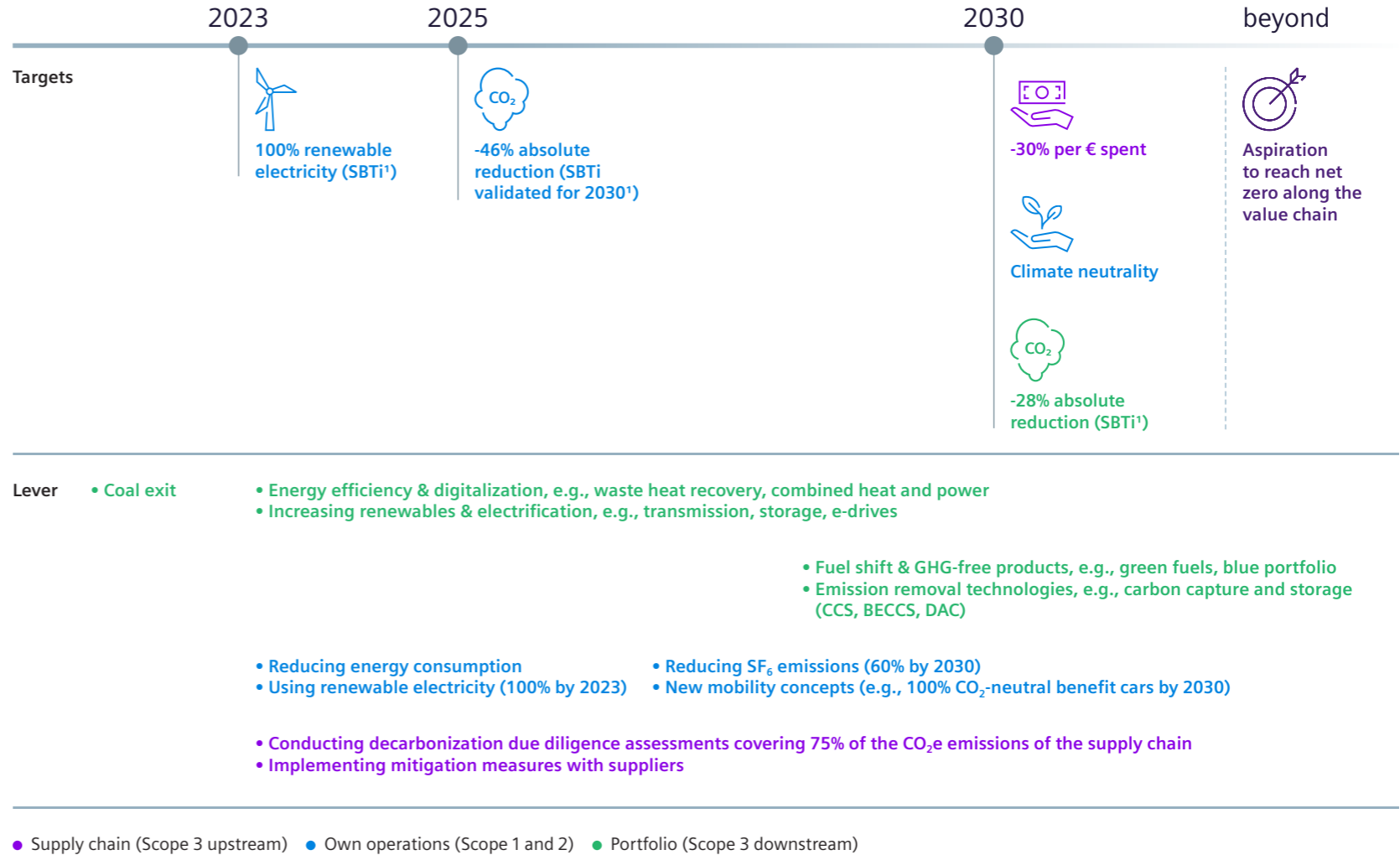
Therefore, we evaluate Scope 1, 2, and 3 emissions every year, have set ourselves both short- and mid-term targets for all scopes, and measure performance against those targets.

The greatest potential to reduce GHG emissions is in our products, solutions, and services, since they make up more than 99% of our overall footprint (Scope 3: use of sold products). We are committed to a 28% reduction by 2030 from a 2019 baseline¹. The SBTi confirms that our target for the use of our products sold is in line with the Paris Agreement goal of limiting global warming to well below 2°C. For the evaluation of emissions from the use of sold products, we follow the GHG Protocol.

Siemens Energy aims to be climate neutral in its own operations by 2030 and to compensate for remaining emissions from then on. This includes the reduction of absolute Scope 1 and 2 emissions by at least 46% by 2025 from base year 2019. This is an even greater ambition than our initial target year, which was originally 2030, as validated by the SBTi for Siemens Energy (without Siemens Gamesa). The strongest levers to achieve climate neutrality by 2030 lie in reducing energy consumption, using renewable electricity, reducing SF₆ emissions, and introducing new mobility concepts. In fiscal year 2023, we achieved our target to have 100% of Siemens Energy's global electricity consumption from renewable sources.

Our suppliers are an important part of the value chain, and we encourage them to take climate protection measures. Emissions reduction is an integral part of our suppliers' supply chain management (see chapter [Sustainable supply chain management](#)). For Siemens Energy, we have set the

Our climate roadmap



¹ Siemens Energy (excluding Siemens Gamesa).

target of reducing our relative Scope 3 GHG emissions from purchased goods and services, as well as transportation and distribution, by 30% per procurement volume unit (€ spent) until 2030 based on fiscal year 2018.

For more information on our decarbonization efforts, energy consumption, and related GHG emissions, please refer to the chapter [Decarbonization](#).

GHG emissions

Our GHG emissions are externally verified by KPMG (please see [Auditor's report](#) on page 88).

Scope 3 downstream (use of sold products)

Siemens Energy's total Scope 3 emissions from the use of sold products during the reporting period amounted to 1.334 billion metric tons of CO₂e (base year 2019: 1.5 billion metric tons). Compared to fiscal year 2023, there is an increase of 0.235 billion tons in absolute numbers and a decrease of 11.1% compared to the base year 2019. Intensity has increased by 22%, compared to fiscal year 2023. The main reason for this increase is a comparable increase in order entry for all Business Areas. This is already an indication of how challenging it will be to reduce emissions while at the same time serving our customers.

Scope 1 & 2

In fiscal year 2024, our Scope 1 and 2 emissions increased by around 9% or 17 metric tons, resulting in a Scope 1 and 2 intensity of 5.71×10⁻⁶ t CO₂e/€ of revenue in 2024 compared to 5.78×10⁻⁶ t CO₂e/€ of revenue in 2023. The increase in emissions was mainly caused by more gas turbine testing (mainly prototype tests) and more compressor testing (mainly factory acceptance tests). Additionally, a minor impact came from heating. Both the tests and the heating were reduced in fiscal year 2023 due to [government regulations](#) because of the Russian war against Ukraine to save natural gas.

Deviations were identified in the fleet emissions calculations, resulting in a restatement of the 2023 fiscal year figures.

Scope 3 downstream emissions ¹ (1,000 metric tons CO ₂ e)	Fiscal year	
	2024	2023
Total¹	1,333,642	1,098,370
Intensity (t CO ₂ e/€ of order intake)	0.027	0.022

¹ Includes category "use of sold products" only (well-to-tank emissions are included, biogenic emissions have been excluded). Siemens Gamesa's emissions equal zero.

Scope 1 and Scope 2 emissions ¹ (1,000 metric tons CO ₂ e)	Fiscal year	
	2024	2023
Scope 1	175	160
Scope 2	22	20
Total	197	180
Intensity (t CO ₂ e/€ of revenue)	5.71×10 ⁻⁶	5.78×10 ⁻⁶

¹ Figures for 2023 have been changed due to deviations in data calculation.

Scope 3 upstream

The calculated upstream footprint for fiscal year 2024 is 9,238 metric kilotons CO₂e, resulting in an intensity of 0.408, which is 0.1% higher in total emissions but 1.3% lower in intensity compared to fiscal year 2023.

Scope 3 upstream emissions (1,000 metric tons CO ₂ e)	Fiscal year	
	2024	2023
Total	9,238	9,230¹
Intensity (kg CO ₂ e/€ of purchasing volume)	0.408 ²	0.414

¹ 325 kilotons of the 775 kilotons of CO₂e emissions were calculated using a consumption-based method.

² Reduction compared to base year 2018 (baseline calculation was partially extrapolated): 19.6%

EU Taxonomy

For fiscal year 2022, and in accordance with a simplified approach allowed by the EU for first-time application, Siemens Energy reported the shares of taxonomy-eligible economic activities in revenues, capital expenditure (CapEx), and operating expenditure (OpEx) in relation to the currently developed environmental targets "Climate change mitigation" and "Climate change adaptation." Since fiscal year 2023, the reporting obligation also extends to the taxonomy-aligned shares of revenue, CapEx, and OpEx and the recognition of natural gas and nuclear energy activities. For further information, please refer to [Siemens Energy Annual Report 2024, EU Taxonomy](#).

EU Taxonomy (%)	Fiscal year	
	2024	2023
Share of revenue from EU Taxonomy-eligible activities	74.2	73.4
Share of capital expenditures from EU Taxonomy-eligible activities	83.5	72.2
Share of operational expenditures from EU Taxonomy-eligible activities	80.8	83.1
Share of revenue from EU Taxonomy-eligible and -aligned activities	42.9	37.5
Share of capital expenditures from EU Taxonomy-eligible and -aligned activities	64.7	51.0
Share of operational expenditures from EU Taxonomy-eligible and -aligned activities	41.9	40.4

Siemens Energy methodology for calculating CO₂e emissions from Scope 3 – Use of sold products

Siemens Energy’s decarbonization activities cover its complete value chain. Our methodology follows the recommendations of the Greenhouse Gas Protocol. We evaluate and disclose the most material categories of the GHG Protocol, including category 11 – Use of sold products, since this accounts for the vast majority of our overall GHG emissions. We seek to reduce the CO₂e emissions from the use phase of our sold products by 28% until 2030. This target has been validated by the Science-Based Targets Initiative (SBTi).

Definition: Scope 3 – Use of sold products

Scope 3 emissions arise from sources owned or controlled by other entities in the value chain (e.g., material suppliers, third-party logistics providers, waste management suppliers, travel suppliers, lessees and lessors, franchisees, retailers, employees, and customers).

Category 11 of the GHG Protocol (Scope 3: Use of sold products) includes emissions from the use of goods and services sold by Siemens Energy in the reporting year, considering the total expected lifetime emissions.

Relevance of Scope 3 – Use of sold products

In the course of our evaluation to set ourselves a science-based emission reduction target, we calculated the complete Siemens Energy CO₂e footprint based on fiscal year 2019 (Scope 1, 2, 3 up- and downstream). The results showed that >95% of our overall CO₂e footprint originates from the use of our sold products.

Sources of CO₂e emissions at Siemens Energy

- Products that directly consume energy (fuels or electricity) during use:
 - CO₂e emissions are basically generated through the combustion of fossil fuels (e.g., natural gas in a gas turbine). The amount of CO₂e emissions varies depending on the type of fuel (e.g., natural gas, biomass, hydrogen) and the energy efficiency of the product (gas turbine, steam turbine, electric motor, etc.).
 - CO₂e emissions are basically generated by large electrical consumers (e.g., motors, drives, pumps) or from power losses (e.g., transformers) of the used products.
- Products that contain or form greenhouse gases that are emitted during use:
 - To a minor extent, the transmission portfolio might be emitting CO₂e due to SF₆ gas leakages during maintenance or operational use at customer sites.

Scope and boundaries

Data on CO₂e emissions is reported within the limits of the customer use phase of a product related to a certain Business Area. Therefore, CO₂e emissions occurring during other phases of the life cycle of a portfolio unit, such as in the supply chain, during production, or upon end-of-life disposal, are not considered as emissions from the use of our sold products.

SE methodology

Calculating emissions from category 11 typically requires product design specifications and assumptions about how customers use our products (e.g., use profiles, assumed product lifetimes).

Typical activity data needed to calculate emissions from products that directly consume energy (fuels or electricity) during use:

- Total lifetime expected
- Quantity of products sold
- Fuel used per use of product
- Electricity consumption per use of product

Emission factors needed:

- Life cycle emission factors for fuels
- Life cycle emission factors for electricity

Typical activity data needed to calculate emissions from products that contain or form GHGs that are emitted during use:

- Total quantity of products sold
- Quantity of GHGs contained per product
- Percentage of GHGs released throughout the lifetime of the product

Emission factors needed:

- Global Warming Potential (GWP) of the GHGs contained in the product, expressed in units of carbon dioxide per unit kilogram of the GHG

Although the GHG Protocol contains clear guidance, there are still many assumptions that must be made when calculating the footprint of a product over its lifetime. Our principles are transparency, credibility, and a somewhat conservative perspective. For our assumptions, we rely on the Business Areas as well as on external, credible sources, such as energy market forecasts from reputable providers.

At Siemens Energy, the evaluation of CO₂e emissions is based on project lists with order entry in the respective reporting year. Internal sources for calculation parameters are diverse and include several project or product databases, service databases, product brochures, and expert opinions. We use external sources for the emission factors (global grid mix, fuel combustion).

Emission factors

Siemens Energy uses life cycle emission factors (including well-to-tank emissions) to calculate Scope 3 emissions related to fuels and energy consumed. Compared to combustion emission factors, life cycle emission factors represent all emissions in the upstream supply chain of fuels and energy (incl. extraction, refining, and transportation of the raw fuel sources; excl. flaring and venting).

Emission factors for fuel combustion are based on the IPCC Default Emission Factors for Stationary Combustion in the Energy Industries while the global grid mix is based on the IEA World Energy Outlook. Emission factors are checked and updated on a yearly basis.

Further calculation parameters:

- Emissions calculated for a particular year include the lifetime emissions of all the products sold in that year. The emissions produced from our already installed fleet are not included in that year's calculation.
- Emission calculations are performed based on assumptions about yearly operating hours and an estimated lifetime in years.
- Energy efficiency is based on ISO values or expert estimates.
- Fuel type is based on internal project lists.

Service business

Service business is not part of the evaluation of Scope 3 emissions from the use of sold products.

Improving data quality over time

As markets are changing, we need to make sure our calculation parameters are conservative but still reflect reality. For example, the share of renewables in the global grid mix is increasing, and the emission factor for electricity is changing over time. This needs to be reflected in our calculations.

We also revisited how we consider H₂ co-firing, and thus considered the planned share of H₂ from a co-firing project in fiscal year 2022 in our calculations. A customer buying an H₂-ready gas turbine is not evidence that it will actually run on H₂. Therefore, we consider H₂ co-firing only if the customer shares a specific time plan for using H₂ and indicates to what extent H₂ is going to be used.

While gas turbines have historically been powered by fossil fuels throughout their lifetime, this will obviously change in the future. Many countries, including our most relevant customer markets, have committed to a net zero economy in 2050 and a net zero electricity system even earlier. This is why we decided to include this change in our calculations for the first time and assume that the turbines we sell now will not run on unabated fossil fuels after 2050.

Base year greenhouse gas (GHG) recalculation policy

Siemens Energy uses fiscal year 2019 as the base year for our greenhouse gas (GHG) emission calculation for Scope 1, 2, and 3 (category 11: Use of sold products).

In order to accurately track progress toward our science-based targets, we will adjust our base year emissions inventory to account for significant

changes, described below, if the changes drive an increase/decrease in emissions of greater than 5% versus the initial baseline, in accordance with the GHG Protocol guidance and the SBTi Net Zero Standard. We may also choose to recalculate our baseline for changes below 5%, especially when structural changes occur.

Structural changes

Structural changes that significantly impact our base year GHG emissions and may trigger an adjustment of the baseline include acquisitions, divestments, and mergers. When significant structural changes occur in the middle of a year, the current and baseline year will be recalculated for the entire year. In the event of an acquisition, in order to ensure that full and accurate data is available, a recalculation will be carried out within one year after the structural change occurred.

Calculation methodology changes

Methodology changes that significantly impact our base year GHG emissions and may trigger an adjustment of the baseline include updated emission factors, improved data accuracy, and changes in calculation methodologies.

Data deviations or other changes

We will recalculate our emissions in the event that we discover a significant deviation or a number of cumulative deviations that together are significant. A significant change in our organizational or operational boundaries may likewise result in an adjustment of the baseline.

Baseline adjustments will be made at the end of each fiscal year if we find any of the changes described above to have occurred during the reporting period that may require us to recalculate our base year. We publicly restate our baseline when we report the latest carbon footprint for the previous financial year.

Limited assurance report of the independent auditor

TO THE MANAGEMENT BOARD OF SIEMENS ENERGY AG, MUNICH

We have performed a limited assurance engagement on the sections 1 “The company”, 2 “Decarbonizing our business” and 3 “Responsible operations” in the Sustainability Report of Siemens Energy AG, Munich (hereinafter the “Group”) for the reporting period from October 1, 2023 to September 30, 2024 (hereinafter the “report”).

Not subject to our assurance engagement are interviews presented in the report as well as any prospective disclosures and links to other web pages.

Responsibilities of management

The legal representatives of Siemens Energy are responsible for the preparation of the report in accordance with the GRI Sustainability Reporting Standards of the Global Reporting Initiative, in combination with internal guidelines (hereinafter the “Reporting Criteria”).

This responsibility includes the selection and application of appropriate sustainability reporting methods and making assumptions and estimates about individual sustainability disclosures of the Group that are reasonable in the circumstances. Furthermore, management is responsible for such internal control as they consider necessary to enable the preparation of a report that is free from material misstatement, whether due to fraud or error.

Independence and quality assurance of the assurance practitioner’s firm

We have complied with the independence and quality assurance requirements set out in the national legal provisions and professional pronouncements, in particular the Professional Code for German Public Auditors and Chartered Accountants (in Germany) and the IDW Standard on Quality Management 1: Requirements for Quality Management in Audit Firms (IDW QMS 1 (09.2022)).

Responsibility of the assurance practitioner

Our responsibility is to express a conclusion with limited assurance on the report based on our assurance engagement.

We conducted our assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised): “Assurance Engagements other than Audits or Reviews of Historical Financial Information” issued by the IAASB. This standard requires that we plan and perform the assurance engagement to obtain limited assurance about whether any matters have come to our attention that cause us to believe that the company’s report, are not prepared, in all material respects, in accordance with the aforementioned Reporting Criteria.

In a limited assurance engagement, the procedures performed are less extensive than in a reasonable assurance engagement, and accordingly, a substantially lower level of assurance is obtained. The selection of the assurance procedures is subject to the professional judgment of the assurance practitioner.

In the course of our assurance engagement we have, among other things, performed the following assurance procedures and other activities:

- Interviewing employees at Group level in order to gain an understanding of the process for determining material sustainability topics and the respective boundaries of Siemens Energy
- A risk analysis, including media research, to identify relevant sustainability aspects for Siemens Energy in the reporting period
- Reviewing the suitability of internally developed Reporting Criteria
- Evaluation of the design and implementation of the systems and processes for determining, processing and monitoring of sustainability disclosures included in the scope of this engagement, including the consolidation of the data

- Inquiries of personnel at Group level responsible for determining disclosures on concepts, due-diligence processes, results and risks, for conducting internal controls and consolidation of the disclosures
- Evaluation of selected internal and external documentation
- An analytical review of the data and trend explanations of quantitative information submitted by all sites for consolidation at Group level
- Evaluation of local data collection, validation and reporting processes as well as the reliability of reported data based on samples at the sites in Jundiaí (Brasil), Aalborg (Denmark) and Finspång (Sweden)
- Assessment of the overall presentation of the disclosures

Assurance opinion

Based on the assurance procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the sections 1 “The company”, 2 “Decarbonizing our business” and 3 “Responsible operations” in the Sustainability Report of Siemens Energy AG, Munich for the period from October 1, 2023 to September 30, 2024 have not been prepared, in all material respects, in accordance with the Reporting Criteria. We do not express an assurance opinion on interviews presented in the report as well as any prospective disclosures and links to other web pages.

Restriction of use

This assurance report is solely addressed to Siemens Energy AG, Munich.

Our assignment for Siemens Energy AG and professional liability is governed by the General Engagement Terms for Wirtschaftsprüfer (German Public Auditors) and Wirtschaftsprüfungsgesellschaften (German Public

Audit Firms) (Allgemeine Auftragsbedingungen für Wirtschaftsprüfer und Wirtschaftsprüfungsgesellschaften) in the version dated January 1, 2024 (www.kpmg.de/AAB_2024_EN). By reading and using the information contained in this assurance report, each recipient confirms having taken note of provisions of the General Engagement Terms (including the limitation of our liability for negligence to EUR 4 million as stipulated in No. 9) and accepts the validity of the attached General Engagement Terms with respect to us.

Munich, December 10, 2024

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