SIEMENS energy

Sustainability Report 2021

Creating transparency

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Dear readers,

We stand at a turning point in human history. The impact of climate change – coupled with an ever-growing demand for energy – is confronting us with fundamental challenges. Projections made by the Intergovernmental Panel on Climate Change in August 2021 indicate that the average global temperature may rise more than 1.5 degrees by as early as 2030. The result would be weather events more extreme than we have ever experienced before. Thus, it is time to act and implement measures that reduce CO_2 right away. Politicians, society at large, and the business world all bear an equal responsibility.

At Siemens Energy, we take this effort very seriously. We intend to include the "Decade of Implementation" – as it was called at the World Climate Conference in Glasgow in November 2021 – within our sphere of responsibility and to make an active contribution to combating climate change.

We want to be the sustainability leader in our industry – and that includes the environment, social responsibility, and governance.

"That's why we place sustainability at the heart of our strategy."

What does that mean for us? We have declared that our activities will be guided by the United Nations' 17 Sustainability Development Goals that are part of its Agenda 2030. Siemens Energy actively supports the targets of the Paris Agreement. And we are committed to the Ten Principles of the United Nations Global Compact and report annually on our progress.

Our efforts to fight climate change start within our own organization. The most important internal goal is to make our own operations climate-neutral by 2030. Our ambitious climate goals throughout the value chain are consistent with the Paris Agreement, as the Science-Based Targets initiative has confirmed.

We also want to set an example in our social responsibility activities. Over the past year, the COVID-19 pandemic and the increasingly obvious impact of climate change have changed the lives of everyone. They have shown the importance of a reliable, affordable, sustainable energy supply so that societies can retain their ability to function even under the most difficult conditions. What we need is a global perspective that recognizes the specific situation in the different parts of the world. Yet the reality is that efforts made to increase sustainable development may be offset by population and energy growth in developing countries. And that would jeopardize every CO_2 target. All the more reason for us to promote technologies that will enable these countries to cover the cost of transitioning faster to renewable energy and at the same time meet their growing energy needs. That calls for innovation. We therefore invest around €1 billion annually in research and development.

What is crucial, however, is not only what we do, but also how we do it. Thus, responsible business practices are the base of our business at Siemens Energy. They express our corporate culture – from rigorous compliance with occupational health and safety measures to an unequivocal commitment to human rights. It also includes choosing and managing our workforce from a perspective that recognizes inclusion and diversity as a strength. The same goes for integrity and compliance, which are the foundation for all our decisions and actions. Sustainability is a task for everybody at Siemens Energy. We systematically manage, track, and measure our Sustainability Program. This report is an expression of how we view our mission.

We made progress in 2021 on our journey to become the sustainability leader in our industry. The results from our sustainability ratings confirm that. But there is more work to be done. We will keep you posted on what we do.

Best regards,

Christian Bruch
Chief Executive Officer and Chief Sustainability Officer
Siemens Energy AG

Our sustainability performance

Decarbonizing our business

Performance indicator	Unit	2021	2020
Greenhouse gas emissions			
Scope 1+2 emissions			
absolute	1,000 metric tons CO_2 e	273	292
thereof SF_6	1,000 metric tons CO_2 e	41	66
thereof fleet	1,000 metric tons CO_2 e	29	29
Scope 3 downstream emissions[1]			
absolute	1,000 metric tons CO_2 e	1,369,163	927,476
intensity	metric tons CO_2 e/ € order intake	0.041	0.027
Scope 3 upstream emissions[2]			
absolute	1,000 metric tons CO_2 e	4,761	4,722
intensity	kg CO_2 e/€ PVO spent	0.473	0.476
Energy			
Energy consumption	million gigajoule	6.33	5.80
Share of green electricity	%	76	78

1 Includes category "use of sold products" only.
2 Includes categories "purchased goods and services" and "transportation and distribution" only. Without SGRE.
3 Without SGRE.

Responsible operations

Performance indicator	Unit	2021	2020
Research & development			
Research & development expenses	million €	1,155	985
Sustainable supply chain management			
External sustainability audits at suppliers	no.	157	60
Waste			
Waste recycling and recovery rate	%	82	78
Water			
Water consumption	million cubic meters	4.10	3.23
Product stewardship			
Portfolio coverage by Life Cycle Assessments (LCAs)	%	71	–
Employees			
Share of women in overall workforce	%	19.3	19.1
Share of women in top leadership positions[3]	%	21	21
Training hours per employee	no.	8.6	–
Occupational health and safety			
Total Recordable Incident Rate (TRIR) of employees	no.	0.49	–
Societal engagement			
Donations	million €	4.71	5.44

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Sustainability dialogue
The energy industry's shift to sustainability raises new challenges. Young talents ask our management their most pressing questions.

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How to fight climate change now?

Interview: Oliver Sachgau **Photography:** Götz Schleser

Climate change is a major threat to humanity. As Siemens Energy Chief Executive Officer and Chief Sustainability Officer Christian Bruch notes, the time has come to radically change and decarbonize our energy system.

In conversation at the Futurium, Berlin's "House of Futures", Bruch lays out a path forward for Siemens Energy and the world at large.

Christian Bruch, the world is far from where it needs to be to meet the Paris Climate Agreement goals. We are nearing a tipping point. Why is there still so much hesitancy to do what's needed to meet these goals?

The Futurium in Berlin is a meeting point for presenting and exchanging information about science, research, and innovation – the ideal location for a conversation with Christian Bruch about the future of sustainability in the energy sector.

I would not call it hesitancy. The transformation we need to go through is complex and massive. We can see that the elements we are driving today are not sufficient. The IPCC [Intergovernmental Panel on Climate Change] report has shown us that we have to move fast, and we have to move differently. We need to bring all stakeholders together to shift gears. The time to act is now.

The effects of climate change are distributed unevenly, affecting some areas of the world much more than others, especially developing countries and the global south. How do you address the disparity between where climate change is hitting people the hardest and where we have the most resources to tackle it?

We do need different solutions in different parts of the world. At the same time, as the Paris Agreement clearly states, the developed world has an obligation to support the developing world in tackling the challenges of energy supply while addressing sustainability. We, as the developed world, have not lived up to this commitment. We need to recognize that in the developing world in particular, the increase in energy demand will be massive. If the developing world fails to deal with this challenge, we will not be able to mitigate climate change, which will ultimately also be to the disadvantage of the developed world.

Your current portfolio consists of conventional and decarbonized technologies. At the same time, you want to be the partner of choice for the energy transition. What will this mean for your portfolio?

There's no single silver bullet for the energy transition, whether it's solar or wind or hydrogen. We will need a variety of technologies – and for a transitional time, we will need conventional technologies. This is why I believe it's a strength to have what we call decarbonized portfolio elements and conventional technologies like gas turbines, because our customers have the same problem. Having said that, our portfolio is absolutely going to change going forward. That's not even a question. We focus our R&D investments of €1 billion every year on technologies that are relevant in a decarbonized energy world.

You've spoken in the past about the importance of bridging technologies. Why would switching to gas help us decarbonize? Aren't you just taking half-measures?

First of all, if you can produce power from a renewable energy source, that's a better way to do it. Nobody is questioning that. But if you have a situation today where 70% of the CO_2 emissions in power production are caused by coal-fired power production, the most urgent task becomes how to stop and replace that. If gas helps us build a bridge by cutting the CO_2 emissions by two-thirds compared to coal, then this is the right measure for reducing CO_2 emissions in the short and medium term. Will it still be the right technology and approach ten or more years down the road? Probably not, but for me, it's important that we stop talking about long-term targets and start tackling some things immediately.

Siemens Energy has the goal of being powered by 100% renewable energy by 2023 as one lever of becoming climate neutral by 2030. How are you doing with these goals?

We're well on track here, and there's no doubt that we will achieve that target of being climate neutral in our own operations by 2030. Reaching this goal will obviously require reducing emissions, but we will also need to compensate emissions from 2030 onwards.

Is it more important to talk about how we as individuals use electricity, or about the way companies generate it?

That is a very important point because we underestimate the relevance of the individual. If we don't change the way we consume energy, we won't solve the problem. It will require all three elements – how we generate electricity, how we distribute and store it, and how we consume it – and we all have a role as individuals to tackle that. We will have to change, all of us.

Oliver Sachgau is a Berlin-based German-Canadian writer and journalist focusing on financial topics. His work has appeared in Bloomberg, the Washington Post, Fortune, and the Independent.

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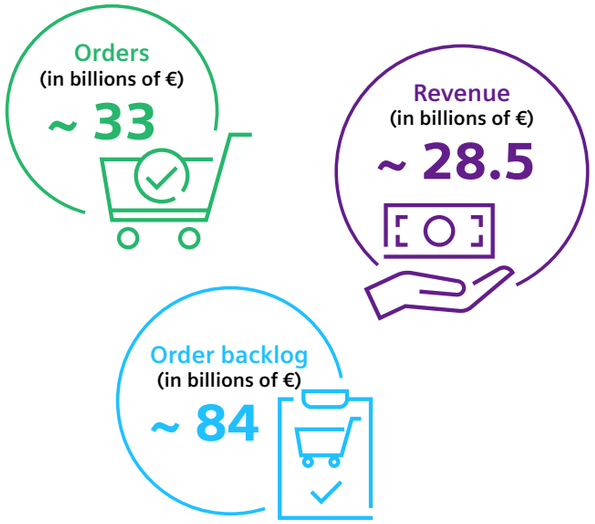
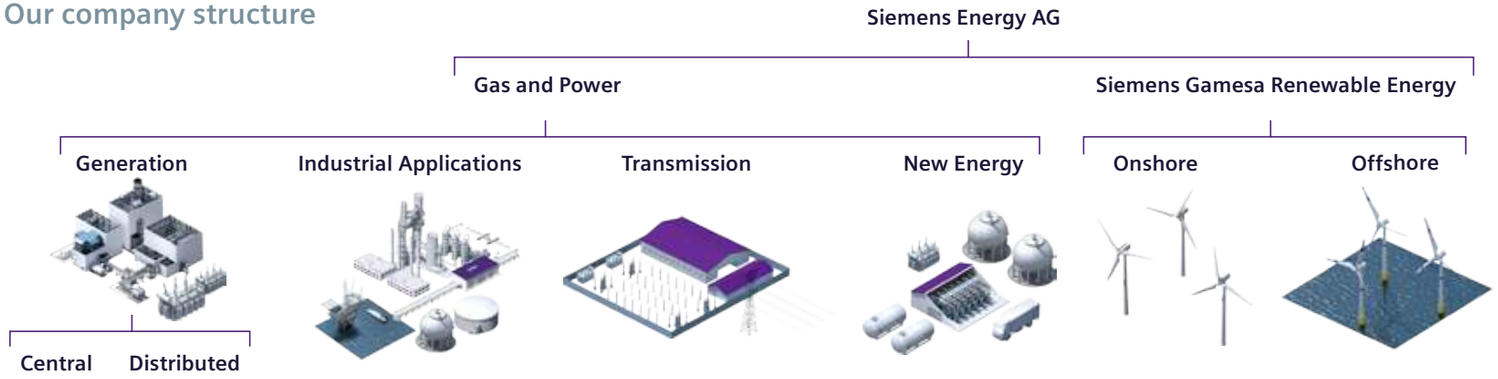
Siemens Energy at a glance

At Siemens Energy, 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. Our portfolio, extensive energy experience, and an ambitious strategy to decarbonize global energy systems are all central to our efforts to be a valued partner and driver of the energy transition.

Key financial indicators



Our company structure



With our broad portfolio of products, solutions, and services, we cover almost the entire energy value chain – from power generation, transmission, and storage to optimizing energy consumption in industrial processes. Our products include conventional and renewable energy technologies, such as gas and wind turbines, hybrid power plants operated with hydrogen, high-voltage grid access solutions, and high-voltage transformers. A majority stake in the listed company Siemens Gamesa Renewable Energy (SGRE) makes Siemens Energy a global market leader in wind power.

Siemens Energy employs around 91,000 people in more than 90 countries worldwide.

Our company structure

The company is divided into two reporting segments, Gas and Power (GP) and SGRE:

- Our GP reporting segment includes our Divisions Generation, Transmission and Industrial Applications, with the respective service business based on customer groups and product lines, as well as our new business venture New Energy Business, developing our business in Power-to-X technologies, electrolyzer systems, and solutions for the production of green hydrogen using renewable energy and water.

- Our SGRE reporting segment, in which Siemens Energy holds a 67% majority stake, focuses on the design, development, manufacturing, supply, and installation of products as well as offering technologically advanced services for the renewable energy sector with a focus on wind turbines for various wind conditions.

As a listed company, our SGRE reporting segment has an independent sustainability strategy and publishes a separate ↗ **Consolidated Non-Financial Statement 2021**. Whilst the strategic direction of both reporting segments is comparable, management approaches and programs may differ.

Strategic focus

A focus on innovation, portfolio transformation and sustainability guides us in all our activities and shows our determination to make the future of tomorrow different today for both our partners – and our people.

- **Our vision is to become the most valued energy technology company in the world**
- **Our business is structured along three pillars: low- or zero-emission power generation, transport of energy and storage, as well as reducing our greenhouse gas footprint and energy consumption in industrial processes**
- **We aim to be the sustainability leader in the industry**

Our world is facing an ever-increasing need for reliable and affordable energy and electricity to support economic development and ensure stable societies. At the same time, the increasing speed of climate change urges us to satisfy this demand more sustainably and with the clear target of achieving climate neutrality. One-sixth of the world's electricity is generated by an installed base of more than 90,000 units by Siemens Energy. This puts us in a unique position to support societies around the world to successfully meet the growing need for sustainable, reliable, and affordable energy.

We are committed to our purpose "We energize society". Our vision is to become the most valued energy technology company in the world. To achieve this vision, we need to balance the varied interests of our diverse stakeholders, namely our customers, our investors, our partners, our employees, our families, and the societies in which we live. We are convinced that only in providing efficient, innovative, and world-leading technologies will we be able to fulfill the needs of our stakeholders.

Our strategy for energy transition

The energy world is undergoing a massive transformation, and there is no one easy solution to solve the complex problems we are facing. Insufficient financial and regulatory frameworks make scaling up new technologies challenging.

We have therefore established a strategy for our company along the three pillars:

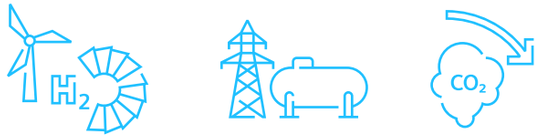
- **Low- or zero-emission power generation:**
  We are continually developing new products and technologies that have either zero emissions or significantly lower emissions, in both service and new units. Also, our SGRE reporting segment plays an essential role in the transition to zero-emissions power generation.
- **Transport of energy and storage**
  We are developing new products, services and solutions for the transport and storage of energy, thus expanding our transmission and hydrogen business.
- **Reducing GHG footprint and energy consumption in industrial processes**
  We are helping our process industry customers to decarbonize their brownfield facilities and ensure sustainable concepts for future installations.

This overarching strategy is broken down into divisional, functional, and regional plans. The process is refined through a regular strategic planning process. It allows us to adapt to changing market trends and customer requirements quickly while providing a clear strategic direction.

Through our company program "Energy of Tomorrow" (EoT), we shape our existing business by developing our portfolio with a focus on sustainability and service while becoming a data-driven company that creates value through digitalization, connectivity, and automation.

Our strategic pillars

We focus on building our company based on three strategic pillars:



Low- or zero-emission power generation | **Transport of energy and storage** | **Reducing our greenhouse gas footprint and energy consumption in industrial processes**

The first phase of the program, called "Accelerating impact", consists of

- focusing and delivering on the fundamentals – by developing our people, achieving zero harm, eliminating non-conformance cost in product design and project execution while optimizing our portfolio with an eye toward sustainability,
- co-creating innovations with customers and partners to speed up innovation and generate the best solutions for the global energy transition, and
- shifting R&D expenditures toward sustainable products and services.

Rating scores

Corporate Responsibility Prime
RATED BY ISS ESG → **B- Prime**
» top 20th percentile in electrical equipment industry

SUSTAINALYTICS a Morningstar company → **17.4**[1]
» 4th percentile, low risk

MSCI ESG Research → **BBB**
» average risk

CDP DISCLOSURE INSIGHT ACTION → **B**
» on a scale from A to D-

[1] Rating result as of Nov 2, 2021

The second phase of the program, called "Leading the energy transformation", will lay out measures to

- become the sustainability leader in the industry,
- electrify countries and communities in a sustainable, affordable, and reliable manner by bringing in our capabilities and technologies and converting ideas into reality, and
- become a company that creates value for our different stakeholders through data-driven insights, automation, and digitalization.

Our first major ESG ratings results show that we are on track toward our vision.

Transformation of our technology portfolio

Global annual investment in the energy sector shall reach €4.2 trillion by 2030, 50% of which shall be invested in power generation and transmission technologies[2]. At Siemens Energy, we aim to be the market leader in each of our areas of business, with a clear focus on innovation, to develop new technologies that foster the energy transition. We have spent roughly €1 billion on R&D each year over the past two years, see chapter Customers and innovation.

We provide a broad variety of products and services to our customers. As our customers are transitioning towards sustainable energy systems, we need to ensure that our products and services remain relevant in the future. Therefore, going forward, we aim to continuously develop these products and services to provide the profitability and cash flow we expect and aim to amend our portfolio accordingly.

[2] Source: IEA Net Zero Scenario.

Generation: We provide sustainable and reliable generation technologies that help our customers significantly reduce the greenhouse gas emissions of their assets. At the same time, we are developing technologies for the deeper decarbonization of power generation. We offer "Coal-to-Gas" solutions with our state-of-the-art gas-fired power plants. Our highly efficient and low-emitting combined cycle power plants compensate for fluctuating renewable energy from wind and sun, help stabilize the power supply, and are equipped to gradually switch to carbon-neutral fuels, enabling a full decarbonization of the power supply. Our current generation of gas turbines is already able to burn blended fuels containing 30-75% hydrogen; by 2030, we want to have 100% hydrogen combustion capability in our gas turbines. For deep decarbonization and sector coupling, we supply technologies to decarbonize heat with electricity, hybridize power generation, for storage solutions and Power-to-X.

Transmission: We partner with our customers to build and operate efficient grid infrastructures. We offer reliable products, solutions, and state-of-the-art services improved with digital functions to meet the growing demand for sustainable electrification. Transmission and distribution networks must be expanded, modernized, and stabilized, especially with increased decentralization. We are therefore investing in grid stabilization, grid intelligence, grid flexibility, and digital applications to increase the performance of our transmission technologies and transport renewable energy to consumers over longer distances, more reliably and with fewer losses. In addition, we are expanding our portfolio to include sulfur hexafluoride (SF_6)-free transmission solutions.

Industrial Applications: We support industrial customers in their conventional business and activities towards energy transition, by providing safe, reliable and highly efficient rotating, electrical, automation and digital products, solutions and services. With our broad portfolio and expertise, we co-create with our customers to decarbonize their processes, leverage the shift toward a hydrogen-enabled economy, and optimize their operations by electrification, automation, and digitalization. Through our R&D focus on sustainability, we aim to be the partner of choice for our customers' energy transition.

New Energy Business: We shape the green hydrogen economy. We are developing the technologies and applications urgently needed for decarbonization on an industrial scale and coupling economic sectors with renewable sources of power. By focusing on the expansion of wind, solar, and storage systems as well as hydrogen and Power-to-X solutions, we aim to further strengthen our position in the renewables market.

Siemens Gamesa Renewable Energy: Through our majority stake in SGRE, we are one of the leading providers of wind power solutions across 90 countries (for further information please refer to ↗ **Consolidated Non-Financial Statement 2021**). SGRE operates with a flexible business model and organizes its business in two segments:

- Wind Turbines (comprising Onshore and Offshore), which covers the design, development, manufacturing and installation of wind turbines, and
- Service.

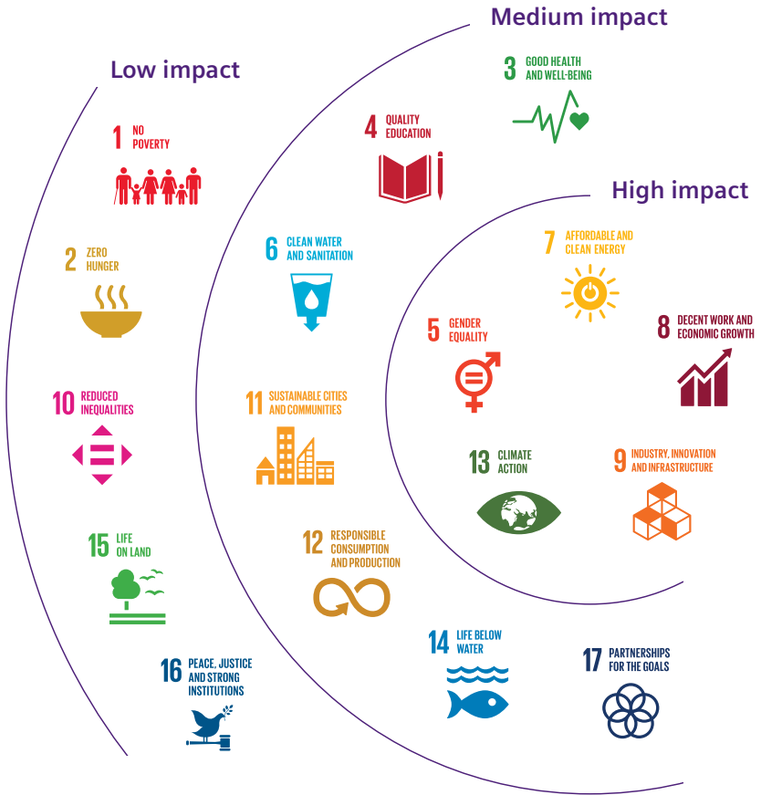
Divesting from coal

One major decision with regards to our portfolio concerns our coal business. In November 2020, Siemens Energy announced that it will no longer participate in new tenders for power plants that will run exclusively on coal. We no longer offer components like steam turbines, generators, and control technology for such projects. We will continue to offer equipment for highly efficient applications such as combined heat and power generation, biomass co-firing, and waste heat recovery for a transition period. Siemens Energy will remain a reliable partner and will honor existing commitments.

We will need multiple technological solutions to solve the different challenges each region of the world is facing on its way to a sustainable energy supply of the future. Several key regions have already outlined targets, including large-scale investment in infrastructure and decarbonization. To meet global net zero, however, we need to support all regions in meeting their goals. Siemens Energy is committed to deliver this support through our regional organization.

Digitalization

Digitalization will play an increasingly important role in the energy landscape. Rapid advances in digitalization are bringing about new ways of working, data-based business models and technology-based services, such as remote operations. Leveraging the vast amount of available data to provide additional value to our customers and drive operational excellence will be the precondition to act successfully in our markets. We are transforming our workflows, processes, and offerings by using our data and applying technologies of connectivity, digitalization, and automation. We continue to work closely with our customers and partners to make specific use of data-driven technologies to maximize performance and reduce emissions throughout product and equipment lifecycles. Improved operations through optimized automation and additive manufacturing creates value for our customers, whilst comprehensive cybersecurity protects our customers' facilities. For example, increased digitalization is enabling more intelligent monitoring and analysis of turbine conditions as well as smart diagnostic services. Profitable opportunities in adjacent business fields, including other renewable sources, hybrid parks, and storage, are being explored in order to advance the system integration of renewables. Achievements in fiscal year 2021 include the ongoing installation of an autonomous plant to reduce cost and increase reliability as well as offering intelligent controllers to ensure increased power output and higher efficiency.



Our impact on the Sustainable Development Goals

We have clustered the SDGs according to the impact we can have on them.

Our commitment to sustainability

The United Nations (UN) Agenda 2030 was adopted in 2015 including 17 goals to end poverty, protect the planet, and ensure prosperity for everyone. While some progress has been made, a substantial effort is needed to achieve the goals within the years remaining. The UN has therefore declared this the Decade of Action.

The Sustainable Development Goals (SDGs) and their related targets are fostering a new understanding of how economic development can be reconciled with social and environmental challenges. To harness the potential and capabilities to shape the energy transition, we focus on five SDGs to ensure our efforts have the biggest impact:

- To achieve SDG 5 “Gender Equality”, we are striving 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 are contributing to SDG 7 “Affordable and Clean Energy”.
- We cover SDG 8 “Decent Work and Economic Growth” with the innovative power of our global operations, which stimulates economic development in many countries and creates decent, future-proof jobs.
- Meanwhile, our products, services, and solutions for decarbonizing energy systems worldwide contribute to SDG 9 “Industry, Innovation, and Infrastructure”.
- We enact SDG 13 “Climate Action” by helping our customers reduce greenhouse gas emissions and by working to become climate neutral in our own operations by 2030 at the latest.

Our Sustainability Program

Our Sustainability Program is fully integrated into our company strategy. It focuses on the most relevant topics that help us achieve our ambition to become a sustainability leader in the industry while contributing to the most relevant SDGs. It is also oriented toward our company 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 and engaging in dialogue with selected internal and external stakeholders. The key sustainability issues for our company serve, among other things, as a basis for reporting. We repeated this materiality analysis in fiscal year 2021 to reflect the voices of relevant external stakeholder groups such as customers, investors, and partners.

At the core of our Sustainability Program is the goal to deliver sustainable energy systems along the entire value chain. Different topics around responsible operations also contribute to Siemens Energy becoming a sustainability leader in the industry and to our societal impact.

Our businesses, regional entities, and central functions are responsible for implementing this program, details on which can be found in the individual chapters of this report.

Implementing and managing the Sustainability Program

All sustainability activities are led by our Chief Sustainability Officer (CSO), who is also the CEO of our company and ensures that sustainability is a regular topic on the agenda of Executive Board meetings and in wider leadership meetings.

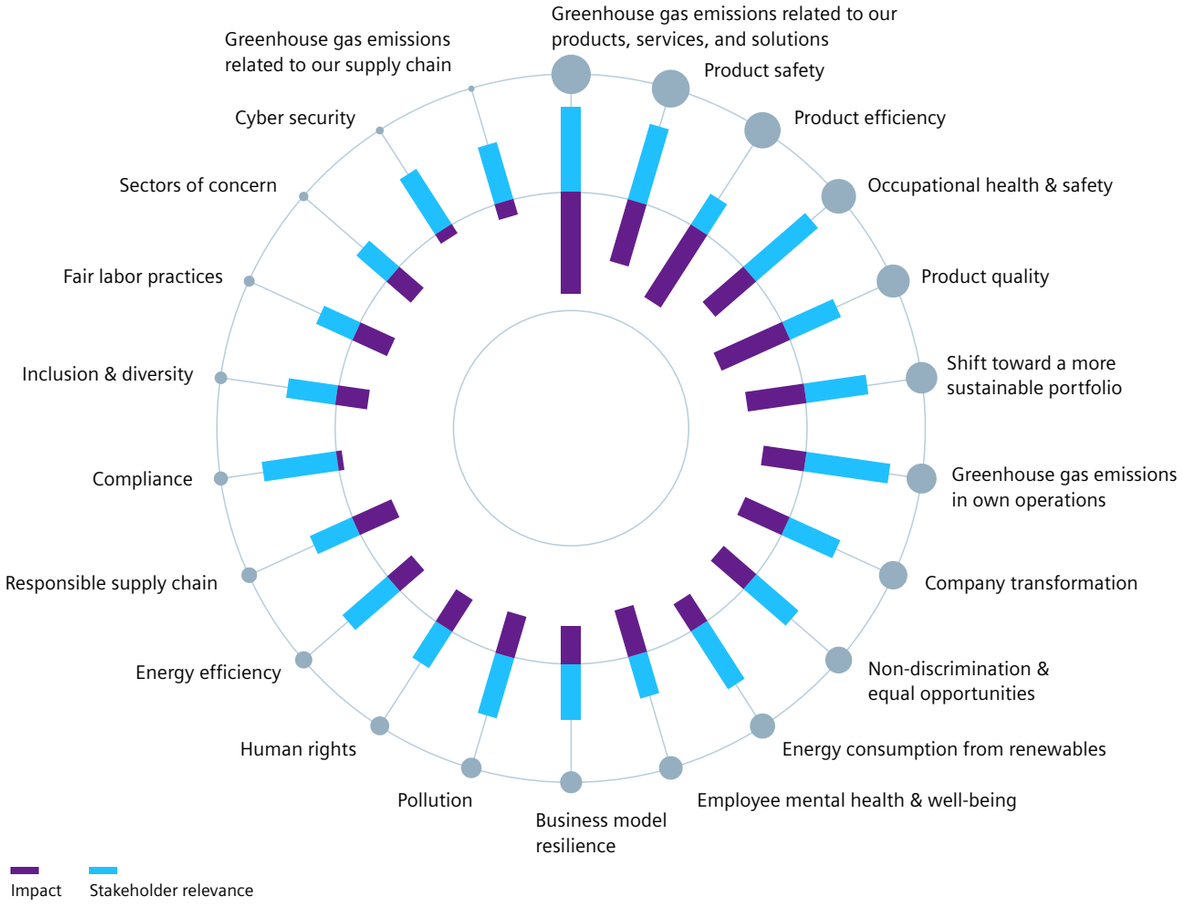
We have also established a Sustainability Council that meets on a regular basis and consists of decision makers representing Divisions, Regional Hubs, and Functions. The Sustainability Council strategically oversees the implementation of the Sustainability Program by making decisions, setting priorities and focal points where needed, providing resources for implementation, and being sustainability ambassadors both inside and outside of Siemens Energy. Our CEO Christian Bruch chairs the Council in his role as CSO.

The Sustainability Director manages the Sustainability Department, which is responsible for driving sustainability within Siemens Energy and for coordinating the company-wide sustainability activities, programs, and measures. The department is part of the Strategy Function.

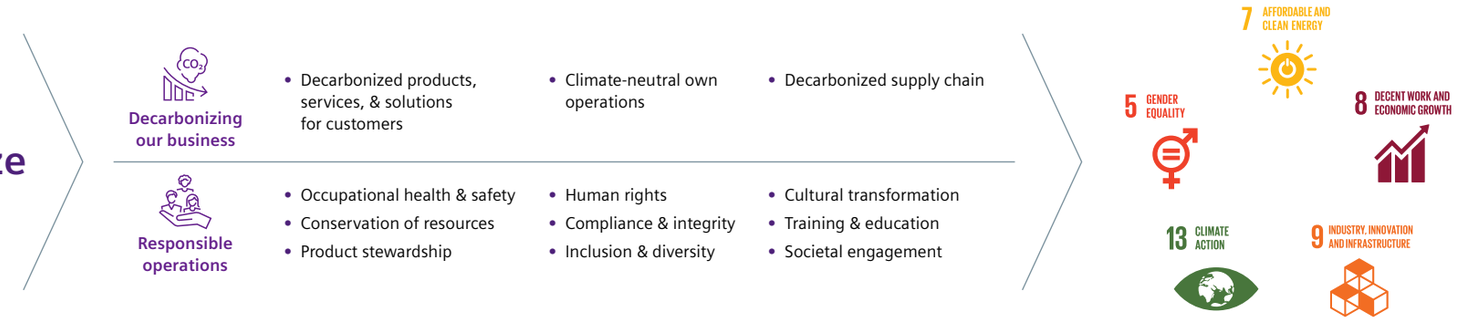
Furthermore, we have the goal to ensure all sustainability measures and initiatives are implemented in our organization and our business activities. Our Divisions and Regional Hubs have nominated Sustainability Business Partners who implement the company program in their areas of responsibility. For specific topic-related targets see the respective chapters.

The importance of sustainability for Siemens Energy is also reflected in our long-term equity-based compensation. This 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 ↗ **Annual Report 2021, Compensation Report**. SGRE has set up their own sustainability approach which is being described in the ↗ **Consolidated Non-Financial Statement 2021, G. Materiality Analysis**.

Results of the materiality analysis



Our Sustainability Program



Sustainability-related risks and opportunities
To provide a comprehensive view of our business activities, we analyze risks and opportunities combining bottom-up and top-down approaches. Sustainability-related risks and opportunities are identified by the respective management of our organizational units. Our Enterprise Risk Management (ERM) system takes a net risk approach and aims to ensure that the Executive Board and the Supervisory Board are fully informed about significant risks on time.

For the fiscal year 2021, the following risks with significant sustainability relevance have been reported within the ERM:
- Critical supply chain
- Climate change and decarbonization trend
- Market and price development (e.g., shift from conventional toward renewable energy in the markets)
- Technology/portfolio gap against competitors
- Pandemic diseases
- Environment, health, and safety (EHS) adverse events
- ESG standards requirements
- Allegation of compliance violations
- Adverse developments in financial and bank markets (e.g., financing restrictions due to sustainability prerequisites)
- Cybersecurity threats including product and solution security

For more information related to the risks, please refer to the ↗ Annual Report 2021, Report on material risks and opportunities. A detailed description of climate-related risks and opportunities can be found in our Task Force for Climate-Related Financial Disclosures (TCFD) section in the ↲ Annex.

We are continually taking steps to reduce our sustainability-related risk exposure within the organization and across the value chain by implementing risk management systems adapted to specific industries and responsibilities. On the other hand, risk mitigation actions also represent opportunities for our business, for example innovations that support the energy transition and streamlining of internal processes.

Breakthrough Energy – a breakthrough for net zero

Siemens Energy has established a corporate partnership with Breakthrough Energy. Founded by Bill Gates, Breakthrough Energy is a network of investment vehicles, philanthropic programs, corporate and stakeholder organization efforts, and advocacy initiatives to help build critical infrastructure and enable an environment for technological transition to support and accelerate the pathway to a net zero carbon economy by 2050. Through its Fellows Program, Breakthrough Energy focuses on supporting the best and brightest innovators, doing research and early demonstration on the technologies we need to invent over the next decade to lead to deep decarbonization. Siemens Energy will support the program by providing in-kind partnership opportunities to the Fellows, including access to key program elements, providing mentorship, technical expertise, and overall ecosystem building.

Partnerships and collaborations

We firmly believe that sustainable development can only be achieved through the cooperation of a diverse set of actors. This approach is in line with SDG 17, which calls for a global partnership that brings together governments, civil society, the private sector, the UN, and other stakeholders. Close collaboration with different stakeholders is necessary to tackle the complex challenges we are facing. Working on these problems across organizations using a full range of resources, perspectives, and experience can lead to better innovation and business outcomes that benefit society.

The exchange of knowledge through these engagements creates value on all sides, and reduces risks externally and internally. At Siemens Energy, we have analyzed existing partnerships and memberships and continue our dialogue with relevant organizations. We are also continually establishing 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 actively engage in industry associations such as Verband Deutscher Maschinen- und Anlagenbau or with think tanks such as the Atlantic Council on societal issues. We also cooperate on a local basis, such as Siemens Energy UK's engagement with the Institute of Environmental Management & Assessment or in Brazil with the Center for International Relations, where Siemens Energy is a member of the Energy Transition Fund. In fiscal year 2021, Siemens Energy established a partnership with the International Renewable Energy Agency to advance the global energy transition based on renewable energy, decarbonization of industry, and facilitating investment.

Siemens Energy was a recipient of HRH The Prince of Wales' inaugural Terra Carta Seal and has joined the Breakthrough Energy initiative by Bill Gates (see highlight box on → **page 14**).

Another example of collaboration and thought leadership are our "Energy Weeks" that we run throughout the year in regions such as North America, Asia, or the Middle East. During the three-day virtual sessions, we bring together global energy businesses, market leaders, policy makers, and government representatives to discuss regional challenges and opportunities facing the energy sector in its transformation toward decarbonized energy systems.

Brainstorming green energy ideas: our transformative venture teams

We're innovating the energy of tomorrow today!

Siemens Energy Ventures (SEV), founded in 2020, supports transformative venture teams to grow into businesses that provide sustainable, reliable, and affordable energy to the world. The SEV innovation framework starts by focusing on the right ideas.

Let's Innovate SE! is a movement instigated by SEV to transform how we innovate and what we offer to the world. This movement aims to unleash the potential of employees to generate and take ownership for ideas around the energy of tomorrow. Events are themed around the five fields of action (→ **see page 23**) and create cross-functional dialogues about innovation, transformation, and sustainability. Since November 2020, over 5000 Siemens Energy employees have joined Let's Innovate SE!'s events to learn, connect, and innovate. The result of this is a growing funnel of ideas, a willingness to move these forward, and a positive shift in company culture.

Over 350 employees have taken ownership of their ideas in our Venture Building Channel. We provide the tools, resources, and network for all employees to define, refine, validate, and evolve their idea. Many of these ideas have grown into business ventures, others have generated customer interest and even first orders.

Sustainability dialogue
The energy industry's shift to sustainability raises new challenges. Young talents ask our management their most pressing questions.

How can digitalization transform the energy sector and support the energy transition?

Ever since his research in power electronics and high-voltage, direct current (HVDC) interconnections at university, Minos Kontos has recognized how crucial digitalization is for the energy sector. "The big treasure of data is out there... Now what do we do with it?" He asks Amogh Bhonde his most pressing questions.

Amogh Bhonde
Vice President of Digital Solutions
Siemens Energy

Epameinondas (Minos) Kontos
Project Lead HVDC Studies
Siemens Energy
Erlangen, Germany

I was born in Corfu, Greece, and studied electrical engineering and computer science at the National Technical University of Athens before taking a second master's in renewable energy technologies at Delft Technical University in the Netherlands. My graduate work focused on renewable energy integration and power transfer between countries. So from early on, you can see that I took an interest in sustainable energy and computer processing.

In fact, my PhD focused on the control and protection of HVDC systems, and as part of my research I worked with optimization algorithms for control parameterization of HVDC converters. For the past three years, I've been working at Siemens Energy on the Viking Link interconnector between England and Denmark. Of course, the controls we're using now are much more complex, and this complexity only intensifies the need for AI and more intelligent systems to work for us so that engineers can spend more of their time developing new ideas and functionalities. The big treasure of data is out there – for ourselves and our customers. Now what do we do with it? How can we analyze it to increase sustainability and move the world a step forward in the energy transition? It's an opportunity we can't miss.

So here are my most pressing questions about digitalization and sustainability: How can digitalization transform the energy sector and support the energy transition? What is the digitalization roadmap of Siemens Energy internally and toward its customers?

Compared to just a decade ago, energy systems have become far more complex. More renewables are being added, more small-scale power generation, new storage solutions, new technologies, and soon new fuels – all of which add to the complexity of our grids, and this is where digitalization holds incredible promise for the energy transition.

Automation and AI can help grids remain stable. Smart Data lets operators improve operations, increase efficiency, and lower emissions. And digitalization is creating interconnected systems with bi-directional power flows and demand responses to peak loads, shed loads, energy storage – the list goes on.

We're in a unique position to help energy companies build and navigate a sustainable energy world, and our Omnivise Digital Services Portfolio addresses the industry's most pressing issues. We're also developing exciting new products such as Green Certifications, which certify clean energy production and consumption across sectors.

With our deep knowledge of the equipment and its operations, combined with our innovative technologies, we can help customers deliver on the promise of a digital transformation. Moreover, we're unleashing the power of data within our own organization with the establishment of a new dedicated team for Enterprise Data & Advanced Analytics Projects.

For all the advances in technology, though, companies still need to treat digital transformations like cultural transformations. Focusing on business outcomes instead of technology and bringing the workforce along the journey are keys to success.

Management of COVID-19 effects

Effects of COVID-19 on Siemens Energy

COVID-19 continued to make a major impact on countries and businesses in fiscal year 2021. At Siemens Energy, the health and safety of our employees and partners has been our utmost priority.

From the earliest days of the pandemic, our global task force has been continuously monitoring the situation, assessing new developments, and taking appropriate steps to protect our employees. As the COVID-19 situation differs between sites, regions, and countries, any decision to restrict or release restrictions of our operations needed to follow local regulations and instructions.

As a standard measure, we have provided protective masks for employees worldwide and ensured flexible, individual working models for employees to assist them in balancing their work and private lives during the pandemic. Office staff not urgently required on location have worked from home following guidelines by local authorities. We also established comprehensive protection plans for employees who cannot work remotely, such as workers at manufacturing sites or sales and service employees. Only business-critical travel has been permitted.

We regularly updated our teams on the situation and the measures to be initiated throughout the year. The decision to gradually bring employees back to their physical workplaces lies with the location manager, based on local legislation and risk assessments.

Most project and service sites are fully equipped to follow COVID-19 protocol. All Siemens Energy factories remained in operation throughout the year, except for the temporary closure of project sites in Germany and Mozambique for GP.

Testing for COVID-19 has been central to ensuring a safe working environment. In Germany, we offer our GP employees the opportunity to be tested for COVID-19 voluntarily and free of charge.

Further to testing, comprehensive vaccination will be crucial for the successful management of COVID-19. Vaccine availability and roll-out has, however, differed significantly across the regions. Although there is no central overview of the vaccination status of Siemens Energy employees, we receive feedback either through national programs or Siemens Energy-supported initiatives. In Germany, we coordinated with Siemens AG in arranging for company physicians to vaccinate employees throughout the company.

Meanwhile, retaining the mobility of service engineers and critical personnel has meant securing vaccines where possible. Varying progress in vaccination programs around the world is leading to restrictions for travelers without vaccination.

While the pandemic impacted our workforce, it also had an effect on our supply chains. With many regions and economies in lockdown in the first half of the year, we experienced some delays in material deliveries. Through continuous monitoring by our COVID-19 task force, up-to-date status reports from our supply chain dashboard as well as close collaboration with our suppliers, we were able to address potential delays in advance (see chapter Sustainable supply chain management).

COVID-19: app for contact tracing

The COVID-19 Case Manager app, developed by Siemens Energy UAE, completely automates the contact tracing process. The biggest problem in contact tracing in the early days of the pandemic was the reliance on manually calling or emailing potentially infected employees – a process prone to errors and inefficiencies. The Case Manager app fully digitizes contact tracing, synchronizing with each employee's mobile device or computer. It guides the user to enter the date of the onset of symptoms and their last day in an office area or facility. The user then selects the specific Siemens Energy employees, as well as customers and third-party vendors, with whom they were in contact. The app subsequently generates and sends emails to every potentially infected contact, detailing the specific UAE COVID-19 rules to follow, how to safely quarantine and who to contact for more information. The app provides transparency and minimizes the risks of missing a potentially infected employee. This app has been developed inhouse, showcasing the digital capabilities of our digitalization team.

In all, the pandemic has presented unforeseen challenges. The mental toll on employees due to long-term remote working, a tendency to work long hours in less-structured workdays, as well as quarantine and isolation due to travel or infection is not to be underestimated. The COVID-19 task force and local organizations have a strong focus on this and thus the topic of mental health was highlighted via communication and local activities. It was also one of the focus areas at our Mental Health Day in October 2021.

Yet benefits can be drawn from the crisis. Measures taken during the pandemic, such as occupational health and safety workshops and dedicated COVID-19 programs, aim to ensure long-term operational resilience and the stability of manufacturing sites. The development of remote services is reducing the need to travel and encouraging the use of local resources. Meanwhile, communication via digital forums can engage workers and provide them with additional support.

Overall, there were 5,957 COVID-19 cases reported among Siemens Energy staff (thereof 1,841 at SGRE). Of those at GP, 3,939 officially recovered (not tracked for SGRE in the same tool) and there were 36 fatalities (thereof 9 at SGRE). Around 8% of reported COVID-19 cases at SE are assumed to be work-related.

Our "New Normal" concept – #BetterTogether

The experience of COVID-19 has inspired a cross-functional team to develop a tailor-made “New Normal” concept for the GP reporting segment. The concept is underscored by the campaign banner #BetterTogether and is centered around our values. The key principles are:

- We leverage the benefits of flexibility to foster a business model that focuses on outcomes and performance, as well as company growth.
- We turn our offices into centers for collaboration to foster culture and creativity.
- Our offices will remain the key destination to interact, cross-collaborate, innovate, and build relationships.

#BetterTogether is not about one size fits all. Designated cross-functional country teams have tailored the global guiding principles to local requirements and have developed and implemented approaches that address local needs directly. A network of volunteers with transformation, cultural change, and coaching backgrounds support individuals, teams and organizations in designing and implementing #BetterTogether, balancing business priorities, team collaboration, and individual working preferences.

We aim to provide the space and time for employees to experiment with new working models and have continuously developed tailored solutions for businesses and countries according to their needs. We share significant experiences and solutions to ensure that our findings are leveraged across Siemens Energy.

United effort: Siemens Energy volunteers support medical research

Joining the community to fight the virus

The COVID-19 virus is a threat to all humankind and can only be defeated by a united effort. At Siemens Transformer Co. Ltd. in Guangzhou, employees volunteered to join local community medical teams to support nucleic acid testing. The volunteers were motivated to alleviate pressure on medical resources and to build a healthy community at large.

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.

45
Net Promoter Score (NPS)[1]

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

Focus
We select, prioritize, and commit to ideas from a strategic perspective

Accelerate
We accelerate ideas to maturity through dedicated channels

Sustain
We strive for tangible returns and measurable value creation

€ 1.2 billion
investment in R&D

[1] Index measuring willingness of customers to recommend a company's products or services to others.

Decarbonization

Our strategy to decarbonize global energy systems is central to our efforts to be the partner and driver of the energy transition. We accelerate decarbonization along the value chain:

Decarbonized supply chain

Status 9%
Target reduction of relative Scope 3 GHG emissions in our supply chain by 2030[2]:
30%

Climate neutrality in our own operations by 2030

Status 36%
Target reduction of relative Scope 1+2 GHG emissions[3] by 2030:
46%

Status 43%
Target reduction of SF_6 emissions compared to 2019:
60%

Status 76%
Target:
100%
share of renewable electricity by 2023

Decarbonized products, services, and solutions

Status 9%
Commitment via SBTi[4]:
28%
reduction of GHG from the use of sold products by 2030[3]

SGRE: net zero by 2040

[2] kg CO_2e/€ PVO spent, base year 2018; reporting segment GP. [3] from a 2019 base; reporting segment GP. [4] SBTi = Science Based Targets initiative.

Sustainability dialogue
The energy industry's shift to sustainability raises new challenges. Young talents ask our management their most pressing questions.

How do we match the right innovative solutions with the right partners?

With new markets, fast competitors, and contrasting regional priorities on energy, "it's not going to be the same business as before," says Ayrton Abad. He asks Kendra Rauschenberger: Can a company the size of Siemens Energy adapt?

Kendra Rauschenberger
Vice President Ventures & Incubator
Siemens Energy

Ayrton Abad
Sales Consulting Professional
Siemens Energy
Buenos Aires, Argentina

I was born and raised right here in Buenos Aires, Argentina, and am currently completing my studies in Energy Engineering at the National University of General San Martin, where I'm writing my thesis on energy storage. I joined Siemens Energy over two years ago because the company has been pioneering innovations so important for a sustainable future, and I believe we can be a leader in the global energy transition.

Partnerships play a big role in realizing these innovations, but how do you choose the right one when what you're working on is new for the industry? How do you know if an innovation has chances of succeeding? Because the industry is changing. New fuels and new technologies are bringing new players and new ways of working – it's not going to be the same business as before. Digitalization lets other companies create tools to respond more quickly to bids and smaller companies tend to be less bureaucratic and more agile. We're also seeing different regional priorities around energy as well. In Argentina, for example, politics haven't caught up with the energy transition yet, so we're looking for different solutions than, say, Europe. Is it possible to be an innovator in the global energy transition and meet different regional demands?

So, here are my most pressing questions: How can we be sure that we're approaching the right innovative solutions with the right partners? Are we agile enough to be one of the most innovative companies and pioneers in terms of energy transition technologies?

Honestly it is hard to be 100% certain or sure. Everyone in the energy system is undergoing significant disruption, so predicting which technologies and business models are going to be vital in the medium and long term is a bit of an art. Being successful requires a different approach to innovation and partnering.

We base our view of future energy systems on our deep domain and technology knowhow and an understanding of our customers' business. As part of our company's strategy, we are prioritizing reducing the CO_2 footprint and energy consumption in industrial processes, low- or zero-emission power generation and transmission, and storage. Our framework for innovation, Focus-Accelerate-Sustain, sharpens our focus on the problems at hand and brings our innovation capabilities powerfully together across the entire company. With it, we can identify opportunities to create new, sustainable businesses, building our path for the future together with partners that share the same values.

Of course, being a company of 91,000-plus employees in over 90 countries can mean we're not always as agile as we'd like to be. But it also means we have a pool of talent with the potential to uncover and explore ideas that can help transform our company and our planet. What becomes important is providing methodologies and mechanisms to allow agility and diversify the way we innovate.

Simple things like improvements in taking quick decisions and implementing changes will also help. Our campaign to support our customers during the pandemic, #keepthelightson, was a great example of our agility and putting customers at the core. The only way we can get better at this is by practice, practice, practice – so let's become more agile, one decision at the time.

Customers and innovation

Our diverse portfolio of innovative technologies covers the entire energy value chain, offering our customers tailor-made energy solutions.

- **Innovation as the core of our business: future-focused technologies position us as partner and driver of the energy transition**
- **Close co-creation with customers, industrial partners, universities, research institutions, and start-ups**
- **Company-wide framework for making innovation process more focused, simpler, faster, and aligned with company strategy**

As the global energy sector continues to transform, many of our customers are facing long-term, disruptive changes to their business models. Advancing digitalization, the need to decarbonize as well as increasing decentralized energy production are leading to more competition, more complexity, and less predictability throughout the industry. At the same time, the changes are creating new business opportunities in areas such as electrification, renewable energy, green hydrogen, grid modernization and resilience, energy storage, and Power-to-X technologies. Our mission is to support our customers in transitioning to a more sustainable world, by providing technologies for a sustainable, affordable, and reliable energy supply, based on our innovative technologies and our ability to turn ideas into reality.

In this respect, we contribute 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 serve our customers

To this end, we provide a diverse portfolio that covers the entire energy value chain for customers across the world.

Our customers range from multinational corporations to smaller companies with a regional focus. The market- and customer-oriented organization of Siemens Energy, comprised of Regional Hubs, Divisions, and Business Units, allows us to continuously adapt to customer needs. The SGRE reporting segment has its own organizational set-up. Please see the ↗ **Consolidated Non-Financial Statement 2021, A.1 Siemens Gamesa at a glance**.

Aiming to provide optimal customer service, Siemens Energy relies on a global sales organization that is distributed across the world. Our regional sales teams work with a global network within and outside the company that includes technical experts, project developers, and integrators. In 2021, the GP reporting segment began redeveloping its key account management system around a selected group of our most important customers with whom it would like to collaborate more closely. We use the Net Promoter Score (NPS) to measure customer satisfaction by asking the question "How likely is it that you would recommend Siemens Energy (Division/Business Unit) to a colleague or business partner?". In 2021, we conducted a total of more than 3,000 NPS interviews and received an NPS result of 45 (on a range from -100 to 100, subtracting % of scores between 1-6 (Detrac-

Clean hydrogen from renewables is blended into the local gas network

Green hydrogen production in Australia

Siemens Energy is supporting Australian Gas Networks (AGN), part of the Australian Gas Infrastructure Group, in taking its first step toward a low-carbon gas supply with the Hydrogen Park South Australia (HyP SA) project. Located within the Tonsley Innovation District in Adelaide, HyP SA uses a Siemens Energy 1.25 MW Silyzer proton exchange membrane electrolyzer to produce clean hydrogen using water and renewable electricity from wind and solar. The facility, which began operating in May 2021, is able to produce an estimated 20 kilograms of hydrogen per hour. This can then be stored for later use, sent directly to hydrogen and gas blending equipment, or compressed into hydrogen tube trailers for transport. Up to 5% of renewable hydrogen is then blended with natural gas and supplied to around 700 nearby homes via the existing gas network owned by AGN.

tors) from % of scores of 9-10 (Promoters)). This result is the combination of the results from the global annual Customer Insight Survey and the project-related operational surveys conducted throughout the year. We are pleased with the result and see it as a positive basis to improve on further. The individual Businesses evaluate the specific responses, follow up with the customers personally, and take the necessary steps to improve customer experience (e.g., process amendments, training measures).

Innovation that makes a difference

The world and our customers need innovative, sustainable solutions for the energy systems of the future. We focus on three aspects within our company-wide innovation strategy: strengthening the core, growing from the core, and transforming the future. These are all further supported by our nine technology fields. Transforming the future is achieved by focusing on five fields of action, each of which serves our mission to progressively decarbonize our portfolio:

- Power-to-X, e.g., power-to-hydrogen, e-fuels
- Energy storage, e.g., batteries, thermal storage
- Decarbonized heat and industrial processes, e.g., heat pumps, waste heat recovery
- Condition-based service interventions, e.g., digital twins, artificial intelligence, machine learning, connectivity
- Resilient grids and reliability, e.g., grid stabilization, power electronics, power system management

This innovation approach is the foundation for a simple, fast, and unified process to build business in support of the Three Pillars of GP:

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

[1] TI Council – does not include SGRE.

Overseeing our activities and expenditure in fields of action, technology fields, and R&D in general is our new Technology and Innovation (TI) Council[1], which meets quarterly with all Executive Board members, Division heads, and our Chief Technology Officer. With a view to implementing the innovation approach, three elements are key:

1. Focus: We select, prioritize, and commit to ideas from a strategic perspective

2. Accelerate: We accelerate ideas to maturity through dedicated channels:
- Product & technology development – to adjust and accelerate Siemens Energy's portfolio within company-wide guidelines
- Strategic partnering – to develop our innovation ecosystem
- Start-up engagement – through venture clienting and venture capital
- Venture building – to grow & spin out internal ventures

3. Sustain: We strive for tangible returns and measurable value creation through business case realization, integrating ideas into operative business

Three elements for successful innovation

Charging power for Hamburg: SGRE's award-winning energy project

SGRE develops large-scale thermal storage

Funded by the German federal ministry of economics, SGRE has set up a demonstration plant in Hamburg to develop and test the operation of a 5.4 MW resistive heating charging facility with a storage capacity of 130 MWh. After the inauguration and connection to the Hamburg grid in June 2019, SGRE was able to demonstrate its effectivity and its commercial viability. The project has been awarded several innovation prizes, such as the 2020 SDG Tech Award of Denmark.

In fiscal year 2021, Siemens Energy invested €1,155 million in R&D (fiscal year 2020: €985 million). The resulting research intensity, defined as the ratio of R&D expenses to revenue, was 4.1% (fiscal year 2020: 3.6%). Additions to capitalized development expenses amounted to €188 million (fiscal year 2020: €191 million) in fiscal year 2021. Around 18,300 (September 30, 2020: 16,600) patents were held by Siemens Energy as of September 30, 2021. On average, we had about 4,900 (fiscal year 2020: 5,000) R&D employees in fiscal year 2021. On September 30, 2021, there were about 5,200 (September 30, 2020: 5,200) R&D employees.

At SGRE, continuous investment in R&D aims to ensure the competitiveness of the company in the renewable energy market. SGRE is focused on becoming a leading innovator of cost-effective products, solutions, and services that strike the optimal balance between renewable power generation and demand. To this end, SGRE is developing energy-efficient wind turbines, cost-effective energy storage solutions, and solutions for hybridization to help utility clients optimize the use of renewable energy and increase profitability. For further information please refer to ↗ **Consolidated Non-Financial Statement 2021, A.1.6 Innovation, Research & Development**.

Innovation beyond our company borders

We value external partnerships for their potential to fulfil future business needs. Collaboration allows us to collect expertise and co-create new technologies, while joint market launches help broaden our customer base. One such partnership is with the Werner-von-Siemens Centre for Industry and Science e.V. (WvSC). This is a research and development collaboration involving 24 partners from industry and science, small and medium-sized enterprises, young companies, and start-ups. It addresses topics of the future such as the energy transition, mobility, and production technology.

Our high-voltage switchgear operates climate-neutrally in Burladingen

SF_6-free substation of the future

The substation of the future, operated by Netze BW, applies Siemens Energy SF_6-gas-free and F-gas-free Blue gas-insulated high-voltage switchgear (GIS) and will go into operation in southern Germany at the end of 2022. It uses vacuum switching technology and Clean Air as the insulating medium, instead of SF_6 and other F-gases, so is therefore climate-neutral in operation. This Blue switchgear is also more cost-effective in its operation and throughout its whole lifecycle, with less maintenance, less reporting costs according to F-gas regulations, and with no impact on health and safety (due to avoidance of F-gases). In Burladingen, Germany, the substation saves 100% of F-gas-related CO_2 emissions. Siemens Energy currently has 50 Blue GIS-bays (substations formed by several bays with connection to energy consumers and power stations) for 145 kV in operation globally, with a further 300 on order in Europe and the US.

Studying hydrogen's potential: Siemens Energy, Duke Energy, and Clemson University

H2 Orange: teaming up for hydrogen research

Siemens Energy, Duke Energy, and Clemson University have teamed up to study the use of hydrogen for energy storage and as a low- or no-carbon fuel source to produce energy at Duke Energy's combined heat and power plant located at Clemson University in South Carolina.

The pilot project, called H2 Orange, was launched in March 2021, and includes studies on hydrogen production, storage, and co-firing with natural gas.

The studies will evaluate multiple forms of hydrogen production, including green hydrogen, which is created from water and has no byproducts. Hydrogen also has the potential to store larger quantities of energy more efficiently and for longer durations than current lithium-ion battery technology.

The WvSC fosters co-located collaboration to accelerate innovation in our key focus areas. For further information see the ↗ **WvSC website**.

In 2021, we also signed a partnership agreement with the International Renewable Energy Agency aimed at advancing the global energy transition. The collaboration scope extends to a variety of opportunities, including developing the business case for green hydrogen as a major contributor to deep decarbonization, furthering joint efforts to promote heat generation and industrial processes, intense decarbonizing to abate industries like cement, steel, and petrochemicals, and facilitating private sector investment in the renewables sector.

Our partnership ecosystem allows our businesses to cooperate in specific focus areas, for example, with Hydrogen Europe, the Australian Hydrogen Council, ETN Global, or EU Turbines. Our Transmission Division has established various partnerships with German universities around the topics of SF_6 alternatives or sustainable high-voltage technologies.

Beyond these partnerships, Siemens Energy cooperates with scientists at top universities and research institutions on the advancement of technologies that contribute to sustainable energy systems of the future, both in bilateral research and publicly funded research projects.

These include, to name but a few, the Shanghai Jiao Tong University in China focusing on digitalization and gas turbine technology, the Instituto Tecnológico de Monterrey in Mexico, addressing cogeneration challenges for industry and the University of California Berkely and University of Central Florida in North America, researching future energy technologies. We also collaborate with several European universities such as the Universities of Oxford, RWTH Aachen or National Technical University of Athens, researching subjects such as hydrogen capability of gas turbines or the cyclic and economic production of fuels based on renewable electricity.

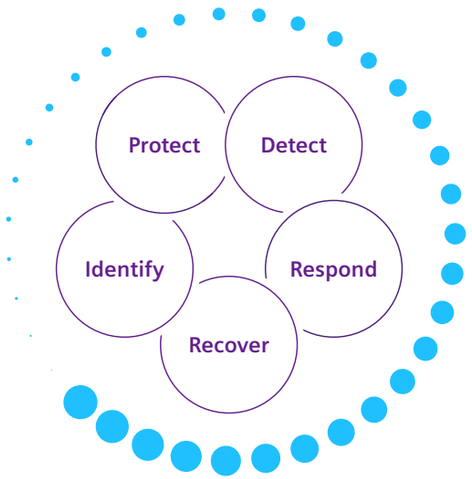
Furthermore, Siemens Energy is focused on identifying, launching, and scaling ventures with future potential. Siemens Energy Ventures was therefore founded in 2020 to uncover and develop tech start-ups with transformative founding teams, technologies, and business models that can address the energy demands of tomorrow. Our Venture Clienting program offers fledgling tech enterprises more than just funding capital: We provide access to our expertise, our client network, our global reach, as well as our supplier and partner networks.

Cybersecurity

Our cybersecurity aims to protect our business operations for GP, information assets, data, information technology (IT)/operational technology (OT) infrastructure, and also aims to ensure 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. SGRE has set up a separate cybersecurity governance and program with similar aims, to protect information and corporate IT assets (IT Cybersecurity) as well as products, solutions, and services offered to the renewable energy market (OT Cybersecurity), based on industry standards and best practices aligned with global regulatory requirements. For further information please refer to ↗ **Consolidated Non-Financial Statement 2021, A.2.1 Megatrends Accelerating the Energy Transition**.

Cybersecurity is the responsibility of every employee and thus a collaborative task where the degree of involvement and responsibility depends on individual roles and functions. Our Cybersecurity Function's principal task consists in defining and monitoring requirements and demanding status reports from the Heads of Divisions, New Energy Business, Excellence Horizontals, and Functions for the company-wide implementation of cybersecurity. The Cybersecurity Function also provides quarterly cybersecurity status and risk reports to the Executive Board.

Our cybersecurity approach



The objectives of our cybersecurity activities are to provide adequately secured products, solutions, and services as well as dedicated cybersecurity support to our customers. All of this is being based on a secure internal IT and OT intended to protect all relevant assets against cyber threats and planned to manage associated risks. This is supported by the following strategic objectives:

- Cybersecurity enables our business to protect adequately against cyber threats and helps us to create business opportunities (Business Enablement)
- Cybersecurity continuously improves resilience through clear and holistic accountability and ownership (Operational Excellence)
- Cybersecurity develops and adopts leading technologies, and leverages the Siemens Energy ecosystem (Technology & Innovation)

In this context, key activities include further developing the cybersecurity strategy, delivering adequate cybersecurity services for identification, protection, detection, defense, and response capabilities to threats and incidents, and building up cybersecurity intelligence to mitigate risks (see chapter Compliance and integrity).

In addition to the measures already implemented to increase cyber resilience, Siemens Energy has also established training and awareness processes to broaden the cybersecurity topic for all employees.

Leaving diesel behind: electric ferries for Norway's busiest route

Electrifying Norway's ferries

The Norwegian transport company Bastø Fosen is a subsidiary of Torghatten ASA. The company operates ferry traffic between Horten and Moss and aims to increase its environmental commitment for Norway's busiest ferry route. Siemens Energy Marine has been commissioned to build a new battery-operated ferry and to retrofit two more ferries. With charging options on the quayside in Moss and Horten, more than 6 million liters of diesel will be saved every year, leading to a 75% reduction in annual CO_2 emissions.

Sustainability dialogue
The energy industry's shift to sustainability raises new challenges. Young talents ask our management their most pressing questions.

Is it realistic that Siemens Energy will reject future projects due to (climate) policy reasons?

Björn Lewandowski knows the future is going to bring more climate policies and regulations to slow global warming. But what will this mean for a company that still has one foot in fossil fuels? He asks Vinod Philip his most pressing questions.

Vinod Philip
Chief Technology & Strategy Officer
Siemens Energy

Björn Lewandowski
Commercial Project Manager
Siemens Energy
Berlin, Germany

In 2016, I started working at Siemens Energy in Berlin, Germany, as part of a dual study program where you earn your bachelor's degree while working part-time. That same year was, at least at the time, the hottest year on record, but it would still take a while before we saw any far-reaching climate change policies.

In 2021, Germany introduced carbon pricing on fuels, which has had an effect on decisions we make in our personal lives. And, of course, it's also had an effect on the decisions companies make, especially in the areas of industry, heating and power generation. We can only expect that more policies and regulations will come.

And the market is already responding. I'm a commercial project manager for our generation service, and we're seeing a huge decline in projects because coal plants are being shut down and steam turbines aren't in demand. Customers are also using gas-fired plants less and less, which means fewer service contracts. In Europe, it seems like no one is building new gas power plants at the moment.

Climate policies are necessary, even if late in coming. But there are always two sides to a story. Siemens Energy has announced a large number of job cuts over the next five years, and the company needs to earn money to finance currently less-profitable technologies like green hydrogen.

So, here's my most pressing question: Is it realistic that Siemens Energy will reject future projects due to (climate) policy reasons?

The short answer is yes. Sustainability is a core part of our strategy, and we continuously review our portfolio and projects to make sure we "walk the talk". All our projects undergo a mandatory sustainability check that evaluates ESG risks.

But the nature of our business and the urgency of climate action makes it essential that we lead the energy transition and not just follow policies. So our decision to stop accepting orders for new coal-fired power plants wasn't trigged by an outside policy, but by our conviction that coal simply isn't a valid energy carrier for sustainable and climate-friendly energy systems.

Taking on a role like this means that we have to develop new business models for the company and create new value propositions for our customers in order to support them in their energy transition journeys.

I'll give you one example: While we're supporting the increased integration of renewables with digitalization and more intelligent power grids, we're also very aware that fossil fuels like natural gas will continue to play a relevant role in stabilizing our energy systems and helping to provide affordable electricity today while transitioning to a net zero society. To fill this interim period, we've developed highly efficient, state-of-the-art gas turbines that can already operate on 30 percent hydrogen or higher (depending on the model) and will be able to run on 100 percent hydrogen before the end of this decade.

As we move forward shaping energy transitions worldwide, sustainability and the path toward a net-zero society will remain our ambition along with offering reliable and affordable energy to people everywhere.

Decarbonization

7 AFFORDABLE AND CLEAN ENERGY
13 CLIMATE ACTION

We believe that innovative technologies are the key to combating climate change. Our products and solutions enable our customers to reduce their greenhouse gas emissions.

- **Fields of action to decarbonize our product and service portfolio**
- **Commitment to climate neutrality in our own operations by 2030**
- **Pursuit of emission reductions throughout our supply chain**

Siemens Energy recognizes that urgent action on climate change is required. Only strong and sustained reductions in emissions of CO_2 and other greenhouse gases can stabilize rising global temperatures.

As countries and companies around the world set ambitious goals, investors are also asking companies to adhere to short-, mid- and long-term targets that comply with the Paris Agreement. Siemens Energy is a partner and driver of the energy transition and is committed to the Paris Agreement. Our decarbonization activities along the entire value chain enable us to contribute to the SDGs, in particular SDG 7 "Affordable and Clean Energy" and SDG 13 "Climate Action".

Decarbonization is an essential part of our strategy

We are dedicated to delivering our customers innovative solutions that drive their energy transformation and support the decarbonization of the energy sector. At the same time, we are consistently pursuing climate neutrality in our own operations and intend to be climate neutral by 2030.

In April 2021, the Science Based Targets Initiative (SBTi) validated the absolute GHG reduction targets for our GP reporting segment, not only for our own operations (Scope 1+2) but also for our sold products (a category of Scope 3). It confirms that our targets are in line with the Paris Climate Agreement to limit global warming.

In 2020, the SBTi verified that SGRE's emission reduction targets (Scope 1+2) are aligned to meet the 1.5°C Paris Agreement goal. SGRE achieved climate neutrality in its own operations in 2019, including offsetting unavoidable emissions. It expanded its ambitions by setting a net-zero emissions target covering Scope 1 to 3 by 2040. For further information please refer to ↗ **Consolidated Non-Financial Statement 2021, C.2 Climate Change**.

Sustainability Strategist Åsa Lyckström explains how future hydrogen and gas turbine energy systems could work

Showcasing future energy systems in Finspång

Our own gas turbine test facility in the town of Finspång, Sweden, is set to become a model for future energy systems. Together with a team of international partners, Siemens Energy is developing the Zero Emission Hydrogen Turbine Center. The center showcases a flexible and sustainable energy system, connecting gas turbines with hydrogen, renewable energy, and energy storage. In addition to solar power, the plant also utilizes excess power from the gas turbine tests to produce its own hydrogen in the electrolyzer and create a looped energy system. The test center will also accelerate the development of Siemens Energy gas turbines to be capable of operating on 100% hydrogen.

After modernization, the combined cycle power plant at BASF Schwarzheide in Germany is now 10% more efficient

BASF brownfield: Reducing emissions through modernization

BASF Schwarzheide GmbH, a wholly owned subsidiary of BASF SE, has contracted Siemens Energy to modernize its industrial power plant in Schwarzheide, Germany. The Brownfield Exchange project involved replacing a gas turbine of another original equipment manufacturer with a new, highly efficient industrial gas turbine from Siemens Energy. The modernization of the 26-year-old plant aims to reduce CO_2 emissions by 17% while increasing the plant's overall efficiency by 10%. In addition, a SIESTART battery storage solution enables the entire power plant to start up independently of an external power supply (black-start capability). A 15-year service contract ensures the availability of energy over the long term while at the same time optimizing life cycle costs.

To advance climate neutrality across the entire value chain, we are also working on concepts to reduce emissions in our supply chain (see further below).

As part of the European Green Deal, the European Union (EU) is working on a classification system – the EU Taxonomy – that lays down criteria for the definition of ecologically sustainable economic activities. The Taxonomy will provide companies, investors, and policymakers with consistent and comparable criteria for assessing which economic activities can be considered sustainable. The reporting will be mandatory for Siemens Energy as of next fiscal year. As the first wave of mandatory reporting covers the areas of climate mitigation and adaptation, we are collating and evaluating data around our activities in these areas and preparing systems and processes to be ready to comply.

Our GP climate goals are also part of our Long-Term Incentive scheme and hence firmly anchored in Top Management compensation.

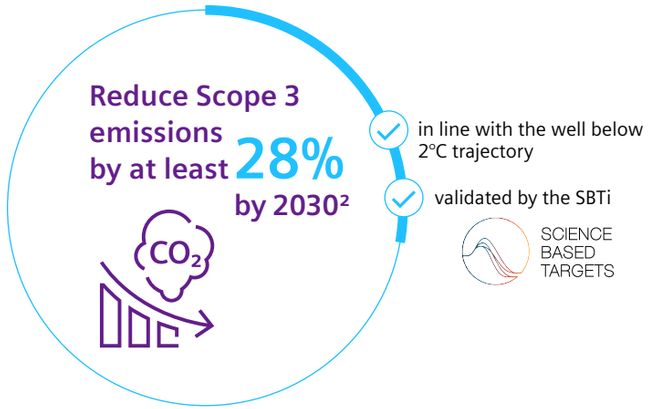
The greatest potential to reduce GHG emissions is in our products, solutions, and services. To underscore our strategic focus of providing innovative technology for our customers' energy transition, we have defined five fields of action to decarbonize our portfolio. For more information see chapter Customers and innovation.

With a focus on decarbonization, we will continue to transform our portfolio of products, solutions, and services, and focus on building our company based on three key pillars, see chapter Strategic focus:

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

Scope 3 emission reduction target

Our GHG emissions reduction target for Scope 3[1] emissions for the GP reporting segment:



[1] Includes category "use of sold products" only.
[2] From base year 2019.

As a provider of clean and affordable energy, SGRE's strategy has focused on opportunities to develop new onshore and offshore wind turbines with bigger rotors able to deliver higher annual energy levels at a lower cost. For further information please refer to ↗ Consolidated Non-Financial Statement 2021, C2.4 Strategy: Strategy to Tackle Climate Change.

Decarbonization at our customers

To reflect the importance of our products and solutions for decarbonizing energy systems worldwide, we have integrated the use of our sold products into our carbon footprint calculation for the first time as part of the SBTi commitment. We decided to publicly disclose the figures from fiscal year 2021 onwards to create transparency for our stakeholders. Sold products make up over 99% of our overall GHG emissions. The GP reporting segment is committed to a 28% reduction by 2030 from a 2019 base[1]. The SBTi confirms that our target for the use of our sold products is in line with the Paris Climate Agreement to limit global warming to well below 2°C.

Our Scope 3 emissions from the use of sold products have been calculated based on the GHG protocol standards. The main drivers for GHG emissions are the direct combustion of fuels (e.g., natural gas) in our products and the electricity consumption and power losses of our products. The emissions include:

- Direct emissions: GHG emissions are basically generated through the direct combustion of fossil fuels (e.g., natural gas in a gas turbine). The amount of GHG emissions varies depending on product type (e.g., gas turbine, gas engine), the type of fuel (e.g., natural gas, coal, oil), and the application mode (simple cycle power plant, combined cycle power plant, or cogeneration plant).

Scope 3 downstream emissions	Fiscal year	
(1,000 metric tons CO_2e)	2021	2020
Total[1]	1,369,163	927,476
Intensity (t CO_2e/ € of order intake)	0.041	0.027

[1] Includes category "use of sold products" only (well-to-tank emissions are included, biogenic emissions have been excluded). SGRE emissions equal zero.

[1] Baseline fiscal year 2019, 1.5 billion tons of CO_2e.

- Indirect emissions: GHG emissions are basically generated by large electrical consumers (e.g., motors, drives, pumps) or from power losses (e.g., transformers) from the used products. To a minor extent the transmission portfolio emits CO_2 equivalents (CO_2e) via SF_6 gas leakages at customers' sites.

The calculation methodology for Scope 3 emissions from the use of sold products comprises the emissions from products over their expected use-phase and the expected operating hours per year. With the order intake, the total of respective emissions is determined and reported. GHG emissions that occur during other phases of a product's lifecycle, such as in the supply chain, production, or end-of-life disposal, are not accounted for and reported on in Scope 3 downstream (use of sold products). Siemens Energy's total Scope 3 emissions from the use of sold products during the reporting period was 1.37 billion tons CO_2e. Compared to fiscal year 2020, this is an increase of about 48% in total emissions and 52% in intensity. The main reason for this increase is the order entry for a 2-gigawatt coal-fired power plant in Indonesia. We committed to the project with the customer prior to our decision to opt out of bidding for new coal-fired power plants.

In fiscal year 2020, we were still included in Siemens AG's Environmental Portfolio (EP) reporting, an annual report that indicates by how much the products and solutions that qualify as Environmental Portfolio elements reduce GHG emissions and how much revenue they generate. As an independent energy company, we have revisited the existing approach and especially considered an increasing stakeholder focus on carbon budgets as well as the upcoming reporting requirements on sustainable revenue, capital expenditure, and operating expenses in line with EU Taxonomy criteria. In the light of these developments, we decided to end EP reporting and to implement absolute Scope 3 emissions from the use of sold products, instead.

In line with our climate action strategy, we are taking decisive action. In November 2020, Siemens Energy announced that it will no longer participate in new tenders for purely coal-fired power plants (commitments already entered into before the announcement will be fulfilled). Instead, we are driving the shift to low- or zero-emission power generation.

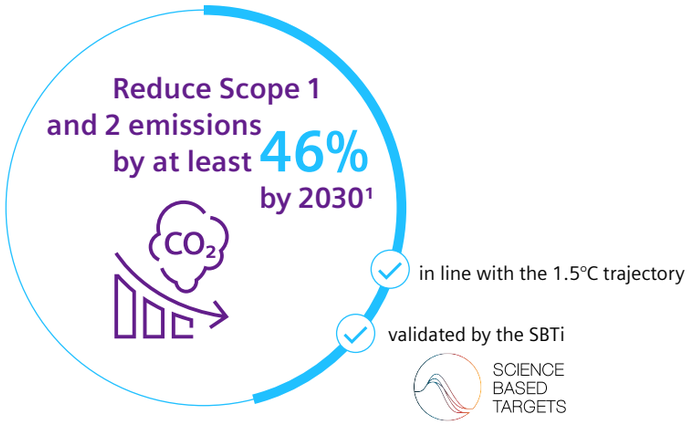
Siemens Energy contributed to developing the comprehensive "H2 readiness" certification guideline

Certifying hydrogen power plants

Many new combined cycle power and other gas-fired power plants are being promoted as "H2-ready" and bridges to a decarbonized future. Yet until now, there was no clear definition of what that term entails. For that reason, TÜV SÜD, supported by Allianz Center for Technology, and Siemens Energy developed a guideline defining "H2-readiness" for the first time. TÜV Süd has been offering the independent third-party certification since October 2021. Siemens Energy is the first company worldwide that received the certification for its concept of an H2-ready combined-cycle power plant in November 2021.

Scope 1 and 2 emission reduction target

Our GHG emissions reduction target for Scope 1 and Scope 2 emissions for the GP reporting segment:



[1] From base year 2019.

Climate-neutral black-start system

At the Marsh Landing Generating Station near Antioch, California, Siemens Energy is designing, building and commissioning a black-start system using a battery energy storage system (BESS). Black-start capabilities allow the station to restart the flow of electricity to the facility's auxiliary systems in the case of an outage or blackout situation. Traditional emergency back-up systems run on diesel generators or small, fossil fuel turbines. By contrast, the BESS operates climate-neutrally to start one of the plant's four combustion turbine generator units.

Green hydrogen

Increased energy efficiency and renewable energy sources are helping to decarbonize the power sector. Yet to meet the Paris Climate Agreement, all sectors of the economy, including heavy industry and transportation, must move forward.

We believe green hydrogen can take the benefits of renewable energy beyond the power sector. With green hydrogen as a bridge, green electricity can be transformed into a transport fuel or into feedstock for industrial processes where currently no climate-neutral alternatives exist. Green hydrogen and derived fuels, such as green ammonia, will, for example, be able to power container ships.

Decarbonization of our operating processes

Becoming climate neutral in our own operations is an integral part of the decarbonization journey for Siemens Energy.

With the Climate Neutral Program, the GP reporting segment 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 GHG emissions by at least 46% by 2030 from the base year 2019 – in line with a 1.5°C trajectory, as validated by the SBTi. In the reporting period, we achieved a reduction of 36% compared to fiscal year 2019.

The strongest levers to achieve climate neutrality by 2030 are:

1. Reducing energy consumption
Energy efficiency projects at various locations such as process optimization and building improvements. These include the installation of LED lighting (dimmers, motion sensors), the installation of smart meters to increase transparency, and building automation systems (e.g., heating, ventilation, air conditioning).

Haru Oni: the first large-scale plant to produce e-fuel from green hydrogen

E-fuel from wind and water

Harnessing the strong winds of the Magellanes in southernmost Chile, the Haru Oni project is the world's first integrated and commercial large-scale plant to produce climate-neutral e-fuel. The plant converts wind energy, water, and CO_2 captured from the air to produce green hydrogen. This is then further refined to produce e-Methanol, a liquid energy carrier that emits about 90% less CO_2 than its fossil counterpart. Siemens Energy will work alongside several international companies led by Highly Innovative Fuels on the project, which intends to produce over 550 million liters of e-Gasoline by 2026.

2. Using renewable electricity
100% of Siemens Energy's global electricity consumption shall be met by power from renewable sources by 2023. In fiscal year 2021, we achieved 76%.

3. Reducing SF_6 emissions
SF_6 emissions in our operations occur in products in our Transmission Division. In fiscal year 2021, we increased transparency on SF_6 emissions at site level and developed ambitious reduction pathways. Our SF_6-free Blue Portfolio is the only switching technology on the market that has zero global warming potential. With the development and expansion of our Blue Portfolio together with various measures in our different locations, we have set ourselves the target to reduce our SF_6-related emissions by 60% by 2030 compared to a 2019 baseline. In fiscal year 2021, we achieved a reduction of 37% compared to last year and 43% compared to fiscal year 2019.

4. New mobility concepts
We intend to continuously reduce our vehicle fleet's emissions and the related fuel costs. We aim for 100% CO_2-neutral benefit cars by 2030. The details of an appropriate global car policy have been worked out and will now be applied locally.

	Fiscal year	
Siemens Energy fleet	**2021**	**2020**
Number of vehicles	5,400[1]	5,600
Fleet consume (1,000 GJ)	392	403

[1] As of April 1st 2021, SGRE changed reporting method to only include vehicles > $5,000 annual lease payments.

SGRE also implemented local country-specific mobility and transportation policies, thereby ensuring that e-mobility is the preferred option for internal transportation and promoting the transition of service vehicles to electric drives. For further information please refer to ↗ **Consolidated Non-Financial Statement 2021, C2.4 Strategy: Strategy to Tackle Climate Change**.

SGRE achieved climate neutrality in its own operations at the end of fiscal year 2019, including the offsetting of unavoidable emissions. Where SGRE cannot reduce or transition its energy, it will compensate for the non-avoided emissions by investing in environmental projects that aim to reduce future emissions to balance its GHG footprint. For further information please refer to ↗ **Consolidated Non-Financial Statement 2021, C2. Climate Change**.

Internal CO_2 pricing
Furthermore, CO_2 pricing is an important steering mechanism for achieving climate neutrality. We believe binding CO_2 budgets for all sectors and regions as well as clear CO_2 price signals can guide us toward the 1.5°C target. These price signals encourage the deployment of the best technologies and business models available. Internally, we are currently experimenting with methods to drive down our emissions through CO_2 pricing. We have implemented a guideline for real estate-related investments that includes the application of a shadow price of 100€ per ton of CO_2 for our decision-making. We plan to expand this approach in early 2022.

Siemens Energy Brazil already implemented an internal carbon fee in October 2020 for all its Business Units. Each Business Unit pays a specified carbon fee into an investment fund, which is then used to invest in low-carbon projects. The carbon fee aims to influence employee behavior and ensure their business decisions consider low-carbon alternatives.

Energy consumption and GHG emissions
We calculate the energy consumption at our office locations and manufacturing facilities by adding the primary and secondary consumption of fuels and electricity.

	Fiscal year	
Energy consumption (1,000 GJ)	**2021**	**2020**
Primary energy	**2,362**	**2,188**
thereof natural gas/liquid petroleum gas	2,037	1,920
thereof fuel oil, coal, gasoline/diesel	280	263
thereof biogas	37	–
thereof other	5	5
Secondary energy	**3,967**	**3,615**
thereof electricity	3,279	2,902
thereof electricity from renewable sources	2,496	2,256
thereof district heating	688	713
Total	**6,329**	5,803
Intensity (GJ/€ of revenue)	2.22×10^{-4}	2.11×10^{-4}

Siemens Energy's total energy consumption during the reporting period was 6.3 million gigajoules (GJ), resulting in an intensity of 2.22×10^{-4}. Compared to fiscal year 2020, this is an increase of 9.1% in absolute energy consumption. This is mainly due to the recovery of global operations from COVID-19 impacts. A specification of our extrapolation method resulted in the calculative offset of some of the achieved progress for the share of green electricity.

In the context of our Climate Neutral Program and our target to have 100% of Siemens Energy's global electricity consumption from renewable sources by 2023, we managed to reduce emissions through electricity from renewable sources by 205,000 metric tons CO_2e (fiscal year 2020: 232,000).

Renewable energy[1] (%)	Fiscal year 2021	2020
Share of renewable electricity (of total electricity)	76	78
Share of renewable energy (of total energy)	40	39

[1] A specification to the extrapolation method has mathematically compensated for the progress achieved in the switch to renewable electricity.

Over the reporting period, Siemens Energy collected the following data regarding the level of Scope 1 and 2 emissions related to its business activities.

Scope 1 (direct) emissions
Direct GHG emissions arise from sources in the company's ownership or under its control.

Scope 2 (indirect) emissions
Indirect GHG emissions refer to the consumption of purchased electrical energy and district heating.

Scope 1 and Scope 2 emissions (1,000 metric tons of CO_2e)	Fiscal year 2021	2020[2]
Scope 1	**206**	221
thereof natural gas & liquid gas	111	–
thereof fuel oil, gasoline, diesel	21	–
thereof SF_6	41	66
thereof fleet emissions	29	29
thereof other emissions	4	–
Scope 2[1]	**67**	71
thereof electricity	34	–
thereof district heat	32	–
Total	**273**	292
Intensity (t CO_2e/€ of revenue)	0.96×10^{-5}	1.06×10^{-5}

[1] We calculate our emissions resulting from electrical consumption based on emission factors of our local sites according to the market-based approach.

[2] Some prior-year breakdowns are not available as the performance indicator has been newly established for fiscal year 2021.

In fiscal year 2021, we managed to reduce our Scope 1 and 2 emissions by around 7% or 19,600 metric tons, resulting in a Scope 1 and 2 intensity of 0.96×10^{-5} in 2021 compared to 1.06×10^{-5} in 2020. The main levers were a reduction of SF_6 emissions due to a shift to clean air technology and some energy efficiency projects as well as an increase of the renewable electricity share. The recovery from COVID-19-related impacts on our global operations has, on the other hand, led to a slight increase in emissions. 43% of our emissions occur in Germany, China and the USA[1].

Atmospheric pollutant emissions
Other atmospheric pollutant emissions also have negative impacts on the environment. These include volatile organic compounds (VOC) and ozone-depleting substances (ODS). VOC contribute to the formation of ozone close to the earth's surface. Solvents, paints, and adhesives are examples of substances and materials that contain VOC. ODS 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.

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

Atmospheric pollutant emissions (metric tons)	Fiscal year 2021	2020
VOC	440	434
ODS (in R11 equivalent)	0.027	0.013
NO_X	81	74

[1] Without fleet emissions.

Decarbonization of our supply chain

Our suppliers are an important part of the value chain and we encourage them to take climate protection measures. Emission reduction is an integral part of our suppliers' supply chain management (see chapter ↲ **Sustainable supply chain management**) and we continue to urge them to increase their efforts.

Our Carbon Reduction@Suppliers pilot project was launched in 2020 in cooperation with an external service provider, who provided an economic model based on an input/output analysis that identifies the CO_2 footprint of all suppliers. With the procurement volume and the material-country combination, the model calculates the CO_2 footprint in the supply chain based on official statistics and studies by the Organization for Economic Co-operation and Development (OECD), EXIOBASE, the U.S. Bureau of Economic Analysis, and the World Bank.

The project enabled the GP reporting segment to calculate its 2020 CO_2 footprint for upstream activities, identify our top 100 suppliers with the highest footprint, and then share their implemented and planned CO_2 reduction measures within the GP reporting segment. After analyzing the data and methodology, we plan to further develop our approach to reducing emissions resulting from collaboration with our suppliers. For our GP reporting segment, we have set ourselves an ambitious 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 (€ spent) until 2030[2].

The calculated upstream footprint for fiscal year 2021 is 4,761 kilotons of CO_2e, resulting in an intensity of 0.47, which is 0.8% higher in total emissions but 0.7% lower in intensity compared to 2020.

Scope 3 upstream emissions (1,000 metric tons of CO_2e)[1]	Fiscal year 2021	Fiscal year 2020
Total	**4,761**	4,722
thereof category "purchased goods and services"	4,553	4,489
thereof category "transportation and distribution"	208	233
Intensity (kg CO_2e/€ of purchasing volume)	0.473	0.476

[1] Without SGRE.

SGRE has set a target to engage 30% of their suppliers by spend, covering purchased goods and services as well as transportation and distribution, to have science-based targets by 2025 and 50% by 2040. For further information please refer to ↗ **Consolidated Non-Financial Statement 2021, C1.10 Environmental Requirements for Suppliers**.

Siemens Energy employees in China can track their emissions with Decarb+

Decarbonizing at work in China

In China, we engaged a professional carbon trading firm to provide a methodology for calculating employees' CO_2 emissions at work. We then designed a "Decarb+" program in which employees can voluntarily record their daily emissions and reductions on a chat program called WeChat. Siemens Energy China has budgeted a fund to match the total emissions reduction by employees, which will be used to finance decarbonization projects.

[2] Baseline fiscal year 2018, from 0.522 kg/€ to 0.367 kg/€ (=kg CO_2e/€ spent).

3 Responsible operations

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Summary page

Zero Harm Framework

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

4 Principles

6 Behaviors

8 Essentials

Occupational health & safety

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

0.49
Total Recordable Incident Rate (TRIR) of employees[1]

[1] Number of recordable injuries (TRI) x 200,000/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 50001 standards or energy audits.

82%
share of recycling[2]

4.10 million m³
water consumption

Product stewardship

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

71%
coverage of portfolio by life cycle assessments (LCA)

[2] Excluding construction and other waste.

Summary page

Sustainable supply chain management

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

€ 17.3 billion
procurement volume

23%
increase in supplier self-assessments

162%
increase in external sustainability audits

Working at Siemens Energy

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

Share of females

All employees
19.3%

in top leadership positions[1]
21%

Our target top leadership positions by 2025
25%

by 2030
30%

Training hours

8.6
Total average training hours per employee

Human rights

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

We conduct human rights due diligence for our customer projects

Compliance & integrity

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

Our Business Conduct Guidelines are binding for all executives and employees worldwide

83%
of employees trained on our Business Conduct Guidelines

Societal engagement

Our global engagement addresses needs in the countries in which we operate.

€ 4.71 million
total donations

[1] At reporting segment GP.

Occupational health and safety

Safe workplaces and healthy employees are our utmost priority. We have clear measures in place to identify risks, avoid accidents, and promote employee wellbeing.

- **Strong Zero Harm culture fosters responsible health and safety practices across the organization**
- **Health and safety management anchored in EHS policy and certified to ISO 45001**
- **Prevention is our key strategy for employee health and safety**

Providing a safe and healthy working environment for all employees, partners, contractors, and suppliers is a key objective for Siemens Energy. Having a sound occupational health and safety (OHS) approach is vital to achieve the two UN SDGs to which we are committed in this regard: SDG 3 "Good Health and Well-Being", which aims to ensure healthy lives and promote wellbeing for all at all ages, and SDG 8 "Decent Work and Economic Growth", which aims to promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.

Our OHS standards are anchored in all our business practices and are aligned with the Siemens Energy EHS Principles and Core Responsibilities as well as our Business Conduct Guidelines. We use these as a foundation for the development of our EHS management approach and processes. We implemented "Eye-on-Safety Reviews", which are held monthly with the Director of Labor and member of the Siemens Energy Executive Board and are accessible on the intranet.

To support the fundamental requirements for good OHS, we revised our EHS Policy in March 2021 to align with our Zero Harm principles and behaviors (see Zero Harm at Siemens Energy) demonstrating:

- Strong leadership, ownership, and commitment
- Promotion of good health and safety conduct
- Commitment to continuous improvement
- Hazard identification, risk assessment and prevention
- Compliance with principles, standards, and behaviors

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 Siemens Energy operates. This standard provides a basis for effective management, identification of potential risks as well as internal audit and review.

Contractors and temporary workers are expected to work to the same standards as those of Siemens Energy employees. The GP reporting segment regularly prepares an overview of contractor incidents that is shared with business procurement to discuss further improvements. We also discuss these with the contractors themselves and hold meetings with suppliers with the highest level of incidents. All relevant data is shared with the Executive Board.

Zero Harm at Siemens Energy

Siemens Energy is committed to protecting the environment and managing the health & safety and wellbeing of our employees, partners, and other stakeholders who may be affected by our business and operational activities. That is why our first priority is a strong Zero Harm culture, which is driven by certain essentials, behaviors, and the following principles:

- Zero Harm is achievable
  By understanding and mitigating risks. By being aware of the way we act and the behaviors we promote.

- We do not compromise
  By holding each other accountable for integrating our Zero Harm behaviors and essentials in all operational phases as well as in any decision-making and change management processes.

- We take care of each other
  By encouraging timely and honest conversations. By listening respectfully to and learning from everyone we work with.

- We develop locally and share globally
  By building on our Zero Harm behaviors and principles. By reflecting local risks and conditions. By being agile in sharing and learning from each other.

Zero Harm at Siemens Energy

Principles

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

- Zero harm is achievable
- We do not compromise
- We take care of each other
- We develop locally and share globally

Behaviors

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

- Risk assessment
- Driving
- STOP!
- Incident management
- Health
- Environment

Essentials

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

- Confined space
- Cranes and lifting
- Vehicle safety
- Electrical safety
- Working at height
- Hazardous energy control
- Machine guarding and interlocking
- Explosive gases and vapors

Building blocks for local programs

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

- Aerial and mobile platforms
- Change management
- Dangerous goods
- Dropped object prevention
- Emergency preparedness
- Ergonomics
- Excavations and trenching
- Fire safety
- Fit for work
- Health on project sites
- Forklift and industrial vehicles
- Hand tools
- Hazardous substances
- Hot works
- Housekeeping
- Hydraulic tooling safety
- Ladder safety
- Manual handling of loads
- Healthy for life
- Pandemic management plan
- Mobile office working
- Office safety
- Offshore working
- Personal protective equipment
- Permit to work
- Power tools
- Scaffold safety
- Simultaneous operations
- Resilient for work
- Safe from workplace exposure
- Traffic and pedestrians
- Welding
- Contractor management
- Crisis and disaster management
- Travel and workplace security
- Build-your-own
- Traveler health

Decarbonization

- Emissions
- Energy consumption

Product stewardship

- Material compliance
- Life cycle assessments

Conservation of resources

- Natural resources
- Recyclability
- Waste
- Water footprint
- Hazardous waste

- Mandatory
- Safety
- Health
- Environment
- Contractor management
- Security

Employees show strong support for Zero Harm

Zero Harm Day 2021

As part of the GP-wide training initiative, our first annual Zero Harm Day was held virtually on January 26, 2021. Over 3,300 employees, representing all businesses, functions, and 47 countries took part. The staff created over 800 posts with programs, posters, and statements, while 72 building blocks were created by local teams. Four new building blocks were elevated to corporate level. All new building blocks were shared with the global organization.

Health and safety culture provides the foundation

The GP Zero Harm approach is part of our Zero Harm Framework and is intended to drive a strong Zero Harm culture. The Zero Harm approach places the responsibility for developing and implementing our Zero Harm Framework on each local manager. Managers discuss the Zero Harm elements with their teams to choose the elements that will be included in their program, then reinforce them as part of daily work.

The GP reporting segment has implemented a training and learning management tool that includes EHS training in both web-based and instructor-led course formats. This provides employees with EHS training opportunities to develop both individual and team-based skills and knowledge, to meet regulatory requirements associated with their job role, and to integrate the Siemens Energy Zero Harm Framework. In 2021, GP deployed specific training in health and safety topics. We are currently improving our internal reporting to determine the number of employees receiving training as a percentage of overall Siemens Energy staff.

Furthermore, through the global EHS reporting tool, we continuously monitor any concerns raised by employees, with each case treated locally according to our reporting process.

SGRE also continues to instill a strong safety and Zero Harm culture across the global business. Its initiatives include the “Safety is My Choice”, the “10 Life-Saving Rules”, and the “Lead Safe” programs. In 2021, SGRE developed the High-Risk Roadmaps, which are used to update management monthly on progress or challenges in the following areas:

- Electrical work
- Road safety
- Dropped objects
- Lifting operations
- Working from height
- Contractor management

For further information please refer to ↗ **Consolidated Non-Financial Statement 2021, B2. Health & Safety**.

Health and safety performance under review

The GP reporting segment completed Corporate Assurance Occupational Safety (OS) audits related to a location’s risk factors. Audits were conducted at the site and organizational levels (some of them remotely) to increase the effectiveness of our safety risk management at manufacturing, service, and project sites. SGRE also completed occupational safety audits (to ISO 45001 standard) during fiscal year 2021. OS audits and their results will continue to be quantified, providing details for the effective implementation of optimization measures, lessons learned, and continuous improvement recommendations.

Preventing accidents

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

Our processes include monthly reviews with each Division on how to meet their individual action plan as well as implementing behaviors defined in the Zero Harm building blocks, for example: “Don’t talk while driving, even if you are behind in your work”. We have set a key focus on the Total Recordable Incident Rate (TRIR) and share detailed information with the board for all serious incidents. We also report the Lost Time Injury Frequency Rate (LTIFR) to the board monthly.

	Fiscal year	
TRIR[1]	**2021**	**2020[4]**
TRIR of employees[2]	0.49	-
TRIR of contractors[3]	0.56	-
TRIR of employees & contractors	0.51	-

[1] Total Recordable Incident Rate: Number of recordable injuries (TRI) x 200,000/work hours performed. Recordable injuries are accidents that result in lost time, restricted work, or medical treatment.

[2] Incl. temporary workers; excl. contractors.

[3] Contractors are service providers carrying out work activities in a work environment under the control of the company. SGRE captures all contractors, GP captures contractors in projects with a volume >€5 million and classified as complex during the bid phase.

[4] Prior-year figures are not available as the performance indicator has been newly established for fiscal year 2021.

LTIFR[1]	Fiscal year 2021	2020
LTIFR of employees[2]	0.23	0.27
LTIFR of contractors[3]	0.26	0.24
LTIFR of employees & contractors	0.24	0.27

[1] Lost Time Injury Frequency Rate: Number of lost time injuries (LTI) x 200 000/work hours performed. LTIs are accidents that result in at least one lost day of work.

[2] Incl. temporary workers; excl. contractors.

[3] Contractors are service providers carrying out work activities in a work environment under the control of the company. SGRE captures all contractors, GP captures contractors in projects with a volume >€5 million and classified as complex during the bid phase.

High-consequence injury Frequency Rate[1]	Fiscal year 2021	2020[3]
High-consequence injury rate of employees & contractors[2]	0.009	-

[1] Work-related serious 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 200 000/work hours performed. Incl. temporary workers and contractors.

[3] Prior-year figures are not available as the performance indicator has been newly established for fiscal year 2021.

Fatalities[1]	Fiscal year 2021	2020
Employees	0	1
Contractors	5	4
Total	**5**	5

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

Service engineer Ohize Edeki demonstrated exemplary commitment to safety

Putting safety first

Our Industrial Applications Field Service Engineer Ohizemoje Oluwaseun Edeki (Ohize) is an excellent example of the many Siemens Energy workers who continually put the safety of employees, contractors, and customers first. While performing his duties as a resident engineer, Ohize demonstrated his commitment to safety by initiating two "Stop Work interventions" at an Abu Dhabi National Oil Company project site to ensure all safety precautions were taken before they continued with their work. He thus demonstrated the importance of looking after the safety of our contractors and making sure that they follow our Zero Harm protocols. Due to his actions to strengthen the safety culture for both Siemens Energy and our customer, Ohize has been commended by management on several occasions.

The overall TRIR of employees was 0.49 and LTIFR of employees was 0.23 at the end of the fiscal year.

A key objective at Siemens Energy is to prevent high-consequence incidents while performing work activities. The Zero Harm Framework supports the efforts to reduce the severity of injuries. In fiscal year 2021, we had 11 high-consequence work-related injuries.

Siemens Energy regrettably had five work-related fatal accidents (fiscal year 2020: five). Two of the fatal accidents were related to electrical shock, one was related to an arc flash. One fatal accident was related to a fall from an elevated work platform, and another one to a fallen internal elevator. All fatal accidents involved SGRE contractors. Each serious event or fatal accident causes grief for families, friends, and colleagues. As a company, we thoroughly investigate and assess the respective circumstances and consequently derive measures to prevent such accidents from happening again.

A key objective at Siemens Energy is that we will not expose workers to occupational illness or work-related diseases while performing work activities. Therefore, GP has introduced the Zero Harm building block "Safe from Workplace Exposure". 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 staff member 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.

	Fiscal year	
Occupational illnesses[1]	**2021**	**2020**
Occupational illness frequency rate[2] of employees[3]	0.11	0.14

[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 200 000/work hours performed.

[3] For Germany.

Promoting health

Within the overall OHS management approach, prevention is our key strategy for the sustainable promotion of employee health. Each GP Business Unit is required to identify and implement health management programs that focus on healthy working and healthy employees – reflecting local needs and conditions and including:

- Identification and evaluation of health-related aspects
- Employee fitness for work
- Awareness of health and wellbeing
- Pandemic preparedness and planning

When considering global approaches, representatives from EHS, Quality Governance and Security (EQS) and specialists from the countries (Health Management, Safety Officers) form a team of eight to ten key members to discuss relevant tasks. EQS organizes the meetings, questionnaires, tools, and evaluation of data. The teams can be extended for special tasks as required.

As part of the Zero Harm program, 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 on topics such as exercise, nutrition, stress, physical wellbeing, psychological health, and work-life balance and are continuously developed. Such topics were particularly important given the rapidly changing work environment due to COVID-19 (see chapter **Management of COVID-19 effects**).

Celebrating health and safety at work

On April 28, 2021, Siemens Energy joined the global community to celebrate World Day for Safety and Health at Work. The day was initiated by the ILO in 2003 to promote the prevention of occupational accidents around the world. Here at Siemens Energy, this is an opportunity to talk about the importance of safety issues and of creating a Zero Harm culture to reduce work-related injuries, diseases, and deaths. To mark the day, local Siemens Energy News Yammer groups and offices shared their special celebrations using the hashtag #SafetyAndHealth. The Berlin team, for example, designed a 15-minute "Body & Soul" session to energize co-workers on their break.

Conservation of resources

We are mindful of the impact our activities have on the environment and are committed to the sustainable use of natural resources.

- **Zero Harm Framework provides guidance for best practices in operational activities**
- **Environmental management system certified to ISO 14001 and 50001**
- **Focus on the reduction of water use, waste, emissions and on biodiversity**

At Siemens Energy, we aim to minimize our impact on the environment by reducing waste, and freshwater withdrawal and emissions as well as protecting biodiversity.

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".

The number of environmental protection requirements and standards around the world is growing rapidly. With the help of our Environment, Health & Safety (EHS) management systems, we aim to comply with applicable laws, regulations, and stakeholder expectations. In both the GP and SGRE reporting segments, our environmental management systems are founded on the principles and elements of the international ISO 14001 and 50001 standards or energy audits as per national legislation. The objective of these systems is to continuously improve environmental performance, lower the environmental impacts, and increase energy efficiency. For more information on energy consumption and emissions see chapter ↲ **Decarbonization**.

Siemens Energy continues to instill a strong EHS 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. Both our EHS Policies for GP and SGRE provide a global framework for local programs and initiatives. The respective Heads of EHS at GP and SGRE support the designated member of the Executive Board responsible for EHS. For further information on SGRE please refer to ↗ **Consolidated Non-Financial Statement 2021, C3. Sustainable Use of Resources**.

In the GP reporting segment, the EHS Policy is further supported by the Zero Harm Framework, see chapter ↲ **Occupational health and safety**, which aims to embed responsible principles and behavior at all levels of the organization. SGRE has implemented "Safety is My Choice", the "10 Life-Saving Rules", and the "Lead Safe" program.

By means of these elements, both reporting segments are addressing the relevant elements from global principles and behaviors to local environmental, health, and safety risks in all activities across the organization.

We use environmental aspect assessments as part of the environmental management system to evaluate potential impacts related to our business activities. The assessment includes impact severity and probability, providing information for management action and opportunities for improvement.

Meeting environmental management standards

For the GP reporting segment of Siemens Energy, our Zero Harm Framework provides the foundation upon which we aim to meet the growing number of environmental protection requirements of our customers and strengthen our position as a sustainable company. The main objectives focused on improving environmental performance in the areas of energy, air, water, and waste, including:

- Increased energy efficiency by using energy management systems at sites
- Adapting the purchasing strategy toward green electricity by 2023
- Controlling air-pollutant emissions by replacing ODS and reducing solvents
- Implementation of local water strategies and risk analysis
- Zero waste to landfill by consistently preventing landfill waste and reducing waste materials

Additionally, SGRE has defined its environmental targets as part of its Sustainability Strategy Vision 2040. For further information please refer to ↗ **Consolidated Non-Financial Statement 2021, A.7.9 Objectives, Resources and Results Evaluation**.

Siemens Energy aims to have a certifiable management system covering all employees worldwide. All Business Units have reviewed and updated their local integrated management systems and current certifications. As of September 30, 2021, 75% of all GP employees worldwide, as well as 80% of all SGRE employees, work at sites covered by ISO 45001 together with ISO 9001 and ISO 14001. The Business Units perform internal audits within their organization to prepare and maintain certifications.

Other locations in GP and SGRE are either working toward the implementation of the ISO 14001 and ISO 50001 standards or alternatively have demonstrated energy efficiency, management, and improvement practices through independent assessment and verification. For further information please refer to ↗ Consolidated Non-Financial Statement 2021, A.4.5 Additional Controls.

Transparency of resource use

Waste

The environmental relevance of waste depends upon the type of waste and the methods used to dispose of it. Hazardous and non-hazardous waste fractions are each further divided into recyclable waste and waste for disposal. Waste from construction or demolition work is reported separately, as this type of waste material arises independently from production.

To continuously improve and increase transparency of how waste is generated, handled, and disposed of at our Siemens Energy locations, we are currently developing a new environmental reporting tool. The Siemens Energy Waste catalogue aims to bring uniformity to the process of categorizing waste across all global reporting locations.

Waste intensity in fiscal year 2021 was 5.09×10^{-6} metric tons per € of revenue. This is a reduction of 4.2% compared to fiscal year 2020. Absolute waste reduction in fiscal year 2021 was 0.7% to the previous year.

	Fiscal year	
Waste (1,000 metric tons)	**2021**	**2020**
Non-hazardous waste	122	121
Hazardous waste	18	19
Construction waste	3	6
Other waste categories	3	–
Total	**145**	**146**
Waste intensity (metric tons/€ of revenue)	5.09×10^{-6}	5.31×10^{-6}

	Fiscal year	
Recycling and recovery (%)	**2021**	**2020**
Share of total recycling[1]	**82**	78
thereof recycled	54	–
thereof recovered	25	–
thereof reused	2	–
Share of recycled hazardous waste	68	–

[1] Excluding construction and other waste.

Waste recycling and disposal[1]

(1,000 metric tons)

Fiscal year

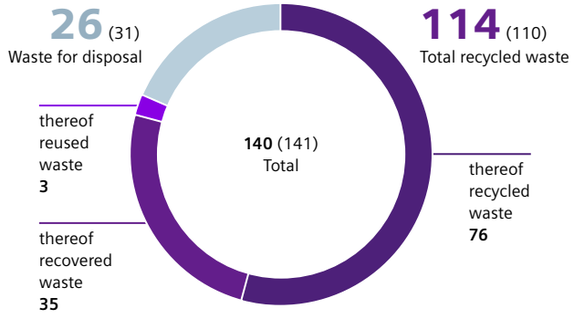


Figure for previous year in brackets

[1] Excluding construction and other waste.

Water consumption

(million cubic meters)

Fiscal year

4.1
Total

3.0
Fresh water use

1.1
Ground and surface water for cooling

Water

Water remains an important topic for Siemens Energy. We aim to carefully manage the use of fresh water in our operations and the impact of our projects on water resources in the surrounding areas. Water consumption is predominantly related to manufacturing centers and office facilities in both reporting segments, GP and SGRE. For further information on SGRE please refer to ↗ Consolidated Non-Financial Statement 2021, C3.7 Water Management.

To facilitate the assessment of water-related impacts, we are applying the World Resources Institute Aqueduct tool to help us efficiently evaluate water risks down to the local level. The Siemens Energy Global Water Footprint Dashboard maps our sites with the results of the water stress assessment of the Aqueduct Tool, making it easier to identify those that are 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 and consumption and other related risks via the integrated management systems or by means of individual mitigation plans.

In fiscal year 2021, the assessment was performed for all environmentally relevant sites at GP.

At Siemens Energy, the volume of water abstracted over the reporting period equates to 4.10 million cubic meters (2020: 3.23 million cubic meters). Water intensity in fiscal year 2021 was 1.44×10^{-4} cubic meters per € of revenue. This is an increase of 27.2% in absolute water consumption and 22.6% in water intensity compared to fiscal year 2020. One factor that influenced the increase is the specification of our extrapolation method, which resulted in a calculative increase of our water consumption as well as wastewater amount.

The stone used at the onshore Triton Knoll substation will be transported to the adjacent National Grid Viking Link interconnector project

Working toward zero waste

Within our Zero Harm Framework and the relevant building blocks, we are working toward zero waste to landfill. We aim to achieve this through the reduction of our material use and circular economy approaches.

In the UK, two Siemens Energy projects collaborated to reuse and recycle stone for their construction sites. Around 8,768 metric tons of stone, enough to fill almost three Olympic-sized swimming pools, previously used to build a temporary access road and site accommodation for the Triton Knoll onshore substation works, was moved to the neighbouring National Grid Viking Link interconnector project. The initiative saved more than 58 metric tons of CO_2 in total, the equivalent of the CO_2 generated by heating 20 homes for one year.

In Brazil, the EHS environmental team has been working to reduce material waste through environmental education, innovation, and use of renewable waste disposal technologies. These include industrial biodigesters such as those installed at the Jundiaí and Santa Bárbara D'Oeste's cafeterias in August 2021. The biodigesters turn organic waste into sewage, reducing around 5 tons of waste a month. Through all our efforts, we ensured that 86% of the waste generated at our Brazilian sites in 2021 were sent to recycling facilities; by the end of 2022, we want to achieve the landfill-free target.

In the US, the Siemens Energy facility in Rural Hall met its goal that no solid or hazardous waste should be directly disposed of in landfill. Today some 80-90% of the facility's waste by weight is recycled and repurposed into another product. At the Orlando campus of Siemens Energy, the external building management company CBRE and the internal GREEN Employee Resource Group have collaborated on acquiring a vendor to compost the cafeteria's food preparation scraps. The organic waste is collected once a week and composted off-site.

Water consumption (million cubic meters)	Fiscal year 2021	2020
Fresh water use	2.99	2.59
Ground and surface water for cooling (returned to receiving water body, chemically unchanged, but warmed)	1.08	0.64
Total	**4.10**	**3.23**
Water intensity (cubic meters/€ of revenue)	1.44×10^{-4}	1.17×10^{-4}

Wastewater (million cubic meters)	Fiscal year 2021	2020
Wastewater from employee facilities	1.50	1.24
Wastewater from manufacturing processes	0.36	0.31
Other (incl. losses)	0.67	0.55
Conditioned cooling water discharged as wastewater	0.43	0.36
Total wastewater without chemically unchanged cooling water	**2.99**	**2.47**
Cooling water (returned to receiving water body, chemically unchanged, but warmed)	1.07	0.64
Total	**4.06**	**3.11**
Wastewater intensity (cubic meters/€ of revenue)	1.42×10^{-4}	1.13×10^{-4}

Wastewater from our facilities and manufacturing processes amounts to 4.06 million cubic meters (2020: 3.11 million cubic meters). Wastewater intensity in fiscal year 2021 was 1.42×10^{-4} cubic meters per € of revenue. This is an increase of 30.6% in absolute wastewater and 25.9% in wastewater intensity compared to fiscal year 2020.

Biodiversity

Maintaining biodiversity is crucial if we are to sustain healthy ecosystems. Siemens Energy uses natural resources (water, fuels, and materials) at its offices, production, and project sites. This interaction with the environment could introduce negative impacts on local ecosystems, habitats, and species.

The conservation of biodiversity is integrated into our environmental management systems, which help us carry out our work and projects as sustainably as possible.

Many local biodiversity initiatives have been identified by our employees and are supported by Siemens Energy to protect biodiversity and create a safe environment for plants and animals. Examples include insect-friendly wildflower meadows, hives for wild bees, bird-nesting areas, tree plantings, roof greening measures, and the creation of nature pools.

Environment-related incidents

During fiscal year 2021, there were two significant environmental incidents related to Siemens Energy (fiscal year 2020: zero). One was due to the malfunction of a gas cylinder valve leading to a loss of SF_6 to the atmosphere, and the second incident was a release of synthetic lubricant to a water stream.

Environmental incidents resulting from our business activities can cause damage to our natural environment and surroundings. As a company, we will investigate, assess, and derive measures that will prevent such incidents from happening again.

Advancing sustainable development in Brazil

In Brazil, Siemens Energy is working together with partners to actively advocate the energy transition, decarbonization, and human rights. In 2021, we joined the Energy Transition Program led by the Interamerican Development Bank and the Center for International Relations. We also cooperate with the Brazilian Council for Sustainable Development, which is the Brazilian representative of the World Business Council for Sustainable Development. Together with our partners, we have worked to advance Brazilian commitments on climate change, including the introduction of a compulsory national carbon market, decarbonization, biodiversity, and sustainability in the Amazon region, as well as human rights and social responsibility in the value chain.

Product stewardship

We take environmental, health, and safety criteria into account at every stage of the product life cycle and work to minimize negative effects.

- **Strong Zero Harm culture promotes environmental protection**
- **Life cycle assessments identify environmental impacts throughout the value chain**
- **EcoTransparency app to calculate the environmental footprint of our products**

Siemens Energy is committed to promoting greater environmental responsibility and developing environmentally friendly technologies. As a participant of the UNGC initiative, we aim to contribute to the fulfilment of the SDGs with our product stewardship activities, especially SDG 12 "Responsible Consumption and Production", which seeks to couple economic growth and development with sustainable consumption and production patterns.

Our approach to product stewardship includes all environmental aspects with a strong focus on climate change adaptation and resource efficiency. It takes into account all life cycle phases, including product development and design, manufacturing, operation, service, and end of life. Measures include life cycle assessments (LCA), environmental product declarations (EPD), component upgrades, and lifetime extensions as well as recycling. By continually analyzing our products, solutions, and services, quantifying their impacts and determining areas of improvement, we are building the foundation for deriving and implementing measures contributing to a circular economy.

Product stewardship at Siemens Energy follows the key standards of the ISO 14000 series, with individual approaches for each Division. The approach is centrally supported by the respective Global EHS departments.

It is also an integral part of our Zero Harm approach, which aims to prevent adverse effects to health and the environment due to our business and operational activities. For more information, see Zero Harm in the chapter Conservation of resources: In terms of detailed guidance and ambition level for GP, 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 processes for evaluating the environmental impact of our products, systems, and materials over the entire life cycle. These processes aim at ensuring that each business has a good knowledge and understanding of the requirements for LCAs and their importance for our customers or suppliers that are directly engaged in the completion of an LCA.

Managing environmental risks

As part of our holistic product stewardship approach, we take environmental risks seriously. Our approach is founded on the minimum standards set by the International Finance Corporation (IFC), internal EHS guidelines (specific EHS processes and checklists for product development and Business Unit-specific EHS plans), and other ESG criteria from external stakeholders. Throughout fiscal year 2021, we have further developed the risk management of products, projects, and services. A key measure we are piloting in the GP reporting segment for the early sales phase is the ESG Radar, which supports lean ESG risk management including a due diligence and risk mitigation process. Additionally, during project execution, we identify mitigation measures based on the input of the environmental impact assessments available, otherwise taking IFC EHS guidelines as a base, regarding energy consumption and efficiency (including our GHG footprint), air emissions, noise, water conservation, waste management, hazardous materials management, and physical, chemical, and radiological hazards as part of our EHS site management.

Product safety and product quality topics are also addressed via defined circulars, reporting lines, and organizational structures. Customers, developers, and manufacturers are provided with user and service manuals that describe the safe use of products, functionality, and product maintenance requirements.

Wherever possible, we are partnering with suppliers, contractors, customers, and other interested parties to meet product-related environmental key business requirements. Customer requirements and related resource requirements are continuously assessed in each Business Unit, and coordinators for product-related topics have been appointed. During 2021, we focused on enabling the organization to take care of requirements in terms of know-how transfer. This included training on the specific LCA software that is in use.

At SGRE, the launch of the RecyclableBlade, the world's first wind turbine blade that can be recycled at the end of its lifecycle, is an important step toward its goal of making turbines fully recyclable by 2040, as part of the SGRE Sustainability Vision.

Life cycle assessments and environmental product declarations

To use resources optimally, we have adopted a sustainable management approach over the entire product life cycle by conducting LCAs and publishing EPDs. The LCA and EPD approach is managed globally by the EHS function and is closely linked to organizational teams dealing with product-related environmental protection. We aim to ensure that we meet legal requirements to avoid the use of substances and materials that have harmful effects on humans and the environment.

The results from LCAs are used to:

- Identify opportunities to improve environmental performance within the design and manufacturing processes. For example, improving material selection, optimizing manufacturing processes, and close loops in material recycling.
- Communicate environmental performance to internal and external stakeholders.

To increase transparency and facilitate dialogue with our customers and stakeholders, Siemens Energy uses EPDs that are based on the following ISO standards:

- ISO 14021 for Type II product declarations and labels that address environmentally relevant information for customers.
- ISO 14025 for Type III product declarations and labels that are built upon the results of LCAs.

Our newly developed EcoTransparency app (see highlight box) calculates scenarios and related impacts based on strategic and customer-specific boundary conditions (including local energy mix, load cycling, percentage of recycling, transport, etc.). It aims to derive improved solutions with lower environmental impacts.

We continuously review our LCAs and EPDs. The table below provides a summary of the number of LCAs (full-scale and screening) and EPDs (Type II and Type III). The number of LCAs significantly increased in 2021 because the Business Units continuously work to cover more of their products with LCAs, mainly due to customer requests.

	September 30	
LCAs and EPDs	**2021**	2020
LCAs (no.)	**124**	94
thereof full-scale[1]	108	82
thereof screening[2]	16	12
Portfolio coverage by full-scale LCAs (%)[3]	71	-
EPDs (no.)	**105**	77

[1] Full-scale LCAs adopt a comprehensive approach, covering the environmental impacts over the entire life cycle.

[2] Screening LCAs cover environmentally relevant parts or phases of a product life cycle.

[3] 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. Prior-year figure is not available as the performance indicator has been newly established for fiscal year 2021.

Measuring footprints with the EcoTransparency app

The energy transition and the focus on providing sustainable energy solutions will be a key issue over the coming years. One of the biggest challenges for all players in the energy sector will be to accurately project, analyze, and improve environmental footprints. This is not only essential for reducing environmental impact but also in providing transparent data for sustainable finance reporting.

Our EcoTransparency app, which was launched in September 2021, was developed for just this purpose. The app enables the Siemens Energy Sales, Product Management as well as R&D departments to calculate product- and project-specific GHG footprints under varying scenarios. Adjustable parameters can include load scenarios, material selection, or transport, among others. With these calculations we aim to add another layer of transparency to our established LCA. The app is based on existing LCA models and provides customers and stakeholders with additional information regarding specific footprints and thus enables them to meet reduction targets for all environmental impact categories.

The application will be further developed in cooperation with various industrial partners and research institutes. It shall enable the evaluation of the circular economy aspects of the German energy transition, such as the comparison of impacts during recycling versus end-of-life and be the foundation for meeting future requirements for calculating environmental footprints.

Material compliance

At Siemens Energy, a large variety of materials and substances are used in its products, manufacturing, and services. Only a few are subject to closer scrutiny (e.g., chromium, lead). The nature and quantity of substances and materials used in products are becoming increasingly relevant, especially if they are reused and recycled. The EcoDesign decisions we make today consider future legal and EHS requirements as well as the level of resource scarcity. Furthermore, the European Commission has published a list of critical raw materials that is subject to regular review and updating. Transparency on materials and substances is the key enabler for a circular economy.

We aim to comply with all legal requirements and customer requirements regarding substance declarations. Pro-active substance management processes are in place and linked to all relevant business processes.

For example, we engage with our suppliers and contractors through the supplier assessment and qualification process (GP uses the Substance Commitment module) and integrate the obtained information into the design and manufacturing process. We aim to comply with all legal requirements, such as REACH (Registration, Evaluation, Authorization and Restriction of Chemicals), RoHS (Restriction of Hazardous Substances) and similar international requirements. Siemens Energy uses globally standardized materials and substances registers for restricted and declarable substances and products. The lists identify any substances that need to be declared for each product and is updated every six months according to current directives from the 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.

Circular solution: SGRE is testing wind turbine blade recycling

Going full circle with DecomBlades

Launched in 2021, "DecomBlades" is a three-year project that is testing the commercial viability of recycling wind turbine blades using sustainable solutions. The consortium behind the project, of which SGRE is a part, has now been awarded funding from the Innovation Fund Denmark. The project focuses on three specific processes: the shredding of wind turbine blades so that the material can be reused in different products and processes; the use of shredded blade material in cement production; and, finally, a method to separate the composite material under high temperatures, also known as pyrolysis.

We encourage our suppliers to use the industry substance management platform BOMCheck to share declarations for substances of very high concern (SVHC) and link this information to our IT systems. In this way, we can proactively manage risks related to substance restrictions. This year we have started several projects to continue the implementation of the new reporting requirement “SCIP” (Substances of Concern In Products), a database established under the EU’s Waste Framework Directive that registers products containing SVHC.

At our GP reporting segment, our cross-functional material compliance approach was further developed together with the procurement department, aiming to increase transparency regarding substances in our products during supplier qualification. The approach focuses on full Bill of Materials data provision with substance management and the development of LCA programs to improve the sustainable product design. We aim to cover the entire value chain. In 2021, our gas and steam turbine organization analyzed specifications and drawings of large, combined cycle power plant projects, and extracted and digitized material information to ensure compliance with restrictions and declaration duties.

Within its substance management process, SGRE also evaluates requests for the use of new chemical products against the SGRE-defined list of prohibited products and list of restricted products. For further information please refer to ↗ **Consolidated Non-Financial Statement 2021, C3.8 Substances**.

The transparency of materials and substances across our product portfolio is key for a sustainable energy supply, for supporting and promoting a circular economy, and for taking informed decisions on material selection and related impacts.

Sustainability dialogue
The energy industry's shift to sustainability raises new challenges. Young talents ask our management their most pressing questions.

How important is the supply chain for our decarbonization activities?

The GHG footprint of our products begins with the materials we buy from our suppliers, says Jie Wu from Siemens Energy in China. So how do we motivate them to go green? She asks Christian Holzer her most pressing questions.

Christian Holzer
Senior Vice President Procurement
Siemens Energy

Jie Wu
Financial Analyst
Siemens Energy
Shenyang, China

I've been working for more than three years as a financial analyst in business controlling for Siemens Energy at the Trench High Voltage Products factory here in Shenyang, China. And while my work isn't directly related to our supply chain, I am a member of the Talent Circle and that includes learning about supply chain management (SCM) – and, of course, decarbonization is a topic that concerns all of us!

The Talent Circle recently held a meeting with the Siemens Energy Head of Procurement in China, and we talked about the operational process of the supply chain as well as how it connects to sustainability. When you think about supply chains, you realize how all the things around you have a greenhouse gas footprint that begins with the very materials they're made from.

It got me thinking about how important it is for Siemens Energy to reduce these emissions and what kind of incentives we can offer our suppliers. I think it must be challenging, since the emissions don't only come from our own daily operations but also rely on suppliers sharing the same values we do.

So here are my most pressing questions on supply chain management and sustainability: How important is the supply chain for our decarbonization activities? What have we done to reduce emissions in the supply chain and what has been the biggest challenge so far? How can we motivate our suppliers to make sustainability in the supply chain a priority?

Our supply chains are crucial to help Siemens Energy reach ambitious net zero targets. This means working with suppliers who are equally committed to decarbonization, working on better climate-neutral solutions, better materials, and better processes.

One important step we've taken in Procurement is the revision of our supplier selection criteria to fit changing market requirements. Our new "Buy from the Best" criteria are Performance, Quality, Operational Excellence, Cost out, Innovation, and Sustainability. Sustainability includes net zero emission efforts as well as the protection of human rights. I am very proud and happy that with the full support of our Executive Board all five criteria segments are given the same importance, each counting equally. This is quite a game-changer and shows that we take our commitment to sustainability extremely seriously! We share these criteria openly with our suppliers, emphasizing that they are mission-critical in the energy world and beyond. In fact, we convey to our suppliers that they are key to long-term competitiveness.

Another big step we've taken is to drive transparency about emissions in our supply chains via a Decarbonization Due Diligence Assessment project. To start with, we analyzed the current CO_2 footprint of our supply chains and then invited 100 suppliers with the highest footprint to share their implemented and planned actions regarding CO_2 reductions. This has significantly increased awareness, both internally and with our suppliers.

Perhaps the most challenging part of decarbonizing the supply chain is to find new solutions to established high-emission production processes. For instance, steel still accounts for about 40% of the CO_2 emissions in our supply chain. As SE Procurement, we keep encouraging and supporting innnovation and technology changes – e.g. the move to hydrogen – in our strategic supplier portfolio to reduce emissions. I am confident that many suppliers will see the long-term benefit of joining us on our journey to build a greener and safer world.

Sustainable supply chain management

We strive for an ethical and sustainable global supply chain by aiming to ensure our suppliers comply with our stringent standards for social and environmental responsibility.

- **Supply chain management identifies risks and opportunities in the supply chain**
- **Our Code of Conduct establishes specific environmental, compliance, and labor standards for suppliers**
- **157 external sustainability audits conducted in the reporting period**

Due to our global operations, Siemens Energy has suppliers in about 140 countries. We are conscious of the impact our activities have on the people who work for us, on our suppliers as well as on local communities and the environment. We therefore share responsibility for protecting human rights, fair labor practices, anti-corruption measures, and environmental protection along the entire value chain. Supply chain management helps Siemens Energy contribute to the UN SDGs by anchoring sustainability criteria in the selection, qualification, assessment, and development of our suppliers. With a global network of approximately 30,000 suppliers and a procurement volume of €17.3 billion in 2021 (fiscal year 2020: €17.7 billion), we see our biggest contribution to SDG 8 "Decent Work and Economic Growth" and SDG 12 "Responsible Consumption and Production". This is why we carefully consider labor conditions throughout upstream production processes and monitor the impact of our activities closely. We also expanded a pilot project to increase transparency over our carbon emissions (see chapter Decarbonization) to address climate protection within our supply chain (SDG 13 "Climate Action").

While it is evident that climate change will have a major impact on global supply chains in the future, it is vital we are prepared for and mitigate other risks, such as global pandemics. Within our supply chain, we saw some COVID-19-related effects on business in the reporting period, such as delayed material deliveries. Our COVID-19 task force established in the previous year continued to provide transparent information on the risks associated with the pandemic. A dashboard implemented last year was key in evaluating suppliers' current delivery capability at all levels of our operations. Close collaboration between sales, procurement, manufacturing locations, and our suppliers helped avoid major disruption in our supply chain, and by establishing more flexible processes for our product manufacturing and projects, we were able to address potential delays in material deliveries.

We believe that understanding our suppliers and knowing they conduct their business to the same high standards as Siemens Energy is vital in guaranteeing a steady and reliable supply chain. We therefore have clear-cut processes and policies in place that aim to ensure that suppliers meet specific social, environmental, and governance requirements.

Binding Code of Conduct for suppliers

All of our suppliers and third-party intermediaries must sign the Code of Conduct (CoC) for Suppliers and Third-Party Intermediaries. It is based on the Business Conduct Guidelines (BCG) and the Principles of the UNGC.

The CoC requires specific environmental, compliance, and labor standards to be established across all countries of operations. It includes the following requirements:

- **Human rights and labor practices, including** (beside others)
  - Prohibition of forced labor
  - Prohibition of child labor
  - Health and safety of employees
  - Grievance mechanism
- **Environmental protection**
- **Fair operating practices, including** (beside others)
  - Anti-corruption and bribery
  - Anti-money laundering, terrorism financing
  - Data privacy
- **Responsible minerals sourcing**
- **Compliance with the CoC in the supply chain of the supplier**

Similarly, SGRE requires its suppliers to comply with its CoC for Suppliers and Third-Party Intermediaries, established in line with SGRE principles and values according to its BCG and its Global Corporate Social Responsibility Policy. Its requirements aim to ensure that working conditions in the

supply chain are safe, that workers are treated with respect and dignity, and that business operations with suppliers are ethically, socially and environmentally responsible. Next to the CoC, SGRE's Supplier Relationship Policy, the General Purchasing Conditions, and its internal rules and procedures all set minimum expectations for suppliers to comply with. For further information please refer to ↗ Consolidated Non-Financial Statement 2021, E3. Responsible Supply Chain.

Comprehensive supplier management

Our SCM approach defines strategic procurement processes to sustain the company's long-term success. It includes purchasing material and services cost-effectively, ascertaining high quality standards along the entire supply chain, identifying and exploiting opportunities to create value through procurement competence, and fostering compliance and sustainability. The Head of Procurement reports to the Executive Board.

The supplier management process in place at Siemens Energy encompasses an extensive range of procedures and tools to enable transparency and awareness regarding expenses, supplier data, and related risks and opportunities in the supply chain. It helps managers leverage the potential of our supplier network. The GP procurement process applies strict criteria for supplier selection and qualification. These include financial stability, quality, and availability together with overriding sustainability criteria, such as contractor safety, substance declarations, or sustainability self-assessments.

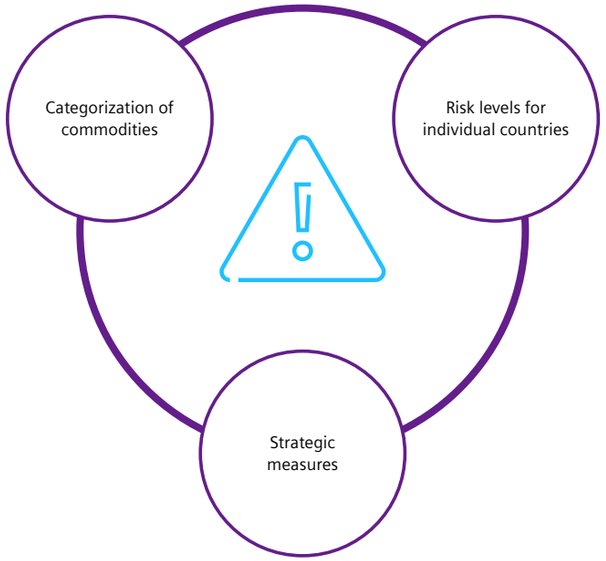
SGRE has implemented a corresponding supplier lifecycle management process for supplier selection and qualification.

As part of Siemens Energy's overall approach to decarbonize its operations throughout the entire value chain, we are actively encouraging our suppliers to also reduce their carbon emissions. 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 of commodities
- Establishment of risk levels for individual countries. These are determined using sustainability indicators for key areas such as compliance with laws, bribery and corruption, human rights in the workplace, child labor, etc. Here, we make use of information supplied by internationally recognized organizations.
- Use of different strategic measures, for example special preparation of projects with large, local procurement volumes

Cornerstones of our risk analysis system



Supplier assessment
Following this risk-based analysis, we have implemented Corporate Responsibility Self-Assessments (CRSA) for suppliers in identified high-risk countries, whereby they are screened with regard to all aspects of the CoC. The CRSAs are used as part of the supplier qualification process that is regularly reviewed and updated as necessary to reflect new standards and regulations. New potential suppliers undergo a qualification process, while existing suppliers are reevaluated every three years.

Compared with fiscal year 2020, the number of CRSAs increased by 23% to 1,685 conducted self-assessments. This can be mainly explained by our ambition to increase our supplier qualification rate where CRSAs are one major module.

Furthermore, we conduct quality audits that include questions about sustainability that cover major aspects and requirements of the CoC. In fiscal year 2021, we conducted 424 on-site audits worldwide. The number of supplier quality audits has significantly increased compared to 334 supplier quality audits in fiscal year 2020 due to the onboarding of new SGRE companies (i.e. Senvion and Adwen) and solving SGRE's backlog of 2020 by hiring additional external auditors.

Supplier quality audits with integrated sustainability questions	Fiscal year 2021	Fiscal year 2020
Europe, C.I.S.[1], Africa, Middle East	227	149
Americas	98	70
Asia, Australia	99	115
Total	**424**	**334**

[1] Commonwealth of Independent States.

Corporate Responsibility Self-Assessments (CRSA)[1]	Fiscal year 2021	2020
Number		
Europe, C.I.S.[2], Africa, Middle East	614	395
Americas	355	301
Asia, Australia	716	677
Total	**1,685**	**1,373**
Agreed upon improvement measures[3]		
Legal compliance/prohibition of corruption and bribery	233	201
Respect for the basic human rights of employees	145	109
Health and safety of employees	77	79
Environmental protection	106	103
Supply chain	24	28
Responsible minerals sourcing	2	14
Total	**587**	**534**

[1] To be conducted mainly by suppliers from non-OECD countries with a purchasing volume > €50,000 p. a. 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 the lack of specific processes and guidelines at the supplier. Without SGRE. Number of CRSAs at SGRE amounted to 444.

We see external sustainability audits (ESA) as the most effective means of reviewing our suppliers' sustainability performance and therefore increased our target for this fiscal year. They are performed by our external audit partner and used as a control mechanism. For monitoring purposes, audits can be repeated, or follow-up audits can be performed. In fiscal year 2021, Siemens Energy conducted 157 ESAs. This number increased from 60 audits in fiscal year 2020, despite ongoing COVID-19 restrictions. Furthermore, we accepted 85 ESAs of suppliers where audits have been initiated by other companies. We only accept audits that fulfill our requirements and where the full audit documentation is provided to us.

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, where the need for a worldwide block is discussed and decided. In 2021, no supplier was dismissed, as 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. It facilitates a fast, efficient response to violations of the CoC requirements. The responsible procurement departments at Siemens Energy may then agree on a series of remedial steps with the supplier. Stakeholders may also report potential misconduct via the whistleblower hotlines "Speak Up" at GP and "Integrity hotline" at SGRE. There were no cases reported in fiscal year 2021.

Supplier sustainability assessments

External sustainability audits (ESA)	Fiscal year 2021	2020
Number		
Europe, C.I.S.[1], Africa, Middle East	48	5
Americas	24	5
Asia, Australia	85	50
Total	**157**	**60**
Agreed upon improvement measures[2]		
Legal compliance/prohibition of corruption and bribery	438	241
Respect for the basic human rights of employees	972	486
Prohibition of child labor	35	20
Health and safety of employees	985	590
Environmental protection	56	36
Supply chain	99	58
Total	**2,585**	**1,431**
Accepted ESAs	**85**	-[3]

[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.

[3] ESAs initiated by third parties were accepted in 2021 for the first time.

Responsible minerals sourcing

Siemens Energy is committed to preventing the use of minerals from conflict-affected and high-risk areas in its supply chain that are affected by 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 a “Responsible Minerals Sourcing Policy” (formerly “Conflict Minerals Policy”) in place to provide a uniform, company-wide supply chain management standard. To determine the use, sources, 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 (Responsible Minerals Assurance Process).

When surveying our approximately 1,800 (fiscal year 2020: 1,500) relevant suppliers, we use the RMI’s “Conflict Minerals Reporting Template” to obtain the necessary information on smelters producing tin, tantalum, tungsten, and gold (3TG). We are actively involved in the “Responsible Minerals Assurance Process” by screening smelters for eligibility and encouraging uncertified smelters to take part in RMI’s assessment programs. All newly reported smelters are shared with RMI.

Based on risk sources identified by the EU, which cover armed conflicts, weak governance, and human right abuses, Siemens Energy also conducts a specific mineral risk assessment to identify other relevant minerals apart from 3TG. As a result, we have integrated cobalt into our due diligence processes by applying RMI’s Cobalt Reporting Template, focusing on our battery suppliers. Copper has also recently been identified as a mineral for further consideration, and we have initiated first steps in attaining transparency on copper supply chains.

In addition to our RMI membership, we have become a strategic partner of the European Partnership for Responsible Minerals and therefore support due diligence projects for artisanal mining in conflict-affected and high-risk areas.

Human rights

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

- **Adherence to international standards and regulations**
- **Respect for human rights anchored in Code of Conduct**
- **Due diligence mitigates risks along value chain**

As a globally operating company, Siemens Energy is aware of the impact its business has on people around the world, especially from our large-scale energy projects. We are dedicated to responsible business conduct and are committed to ensuring respect for human rights within our spheres of influence. This is why we seek to identify and manage our human rights impacts and mitigate risks along our entire value chain.

Our actions go beyond compliance with applicable laws and regulations; they include our commitment to:

- **International Bill of Human Rights**, consisting of:
  - › Universal Declaration of Human Rights
  - › International Covenant on Civil and Political Rights and
  - › 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 and the right to collective bargaining) and fundamental freedoms
- **United Nations Guiding Principles on Business and Human Rights** (UNGPs)
- **OECD Guidelines for Multinational Enterprises**
- **United Nations Global Compact principles**, to which we are a signatory
- **UN Sustainable Development Goals** specifically SDG 8 "Decent Work and Economic Growth", which we have defined as one of our priority SDGs

Identification of material human rights topics

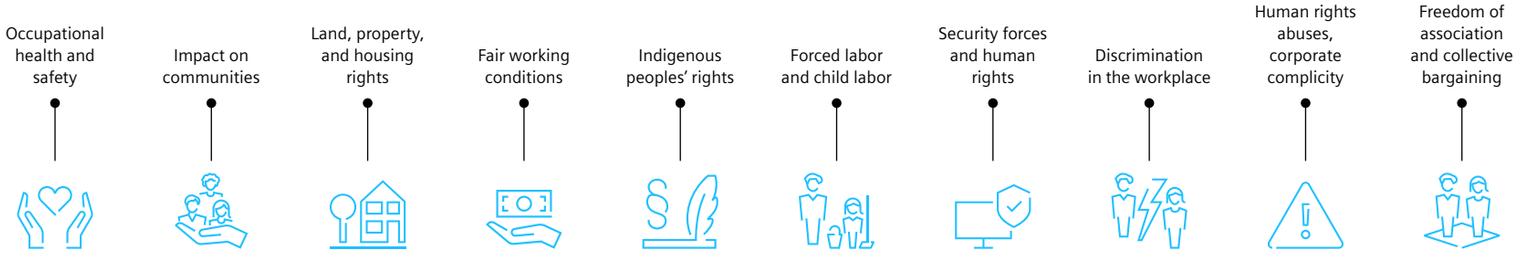
Siemens Energy has identified material human rights topics based on an internal materiality analysis, including input from our human rights due diligences on customer projects, our internal exchanges with the functions Procurement, Environmental Protection, Health Management, Quality and Safety, Human Resources, and Sustainability Functions, as well as the experiences of our global compliance team with critical and controversial projects.

In the reporting period, Siemens Energy maintained its regular exchange with existing networks, such as econsense, a German sustainability network of internationally operating companies, particularly with a view to the new German Supply Chain Due Diligence Act.

Human rights topics have been identified as material by the Group from the following perspectives: "supply chain", "workplace", and "customer projects", in summary reflecting our value chain and sorted according to relevance for our business.

The material topics identified will be further analyzed and potential weaknesses mitigated with respective actions in order to preserve human rights.

Overview on material human rights topics



Anchoring our commitment

Our commitment to respecting human rights is written into Siemens Energy's Business Conduct Guidelines (BCG), with special emphasis on Siemens Energy's company values of being caring, agile, respectful, and accountable. The BCG are binding for all executives and employees worldwide. All employees must agree to them and are given mandatory web-based training sessions on the guidelines (see Compliance training program).

Due to its legal independence, SGRE has implemented its own BCG, which, in line with the group-wide approach and underpinned by a human rights policy, aim to define respect for human rights as an integral part of corporate responsibility. To enforce this commitment, employees are trained in the use of BCG, the sales function has mandatory evaluation and approval processes that take human rights into account, and compliance risk assessments (CRA) are carried out, complemented by an ongoing monitoring process and reporting routines by SGRE's Chief Compliance Officer. For further information please refer to Consolidated Non-Financial Statement 2021, D2. Human Rights.

Dimensions of human rights

Awareness of human rights issues was raised in the reporting period in the newly founded Siemens Energy Sustainability Council. Furthermore, the Siemens Energy Executive Board as well as the Supervisory Board were briefed on relevant topics such as the implementation of the new German Supply Chain Due Diligence Act.

Respect for human rights in employee relations
Respecting human rights in employee relations is a core aspect of our commitment. 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 Code of Conduct (CoC) for Suppliers and Third-Party Intermediaries, which is based on the principles of the UNGC and the ILO but contains more far-reaching requirements. The CoC particularly emphasizes respect for the basic human rights of employees, including fair remuneration, freedom of association, health and safety standards, and prohibition of discrimination, forced labor, and child labor.

With regard to materials sourcing, we have implemented a "Responsible Minerals Sourcing Policy" and integrated it into the procurement process. To support our suppliers, we continue to offer training on sustainability in the supply chain. For more information, see chapter Sustainable supply chain management.

Human rights due diligence in customer projects
A dedicated team at Siemens Energy 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 with the UNGPs. Here Siemens Energy is relying on external ESG databases focusing on country-, customer-, and project-related risks. The results of the due diligence are decisive for the project's decision-making process. Siemens Energy is continuously striving to improve its due diligence process. We therefore created a recording process in 2021 to automate information gathering, tracking, and reporting capabilities. The intent is to also use this information as a basis for a risk analysis for human rights in customer projects.

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 regularly report on controversial topics via ratings and rankings, such as specific human rights aspects in critical projects.

Any violations of human rights associated with 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. Siemens Energy is not aware of any human rights-related issues submitted via these channels in the reporting period.

Compliance and integrity

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Our strong culture of ethics and compliance aims to ensure our values are upheld throughout the entire company and in all our business activities.

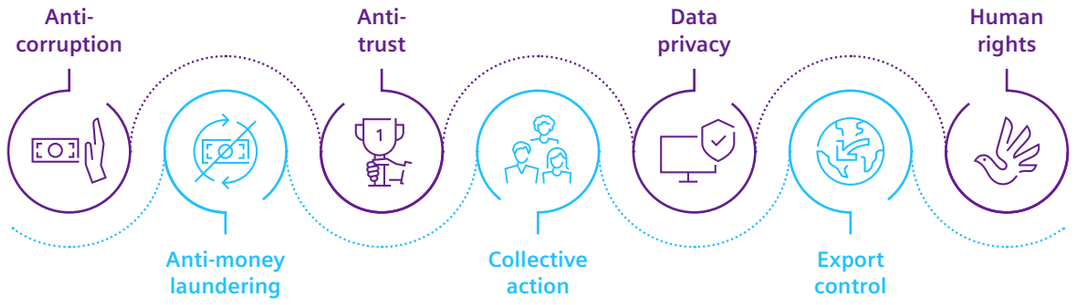
- **Compliance is a top management priority**
- **Zero-tolerance approach based on "prevent, detect, respond"**
- **Ethical business ensures sustainable growth and development worldwide**

Siemens Energy operates globally with customers from a wide range of industries in the private and public sectors. We are therefore confronted with complex regulatory requirements coupled with increasing stakeholder expectations regarding integrity and risk management. In this context, Siemens Energy is committed to a strong culture of ethics and compliance. We pursue a zero-tolerance approach toward corruption, violations of the principles of fair competition, and other breaches of the law. When such cases do 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 dramatically reduce bribery and corruption in all their 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, as corruption impedes economic growth and hampers sustainable social development.

For Siemens Energy, compliance means more than adhering to laws and the internal regulations described in our BCG. Compliance is the basis for all our decisions and activities. Therefore, it is the key to integrity when conducting business. Our premise is this: 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, and our Group Compliance Officer reports regularly on GP and SGRE compliance matters to the Executive and Supervisory Boards.

Compliance focus areas



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

Our zero-tolerance approach requires a holistic compliance system[1] consisting of measures to ensure that business is always carried out in full accordance with the law as well as our internal rules. The Siemens Energy-wide compliance approach is based on the three levels of action "prevent, detect, respond", centering around management's responsibility and comprising focus areas such as anti-corruption, anti-money laundering, antitrust, data privacy, export control, and human rights, which is also reflected in the BCG. For more information, see chapter Human rights.

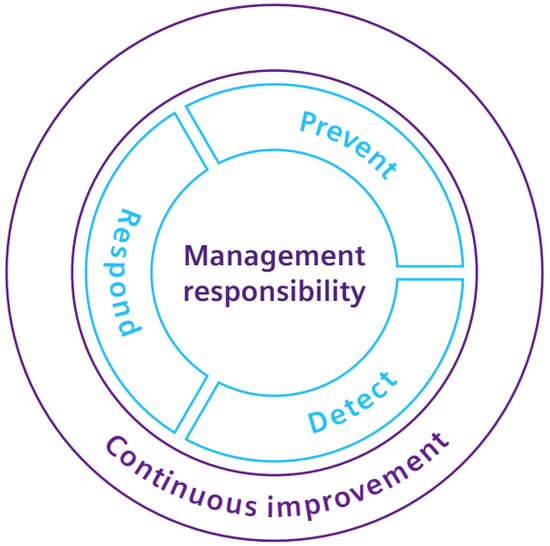
[1] Collective action for GP only.

SGRE, in turn, has implemented its own compliance system and BCGs that are in line with the GP approach. For further information please refer to ↗ Consolidated Non-Financial Statement 2021, D1. Ethics, Integrity and Anti-Corruption.

Preventive measures include the Siemens Energy training program, communication channels such as our "Speak Up" reporting system at GP, the GP ombudsperson, the "Integrity Hotline" at SGRE, our compliance risk management system as well as the respective BCG.

The BCGs for GP and SGRE set out our internal regulations. They express the values, compliance-related responsibilities, and behavioral framework for all managers, employees, and Executive Board members worldwide.

Our compliance system: Management responsibility is the focus



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.

We continuously update our compliance system to mitigate challenges and risks arising from changing market conditions and our business activities.

Holistic implementation of the compliance system

The Siemens Energy compliance system combines strong 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 to ensure that all business decisions and activities conform to the relevant legal requirements and follow our own values and company policies.

We expect the same commitment from all our employees and conduct regular surveys on integrity to obtain direct feedback from them. For example, our global employee engagement survey that we conduct twice a year at GP included compliance and integrity topics. Based on the feedback, we developed the Compliance Awareness Campaign to provide further transparency on the Siemens Energy compliance standards, tools, processes, and our organization.

Compliance training program

The Siemens Energy global compliance training program requires all managers and employees in positions with a specific risk profile to complete compliance training. The compliance officers of each company unit identify which managers and employees are required to participate and ensure they attend.

	September 30[1]
Compliance training[2]	**2021**
Training on Business Conduct Guidelines	
Employees targeted that completed the module (no.)	60,519
Share of employees that completed the module (%)	83
Training on antitrust[3]	
Employees targeted that completed the module (no.)	43,304
Share of employees that completed the module (%)	95
Training on export control	
Employees targeted that completed the module (no.)	60,154
Share of employees that completed the module (%)	85

[1] Prior-year figures are not available as the performance indicator has been newly established for fiscal year 2021.
[2] GP as well as SGRE address the same overarching topics but may vary in detailed content. Figures contain employees that were trained in the respective modules, incl. prior years.
[3] Without SGRE.

We aim to maintain constant awareness of compliance issues – from employee onboarding to refresher courses, and continuous reinforcement by managers.

Dedicated compliance and integrity topics will be announced through our respective global communication strategy, based on two elements: continuous messaging via company social media (e.g., Yammer) and integrity dialogues, which provide a forum for managers to exchange ideas about current compliance issues with their teams.

Compliance risk management

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

In this context, the bi-annual compliance risk assessment (CRA) was conducted for GP and separately for SGRE in fiscal year 2020. Identified risks were addressed through local and central measures and followed up in dedicated annual workshops. CRAs are an integral part of the quarterly updated company-wide ERM that creates further transparency throughout the risk environment.

A compliance roadmap for Iraq

In June 2021, employees of the Siemens Energy Middle East Legal and Compliance department provided officials from the Ministry of Electricity in Iraq with training in anti-corruption. The training covered the historical development of anti-corruption, global anti-corruption measures, cases, and practical exercises. The training was well received by the participants and the objective is for them to further train other officials.

Collaboration with business partners

Under certain circumstances, Siemens Energy can be held legally responsible for the actions of its business partners. We counter this risk by taking a comprehensive approach to selecting our partners, by contractually obliging them to adhere to our CoC, and by monitoring ongoing collaborations. The CoC is based on the 10 principles of the UNGC and is mandatory for all Siemens Energy business partners. It covers legal compliance in general and our anti-corruption policies, including provisions against anti-competitive practices and conflicts of interest. Our process covers the entire life cycle of the business partnership. Our compulsory company-wide Business Partner Compliance Tool supports the implementation of the process and ensures the documentation of relevant information and activities. We are continuously enhancing our business partner due diligence process. We do this by systematically harnessing the potential of big data, using dashboards and analytics to improve risk management.

Channels for reporting misconduct

We offer all employees and external third parties confidential channels for reporting potential violations. In doing so, they help identify and eliminate misconduct, while protecting themselves and the company against any damage that may result. Such channels include:

- Managers
- Group Compliance Officer
- Compliance department and Legal department
- Human Resources department
- Whistleblower hotlines: “Speak Up” at GP, “Integrity Hotline” at SGRE
- Ombudsperson
- Employee representatives

Information on possible violations can be given confidentially and anonymously. Retaliation against complainants or whistleblowers will not be tolerated by Siemens Energy and is punished as a compliance violation. Siemens Energy applies the same principles to reports of wrongdoing brought forward by third parties.

The Compliance department investigates relevant reports based on pre-assessments and takes appropriate actions in accordance with the applicable formal company-wide processes.

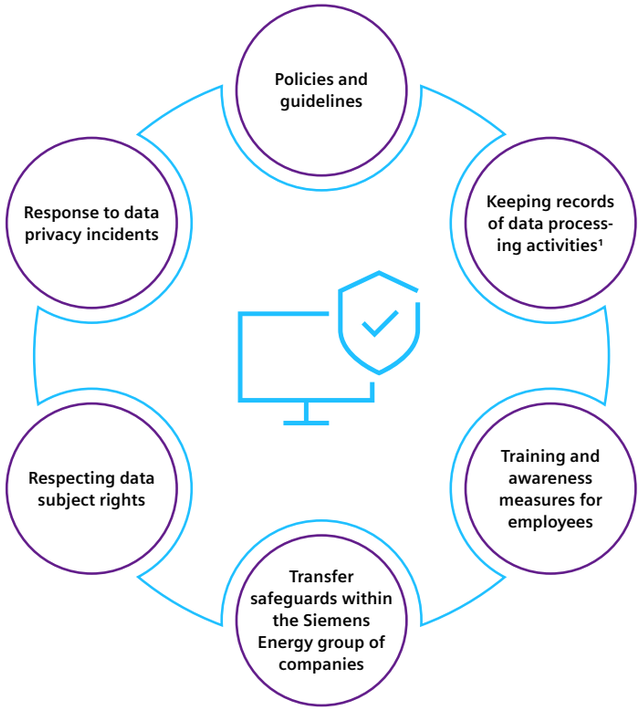
Data privacy

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

To comply with applicable data protection laws, including the General Data Protection Regulation, we have implemented the Siemens Energy data privacy management system, which aims to ensure the protection of our customers’, business partners’, and employees’ personal data. Although we predominantly operate in a B2B environment where our customers are not end consumers, we nevertheless 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.

Data privacy management system



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

Key compliance indicators

Siemens Energy responds to all allegations of possible violations of external and internal rules in accordance with the applicable formal company-wide processes and takes appropriate disciplinary action in the event of proven violations. Once a compliance investigation has been completed and compliance violations have been identified, our internal processes provide guidance to ensure that appropriate action is taken with the employees concerned. We evaluate and define consequences through disciplinary processes at central or local level, and systematically monitor implementation.

	Fiscal year	
Compliance indicators	**2021**	**2020**
Compliance cases reported	103	143
Disciplinary sanctions[1]	49	65
thereof warnings	29	33
thereof dismissals	18	30
thereof other[2]	2	2

[1] 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 – that follows a due process – was completed. In addition, a single case may result in multiple sanctions, or none at all.

[2] Includes loss of variable and voluntary compensation components, transfer, and suspension, but not the revocation of signatory rights.

The evidence demonstrates once again that our compliance system is well-designed and implemented effectively. Based on the nature of our businesses, the environments in which we work, and the wide range of different geographical regions, we do not regard the number of incidents as unusual.

Siemens Energy is not aware that it has been convicted of any corruption, bribery, or antitrust violations during fiscal year 2021.

Achievements

The following milestones were achieved in fiscal year 2021:

- We further developed our stand-alone compliance system by implementing optimized internal compliance processes accompanied by a stronger risk focus, e.g., the Compliance Control Program.
- We enhanced our compliance processes by further modernizing the compliance tool landscape.
- We developed the Compliance Awareness Campaign to strengthen internal compliance communication. Based on feedback from the Siemens Energy Voices campaign, we took action to provide more insight and transparency into the Siemens Energy Compliance System.
- We revised the compliance training program and adapted it to our specific requirements.

In fiscal year 2022, we will further optimize our compliance tool landscape initiated in fiscal year 2020 and explore the possibilities of digitalization, with the aim of strengthening our ongoing compliance monitoring system.

We will also continue to work on refining the Siemens Energy compliance system to further tailor it to the individual risks and opportunities of our business and the organizational structure of Siemens Energy.

Sustainability dialogue
The energy industry's shift to sustainability raises new challenges. Young talents ask our management their most pressing questions.

How can we increase the number of women in leadership functions?

Nathalie Hideborg sees diversity as a key to creative innovation and employee satisfaction. So how can we make the company more diverse? She asks Maria Ferraro her most pressing questions about inclusion & diversity.

Maria Ferraro
Chief Financial Officer and Chief Inclusion and Diversity Officer
Siemens Energy

Nathalie Hideborg
Area Sales Manager
Siemens Energy
Finspang, Sweden

I've been at Siemens Energy for over three years now. In my first year as a graduate trainee, I was approached by the company's internal women's network to support our work with employer branding and to conduct a study identifying where women work and what roles they often have in our company. The results clearly showed that women held more commercial or finance positions and fewer technical or leadership positions.

Already at the beginning of my career I was involved in diversity. Diversity, especially in leadership, is important because it opens us up to a broader mix of experiences and knowledge, which can lead to entirely new ways of tackling our challenges. It also attracts diverse new talent by providing examples of the career paths the company offers.

I remember the first time I toured the Siemens Energy grounds here in Finspang, Sweden, with other students. I was just about to finish my MSc in Industrial Engineering and Management, and I was eager to work in a Swedish industry. That day, I met four different women in four different positions at Siemens Energy talking about their careers and what opportunities would be available to all of us after graduation – it was inspiring. When they talked about their journey within the company, I could see a future for myself too.

So, here is my most pressing question: How can we increase the number of women in leadership functions and across the company as a whole?

That's a great question, but let me give it some context. So, we've set a target that by 2025, 25% of our senior management will be women, increasing to 30% by 2030. Sounds easy enough, right? But we're facing two major challenges. First, there's a structural imbalance across the energy sector in the supply of qualified female candidates, especially in senior management positions. Second, we're undergoing a transformation that requires us to reduce our overall employee population in all areas of the business.

To overcome this, we promote and foster the studying of STEM subjects at schools and universities, partnering with education providers, industry bodies, and sometimes even our competitors. We also promote diverse hiring by increasing the number of women we attract and removing barriers to their recruitment. We have targets for diverse hiring, partnerships with companies that specialize in female talent attraction, and require all female candidates to be interviewed by a balanced interview panel.

Moreover, we have mentoring programs that focus on developing women faster, with sponsorships from senior management and access to the Board. And our Better Together program supports flexible working for men and women, making it easier to share parental and caring responsibilities, improving our chances of retaining women.

Change takes time, but we're committed to creating a thriving environment for all our people. We strive to create a welcoming, inclusive, and diverse company where all our employees are respected, able to speak up and be themselves.

Working at Siemens Energy

Our people and culture provide the strong foundation upon which we can lead the energy transition and make a difference for our customers, investors, suppliers, partners, employees, and society.

- **Our aim is to develop a future-ready workforce and to be the employer of choice in the energy industry**
- **We aspire to become the most inclusive and diverse place to work on the energy transition**
- **We develop game-changing leaders that are driving the business transformation**

We are a global employer with a workforce of around 150 nationalities and are committed to equality, inclusion, and diversity in all our teams. We believe that a culture based on our Leadership Essentials, our behaviors, and our values – caring, agile, respectful, and accountable – is key. At the same time, the digitalization of the workplace, accelerated by COVID-19, is changing the way we work and bringing forth new models of collaboration. We see this as a strong competitive advantage and a further opportunity to foster innovation, develop a future-ready workforce, and attract the best talent from around the world.

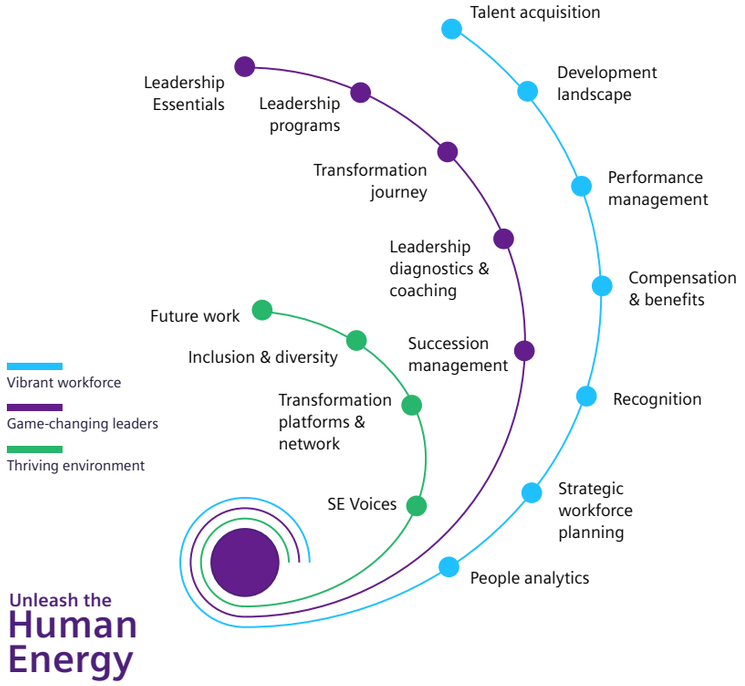
Through our human resources activities, we contribute directly to SDG 4 “Quality Education”, SDG 5 “Gender Equality”, SDG 8 “Decent Work and Economic Growth” and SDG 10 “Reduced Inequalities”. To enable our contribution to the SDGs and prepare the company for the future, GP further developed its comprehensive Human Resources strategy, called the People Agenda.

The People Agenda, including its programs and initiatives, is designed to support the strategic business transformation. Leading the energy transition from the people perspective means leveraging our strengths and further enhancing our company´s strategic “People & Culture” foundation with three main pillars:

- Thriving environment: We are creating an environment for people to be self-directed, to have responsibility, and find meaning in their work. We guide this by setting standards through our Inclusion & Diversity (I&D) Framework, applying new ways of working, and establishing cross-organizational networks.
- Game-changing leaders: Leaders navigate through changing situations by providing clarity and direction in uncertain conditions. They bring new strategies, new mindsets, and business transformation to life, triggered by outside market changes and role modelling our Leadership Essentials.
- Vibrant workforce: Our ambition is to become the employer of choice in the energy industry. We do this by investing in employer branding, learning and development, strategic workforce planning, and a recognition & performance management system. All elements contribute to the implementation of our strategy and anchor our values and behaviors.

The operational responsibility for specific aspects like training or diversity lies with dedicated departments, which regularly report to the Executive Board.

Our People Agenda



SGRE's purpose of empowering people to lead the future and its Culture of Trust program are essential to its business model. They are core to the business strategy, organization, hiring and decision-making process, daily operations, and how the company and employees grow. For further information please refer to ↗ Consolidated Non-Financial Statement 2021, B1. Working at Siemens Gamesa.

Thriving environment

At Siemens Energy, we strive to create safe, inclusive, and welcoming workplaces that encourage equality and belonging throughout the whole organization.

Fostering I&D

We want everyone to bring their whole self to work and reach their full potential. Therefore, we aim to create a workplace environment that is open to everybody regardless of their ethnic origin, religion, world view, age, disability, gender, and sexual orientation. We strive to offer our employees equal treatment in a non-discriminatory work setting. To emphasize the relevance of I&D for Siemens Energy, we have anchored the topic to the very top of the company with Maria Ferraro, the Chief Financial Officer of Siemens Energy, also holding the role of Chief Inclusion & Diversity Officer.

With our focus on I&D, GP aims to

- have access to broader talent pools from which to source the diverse capabilities we need to power our innovation,
- bring together different experiences and perspectives to solve the complex challenges in our industry,
- become more productive through faster, effective decisions with less cognitive bias, and
- enhance our reputation while being representative of the communities we serve.

To support our ambition, we have developed a holistic I&D Framework, and our activities contribute to the promotion of I&D. Some examples of our activities in fiscal year 2021 are:

- We founded an I&D Council at GP, which is responsible for providing strategic direction and acts as a representative both internally and externally. It also creates action plans and establishes processes to examine allegations of oppression and discrimination. The council is chaired by the Chief Inclusion and Diversity Officer and meets on a bi-monthly basis. Its members represent our business, countries, and employee networks.
- To measure progress, we have developed a global I&D dashboard for the GP reporting segment. It includes performance indicators covering multivariant diversity such as the share of women, age groups, and minorities in management as well as employee survey results.
- To decrease bias in the hiring process, we established the use of a balanced interview panel. This refers to interviewers with diverse backgrounds conducting the job interview as a group and making the hiring decision together to increase the chance of selecting the best-fitting candidate.

GP 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.

SGRE aims to reach a share of 25% women in headcount and in leadership positions by September 30, 2025, and a share of 30% women in headcount and leadership positions by September 30, 2030.

2021 was the year in which we designed and created targeted measures and anchored them accordingly. In a year characterized by changes and foundational work, the share of women in top leadership positions at GP has remained stable at 21% (as of September 30, 2021). SGRE reached 13% women in leadership positions (September 30, 2020: 12%) and 19.1% women in headcount (September 30, 2020: 18.8%).

SGRE's Diversity and Inclusion strategy is set over a two-year period and cascaded across the business. Strategic objectives are backed by specific action plans. Over the last year, we have seen progress in a number of areas:

- We pay close attention to how we attract and assess talent at every step of the recruitment and hiring process, e.g., by advertising all roles internally and widening the pool of candidates. Our job offers contain a statement endorsing our diverse, inclusive, and flexible culture.
- We have developed our Equal Opportunities Policy that defines positive action to increase the representation of underrepresented groups in our workforce. Some examples are:
  - No posts are reserved for the nationals of any specific country to ensure a fair spread of ethnicities and nationalities throughout the workforce and at all levels of the organization.

Our Inclusion & Diversity approach

Three focused strategy drivers serve as the foundation for a global and local program of action

Strategic intent

01 Equal opportunity

We are committed to fair and transparent practices for the attraction, promotion, development, and retention of diverse people with different skills, abilities, and ideas.

02 Belonging

We make our mix work by creating an inclusive culture where people feel respected, engaged, able to speak up and be themselves.

03 Society & partnerships

We work together, internally and externally, with customers and partners to support us in becoming more diverse and inclusive.

Summer Youth Energy Academy: next generation minority professionals

We have partnered with the American Association of Blacks in Energy (AABE) to provide STEM (science, technology, engineering, and mathematics) activities for over 50 low-income and minority teens during the 10th annual Youth Energy Academy in Orlando and St. Petersburg. AABE's overall goal is to create the next generation of minority utility energy professionals in the craft, technical, and professional disciplines within energy and STEM related sectors.

Representatives from OUC, Duke Energy, Siemens Energy, and Siemens who are AABE members talking with students during one of the general sessions in the virtual conference

- We have implemented Smart Working as an innovative means of organizing and working using information and communication technologies that allow employees to perform their duties in an environment other than their official workplace.
- In seeking to enhance gender diversity across our organization, it is important to take stock of gender inequalities, including gender pay gaps. We have analyzed the gender pay gap in our relevant locations and have included this metric into our reporting system.

For further information please refer to ↗ **Consolidated Non-Financial Statement 2021, B3. Diversity and Equal Opportunity**.

In Brazil, GP has gone beyond local regulations to foster I&D in the workplace. From September 2021, same-sex couples can take up to four months of parental leave to care for a child resulting from a solidary pregnancy.

In Abu Dhabi, UAE, Siemens Energy entered into a cooperation with Zayed Higher Organization, a national advocacy for people with disabilities. The collaboration aims to establish a professional training program for people with disabilities, foster the exchange of knowledge and experience between the organization and the company, and raise awareness among employees about the rights and needs of people with disabilities.

On September 30, 2021, Siemens Energy employed about (1,400 September 30, 2020 ~1,400) people with a disability in Germany.

Transformation platforms and network

We have established a fast-acting, decentralized, and constantly growing network at GP to reach and support all our employees throughout the entire organization.

In order to achieve this, we organized virtual Transformation Accelerator (TA) bootcamps in 2021 across countries, Divisions, and hierarchies. These are train-the-trainer programs to give middle managers and influencers a common language, methods, and tools to drive a new way of working. TAs train the next groups, respond to business needs for support in change initiatives, and help shift people's mindsets.

Global employee engagement survey

At GP, we conduct our global employee engagement survey twice a year. It gives all employees worldwide the opportunity to share their perspective on how they perceive our company, our culture, leadership, team collaboration, and work environment. With our second survey in May 2021, we introduced a dedicated question to measure the level of "Active Engagement" throughout Siemens Energy: „After the last survey, my team took actions which created positive changes" reached a total 51% favorable score. Going forward, we will use this score to continuously measure and track our progress.

SGRE periodically carries out employee engagement surveys. In fiscal year 2021, the Employee Engagement Survey was conducted with a response rate of 79% (82% in fiscal year 2020). The results reveal widespread satisfaction with the company's safety culture (83% favorable score), along with an improved perception of the supervisor (77% favorable score) and sustainable engagement (75% favorable score). For further information please refer to ↗ **Consolidated Non-Financial Statement 2021, B.1.5 Employee Survey**.

Game-changing leaders

Considering the current disruption of the energy industry, we need excellent leaders who provide clarity and direction for our people. We achieve this through dedicated transformation and leadership development programs.

Transformation journey
In 2020, we finalized six Leadership Essentials at GP together with the Executive Board to help 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:

1. Leaders are curious learners – they are humble and invest in their own development.
2. Leaders create the future – they are cost-conscious and manage multiple priorities.
3. Leaders deliver as one – they act on behalf of Siemens Energy and in the greater interest of all stakeholders.
4. Leaders grow our people – they develop strong teams and place best talent across Siemens Energy.
5. Leaders ignite change – they challenge the status quo and create change multipliers across Siemens Energy.
6. Leaders stand for safety and integrity – they live by and enable the highest standards.

Leadership Essentials

We have since been communicating the Leadership Essentials to all our GP employees, embedding them in learning programs and in new processes.

Senior leaders completed a series of transformation journeys to develop the skills and behaviors to live the Leadership Essentials and to empower their teams to role-model and drive the transformation. This was accompanied by an external leadership assessment.

Succession
Beyond centralized succession planning for key roles including quarterly succession reviews, we accompany both senior and early talents to accelerate their targeted growth and foster diverse succession. In addition, we are developing a company-wide decentralized approach to succession at scale for lower pipelines.

Leadership development
Our GP reporting segment runs four leadership pipeline and 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 to build a strong and diverse leadership pipeline.

The leadership programs are the following:

- **Step-Up:** Provides early talents in the regions with visibility across Siemens Energy
- **NextGen Leaders:** Strengthens pipeline leaders' leadership maturity and develops critical leadership capabilities
- **Enterprise Business Leaders:** Equips experienced senior leaders with the mindset and leadership capabilities required to navigate in the new reality of Siemens Energy
- **Catalysta:** Designed for women leaders driving the transformation

The total number of participants in all programs in fiscal year 2021 amounted to 115.

Vibrant workforce

To achieve our business strategy and lead the energy transition, we need dedicated, motivated people with future-ready skills.

Employee structure
As of September 30, 2021, Siemens Energy had around 91,000 (September 30, 2020: 93,000) employees[1] world-wide, 26,000 (September 30, 2020: 26,000) of whom worked for SGRE. The decrease is mainly related to restructuring activities at GP. The average number of employees during the fiscal year stood at 92,000 (fiscal year 2020: 92,000).

Women accounted for 19.3% (September 30, 2020: 19.1%) of the workforce and 19.4% (fiscal year 2020: 19.2%) of all new hires. We expect 10.2% of employees to retire within next 5 years[2]. The share of employees with permanent working contracts is 95.1% (September 30, 2020: 94.3%). The worldwide average working week at GP was 39 hours with no changes in comparison to 2020. The average employee age was 42.8 (fiscal year 2020: 42.5). At Siemens Energy, around 74% of employees are covered by collective bargaining agreements worldwide.

As part of our family-friendly corporate policy, GP employees in Germany, for example, are offered a range of opportunities to tailor their working times and location to their needs, such as part-time and remote working, and are given the flexibility to care for children or sick relatives. In numerous countries, we offer employees additional support for family and children, for example through school vouchers, allowances, or additional time off. About 3,000 (September 30, 2020: 3,500) employees, or 3.3%, worked part-time and around 1,500[3] (September 30, 2020: 2,000) were on leave of absence.

Due to the spin-off from Siemens AG, some structural data is not available for fiscal year 2020 but will be reported henceforth.

[1] All figures in this section refer to the headcount.
[2] Employees with an age >57.
[3] Without SGRE. Previous year includes SGRE.

Age and regional structure

September 30

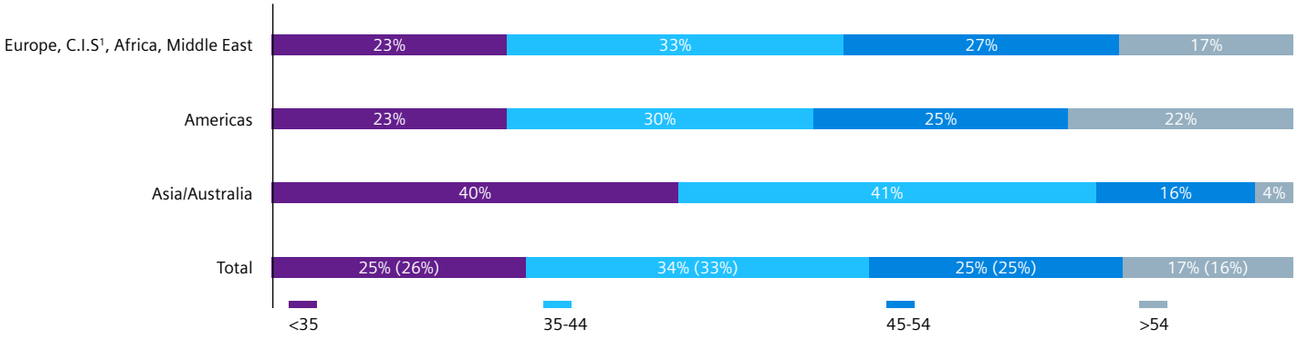


Figure for previous year in brackets
[1] Commonwealth of Independent States

Number of employees

September 30

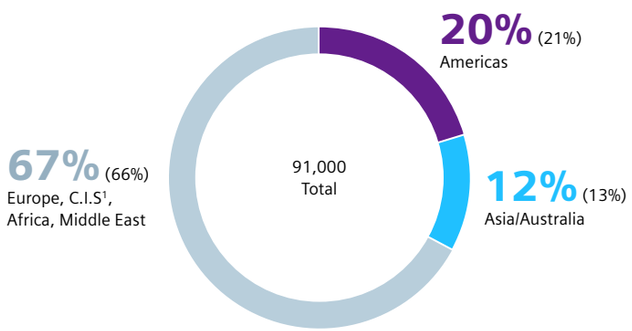


Figure for previous year in brackets.
[1] Commonwealth of Independent States.

September 30

Women in the company	2021	2020
Share of women in workforce (%)	**19.3**	19.1
Europe, C.I.S.[1], Africa, Middle East	19.4	-
Americas	19.3	-
Asia/Australia	18.4	-
Employees in top leadership positions at GP (no.)	**190**	173
thereof female employees (%)	21	21
Employees in senior management at SGRE (no.)	**271**	248
thereof female employees (%)	13	12
Share of women on the Supervisory Board (%)[2]	**30**	40

[1] Commonwealth of Independent States.
[2] Without SGRE. SGRE only has one-tier board.

Employee fluctuation	Fiscal year 2021	2020
Hirings (thousands)	**7.5**	9.0
thereof women	19.4%	19.2%
thereof Europe, C.I.S.[1], Africa, Middle East	55.8%	-
thereof women Europe, C.I.S.[1], Africa, Middle East	21.3%	-
thereof Americas	26.5%	-
thereof women Americas	16.2%	-
thereof Asia/Australia	17.7%	-
thereof women Asia/Australia	18.1%	-
Recruitment rate[2]	**8.2%**	9.9%
Exits (thousands)	**9.7**	8.4
thereof dismissals[3]	16.8%	22.9%
thereof Europe, C.I.S.[1], Africa, Middle East	51.7%	-
thereof Americas	29.4%	-
thereof Asia/Australia	18.9%	-
Turnover rate[4]	**10.6%**	9.2%
Turnover rate – voluntary	4.3%	3.5%
Turnover rate – other reasons	6.3%	5.7%

[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.
[3] Without SGRE.
[4] 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.

Contractually agreed weekly working hours (average)[1]	September 30 2021	2020
Europe, C.I.S.[2], Africa, Middle East	37	-
Americas	42	-
Asia/Australia	41	-
Total	**39**	39

[1] Without SGRE.
[2] Commonwealth of Independent States.

Training and education

The opportunity to learn and grow is a core component of the experience we want to provide to our employees. We aim to be a learning organization where everyone has access to digital, real-time, and personalized best-in-class training.

Our learning landscape supports enhancing employees' skills and developing long-term capabilities. Thus, we continuously foster the performance of our employees and prepare them for future challenges.

At GP, training concentrates on two areas:

- Product learning to keep up to date with our portfolios and technologies to run the businesses successfully
- Management and employee training to build the skills they need to be successful in their everyday work, including leadership topics, strategy development, digitalization with new business and service models, change management, collaboration, and team communication

Learning takes place on a wide variety of levels, from on-the-job, through interactions with colleagues to formal internal or external learning activities.

Training	Fiscal year 2021	2020
Spend on further education (€ million)	58	60
Spend on further education per employee (€)	632	654
Total number of training hours[1]	**786,721**	**-**
On-site	592,033	-
Web-based	194,087	-
Total average training hours per employee[1]	**8.6**	**-**
On-site	6.5	-
Web-based	2.1	-

[1] Prior-year figures are not available due to setup of new platform within the GP reporting segment.

In fiscal year 2021, we expanded the Siemens Energy internal Learning Platform, which was launched in October 2020. The platform offers GP employees worldwide access to e-learning modules in different languages. It integrates a learning ecosystem of internal and external sources to ensure that our employees receive up-to-date and relevant knowledge. These sources include learning libraries, selected global and regional training providers, and Siemens Energy experts.

In fiscal year 2021, 61% of our GP employees took part in at least one learning activity on the platform, spending an average of 3.5 hours on formal learning measures. To measure our employees' learning activities on separate, external platforms, we are currently building a web interface where employees can manually record these activities. This application will be available by 2022.

Over 5,400 selected e-learning modules in different languages are available on the platform and are accessible to all GP employees worldwide with access to a computer. Centrally purchased licenses allow employees to work through the learning modules at their own pace. A further 1,100 e-learning modules provide content on energy products and solutions. For interactive learning with trainers, 2,900 courses are available worldwide, both in the virtual classroom and as face-to-face events. The quality of the courses is evaluated via participant feedback.

In fiscal year 2021, SGRE also invested in new learning platforms, which improve community-based learning and support SGRE employees in their performance.

To achieve digitalization in learning, SGRE ran several strategic initiatives in fiscal year 2021 that can be clustered as follows:

- Implementation a new digital platform for delivery of product learning
- Creation of digital resources and running digital classroom delivery for our internal trainers
- Contract signed with global digital standard learning provider

SGRE employees have access to separate training courses and continuous learning opportunities offered by SGRE's own learning units such as the Wind Uni Academy. These learning services provide consultancy and tools, delivering different activities throughout the business. For further information please refer to ↗ **Consolidated Non-Financial Statement 2021, B5. Talent Management and Learning**.

With its vocational training programs in Germany, Siemens Energy aims to attract school graduates. As of September 30, 2021, there were 2,100 (Septermber 30, 2020: 2,165) trainees and students enrolled in work-study programs: 1,062 (Septermber 30, 2020: 1,167) internals and 1,038 (Septermber 30, 2020: 998) externals from other companies. In fall 2021, a total of 241 (fiscal year 2020: 229) graduates began an apprenticeship or a work-study program, and there were 280 (fiscal year 2020: 315) external trainees. In addition to the apprenticeships in Germany, we also offer vocational training in several other countries.

To achieve high employability of young talents, we continually innovate our curricula. Developing future-proof skills in digitalization and energy-specific topics is key to accelerate our company's transformation. In 2021, for example, we developed the first learning nuggets on electronics and hydrogen technologies and tested them successfully with our apprentices.

Performance

In 2021, the GP Performance Management Process (PMP) was redesigned and has been developed in co-creation with more than 200 employees worldwide. It is called "My Performance" and will be open to all employees.

To ensure that everyone's contribution is constantly connected to our company's strategy, values, and behaviors, our new approach is built on four key principles:

- Top five responsibilities: clarify the top five responsibilities of each individual's role to assure alignment to the broader organization
- Contribution/Individual goals: give accountability to each employee to define goals and their own contribution to deliver on them
- Check-ins: engage in ongoing continuous feedback and check-ins throughout the year to help employees better understand the connection between their own performance and the rewards they receive
- Growth dialogue: clear goals and ongoing check-ins support an employee's personal growth and development planning, and it supports the manager's judgement of pay for performance.

Rewarding our workforce

As we aim for fair working conditions, industry wage agreements – which Siemens Energy adheres to – supersede the national minimum wage in many countries, especially in Western Europe. Since we strive for equal pay, we are developing a methodology to evaluate and report differences in pay next fiscal year. Hiring agency workers is common, and in many cases, contracts are governed by similar or comparable wage policies to those enjoyed by company employees.

Siemens Energy generally offers employees benefits based on local market practice. These can include additional time off, health benefits, family support, insurance subsidies, and other prerequisites.

Part of our GP People Agenda is also to align financial and other employee rewards with our strategy, purpose, and values in order to embed a growth and performance mindset. This is achieved via a range of programs, such as the share plans for employees, which include the Direct Match Program that gives GP employees the opportunity to become shareholders of the company or the "Employee Spin-off Incentive Program" that was implemented for GP in 2021. This rewards employees for their efforts in our company's successful spin-off and public listing.

SGRE has a long-term incentive plan based on SGRE shares for senior management. The plan's primary objective is to align its beneficiaries' interests with the interests of the company's shareholders and to offer beneficiaries an incentive to help the company attain its strategic objectives. For further information please refer to ↗ **Consolidated Non-Financial Statement 2021, B6.9 Performance**.

Recognition and celebrating success

People are our greatest asset. That is why appreciation of our employees and a culture of recognition are of utmost importance to us.

To this end, we have developed different initiatives and tools. Our Sharing Thanks And Recognition (STAR) online platform gives an equal voice to our employees. They may show appreciation to peers through personalized messages or e-cards or by awarding points. The platform was rolled out in 2021 in more than 60 countries.

We also recognize extraordinary achievements by granting special payments.

Strategic workforce planning and #FutureFit

With a strategic and leadership-owned approach to workforce planning, we aim to anticipate future workforce scenarios by closely aligning our business strategy and growth fields to the future demand and supply of critical skills. A quantitative approach (data-driven workforce insights) combined with qualitative insights (skill-based view) ensures that we create transparency about workforce shifts, potential skill gaps as well as transition scenarios early on. We strive to close skill gaps and build a robust #FutureFit workforce by specifically focusing on:

- Upskilling and reskilling our existing workforce in strategic growth fields (e.g., Decarbonization, Power-to-X, Energy of Tomorrow)
- Strategic hiring from the external market
- Retaining mission-critical skills

Employee representation

At Siemens Energy, we highly value employee representation and participation in accordance with national laws. 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.

On a national level, various forms of employee representation exist based on national regulations. In Germany, trade union representation is through the Industrial Union of Metalworkers, and in many international countries by domestic trade unions. In addition, inhouse employee representation is based on national regulations. In German locations, based on the German Works Constitution Act, employee representation 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, it is based on domestic law. The Supervisory Board of Siemens Energy also contains employee representatives as full board members, which are – based on national law – either delegated by employees or appointed by the trade union.

Honoring those that share Siemens Energy's spirit of innovation

The Siemens Energy Passion for Energy Award

In May 2021, we introduced our new GP award program, the Passion for Energy Award, to celebrate our best and brightest employees who exemplify the Siemens Energy values, behaviors, and spirit of innovation. The Passion for Energy Award program honors projects and initiatives that drive the success of our company and ensures that everyone's contributions at Siemens Energy are seen, valued, and celebrated. Employees from around the world participated and, 651 projects or initiatives were submitted.

Sustainability dialogue
The energy industry's shift to sustainability raises new challenges. Young talents ask our management their most pressing questions.

How are we preparing our workforce for the skills of a green future?

"A major shift is coming," says Akshay Prasanna, who foresees a growing gap in skillsets as Siemens Energy increasingly focuses on sustainability. He asks Gina Vargiu-Breuer how the company, with 91,000 employees, is preparing for the change.

Gina Vargiu-Breuer
Senior Vice President Global Human Resources
Siemens Energy

Akshay Prasanna
International Resource Manager
Siemens Energy
Karlsruhe, Germany

I'm originally from India, but moved to Germany for my studies, and I've been working for two years now here in Karlsruhe as an international resource manager for Siemens Energy. Part of my job is resource management, supporting (global) regions with balancing workload and resource topics, and another part is competency management, where we map out the skillsets we have and try to pinpoint potential gaps and fill them.

We all know that our industry is rapidly changing, especially when it comes to tackling climate change. What kind of energy will we use? How will it be generated and stored? Can we reach net zero and when? These questions effect our daily lives, and we see that we're dealing with a very uncertain future.

When it comes to the skillsets and competencies our workforce needs, there are even more questions marks. We know that a major shift is coming, and I'm already seeing some areas that we're rapidly adjusting. And I hope we'll continue to drive the technology and the workforce of the future. But my view is limited to my business unit. What's missing is a larger perspective that takes in all of Siemens Energy, its 91,000 employees, and the skills the company believes will be necessary in a sustainable energy future.

So here is my most pressing question about the future of work at Siemens Energy: How is Siemens Energy preparing its workforce for the major shift in skillsets and competencies needed in the energy transition?

Siemens Energy is in the midst of the transition of the energy industry. In times of rapidly changing regulations, markets, and customer requirements, it's crucial that we anticipate what skills we need now and in the future. We need to have a workforce that is prepared for the challenges ahead. This is one of our top strategic priorities.

Strategic Workforce Planning (SWP) addresses SE's structural workforce change on an organizational level to ensure critical roles and future-relevant skills are available at the right level, at the right location, and at the right cost.

With SWP, we are using short-, mid- and long-term information and insights from data analytics from SE (for example, market and technology developments, customer insights, workforce trends) to create internal supply-demand analyses. Together with representatives from Strategy, Technology and Innovation, Business and HR, we co-create a buy-build-borrow strategy for future-relevant skills. That means we define which skills we have to hire from the external market (buy), train/up-skill internally (build), or gain access through through external strategic partnerships (borrow). Three pilots are currently running in different and diverse business areas to test the approach and to provide scalable results. We plan to provide the SWP methodology to the businesses by January 2022. On a more individual level, the SE Learning Platform provides a single point of entry for employees to access all online and face-to-face learning opportunities, enabling employees to develop and prepare for the energy transition.

As you can see, the right demand-supply analysis, learning offerings, transparency, and self-driven development are important components in securing the right skillsets for our workforce.

Societal engagement

We actively support initiatives that address the specific societal and environmental needs of the countries in which we operate and contribute to the future viability of these communities.

- **Global approach allows for local, community-based action**
- **Strategic framework focuses on areas that impact our core business**
- **Donations amounted to €4.71 million for projects worldwide in 2021**

A sense of purpose and social responsibility have been central to our corporate philosophy since Werner von Siemens founded the company in 1847. Societal engagement means more to us than just charity. We believe it creates shared value for society and a competitive advantage for business.

Through our engagement, we contribute to several SDGs. Our technology-related activities are driving the energy transition and helping to achieve SDG 7 "Access to Affordable and Sustainable Energy". By providing access to education, we contribute to SDG 4 "Quality Education", SDG 5 "Gender Equality" and SDG 10 "Reduced Inequalities". And as our community-related activities focus on serving local needs, they relate to several SDGs in line with SDG 11 "Sustainable Cities and Communities".

Throughout fiscal year 2021, GP rolled out its societal engagement approach. To focus activities and increase their impact, GP defined a framework that includes three focus areas that reflect our global commitment but also allow local autonomy:

- Driving the Energy Transition: Support clean energy R&D
- Access to Education: Promote STEM subjects and climate education (especially for underrepresented demographics)
- Sustaining Communities: Disaster recovery (especially related to electricity supply)

In each region, we asked Managing Directors to develop initiatives within the company's strategic framework, including the three focus areas. Using this approach, GP aims to support initiatives that address the specific and unique needs of the respective countries within the context of our overarching global societal engagement framework. The objective of the approach is to:

- enhance relationships with customers and partners,
- boost employee engagement,
- generate awareness of our brand, and
- support the company's competitive context.

The approach allows for 80% of donations to support the three areas related to GP's strategic framework for societal engagement, 10% to be discretionary, supporting causes aligned to customers and partners, and 10% to go toward activities in local communities where we have operations with a significant employment base.

In August 2021, the twins Kayla and Alissa Villanueva participated in the first Girls with Energy Hackathon in Mexico

Girls with Energy Hackathon

In August 2021, GP hosted the inaugural Girls with Energy Hackathon in Mexico. Seventy girls aged between 12–18 years were invited, most of whom were daughters of Siemens Energy employees, stakeholders, or customers. The goal was to develop a product or service related to energy in STEM using learning games such as Kahoot and Skribbl. In the lead-up to the event, we held workshops on energy and climate, design thinking, Canvas, and presenting an elevator pitch. Female GP employees acted as mentors and judges.

In the UK, GP has partnered with Stemettes, an award-winning social enterprise working across the UK and Ireland to inspire and support young women and nonbinary people to study STEM subjects. On International Women's Day in February 2021, we hosted a panel session to inform attendees about career options in STEM areas. A second event was held in March with attendees working collaboratively to develop an app to solve a sustainability problem. The events were supported by 21 volunteers from GP.

SGRE has also put a social commitment strategy in place and created a new department that focuses on the company's social commitment to reduce poverty, combat the effects of climate change, and promote technological education, especially in STEM. The approach is underpinned by its Social Commitment Policy and forms part of a long-term strategy aligned with the United Nations' SDG 1 "No Poverty", SDG 4 "Quality Education", SDG 13 "Climate Change", SDG 14 "Life Below Water", and SDG 15 "Life on Land". To manage all of its social commitment projects, SGRE is leveraging digitalization by launching a platform to share information with beneficiaries, manage events and activities, house communication assets, track achievements, and enable interaction among interested parties. For further information please refer to ↗ **Consolidated Non-Financial Statement 2021, E1. Social Commitment**.

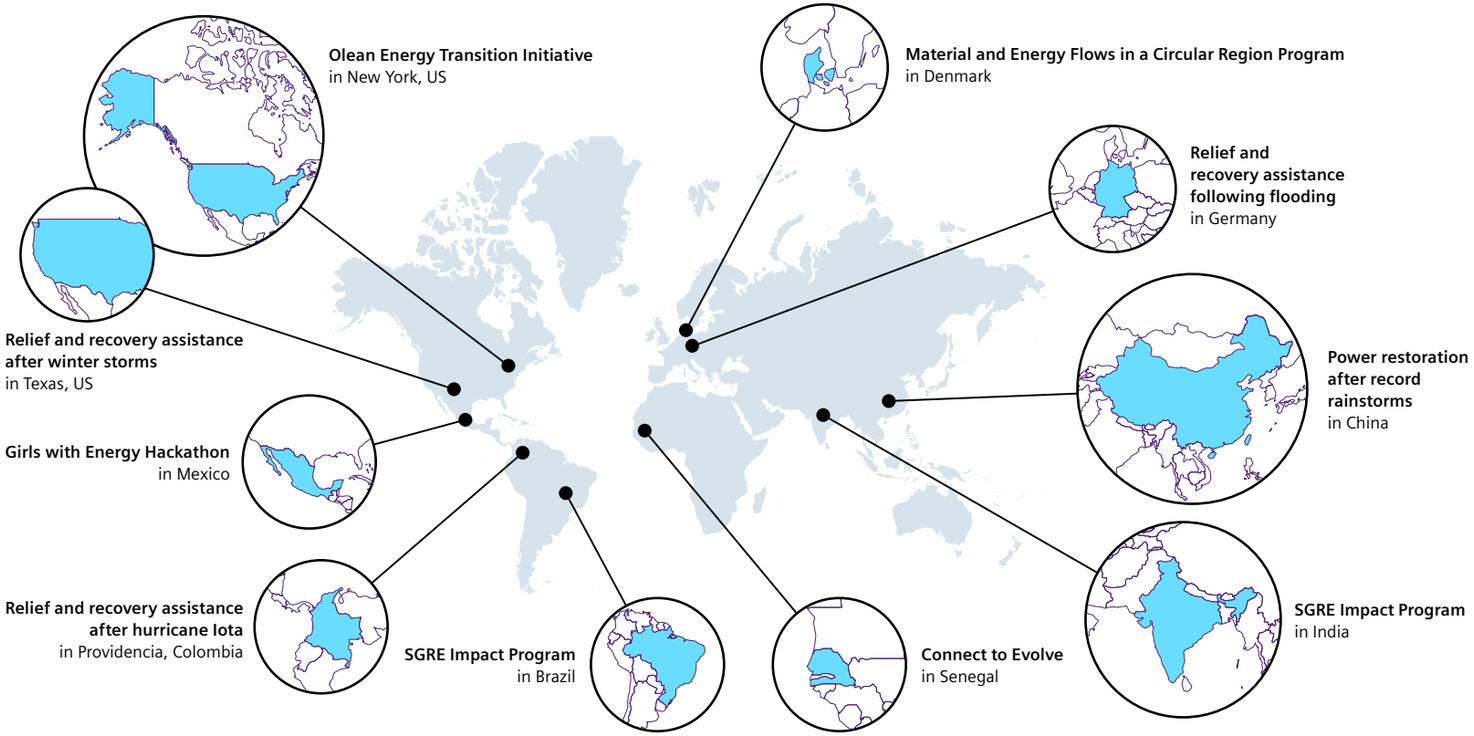
Since societal engagement is often driven by individuals, Siemens Energy encourages its employees to take social responsibility through our volunteering program. Corporate volunteering is an efficient and personal way to provide commitment to society and enhance employee satisfaction and retention. A dedicated volunteering framework was set up for GP in 2021 to guide our country units and encourage employees to spend up to 16 hours of volunteer time off to work on company-endorsed initiatives in the three focus areas and two discretionary categories. GP also encouraged a cross-company initiative around the UN International Volunteer Day on 5 December 2020.

Further to this, GP and SGRE are contributing to societal development all over the world through a range of projects in our designated focus areas:

Driving the energy transition

Public energy infrastructure is one of the most important prerequisites for the sustainable development of societies. This is especially true for countries where not all citizens have access to a reliable, sustainable, and affordable power supply. We draw on our core competencies and portfolio to help rural areas gain access to basic infrastructure. We are focusing on shaping the energy transition by supporting clean energy R&D and projects.

Local projects contribute to societal progress worldwide



In Olean, New York, US, GP developed a pilot program together with local community representatives to support workers displaced as a result of the energy transition. The Olean Energy Transition Initiative helps workers find new careers in sustainable technologies either through re-skilling or a small business incubator initiative. Ultimately, the program will result in a blueprint that will be shared with other communities that may be impacted by the energy transition.

In an effort to mitigate climate change and reduce CO_2 emissions, SGRE launched the Forests of Siemens Gamesa reforestation initiative. Since starting, 20 forests have been planted with almost 100,000 trees in 10 different countries (Germany, Denmark, US, Spain, Morocco, France, UK, Mexico, Brazil, and China). More than 2,000 employees volunteered for events to plant trees in fiscal year 2021.

Access to education

As the world becomes ever more connected through digitalization and as the energy industry continues to transform, new skills are required. We are working to extend educational and research opportunities to more people. For both GP and SGRE, our respective strategies aim to inspire, engage, and enthuse the next generation in the STEM subjects, particularly those in underrepresented demographics.

To this end, SGRE launched Planet Rescuers Minecraft, a video game in Minecraft Education Edition, which requires players to apply STEM concepts to overcome challenges and missions. On their journey through the Minecraft universe, they learn about energy and its vital contribution to a sustainable world. SGRE plans to introduce its video game to schools around the world.

In Zhengzhou: the green mobile substation equipped with a Sensformer™ filled with natural ester oil ready for operation

Repowering a city in need

In August 2021 record rainstorms lashed Zhengzhou, one of the largest cities in central China, claiming lives and forcing people to relocate. Upon learning about the catastrophe, GP factories were quick to lend their support to the local power company. Within 36 hours, Siemens Transformer (Wuhan) Co., Ltd. had mobilized a fast-response team and delivered a 110kV mobile substation to help the city restore power.

SGRE also launched a project-based learning program on “Material and Energy Flows in a Circular Region” in conjunction with the University of Aalborg in Denmark. The program, aimed at Masters-level students, poses the question: “How to Achieve an Energy Transition with Sustainable Solutions.” The program is being expanded to additional universities in various regions, starting with the Basque Cluster for Engineering, Science and Technology, giving students across the regions the opportunity to exchange experiences and findings.

Sustaining communities

Providing access to basic infrastructure and services is essential for sustaining thriving communities. Siemens Energy is committed to providing relief and recovery assistance to areas affected by disasters.

In the aftermath of hurricane Iota in November 2020, GP, in cooperation with the Siemens Foundation, supported families affected by Iota in Providencia, Columbia, by providing emergency solar energy kits.

#connect2evolve: Thanks to more than 240 donors Siemens Energy helps bring mobile solar power to Senegal

Closing the gap in energy infrastructure

More than 630 million people lack electricity in Sub-Saharan Africa. When not connected to a grid, they often produce their required energy from inefficient diesel generators, which are neither economically nor ecologically suitable. GP wants to bring about change by connecting more than 3,000 people in Bacco Ndieme, Senegal, to a sustainable, ecological energy source. Founded by a self-organized initiative of GP employees, the project is raising funds for the installation of a SolartainerTM, including a storage battery, the construction of a mini-grid as well as the installation of smart meters.

In February 2021, following the disastrous winter storm, record cold temperatures, and subsequent power outages in the US state of Texas, GP and Siemens AG launched the Texas Freeze Disaster Relief program whereby the companies matched employee donations, thereby raising a total of $41,615 for employees affected.

Similarly, during the devastating floods in Germany in August 2021, GP matched €275,000 in employee donations, thus providing a total of €550,000 to the German Red Cross to assist affected communities.

At SGRE, the Impact Program is a company-wide initiative to bring positive change to the communities in which SGRE operates while heightening the engagement of employees. Every year, employees can propose a community project related to its Social Commitment strategy. Current projects include the empowerment of communities of 37 impoverished areas in Urban Surat, India, and promoting reading and management of community libraries as a space of knowledge sharing for vulnerable children in the Brazilian Amazon.

In fiscal year 2021, donations decreased from €5.44 to €4.71 million due to SGRE's reduction of the temporarily introduced special COVID-19 donations from fiscal year 2020.

	Fiscal year	
Donations by region (millions of €)	**2021**	**2020**
Europe, C.I.S.[1], Africa, Middle East	2.06	3.53
Americas	2.03	1.16
Asia, Australia	0.62	0.76
Total	**4.71**	**5.44**

[1] Commonwealth of Independent States.

4 Annex

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The company and reporting method

Siemens Energy AG is incorporated as a stock corporation (Aktiengesellschaft) under the laws of Germany, 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 Siemens Energy business was formerly part of the Siemens Group and became an independent company by way of a spin-off and subsequent listing in September 2020. Siemens AG still holds a non-controlling interest in Siemens Energy AG of 35% (based on last voting rights notifications). Siemens Energy holds a majority interest of approximately 67% in Siemens Gamesa Renewable Energy, S.A. (SGRE), Zamudio, Spain.

The shares of Siemens Energy AG are admitted to the regulated market of the Frankfurt Stock Exchange and to the sub-segment of the regulated market with additional post-admission obligations (Prime Standard) (ISIN DE000ENER6Y0/WKN ENER6Y). Siemens Energy is a member of the German DAX.

Siemens Energy is organized in two reporting segments, Gas and Power (GP) and Siemens Gamesa Renewable Energy (SGRE):

- GP includes our Divisions Generation, Transmission, and Industrial Applications Divisions, with the respective service business based on customer groups and product lines, as well as our new business venture New Energy Business, developing our business with Power-to-X technologies, electrolyzer systems, and solutions for the production of green hydrogen using renewable energy and water.
- SGRE focuses on the design, development, manufacturing, supply, and installation of products, as well as the provision of technologically advanced services in the renewable energy sector with a focus on wind turbines for various wind conditions.

Reporting method

Sustainability is an integral part of our company strategy. In our "Sustainability Report" (hereinafter referred to as the "Report"), we publish fundamental information about our sustainability activities such as strategy, organization, initiatives, programs, management systems, and goals. As a listed company, our SGRE reporting segment has an independent sustainability strategy and publishes a separate ↗ Consolidated Non-Financial Statement 2021. While the strategic direction of both reporting segments is comparable, management approaches and programs may differ. We indicate deviations from a common approach in the respective chapter.

This Report has been prepared in accordance with the GRI Standards – Core Option (see ↗ GRI Content Index). We use the UN Guiding Principles (UNGP) Reporting Framework and its narrative guidance as a guide when reporting on our human rights activities.

Reporting period and reporting boundaries
This Report is the second independent Sustainability Report published by Siemens Energy. It is based on activities carried out during Siemens Energy's fiscal year 2021 (October 1, 2020 to September 30, 2021). Any exceptions are indicated as such. We report annually on our progress.

In general, our fully consolidated companies are all covered by the Report. Possible exceptions regarding the pool of data used are indicated. Minority equity investments are not included in the reporting. In order to ensure comparability, KPIs from previous years may be adjusted, if necessary, which will be indicated accordingly.

Data collection

Given Siemens Energy's size and global spread, data gathering requires utilization of a distributed IT and data environment. Captured non-financial data may adhere to local rules and regulations, which may deviate from the group's reporting requirements. In order to ensure consistency of group non-financial reporting, input data is reconciled and adjusted to comply with the group's reporting requirements. All 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 the financial information. In particular, they may be subject to less extensive internal documentation, data generation, and auditing requirements, including those relating to the IT systems used and the general control environment. To ensure data quality and maintain information value, we identify and evaluate data restrictions in accordance with our internal guidelines. Where necessary and taking into account the need for 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, numbers presented throughout this Report may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures.

Task Force on Climate-Related Financial Disclosures (TCFD)

Environmental reporting and collection of environmental data

Siemens Energy uses an environmental information system to analyze reports from sites in all relevant countries where defined threshold values were exceeded for parameters such as energy use, resource consumption, and emissions within environmental management. To measure and monitor our environmental impact, absolute values are used, such as energy consumption in gigajoules. We report environmental data for continuing operations. Extrapolation to 100% was applied to reflect complete consumption. We monitor our environmental impact for all office and production sites of environmental relevance, using environmental data gathered quarterly.

Independent assurance review

We prepare our Sustainability Report to 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 Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft on page 89.

To create transparency on our climate actions, we disclose how we address risks and opportunities arising from climate change. To do so, we are following the recommendations developed by the G20 Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD). Please also see our TCFD Index in the ↗ Siemens Energy Annual Report 2021, TCFD Index.

Climate change governance

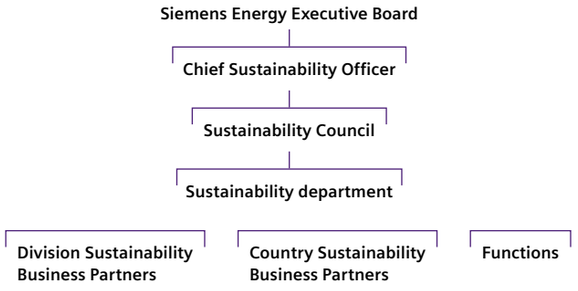
Sustainability and climate action play a key role in our decision-making processes. Our Sustainability Program, which is fully integrated into our company strategy, is led by our Chief Sustainability Officer (CSO), who is also the CEO of our company. Climate action is a regular topic on the agenda of Executive Board meetings as decarbonization is the cornerstone of our business strategy. Topics covered include adapting our business model to offer decarbonized solutions to our customers and the progress of our program to become climate neutral in our own operations by 2030. In addition, climate-related risks and opportunities are monitored. Within the Enterprise Risk Management (ERM) process, the Executive Board is informed quarterly and aligns on the reporting of all significant risks and opportunities throughout the company, including climate issues. Due to the relevance of the topic, it was decided to also include emission targets in the Senior Management's Long-Term Incentive scheme.

To reflect the importance of sustainability and climate action, we have established the Siemens Energy Sustainability Council. It meets on a regular basis and consists of decision-makers representing Business Divisions (Division CEOs), Regional Hubs (Country CEOs), and Functions (Heads of).

The Sustainability Council strategically oversees the implementation of the Sustainability Program by making decisions, setting priorities and focus where needed, providing resources to implement the Program, and being 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 of implementation of the Sustainability Program and an overview of topics where a decision is needed (if applicable). The Sustainability Council was established in February 2021. One major outcome of the first meetings was the decision to commit to a science-based target and disclose Scope 3 emissions for the GP reporting segment. The next meeting will be in spring 2022.

The Sustainability Director manages the Sustainability Department, which is part of the Strategy Function, and is responsible for driving sustainability (including climate-related topics) within Siemens Energy and for coordinating the company-wide sustainability activities, programs, and mea-

Organization of our sustainability governance



sures. Among others, the Sustainability Department coordinates the Climate Neutral Program and works on portfolio topics. The implementation of climate actions in Divisions and Countries is ensured by nominated Sustainability Business Partners. For further information, please refer to the chapter Strategic focus.

Risk management approach to climate-related risks and opportunities

Climate-related risks and opportunities are being analyzed within our dedicated ERM process as well as within further operational processes, e.g., in Property Risk Engineering analyses for detailed location-specific Environment Health and Safety (EHS) risks (e.g., fires, floods, windstorms). Our ERM process aims for early identification, evaluation, and response to opportunities and risks that could materially affect the achievement of our strategic, operational, financial, and compliance objectives across the entire organization. It is not the ultimate purpose of ERM to avoid or eliminate business risks, but to support entrepreneurial decision-making by finding the right balance of managing risks and pursuing opportunities. The management of all our defined organizational reporting units is responsible for providing all relevant risks for the respective unit. The risk assessment allows Siemens Energy to prioritize the identified risks and focus management attention on the most important topics. The assessment also serves as the basis for the definition of adequate response measures and monitoring activities. Please refer to the Siemens Energy Annual Report 2021, Report on material risks and opportunities.

Our risks and opportunities are categorized in a four-dimensional scheme including the dimensions "Strategic", "Operations", "Financial", and "Compliance", each of them covering a broad spectrum of underlying associated topics, including climate-related risks.

Relevant risks and opportunities are prioritized in the dimensions impact and likelihood considering different impact perspectives, a quantitative perspective (financial, defined as potential loss of pre-tax profit), and qualitative perspectives (non-financial, defined as one of the four categories: business objectives, media/reputation, regulatory bodies' activities, and management time/attention). Impact is the potential adverse effect on our objectives, whereas likelihood is its probability of occuring. Scenario analysis can inform both parameters in the context of climate risks and opportunities. Risk impact and likelihood are assessed based on a three-year time horizon through scales that are being consistently used across all defined organizational reporting units. Both scales range from 1 to 9, on the basis of which an overall exposure score is calculated for each risk that determines the ranking of risks toward each other. While the impact scale represents magnitudes from (corresponding financial categorization in brackets) "marginal" (up to EUR 10 million) to "major" (exceeding EUR 125 million), the likelihood ranges from "unlikely" (below 20%) to "certain" (above 80%). We define substantive impact on our business as a potential deviation from our objectives that is not only marginal.

Responding to risks in a first step focuses on the definition of appropriate risk strategies, including targets and response measures. In a second step, it focuses on the concrete implementation to reach the defined response targets. The key objective of the response phase is to bring the residual risk exposure to a tolerable level. For all risks and opportunities (irrespective of the exposure level), response plans have to be documented in the ERM tool. All response plans have to be agreed upon by the management level concerned and are founded on the general response strategy, which has to be mandatorily determined (to be chosen from five different risk response strategies: "Avoid", "Reduce", "Transfer", "Watch", and "Retain").

During the reporting process, each defined organizational reporting unit reports its updated risk register to the next higher organizational level for further evaluation and analysis. Thereby, individual risks and opportunities of similar cause-and-effect nature are aggregated bottom-up into broader risk and opportunity topics. Such aggregation naturally results in a mixture of risks, including those with a primarily qualitative assessment and those with a primarily quantitative assessment. The resulting aggregated topics form the basis for the evaluation of the company-wide risk and opportunity situation and allow a meaningful discussion of risk and opportunity at the Siemens Energy group level. Climate change is integrated into this process to the extent that it influences risks and opportunities across the different organizational units and areas assessed, e.g., in relation to corporate sustainability, EHS, supply chain, or financing activities.

Assessment of physical climate risks in our operations is managed by the Environmental, Health and Safety and Quality (EQS) Department. Severe weather, such as fires, hurricanes, high winds and seas, blizzards, flooding, and extreme temperatures may cause evacuation of personnel, curtailment of services and suspension of operations, inability to deliver materials to job sites following contract schedules, loss of or damage to equipment and facilities, supply chain disruption, and reduced productivity. We continuously evaluate and monitor changes in physical climate parameters based on global studies, weather statistics, and trends based on international experience of insurance companies. In addition, we perform local risk assessments based on the EHS emergency management and develop protection concepts if needed. Furthermore, our insurance department provides natural hazard risk analyses for each new building project that drive the selection process for new site areas. The collected data and information allow us to identify geographical areas where we pay special attention at our sites in regard of risks from changed physical climate parameters. To cover the risk exposure in the supply chain, we introduced a risk analysis procedure to systematically identify potential risks in the supply chain. Please refer to the chapters Decarbonization and Sustainable supply chain management.

Climate-related risks and opportunities

The impacts of climate change might have significant effects on our company throughout the entire value chain, such as on markets, technologies, policy and legal, reputation, as well as physical impacts on our sites, portfolio, or supply chains, although these changes will be gradual over several years/ decades. In particular the trend toward decarbonization in the energy market might force us to review our strategy, organizational setup, and portfolio. We constantly screen for i.a. climate action commitments and roadmaps as well as upcoming regulations, to derive risk exposure and share relevant findings with the Sustainability Council for further action in the respective area of responsibility. In order to raise awareness of ESG

risks in projects, we implemented an ESG check early in the process and work closely with Project/Customer Finance & Sales to ensure mitigation actions are identified and implemented in a timely manner. Furthermore, we perform carbon footprint assessments for selected customer projects to support decision-making.

The table below describes the risks and opportunities arising from climate change on our business. The respective response plans to cope with both categories of risk, physical and transitional, have been further translated into opportunities to grow our business and contribute to more sustainable energy systems for society.

Climate-related risks and opportunities

	Risk driver	Identified potential impact	Time horizon	Response plan	Opportunity
Transitional risk	**Technology**	• 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.	■ ■	• Close observation of market & regulatory developments, focusing on applications with earlier expected market maturity. • Analysis of group portfolio whereby three areas with a focus on core, growth, and transformation have been identified to address and enhance identified technology needs in the upcoming R&D planning process and beyond to mitigate technology/portfolio risks. • Adaptation of business model and portfolio elements to the changing customer behavior following the disruptive developments in the energy market. • Consistent decision-making in R&D re-allocation from underperforming portfolio elements to new green portfolio elements reflecting the strategic (transformational) focus of the company. • Simplification, speed-up, and renewal of the way innovations are pursued reflected in three elements: Focus: We select, prioritize, and commit to ideas from a strategic perspective Accelerate: We accelerate ideas to maturity through dedicated channels Sustain: We strive for tangible returns and measurable value creation.	• Development of new applications and continuous adaptation of our business models, offering, and product portfolio to changing customer requirements. • Acceleration of Siemens Energy's growth by developing a green product portfolio (e.g., Power-to-X, heat pump), customer requirement-driven solutions (e.g., H2 production, energy storage, resilient grids, decarbonized heat, H2-fired gas turbines) and bring this to market within a short time. • We assume a positive impact resulting from our wind power portfolio due to a market shift toward renewable energy. • Provision of energy storage for our clients in existing power plants, as standalone solutions for grids, and in combination with renewable energies like photovoltaic or wind. • In all these fields, we are exploring market opportunities, future portfolio elements, and are setting the foundation for new businesses. The Business Segment New Energy Business focuses on building up our H2-related business with electrolyzer systems and solutions for the production of green hydrogen on the basis of renewable energy and water. • Investment in targeted R&D activities that support our five fields of action to transform the future, supported by nine technology fields (see chapter Customers and Innovation).
	Market	• There is a risk that, due to the decarbonization trend in the energy markets (e.g., the shift from fossil fuels toward renewables, intensified competitive behavior, low demand for hydrocarbons, oil price remains low long-term), we may face reduced demand for certain parts of our products and services (e.g., fossil-based portfolio, countries depending on high oil price may reduce their investment in energy infrastructure and/or will default on payments) due to a change in consumer preferences. • Due to the rapid increase of the trend, we may not be able to adapt our business model and product portfolio to such disruptive developments.	■ ■		

■ Short-term risk[1] ■ Medium-term risk[2] ■ Long-term risk[3]

[1] Siemens Energy defines a time horizon of up to 3 years in advance as short-term, as for short-term 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., IHS, IEA, Bloomberg. Even if the market development may not end up being the most likely scenario, it gives us a rather conservative view that enforces reasonable planning that is robust enough against potential deviations from the scenario assumed.

[3] Siemens Energy defines a time horizon above 5 and up to 30 years as long-term. For this horizon, holistic long-term energy concepts for countries are being prepared, by making use of various scenarios like, e.g., IHS Autonomy, IHS Rivalry, or IEA SHS and IEA SDS. The aim is to better assess the consequences and robustness of the current and alternative energy plans we may be proposing. That helps us identify the most reasonable plan of action while maintaining adequate robustness if the real-world development differs from the assumptions made. Beyond this horizon, any predictions are associated with high uncertainty and supposedly little impact on today's business.

	Risk driver	Identified potential impact	Time horizon	Response plan	Opportunity
Transitional risk	**Policy and legal**	• The markets of the gas and power business are affected by changes in national energy regulations, such as support of renewable energy, carbon pricing and climate change targets, and the modernization of energy and electricity markets. • Risks arising from non-compliance with the code of conduct, legal, contractual, or (emerging) regulatory requirements might affect Siemens Energy, e.g., through legal requirements on emissions. • CO_2 taxes, financing restrictions for greenhouse gas-emitting technologies, or declining subsidy levels might affect the financial sustainability of some of our business segments. • The emerging EU Taxonomy will require Siemens Energy to publicly disclose sustainability-related financial figures, which might affect future investment decisions by external investors.	■ ■	• Monitoring current and emerging regulations in our major markets. • Raising awareness for these new regulations to assess potential impacts. • Informing affected businesses as early as possible to create room for timely portfolio (products and services) adaptations. • Where applicable, informing emerging regulations either directly through contacts with the relevant regulatory bodies or via associations or together with similarly affected companies to avoid or lessen foreseen impact.	• An incentive to adapt current products and develop sustainable solutions leveraged by supporting regulations. • To reach climate neutrality, many countries are likely to increase their (financial and regulatory) support for climate-friendly technologies and solutions.
	Reputation	• Increasing public pressure (e.g., media campaigns, boycotts) to accelerate the shift from fossil-based energy generation toward renewables might cause reputational damage if the portfolio transition toward helping customers reduce emissions and environmental impact on an absolute basis is not executed quickly enough. • Reputational damage might result in adverse effects on our business (e.g., loss of tenders, discontinuation or adaptation of some of our products earlier than expected) and financial conditions (e.g., unattractive investment opportunity for investors, divestments of ESG-oriented investors). • If the strategic implementation deviates from what has been communicated, this may result in a lack of credibility for external stakeholders and partners.	■ ■	• Implementation of a climate action program including targets, to create transparency on decarbonization levers and aim to decarbonize our portfolio. • Active portfolio management, where sustainability/ESG fit is one of the four strategic lenses applied. • Constant screening of climate-related developments in the strategic 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. • In order to raise awareness for ESG risks in projects, an ESG check was implemented early in the process in close collaboration with Project/Customer Finance & Sales to ensure mitigation actions are identified and implemented in a timely manner. • Transparency creation on ESG performance for stakeholders, e.g., through the Sustainability Report or contribution to relevant ESG ratings.	• Compliance with best climate change mitigation practices as well with ESG standards. • A positive reputation may lead to better stakeholder relationships and thus may result in business opportunities (e.g., financing, tenders, etc.).

■ Short-term risk ■ Medium-term risk ■ Long-term risk

	Risk driver	Identified potential impact	Time horizon	Response plan	Opportunity
Physical risk	**Acute** increased severity of extreme weather events	• Severe weather, such as fires, hurricanes, high winds and seas, blizzards, and extreme temperatures may cause evacuation of personnel, curtailment of services and suspension of operations, inability to deliver materials to job sites following contract schedules, loss of or damage to equipment and facilities, supply chain disruption, or reduced productivity. • We may face the risk of missing out on the identification of climate risks (e.g., floodings, storms) due to changes in climate conditions that result in damage to property or impact on business continuity. • For example, SGRE had to adjust its profitability target in January 2020 following unforeseen costs in a low triple-digit million euro amount relating to five onshore projects (1.1 GW) in northern Europe, mainly Norway, caused by adverse road conditions and the unusually early onset of winter weather, which delayed project execution.	■ ■	• Continuous evaluation and monitoring of changes in physical climate parameters based on global studies, weather statistics, and trends based on international experience of insurance companies. • Performance of local risk assessments based on our EHS emergency management and development of protection concepts if needed. • Our insurance department provides natural hazard risk analysis for each new building project that supports the selection process for the respective site areas. The collected data and information allow us to identify geographical areas where we pay special attention to risks from changes of physical climate parameters.	• Constant improvement of our EHS Emergency Response Management System and the supply chain response. • Readiness for emergencies leading to increased resilience.
	Chronic longer-term shifts in climate patterns	• Long-term shifts in climate patterns (e.g., longer and warmer seasons, extreme cold, drought) may affect our and our customers' operations and may require changes to our product portfolio and project execution.	■	• Transparency on environmental stressors and impacts has been created to evaluate, e.g., water stress on locations. Starting fiscal year 2022, location screenings will gradually include all environmental and especially climate-related impacts to derive mitigation measures. Implementation of those measures will be supported by the integrated management systems and insurance risk reports.	• Constant improvement of our EHS Emergency Response Management System. • Development of new markets and business models.

■ Short-term risk ■ Medium-term risk ■ Long-term risk

Strategic response, strategy resilience, and climate scenario analysis

Climate-related risks and opportunities influence our strategy as well as financial planning, e.g., in terms of portfolio adaptation, allocation of investments and R&D, own operations, and the entire value chain to mitigate risks arising from the transition to a lower-carbon economy, such as CO_2 taxes, financing restrictions for greenhouse gas-emitting technologies, or a reduction in customer demand due to a change in consumer behavior. As such, climate-related risks and opportunities might have a significant impact on our products and services in the short-, mid-, and long-term. "Decarbonization" is one of the key market drivers for Siemens Energy, and we will continue to transform our portfolio as part of our company program "Energy of Tomorrow" where we want to be ready to be leading the energy transformation (see chapters Strategic focus and Decarbonization). As a consequence, we focus on building our company based on three key pillars: 1. Low- or zero-emission power generation, 2. Transport of electricity and storage and 3. Reducing our CO_2-footprint and energy consumption in industrial processes. In this context, Siemens Energy decided in November 2020 to no longer support the development of new, purely coal-fired power plants, for example. To grow along these pillars, we will continue to invest around €1 billion per year to maintain our innovative edge. In addition to renewable energy in SGRE, we have identified five fields of action for our GP reporting segment to form the basis of our transformation. Siemens Energy invests in targeted (mainly mid-term) R&D activities that support our Energy of Tomorrow fields of action to transform the future (see chapter Customers and innovation). Furthermore, in response to transition risks such as carbon pricing, Siemens Energy has developed a Climate Neutral Program and aims to be climate neutral by 2030 in its own operations. In addition, procurement prices might rise due to carbon pricing, which is why we engage with suppliers to reduce carbon emissions in our supply chain through our Carbon Reduction@Suppliers program (see chapter Decarbonization).

Scenario analysis allows to develop an understanding of how various combinations of climate-related risks, both transition and physical risks, may affect its businesses, strategies, and financial performance over time[1]. Siemens Energy uses climate-related scenarios and models applied, such as: IRENA, IEA Sustainable Development Scenario (SDS), IEA NPS, BNEF NEO, Nationally determined contributions (NDCs), IHS Autonomy, IHS Rivalry, IEA NZE.

At Siemens Energy, the use of climate scenarios has various facets and is used for different purposes to support the Paris Agreement in limiting global warming and to avoid climate change impacts.

1. Corporate strategy
For our global strategic assumptions, we use mainly IHS Autonomy but also BNEF NEO, IEA Net Zero by 2050, or IRENA. They are applied in all businesses, e.g., for assumptions on fossil energy additions, costs for renewables, policies, and regulations. The time horizon until 2040/2050 reflects long cycles of energy investments. The results are used to inform management about possible opportunities and threats if scenario compliance with climate goals materializes as well as for corporate strategy development, the planning process, the sales targets for our regional managers, and as a basis for decisions of our management on an annual basis. Scenarios highlight the need to balance fluctuating renewables and ensure stability of the electricity grid. One example of how the strategy is influenced are flexible peaker gas turbines complemented by energy storage solutions.

2. Business strategy
We use the scenarios to be able to compare, challenge, or complement our strategic mid-/long-term related planning processes. This also helps us identify new business opportunities such as investment in hydrogen. Here, we are using IHS Autonomy, as well as IEA SDS with the following rationale: IHS Autonomy, e.g., is used for the Generation business with customized data of IHS for market planning. Our regional strategy is based on NDCs. Data provided includes power generation, installed capacity, retirements, and gross capacity additions by technology and fuel type, but also further macroeconomic indicators. IEA SDS is used to incorporate a multitude of societal (e.g., push for decarbonization) and economic indicators (e.g., GDP, population growth) and power generation-specific predictions. Based on this market model, strategic business decisions (e.g., footprint, portfolio adaptations, marketing strategies) are taken, e.g., to predict the power generation market evolvement in the next 5-10 years. We use external scenarios especially for the installed capacity/power consumption/investments (CAPEX/OPEX). We compare how the markets react to extreme parameters and adjust our strategic outlook/KPI monitoring and/or our deduced strategic rationales accordingly. IHS autonomy and IEA SDS scenarios were considered, looking at indicators such as uptake of renewables, need for decentralization, increased demand for energy efficiency, or CO_2 prices for 2020-2040.

3. Global decarbonization strategy
Decarbonization will transform the whole energy value chain over the next few decades. We consider ourselves a leading partner for decarbonization for our customers and society by providing innovative technologies. This includes an understanding of the technological changes required for the next 30+ years as well as of the costs involved.

Metrics and targets

Decarbonization is a core part of Siemens Energy's strategy. Therefore, it is essential to set targets and measure the performance against those targets.

We will continue to transform our portfolio, since the greatest potential to reduce GHG emissions is within our products, solutions, and services. As part of the SBTi evaluation, we integrated the use of our sold products into our carbon footprint calculation for the first time. Sold products make up over 99% of our overall carbon footprint. The GP reporting segment is committed to a 28% reduction by 2030 from a 2019 base[2]. The SBTi confirms that our target for the use of our sold products is in line with the Paris Climate Agreement to limit global warming to well below 2°C. The

[1] Financial Stability Board (2017). Final Report, Recommendations of the Task Force on Climate-related Financial Disclosures.

[2] Baseline fiscal year 2019, 1.5 billion tons of CO_2e.

main reason for the increase in fiscal year 2021 is the order entry for a 2-gigawatt coal-fired power plant in Indonesia. The project-related commitment towards the customer was entered into before our decision to exit bidding for new coal fired power plants.

	Fiscal year	
Scope 3 downstream emissions (1,000 metric tons CO_2e)	**2021**	2020
Total	**1,369,163**	927,476
Intensity (t CO_2e/€ of order intake)	0.041	0.027

[1] Includes category "use of sold products" only (well-to-tank emissions are included, biogenic emissions have been excluded). SGRE emissions equal zero.

Becoming climate neutral in our own operations is an integral part of the decarbonization journey for Siemens Energy. The GP reporting segment aims to be climate neutral in its own operations by 2030. This includes the reduction of absolute Scope 1 and 2 GHG emissions by at least 46% by 2030 from the base year 2019 – in line with a 1.5°C trajectory, as validated by the SBTi. The strongest levers to achieve climate neutrality by 2030 are reducing energy consumption, using renewable electricity, reducing SF_6 emissions, and new mobility concepts. Furthermore, our target is to have 100% of Siemens Energy's global electricity consumption from renewable sources by 2023. In 2021, we reached 76% green electricity.

In 2020, the SBTi verified that SGRE's emission reduction targets (Scope 1 and 2) are aligned to meet the 1.5°C Paris Agreement goal. SGRE achieved carbon neutrality in its own operations in 2019, including offsetting unavoidable emissions. It expanded its ambitions by setting a net-zero emissions target covering Scope 1 to 3 by 2040.

	Fiscal year	
Scope 1 and Scope 2 emissions (1,000 metric tons CO_2e)	**2021**	2020
Scope 1	206	221
Scope 2[1]	67	71
Total	**273**	292
Intensity (t CO_2e/€ of revenue)	0.96×10^{-5}	1.06×10^{-5}

[1] We calculate our emissions resulting from electrical consumption based on carbon emission factors of our local sites according to the market-based approach.

With regard to decarbonization in the supply chain, the Carbon Reduction@Suppliers pilot project has enabled the GP reporting segment to calculate its carbon footprint for upstream activities, identify the top 100 suppliers with the highest carbon footprint, and then share their implemented and planned CO_2 reduction measures with us.

GP has set itself the target of reducing relative Scope 3 GHG emissions from purchased goods and services as well as transportation and distribution by 30% per procurement volume (€ spent) until 2030[3].

SGRE has set a target to engage 30% of its suppliers by spend, covering purchased goods and services as well as transportation and distribution, to have science-based targets by 2025 and 50% by 2040.

	Fiscal year	
Scope 3 upstream emissions (1,000 metric tons CO_2e)[1]	**2021**	2020
Total[2]	**4,761**	4,722
Intensity (kg CO_2e/€ of purchasing volume)	0.473	0.476

[1] Without SGRE.

[2] Categories "purchased goods and services" and "transportation and distribution" included.

For more information on our decarbonization efforts, energy consumption, and related GHG emissions, please refer to the chapter → **Decarbonization**.

[3] Baseline fiscal year 2018, from 0.522 kg/€* to 0.367 kg/€* (=kg CO_2e/€ spent).

UN Global Compact – Communication on Progress

Siemens Energy has been a participant in the United Nations Global Compact since 2020 and is committed to its ten principles. Index according to the ten principles of the Global Compact.

Principle	System	Measures	Achievements
Principle 1 Support of human rights **Principle 2** Exclusion of human rights abuses **Principle 3** Assurance of freedom of association **Principle 4** Elimination of all forms of forced labor **Principle 5** Abolition of child labor	Our Siemens Energy Business Conduct Guidelines (BCG) provide the ethical and legal framework within which we conduct our business activities. They contain basic principles and rules for our conduct internally and externally, for example on human rights or labor standards. The BCG are binding for all executives and employees worldwide. The Siemens Energy-wide compliance approach is based on the three levels of action "prevent, detect, respond", centering around management's responsibility, and comprising focus areas such as anti-corruption, anti-money laundering, antitrust, data privacy, export control, and human rights, which is also reflected in the BCG. Our actions go beyond compliance with applicable laws and regulations; they include i.a. our commitment to the International Bill of Human Rights, European Convention on Human Rights, International Labour Organization (ILO), 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, and the right to collective bargaining) and fundamental freedoms, United Nations Guiding Principles on Business and Human Rights (UNGPs), or OECD Guidelines for Multinational Enterprises. All of our suppliers and third-party intermediaries must sign our Code of Conduct (CoC) for Suppliers and Third-Party Intermediaries, which requires that these basic rights and principles are also upheld in our supply chain. The CoC particularly emphasizes respect for the basic human rights of employees, including fair remuneration, freedom of association, health and safety standards, and prohibition of discrimination, forced labor, and child labor.	All employees must agree to the BCG and are given mandatory web-based training sessions on the guidelines. Preventive measures include the Siemens Energy training program, communication channels such as our "Speak Up" reporting system at GP, the GP ombudsperson, the "Integrity Hotline" at SGRE, our compliance risk management system as well as the respective BCG. 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. Human rights due diligence is mandatory in the sales phase for projects that meet defined risk criteria, and the process conforms with the UN Guiding Principles on Business and Human Rights (UNGPs). The results are decisive for the project's decision-making process. Using our sustainability risk analysis system, we systematically identify potential risks in our supply chain, including i.a bribery, corruption, and human rights issues. The cornerstones are the identification of risks and categorization of commodities, the establishment of risk levels for individual countries, and the use of different strategic measures. Following this risk-based analysis, we have implemented Corporate Responsibility Self-Assessments (CRSA) for suppliers in identified high-risk countries, whereby they are screened with regard to all aspects of the CoC. Furthermore, we conduct quality audits including questions about sustainability that cover major aspects and requirements of the CoC. We see external sustainability audits (ESA) as the most effective means of reviewing our suppliers' sustainability performance and therefore increased our target for this fiscal year.	Siemens Energy has identified material human rights topics based on an internal materiality analysis from the following perspectives: "supply chain", "workplace", and "customer projects". They reflect our value chain and have been sorted according to relevance for our business. Awareness of human rights issues was raised in the reporting period in the newly founded Siemens Energy Sustainability Council. Furthermore, the Siemens Energy Executive Board as well as the Supervisory Board were briefed on relevant topics such as the implementation of the new German Supply Chain Due Diligence Act. In fiscal year 2021, 83% of our employees were trained on the BCG. Around 74% of employees are covered by collective bargaining agreements worldwide. In the year under review, we conducted 1,685 CRSA for suppliers. Compared to fiscal year 2020, the number increased by 23%. Furthermore, we conducted 424 quality audits with integrated sustainability questions. Compared to fiscal year 2020, the number increased by 27%. In addition, we conducted 157 ESA, which is an increase of 162% compared to fiscal year 2020. When surveying our approximately 1,800 relevant suppliers, we use the RMI's "Conflict Minerals Reporting Template" to obtain the necessary information on smelters producing tin, tantalum, tungsten, and gold (3TG). **Sustainable supply chain management, pages 51-54** **Human rights, pages 55-56**

Principle	System	Measures	Achievements
Principle 1 – 5 (cont.)	Furthermore, Siemens Energy is committed to preventing the use of minerals from conflict-affected and high-risk areas in its supply chain. To this end, we have a "Responsible Minerals Sourcing Policy" in place to provide a uniform, company-wide supply chain management standard. SGRE, in turn, has implemented its own compliance system and Business Conduct Guidelines that are in line with the GP approach as well as a CoC for suppliers and third-party intermediaries according to its BCG and its Global Corporate Social Responsibility Policy. **Compliance and integrity, pages 57-60** **Sustainable supply chain management, pages 51-54** **Human rights, pages 55-56**	To determine the use, sources, and origin of minerals from conflict-affected and high-risk areas 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. Based on risk sources identified by the EU, which cover armed conflicts, weak governance, and human right abuses, Siemens Energy also conducts a specific mineral risk assessment to identify other relevant minerals apart from 3TG. **Sustainable supply chain management, pages 51-54** **Human rights, pages 55-56**	
Principle 6 Elimination of discrimination Empowerment of women	At Siemens Energy, we strive to create a workplace environment that is open to everybody regardless of their ethnic origin, religion, world view, age, disability, gender, and sexual orientation throughout the whole organization. We strive to offer our employees equal treatment in a non-discriminatory work setting. To emphasize the relevance of Inclusion & Diversity for Siemens Energy, we have anchored the topic to the very top of the company with Maria Ferraro, the Chief Financial Officer of Siemens Energy, also holding the role of Chief Inclusion & Diversity Officer. Our Leadership Essentials and our values – caring, agile, respectful, and accountable – are key in ensuring our employees feel valued and respected. This commitment is also anchored in our BCG as well as our CoC, which emphasizes respect for basic human rights, including fair remuneration and prohibition of discrimination. SGRE's Diversity and Inclusion strategy is set over a two-year period and cascaded across the business. Strategic objectives are backed by specific action plans. **Human rights, pages 55-56** **Working at Siemens Energy, pages 62-69**	In fiscal year 2021, GP further developed its Human Resources strategy, called the People Agenda, including its programs and initiatives, which is designed to support the strategic business transformation. Furthermore, GP founded an Inclusion & Diversity Council to provide strategic direction and act as a representative. It also creates action plans and establishes processes to examine allegations of oppression and discrimination. It is chaired by the Inclusion and Diversity Officer. To measure progress, we have developed a global Inclusion & Diversity dashboard for the GP reporting segment. It includes performance indicators covering multivariant diversity such as the share of women, age groups, and minorities in management as well as employee survey results. To decrease bias in the hiring process, we established the use of a balanced interview panel. Catalysta, our GP-wide female talent program, is designed for women leaders driving the transformation. SGRE has, for example, developed an Equal Opportunities Policy that defines positive action to increase the representation of underrepresented groups in the workforce. SGRE's purpose of empowering people to lead the future and its Culture of Trust program are essential to its business model. They are core to the business strategy, organization, hiring and decision-making process, daily operations, and how the company and employees grow. **Working at Siemens Energy, pages 62-69**	GP aims to reach a share of 25% women in top leadership positions by 2025, and a share of 30% women in top leadership positions by 2030. SGRE aims to reach a share of 25% women in headcount and in leadership positions by 2025, and a share of 30% women in headcount and leadership positions by 2030. In the year under review, women accounted for 19.3% of the workforce. Women hired amounted 19.4% of all new hires. The share of female employees in top leadership positions at GP remained stable at 21%. The share of female employees in leadership positions at SGRE is 13% (September 30, 2020: 12%). On September 30, 2021, Siemens Energy employed about 1,400 people with a disability in Germany[1]. In several countries, it is not allowed to register people with disabilities due to legal requirements. **Working at Siemens Energy, pages 62-69**

[1] Without SGRE.

Principle	System	Measures	Achievements
Principle 7 Precautionary approach to environmental protection	At Siemens Energy, we aim to minimize our impact on the environment by reducing emissions, waste, and freshwater withdrawal as well as protecting biodiversity. In particular, Siemens Energy recognizes that urgent action on climate change is required. Therefore, decarbonization is an essential part of our strategy. Siemens Energy has EHS management systems in place to manage its environmental performance and comply with applicable laws, regulations, and stakeholder expectations. The environmental management systems are founded on the principles and elements of the international ISO 14001 and 50001 standards or energy audits as per national legislation. Our EHS Policy 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. In the GP reporting segment, it is further supported by the Zero Harm Framework, which aims to embed responsible principles and behavior at all levels of the organization. SGRE has implemented "Safety is My Choice", the "10 Life-Saving Rules" and the "Lead Safe" program. Additionally, SGRE has defined its environmental targets as part of the Sustainability Strategy Vision 2040. **Conservation of resources, pages 43-46** **Decarbonization, pages 28-34**	The main objectives focused on improving environmental performance in the areas of energy, air, water, and waste, including increased energy efficiency by using energy management systems at sites, adapting the purchasing strategy toward green electricity by 2023, controlling air-pollutant emissions by replacing Ozone Depleting Substances and reducing solvents, implementation of local water strategies and risk analysis, zero waste to landfill by consistently preventing landfill waste and reducing waste materials. As part of our climate action, we are consistently pursuing climate neutrality in our own operations and intend to be climate neutral by 2030 and to compensate for remaining emissions from then on. The main levers to achieve emission reductions are the reduction in energy consumption, using renewable electricity, reducing SF6 emissions, and new mobility concepts. Furthermore, CO_2 pricing is an important steering mechanism for achieving climate neutrality. We believe binding CO_2 budgets for all sectors and regions as well as clear CO_2 price signals can guide us toward the 1.5°C target. At the same time, we are dedicated to delivering our customers innovative solutions that drive their energy transformation and support the decarbonization of the energy sector. We will continue to transform our portfolio of products, solutions, and services, and focus on building our company based on three key pillars: low- or zero-emission power generation, transport of energy and storage, and reducing our GHG footprint and energy consumption in industrial processes. In April 2021, the Science Based Targets initiative (SBTi) validated the absolute GHG reduction targets for our GP reporting segment, not only for our own operations (Scope 1+2) but also for our sold products (a category of Scope 3). It confirms that our targets are in line with the Paris Climate Agreement to limit global warming. To advance climate neutrality across the entire value chain, we are also working on our Carbon Reduction@Suppliers pilot project, which enabled the GP reporting segment to calculate its 2020 CO_2 footprint for up-stream activities, identify our top 100 suppliers with the highest footprint, and then share their implemented and planned CO_2 reduction measures. In 2020, the SBTi verified that SGRE's emission reduction targets (Scope 1+2) are aligned to meet the 1.5°C Paris Agreement goal. SGRE achieved climate neutrality in its own operations in 2019, including offsetting unavoidable emissions. It expanded its ambitions by setting a net-zero emissions target covering Scope 1 to 3 by 2040. SGRE has defined its environmental targets as part of the Sustainability Strategy Vision 2040. **Product stewardship, pages 47-49** **Conservation of resources, pages 43-46** **Decarbonization, pages 28-34**	As of September 30, 2021, 75% of all GP employees worldwide ,as well as 80% of all SGRE employees, work at sites covered by ISO 45001 together with ISO 9001 and ISO 14001. In fiscal year 2021, we managed to reduce our Scope 1 and 2 emissions by around 7% to 273,000 metric tons of CO_2e. Included in this is a reduction of SF6 by 37%. As part of our SBTi commitment, we aim for a reduction of absolute Scope 1 and 2 GHG emissions by at least 46% by 2030 from the base year 2019. Furthermore, we have set ourselves the target to reduce our SF6-related emissions by 60% by 2030 compared to a 2019 baseline. SGRE achieved climate neutrality in its own operations in 2019, including offsetting unavoidable emissions. Siemens Energy's total energy consumption during the reporting period was 6.3 million gigajoules. Compared to fiscal year 2020, this is an increase of 9.1%. Our share of green electricity was 76%, and we aim to achieve 100% by 2023. The Scope 3 downstream emissions (category "use of sold products") for fiscal year 2021 are 1.37 billion tons CO_2e. Compared to fiscal year 2020, this is an increase of about 48% in total emissions. The GP reporting segment is committed to a 28% reduction by 2030 from a 2019 base. At the GP reporting segment, the Scope 3 upstream emissions (categories "purchased goods and services" as well as "transportation and distribution") for fiscal year 2021 was 4.76 million metric tons of CO_2e, resulting in an intensity of 0.473 kg CO_2e per € of purchasing volume, which is 0.8% higher in total emissions but 0.7% lower in intensity compared to 2020. Within GP, we have set the target of reducing our Scope 3 upstream intensity by 30% until 2030 compared to a 2018 baseline. SGRE has set a target to engage 30% of its suppliers by spend, covering purchased goods and services as well as transportation and distribution, to have science-based targets by 2025 and 50% by 2040. The absolute waste amounted to 145,000 metric tons. The waste reduction in fiscal year 2021 was 0.7% to the previous year. The share of recycling was 82%. At Siemens Energy, the volume of water abstracted over the reporting period equates to 4.10 million cubic meters, which is an increase of 27.2%. Wastewater from our facilities and manufacturing processes amounts to 4.06 million cubic meters, which is an increase of 30.6%. **Conservation of resources, pages 43-46** **Decarbonization, pages 28-34**

Principle	System	Measures	Achievements
Principle 8 Specific initiatives to promote environmental protection	Raising our employees' awareness on environmental and climate protection is an element of both our environmental strategy and our social commitment. With internal communication measures, we help create a greater sense of responsibility for ecological issues. Diverse countries around the world engage in societal engagement initiatives on building awareness for environmental topics within our global framework on societal engagement. For the GP reporting segment, our Zero Harm Framework provides the foundation upon which we aim to meet the growing number of environmental protection requirements of our customers and strengthen our position as a sustainable company. Through the various building blocks, the framework provides content for local programs and initiatives. **Product stewardship, pages 47-49** **Conservation of resources, pages 43-46** **Societal engagement, pages 71-74**	To enable our Sales, Product Management, and R&D departments to calculate product- and project-specific CO_2 footprints under varying scenarios, our new EcoTransparency app was launched in September 2021. The app is based on existing Life Cycle Assessment models and provides customers and stakeholders with additional information regarding specific footprints, thus enabling them to meet reduction targets for all environmental impact categories. In fiscal year 2021, GP rolled out its societal engagement approach. We have defined a framework that includes three focus areas that reflect our global commitment but also allow local autonomy: • Driving the Energy Transition: Support clean energy R&D • Access to Education: Promote STEM (science, technology, engineering, and mathematics) subjects and climate education (especially for underrepresented demographics) • Sustaining Communities: Disaster recovery (especially related to electricity supply) SGRE has defined its environmental targets as part of the Sustainability Strategy Vision 2040. **Product stewardship, pages 47-49** **Conservation of resources, pages 43-46** **Societal engagement, pages 71-74**	Local zero waste initiatives have been identified by our employees and are supported by Siemens Energy (e.g., reuse and recycling of stone in Lincolnshire, UK; material waste reduction in Brazil; recycling of 80-90% of the facility's waste in Rural Hall, North Carolina, US; composting of the cafeteria's food preparation scraps in Orlando). In Brazil, for example, Siemens Energy is working together with partners to actively advocate energy transition, decarbonization, and human rights. Together, we have worked to advance Brazilian commitments on climate change, including the introduction of a compulsory national carbon market, decarbonization, biodiversity, and sustainability in the Amazon region. SGRE, for example, launched 'DecomBlades' in 2021, which is a three-year project testing the commercial viability of recycling wind turbine blades using sustainable solutions. The consortium behind the project, of which SGRE is a part, has now been awarded funding from the Innovation Fund Denmark. The project focuses on three specific processes: the shredding of wind turbine blades so that the material can be reused in different products and processes; the use of shredded blade material in cement production; and, finally, a method to separate the composite material under high temperatures, also known as pyrolysis. **Conservation of resources, pages 43-46**
Principle 9 Development and diffusion of environmentally friendly technologies	Public energy infrastructure is one of the most important prerequisites for the sustainable development of societies. The greatest potential for Siemens Energy is to reduce GHG emissions is in products, solutions, and services. Our mission is to support our customers in transitioning to a more sustainable world, by providing technologies for a sustainable, affordable, and reliable energy supply, based on our innovative technologies. To underscore our strategic focus of providing innovative technology for our customers' energy transition, we have defined five fields of action to decarbonize our portfolio. As a provider of clean and affordable energy, SGRE's strategy has focused on opportunities to develop new onshore and offshore wind turbines with bigger rotors able to deliver higher annual energy levels at a lower cost. **Customers and innovation, pages 22-26** **Decarbonization, pages 28-34**	We will continue to transform our portfolio of products, solutions, and services, and focus on building our company based on three key pillars: low- or zero-emission power generation, transport of energy and storage, and reducing our GHG footprint and energy consumption in industrial processes. Through our company program "Energy of Tomorrow" (EoT), we are shaping our existing business by developing our portfolio with a focus on sustainability and service, by allocating the R&D budget to achieve breakthrough innovations, and by creating an ecosystem of partners. We are investing in targeted R&D activities that support our five fields of action to transform the future, supported by nine technology fields. **Strategic focus, pages 9-15** **Customers and innovation, pages 22-26**	In fiscal year 2021, Siemens Energy invested €1.2 billion in R&D. Our partnership ecosystem allows our businesses to cooperate in specific focus areas. For example, our Transmission Division has established various partnerships with German universities around the topics of SF6 alternatives or sustainable high-voltage technologies. Our SF6-free Blue Portfolio is the only switching technology on the market that has zero global warming potential. Furthermore, Siemens Energy is focused on identifying, launching, and scaling ventures with future potential. Siemens Energy Ventures was founded in 2020 to uncover and develop tech start-ups with transformative founding teams, technologies, and business models that can address the energy demands of tomorrow. In 2021, we also signed a partnership agreement with the International Renewable Energy Agency aimed at advancing the global energy transition. **Customers and innovation, pages 22-26** **Decarbonization, pages 28-34**

Principle	System	Measures	Achievements
Principle 10 Measures against corruption	We pursue a zero-tolerance approach toward corruption, violations of the principles of fair competition, and other breaches of the law, which requires a holistic compliance system consisting of measures to ensure that business is always carried out in full accordance with the law as well as our internal rules. When such cases do occur, we take immediate action. Compliance is the basis for all our decisions and activities. The Siemens Energy-wide compliance approach is based on the three levels of action "prevent, detect, respond", centering around management's responsibility, and comprising focus areas such as anti-corruption, anti-money laundering, antitrust, data privacy, export control, and human rights, which is also reflected in the BCG. The BCG are binding for all employees worldwide. We support international organizations that strengthen responsible business practices, including the United Nations Convention against Corruption and the Anti-Bribery Convention of the OECD. **Compliance and integrity, pages 57-60**	The Siemens Energy compliance system combines strong 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 to ensure that all business decisions and activities conform to the relevant legal requirements and follow our own values and company policies. We expect the same commitment from all our employees and conduct regular surveys on integrity to obtain direct feedback from them. Siemens Energy continuously maintains and develops its compliance system. Our global compliance training program requires all managers and employees in positions with a specific risk profile to complete compliance training. **Compliance and integrity, pages 57-60**	On September 30, 2021, 83% of our employees were trained on the BCG, 95%[2] on antitrust and 85% on export control. In fiscal year 2021, we achieved a further development of our stand-alone compliance system by implementing optimized internal compliance processes accompanied by a stronger risk focus as well as an enhancement of compliance processes by further modernizing the compliance tool landscape. Additionally, we developed the Compliance Awareness Campaign to strengthen internal compliance communication and revised the compliance training program to adapt it to the specific requirements. **Compliance and integrity, pages 57-60**

[2] Without SGRE.

Independent auditor’s limited assurance report

TO SIEMENS ENERGY AG, MUNICH

We have performed a limited assurance engagement on the Sustainability Report of Siemens Energy AG for the reporting period from October 1, 2020 to September 30, 2021 (hereafter the report).

Our engagement exclusively relates to the English PDF-version of the report. Our engagement did not include the information in the Annex to the report, interviews presented in the report as well as any prospective disclosures and links to other web pages. The report is published as a PDF-version at ↗ www.siemens-energy.com/sustainability-report-2021.

Management’s responsibility
The legal representatives of Siemens Energy AG are responsible for the preparation of the report in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (hereafter GRI criteria) and for the selection of the information to be assessed.

This responsibility includes selecting and applying appropriate methods to prepare the report as well as making assumptions and estimates related to individual sustainability disclosures that are reasonable in the circumstances. Furthermore, the legal representatives are responsible for such internal controls that they have considered necessary to enable the preparation of a report that is free from - intended or unintended - material misstatement.

Auditor's declaration relating to independence and quality control
We are independent from the Company in accordance with the provisions under German commercial law and professional requirements, and we have fulfilled our other professional responsibilities in accordance with these requirements.

Our audit firm applies the national statutory regulations and professional pronouncements for quality control, in particular the by-laws regulating the rights and duties of Wirtschaftsprüfer and vereidigte Buchprüfer in the exercise of their profession [Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer] as well as the IDW (Institut der Wirtschaftsprüfer in Deutschland e.V.) Standard on Quality Control 1: Requirements for Quality Control in audit firms [IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitätssicherung in der Wirtschaftsprüferpraxis (IDW QS 1)].

Auditor's responsibility
Our responsibility is to express a limited assurance conclusion on the report based on the assurance engagement we have performed.

We conducted our assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information", issued by the International Auditing and Assurance Standards Board (IAASB). This Standard requires that we plan and perform the assurance engagement to obtain limited assurance about whether the Sustainability Report has been prepared, in all material respects, in accordance with the GRI criteria. In a limited assurance engagement, the assurance procedures are smaller in scope than for a reasonable assurance engagement, and therefore a substantially lower level of assurance is obtained. The assurance procedures selected depend on the auditor's professional judgment.

Within the scope of our assurance engagement, which has been conducted between June 2021 and January 2022, we performed, among other things, the following assurance and other procedures:

- Inquiries of employees and inspection of documents concerning the sustainability strategy, sustainability principles, and sustainability management including the stakeholder dialog of Siemens Energy AG
- Inquiries of employees responsible for data capture and consolidation as well as the preparation of the Sustainability Report to evaluate the sustainability reporting system, the data capture and compilation methods as well as internal controls to the extent relevant for the assurance of the Sustainability Report

- Identification of likely risks of material misstatement in the report
- Inspection of relevant documentation of the systems and processes for compiling, aggregating, and validating data in the reporting period and testing such documentation on a sample basis
- Analytical measures at Group level and at the level of the segments "Gas and Power" and "Siemens Gamesa Renewable Energy" regarding the quality of the reported data
- Inquiries and inspection of documents on a sample basis relating to the collection and reporting of sustainability data at Group level, at the level of the segments, and at selected sites
- Inquiries of employees from the central Sustainability department and other relevant departments on material qualitative statements in the report as well as the inspection of selected underlying documents
- Evaluation of the presentation of disclosures in the Sustainability Report

Assurance conclusion
Based on our assurance procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that the Sustainability Report of Siemens Energy AG for the period from October 1, 2020 to September 30, 2021 has not been prepared, in all material respects, in accordance with the GRI criteria.

Intended use of the assurance report
We issue this report on the basis of the engagement agreed with Siemens Energy AG. The assurance engagement has been performed for the purposes of the Company, and the report is solely intended to inform the Company as to the results of the assurance engagement and must not be used for purposes other than those intended. The report is not intended to provide third parties with support in making (financial) decisions.

Engagement terms and liability
The "General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften [German Public Auditors and Public Audit Firms]" dated January 1, 2017 are applicable to this engagement and also govern our relations with third parties in the context of this engagement (www.de.ey.com/general-engagement-terms). In addition, please refer to the liability provisions contained there in no. 9 and to the exclusion of liability toward third parties. We assume no responsibility, liability or other obligations towards third parties unless we have concluded a written agreement to the contrary with the respective third party or liability cannot effectively be precluded.

We make express reference to the fact that we do not update the assurance report to reflect events or circumstances arising after it was issued unless required to do so by law. It is the sole responsibility of anyone taking note of the result of our assurance engagement summarized in this assurance report to decide whether and in what way this result is useful or suitable for their purposes and to supplement, verify or update it by means of their own review procedures.

Munich, January 24, 2022

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Wirtschaftsprüfungsgesellschaft

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