# Sustainability Report

Introduction	143
General Disclosures	155
Environment	177
Social	202
Governance	214
Sector-Specific Disclosures	220
Appendix	223

## Introduction

## Alpiq's Sustainability Focus

## Foreword

In 2024, Alpiq highlighted the need for a unified approach to climate change, recognising that geopolitical tensions and economic fluctuations had shifted global focus and resources away from sustainability. Even strong advocates recognise the need to balance sustainability ambition with practical regulation.

While the EU Omnibus may introduce changes to the scope of the mandatory Corporate Sustainability Reporting Directive (CSRD), Alpiq remains proactive in adapting to current regulations. As part of the preparation, the Sustainability Report 2024 already has the structure of CSRD reporting and includes the first CSRD disclosures.

A key focus in 2024 was the Double Materiality Assessment (DMA), a cornerstone of CSRD. Following an indepth analysis, Alpiq applied an average rating on "Impact, risk and opportunity (IRO)" level and a threshold of 4.2, (on a scale from 1 to 5) identifying four material topics:

- El Climate Change Mitigation
- E3 Water and Marine Resources
- E4 Direct Impact Drivers of Biodiversity Loss
- S1 Working Conditions

The Sustainability Report also covers the necessary disclosures as per Swiss law (OR 964 Art a-c/j-l and associated ordinances) such as:

- Pollution
- Equal treatment (Diversity metrics)
- Business Conduct (Corporate Culture and Corruption & Bribery)
- Supply Chain Due Diligence
- Security of Supply

Finally, the following sections are voluntarily disclosed due to their significant importance to Alpiq:

- Training and skills development metrics
- Business conduct steering

Beyond the DMA, Alpiq also achieved key sustainability milestones:

- TCFD Risk Assessment: A physical risk assessment identified river flooding and landslides as the most critical hazards across Alpiq's asset locations. Transition risks linked to a lower-carbon economy were also evaluated and integrated into the company's financial model and risk management system, reinforcing resilience against climate risks.
- Supply Chain Due Diligence: In 2024, Alpiq reviewed its Code of Conduct for Suppliers and the associated risk assessment, which further strengthened its supply chain risk management.
- New Sustainability Organization: To enhance coordination and implementation, Alpiq established a sustainability matrix organization, with a Sustainability Committee serving as the central oversight body.

In addition to navigating regulatory complexities in 2024, Alpiq strengthened security of supply while also reducing the environmental impact of its operations, particularly in thermal assets. Alpiq remains committed to investing in employee growth and development while actively supporting society through various initiatives and financial support.

#### 26 February 2025

Johannes Teyssen Chairman of the Board of Directors Antje Kanngiesser CEO Alpiq Group

## CSRD journey

Alpiq's Sustainability Report 2023 was prepared in accordance with the Global Reporting Initiative (GRI). However, as compliance with the Corporate Sustainability Reporting Directive (CSRD) becomes mandatory for Alpiq as from the financial year 2025, a transition is currently under way to prepare for the creation of a fully CSRD-compliant Sustainability Report 2025 (to be issued in 2026). Alpiq is therefore already making a voluntary effort to follow the European Sustainability Reporting Standards (ESRS) structure in its Sustainability Report 2024, but by no means claims to be fully CSRD-compliant. As part of the ongoing transition, Alpiq is developing a series of metrics, targets, policies and actions, many of which are currently largely missing and therefore not yet included in the Sustainability Report 2024, but which will be disclosed in the CSRD-compliant Sustainability Report 2025. The ESRS Index in the <u>Appendix</u> gives an overview of the CSRD requirements that are already addressed in the Sustainability Report 2024.

## Reporting boundaries

On its journey towards a CSRD-compliant Sustainability Report, Alpiq needs to adapt its reporting boundaries. The following section explains how these reporting boundaries are changing.

CSRD requires companies to report on the basis of operational control, therefore Alpiq has introduced an operational control logic to its Sustainability Report 2024. According to this logic, the environmental KPIs for assets over which Alpiq has operational control (fully consolidated assets) need to be calculated as if Alpiq owned 100% of the respective assets (in line with the financial consolidation process under IFRS and Alpiq's Financial Statement), rather than based on Alpiq's exact ownership share (as was the case in 2023). The emissions figures calculated under the new methodology therefore differ from the figures calculated based on the exact ownership share. Figures calculated using both methodologies are displayed in this year's report to ensure a transparent transition from the old to the new methodology.

In Alpiq's case, operational control is generally exercised over entities in which Alpiq holds a majority stake, with two exceptions:

- 1. Grande Dixence hydropower plant: With an ownership share of 60%, Alpiq is the majority shareholder of the legal entity that holds the Grande Dixence hydropower plant. However, Alpiq does not have operational control over the Grande Dixence hydropower plant, therefore this asset is not fully consolidated.
- 2. Emosson hydropower plant: With an ownership share of 50%, Alpiq is not the majority shareholder of the legal entity that holds the Emosson hydropower plant. However, Alpiq does hold 100% of the energy rights and operational control of the Emosson hydropower plant, therefore this asset is fully consolidated.

Due to the complex partner power plant structure in Switzerland and Alpiq's many minority shareholdings in partner plants, as well as the special case of Grande Dixence, which is not fully consolidated, the strict operational control approach does not truly reflect Alpiq's energy production portfolio and thus creates an incomplete picture of the company's business. Therefore, Alpiq has also voluntarily decided to provide information on environmental KPIs for assets not under its operational control (minority shareholdings and Grande Dixence), as from the Sustainability Report 2025, even though this is not required by CSRD. This is also in line with Alpiq's Financial Statement, which reports in accordance with IFRS.

A list of all Group companies (fully consolidated assets) and minority shareholdings that are reported as investments in partner power plants (non-consolidated assets) can be found in the <u>Notes to the Consolidated</u> <u>Financial Statements (5.4 Group companies and investments) of the Financial Report</u>.

## **RES** portfolio

Alpiq has a diverse national and international power generation portfolio from renewable resources, which comprise hydropower, wind and photovoltaics. Alpiq's services in many European countries also support large and industrial customers in selling electricity from renewable energy source (RES) assets or in their efforts to reduce the environmental footprint of their own business activities.

The following table provides an overview of Alpiq's RES portfolio:

	Installed Capacity (on 31 Dec 2024) [MW]	Production 2024 [GWh]
Hydropower	3,327	6,774
Switzerland	3,027	5,692
France	300	1,082
Small-scale hydropower, wind, photovoltaics	255	427
Switzerland	18	70
France <sup>1)</sup>	13	38
Italy	224	319
Sweden <sup>2)</sup>	22	52

1 Long-term contract (no energy share - not included in GHG calculation)

2 Alpiq has a minority interest of 30% in Tormoseröd power plant, but no energy rights. This plant is therefore not consolidated.

## Flexible or RES integration assets

Alpiq is fully supportive of the energy transition and actively contributes to the transition in three ways, by: (1) generating low-carbon electricity with a focus on hydropower and nuclear power, (2) enabling the integration of intermittent renewable energy (wind, photovoltaics) by providing flexibility to the electricity system through flexible generation and energy storage, and (3) enabling the integration of third-party renewable energy and flexible generation assets by providing risk and portfolio management solutions through its origination activities.

However, without flexibility, the energy transition is not possible. This issue is becoming apparent in most markets in which Alpiq operates, where the successful expansion of intermittent renewable energy capacity is increasingly causing system challenges and the integration of additional variable renewable energy will be restricted, if there is no increase in flexibility.

Flexibility assets therefore have a significant positive impact on the speed of decarbonisation of the overall energy system and support energy transition objectives. Therefore, in addition to Alpiq's flexible hydro asset base, Alpiq is strongly expanding its activities in the space of storage assets such as battery energy storage systems (BESS) and hydrogen, the flexibility of which is complementary to the increasing production of intermittently producing RES assets.

Furthermore, the need for flexibility is the reason why Alpiq's thermal assets play an important role. The combined-cycle gas turbine (CCGT) and open-cycle gas turbine (OCGT) power plants, which represent one type of thermal asset in Alpiq's portfolio, offer a high degree of flexibility and are ideally suited to balance fluctuations in the electricity grid. They thus play an important role in maintaining system stability and thereby contribute to the energy transition while ensuring security of supply.

CCGT power plants are among the most efficient conventional power plants. Alpiq has shareholdings of up to 100% in CCGT power plants in Hungary, Italy and Spain. In addition to producing electricity, these plants fulfil other requirements such as supplying district heating or black-start capability. Alpiq's San Severo plant in Italy has been upgraded to enable a 25% intake of hydrogen in the future, but hydrogen input is not currently an option due to the restricted supply of hydrogen and the associated high prices.

OCGT power plants, such as Alpiq's Vercelli plant in Italy, are less efficient than CCGT power plants in terms of GHG emissions but can be ramped up much faster and enable several starts per day, which makes them ideal in providing flexibility.

Nuclear power plants, the second type of thermal asset in Alpiq's portfolio, also make an important contribution to security of supply. They complement Alpiq's portfolio with a share of 40% in Kernkraftwerk Gösgen-Däniken AG (KKG), 27.4% in Kernkraftwerk Leibstadt AG (KKL), and 33% in Centrales Nucléaires en Participation SA (CNP). To actively support the energy transition and continue making an important contribution to security of supply, Alpiq is preparing to expand the operational lifetime of its nuclear power plants, while placing the highest priority on guaranteeing safety. Comprehensive sustainability information for KKG and KKL can be found in their respective Sustainability Reports, which are expected to be published in summer 2025.

## Trading and Origination business

In addition to the energy production and trading activities associated with the above-described assets, which create value in Alpiq's Asset business, the company's Trading and Origination businesses also contribute significantly to security of supply by providing flexibility. In addition, these businesses play an important role in easing financial pressure on owners and operators of power plants and maximising the value of their operations.

Besides the asset-trading activities that are part of Alpiq's Asset business, Alpiq's Trading business comprises proprietary power trading and gas trading. The Trading business increases Alpiq's profit by leveraging the balance sheet, taking market risks and providing market access. The CO<sub>2</sub> emissions associated with physical deliveries related to the Trading business are included in the Scope 3 emissions disclosed under <u>Climate</u> <u>Change [ESRS E1]</u>.

Alpiq's Origination business focuses on risk management solutions for third-party assets, covering shortterm flexibility management, risk management services for industrial customers, sales activities to end consumers and power purchase agreements (PPAs). The PPA business, in particular, allows investors and other asset owners to minimise risks and sustain their investments in renewable assets as well as enabling industrial customers to decarbonise their value chain. Alpiq's Origination business thus contributes to enabling climate-friendly investments.

## Sustainable business statements

The following section presents some specific examples of Alpiq's actions and achievements in the area of sustainability in order to illustrate its commitment to sustainability and back up its sustainable business statements.

#### "Alpiq wants to make a significant contribution to security of supply by providing storage capacity and flexible power production."

Example 1 (see also Key Moments in the Annual Review):

## Alpiq continues to invest in flexibility and acquires a 100 MW battery project in France (25 November 2024)

Alpiq is strengthening its position as a provider of flexibility to the energy system with the acquisition of Harmony Energy France's battery project in the department of Oise, north of Paris. The 100 MW battery energy storage system (BESS), with a capacity of 200 MWh, is scheduled to be commissioned in autumn 2026. This investment is in line with Alpiq's strategy of focusing on flexibility and its commitment to integrating renewable energy and strengthening security of supply. Further acquisitions of battery storage are envisaged in Switzerland, Germany, France and the Nordics.

<u>Alpiq continues to invest in flexibility and acquires a 100 MW battery project in</u> <u>France | Alpiq</u>

Example 2:

#### Vercelli 2.0 - more flexible, efficient and climate-friendly (24 June 2024)

Over recent months, Alpiq has completely overhauled the Vercelli gas-fired power plant in the northern Italian region of Piedmont, making it fit for the energy future. Thanks to its flexibility, the plant will provide valuable services for electrical system adequacy and for security of supply in Italy.

Vercelli 2.0 - more flexible, efficient and climate-friendly | Alpiq

#### Example 3 (see also Key Moments in the Annual Review):

## Alpiq acquires 30 MW battery project in Finland and strengthens its position as a flexibility supplier (19 June 2024)

Alpiq has expanded its flexibility portfolio by acquiring one of the largest battery energy storage systems (BESS) in Finland. The 30 MW large-scale battery from Merus Power, a leading Finnish technology company, will have one of the highest capacities in Finland and will become operational in Valkeakoski in mid-2025. The battery energy storage system is primarily used to stabilise the grid. It therefore contributes directly to security of supply and enables additional renewable energy projects. This strategic investment strengthens Alpiq's commitment to paving the way towards the energy transition.

<u>Alpiq acquires 30 MW battery project in Finland and strengthens its position as a</u> <u>flexibility supplier | Alpiq</u>





# "Our goal is to make energy available whenever needed, in various forms, in sufficient quantity at an affordable price."

Example 1 (see also Key Moments in the Annual Review):

#### Alpiq acquires 10% of Forces Motrices D'Orsières SA (13 September 2024)

In connection with the renewal of the hydropower concessions of Forces Motrices d'Orsières SA, the primary assemblies of the municipalities of Orsières and Liddes have authorised the sale of 10% of the company to Alpiq from 19 January 2027, for a duration of 80 years. Alpiq submitted a convincing tender and this acquisition will enable it to expand its portfolio of hydropower plants. Between the Orsières and Niollet power plants, the facility produces approximately 110 GWh per year, which is enough to supply 24,500 households with electricity.

#### Alpiq acquires 10% of Forces Motrices d'Orsières SA | Alpiq

#### Example 2:

#### The Hongrin dams in the solar age (21 August 2024)

The Forces Motrices Hongrin-Léman (FMHL) have commissioned a new photovoltaic installation. Located on the crest of the Hongrin dams, the 720 solar modules will supply around 70 households with electricity, mainly in winter, when Switzerland's energy needs are at their highest. This is part of the FMHL's ongoing efforts to improve energy efficiency.

The Hongrin dams in the solar age | Alpiq

#### "By pushing the energy transition and minimising the impact on the planet, we are shaping the future world of energy."

Example 1:

## Tormoseröd wind farm: Another step forward for renewables in Sweden (17 September 2024)

Alpiq has held an official inauguration to announce the successful completion of the Tormoseröd wind farm, the state-of-the-art renewable energy project in south-west Sweden. The wind farm, which Alpiq co-owns with Fu-Gen, marks a significant milestone in Sweden's green energy transition and reinforces the partnership's commitment to sustainable energy solutions across Europe.

Wind Park Tormoseröd: Another step forward for renewables in Sweden | Alpiq

#### Example 2:

## Norvento Enerxía strengthens its alliance with Alpiq for the representation of six of its wind farms in Galicia (9 January 2024)

Madrid – Norvento Enerxía and Alpiq have reached a new agreement for the provision of market access services in 2024.

Norvento Enerxía strengthens its alliance with Alpiq for the representation of six of its wind farms in Galicia | Alpiq









# "We are committed to transforming into a sustainable business."

Example 1:

#### Commissioning of a new low-head turbine (30 September 2024)

Forces Motrices de Martigny-Bourg (FMMB) officially commissioned Switzerland's first very low head (VLH) turbine. Installed in the tailrace of the Martigny-Bourg run-of-river power plant, the new turbine will generate some 850,000 kWh per year, equivalent to the average annual consumption of almost 200 households. It will therefore optimise the hydropower available on the site, with no additional impact on the environment.

#### Commissioning of a new low-head turbine | Alpiq

Example 2:

#### Reuse of replaced laptops and desktop computers (3 July 2024)

Alpiq replaced all PCs (laptops and desktop computers) in its locations in Switzerland, the Czech Republic, Italy and the Nordics. The replaced devices were thoroughly checked and securely wiped of all data and then offered for purchase to Alpiq employees in the locations at a discounted price. Devices not sold to employees were reintroduced into the lifecycle for sustainable use, contributing to the efficient use of valuable resources and a better climate.

Example 3 (see also Key Moments in the Annual Review):

## Alpiq acquires a majority stake in the Finnish hydrogen pioneer P2X Solutions (12 April 2024)

Alpiq has emphasised its commitment to climate protection and strengthening the security of supply by acquiring a majority stake (54.9%) in the Finnish hydrogen pioneer P2X Solutions, which is headquartered in Espoo. The partnership-based participating interest is effective immediately, although P2X Solutions will remain an independent company. This acquisition shows that Alpiq is strengthening its position in the Nordic countries and becoming one of the leading companies in Northern Europe in the production of green hydrogen.

<u>Alpiq acquires a majority stake in the Finnish hydrogen pioneer P2X Solutions |</u> <u>Alpiq</u>

#### "In our projects, we carefully weigh up the protection of nature and the use of natural resources."

Example 1 (see also Key Moments in the Annual Review):

## #prixalpiq 2024 – The circular economy at the heart of water management (31 October 2024)

For the fourth year running, the #prixalpiq has recognised two projects that promote sustainable water management with the support of municipalities in the Swiss canton of Valais. The municipality of Grimisuat has been chosen as the 2024 winner, with its project entitled "Grimisuat irrigation network – sustainable water storage and management". The jury gave its "Coup de Cœur" to the











association for water management and development planning in the Aletsch region, for its project entitled "Sustainable water supply planning in the Aletsch region". To enhance the awards ceremony and facilitate debate on subjects beyond water management, a panel discussion on the topic of "The circular economy: utopia or reality?" took place at the University of Applied Sciences and Arts (HES-SO) Valais-Wallis in Sion.

<u>#prixalpiq 2024 – The circular economy at the heart of water management | Alpiq</u>

Example 2:

## Alpiq to help prevent forest fires in Sicily by installing special cameras on wind turbines (21 October 2024)

The summer fires that rage in Sicily destroy nature and often cost lives. As part of a pilot project with Sicilian authorities, Alpiq Energia Italia will install special firedetecting cameras on selected turbines with the repowering at its Monte Mele wind farm. This serves as an early warning system and helps identify the source of the fires.

<u>Alpiq to help prevent forest fires in Sicily by installing special cameras on wind</u> <u>turbines | Alpiq</u>

Example 3:

## Raising awareness of invasive plants among the younger generation (27 June 2024)

On 17 June 2024, primary school pupils enthusiastically uprooted invasive plants that threatened the stability of the banks along the Trient watercourse in the municipality of Salvan (canton of Valais). Xavière Schröder, Environmental Project Manager at Alpiq, organised this action to raise awareness among the younger generation of the importance of preserving local biodiversity and playing an active part in protecting the environment.

Raising awareness of invasive plants among the younger generation | Alpig

#### "Alpiq offsets the impact of its projects on the environment with compensation measures."

Example 1:

#### The Trient: balancing flood protection and biodiversity (14 November 2024)

Nant de Drance SA is implementing 14 environmental compensation measures in connection with the construction of its pumped storage power plant. These include ecological restoration and flood protection on part of the Trient watercourse at Vernayaz. The first phase of the work – enlarging the Trient – is a key step in the flood control programme. Following the flooding in the canton of Valais in November 2023, which was caused by a rise in the levels of several watercourses including the Trient, the municipalities of Vernayaz and Martigny welcome this project. It aligns with their commitment to addressing flood protection for the local population as an urgent priority.

The Trient: balancing flood protection and biodiversity | Alpiq







Example 2:

#### Environmental measures bear fruit (23 January 2024)

The realisation of the Nant de Drance pumped storage power station in the municipality of Finhaut in the Valais, like any construction project, has had a certain impact on nature. Xavière Schröder, Environmental Project Manager at Alpiq, supported by Grenat Sàrl environmental bureau, is working closely with nature conservation organisations (WWF and Pro Natura) and the federal, cantonal and municipal authorities to offset these impacts and enhance local biodiversity.

Environmental measures bear fruit | Alpiq

# "With the Alpiq eco-fund, we are supporting the creation of more habitats to preserve or revive biodiversity."

Example 1:

#### Breeding pool enhancements keep the toads singing (27 May 2024)

A 1-hectare pool landscape in Härkingen in the canton of Solothurn that serves as a vital spawning ground for endangered toads has been restored and enhanced with the support of the Alpiq Eco Fund. The habitat will also benefit several other species that have become rare to the region.

Breeding pool enhancements keep the toads singing | Alpiq

Example 2:

#### 11 kilometres of river renaturalised to enhance biodiversity (2 April 2024)

Eleven kilometres of small and medium-sized rivers have been revitalised in the canton of Solothurn thanks to the support of the Alpiq Eco Fund. Natural and local materials were used to slow down the flow of the rivers and promote the development of aquatic flora and fauna.

11 kilometres of river renaturalised to enhance biodiversity | Alpiq

#### "It is important to Alpiq that its employees remain mentally and physically healthy."

Example 1:

#### Assessment of Health & Safety Culture

Alpiq has undergone an external assessment of its Health & Safety culture, with the objective of reviewing and improving the Health & Safety culture in order to lower the probability of incidents that have an impact on employee health and safety. The assessment is a voluntary addition to the ISO certifications of the organisations in Alpiq's International division, which was conducted based on an anonymous self-perception safety survey covering people mindset and behaviours, thereby identifying potential areas of concern and establishing the basis for an industry benchmark. By constantly improving Health & Safety standards, Alpiq protects its most valuable assets – its employees – and









contributes to an increase in employee satisfaction, trust and engagement, creating a positive impact on employee well-being.

#### "Inclusion of diversity is key for success."

Example 1 (see also Key Moments in the Annual Review):

#### Alpiq is certified as "Great Place to Work"

After receiving the renowned "Great Place to Work" certification, Alpiq officially became a certified employer in Switzerland and its other company locations in Spain, Italy, Germany, France, Czech Republic, Finland and Hungary for the first time in December 2024. This certification is largely based on a positive assessment of the workplace culture by the employees themselves, so Alpiq has demonstrated its commitment to promoting a workplace in which employees feel valued and can develop professionally. The certification also strengthens Alpiq's employer brand and its profile as an attractive employer.

Example 2:

#### Alpiq offers internship to engineering student from Burkina Faso

In collaboration with the Burkina Institute of Technology (BIT), Alpiq offered a 4month online internship to an engineering student from Burkina Faso, allowing him to get an insight into the world of energy, gain international experience and write his bachelor thesis about solar plant reliability. After the successful completion of his internship and defence of his bachelor thesis, it was decided that Alpiq will continue the collaboration with the BIT, offering one internship space per year to one of their students, and thereby contributing to the education of new generation engineer leaders in Burkina Faso.





## General Disclosures

## **Basis of Preparation**

## General basis of preparation of the Sustainability Report – consolidation and scope

The sustainability statement (hereinafter referred to as the "Sustainability Report") was prepared on a consolidated basis at the Alpiq Group level, including all legal entities in Switzerland and the European countries where Alpiq is present.

Nevertheless, some requirements contain information on specific countries, due to one of the following two reasons:

- The information available at a country level cannot be summarised on Group level without compromising its meaningfulness, given country-specific circumstances such as differences in countries' asset portfolios and local regulations. In this case, reporting at a country level is preferred in order to create an unbiased picture.
- 2. The information is only available for certain countries but not for all countries in which Alpiq operates. In order to report as transparently as possible, the information is disclosed for the countries for which it is available.

The scope of consolidation for Alpiq's Sustainability Report is the same as for the Alpiq Financial Report. All subsidiary undertakings, over which Alpiq Holding Ltd. has operational control, are fully in scope for the consolidated Sustainability Report. However, subsidiary undertakings of which Alpiq is a majority shareholder but does not have operational control (i.e. the Grande Dixence hydropower plant) or of which Alpiq Holding Ltd. is a minority shareholder (and over which Alpiq does not have operational control) are treated as an investment. The GHG emissions are therefore reported under Scope 3 according to the respective ownership share.

A list of Alpiq Group companies and investments can be found in the <u>Notes to the</u> <u>Consolidated Financial Statements in the chapter Group companies and</u> <u>investments of the Financial Report</u>.

The Sustainability Report considers both Alpiq's upstream (suppliers) and downstream (customers) value chain. The upstream value chain mainly entails suppliers of power (including Alpiq's minority shareholding in assets), suppliers of physical trading power, and sellers of power purchase agreements (PPA). The downstream value chain entails the business-to-business relationships with transmission system operators (TSOs), distribution system operators (DSOs) and PPA buyers, as well as the business-to-customer relationships in France. Information is not provided on every actor in the value chain, but on the upstream and downstream actors identified to be material during the Double Materiality Assessment (DMA).

ERSR 2 BP-15 (a)

ESRS 2 BP-15 (b)

ESRS 2 BP-15 (c)

# Disclosures in relation to specific circumstances

The Sustainability Report 2023 was prepared in accordance with the Global Reporting Initiative (GRI). However, as it becomes mandatory for Alpiq to report according to the Corporate Sustainability Reporting Directive (CSRD) by 2025, the Sustainability Report 2024 already follows the ESRS structure, and covers additional topics as compared to the previous-year report. Some metrics for the Sustainability Report 2024 have already been calculated as required by CSRD. If a metric has been replaced by a new metric to be in line with CSRD requirements, it will be clearly stated that the new metric is not comparable to the one used in the previous reporting period. In particular, the calculation of CO<sub>2</sub> emissions (see chapter Gross Scopes 1, 2, 3 emissions, total GHG emissions, and GHG intensity) has changed drastically due to the application of CSRD guidelines (operational control methodology), which leads to a large increase in total GHG emissions and emissions intensity. CO<sub>2</sub> emissions and KPIs related to CO<sub>2</sub> emissions have therefore also been calculated according to the previous equity share methodology, and two different figures are shown to allow for comparison with the previous reporting period.

While the Sustainability Report 2024 follows the ESRS structure, it is not fully CSRD-compliant. Alpiq's Sustainability Report 2025 will be CSRD-compliant and is currently in the development phase.

In addition to the topics identified as material during the DMA, which will be described in detail later in this report (see chapter <u>Material Sustainability</u> <u>Matters</u>), this Sustainability Report addresses the issue of due diligence in the supply chain in relation to "Conflict Minerals" and "Child Labour" as required by the Swiss Ordinance on Due Diligence and Transparency (DDTrO) in relation to Minerals and Metals from Conflict-Affected Areas and Child Labour, based on article 964j paragraphs 2-4 and article 964k paragraph 4 of the Swiss Code of Obligations. This report also covers the non-financial reporting requirements of the Responsible Business Initiative (RBI) as well as the requirements of the Swiss Climate Ordinance (SCO), which were formerly covered by the requirements of the Task Force on Climate-Related Financial Disclosures (TCFD). The specific chapters related to DDTrO, RBI and SCO are listed in the respective index in the <u>Appendix</u>.

ESRS 2 BP-2 13 (a),(b), (c)

ESRS 2 BP-2 15

## Governance

# The composition and roles of the administrative, management and supervisory bodies

Alpiq's highest governance body is the Board of Directors (BoD), which consists of seven non-executive members. The BoD has delegated operational management of the company to the CEO, in alignment with the respective laws, the Articles of Association and the Organisational Regulations. The CEO chairs the Executive Board (EB), which has five executive members, namely the CEO, the CFO (Chief Financial Officer) and three business Division Heads, to whom the CEO has delegated some of her management responsibilities. The CEO and EB have issued regulations governing the assignment of authorities and responsibilities. These regulations apply throughout the Group.

In addition to the BoD and EB, the Audit and Risk Committee (ARC) and the Nomination, Remuneration and Strategy Committee (NRSC), each of which consists of three members of the BoD, are part of Alpiq's administrative, management and supervisory bodies.

In Switzerland, the PEKO/COPE represents the common interests of employees at functional levels 1 to 10 (meaning employees who are not in top management functions) to the top management of Alpiq Holding AG. The members of the PEKO/COPE are freely elected by all employees of functional levels 1 to 10 in Switzerland. All employees of functional levels 1 to 10 in Switzerland may present themselves for election. As for employee representation in other countries, Alpiq complies with the local laws and regulations.

The members of the management and supervisory bodies are fully qualified for the tasks they are in charge of. Further information on the experience level of the BoD and EB is available in the chapters <u>Board of Directors</u> and <u>Executive Board</u> in the Corporate Governance section of this Annual Report.

At the end of 2024, the female to male ratio in the EB was 20% vs 80% respectively, with a ratio of 14% (female) to 86% (male) in the BoD. The three shareholder groups of Alpiq (each of which represents 33.3% of the share capital) have the right to make a proposal for two board members each. Election remains with the General Assembly.

The BoD nominates the members of the NRSC and the ARC, including their Chairs. Further rules are laid out in detail in the Organisational Regulations. The NRSC and the ARC prepare, control and steer major decisions in terms of their strategic (including sustainability), economic, and financial impact on the company. While the NRSC is responsible for strategy and sustainability and hence ESG targets (including sustainability impact and opportunity management), the ESRS 2 GOV-1 21 (a)

ESRS 2 GOV-1 21 (b)

ESRS 2 GOV-1 21 (c)

ESRS 2 GOV-1 21 (e)

Share of female EB members

20%

ESRS 2 GOV-1 22 (a)

ARC is responsible for ESG risks. Specific extraordinary meetings are regularly set up to allow pre-discussions with management. The BoD can request the Group Internal Audit to investigate or conduct a detailed audit on any subject matter at any time.

The ARC consists exclusively of non-executive members of the BoD, most of whom have finance and accounting experience. The ARC's role is to support the BoD in assessing the performance of the external auditors, monitoring and assessing the internal auditors, the internal control system, financial accounting, risk management (including the management of ESG risks), compliance and corporate governance.

The NRSC is tasked with supporting the BoD in discharging its supervisory duty regarding succession planning (EB), determining and reviewing remuneration policy and guidelines as well as performance targets (including ESG targets), preparing proposals on the remuneration of the BoD and the EB on behalf of the Annual General Meeting (AGM), determining all other terms and conditions of employment of the members of the BoD and approving the other contract terms and conditions of employment for the CEO (as proposed by the Chairman of the BoD) and for the EB (as proposed by the CEO). In addition, the NRSC is in charge of pre-discussing the Group Strategy, prior to approval by the BoD, and monitoring implementation of the strategy, as well as determining sustainability targets, including implementation of suitable reporting.

In summary, economic, environmental and social issues as well as decisions regarding sustainability are taken by the committees appointed by the BoD, upon the proposal of the EB. In addition to this, they are dealt with by the committees supporting the BoD, in particular the NRSC. Clear governance and procedures are defined to deal with sustainability matters, but they are not yet aligned with the identified Impacts, Risks and Opportunities (IRO).

ESG risks are currently being integrated into the company-wide enterprise risk management (ERM). This means that ESG risks will be treated the same as any other enterprise risks and the same risk management processes will apply, including the regular monitoring and development of actions by the ARC, EB and BoD. The further integration of impact, risk, and opportunity management into already existing management processes will be defined and developed in 2025.

As the CSRD implementation is still ongoing, targets pertaining to Alpiq's material topics are currently under development. The setting of targets requires input from internal metric owners in the divisions. Their input is pre-discussed in the Sustainability Committee, a central coordination body for the sustainability matrix organisation, and targets are proposed based on these discussions. The Lead Group Sustainability presents the suggested targets in the EB, NRSC and BoD for approval.

The Lead Group Sustainability also conducts regular trainings for the EB and BoD on the topic of sustainability. The Lead Group Sustainability is highly familiar with Alpiq's material topics and therefore relates the coaching to the relevant topics. There is no dedicated person in the EB and BoD responsible for sustainability; in each case the responsibility is shared in recognition of the fact that different members may bring different sustainability skills. ESRS 2 GOV-1 22 (b), (c) i.,(c) ii.

ESRS 2 GOV-1 22 (c) iii.

ESRS 2 GOV-1 23 (a), (b)

ESRS 2 GOV-1 22 (d)

The Sustainability Report is compiled and edited under the lead of the EB in alignment with the Lead Group Sustainability and the NRSC, which may be involved during the editing phase. Once finalised, the EB submits the Sustainability Report to the BoD for approval.

## Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies

At an operational level, Group Risk Management is mandated by the EB to monitor all market, credit and liquidity risks on an ongoing basis. Frequent Risk Management Committee meetings are conducted to assess the company's current risk situation and decide on the operational measures to be taken. The EB is permanently informed of ongoing discussions via an online platform and in every EB meeting (on a fortnightly basis). As part of Group Risk Management, Enterprise Risk Management assesses risks for the going concern in a broader context. The ARC and BoD are informed twice per year of the current risk situation, or at any time as required by the current evolution of the business.

For each business opportunity, the potential and related risks are assessed by the relevant entities, such as Risk Management, Tax, Sustainability, Legal & Compliance, and a Know-Your-Customer (KYC) check is performed as standard and prior to any formal decision taken. Strategic opportunities are tracked by the EB in the context of the corporate strategy. Discussions on potential opportunities and the way forward take place on a weekly basis.

Specific policies, actions, metrics and targets needed to address material IROs are currently under development.

For each business decision to be taken, the Regulation of Authority determines the level of required approval. In any case, whether the decision is taken by the Division Head, the EB or the BoD, a fully-fledged business plan and an assessment of all related risks and opportunities has to be available, including financial, tax, legal & compliance, sustainability and reputational risks and opportunities. For business cases to be approved by the relevant bodies, the prior consent and recommendation of the corresponding experts in Finance, Tax, Legal & Compliance, and Sustainability is required.

# Integration of sustainability-related performance in incentive schemes

Sustainability considerations serve as a basis for the company's strategic plan, the execution of which is a factor considered in the incentive schemes for the EB. As of 2024, the remuneration of the EB is linked to Long-Term Incentives (LTI), which include ESG criteria. The sustainability target "Successfully set up our sustainability organisation according to CSRD roadmap for 2024, incl. KPIs, targets etc." is part of the EB's targets for 2024. As sustainability is considered in the setup of the strategic plan and the execution of this plan has an impact on the ESRS 2 GOV-2 26 (a)

ESRS 2 GOV-2 26 (b)

ESRS 2 GOV-3 29 (a), (b),(c),(d),(e) BoD's performance assessment, the assessment of the BoD's performance is also indirectly linked to sustainability targets.

The terms of incentive schemes are approved and/or updated in the EB and NRSC, and, if required, by the BoD.

Further information on LTI and remuneration at Alpiq can be found in the chapter <u>Remuneration</u> in the Corporate Governance section of this Annual Report.

# Risk managemen and internal controls over sustainability reporting

Alpiq is currently developing a framework for risk management in sustainability reporting, to be finalised in 2025. This is to ensure that the risk assessments and controls are in line with the prioritised risks and that the results are integrated into internal processes.

Oversight of the Sustainability Report will involve both the ARC and the NRSC. The ARC will focus on the adequacy of risk management and controls, while the NRSC will ensure compliance with ESG standards before approving the report. Periodic updates will be provided to management and supervisory bodies to ensure transparency and accountability. ESRS 2 GOV-5 36 (a), (b),(c),(d),(e)

# Strategy

# Strategy, business model and value chain

Alpiq is a generator of electricity, steam and heat, and optimises its generation assets through asset trading. In addition, Alpiq is active in proprietary energy trading and origination (providing energy-related risk and portfolio management services to other generators and energy off-takers, mainly in a business-tobusiness context). It is represented by subsidiaries in various European countries.

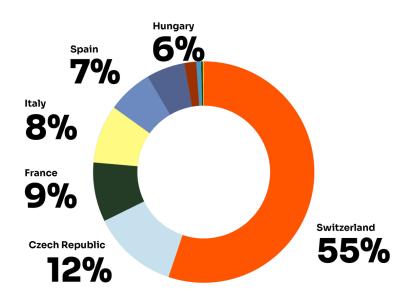
The core of Alpiq's generation portfolio is flexible hydropower generation in Switzerland. The characteristics of these generation assets make Alpiq a natural provider of flexible generation and energy storage. Besides the production stemming from the  $CO_2$ -free technologies of hydropower (Switzerland), and nuclear power (Switzerland) and the small share from wind and solar (in Italy and France), Alpiq generates energy from natural gas (in Italy, Spain and Hungary). The flexible gas-fired combined-cycle and open-cycle power plants operated in Italy, Spain and Hungary strengthen system flexibility and security of supply.

Recognising its strength in operating and optimising flexible generation, Alpiq's strategy focuses on providing flexibility to the energy system and by doing so enabling the energy transition through the integration of variable renewable energy sources like wind and solar. Alpiq is pursuing investments in flexible hydropower, BESS and flexible gas-fired thermal generation. These investments contribute to the energy transition by increasing the flexibility Alpiq can provide to the energy system. In 2024, Alpiq acquired a 30-megawatt battery project in Finland, a 100-megawatt battery project in France, and a majority stake in the Finnish hydrogen pioneer P2X Solutions.

As per 31 December 2024, Alpiq has 1,385 employees, split by geographical areas as follows:

	Headcount of
Country	employees
Switzerland	764
Czech Republic	174
France	120
Italy	118
Spain	92
Hungary	78
Germany	24
Finland	10
Norway	3
Bosnia	2
Total	1,385

ESRS 2 SBM-1 40 (a)



The following pie chart illustrates the distribution of Alpiq employees by country in 2024:

The above figures do not include employees who work for fully-consolidated Alpiq entities but do not have Alpiq work contracts, as is the case for P2X Solutions, Entegra Wasserkraft AG and Isento Wasserkraft AG employees. P2X Solutions has 18 employees in Finland, while Entegra and Isento have six and one employee(s) respectively.

Alpiq developed a new corporate strategy in 2023, in which sustainability was anchored as an integral part. The company has set the overarching goal of achieving the net-zero target for Scope I and 2 by 2040. The emissions path to reach this target depends to a large extent on the progress of the energy transformation and technological development and is therefore currently still under development. However, since 99% of Alpiq's emissions stem from gas-fired combined-cycle power plants in Italy, Spain and Hungary, these plants have the highest potential for emissions reduction through optimisation / efficiency measures such as the measures that were implemented for the Vercelli plant (see the success story in the <u>Introduction</u> section of the Sustainability Report).

As mentioned previously, Alpiq offers its customers comprehensive and efficient services in the fields of energy generation and market access, as well as energy portfolio management. These services are mainly offered to industrial and business customers throughout Europe. Thanks to digital tools and Alpiq's expertise in flexibility management and cross-border trading, energy generation and asset trading are optimised to support the TSOs in stabilising the electricity grids. In addition, Alpiq operates in Trading and Origination in its core markets in Europe. In France, Alpiq has also been active in the business-to-customer retail business for electricity consumers since 2020.

ESRS 2 SBM-1 40 (e)

Share of emissions from CCGT power plants

ESRS 2 SBM-1 40 (f)

While the transition towards becoming a more sustainable company may affect Alpiq's asset portfolio, the core products / services offered, and the target customer type will remain the same. However, the markets served may be expanded depending on where future sustainability-related projects are located.

Apart from thermal assets (gas-fired power plants and nuclear power plants), Alpiq has a diverse national and international power-generation portfolio from renewable resources comprising hydropower, wind and photovoltaics. The services offered in many European countries also support large and industrial customers in selling electricity from RES assets or in their efforts to reduce the environmental footprint of their own business activities.

As electrification advances across various sectors, Alpiq is driving the sustainable ES energy transition by making strategic investments in flexible assets, such as battery projects. The company's CCGT power plants, which play a crucial role in maintaining system stability, will reach their end-of-life before 2040. These plants contribute to reliable power generation, which is vital for Alpiq's customers, including TSOs. They directly influence the company's economic performance and the security of the energy supply, which are key pillars of sustainability. However, with 99.9% of Alpiq's total Scope 1 GHG emissions stemming from CCGT power plants, these assets remain the primary source of direct emissions. Embracing the "best owner principle", Alpiq continuously invests in upgrading projects to enhance CCGT efficiency and explore green gas blending capabilities until the plants' end-of-life.

After having explained Alpiq's strategy and business model, the following section focuses on the company's value chain. As part of the DMA, which will be described in detail at a later stage (see chapter <u>Material Sustainability Matters</u>), Alpiq's value chain has been analysed in detail to identify Impacts, Risks and Opportunities (IROs) created throughout the whole value chain.

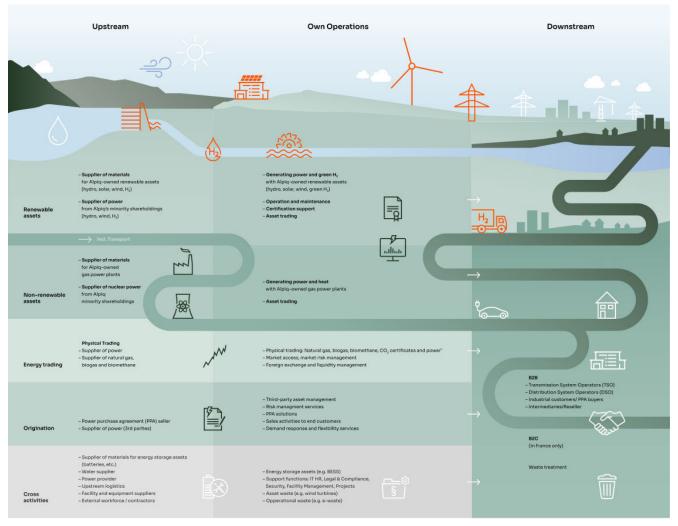
It is important to note that when talking about value chain in the context of CSRD and the DMA, the term value chain is to be understood in line with the definition provided by the European Commission: "A value chain encompasses the activities, resources and relationships the undertaking uses and relies on to create its products or services from conception to delivery, consumption and end-of-life. Relevant activities, resources and relationships include: i. those in the undertaking's own operations, such as human resources; ii. those along its supply, marketing and distribution channels, such as materials and service sourcing and product and service sale and delivery; and iii. the financing, geographical, geopolitical and regulatory environments in which the undertaking operates. Value chain includes actors upstream and downstream from the undertaking. Actors upstream from the undertaking (e.g., suppliers ) provide products or services that are used in the development of the undertaking's products or services. Entities downstream from the undertaking (e.g., distributors, customers) receive products or services from the undertaking." (European Commission, 2023).

This use of the term "value chain" is not to be confused with Alpiq's internal definition and use of the term, which refers to the elements that generate value for the company and includes the "value chain elements" Assets, Trading and Origination. In order to avoid confusion with Alpiq's internal use of the term "value chain", these are referred to as "value chain elements" in the remainder of this chapter.

ESRS 2 SBM-1 40 (g)

ESRS 2 SBM-1 42 (a), (b),(c)

#### The complete Alpiq value chain looks as follows:



Financial trading was assessed as not relevant for CSRD or the EU Taxonomy and therefore excluded

As shown in above illustration, Alpiq's own-operations part of the value chain contains the company's three main elements of value creation – Assets, Trading and Origination – as well as activities that span across these three elements. The Alpiq value chain is completed by the upstream and downstream parts.

The upstream value chain consists of partner agreements with minority shareholdings, for both renewable and non-renewable energies. Under the partner agreements in force, the shareholders of partner power plants are required to take on the energy and pay the annual costs allotted to their ownership interest throughout the concession period. Furthermore, nuclear power plant owners are required to pay certain additional contributions to the decommissioning and waste disposal fund, in case a primary contributor is unable to fulfil payments. The partner agreements run throughout the useful life of the power plant, or throughout the concession period, and can only be terminated under exceptional circumstances and with the unanimous decision of all the parties. In some cases, the shareholding may differ from the right to energy and therefore from the ESRS 2 SBM-1 42 (a), (b),(c) obligation to pay the annual costs. In such cases, the reported interest from an economic perspective may differ from the interest held pursuant to corporate law.

In addition, Alpiq's upstream value chain entails some Trading and Origination activities. Upstream trading entails the physical trading of power, natural gas, biogas and biomethane, while upstream origination entails mainly the engagement in power purchase agreements (PPAs) and the supply of power via third parties.

Similarly to Alpiq's upstream value chain, the company's own operations can be divided into activities belonging to the Asset, Trading, or Origination element, or to cross-element activities. Own-operation activities in the Asset element include power generation through renewable and non-renewable assets, as well as asset trading. The own-operation Trading element consists of the financial trading of fossil commodities, power and CO<sub>2</sub> certificates, and the physical trading of natural gas, biogas, biomethane, CO<sub>2</sub> certificates and power. Activities related to market access and market risk management, foreign exchange and liquidity management are also part of own-operations trading. Own-operations Origination activities include third-party asset management, risk management services, PPA solutions, sales activities to end customers, and ancillary services. Cross-activities include energy storage, support functions (IT, HR, Legal & Compliance, Security, Facility Management, Projects), asset waste management and operational waste management.

Alpiq's downstream value chain entails primarily the business-to-business sale of power to TSOs, DSOs, industrial customers and PPA buyers, as well as to intermediaries or resellers. In addition, it includes Alpiq's business-to-customer retail activities in France.

### Stakeholders, stakeholder engagement, and the management of stakeholder views and interests

Alpiq's most relevant internal and external stakeholders are employees, shareholders, banks, customers, suppliers, business partners, associations, politicians and government groups, as well as civil society, including NGOs.

Stakeholder engagement has a high priority at Alpiq and takes place with all stakeholder groups via different channels and at various intensities and frequencies, depending on the specific stakeholder group and the situational circumstances. The dialogue with stakeholders, i.e. shareholders, is generally conducted via the Chairman and the Annual General Meeting. The administrative contact is the Secretary of the Board. Furthermore, public affairs, investor relations and other specialists in different departments and business units are dedicated to stakeholder engagement.

Internal stakeholder engagement is guaranteed by using various channels and platforms for informal and formal direct dialogue with and among employees.

As for the employee stakeholder group specifically, and in accordance with the Alpiq Code of Conduct and the company's respectful and Secure Base Leadership-compliant behaviours, Alpiq adheres to the following principles: ESRS 2 SBM-2 45 (a), SBM-2 AR 4

- Provision of appropriate working conditions (compliance with the applicable labour law at all times)
- No discrimination, and celebration of diversity (a dedicated Inclusion of Diversity team ensures that HR / workforce-related processes run according to inclusion standards)
- No bullying and no tolerance for harassment (performance management weights and assesses performance equally according to results and expected behaviours)

The purpose of internal stakeholder engagement is to foster commitment and motivation, which are crucial for running a successful business. In order to understand employees' interests, needs and expectations, two employee surveys were conducted during the reporting period. The first survey was a short "pulse check" conducted in the first half of the reporting year, while the second one was a more extensive survey conducted in cooperation with the organisation Great Place to Work in the second half of the reporting year. The results of the first pulse check survey were published in the summer and some actions have been implemented as a consequence. The results of the survey conducted with Great Place to Work were published in January 2025 and actions based on the outcome are currently under development.

As for external stakeholder engagement, Alpiq is actively involved in professional associations through committees, commissions and working groups with the aim of working towards sustainable economic framework conditions for the Swiss electricity sector at political and administrative levels. The company is also in direct and continuous dialogue with political decision-makers (members of parliament, energy and environmental commissions) and government administration with the aim of mitigating and minimising risks and uncertainties in the political process. Alpiq continuously monitors and analyses political events and intervenes in specific legislative proposals to secure good framework conditions in the long term.

In addition, Alpiq works closely with NGOs, particularly in infrastructure projects and regarding the mitigation of environmental impacts, e.g. compensation measures related to Nant de Drance, which have been implemented in collaboration with WWF and Pro Natura.

The outcome of Alpiq's stakeholder engagement is taken into account in various ways. For example, Alpiq has taken actions in response to the results of the pulse survey conducted in 2024. First, the desire expressed by employees for more clarity on the details of the company strategy was taken into consideration during the Targets 2025 EB workshop, by linking the strategy more clearly to daily activities and translating it into yearly goals. Second, a need to improve Alpiq's meeting culture was identified. To achieve this, it was decided that a meeting guideline would be added by default to every meeting to enable more consistency and structure and make meetings more efficient and productive.

Furthermore, as previously mentioned, impacts on Alpiq's own workforce are identified by means of regular surveys (conducted twice a year). The company strategy is adapted based on these impacts. One of Alpiq's strategic pillars for organisational goals is based on people, and the outcome of the surveys is instrumental in setting related organisational goals. These goals help define actions to adapt the strategy and thus mitigate the negative impacts on the workforce. Progress towards the goals is continuously monitored to ensure that the workforce's needs are properly addressed.

In addition, the interests and views of internal and external stakeholders were taken into consideration in the DMA. This was accomplished by conducting surveys and interviews with representatives of the relevant stakeholder groups.

Based on the surveys that were sent out and the interviews conducted withESRS 2 SBM-2 45 (b)stakeholders as part of the DMA, the interests and views of Alpiq's stakeholdersand the engagement with these stakeholders can be summarised as follows:

Stakeholder	Interests and views	Engagement
Employees	Fair compensation Career growth Job security Work-life balance	Internal contact with employees is guaranteed through various channels and platforms for informal and formal direct dialogue with and amongst employees. In Switzerland, for example, Alpiq has a personnel committee in place that represents the employees' interests towards the management of the Alpiq Holding AG. In addition, regular surveys (e.g., pulse checks and Great Place to Work surveys) are conducted, providing deeper insights into Alpiq employees' interests and needs. Through various channels, e.g., through Alpiq's SpeakUp mechanism, all employees can hand in cases of misconduct to be investigated internally by Alpiq's Compliance team.
Suppliers	Reliable payments Long-term relationships	Alpiq's central procurement team for Switzerland and Prague maintains regular dialogue with suppliers. The dialogues conducted in other Alpiq locations are maintained in a more decentralised manner by Alpiq's local Procurement specialists.
Customers	Increasingly require sustainable business and a clear commitment to the reduction of negative impacts on environment and society as a condition for closing a deal	Customers were consulted in the creation of Alpiq's DMA and their interests are recorded and represented by Alpiq's employees in Sales & Origination. Alpiq's SpeakUp tool is also open to the public, allowing customers to hand in compliance concerns for internal investigation.
Business partners	Long-term relationships	Important business partners for Alpiq are the co-owners of the "Partnerwerke" constructs, pertaining mainly to Alpiq's hydro power plants. Close collaboration and dialogue is maintained with said co-owners.
Shareholders	Profitability Long-term growth	Dialogue is maintained via the Secretary of the Board and Annual General Meetings and through contact with the BoD. In addition, shareholders were consulted in the creation of Alpiq's DMA.
Banks	Financial stability Low-risk investments Increasingly interested in investing in companies with clear decarbonisation targets and paths	Dialogue is maintained through regular exchange between the Lead Group Sustainability and Alpiq's key banks. Banks were also consulted in the creation of Alpiq's DMA.
Associations	Advocacy for industry issues	Alpiq is actively involved in professional associations through committees, commissions and working groups with the aim of working towards sustainable economic framework conditions for the Swiss electricity sector at the political and administrative levels.
Politicians/government groups	Regulatory compliance Environmental protection Ensuring security of supply (e.g. Federal Act on a Secure Electricity Supply in Switzerland)	Alpiq is also in direct and continuous dialogue with political decision- makers (members of parliament, energy and environmental commissions) and government administration with the aim of mitigating and minimising risks and uncertainties in the political process. Alpiq continuously monitors and analyses political events and intervenes in specific legislative proposals to secure good framework conditions in the long term.
NGOs	Minimising environmental/social impacts Ethical business practices	Alpiq works closely with NGOs, particularly in infrastructure projects and in connection with the impact on the environment (e.g. close cooperation with WWF and Pro Natura in the area of compensation measures relating to Nant de Drance). In addition, NGOs were consulted in the creation of Alpiq's DMA.

In addition to the stakeholder engagement activities described above, regular exchanges between the Lead Group Sustainability and various stakeholder groups (e.g. banks, investors, NGOs) take place to understand the stakeholder's interests and needs. The Lead Group Sustainability represents their needs in the EB and NRSC meetings and provides support by ensuring alignment of the ESRS 2 SBM-2 45 (c)

strategy with those needs. Some interests that have already been taken into account from these stakeholder groups include the following:

- 1. Investors' interest in reduced Scope 1 and 2 emissions, since these emissions appear in their Scope 3 balance.
- 2. Banks' increasing interest in companies with low CO<sub>2</sub> emissions, as they have set thresholds to decarbonise their portfolios or accept gas investments only if there is a link to renewables development.
- NGOs' negative perception of companies that operate with fossil fuels. This
  is a critical issue for Alpiq, since NGO support for new projects is essential.
  Alpiq took these interests into consideration when formulating the net-zero
  targets for Scope 1 and 2 as part of its strategic direction until 2040.

Alpiq is currently defining clear guidelines for sustainability transition plans, actions and targets in alignment with its strategy, in which the interests and views of stakeholders play an important role. These guidelines will be completed in 2025, and the resulting transition plans, actions and targets will be integrated into the Sustainability Report 2025.

While Alpiq's corporate strategy, introduced in 2023, makes sustainability an integral part of all strategic decisions, no sustainability-related amendments have been made to the corporate strategy since 2023. The sustainability-related transition plans, actions and targets that are currently under development will be integrated into Alpiq's strategy and will have a positive impact on stakeholders' views and interests.

Stakeholders' views and interests with regard to the company's sustainabilityrelated impacts are provided to the BoD, EB and NRSC by the Lead Group Sustainability in the form of regular written or oral information. ESRS 2 SBM-2 45 (d)

## Material Sustainability Matters

## Material impacts, risks and opportunities and their interaction with strategy and business model

In 2024, Alpiq conducted a CSRD-aligned DMA for the first time. For this reason, ESRS 2 SBM-3 48 it is not possible to make a comparison to IROs from previous reporting periods.

According to the DMA conducted in 2024, Alpiq's IROs are concentrated on the environment dimension, but are also present in the social dimension. The sub-topics identified to be material are the following:

- El Climate change mitigation
- E3 Water and marine resources
- E4 Direct impact drivers of biodiversity loss
- S1 Working conditions

Even though IROs were found to be relevant for the whole value chain, they are concentrated in Alpiq's own operations, in particular when it comes to environmental risks linked to energy production.

In conducting the DMA, Alpiq identified sustainability topics of high relevance to the company, taking into account both the impact of Alpiq's business on the environment and people (inside-out/impact perspective), as well as the risks and opportunities (outside-in/financial perspective) Alpiq is facing due to external effects such as climate change.

The following tables illustrate the findings of the DMA. There are two tables showing material actual or potential impacts (positive and negative), one table showing material opportunities, and one table showing material risks.

## Material positive impacts

Material impact	ESRS topic (level 1)	Description	Time horizon <sup>1</sup>	Value chain location	Stakeholders affected (category)
Renewable energy portfolio	El Climate Change	Providing renewable electricity (from hydropower, wind and photovoltaics) to customers helps reducing customers' Scope 2 emissions.	S, M, L	Downstream	Nature
Renewable energy portfolio	El Climate Change	Contributing to the green energy transition by supporting the development of local renewable energy and flexible power plants in line with the Confederation's 2050 and EU Energy Targets and through participation in round tables organised by the federation.	S, M, L	Own operations	Nature
Energy efficiency	El Climate Change	Reducing environmental impact through energy-efficiency measures and investments that reduce energy use in own buildings.	M, L	Own operations	Nature
Environmental management system	El Climate Change	Systematic control and reduction of environmental impacts, e.g. through hydro sanitation, impact studies for new projects, certification by the Eco- Management and Audit Scheme (EMAS), installation of on-site electric car charging stations, or efficiency increases in thermal assets.	S, M, L	Own operations	Nature
Certified renewable energy consumption	El Climate Change	Reduction of environmental impact by using certified renewable electricity consumption for plants and office buildings.	S, M, L	Own operations	Nature
Energy transition investment	El Climate Change	Supporting energy transition by participating in and working on hydrogen and battery storage projects.	S, M, L	Own operations	Nature
Electrification	E4 Biodiversity and Ecosystems	Energy use contributes to electrification and reduces the negative impact on biodiversity and nature in diverse sectors, such as the transport industry.	S, M, L	Downstream	Nature
Awareness training	S1 Own Workforce	Positive impact on employees by spreading awareness, training employees, and maintaining processes for managing near misses, unsafe conditions and unsafe behaviour.	S, M, L	Own operations	Own workforce
Employment of external temporary staff	S1 Own Workforce	Bridging short-term staff shortages with external temporary staff and employees working on consultancy mandates to ensure employee's work-life balance.	S, M	Own operations	Own workforce
Social dialogue	SI Own Workforce	Social dialogue impacts employees' well- being, work-life balance and mental health. Impact on own workforce as well as potential spill-over effect on peers.	S, M, L	Own operations	Own workforce

1 S = Short Term, M = Medium Term, L = Long Term

## Material negative impacts

Material impact	ESRS topic (level 1)	Description	Time horizon <sup>1</sup>	Value chain location	Stakeholders affected (category)
Scope 1 and 2 GHG emissions	El Climate Change	Scope 1 and 2 GHG emissions (e.g. $CO_2$ , $NO_{x}$ , $SF_6$ etc.), mainly from the operation of own power plants, i.e. CCGT power plants.	S, M, L	Own operations	Nature
Scope 3 GHG emissions upstream	El Climate Change	Scope 3 GHG emissions in the upstream supply chain mainly caused by drilling, the extraction of gas and biogas, the production of capital goods for renewable energies, energy production for energy trading, upstream transportation and the production of energy storage (batteries).	S, M, L	Upstream	Nature
Scope 3 GHG emissions downstream	El Climate Change	Scope 3 GHG emissions in the downstream supply chain mainly caused by the consumption of fossil fuel energy traded by Alpiq, transmission and distribution losses, and end-of-life treatment of energy storages and power plants.	S, M, L	Downstream	Nature
Scope 3 GHG emissions upstream and downstream	El Climate Change	Scope 3 GHG emissions in the upstream and downstream supply chain due to the transportation of gas, biogas, and hydrogen, e.g. the leakage of methane during transportation.	S, M, L	Upstream and downstream	Nature
Water use in supply chain	E3 Water and Marine Ressources	Significant water withdrawal, consumption and discharge which affects water availability and the state of habitats, with potentially negative impacts on local communities.	S, M, L	Upstream	Affected communities
Water use in own operations	E3 Water and Marine Ressources	Significant water withdrawal, consumption and discharge which affects water availability and the state of habitats, with potentially negative impacts on local communities.	S, M, L	Own operations	Affected communities
Nurturing life on water in own operations	E4 Biodiversity and Ecosystems	Construction in areas occupied by natural environments worthy of protection. Hydropower plants and wind turbines are often located in biodiversity-critical areas.	S, M, L	Own operations	Nature
Nurturing life on water upstream	E4 Biodiversity and Ecosystems	Building new power plants, production facilities or mines has negative impacts on the environment, e.g. loss of surface area usable by flora and fauna, and changes to the soil on this surface area.	S, M, L	Upstream	Nature
Light pollution	E4 Biodiversity and Ecosystems	Energy production and use, as well as construction work, create light pollution, disrupting species' light-dark cycle and affecting their survival.	S, M, L	Downstream	Nature
Occupational safety and health incidents in own workforce	S1 Own Workforce	Occupational safety and health incidents can negatively impact workers by creating physical harm, psychological distress and a lower sense of security in the workplace.	S, M, L	Own operations	Own workforce

1 S = Short Term, M = Medium Term, L = Long Term

### Material opportunities

Material opportunity	ESRS topic (level 1)	Description	Time horizon <sup>1</sup>	Value chain location
H&S awareness	S1 Own Workforce	Opportunity to reduce workplace accidents and absenteeism rate by improving H&S awareness.	S, M, L	Own operations

1 S = Short Term, M = Medium Term, L = Long Term

### **Material risks**

Material risk	ESRS topic (level 1)	Description	Time horizon <sup>1</sup>	Value chain location
Direct risks of climate change	El Climate Change	Less efficient cooling systems for CCGT power plants if river water temperature rises above standard and extreme hydro intakes occur due to variations in precipitation, lower total precipitation in the long term, glacier retreat, and more sediment.	S, M, L	Own operations
Physical and transition climate change risks	El Climate Change	Risks of downtime, higher insurance costs, reputational damage, increased operational expenses for damage mitigation and compliance measures, e.g. due to flooding, strong winds, heavy rainfall, and high temperatures.	S, M, L	Own operations

1 S = Short Term, M = Medium Term, L = Long Term

The identified material IROs as presented in the above tables are taken up in Alpiq's yearly strategy review and thus serve as a basis for decision-making and inform strategic initiatives, business plans etc.

## Description of the processes to indentify and assess material impacts, risks and opportunities

The process and methodology applied for conducting the DMA can be described as a set of successive steps:

ESRS 2 IRO-1 53 (a),(b), (c),(d),(e),(f),(g),(h)

Understanding phase:

- Mapping of the value chain: the value chain (including own operations, upstream and downstream activities) was identified and mapped to Alpiq's internally used principle of value chain elements (Asset, Trading and Origination) and business segments (Asset Renewable Energies, Asset Non-Renewable Energies, Energy Trading, Origination and Cross-Activities).
- Site and asset-level assessment considerations: identification of subsidiaries, sites and assets where specific material topics are applicable.
- Identification and classification of stakeholders: Alpiq stakeholders were identified and classified to inform the selection of stakeholders (or

stakeholder representatives), to be involved in the DMA and engaged with on a regular basis.

- Creation of long list of sustainability matters: sustainability matters were identified based on the sector-agnostic sustainability matters covered in the ESRS, sector-specific topics from the Sustainability Accounting Standard Board's (SASB) internal documentation, external sources and peer benchmarking.
- Creation of short list of sustainability topics: the list was reduced to only include relevant topics. If a topic from the long list was identified as not relevant a reasoning was included.

#### Identification phase:

Definition of IROs: Topics on the short list were further broken down into sub-topics and sub-sub-topics, in order to define IROs at a more granular level.
 IROs were pre-identified by the DMA project team and mapped to ESRS and SASB sub-(sub)-topics. The DMA project team consisted of the Alpiq Lead Group Sustainability Team and Alpiq's advisor. For the pre-identification of IROs, internal analysis (e.g. ERM or impact assessments) as well as external documents (e.g. industry reports, scientific research) were used. The IROs were then reviewed by Alpiq internal experts, and review outputs were discussed during two workshops, leading to a final list of IROs.

#### Assessment phase:

- Establishment of assessment criteria: criteria and scores for assessing the scale, scope, irremediability and likelihood (of impacts) and likelihood and magnitude of the potential financial impact (for risks and opportunities) were defined. For the financial assessment, Alpiq's ERM was used to inform the scale.
- Assessment of IROs: Alpiq's internal experts assessed the IROs based on their topic expertise. Their assessments were verified by the DMA project team and potential assessment discrepancies were discussed in order to arrive at a final assessment.

#### Determination phase:

- External stakeholder engagement: Alpiq conducted surveys and interviews with external stakeholder groups, namely banks, business partners, customers, NGOs (WWF and Pro Natura), shareholders and suppliers, in order to include the perspective of external stakeholders in the assessment. The following topics were analysed: affected communities, biodiversity & ecosystems, business conduct, business model resilience, child labour and forced labour, circular economy, climate change, consumers and end-users, critical incident risk management, equal treatment and opportunities for all, grid resilience, health & safety, pollution, security of supply, waste, water & marine resources, and working conditions for workers in the value chain.
- Alpiq asked the BoD and EB to provide a financial and impact assessment of all topics under discussion. The result served as an indication as to which topics are material for Alpiq.
- Determining material sub-topics: Alpiq decided to set the threshold at 4.2 (on a scale from 1 to 5), enabling the company to focus on the key impacts, risks and opportunities. The materiality outcome was presented to and approved by the EB and the NRSC.

Documentation of the DMA process: the process used to conduct the DMA was documented.

In order to ensure that Alpiq stays up to date with regard to material IROs, the Sustainability Committee will review the DMA and resulting IROs once a year and decide on potential changes to them. If material IROs change, the Sustainability Committee will inform the EB.

### Disclosure Requirements in ESRS covered by the undertaking's sustainability statement

Material topics and sub-topics identified through the DMA were displayed in a double materiality matrix in accordance with their ratings for financial materiality and impact materiality. It was then decided where to set the materiality threshold above which a topic or sub-topic should be considered material and therefore be reported on in the Alpiq Sustainability Report going forward. In order to be able to make an informed decision regarding the threshold, benchmarking, practices followed by peers, the company's strategic directions and previous DMA outcomes were taken into consideration.

After identifying material topics and sub-topics, a scoping exercise was conducted in order to determine materiality at a requirements level (for material topics and sub-topics). Some requirements were deemed not to be in scope due to missing materiality, even if the topic/sub-topic as a whole was considered to be in scope. The result of the scoping exercise served as the basis for the disclosure requirements included in this Sustainability Report. However, material requirements for which data is missing were omitted in this year's report but will be included in the Sustainability Report 2025 to ensure CSRD-compliance.

A list of the disclosure requirements complied with in the Sustainability Report	ESRS 2 IRO-2 56
2024 can be found in the ESRS Index in the Appendix.	

After covering the general disclosures, the Sustainability Report follows by disclosing information belonging to the environment, social and governance spheres as well as sector-specific information.

ESRS 2 IRO-2 59

# Environment

### Climate Change

## Integration of climate-related performance in incentive schemes

The chapter on climate change starts by disclosing how climate-related considerations are factored into the remuneration of members of the administrative, management and supervisory bodes. In Alpiq's case, no climate-related considerations are directly factored into the remuneration of members of the EB and BoD.

#### Material impacts, risks and opportunities and their interaction with strategy and business model

The following section describes how Alpiq assessed physical and transition risks related to climate change. Based on the usage by the <u>Task Force on Climate-Related Financial Disclosures (TCFD</u>), physical risks are defined as risks related to the physical impacts of climate change and can be event-driven (acute) or due to longer-term shifts (chronic) in climate patterns. Physical risks may have financial implications for organisations such as direct damage to assets and indirect impacts from supply chain disruption, damage of premises, interrupted operations etc. On the other hand, transition risks are risks related to the transition to a lower-carbon economy, created by policy, legal, technology and market changes established to address mitigation and adaptation requirements related to climate change. Transitional risks are existing risks prior to the implementation of any mitigation measures, while net risks are residual risks remaining after mitigation measures have been taken.

Alpiq conducted a climate scenario analysis to assess physical and transition risks (further details on the scenario analysis can be found under <u>ESRS E1 IRO-120</u>). Physical risks were assessed for Alpiq's own operations and parts of the upstream value chain (for assets in which Alpiq has a minority shareholding), while the assessment of transition risks comprised the full value chain, including all upstream and downstream parts. The scenario analysis that was conducted can be seen as the first step towards a resilience analysis.

To ensure resilience with regards to climate change, Alpiq's strategy is constantly being reviewed and adapted. More concretely, in order to stay resilient or become even more resilient in the context of climate change challenges, Alpiq has already taken the following strategic decisions and actions:

 Focusing on flexibility by investing in flexible plants as well as storage capacity (flexibility becomes more important as RES capacity is added to the energy system and weather becomes potentially more extreme and unpredictable) ESRS E1 GOV-3 13

ESRS E1 SBM-3 19

- Investing in hydropower plants to take advantage of potentially different water inflow patterns due to glacier melting and changes in precipitation and to contribute to security of supply, especially in winter.
- Investing in new technologies which have minimal impact on the climate (i.e. BESS).
- Strengthening the Trading divisions to allow for fast reaction to changing circumstances, thereby limiting market risks
- Closing PPA deals with industrial clients to decarbonise their businesses and guarantee power supply.

The results of the scenario analysis show that Alpiq is well protected against physical risks, since its plants already fulfil very high safety standards and Alpiq invests continuously in maintaining these standards at a very high level. For example, Alpiq's hydropower plants are already constructed and protected in such a way as to withstand floods which, statistically speaking, only happen once in a thousand years (a 1,000-year flood has a 0.1% change of occurring in any given year). Taking into consideration the uncertainty related to climate change and given the many floods that occurred in 2024, Alpiq will challenge its approach to flood protection and, if assessed to be necessary, make adaptations to ensure protection against potential future impacts caused by climate change. In addition, short plant outages due to potential disruption by a flood or similar events can be balanced by Alpiq's Trading division.

In contrast, transition risks are expected to have a bigger impact on Alpiq, as transition events may influence energy and  $CO_2$  prices, which in turn have a direct impact on the company's cash flow. Transition risks are described in more detail under IRO-120 (c).

### Description of the processes to identify and assess material climate-related impacts, risks and opportunities

Climate-related IROs, including the impact of Alpiq's GHG emissions, were identified by conducting the DMA as described under <u>ESRS 2 SBM-3 48</u>.

As part of this process, climate-related material hazards in Alpiq's own operations and for parts of the upstream value chain (for minority shareholdings) were identified with the aid of the MunichRe Location Risk Intelligence Tool, which assesses the hazard probability over four different time horizons (current, 2030, 2050, 2100) and three different climate scenarios (SSP1, SSP2 and SSP5), based on the asset type and asset location (latitude and longitude). From this data, covering 126 Alpiq locations with a building or construction (e.g. dam, transformation station, water withdrawal unit), the 31 locations with the highest risk scores were identified and further assessed. Alpig has identified the following current and potential future climate-related hazards to which its assets and business activities could be exposed over the short, medium and long term: cold stress, drought stress, extratropical storm, fire weather stress, flash floods, hail, landslide, river floods, precipitation stress, and water stress. Flooding and landslides were identified to be the most relevant potential hazards for Alpiq. Each Alpiq asset has been assessed in terms of its exposure to these current and potential future hazards to determine the physical risk.

ESRS E1 IRO-120 (a)

ESRS E1 IRO-120 (b)

Number of Alpiq locations assessed regarding climaterelated material hazards

126

Environment

Three climate scenarios were used to assess material hazards and estimate physical risk:

- 1. IPCC SSP1 (low-emissions scenario, global warming below 2 degrees Celsius)
- 2. IPCC SSP2 (mid-emissions scenario, global warming 2 to 3 degrees Celsius)
- 3. IPCC SSP5 (high-emissions scenario, global warming 3.3 to 5.7 degrees Celsius)

These Shared Socio-Economic Pathways (SSPs) were used in the Sixth Assessment Report on Climate Change by the Intergovernmental Panel on Climate Change (IPCC) and serve as a well-known scenario standard. It is plausible to use these three different emissions scenarios to determine physical risks, as the probability and severity of potential hazards change depending on how much temperatures increase and, having two scenarios, SSP1 and SSP5, at opposite ends of the potential temperature increases the spectrum that is covered.

In Alpiq's case, the calculation of gross physical risk is challenging, since many measures taken during asset construction already mitigate a large proportion of the gross physical risk. The following description of the calculation of physical risk therefore refers to the risk already mitigated to a certain extent due to the measures taken during asset construction.

The physical risk in Alpiq's own operations and upstream minority shareholdings was calculated per asset, using the MunichRe Location Risk Intelligence Tool, which assesses climate-related risks based on the location of the asset. The probability of occurrence of different climate events and the estimated number of shutdowns of each asset served as an input to estimate the financial impact of the physical risks.

Physical risk was assessed for Alpiq's own operations as well as for part of the upstream value chain, i.e. for assets in which Alpiq holds minority shareholdings, since an outage of one of these assets could have major implications for Alpiq's business. However, other parts of the upstream value chain, such as the supply chain and the downstream value chain, were not included in the physical risk assessment, as they are of comparatively lower relevance for business continuity.

#### The following physical risks were found to be material:

Physical risk	Description	Time horizon <sup>1</sup>	Impact	Sensitivity (expert opinion) <sup>2</sup>
(acute) events due to climate change pote inter Reco diffic		Potential damage to Alpiq's operations, including potential infrastructure damage, and business interruption in affected regions. Recovery costs, operational shutdowns, and difficulty in meeting customer demands for electricity and services.	Very low	
Landslide (acute)	Extreme weather events such as excessive rainfall and increasing temperature can trigger landslides	M, L	Potentially strong impact on Alpiq's operational portfolio, particularly in areas where the company has critical infrastructure, facilities, or employees. Infrastructure damage and potential extended business interruption periods could result. Loss of revenues, increased maintenance costs, and lower production capacity and services in affected areas.	Medium
Precipitatio stress (chronic)	orHigh precipitation volumes due to climate change	L	Adverse effects on Alpiq's regional operations. Excessive rainfall may induce floods and landslides or hail events that may cause damage to equipment and power transmission lines.	Very low

1 S = Short Term, M = Medium Term, L = Long Term

2 The expert opinion regarding sensitivity is based on inputs from Alpiq internal experts as well as the independent external advisor.

The impacts described in the table could lead to a situation of reduced production capacity and production rates, increased overhead costs, deterioration of market position (which in turn could lead to a high employee turnover), all of which could affect the company's profitability.

However, as mentioned previously, many adaptation measures are inherent to Alpiq assets and therefore the overall physical risk for Alpiq remains moderate.

In the section below, we turn from looking at the physical risks to considering the transition risks and opportunities.

Climate-related transition events and the related gross risks and opportunities in Alpiq's own operations and along the value chain were identified for a climate scenario in line with limiting global warming to 1.5°C by the year 2050 (IEA Net Zero 2050). It was decided to work with a 1.5°C scenario since this creates the potentially biggest transition risk and it is of interest to the regulator to see the impact of a worst-case scenario.

The gross transition risks and opportunities were identified through a qualitative assessment of potential transition events in the following clusters: Political & Legal, Technology, Market and Reputation (for risks); Resource Efficiency, Energy Source, Products & Services, Markets and Resilience (for opportunities). The assessment was conducted by experts attributing scores to the estimated impact and likelihood of occurrence of the different risks and opportunities created by transition events. The risks and opportunities were evaluated for a short-, medium- and long-term time horizon (short-term = 1 year, medium-term = 2 to 5 years, long-term = more than 5 years).

The following transition events and related gross transition risks were identified to be material (by cluster):

ESRS E1 IRO-120 (c)

Transition risk cluster	Description	Time horizon <sup>1</sup>	Impact	Sensitivity (expert opinion <sup>2</sup> )
Market	The market risk in the energy sector is influenced by a shift towards cleaner energy sources, a decrease in fossil fuel energy demand, and the establishment of new energy companies solely focused on clean energies.	L	The transition affects the return on investment (ROI) and compliance costs, as companies may need to decommission existing fossil fuel infrastructure and adhere to strict environmental standards. It may also impact market share, potentially leading to a reduction in the market share of existing companies. Shifting investment patterns may occur as investors prioritise companies with strong sustainability credentials.	High
Policy & Legal	The policy and legal risks are associated with evolving regulatory frameworks targeting GHG emissions. These include stricter emissions regulations, reduced government support for fossil fuels, and mandates for transitioning to low-carbon energy systems.	L	Changed regulation may impact operational compliance requirements and compliance costs, influence energy market dynamics, shift customer and stakeholder expectations toward more sustainable practices, and lead to subsidy reductions and regulatory penalties.	Medium to high
Reputation	Reputation risks stem from the public perception of fossil fuel reliance, lagging sustainability efforts and slow adaptation to new technologies.	L	Negative public sentiment can lead to the erosion of trust, a diminished brand value, difficulties attracting customers and investors, and a failure to attract talent, which in turn negatively impacts the market position.	Medium to high
Technology	Technological challenges may arise due to (and not limited to) implementation of new technologies, uncertainty in renewables technology, energy storage technology limitations and interoperability and compatibility issues of assets.	L	Technological challenges may lead to increased costs and lower cost effectiveness, as well as a competitive disadvantage.	Medium to high

1 S = Short Term, M = Medium Term, L = Long Term

2 The expert opinion regarding sensitivity is based on inputs from Alpiq internal experts as well as the independent external advisor.

The potential impacts described in the table could lead to a decrease in revenues and profitability.

The following transition events and related opportunities were identified to be material (by cluster):

Transition opportunity cluster	Description	Example	Time horizon <sup>1</sup>	Impact
Products & Services	Leverage innovation in energy storage, renewable energy trading, and Al-driven solutions to lead the sustainable energy market and drive revenue growth.	Deploy advanced storage solutions, expand renewable trading platforms, and integrate AI to enhance trading efficiency and drive revenue growth.	M to L	Very high
Markets	Expand capacity to meet growing demand for renewable and green energy while capitalising on the market shift toward low-carbon solutions and green investments.	Expand hydropower, wind and photovoltaic capacities and other green energy sources, issue green bonds to attract sustainable investment and drive project growth.	L	Very high
Resilience	Position climate resilience as one of the most important aspects in business strategy to adapt proactively, build trust and align with emerging sustainability trends for long-term growth.	Embed climate risk assessment into planning processes, align capital expenditure with sustainability goals, and partner with governments and organisations to drive regional adaptation initiatives and strengthen market positioning.	L	High
Ressource Efficiency	Further invest in leading sustainable resource management practices and continuously enhance operational efficiency by implementing advanced technologies and optimising processes.	Adapt advanced technologies such as smart grids, optimise water usage, reduce waste, collaborate with stakeholders in the value chain, and educate staff on best practices in resource management.	L	High
Energy Source	By expanding the renewable energy portfolio, including making further investments in hydropower, wind, solar and flexibility projects, Alpiq can align more closely with global decarbonisation goals and sustainability targets, save costs and grow revenue from energy sources.	Ongoing investment in the latest technologies and processes to continuously improve the efficiency of all renewable energy operations.	L	High

1 S = Short Term, M = Medium Term, L = Long Term

The above table illustrates that transition events not only present risks but can also create a lot of opportunities for Alpiq, which may positively impact market valuation, financing conditions, costs and revenues.

A qualitative assessment of transition risks serves as a good baseline to better understand the potential impacts of transition risks and to explore the potential opportunities arising from the transition to net zero. However, due to the complexity of transition risks and to gain a more comprehensive understanding of the financial implications these transition risks might entail, Alpiq is currently in the process of quantifying both the risks and opportunities associated with a transition to net zero. The impact on the company's financials was modelled using a complex, Alpiq internal financial model for three different climate scenarios (base case, RCP2.6, RCP8.5). The model results indicate that climate change has an impact on financials; however, the magnitude and direction of this impact is largely dependent on price trends in the market.

## Transition plan for climate change mitigation

Alpiq has set itself the target of reaching net zero for Scope 1 and 2 emissions by 2040, but no further sub-targets/milestones have been defined yet. In accordance with the Swiss Climate Ordinance (see <u>SCO index</u> in the Appendix), Alpiq acknowledges the obligation to disclose a transition plan and is currently developing such a plan.

Decarbonisation levers mainly exist for CCGT power plants, as these are the plants that create the main part of the company's direct GHG emissions. Alpiq strives to continuously optimise CCGT power plants by implementing the latest available technology to maximise efficiency (e.g. by installing new turbines), which makes further efficiency gains challenging. However, Alpiq remains committed to exploring innovative solutions such as  $H_2$  blending, demonstrating its commitment to achieving future GHG emissions reduction targets.

Despite CCGT power plants creating a major part of Alpiq's GHG emissions, Alpiq also assumes responsibility for reducing GHG emissions from other sources, by continuously analysing new solutions and technologies that could contribute to the goal of fossil-free power production. Alpiq deploys certified management systems in accordance with each specific production technology and country regulations framework to track the effectiveness of its progress in limiting emissions and monitors its activities and performance in limiting GHG and nitrogen oxides emissions by means of specific environmental key performance indicators.

# Policies related to climate change mitigation

Alpiq is currently developing a Group-level environmental policy to harmonise its environmental principles and objectives across locations and activities. This policy and the related guidelines will be further developed to manage the material IROs identified.

Alpiq's energy production assets in Hungary, Italy and Spain as well as its hydropower plants in Switzerland implement Environmental Management Systems such as ISO 14001 and EMAS. These currently address long-term environmental management practices in the context of climate change mitigation, with a key focus on continuous improvement.

# Gross Scopes 1, 2, 3 emissions, total GHG emissions, and GHG intensity

#### **Consolidation method**

Alpiq has reported its GHG emissions, covering Scopes 1, 2 and 3, since 2020. Until the reporting year 2023, the methodology was based on Alpiq's equity share in each of its assets according to the GHG Protocol, following these principles: ESRS E1-116, 17

Socpe 1 and 2 emissions net zero goal by year



ESRS E1-2 24, 25

- All direct emissions were reported as Scope 1.
- For all majority assets (> 50% share), indirect emissions were reported as Scope 2.
- For all minority assets (< 50% share), indirect emissions were reported as Scope 3.

In all cases, values were taken as being proportional to the shares of asset ownership.

ESRS guidelines define an alternate consolidation principle, based on operational control. Assets under operational control are defined as fully consolidated entities, for which Alpiq has the full authority to introduce and implement operating policies. The consolidation method therefore requires consideration:

- All fully consolidated assets, to be reported in Scopes 1 and 2 (100% of the emissions values).
- All non-fully consolidated assets, to be reported in Scope 3 (values proportional to ownership shares).

The ESRS consolidation method, particularly the GHG emissions boundaries, affects the reported GHG balance in the context of Alpiq activities. Indeed, most of Alpiq's assets in Switzerland are partner plants (so-called "Partnerwerke" in German) and are minority shareholdings, in some cases owned through specific contracts, which, according to the ESRS operational control logic, are not fully consolidated, even in cases where Alpiq has the management mandate. Moreover, this principle leads to a notable reporting gap, as some major energy production assets fall out of any shareholder's direct scope.

Alpiq considers that all its assets under management are core parts of its activities. Therefore, the equity share consolidation method is far more representative of Alpiq's overall business. Alpiq intends to carry on reporting GHG emissions according to its equity shares, in addition to the strict ESRS consolidation per operational control.

Therefore, both consolidation methods are presented in the following sections.

### Standards, methodologies, assumptions and calculation tools used

The 2024 calculation process and GHG declaration were conducted according to the GHG protocol and ESRS El requirements. Furthermore, they were checked externally by a third-party expert. Scope 3 values relative to energy trading (physical deliveries of power and gas) were recalculated for the year 2023, following a deeper assessment of the correct allocation of Alpiq's trading activities to Scope 3 emissions. This results in significant effects on the total reported Scope 3 emissions. No other recalculation has been applied.

GHG emissions of CCGT power plants are based on indirect site measurements and are reported in the relevant national registries. The other principal sources of GHG emissions are based on power plants' energy consumption as well as owned offices. Vehicle emissions based on reported kilometres travelled by Alpiq staff are considered. Upstream and downstream emissions relative to trading activities (physical deliveries of power and gas) are based on reported sale values. Emissions coefficients are updated annually, based on the most recent and approved references in consultation with the external expert, as follows:

- Emissions factor, fuel consumption: BAFU, Faktenblatt CO<sub>2</sub>-Emissionsfaktoren des Treibhausgasinventars der Schweiz, April 2024
   <u>Greenhouse gas inventory of Switzerland (admin.ch)</u>
- National average emissions factors, European Residual Mixes 2023
   Association of Issuing Bodies: Table 4: Total Supplier Mix 2023 <u>2023 | AIB</u>
- Emissions factor by technology, power generation: Treibhausgas-Emissionsfaktoren f
  ür den Geb
  äudesektor, intep, 26.02.2024, V2.0 – Emissionsfaktoren f
  ür den Geb
  äudesektor (intep.com)
- 4. Conversion factor for mobility, km to energy: Mobitool 3.0 <u>Facteurs</u> <u>mobitool v3.0 - mobitool</u>
- Scope 3 emission factor, nuclear IPCC values, Technology-specific Cost and Performance Parameters, 2014, Tab A.III.2 – <u>ipcc\_wg3\_ar5\_annex-iii.pdf</u>
- 6. Location-based emission factor for Swiss electricity mix 2023 <u>REIDA</u> <u>Treibhausgasemissionsfaktoren</u>
- Electricity generation mix for certain European countries <u>Our world in data</u> – <u>electricity 2023</u>

For internal purposes, to guarantee consistency from year to year, energy consumption and the respective GHG emissions are evaluated for each production site, office building and business unit. However, emissions are not declared per site or per country in the public report.

Base data is collected through various internal data owners, using specific checklists. Calculations are made in an Excel tool, initially developed by our external consultant and internally updated yearly to include all new documented emissions sources.

The declaration is provided in  $CO_2$  equivalents, including all applicable greenhouse gases. The emissions are based on the most recent and approved reference coefficient factors, which include all main gases with known GHG effects, according to the requirements of the UNFCCC/Kyoto Protocol: carbon dioxide ( $CO_2$ ), methane ( $CH_4$ ), nitrous oxide ( $N_2O$ ), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride ( $SF_6$ ).

As stated above, Alpiq considers that all its assets under management are integral to its activities. Therefore, the equity share consolidation method is far more representative of the entire business. Alpiq intends to continue reporting GHG emissions according to its equity share in addition to the ESRS methodology.

### Scope 1 GHG emissions inclunding share in emissions trading schemes (ETS)

Scope I emissions cover direct emissions from fossil fuels. Regarding Alpiq's activities, electricity production from CCGT power plants is the main source of direct emissions. Scope I emissions of Alpiq CCGT power plants are aligned with their respective national registry declarations. Emissions resulting from the fuel consumption of buildings and vehicles owned by the company are also included.

ESRS E1-6 48, AR 40

Alpiq is reporting its GHG emissions according to the ESRS standards for the first time in 2024. According to ESRS E1-6 AR 40, 100% of the GHG emissions of the entities it operationally controls are considered, regardless of the effective ownership share.

ESRS consolidation (operational control)			Equity share
2024	2024	2023	2022
1,558,126	1,415,480	1,313,498	2,057,654
1	552	470	
229	229	294	309
431	431	417	434
1,558,787	1,416,692	1,314,679	2,058,397
100.0%	99.9%	99.9%	100.0%
	consolidation (operational control) 2024 1,558,126 1 229 431 1,558,787	consolidation (operational control)           2024         2024           1,558,126         1,415,480           1         552           229         229           431         431           1,558,787         1,416,692	consolidation (operational control)         2024         2024         2023           2024         2024         2023         1,313,498         1,313,498         1,313,498         1,313,498         1,212,470         229         229         229         294         2024         2023         1,212,498         1,213,498         1,213,498         1,213,498         1,213,498         1,213,498         1,213,498         229         229         294         294         294         294         294         214         1,212,412         1,214,679         1,314,679         1,314,679         1,314,679         1,314,679         1,314,679         1,214,679 </td

1 Fuel consumption (diesel generators, heating) reported for nuclear and hydropower assets since 2023, for RES assets since 2024

2024 CCGT power plant production values are in line with 2023, increasing by approximately 8%, resulting in a proportional increase of Scope 1 GHG emissions. The running hours of the CCGTs depend on local market conditions, which differ each year. In 2024, the running hours of the Italian CCGTs increased compared to 2023, while the Hungarian running hours were lower than 2023. The increase in Italy is attributed to the exceptionally dry summer in southern Italy in 2024, which resulted in higher energy demand and nearly continuous operation of the San Severo power plant for four months. Additionally, the San Severo plant experienced a 60-day maintenance shutdown in 2023, compared to only 15 days in 2024. Furthermore, the new gas turbine in Vercelli became operational in 2024, enabling the plant to increase its operation time to approximately 1000 hours, up from around 350 hours in 2023. This increased production is due to the higher activation by Terna (Italy's TSO), through which Vercelli contributes to the security of supply in Italy. In terms of GHG intensity, CCGT-related emissions are stable compared to 2023.

Likewise, Scope I emissions of owned administrative buildings show values in line with the previous two years. Conversely, mobility-linked emissions show a decrease, mainly benefiting from the switch to hybrid or fully electric vehicles instead of petrol or diesel in countries where the longest distances are carried out (mainly Italy and France).

#### Direct biogenic CO<sub>2</sub> emissions

Alpiq activities include no significant combustion or biodegradation of biomass. Nevertheless, a few hydropower production sites use wood pellets for heating, which falls within the scope of biogenic emissions (out of scope). These sites are not within Alpiq's operational control and are thus not included in the ESRS consolidation. Change in Scope 1 emissions (vs 2023)



ESRS E1-6 AR 43 (c)

	ESRS consolidation (operational control)			Equity share
Scope 1: direct biogenic CO2 emissions [T $CO_2$ eq]	2024	2024	2023	2022
Pellets heating <sup>1</sup>	0	149	194.1	169.8

1 Direct biogenic emissions reported since 2024, 2022 and 2023 values being calculated retrospectively

Biogenic emissions total 149 T  $CO_2$  eq for the reporting period, 23% lower than the previous year's value. Year-on-year variations are due to fluctuating heating demand (building occupancy, weather conditions) as well as changing monitoring methods, which are based on fuel deliveries, not directly on the amounts consumed.

#### Scope 2 GHG emissions

Scope 2 covers indirect emissions from electricity consumption and district heating of majority shareholding power plants, leased buildings and all-electric vehicles. The declaration of Scope 2 emissions generally considers the location-based approach, which reflects the average emissions intensity of grids in which energy consumption occurs (using country or grid-average emissions factor data).

An effective market-based approach derives emissions factors from contractual instruments, which include any type of contract between two parties for the sale and purchase of energy bundled with attributes about the energy generation energy mix (through certificates or delivery contracts).

Alpiq's electricity procurement, especially for its production assets, involves various and complex contracts, the majority of which do not specify a guarantee of origin. Consequently, only a marginal part of the electricity used to run Alpiq's assets can be linked to a specific market-based energy mix and corresponding emissions factors. For this reason, only location-based data is reported below, with total market-based reductions according to documented guarantees of origin.

Gross energy indirect (Scope 2) GHG emissions in metric tons of CO<sub>2</sub> equivalents:

ESRS E1-6 49

	ESRS consolidation			
	(operational control)			Equity share
Scope 2: indirect GHG emissions - location-based $^1$ [T CO <sub>2</sub> eq]	2024	2024	2023	2022
Energy procurement for standby operation of gas-fired combined-cycle power plants (operational control)	9,939	9,275	8,172	5,565
Energy procurement for run-of-river, photovoltaic and wind power plants (operational control)	1,502	1,475	1,447	1,543
Energy for storage power plants (partner power plants with operational control)	1,424	4,473	6,108	3,894
Mobility in Europe (vehicle fleet owned or leased by Alpiq, electrically driven)	5	5	2.6	2.0
Electricity consumption of administrative buildings in Europe owned or rented by Alpiq	167	167	131	158
Indirect (Scope 2) GHG emissions gross	13,037	15,394	15,860	11,162
Market-based reductions <sup>2</sup>	-32	-32	- 45	- 27

1 Location-based: the calculations are based on reference country supplier mix

2 Market-based: the market-based reductions are based on the effective energy mix when origination guarantee is available (certifications or chosen specific energy mix)

Global Scope 2 emissions show a 3% decrease compared to 2023 but do not reveal a clear trend.

The main drivers of Scope 2 emissions variations are:

- Stand-by electricity consumption by CCGT power plants, which depends indirectly on the total running hours.
- Hydropower pumping consumption, which depends on the yearly natural intakes and production planning.
- Variations of the average electricity consumption mix in countries with significant consumption, and related emissions factors.

#### Scope 3 emissions per category

Scope 3 covers all other indirect emissions that occur in Alpiq's value chain, according to the <u>GHG protocol framework</u>. A full assessment of Alpiq Scope 3 GHG emissions was conducted with the support of an external consultant in 2023. Based on this comprehensive assessment, this report addresses the most relevant emitting categories, which encompass over 98% of Group Scope 3 emissions. This includes the following categories:

- Emissions of not fully consolidated power plants.
- CAT 3.3 Upstream emissions relative to Alpiq's own energy consumption as well as energy sold to end users
- CAT 3.6 Business travel emissions (flights, rented vehicles for all business units, personal vehicles and trains for business unit Switzerland)
- CAT 3.11 Emissions originating from the end use of goods and services sold by Alpiq (gas sold to end users).

Change in Scope 2 emissions (vs 2023)



ESRS E1-6 51

Business travel CAT. 3.6 is included for internal environmental awareness even though it is not very impactful in terms of relative magnitude.

Gross other indirect (Scope 3) GHG emissions in metric tons of CO<sub>2</sub> equivalents:

ESRS consolidation (operational control)			Equity share
2024	2024	2023	2022
15,125	11,402	11,844	10,948
8,983	8,983	12,392	6,561
365,893	365,893	344,998	493,342
2,174,959	2,174,959	2,421,297	1,423,778
911	911	624	323
58	58	93	78
25	25	22	10
2,592,832	2,592,832	2,872,999	3,245,959
5,158,787	5,154,982	5,664,269	5,180,999
	consolidation (operational control) 2024 15,125 8,983 365,893 2,174,959 911 58 25 25 2,592,832	consolidation (operational control)         2024           2024         2024           15,125         11,402           8,983         8,983           8,983         8,983           365,893         365,893           2,174,959         2,174,959           2,174,959         2,174,959           911         911           58         58           25         25           2,592,832         2,592,832	consolidation (operational control)       2024       2024       2023         105,125       11,402       11,844         8,983       8,983       12,392         365,893       365,893       344,998         2,174,959       2,174,959       2,421,297         911       911       624         58       58       93         25       25       22         2,592,832       2,592,832       2,872,999

1 Location-based: the calculations are based on reference countries' consumption mix

2 Cat 3.3, 3.6, 3.11 are relative to Alpiq's corporate business activities, and are therefore not influenced by the production asset consolitation method

- 3 Recalculation of the 2023 value (+914'062 T CO2eq, 32% of total Scope 3) due to a more comprehensive classification of power sold to end users and allocation to Scope 3.3
- 4 Recalculation of the 2023 value (+72'172 T CO2eq, 1.5% of total Scope 3) due to the reallocation of gas sold in Switzerland to Scope 3.11

Overall, Scope 3 emissions show a 9% decrease compared to 2023 (incl. recalculation), but with significant variations in some categories. The main drivers of the variations are the following:

Energy procurement - minority / non-controlled assets: -16%

 Update of the average emissions factor for electricity consumption in Switzerland for 2023, from 18.0 g CO<sub>2</sub>eq/kWh to 13.4 g CO<sub>2</sub>eq/kWh (–26%), leading to a decrease in the calculated emissions of energy procurement from nuclear, storage and pump storage power plants.

CAT 3.3: Upstream emissions of energy-related activities: -9%

 Limited increase in the amount of natural gas used in our CCGT power plants and associated upstream emissions, in line with the increase in production compared to 2023. Change in Scope 3 emissions (vs 2023)



 Limited decrease in the total amount of electricity sold to end users and associated upstream emissions, including a more comprehensive integration of the energy sales of all Alpiq country branches and an update of the 2023 values.

CAT 3.6: Business mobility: +34%

- Significant increase in the number of business flights and associated emissions in 2024 compared to 2023.
- Decrease in emissions linked to rented and personal car use, both due to an ongoing shift from fuel to hybrid and electric vehicle use and unreported data from some country branches.

CAT 3.11: Downstream emissions of energy-related activities: -10%

- Decrease in the total amount of gas sold to end users.

#### Total GHG emissions and intensity

By consolidating the total GHG emissions values, including Scopes 1, 2 and 3, as ESRS E1-6 53, 54 well as Alpiq's overall net revenue, a global GHG intensity per net revenue can be calculated according to ESRS requirements, as follows:

	ESRS consolidation (operational control)
Alpiq total GHG emissions and intensity per net revenue [T $\rm CO_2  eq$ ]	2024
Scope 1 - direct GHG emissions gross	1,558,787
Scope 2 - indirect GHG emissions gross	13,037
Scope 3 - indirect GHG emissions gross	5,158,787
Total GHG emissions gross	6,730,611
Global net revenue [CHF million]	6,643.0
GHG intensity per net revenue [T CO2 eq/CHF million]	1,013

### GHG intensity per net revenue – reference to financial statements

The net revenue used to calculate GHG emission intensity per net revenue is theESRS E1-6 55net revenue as presented in the chapter Consolidate Income Statement of theFinancial Report.

#### **Complementary GHG emissions intensity ratios**

In addition to the ESRS-aligned total emissions per net revenue presented above, two complementary GHG intensity ratios are reported here. These values provide interesting insights into the emissions intensity of CCGT production as well as Alpiq's overall electricity production.

GHG intensity of CCGT power plants, Scope 1 and 2 emissions:

Environment

The CCGT power plant production in 2024 is largely in line with the 2023 values, with the 8% increase in total production resulting in a proportional increase in total direct emissions. In terms of intensity, the CCGT emissions do not show a significant variation ( $-1.4 \text{ g CO}_2 \text{ eq/kWh}$ ) from the previous year, as the global load factors did not change much.

	ESRS consolidation (operational control)			Equity share
GHG intensity - CCGT power plants <sup>1</sup>	2024	2024	2023	2022
CCGT emissions [T CO <sub>2</sub> eq]	1,568,065	1,424,755	1,321,669	2,063,219
Overall CCGT electric production [GWh]	3,679	3,375	3,121	4,997
GHG emission intensity [g $CO_2$ eq/KWh]	426.2	422.1	423.5	412.9

1 Calculation includes CCGT power plants Scope 1 and 2 emissions (direct and indirect energy procurement of production asset) and net electricity production as reported in the chapter "Abut us" in the Annual Review

GHG intensity of electricity production at the Alpiq Group level, including all power plants:

At the Alpiq Group level, our renewable and nuclear assets contribute significantly lower greenhouse gas intensity than electricity produced from natural gas. The ESRS consolidation approach considers only the production and emissions of assets under operational control (Scope 1 and 2) and shows significant differences with the equity share consolidation approach, which considers both production and emissions values based on Alpiq's shares, including minority assets. Other Scope 3 emissions in Alpiq's value chain not directly related to power production are not included in the production intensity.

For 2024, the 8% increase in CCGT power plant production is balanced by a 21% increase in hydropower production, due to a good hydrological year. The overall intensity value is mainly driven by the annual fossil / non-fossil production ratio and 2024 is closely aligned with 2023 in that regard. Based on the equity share method, the production intensity consequently shows a marginal decrease (-1.4g  $CO_2$  eq/kWh). Conversely, the ESRS consolidation method results in a very different picture, with higher total emissions and all Alpiq nuclear and a significant part of hydropower production out of scope.

Change in production intensity in  $g CO_2 eq/kWh$ 



	ESRS consolidation (operational control) <sup>1</sup>			Equity share <sup>2</sup>
GHG intensity - Alpiq Group	2024	2024	2023	2022
Total emissions [T CO <sub>2</sub> eq]	1,596,002	1,452,426	1,354,775	2,087,375
Overall electric production [GWh] <sup>3</sup>	6,994	16,252	14,921	14,618
GHG emission intensity [g $CO_2$ eq/ KWh]	228.2	89.4	90.8	142.8

1 Calculation according to ESRS includes full Scope 1 and 2 emissions (direct and indirect energy procurement, production assets, offices and mobility), and net electricity production of fully consolidated assets

2 Calculation according to equity share includes Scope 1 and 2 emissions (direct and indirect energy procurement, production assets, offices and mobility), partial Scope 3 emissions (direct and indirect energy procurement of minority interests) according to Alpiq ownership shares and total net electricity production (including minority shares), aligned with Alpiq's production values as presented in the chapter "About us" in the Annual Review

3 The GHG reporting scope for equity share figures includes the Tormoseröd wind farm (Sweden, Alpiq share of 30%) and excludes the Hydro France base-versus-peak-exchange contract (no fixed energy right)

### Pollution

### Targets related to pollution

Limiting air pollutant emissions is an important goal that Alpiq pursues and takes into account when making strategic decisions. Alpiq deploys certified management systems in accordance with each specific production technology and country regulation framework to track the effectiveness of its progress in limiting pollutants.

For the CCGT and OCGT power plants, the following emissions limits are in place and adhered to:

RBI only (OR Art. 964b)

Gas turbine emission limits  $[mg/NM_3]$ 

	NO <sub>x</sub>	CO
Plana del Vent	50	100
San Severo	25	30
Novara	30	50
Vercelli	30	30
Csepel	90	50

	Auxiliary boiler emiss	ion limits [mg/NM <sub>3</sub> ]
	NO <sub>x</sub>	CO
Plana del Vent	450	100
San Severo	200	n/a
Novara	200	250
Vercelli		n/a
Csepel	200	100

Above emissions limits can vary within the same country because they depend on plant technology, age and regional authority intentions. Some authorities intend to reduce those thresholds to contribute to national emission reduction goals.

In addition, the Group companies are legally required to conduct environmental impact assessments (EIAs) for assets that are newly constructed, upgraded or modified, in order to ensure that potential pollution impacts are avoided, mitigated and addressed appropriately. Those pollution requirements are integrated into the licence conditions.

For each of Alpiq's CCGT power plants, spill and leakage prevention and mitigation/response measures are in place. Spill and leakage prevention includes the proper storage of hazardous materials and waste, regular inspections, training and awareness creation, and contention measures. These measures prevent potential negative impacts caused by the discharge of water that is too warm or that differs from the pH limit mandated by authorities. Mitigation is ensured through the use of spill response kits. For groundwater monitoring, the CCGT power plants in Italy and Hungary have installed several piezometers to determine the level, quality and flow patterns of groundwater.

At the business unit Hydro Generation Switzerland, environmental incidents (without impacts on the environment) and accidents (with impacts on the environment) are constantly being monitored, allowing Alpiq to identify, consolidate and analyse these incidents and accidents. This ensures that appropriate measures can be taken, and feedback can be used to improve practices if necessary.

However, apart from the targets already in place and adhered to, Alpiq has not yet defined any specific pollution reduction targets.

### Pollution of air

In 2024, Alpiq's CCGT and OCTG power plants have emitted the following RBI only (OR Art. 964b) amounts of air pollutants:

	CO [kg/year]	NO <sub>x</sub> [kg/year]
Italy		
San Severo	30,730	162,430
Novara	17,690	98,860
Vercelli	2,662	4,668
Spain		
Plana del Vent	23,730	62,920
Hungary		
Csepel	30,318	247,492
Total	105,130	576,370

In order to track pollution, Alpiq applies different pollution measurement methodologies depending on the plant and the type of pollution to be measured.

For air pollution measurement of the closed-cycle and open-cycle gas-fired power plants, Spain makes use of air vector measurement methodology, whereby the meters used are subject to legal meteorological control. In Italy and Hungary, all gas-turbine plants are equipped with Continuous Emission Monitoring Systems (CEMS) that measure the levels and flow rates of the different pollutants, and an alarm is triggered if the limits are exceeded. Furthermore, a yearly analysis performed by an external certified laboratory as well as methane (CH<sub>4</sub>) sensors and leakage detection systems are used to measure air pollution in Italy.

In Spain, carbon oxide (CO) and nitrogen oxide (NO, are measured in real time using the company's own sensors in the stack. A third party checks for particulates and sulphur oxide  $(SO_x)$  every six months. Sulphur hexafluoride  $(SF_6)$ and fluorinated gases are checked whenever refills are necessary. Soil pollution is

measured by piezometers, while sea water measurements are taken by flow meters (owned by Naturgy).

In Italy, air pollution is measured through stacks downstream of the heat recovery steam generators (HRSGs) and the auxiliary boilers of the power plants are equipped with sensors for continuous measurement of air pollutants. The data read by the sensors is processed by Continuous Emission Monitoring Systems (CEMS) and recorded by distributed control systems (DCS). Data can be read continuously by connecting to the system or can be extracted and organised into daily/monthly/annual reports. For wastewater, the pH and temperature values of the Novara wastewater basin are read by sensors that transmit the data directly to the DCS. Soil pollution is monitored by conducting analyses of water taken from piezometers. These analyses are carried out by an accredited external laboratory and the results transmitted with reports.

In Hungary, air quality is measured through stacks downstream of the gas turbines of the power plant, which are equipped with sensors for continuous measurement of pollution parameters. The data read by the sensors is processed by CEMS and recorded by DCS. Data can be read continuously by connecting to the system or can be extracted and organised into daily/monthly/annual reports. For wastewater, the pH and temperature values are read by sensors that transmit the data directly to the DCS. Groundwater is checked by an accredited external company and the results are transmitted to Alpiq, where they are stored.

### Water and Marine Resources

### Description of the processes to identify and assess material waste and marine resources-related impacts, risks and opportunities

To identify material IROs related to water and marine resources, Alpiq conducted a DMA as described under <u>ESRS 2 SBM-3 48</u>. With regard to water and marine resources-related IROs, Alpiq also conducted consultations as described under <u>ESRS 2 IRO-1 53</u>.

# Policies related to water and marine resources

Specific policies with regard to water and marine resources do not currently exist ESRS E3-111 at Alpiq for all locations and/or assets.

Nevertheless, as described under <u>E1-2 24 and 25</u>, Italy has an integrated health, ESRS E3-112 (a) safety, and environmental policy in place. Spain and Hungary also have a health and safety policy and a separate environmental policy in place. These environmental policies provide high-level guidance on the management of water and marine resources.

As an example, based on the environmental policy in Spain, Alpiq's San Severo ESRS E3-112 (b) plant is equipped with a zero liquid discharge (ZLD) system. In a ZLD system, which is a closed-loop system, all wastewater is either recycled or evaporated, thus leaving zero liquid waste to be discharged, which allows the used water to be recycled.

### Actions, resources and targets related to water and marine resources

As for actions related to water and marine resources, some actions have already	ESRS E3-2 19
been taken at Alpiq's plants.	

The hydropower plants capture water from rivers to convert into energy. The water is extracted upstream of the facility, turbined and then returned downstream. In this process, the water is returned entirely to nature, without pollution or alteration. Water used for hydroelectric generation is not considered to be consumed.

Furthermore, cooling water discharges from all Alpiq's CCGT power plants are controlled by measuring temperature, salinity, turbidity, dissolved oxygen and density in order to assess the impact of these discharges. The results of the analyses of the samples show that no signs of disturbance to the water and ESRS E3 IRO-18 (a),(b)

marine environment were detected that could be attributable to the operation of the CCGT power plants.

For Plana del Vent specifically, which is located in an area with a highly sensitive marine environment, an extensive environmental monitoring and exploitation control programme is in place that ensures controls of the plant's impacts on the marine environment. The cooling water discharge area of the plant undergoes checks for temperature, salinity, turbidity, dissolved oxygen, density, inorganic nutrients, suspended matter, chlorophyll a, and microbiological indicators. According to the latest results, no signs of disturbance of the marine environment have been observed that could be attributable to the operation of the Plana del Vent CCGT power plant.

While some actions have already been taken, there are currently no targets in place at Alpiq with regard to water and marine resources.

### **Biodiversity and Ecosystems**

### Material impacts, risks and opportunities and their interaction with strategy and business model

Alpiq owns and operates production facilities that have a significant footprint on the territory in natural environments worthy of protection. Therefore, Alpiq has put measures in place to create, preserve or revitalise essential habitats for animals and plants, including financial support for many environmental revitalisation and improvement programmes. The company ensures the quality, reproducibility and sustainability of its processes in this regard by adhering to the standards issued by the International Organisation for Standardisation, including ISO 14001 (environmental management system).

Furthermore, Alpiq conducted a materiality assessment of potential impacts using the ENCORE (Exploring Natural Capital Opportunities, Risk and Exposure) framework to identify the company's dependencies and pressures on nature. The assessment confirms that the generation of electricity via Alpiq's production portfolio notably has very strong interdependencies with climate regulation, water resources and use, terrestrial / freshwater ecosystems and biodiversity as well as having the potential to provide flood and storm protection. These considerations are being integrated in Alpiq's Group-level biodiversity policy, which is currently under development to harmonise principles and objectives.

Ultimately, (EIAs), including the impact on biodiversity, are a key part of all Alpiq projects and play an important role in driving strategic choices.

#### Description of processes to identify and assess material biodiversity and ecosystem-related impacts, risks and opportunities

In order to identify material IROs, Alpiq conducted a DMA as described under ESRS ESRS 2 SBM-3 48.

For the assessment of biodiversity and ecosystems-related IROs, internal experts reviewed business activities in Alpiq's own operations as well as in the upstream and downstream value chain and came up with a qualitative assessment of the (potential) impacts on biodiversity and ecosystems.

The DMA identified a material positive impact on biodiversity. By contributing to electrification, negative impacts on biodiversity and nature can be reduced in different sectors.

Furthermore, the DMA identified several material negative impacts on biodiversity. Alpiq builds, owns and operates production facilities whose location is strongly influenced by the natural resources used. The location of these ESRS E4 SBM-316 (b)

ESRS E4 SBM-316 (a)

ESRS E4 IRO-1 17 (a)

facilities, particularly those using renewable energy, leads to construction in areas occupied by natural environments worthy of protection. In some cases, hydropower plants and wind turbines are located in areas with significant biodiversity value. Also, the building of new power plants or production facilities has a negative impact on the environment, e.g. the territorial footprint of the construction, resulting in soil loss and thus a loss of surface area usable by flora and fauna, as well as changes to the soil of this surface area. In addition, energy production and transportation facilities, as well as construction work, generate negative emissions, including air pollutants, noise, light and electromagnetic fields, which have various effects on fauna.

Further details are available in the DMA tables in the chapter <u>Material</u> <u>Sustainability Matters</u>.

## Actions and resources related to biodiversity and ecosystems

Alpiq manages the construction and operation of production sites proactively in order to minimise their impact and promote the existing biodiversity. This includes the collaboration with different interest groups and the implementation of remediation, renaturation and compensation measures for Alpiq's development projects and for the watercourses on which the company operates. Environmental expertise is also developed internally to improve the overall environmental quality of projects. An environmental assessment, including nature and biodiversity, is a key par of all Alpiq projects and plays an important role in driving the company's strategic choices, event at an early stage.

For hydropower plants, the impacts of water withdrawals vary from case to case. In the case of Switzerland, the impact on watercourses has been assessed in accordance with the Federal Water Protection Act. For all the facilities managed by Alpiq, remediation measures are identified and implemented. The remediation measures include the construction of specific measures to allow fish migration (fish ladder, bypass channel), sediment evacuation and management, residual flow management and re-naturalisation. Finding a good balance between energy production and nature protection is a complex process, managed in close collaboration with all stakeholders

In addition, Alpiq has been involved in the following initiatives to promote biodiversity:

- The Alpiq Eco Fund, financed through the energy produced and sold by the Alpiq Ruppoldingen hydropower plant, has been supporting environmental projects since 2010.
- The realisation of various projects to develop sustainable tourism in the region of the nature park "Vallée du Trient", where it operates various hydropower plants.
- Cooperation with Swiss universities and universities of applied sciences to ensure a science-based approach that takes political and social aspects into account and leads to successful measures in the long run.
- Engagement with the public to promote the preservation of delicate ecosystems. The aim is to foster a harmonic interplay between human activities and ecosystems and ensure the sustainability of environmental compensation measures.

ESRS E4-3 28 (b)

To give some concrete examples, in June 2024, Alpiq conducted an event during which primary school pupils uprooted invasive pants, with the aim of raising awareness among the younger generation of the importance of preserving local biodiversity and playing an active part in protecting the environment. The 17 pupils from Salvan primary school who participated in the event were accompanied by a biologist and learnt about local invasive plants and the dangers they pose to biodiversity. The collaboration with Salvan primary school started in 2022 as a compensation measure for the Nant de Drance power plant. This is just one of the 14 environmental measures implemented as compensation for the construction of Nant de Drance. The total investment for these compensation measures amounts to CHF 22 million.

Another measure that has been particularly successful is the renaturation of the Canal de la Lantze in Vernayaz in the canton of Valais. It has created favourable conditions for seasonal spawning by fish, and different plant species characteristic of temporarily flooded environments have recolonised the newly created riverbanks. The new habitats have also attracted some wildlife, including a family of castors (a protected species in Switzerland). Number of compensation measures implemented for the construction of Nant de Drance



Alpiq Annual Report 2024

Social

### Social

### Own Workforce

### Material impacts, risks and opportunities and their interaction with strategy and business model

Based on the DMA described in the chapter <u>Material Sustainability Matters</u> it was found that people in Alpiq's workforce could be negatively affected by certain impacts and risks. Specific risks associated with job requirements (environment, shift work etc.) are properly observed and remunerated in workers' contracts. Moreover, Alpiq performs a continuous follow-up on health and safety outcomes, with particular attention to the blue-collar population, and includes measures to improve both the physical and mental health of its workforce.

### Policies related to own workforce

With respect to human rights policy commitments, Alpiq respects and upholds ESRS S1-120 (a) human rights in all aspects of its operations and always complies with the applicable labour laws where people are employed. In the absence of national legislation, Alpiq applies international standards such as the conventions of the International Labour Organization. In order to monitor compliance with human rights commitments, Alpiq operates ESRS S1-120 (b) the "Speak up! Line" in compliance with the EU DIRECTIVE (EU) 2019/1937 on the protection of persons who report breaches of European Union law. Alpiq wants all employees to feel free to report issues openly and ensures that employees who raise a concern in good faith do not suffer any disadvantage as a result. All Alpiq employees have access to the "Speak up! Line" and can report identified company-related irregularities and/or misconduct. Alpiq has a non-tolerance approach towards the violation of human rights. In case ESRS S1-120 (c) of human rights impacts due to misconduct by an employee or manager, Alpiq conducts a thorough impartial investigation (led by Compliance) to define the most appropriate consequence, depending on the results of the investigation. The consequences can range from measures to mitigate and eradicate this misconduct to the termination of the contractual relationship with the perpetrator. In alignment with internationally recognised standards, Alpiq also adheres to the ESRS S1-121 OECD Guidelines for multinational enterprises on responsible business conduct as well as to the International Labour Organization Fundamental Principles and Rights at Work, which include the prohibition of forced and child labour, the prohibition of discrimination in employment and occupation, and the right to freedom of association and collective bargaining. To foster the prevention of workplace accidents, Alpiq has had a Group Health & ESRS S1-123 Safety Policy in place since January 2021. Outside Switzerland, all employees working in power plants, as well as office-based workers in Italy, Spain and

ESRS S1 SBM-315

Social

Hungary, are covered by occupational health and safety (OHS) management systems certifying the local Alpig subsidiaries according to ISO 45001.

Alpiq's Code of Conduct aims to eliminate harassment and discrimination, while promoting equal opportunities as well as diversity of inclusion. The Alpig Code of Conduct states that employment-related decisions must be based on merit, without regard to a (potential) employee's race, nationality, ethnic origin, colour, religion, age, gender, gender identity, sexual orientation, martial or family status, disability or other characteristics protected by law. To advance diversity of inclusion, Alpiq is committed to increasing the female presence in leadership positions, with a target of 35% of female employees in top management by 2030. The company's people success (talent review) process aims to increase the visibility of female talents inside the company and focuses on creating development plans for those talents, in order to support the internal pipeline for the succession of key roles. Furthermore, Alpiq is a member of Advance and collaborates with other institutions focused on female professional development (e.g. Girls Getting Started in Switzerland).

### Processes for engaging with own workforce and workers' representatives about impacts

To allow for active engagement with the workforce, Alpiq has a body of workers' representatives with whom the company conducts continuous dialogue and feedback exchange on its strategy and workforce needs in all applicable countries.

The type and frequency of Alpiq's engagement with its workforce depends on the country. For instance, in Switzerland the PEKO/COPE attends the EB meeting twice a year, while there is a continuous exchange with the Head of Group HR. In other countries, such as Spain, Germany or France, the Work Council is involved in any important decision affecting the workforce and in the consequent negotiation with company representatives (led by HR).

Moreover, the company organises several Alpiq Insight sessions per year to inform the workforce about the progress on company strategy and related measures affecting both business and people.

Communication between the workforce and the company takes place mainly through the workforce's representative bodies. All country-related matters are to be discussed between the local Work Council and local HR. In Switzerland, where Alpiq's headquarters is located, the Head of Group HR has the operational responsibility to engage with the PEKO/COPE. Any country-related matter that cannot be clarified between the local Work Council and local HR shall be escalated to the Head of Group HR.

Alpiq assesses the effectiveness of its engagement with its own workforce through a survey conducted two times a year, which includes questions regarding the communication flow between the company and its employees.

ESRS S1-1 24 (a),(b),(c), (d)

Social

ESRS S1-2 27 (a)

ESRS S1-2 27 (b)

ESRS S1-2 27 (c)

ESRS S1-2 27 (e)

To gain further insights into the perspective of people in its own workforce, a special task force will be developed in 2025. The taskforce is based on a grassroots movement led by employees (both women and their allies) and will address problems and issues that women face in their professional lives that hinder their development and professional growth. After a first analysis phase to identify, propose and implement necessary measures, the goal for this taskforce is to become an employee resource group (ERG). While the focus in 2025 will be on women and cultural diversity, further topics are planned to be addressed from 2026.

### Processes to remediate negative impacts and channels for own workers to raise concerns

To provide or contribute to remedy in the case of material negative impacts on people in its workforce, Alpiq operates the "Speak up! Line" in compliance with the EU DIRECTIVE (EU) 2019/1937 on the protection of persons who report breaches of European Union law, as previously mentioned. It is Alpiq's aim that all employees feel free to report issues openly and to ensure that employees who raise a concern in good faith do not suffer any disadvantage as a result. The "Speak up! Line" enables Alpiq employees to report issues such as harassment and discrimination, but also other potential violations of the Code of Conduct.

In case of breach of the Code of Conduct, Compliance will investigate the case. If HR receives a complaint from an employee or detects potential misbehaviour, but there is no obvious breach of the Code of Conduct, a process is started to clarify the situation with the line manager of the employee who has potentially misbehaved. If this clarification is not satisfactory, Alpiq's internal network of coaches will act as mediator. If misbehaviour is detected, the employee that showed misbehaviour will be included in a performance improvement plan or, depending on the severity of the case, directly dismissed.

Taking action on material impacts on own workforce, approaches to managing material risks and opportunities related to own workforce, and effectiveness of those actions

Planned actions to manage material IROs related to Alpiq's own workforce include the following:

- Preparing for compliance with the EU Pay Transparency Directive
- Defining Alpiq's mobility framework
- Developing an Inclusion of Diversity roadmap
- Reviewing talent pipelines from a gender perspective
- Investigating technological possibilities to improve collaboration
- Offering modern and flexible working models

ESRS S1-2 28

ESRS S1-3 32

ESRS S1-4 37

- Integrating external service providers as a guarantee of employee engagement (e.g. Great Place to Work)
- Gathering regular employee feedback
- Providing Secure Base Leadership training
- Implementing a graduate programme
- Improving leadership qualities for Alpiq managers by offering specific trainings, 360-degree evaluations and coaching
- Increasing employer branding activities, along with a new employee value proposition and Alpiq's candidate, employee and alumnus journeys

Several actions to mitigate material negative impacts and deliver positive impacts on Alpiq's own workforce have already been taken, including the following:

- Reduction of meeting times, by working with shorter default meeting slots in Outlook and allowing for short breaks between meetings
- Roll-out of graduate programmes to ensure greater diversity in teams by including younger generations
- Establishing a common understanding, framework and wording for leadership-related situations, by running several training cohorts in Secure Base Leadership at IMD
- Establishing an internal coaching network, based on the Secure Base Leadership principles, which will collaborate with HR to act as an internal advisor to employees and allow Alpiq to collect first-hand inputs from its workforce

Alpiq's actions to manage business pressures without compromising employee wellbeing also include hiring temporary staff to fill critical resource gaps.

The effectiveness of the actions taken is tracked and assessed through the yearly employee surveys. After conducting these surveys, the results are analysed, and a new action plan is created based on the outcome of the analysis.

In order to mitigate material risks arising from workforce impacts, Alpiq is collaborating with Great Place to Work to evaluate its situation not only from an internal perspective, but also against an external benchmark. This allows Alpiq to gain a comprehensive understanding of its situation and helps to prioritise potential actions for improvement. Following a 68% participation rate in the survey conducted in November 2024, Alpiq has achieved the Great Place To Work certification for 2025 in all its countries. The company also recorded its highest-ever Net Promoter Score (NPS), increasing from +1 in 2022 to +42. The survey results highlight strengths in fairness, camaraderie, pride and safety, while areas for improvement include meeting culture, clarity of vision and development

Furthermore, a Global HR Information System will be implemented in 2025 containing employee data, which will allow Alpiq to have an accurate and up-to-date picture of the workforce.

Alpiq protects employees by using their data responsibly. Data stored due to its relevance for decision-making (e.g. for performance evaluation or identification of areas of improvement) is protected from misuse by centralising it in a global system (currently in place for data in Switzerland and the Czech Republic) or in the HR department. The Global HR Information System that will be implemented in 2025 will further improve data protection.

ESRS S1-4 38 (a),(b),(c)

ESRS S1-4 41

ESRS S1-4 38 (d), 39

ESRS S1-4 40 (a)

Participation rate Great Place to Work survey



ESRS S1-4 40 (b)

ESRS S1-4 41

Responsibilities for the management of material IROs are spread over many different people in HR. In particular, the Centres of Excellence "Talent Experience and Development" and "Organisational Development" allocate resources to the management of Alpiq's material impacts.

### Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities

Alpiq's organisational targets are set between the end of the third quarter and the beginning of the fourth quarter, always in alignment with the budget and the medium-term strategic direction. These targets are presented to and approved by the EB and serve as a basis for creating the Alpiq value chain targets as well as the EB members' own goals. Once this process is concluded, the organisational and value chain targets are communicated to the whole organisation, to ensure that alignment occurs at division and team levels by establishing goals that support the overall targets.

The organisational value chain and EB targets are constantly monitored and the NRSC is informed of the progress. As part of the continuous progress monitoring, potential shortfalls or needs for improvement are identified and tackled in a timely manner, either by adjusting the strategy to environmental circumstances or by putting in place the necessary actions.

# Characteristics of the undertaking's employees

The following chapter discloses figures that provide some insights into the characteristics of Alpiq employees. These figures do not include employees of P2X Solutions, Entegra Wasserkraft AG and Isento Wasserkraft AG, which are fully-consolidated entities, but whose employees do not have an Alpiq contract and are therefore not counted as own employees. The total headcount of 1385 employees corresponds to 1326 FTEs. The FTE figure reported in the Financial Statement differs because it includes employees that do not have an Alpiq contract but work in the fully-consolidated entities mentioned above.

The following table and chart show Alpiq's employee headcount by gender and year:

	Number of employees (headcount)		
Gender	2024	2023	2022
Male	959	910	885
Female	426	372	301
Total employees	1,385	1,282	1,186

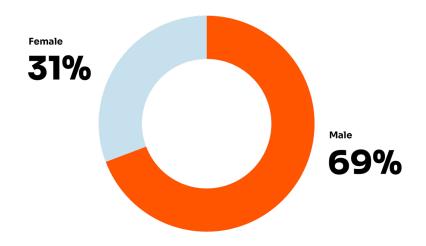
ESRS S1-4 43

ESRS S1-5 47 (a)

ESRS S1-5 47 (b),(c)

ESRS S1-6 50 (a)

#### Alpiq employee headcount by gender in 2024:



The following table shows the employee headcount in countries where the undertaking has at least 50 employees representing at least 10% of its total number of employees (in 2024):

Country	Number of employees (headcount)
Switzerland	764 (55%)
Czech Republic	174 (13%)

The following table shows information on employees by contract type, broken	ESRS S1-6 50 (b)
down by gender (for the year 2024):	

Contract Type	Female	Male	Total
Permanent employees	412	929	1,341
Temporary employees	13	20	33
Non-guaranteed hours employees	1	10	11
Total	426	959	1,385

Finally, the last table in this chapter shows the total number of employees who left the company during the reporting period (the year 2024) and the rate of employee turnover (= employees who left divided by the total number of employees at 31 December 2024) for this same period:

ESRS S1-6 50 (c)

208

Country	Number of employees who left	Turnover rate
Switzerland	75	9.8%
Spain	15	16.3%
France	11	9.2%
Czech Republic	8	4.6%
Italy	6	5.1%
Hungary	4	5.1%
Germany	1	4.2%
Norway	1	33.3%
Finland	0	0.0%
Bosnia	0	0.0%
Total	121	8.7%

It was decided to also disclose the characteristics of P2X employees on a voluntary basis (not required by CSRD). P2X Solutions has a total of 18 employees (11 male and 7 female), all based in Finland. Seventeen of these employees are permanent employees, and there is one temporary employee.

## Collective bargaining coverage and social dialogue

The global share of Alpiq employees covered by workers' representatives is 51%. This share includes countries that have at least 50 employees and represent at least 10% of the company's total employees.

ESRS S1-8 63 (a)

Share of Alpiq employees covered by workers' representatives

51%

ESRS S1-8 63 (b)

Alpiq has local Work Councils but no European Work Councils (EWCs) or European Company Work Councils (SE-WCs) as the overall number of employees based in EU countries is less than 1,000.

### **Diversity metrics**

Alpiq has set the goal to have a share of 35% women in top management by 2030.

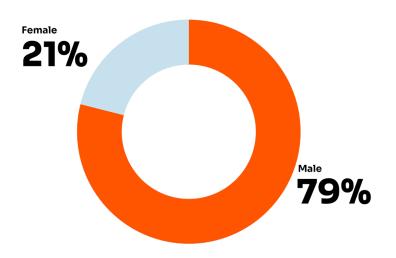
In 2024, Alpiq had 21% women in top management, compared to 18% in 2022 and 25% in 2023. The reason for the decline of this share in 2024 is that Alpiq changed the base population used to calculate the female representation in top management:

RBI only (OR Art. 964b)

- 2023 report: EB and EB-1 (32 employees)
- 2024 report: EB and Job Grade 10 (75 employees)

The new and larger pool of employees used as the base for the calculation reflects those employees holding strategic positions and decision-making roles that influence the direction of Alpiq much better. Alpiq thereby takes a full commitment to enable the development of female leaders from an early stage. Whilst the current percentage of 21% women in top management is not yet at the level Alpiq aims for, measures and strategies are being developed internally to increase this share.

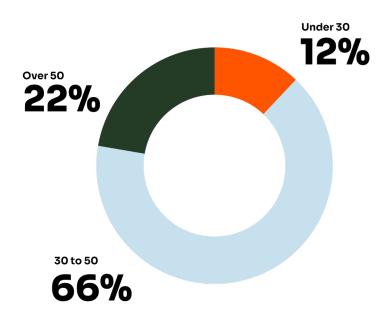
Gender distribution in top management in 2024:



The following table shows the distribution of Alpiq employees by age group:

Age group	Number of employees (headcount)	Share (%)
Under 30 years	167	12.1%
30 to 50 years	909	65.6%
Over 50 years	309	22.3%
Total	1,385	

Social



It was decided to also disclose diversity metrics of P2X Solutions on a voluntary basis (not required by CSRD). P2X Solutions has four men and two women in top management, thus a top management gender distribution of 66.7% male and 33.3% female.

The age distribution of P2X employees is as follows:

- Under 30 years: 1 employee (5.6%)
- 30 to 50 years: 14 employees (77.8%)
- Over 50 years: 3 employees (16.7%)

### Social protection

As part of its social protection measures, Alpiq protects its employees in case of injury. In Switzerland, accident insurance is compulsory and regulated by the Federal Law on Accident Insurance (UVG). Accident insurance protects Swiss employees from the financial consequences of occupational accidents, non-occupational accidents and occupational diseases. Article 66 of the UVG describes that for certain companies, especially those with higher risk potential (including industrial companies), employees must be insured with SUVA. Alpiq has the SUVA accident insurance for all Swiss employees, as well as an additional accident insurance with AXA that gives employees access to private insurance benefits in case of hospitalisation due to an accident.

In other countries, employees are covered by social protection against loss of income due to injury and acquired disability according to local regulation.

Another important aspect of social security is the protection against loss of ESRS S1-1174 (d) income due to parental leave. Alpig aims to meet or exceed local norms for

ESRS S1-1174 (c)

Social

maternity, paternity and other types of parental leaves. Across Alpiq's European operations, practice varies in line with local requirements and norms.

In Switzerland, after the birth of a child, the mother is entitled to be paid maternity leave of 14 weeks (98 days) and the father to two weeks' (10 days) paid paternity leave. Mothers on maternity leave are not allowed to work unless they voluntarily decide to return to work after the first eight weeks. Paternity leave can be taken within six months of the birth of the child. Alpiq pays 100% of the maternity and paternity allowance, while 80% of the allowance is reimbursed to Alpiq by "Ausgleichskasse Schweizerischer Elektrizitätswerke" (AKEW). The additional 20% is covered by Alpiq itself.

In Spain, mothers and fathers are both protected during 16 weeks after the birth of a child. During these 16 weeks, the government covers 100% of the social security contribution base. If the salary of the employee is higher than this base, Alpiq Spain covers the rest in order to esure a combined salary coverage of 100%. Mothers and fathers can ask for extra leave without salary until the baby reaches the age of one year, with a guarantee that their positions in the company are kept. An extension beyond the baby's first birthday is also possible, but in this case Alpiq does not guarantee that the employee's position will be kept.

In France, the standard maternity leave is 16 weeks and maternity leave is paid. The social security system covers the mother's salary during maternity leave up to a certain limit, and Alpiq France covers the difference between this limit and the mother's actual salary. Standard paternity leave in France is 25 days This is also covered by social security up to a defined limit, while Alpiq France covers the difference between this limit and the employee's salary. If the mother gives birth to more than one child, the maternity and paternity leaves are extended.

### Training and skills development metrics

The percentage of Alpiq employees who participated in career development reviews (called "People Success") in 2024 is 89.9%, with 70.4% of participants being male and 29.6% being female employees.

The total average number of recorded training hours per employee was 16.3 hours, with a gender split of 55% male and 45% female recorded training participants.

The above figures do not include P2X Solutions. At P2X Solutions, each employee received one business day of training by calendar month on average.

### Health and safety metrics

Twenty-five percent of Alpiq employees are covered by a health and safety management system (in Switzerland, this is either ISO 45.001 or EKAS). As for Alpiq employees with an asset risk profile, i.e. employees who work in power plants and therefore have a higher risk exposure than office-based staff, 96% are covered by a health and safety management system (ISO 45.001 or EKAS in Switzerland).

Voluntary

Recorded training hours per employee

16.3

ESRS S1-14 88 (a)

Weeks of paid maternity leave in Switzerland



There have been zero fatalities, and zero work-related ill-health was recorded for Alpiq employees in 2024. However, there have been three reported work-related accidents among Alpiq employees in 2024, namely one minor finger cut as well as two slips and falls. The Total Recordable Injury Frequency Rate (TRIFR) of Alpiq employees is 1.2 based on 1,000,000 hours worked. The number of recordable work-related injuries of workers who are not employees but whose work and/or workplace is controlled by Alpiq amounts to two (both minor slips on asset construction sites).

ESRS S1-14 88 (b),(c), AR 91

Number of fatalities and work-related ill-health



# Governance

# **Business Conduct**

### Business conduct steering

The BoD, the ARC and the NRSC conduct regular meetings to discuss any concerns relating to business conduct. In each of these meetings, the BoD provides information about ongoing business challenges and related opportunities and risks. Additional ad-hoc meetings and video conferences are held in case of urgent discussion points.

For oversight and monitoring, the BoD ensures that key governance functions, such as compliance and risk management, are implemented effectively and reviewed regularly. The ARC and NRSC focus on specific subject matters and may request information related to business activities or mandate an internal audit for investigation. Internal Audit helps the organisation to achieve its objectives by providing a consistent, acknowledged procedure for measuring and increasing the effectiveness of risk management, administration and governance. It serves as an important instrument for business conduct steering.

This structured approach ensures robust oversight mechanisms that contribute to business integrity and timely responses to critical matters.

Alpiq's BoD consists of seven highly experienced senior non-executives, jointly covering all areas of expertise required for the administration and supervision of the company. These areas cover in particular executive experience in the management of large international energy companies, trading expertise, financial expertise, experience and expertise in sustainability and climate aspects, industrial and technical expertise, as well as deep knowledge of the Swiss energy market and the political and regulatory environment.

# Business conduct policies and corporate culture

Alpiq actively fosters a corporate culture rooted in integrity, accountability and compliance. These values are embedded into the organisation through the implementation of the Compliance Programme, which integrates mechanisms to identify, report and mitigate concerns about business conduct.

Key actions within the Compliance Programme include:

- Risk assessment: regular assessment of processes to identify the probability and impact of risks related to corruption, antitrust violations, data privacy, embargoes, sanctions, market integrity, money laundering and conflicts of interest.
- Policy adaptation: feeding the outcomes of the compliance risk assessment(s) into Alpiq's Code of Conduct and directives to tailor them to Alpiq's activity and risk profile.
- Control implementation: establishing and documenting controls to mitigate identified risks, including business partner due diligence, high-risk contract reviews, anti-bribery and corruption measures, and conflict-of-interest management.

Voluntary

RBI only (OR Art. 964b)

- Training and communication: providing all employees with training on Alpiq's values, Code of Conduct, and role-specific compliance requirements.
- Reporting mechanisms: operating the "Speak Up! Line," a confidential reporting channel for employees and external stakeholders to raise concerns.
- Continuous monitoring: conducting regular reviews and reporting biannually to the ARC and EB on the effectiveness of the Compliance Programme.

By embedding these steps into the company culture, Alpiq ensures a consistent and transparent approach to business conduct matters.

The company policies adhere to the principles of the United Nations Convention against Corruption, focusing on preventing bribery and corruption by conducting due diligence on business partners, reviewing high-risk contracts and the implementation of robust internal controls.

Alpiq maintains a mechanism for identifying, reporting and investigating concerns related to business integrity. The "Speak Up! Line" provides a confidential platform for employees and external stakeholders to report unlawful behaviour or violations of the Code of Conduct. Reports are investigated under an internal investigation procedure, ensuring prompt, independent and objective handling.

All individuals carrying out investigations are informed of the applicable internal procedure before the commencement of their first investigation and the Head Compliance oversees the investigation process of each report.

Alpiq is committed to protecting reporters and fostering a culture of openness. The "Speak Up! Line" ensures confidentiality, with access to reports limited to a minimum number of trained personnel. Employees who report concerns in good faith are protected from retaliation, as per Directive (EU) 2019/1937.

Training is provided to all employees. Attendance of all training assigned by Compliance is mandatory. Contingent workforce who, at least partially, evolve in Alpiq's work environment in a similar way as Alpiq employees, must also receive the mandatory training designed for their target group.

Compliance makes use of e-learning and classroom courses to ensure variety and efficiency in compliance training.

Topics on which Compliance provides training are Alpiq's Code of Conduct, antibribery and corruption, fair competition, data privacy, gifts and invitations, conflicts of interest, the speak-up culture and trade compliance.

# Prevention and detection of corruption and bribery

Alpiq's compliance programme consists of the actions / steps as described above. In case of a concern about business integrity, only trained members of the Compliance team may conduct investigations. The Compliance team is part of the Legal & Compliance unit and has a direct reporting line to the Chairman of the BoD.

The Head Compliance reports on compliance activities, including the outcomes of investigations, to the ARC of the BoD.

RBI only (OR Art. 964b)

Governance

All employees have access to Alpiq's intranet, where the Code of Conduct and subsequent Directives are communicated. In addition, most important documents, such as the Code of Conduct, are sent to all employees by email. When a compliance-related document is revised or adopted, the Compliance function ensures that the employees to whom it applies are informed and trained on it.

Anti-bribery and corruption training is rolled out as e-learnings to all employees at risk of corruption. Classroom sessions, which are trained per function, include the relevant risk of corruption faced by the function to be trained.

All employees are covered in Alpiq's Compliance Training programme. In 2024, in-person training sessions and e-learning sessions were held on the Code of Conduct and on topics of anti-bribery and corruption, management of third parties, data privacy, fair competition, market integrity, conflicts of interest, gifts and invitations, and the speak-up mechanism. Overall, 95% of employees assigned to these training sessions have successfully completed them.

Members of the EB and the BoD are trained face-to-face by Compliance according to their need. In addition, members of the EB are enrolled in the same e-learning and classroom training as the rest of the organisation's employees.

The number of convictions and the amount of fines for violation of anticorruption and anti-bribery laws for the year 2024 are both zero. They are also zero for P2X. Share of successfully completed Compliance trainings

95%

Number of convictions and amount of fines for violation of anti-corruption & antibribery laws

 $\mathbf{O}$ 

# Supply Chain Due Diligence

In addition to the identified material topics, Alpiq recognises the importance of responsible supply chain management and adheres to the Swiss Ordinance on Due Diligence and Transparency (DDTrO) in relation to Minerals and Metals from Conflict-Affected Areas and Child Labour, as well as the upcoming Corporate Sustainability Due Diligence Directive (CSDDD) under CSRD.

To ensure compliance with these Swiss requirements and the European directive, as well as to foster transparency, accountability and adherence to ethical standards, Alpiq executed a project in 2024 that encompassed the creation of a new supply chain due diligence process for fully consolidated Alpiq entities, including a new Code of Conduct for Suppliers. The newly implemented due diligence process includes compliance checks for new as well as existing suppliers, based on which further investigations are mandated if a supplier is found to have been involved in conspicuous actions, including but not limited to engagement in child labour and the use of conflict materials.

The following outlines Alpiq's approach regarding child labour and conflict minerals.

### Child labour

Alpiq recognises that child labour poses a significant ethical and human rights concern in global supply chains. While there is no direct risk of child labour in Alpiq's operations, which primarily entail the production of electricity at geographically specific power plants, residual risks may arise in its supply chain where goods or services originate from regions identified as higher risk under the Children's Rights in the Workplace Index.

To mitigate such risks, Alpiq adheres to the principles of the International Labour Organization (ILO) and implements a Supplier Code of Conduct that prohibits child labour. Alpiq endeavours to enforce the principles stipulated in the Code of Conduct for Suppliers in its supply chain and reviewed its Code of Conduct for Suppliers and the associated risk assessment process throughout 2024. The Supplier Code of Conduct is incorporated into supplier contracts in order to set clear expectations and ensure compliance. Alpiq also regularly reviews its supply chain processes to improve traceability and risk management.

Alpiq intends to further strengthen its supply chain risk management. It reviewed its process (including traceability) during 2024 and will continue to adjust its approach to common market practice. The company also continues to further strengthen and develop its ESG framework, including child labour regulation.

In addition, Alpiq operates a whistle-blowing tool, accessible via the company website, which allows for concerns to be raised with the Compliance function, including any perceived and actual shortcomings pertaining to child labour. As stipulated, any perceived shortcoming can be raised by employees and/or any member of the public and will be investigated independently. DDTrO (OR Art. 964j/k)

DDTrO (OR Art. 964j/k)

### Conflict minerals

Alpiq complies with DDTrO regulations concerning conflict minerals. As Alpiq does not import or refine minerals or metals that fall within the scope of these regulations, it is exempt from related disclosure requirements. Nonetheless, Alpiq maintains responsible sourcing practices in line with the new supply chain due diligence process and the new Code of Conduct for suppliers and monitors its supply chain to align with applicable standards.

DDTrO (OR Art. 964j/k)

# Sector-Specific Disclosures

# Security of Supply

Security of supply is an entity-specific topic that is not covered by ESRS but is material to Alpiq and is therefore included in this Sustainability Report.

Alpiq uses the definition of security of supply as provided by the European Environment Agency (EEA). The EEA defines security of supply as "the availability of energy at all times in various forms, in sufficient quantities, and at reasonable and/or affordable prices" (<u>EEA, 2024</u>).

Alpiq's contribution to ensuring security of supply is stated in its company purpose. Providing reliable power or heat generation when needed by customers, including TSOs, has a direct impact on the company's economic results. It is therefore of the utmost importance that Alpiq continuously maintain the reliability and upgrade the technical capabilities of its assets, not only to comply with the latest environmental regulations, but also to make use of the best technology available for increasing the fuel efficiency and flexibility, and to prevent any operational failures that could negatively impact security of supply and significantly affect its economic position.

Alpiq recognises that in some situations a conflict may arise between the responsibilities of contributing to both a better climate and security of supply, especially in the case of electricity generation from fossil fuels. However, Alpiq is fully supportive of the energy transition and by investing in battery energy storage systems (BESS), flexible hydro power, and highly flexible gas-fired thermal assets, the company contributes to the energy transition by providing flexibility to the energy system. Without an increase in flexibility, the integration of additional variable renewable energy is restricted, and the energy transition is not possible. Alpiq therefore chooses deliberately to focus on providing flexibility to the energy system and to assess its activities and investments not based on their direct climate impact, but on their overall impact on the energy system.

Gas-fired generation is expected to remain an important source of flexibility for at least the coming 10 to 15 years, and Alpiq intends to continue operating its existing gas-fired assets until the end of their technical lifetime. Alpiq is also open to expanding its flexible gas-fired generation portfolio, provided newly added assets contribute significantly to system flexibility. To summarise, it is additional flexibility that allows for the further expansion of intermittent renewable energy generation while ensuring security of supply at all times.

Apart from contributing to security of supply by providing flexibility, Alpiq continuously works on maintaining high-quality crisis management and business continuity plans. In 2024, ten percent of the company's workforce was trained in crisis management by participating in sophisticated exercises, and more than 35 continuity plans were drawn up and tested to secure critical activities.

In-market availability, the KPI measuring the percentage of time that an asset is available when needed, is reported to all internal stakeholders and is closely monitored and assessed. Maintenance periods are carefully planned in advance to ensure optimal timing and minimal duration. In case of outages, internal processes and competent technical staff are in place to remedy the situation. In order to reach the highest availability values, Alpiq does not only focus on technical and economic indicators but also applies high health and safety SASB

standards to ensure a secure environment on its premises. All outage events are reported to both internal and external stakeholders to guarantee complete transparency.

The levels of security of supply and grid safety are typically set by the TSOs and/or local regulations for grid support services (GSS). Where technically possible, Alpiq provides certified products for GSS at each flexible asset. To be allowed to participate in the GSS market, the technical ability of each individual asset is accredited and regularly tested by the TSOs according to their local requirements for each GSS product.

In order to contribute additionally to security of supply in times of high electricity demand, Alpiq participated in the Swiss Federal Council's tender for the winter 2024/2025 hydropower reserve for the third year in a row. Alpiq bid successfully and contributed to the winter reserve 2024/2025 by providing 103 GWh out of the total Swiss reserve of 250 GWh. The winter 2024/2025 is the last winter for which the reserve was put out to tender. From winter 2025/2026, it will be a legal requirement to contribute to winter reserves.

Contribution to winter reserve in GWh

103

# Appendix

# List of disclosure requirements by reporting standard

### European regulations (CSRD)

#### **ESRS Index**

The tables below shows the ESRS requirements Alpiq is already disclosing on a voluntary basis in the Sustainability Report 2024.

#### **General disclosures**

ESRS topic	Standard	Disclosure requirement (DR)	DR designation	Chapter
General disclosures	ESRS 2	BP-1	General basis for preparation of the sustainability statement	Basis of Preparation
		BP-2	Disclosures in relation to specific circumstances	Basis of Preparation
		GOV-1	The role of the administrative, management and supervisory bodies	Governance, Business Conduct
		GOV-2	Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies	Governance
		GOV-3	Integration of sustainability-related performance in incentive schemes	Governance, Climate Change
		GOV-5	Risk management and internal controls over sustainability reporting	Governance
		SBM-1	Strategy, business model and value chain	Strategy
		SBM-2	Interests and views of stakeholders	Strategy
		SBM-3	Material impacts, risks and opportunities and their interaction with strategy and business model	Material Sustainability Matters, Climate Change, Biodiversity and Ecosystems, Own Workforce
		IRO-1	Description of the process to identify and assess material impacts, risks and opportunities	Material Sustainability Matters, Climate Change, Pollution, Water and Marine Resources, Biodiversity and Ecosystems, Business Conduct
		IRO-2	Disclosure requirements in ESRS covered by the undertaking's sustainability statement	Material Sustainability Matters

#### Disclosures according to material topics

ESRS topic	Sub-topic	Disclosure requirement (DR)	DR designation	Chapter
Environment	ESRS E1 - Climate Change	E1-1	Transition plan for climate change mitigation	Climate Change
		E1-2	Policies related to climate change mitigation and adaptation	Climate Change
		E1-6	Gross Scopes 1, 2, 3 and total GHG emissions	Climate Change
	ESRS E3 - Water & Marine Resources	E3-1	Policies related to water and marine resources	Water and Marine Resources
		E3-2	Actions and resources related to water and marine resources	Water and Marine Resources
		E3-3	Targets related to water and marine resources	Water and Marine Resources
		E3-4	Water consumption	Water and Marine Resources
	ESRS E4 - Biodiversity & Ecosystems	E4-3	Actions and resources related to biodiversity and ecosystems	Biodiversity and Ecosystems
Social	ESRS S1 - Own Workforce	S1-1	Policies related to own workforce	Own Workforce
		S1-2	Processes for engaging with own workers and workers' representatives about impacts	Own Workforce
		S1-3	Processes to remediate negative impacts and channels for own workers to raise concerns	Own Workforce
		S1-4	Taking action on material impacts on own workforce, and approaches to mitigating material risks and pursuing material opportunities related to own workforce, and effectiveness of those action	Own Workforce
		S1-5	Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	Own Workforce
		S1-6	Characteristics of the undertaking's employees	Own Workforce
		S1-8	Collective bargaining coverage and social dialogue	Own Workforce
		S1-11	Social protection	Own Workforce
		S1-14	Health & Safety metrics	Own Workforce

### Swiss regulations

### **DDTrO Index**

Alpiq adheres to the requirements of Art. 964j-k of the Swiss Code of Obligations and the respective Ordinance DDTrO. The company's disclosures relating to these requirements are mapped in the table below.

DDTrO topic	Chapter
Management System	Supply Chain Due Diligence
Supply Chain Policy	Supply Chain Due Diligence
Risks in the Supply Chain	Supply Chian Due Diligence, Material Sustainability Matters
Minerals and Metals: Exemption	Supply Chain Due Diligence
Child Labour: Risk Management Instruments and Traceability System	Supply Chain Due Diligence
Risk Management (Art 15)	Supply Chain Due Diligence, Material Sustainability Matters

### **RBI Non-Financial Index**

The table below points out the context which is reported in compliance with the requirements of Art. 964b of the Swiss Code of Obligations.

RBI area	RBI topic	Chapter	
General Requirements	Approval	Governance	
	Business model	Strategy, Material Sustainability Matters	
	Consolidated reporting	General Disclosures	
	Materiality assessment	Basis of Preparation, Strategy, Material Sustainability Matters, Climate Change, Water and Marine Resources, Biodiversity and Ecosystems	
	Risks related to non-financial matters	Material Sustainability Matters	
Environment	Air pollution	Pollution	
	Biodiversity and land & resource use	Biodiversity and Ecosystems	
	GHG emissions (CO2-targets)	Climate Change	
	Use of renewable/non-renewable energy	Climate Change, Biodiversity and Ecosystems	
Employee Matters	Health & safety	Own Workforce, Security of Supply	
	Working conditions	Own Workforce	
	Gender equality	Own Workforce	
Social Matters	Community impact	Security of Supply	
Human Rights	Respect for human rights and union rights	Own Workforce, Supply Chain Due Diligence	
Anti-Corruption	Granting of an undue advantage & bribery	Business Conduct	

### **SCO Index**

Alpiq adheres to the requirements of Art. 964b of the Swiss Code of Obligations and the respective Ordinance SCO. The company's disclosures relating to these requirements are mapped in the table below.

SCO topic	Standard	Disclosure requirement (DR)	DR designation	Chapter
General disclosures	ESRS 2	BP-1	General basis for preparation of the sustainability statement	Basis of Preparation
		BP-2	Disclosures in relation to specific circumstances	Basis of Preparation
		GOV-1	The role of the administrative, management and supervisory bodies	Governance
		GOV-2	Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies	Governance
		GOV-3	Integration of sustainability-related performance in incentive schemes	Governance, Climate Change
		GOV-5	Risk management and internal controls over sustainability reporting	Governance
		SBM-1	Strategy, business model and value chain	Strategy
		SBM-3	Material impacts, risks and opportunities and their interaction with strategy and business model	Material Sustainability Matters, Climate Change, Biodiversity and Ecosystems, Own Workforce
		IRO-1	Description of the process to identify and assess material impacts, risks and opportunities	Material Sustainability Matters, Climate Change, Water and Marine Resources, Biodiversity and Ecosystems
		IRO-2	Disclosure requirements in ESRS covered by the undertaking's sustainability statement	Material Sustainability Matters
Environment	ESRS E1 - Climate Change	E1-1	Transition plan for climate change mitigation	Climate Change
		E1-2	Policies related to climate change mitigation and adaptation	Climate Change

# Glossary

ARCAudit and Risk CommitteeBESSBattery energy storage systemBoDBoard of DirectorsCCGTCombined-cycle gas turbineOFOObject Executive Officient	
BoD     Board of Directors       CCGT     Combined-cycle gas turbine	
CCGT Combined-cycle gas turbine	
CEO Chief Executive Officer	
CEMS Continuous emission monitoring system	
CFO Chief Financial Officer	
CHO <sub>4</sub> Methane	
CO Carbon Oxide	
CSRD Corporate Sustainability Reporting Directive	
DCS Distributed control system	
DDTrO Due Diligence and Transparency Ordinance	
DMA Double Materiality Assessment	
DSO Distribution system operator	
E Environment	
EB Executive Board	
EEA European Environment Agency	
EIA Environmental impact assessment	
EIP Energy Infrastructure Partners	
ERG Employee resource group	
ERM Enterprise risk management	
ESG Environment, Social, Governance	
ESRS European Sustainability Reporting Standards	
ETS Emissions Trading Scheme	
EWC European Work Council	
FMHL Forces Motrices Hongrin-Léman	
FTE Full-Time Equivalent	
G Governance	
GHG Greenhouse gas	
GRI Global Reporting Initiative	
HRSG Heat recovery steam generator	
ILO International Labour Organization	
IPCC Intergovernmental Panel on Climate Change	
ISO International Organization for Standardization	
IRO Impact, Risk, Opportunity	
KKG Kernkraftwerk Gösgen-Däniken AG	
KKL Kernkraftwerk Leibstadt	
KPI Key performance indicator	
n/a Not applicable	

NGO	Non-governmental organisation
NO <sub>x</sub>	Nitrogen Oxide
NRSC	Nomination, Remuneration and Strategy Committee
OCGT	Open-cycle gas turbine
OECD	Organisation for Economic Co-operation and Development
OHS	Occupational health and safety
PEKO/COPE	Personalkommission/Commission du Personnel
PPA	Power purchase agreement
RBI	Responsible Business Initiative
RES	Renewable energy sources
S	Social
SASB	Sustainability Accounting Standards Board
SCO	Swiss Climate Ordinance
SE-WC	Societas Europea Work Council (European Company Work Council)
SF <sub>6</sub>	Sulphur hexafluoride
SO <sub>x</sub>	Sulphur oxide
TRIFR	Total Recordable Injury Frequency Rate
TSO	Transmission system operator
UVG	Unfallversicherungsgesetzt (Federal Law on Accident Insurance)
WWF	World Wide Fund for Nature
ZLD	Zero liquid discharge