



Annual Report
2020



Azienda Elettrica Ticinese

Annual Report **2020**

**Report of the Board of Directors
of the Azienda Elettrica Ticinese
to the Grand Council and the Council of State
of the Republic and Canton of Ticino**

Ladies and Gentlemen,
Chairmen,
State Councillors,
Parliamentary Representatives,

in accordance with the provisions contained in article 6 of the Act of the Azienda elettrica ticinese (LAET), we hereby submit:

- the report of the Board of Directors for the year 2020;
- the auditors' report;
- the financial statements for the year 2020;
- the proposal for allocation of result.

The english version of the AET 2020 Annual Report is merely a translation:
the official version is the italian text.



The St. Gotthard wind farm

The images shown in AET's 2020 Annual Report celebrate the completion of the St. Gotthard wind farm project. Taken by photographer Nicola Demaldi during the summers of 2019 and 2020, they illustrate different phases of the construction work on the pass.

The St. Gotthard wind farm consists of five Enercon E-92 wind turbines with an output of 2.35 megawatts each. Expected annual production ranges from 16 to 20 GWh and is sufficient to cover the energy needs of all households in the Leventina region. Built by Parco eolico del San Gottardo SA, a company 70% owned by AET, 25% by SIG (Services Industriels de Genève) and 5% by the Municipality of Airolo, it required an investment of CHF 32 million.

On the cover: View of the St. Gotthard wind farm

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The assembly and putting into service of the five wind turbines of the St. Gotthard wind farm required two years. The construction site was only operational during the opening months of the pass, from May to October. The summer of 2019 was dedicated to the completion of the civil engineering works: excavation and casting of the foundations, construction of the access tracks and completion of the cable routes.

2020 in summary

Key figures

	2020	2019	2018	2017	2016 ¹
In CHF million					
Operating income	867	1,018	871	872	824
Operating result	23	16	-15	-19	-27
Net result	13	9	-2	-13	-31
Equity	340	329	323	328	342
Equity in % of balance sheet total	43.9%	42.7%	41.8%	40.3%	41.9%
Non-current assets	512	501	506	527	510
Balance sheet total	773	771	775	813	816
Distribution of dividends to the State	-	-	-	-	-
Interest on capital, due to the State	3	3	3	3	3
Employees of the Group (full time equivalent)	285.8	272.6	265.3	252.9	263.6
	2020	2019	2018	2017	2016
In GWh					
Production AET Group	981	1,090	955	814	872
Production participations	1,069	1,637	1,550	1,451	1,310

¹ 2016 figures restated

In 2016 the participation Società Elettrica Sopracenerina SA (SES) has been deconsolidated following the decrease of AET's shareholding from 53% to 30%.



The Executive Management of AET

From left: Claudio Nauer, Roberto Pronini, Flavio Kurzo, Edy Losa, Giorgio Tognola, Fiorenzo Scerpella.

Photo: Studio Pagi

Company officers

Board of Directors

Leonardi Giovanni, *Chairman*

Ogna Ronald, *Vice Chairman*

Beffa Floriano (in office until 04.06.2020)

Cauzza Dino

Cereghetti Claudio

Codoni – Sulmoni Marika (in office from 05.06.2020)

Gianora Fabiana (in office from 01.02.2020)

Passoni Alberto

Group auditor

KPMG SA, Lugano

Executive Management

Pronini Roberto, *CEO*

Nauer Claudio, *Co-CEO*

Kurzo Flavio, *CFO*

Losa Edy, *Head of energy production*

Scerpella Fiorenzo, *Head of grid*

Tognola Giorgio, *Head of energy trade*



A total of about 23,000 cubic metres of material was excavated for the foundations and other civil engineering works.

Report of the Board of Directors



Even though the construction site was concentrated in the summer months, it had to cope with the extremely changeable weather conditions on the St. Gotthard Pass.

Introduction by the Chairman

A complex transition

2020 will be remembered as the year of COVID-19 and the measures taken to contain the pandemic. The lockdown imposed by the Confederation during the spring months was an unprecedented event, which also impacted companies in the electricity sector. AET was faced with a double challenge: to reorganise the working methods of almost 300 employees without compromising the security of the electricity supply, and to manage the drop in consumption caused by the temporary halt in production activities, with negative peaks of over – 20%. The company's staff confronted the test with professionalism and a sense of responsibility, overcoming the acute phase of the crisis with no serious repercussions. The main objectives of the year and the commissioning of the St. Gotthard wind farm in particular, were achieved despite the ongoing emergency situation. From a financial point of view, 2020 was not overly affected by the health crisis and the associated effects on economic activity. This was thanks to hedging carried out in advance and good production of the hydroelectric plants: in this difficult year, AET succeeded in generating a positive result with a net profit of CHF 13 million (compared to CHF 9 million in 2019).

However, the profit achieved should not, be misconstrued: the long crisis due to the pandemic has had a negative effect on future wholesale energy prices, which will have repercussions in the coming years. It will therefore be necessary to remain vigilant and to progress with caution.

Changes in progress

The pandemic has not stopped the transformation processes taking place in the energy sector, and 2020 was particularly prolific in terms of policy initiatives.

During the spring, the Federal Council outlined the content of its plans to revise the Energy Act (EnA) and the Federal Electricity Supply Act, which aim to establish the regulatory framework for the development of the second phase of the Swiss Energy Strategy 2050. The new package of measures, which will be submitted to the Swiss parliament in the course of 2021, is designed to ensure long-term security of supply by encouraging increased winter hydropower production as well as production from other domestic renewable energy sources. The plan provides for the restructuring of the market in order to create the framework conditions for managing the new energy environment. At the end of the year, the new federal law on CO₂ was also approved, introducing a series of measures that will boost the decarbonisation process and consequently encourage the "electrification process" of energy consumption.

These initiatives will have to pass the scrutiny of parliament and the popular vote. The outcome of this process is far from certain, but irrespective of how the situation develops, it is already clear that electricity, and hydropower production in particular, is destined to become the backbone of the future energy system.

Ticino, for its part, launched an important package of incentives over the summer in favour of energy efficiency and production from renewable sources, which places it among the best performing cantons in these areas. This is a sign that reinforces and confirms nationwide trends.

Within a few years, companies operating in the sector will have to deal with very different technological and market scenarios compared to those seen today. AET is ready to take up the challenge. Furthermore, the strategy adopted in the last decade – i.e. prioritising the development of production from renewable sources in Ticino and adapting business models to the changing needs of customers – confirms that the path taken is the correct one.

The results achieved in 2020, despite the difficulties caused by the pandemic, testify to AET's ability to keep up with the times, and represent the best possible incentive for the years to come. The good relationships enjoyed with the Cantonal authorities and customers, as well as the commitment of the company's management and all its staff, proved indispensable in overcoming the crisis. The Board of Directors would like to say a big thank you to all parties concerned.



Giovanni Leonardi
Chairman



During the two years of work at the site, between 20 and 30 people were permanently on duty.



Each foundation weighs approximately 700 tonnes and has been built with a continuous pour of 330 cubic metres of concrete.

Management report

A year marked by exceptional events

AET closed the 2020 financial year with an operating result of CHF 23 million (2019: CHF 16 million) and a consolidated net profit of CHF 13 million (2019: CHF 9 million), which was impacted by the recognition of an additional impairment on the energy procurement contract with EDF.

The result, which was up on the previous year despite the difficulties related to the COVID-19 pandemic, benefited from the effects of the increase in wholesale energy prices observed in previous years as well as being boosted by hydroelectric production figures above the multi-year average.

Production

Electricity

Hydroelectric production at AET's plants during the 2020 financial year stood at 977 GWh: this result was above the average for the 2010 – 2019 period, but down 10% on the previous year. Similarly, hydroelectric production from participations only reached 638 GWh, down 5.5% on 2019 but above the ten-year average. Hydropower production in Ticino benefited in particular from water accumulated during the heavy spells of rain in the last months of 2019, as well as from the autumn 2020 rainfall. In 2020 AET obtained the renewal of the *naturemade basic* quality certification for its own hydroelectric production.

AET's share of production at the German plant in Lünen was 154 GWh in 2020. This figure was well below expectations and approximately 73% lower than in 2019. The reasons for this sharp decline were unfavourable market conditions due to the pandemic in the spring and an extended shutdown of the plant during the summer months due to a breakdown. As in previous financial years, market prices were not sufficient to cover the production costs of the power plant. This difference resulted in a higher cost to be borne by AET, of approximately CHF 20 million.

Production from nuclear participations in Switzerland and France stood at 229 GWh, down 35% on the 2019 financial year. The extension of certain shutdowns of French power plants and EDF's decision to reduce its nuclear production from May onwards weighed heavily on the result.

Thermal energy

TERIS Teleriscaldamento del Bellinzonese SA, a company that is 60% owned by AET, completed the connection of new customers representing a total of more than 2 MW of power. Despite some delays caused by the lockdown, the objectives set for the year were achieved.

Calore SA, a company owned by AET and Società Elettrica Sopracenerina SA (SES) which manages the Morettina district heating plant in Locarno, continued the development of the Verbano 2030 project, which includes the extension of the district heating network and the construction of a new thermal plant in the Lido area. The planning of the plant is ongoing, and initial contact was established with potential future customers in the autumn.

Capriasca Calore SA, a company owned by AET, the Azienda Elettrica di Massagno (AEM) and the Municipality of Capriasca, completed the construction of the new thermal plant and the installation of the district heating network in Tesserete. Commissioning and testing were completed and the first heating supplied in early 2021.

Despite a slight drop in consumption during the lockdown months, Metanord SA – a company in which AET holds a 33% stake – closed the 2020 financial year with a significant increase in the volume of gas supplied. Recent marketing campaigns have enabled the company to obtain new customers and to achieve results exceeding the annual outlook.

Energy trade

The market

The COVID-19 pandemic caused a massive and widespread drop in prices on the power exchanges. Switzerland and Italy registered new lows, while Germany and France came close to the lowest figures ever recorded. The recovery in the second half of the year was only partial and failed to offset the negative effects of the most acute phase.

Future prices also underwent fluctuations, and experienced a downward trend in the first half of the year. The summer months marked the start of a recovery which became more established towards the end of the year thanks to positive news regarding COVID-19 vaccinations and expectations of a winter with lower temperatures than in the past.

Sales

The volumes of energy traded in 2020 were in line with those of previous years, despite the fact that the pandemic led to a drop of around 3% in expected supplies in “full supply” mode. Numerous contracts with distributors in Ticino and Moesano have been extended.

The range of products and services offered by AET is constantly being updated in response to changing customer needs and increasing market competition. In 2020, particular attention was paid to the development of digital solutions with a view to strengthening relations with distribution companies in Ticino and the rest of Switzerland. In addition to a number of applications tailored to the requirements of individual customers, the creation of the online kwick energy sales portal in cooperation with Società Elettrica Sopracenerina SA (SES) deserves a special mention. This project lays the foundations for expanding collaboration with other distribution companies in the areas of energy sales and online services.

Collaboration with Enertì SA for the sale of the range of eco-products (tiacqua, tinatura and tisolet) in Ticino was renewed for a further year.

Grid

AET's supra-regional distribution network undergoes constant modernisation and maintenance. In 2020, the Lucendro substation in Airolo was upgraded thanks to the installation of two new 50/16 kV transformers, and the new 50 kV distribution system was built at the Stalvedro substation in Quinto, ready for the connection of the new Ritom power plant.

In order to ensure the connection of the St. Gotthard wind farm, work was completed on the expansion of the 16 kV Airolo – Ospizio lines, the renovation of the Ospizio substation and the connection of the five wind turbines via a 16 kV network and fibre optics.

The emergency grid that guarantees communication in the event of blackouts or other special events has been completely replaced by a new infrastructure based on Digital Mobile Radio (DMR) technology, which was created in association with Società Elettrica Sopracenerina SA (SES), Officine Idroelettriche della Maggia SA (OFIMA) and Azienda Multiservizi Bellinzona (AMB).

A new partnership with Società Elettrica Sopracenerina SA (SES) for medium- and long-term strategic planning purposes will make it possible to coordinate and rationalise the renovation of various grid infrastructures by standardising technologies and reducing the costs of implementation and future management.

In the field of services for third parties, AET once again secured the tender for the inspection of the Swiss Federal Railways – SBB high-voltage lines from Balerna to Göschenen for the next five years. In cooperation with AXPO, AET also won a tender issued by Swissgrid for engineering services for the design of primary and secondary technical installations throughout Switzerland. AET won these tenders thanks to its competitiveness, as well as the professionalism and technical expertise of its staff.

To ensure the safe supply of auxiliary installations in the Monte Ceneri base tunnel, four different 16 kV redundant power supplies were built and put into operation.

As part of the agreement with Federal Roads Office – FEDRO for the construction site connection of the second St. Gotthard motorway tunnel, AET built the first of four new transformer cabins needed to upgrade the Airolo grid.

Strategic projects

Construction work on the St. Gotthard wind farm progressed according to plan. Despite weather-related difficulties during the autumn, the five wind turbines were put into regular operation in November. The project was carried out by Parco eolico del San Gottardo SA, a company that is 70% owned by AET. The construction site attracted media attention throughout Switzerland, demonstrating the project's strong symbolic value.

AET provides specialist services in the areas of grid connection, civil engineering and generator electromechanics to Ritom SA (a company owned 75% by Swiss Federal Railways – SBB and 25% by the Canton Ticino), the company that is building the new Ritom power plant. In future, AET will manage the canton's share of the plant's production and take care of its maintenance.

The construction site suffered a number of delays due to complications associated with the COVID-19 situation and a hydrogeological problem that arose during the excavation of the horizontal tunnel for the new power gallery. The work is scheduled for completion in 2024.

Conclusion

AET ended 2020 with a satisfactory net profit despite the difficulties caused by the outbreak of the COVID-19 pandemic. This figure indicates the substantial stability of the electricity sector and confirms the validity of the strategy that has enabled AET to overcome the crisis in the electricity market in recent years. However, the challenges of the market are not yet over: the effects of COVID-19 on future electricity prices will be felt in the results of the next few years, and given the inherent volatility of this market, the risk of negative developments cannot be ruled out.

In the long term, it is clear that electricity will play an increasingly important role. Switzerland's energy policies, like those of the main European countries, are pushing for an increase in electricity production from renewable sources. At the same time, the decarbonisation process under way on a global scale is already showing a shift towards the electrification of energy consumption. Translating these trends into opportunities for energy companies depends on their ability to adapt to the new technological and market environment. There is certainly significant potential for operating renewable, flexible production such as hydropower.

Over the last ten years, AET has revised its strategy, seeking to anticipate the changes taking place at both a legislative and a technological level. Emphasis has been placed on production from renewable local sources, and investments have been concentrated on the areas of hydroelectric, photovoltaic, wind and thermal energy development. Transport networks, IT tools and sales models have been adapted accordingly.

In the social sphere, AET has made a tangible contribution by creating new jobs and apprenticeships in one of the peripheral regions of the Canton. In the field of sponsorships, despite the cancellation of a large number of events, AET has responded to many requests for contributions, in line with the sponsorship policy it has been pursuing for years.

AET now has all the resources and expertise it needs to deal with the many changes taking place, which bodes well for the years to come.

Proposals for approval to the State Council and the Grand Council

The Board of Directors, in accordance with article 18 LAET (respectively article 671, Paragraph 2 of the Swiss Code of Obligations), proposes to allocate the result as follows:

In CHF 1,000	
Net result 2020	9,230
– to the State: 8% interest on the endowment capital	–3,200
– dividend to the State	–
– allocation to the general reserves	–
Allocation to the results carried forward	6,030

The Board of Directors proposes to the State Council and the Grand Council the approval of:

- the financial statements for the year 2020;
- the proposal for allocation of result;
- the discharge to the Board of Directors and the Management for their activity.



The foundations of the five wind turbines were completed in summer 2019, prior to the closure of the pass.

Consolidated financial statements

Consolidated balance sheet

Assets

		31.12.2020	31.12.2019
In CHF 1,000	Notes		
Plants and equipment		273,498	255,460
Land and buildings		51,766	52,496
Tangible fixed assets under construction		23,755	25,128
Tangible fixed assets on lease		–	–
Other tangible fixed assets		2,943	2,617
Tangible fixed assets	2	351,962	335,701
Participations in associates	3	84,312	80,619
Long-term securities	4	44,919	45,929
Advances and loans to participations	5	19,353	19,804
Other financial assets		378	470
Financial assets		148,962	146,822
Usage rights		7,695	7,980
Energy procurement rights		0	6,254
Intangible assets under development		1,895	3,784
Other intangible assets		1,396	771
Intangible assets	6	10,986	18,789
Non-current assets		511,910	501,312
Other short-term assets	7	67,093	55,372
Prepayments and accrued income	8	98,685	109,668
Receivables from goods and services	9	20,990	17,624
Cash and cash equivalents	10	74,281	87,459
Current assets		261,049	270,123
Assets		772,959	771,435

Liabilities and equity

		31.12.2020	31.12.2019
In CHF 1,000	Notes		
Endowment capital		40,000	40,000
Conversion differences		-8,965	-8,662
Retained earnings		285,652	279,250
Net result		12,903	9,412
Equity attributable to AET		329,590	320,000
Minority interests		9,949	9,373
Group equity		339,539	329,373
Long-term provisions	11	13,428	11,773
Other long-term liabilities		5,194	5,047
Long-term financial liabilities	12	261,854	279,625
Long-term liabilities		280,476	296,445
Short-term provisions	11	8,544	5,832
Other short-term liabilities	13	18,685	25,930
Short-term financial liabilities	14	23,100	7,274
Accrued liabilities and deferred income	15	85,772	91,418
Payables from goods and services	16	16,843	15,163
Current liabilities		152,944	145,617
Liabilities		433,420	442,062
Liabilities and equity		772,959	771,435

Consolidated income statement

		2020	2019
In CHF 1,000	Notes		
Operating income			
Energy income	17	810,689	961,374
Grid income		37,401	38,866
Other operating income	18	18,621	17,300
Operating income		866,711	1,017,540
Operating expenses			
Energy purchases	19	-739,566	-896,722
Grid expenses		-22,003	-22,185
Personnel expenses	20	-31,781	-31,192
Service and material expenses		-5,848	-6,725
Depreciation on tangible fixed assets	2	-16,950	-16,328
Amortisation on intangible assets	6	-1,444	-2,544
Other depreciation and amortisation		-1,013	-1,014
Other operating expenses	21	-25,319	-24,664
Operating expenses		-843,924	-1,001,374
Operating result		22,787	16,166
Financial result	22	-4,195	-4,327
Result from associates	3	6,888	7,255
Ordinary result		25,480	19,094
Non-operating result		-	-
Extraordinary result	23	-11,615	-8,153
Result before income taxes		13,865	10,941
Income taxes		-386	-972
Group net result		13,479	9,969
Minority interests		-576	-557
Net result attributable to AET		12,903	9,412

Consolidated cash flow statement

	2020	2019
In CHF 1,000		
Net result	12,903	9,412
Minority interests to income statement	576	557
Depreciation on tangible fixed assets	16,950	16,328
Amortisation on intangible assets	1,444	2,544
Other depreciation and amortisation	1,013	1,014
Change in provisions	4,352	326
Change in impairments	5,270	8,248
Profit / loss from disposal of non-current assets	-16	-688
Result from associates	-3,522	-3,085
Other non cash expenses and income	-113	-53
Change in receivables, prepayments and accrued income and other short-term assets	-4,159	10,611
Change in payables, accrued liabilities and deferred income and other short-term liabilities	-11,262	-6,312
Cash flow from operating activities	23,436	38,902
Outflows for investment in tangible fixed assets	-31,124	-20,749
Inflows from disposal of tangible fixed assets	16	141
Outflows for investment in intangible assets	-1,208	-628
Inflows from disposal of intangible assets	-	-
Outflows for investment in financial assets	-240	-565
Inflows from disposal of financial assets	603	512
Cash flow from investing activities	-31,953	-21,289
Issuance / repayment of short-term financial liabilities	-7,244	-4,021
Issuance / repayment of long-term financial liabilities	5,789	2,026
Payments related to minority shareholders	-	1,500
Interests on capital, due to the State	-3,200	-3,200
Distribution of dividends to the State	-	-
Cash flow from financing activities	-4,655	-3,695
Cash and cash equivalents at the beginning of the year	87,459	73,601
Cash flow	-13,172	13,918
Conversion differences on cash and cash equivalents	-6	-60
Cash and cash equivalents at the end of the year	74,281	87,459

Statement of changes in consolidated equity

	Endowment capital	Conversion differences	Retained earnings	Net result	Equity attributable to AET	Minority interests	Group Equity
In CHF 1,000							
Equity at 01.01.2019	40,000	-6,004	284,041	-1,877	316,160	7,316	323,476
Allocation of result	-	-	-1,877	1,877	-	-	-
Interests on capital, due to the State	-	-	-3,200	-	-3,200	-	-3,200
Distribution of dividends	-	-	-	-	-	-	-
Capital increases	-	-	-	-	-	1,500	1,500
Conversion differences	-	-2,658	1,778	-	-880	-	-880
Change in consolidation scope	-	-	1	-	1	-	1
Offset consolidation difference	-	-	-1,493	-	-1,493	-	-1,493
Net result 2019	-	-	-	9,412	9,412	557	9,969
Equity at 31.12.2019	40,000	-8,662	279,250	9,412	320,000	9,373	329,373
Allocation of result	-	-	9,412	-9,412	-	-	-
Interests on capital, due to the State	-	-	-3,200	-	-3,200	-	-3,200
Distribution of dividends	-	-	-	-	-	-	-
Capital increases	-	-	-	-	-	-	-
Conversion differences	-	-303	190	-	-113	-	-113
Change in consolidation scope	-	-	-	-	-	-	-
Offset consolidation difference	-	-	-	-	-	-	-
Net result 2020	-	-	-	12,903	12,903	576	13,479
Equity at 31.12.2020	40,000	-8,965	285,652	12,903	329,590	9,949	339,539

Notes to the consolidated financial statements

1. Accounting principles

The 2020 group financial statements of Azienda Elettrica Ticinese (AET) were prepared in accordance to the Swiss GAAP FER as a whole and approved by the Board of Directors on the 22.04.2021.

1.1. Consolidation principles

1.1.1. Companies consolidated according to the full consolidation method

The following controlled companies, of which AET holds the majority of the voting rights, were consolidated according to the full consolidation method:

Subsidiaries ¹	Currency	Share capital	Shareholding at 31.12.2020	Shareholding at 31.12.2019
		in 1,000	%	%
AET Italia Srl	EUR	871	100.00	100.00
Calore SA	CHF	2,000	65.00	65.00
CEG Srl	EUR	120	100.00	100.00
Lucendro SA	CHF	3,000	100.00	100.00
Parco eolico del San Gottardo SA	CHF	6,000	70.00	70.00
Senco Holding SA	CHF	150	65.00	65.00
Senco Sagl	CHF	220	65.00	65.00
SPE Società per Partecipazioni Energetiche SA	CHF	8,000	100.00	100.00
TERIS Teleriscaldamento del Bellinzonese SA	CHF	10,000	60.00	60.00

¹ Direct and indirect subsidiaries

All consolidated companies have closed their financial year on the 31.12.2020.

At the time of acquisition, all acquired net assets are valued at fair value. Any difference between the acquisition price and the value of the acquired net assets is recognised as consolidation difference and immediately compensated with group equity. All transactions between group companies and the related income and expenses were eliminated in the consolidation process. For participations of which the AET Group holds less than 100%, the minority interests in shareholders' equity and in shareholders' result are reported as separate items on the balance sheet and income statement.

1.1.2. Changes in consolidation scope

During 2020 and 2019 there has been no change in the consolidation scope of the AET Group.

1.1.3. Companies recognised according to the equity method

The shareholdings in companies over which the AET Group exercises significant influence but no control are recognised in the Group consolidated financial statements according to the equity method (recognition of the share of shareholders' equity and net profit according to the Group accounting principles, with neutral treatment of the conversion differences arising from foreign exchange translation adjustment).

As for the fully consolidated companies, any positive or negative difference between acquisition price and the value of the net assets acquired is immediately compensated with group equity without impact on the net result.

Associates ¹	Currency	Share capital	Shareholding at 31.12.2020	Shareholding at 31.12.2019
		in 1,000	%	%
Capriasca Calore SA	CHF	1,313	33.33	33.33
Metanord SA	CHF	18,000	33.33	33.33
Nord Energia SpA	EUR	10,200	40.00	40.00
Società Elettrica Sopracenerina SA (SES)	CHF	16,500	30.00	30.00

¹ Direct and indirect associates

1.1.4. Other participations

The shareholdings in companies over which AET does not exercise significant influence are valued at their cost value adjusted for any impairment, they are booked within long-term securities.

1.1.5. Conversion of financial statements held in foreign currency

The consolidated financial statements are reported in thousands of Swiss francs (CHF 1,000). The assets and liabilities of foreign subsidiaries are converted at the balance sheet date exchange rates. The income statement figures are converted at the yearly average exchange rates.

Conversion differences are recorded within Group equity, without impact on the net result.

Exchange rates applied (EUR / CHF)	2020	2019
Exchange rate on the balance sheet date 31.12	1.0816	1.0870
Average exchange rate	1.0705	1.1125

1.2. Accounting principles

Assets and liabilities are valued with uniform principles. The most significant accounting principles are described in the following.

1.2.1. Tangible fixed assets

Tangible fixed assets are valued at their acquisition or construction cost, taking into account the necessary technical-economical depreciation and any necessary impairment. Depreciation is computed on a straight-line basis, considering the technical life of the assets generally accepted within the sector. Land is not depreciated. Tangible fixed assets under construction are reported at construction cost, tangible fixed assets under construction are not depreciated. The following minimum and maximum depreciation periods for each tangible fixed asset category are applied:

Civil works	40 – 80 years
Electromechanical installations	40 – 50 years
Electromechanical equipments	15 – 35 years
Power lines	30 – 55 years
Substations and transformers	20 – 35 years
Buildings	40 – 50 years
Photovoltaic plants	20 – 30 years
Machinery and tools	5 – 25 years
Vehicles	3 – 10 years
IT equipments	3 – 5 years

Renewal or optimisation investments on plants are capitalised if useful life, capacity or performance of the involved plant are significantly improved.

1.2.2. Financial assets

Financial assets are reported at their cost value, adjusted for any impairment. For production participations, organised according to the principle of energy withdrawal at generation costs, the investment value exceeding the expected equity value at the end of the useful life of the power plant is depreciated on a straight-line basis according to the useful life of the power plant. Long-term advances in foreign currency are converted at the year-end exchange rates.

1.2.3. Intangible assets

Intangible assets are capitalised at their acquisition cost taking into account the necessary technical-economical amortisation and any necessary impairment. Amortisation is computed on a straight-line basis, considering the useful life of the asset. Usage right without expiration are amortised on the basis of the technical life of the involved plant (40-80 years).

1.2.4. Energy related and similar certificates

Energy related and similar certificates acquired within the trading portfolio are booked at their market value (mark to market) at the balance sheet date, changes in market value incurred during the financial year are recorded in the income statement within other energy income. Energy related and similar certificates, acquired for the purpose of hedging of the generation portfolio of AET, are booked at their weighted average purchase price.

1.2.5. Inventories

Inventories include small tools, spare parts and consumables. They are valued at their weighted average purchase price, taking into account any impairment for slow-moving items or obsolescence.

1.2.6. Receivables

Receivables are reported at their face value, taking into account potential losses. Foreign currency receivables are converted at year-end exchange rate.

1.2.7. Cash and cash equivalents

Cash and cash equivalents are reported at their face value and include cash in hand and account balances at financial institutions. Balances in foreign currencies are converted at year-end exchange rate.

1.2.8. Impairment

At each balance sheet date, all assets are tested for any impairment indicators. In case of existence of such indicators, the recoverable amount, that is the higher between the net selling price and the value in use, is computed. The value in use is generally computed on the basis of the present value of the expected future cash flows. If necessary, the carrying value is adjusted to the recoverable amount through the recording of an impairment. In case of improvement of the recoverable amount, the carrying value is revaluated at maximum to the value according to the original depreciation scheme.

1.2.9. Provisions

Provisions are deemed to cover probable future disbursements related to legal or implicit obligations arising from past events. Long-term provisions are reported at the present value at the balance sheet day of the expected future disbursement.

1.2.10 Liabilities

All liabilities are reported at their nominal value. Liabilities in foreign currency are converted at year-end exchange rate.

1.2.11. Contingent liabilities

All contingent liabilities and other non-recognisable commitments existing at the balance sheet date are disclosed in the notes to the consolidated financial statements.

1.2.12. Energy forward sale and purchase transactions

Energy forward sale and purchase transactions, as well as the economic result of energy related transactions with financial instruments, made within the trading portfolio are booked at their market value at the balance sheet date (mark to market). Positive and negative replacement values (the difference between the market price at the balance sheet date and the contract price) are booked within other short-term assets and other short-term liabilities respectively. Changes in market value incurred during the financial year are recorded in the income statement within other energy income.

Energy forward sale and purchase transactions, as well as the economic result of transactions with energy related financial instruments, entered for the purpose of hedging of AET's generation portfolio are recognised in the income statement at delivery.

1.2.13. Revenues

Grid income and other operating income are recognised within the income statement when they are incurred. All revenues are recorded net of price reductions, sale taxes and value added taxes.

1.2.14. Pension funds

Pension benefits for employees hired by Swiss entities are covered by autonomous pension funds. The financial implications of the pension schemes in place, regardless of their structure and legal form, are included in the consolidated financial statements. Surplus payments or deficits are determined on the basis of the latest available financial statements of the pension funds involved. Any liabilities (economic obligations) or any assets (economic benefits) in addition to the payment of the regular premiums are recorded in the financial statements. Economic obligations are recognised when pension liabilities are undercovered, generating a future cash outflow for the company in the form of restructuring contributions. Economic benefits consist of future positive cash flow resulting from the use of employer's contribution reserves or other benefits. The personnel employed in Italy is covered for pension according to the ordinary Italian pension scheme. The Group companies operating abroad thus have no obligation or benefit related to the pension schemes, which are not recorded in the financial statements. The yearly contributions, the yearly change in any economic obligations and economic benefits, as well as the change in the employer's contribution reserve, are recorded in the income statements under personnel expenses.

1.2.15. Income taxes

Income tax expense includes all current and deferred taxes. Deferred taxes arise from valuation differences between the tax financial statements and the financial statements used for consolidated reporting purposes. The Group parent company AET is not subject to any income tax.

1.2.16. Related party transactions

Transactions with associates include all transactions and debit / credit relationships with companies of which AET holds between 20% and 50% of the voting rights. Transactions with other related parties include transactions with the power generation / procurement companies Officine idroelettriche della Maggia SA, Officine idroelettriche di Blenio SA, Verzasca SA, Ritom SA held by the Canton Ticino as well as Kraftwerke Mattmark AG, AKEB Aktiengesellschaft für Kernenergie-Beteiligungen Luzern and Trianel Kohlekraftwerk Lünen GmbH & Co. KG held by AET for less than 20%. AET offtakes the respective share of energy and pays the related production / procurement costs.

2. Tangible fixed assets

	Plants and equipment	Land and buildings	Tangible fixed assets under construction	Tangible fixed assets on lease	Other tangible fixed assets	Total
In CHF 1,000						
Cost value at 01.01.2019	656,277	64,147	29,191	213	8,301	758,129
Change in consolidation scope	–	–	–	–	–	–
Reclassification	20,939	1,120	–23,584	–	1,600	75
Additions	945	174	19,692	–	254	21,065
Disposals	–4,680	–	–171	–205	–422	–5,478
Conversion differences	–	–	–	–8	–9	–17
Cost value at 31.12.2019	673,481	65,441	25,128	–	9,724	773,774
Change in consolidation scope	–	–	–	–	–	–
Reclassification	31,401	257	–30,167	–	603	2,094
Additions	5,744	–	28,794	–	341	34,879
Disposals	–542	–	–	–	–328	–870
Conversion differences	–	–	–	–	–1	–1
Cost value at 31.12.2020	710,084	65,698	23,755	–	10,339	809,876
Accumulated depreciation at 01.01.2019	–407,011	–11,977	–	–69	–7,122	–426,179
Change in consolidation scope	–	–	–	–	–	–
Reclassification	–	–	–	–	–	–
Depreciation	–14,936	–968	–	–11	–413	–16,328
Additions	–316	–	–	–	–	–316
Disposals	4,242	–	–	77	419	4,738
Conversion differences	–	–	–	3	9	12
Accumulated depreciation at 31.12.2019	–418,021	–12,945	–	–	–7,107	–438,073
Change in consolidation scope	–	–	–	–	–	–
Reclassification	–	–	–	–	–	–
Depreciation	–15,345	–987	–	–	–618	–16,950
Additions	–3,755	–	–	–	–	–3,755
Disposals	535	–	–	–	328	863
Conversion differences	–	–	–	–	1	1
Accumulated depreciation at 31.12.2020	–436,586	–13,932	–	–	–7,396	–457,914
Net carrying amount at 01.01.2019	249,266	52,170	29,191	144	1,179	331,950
Net carrying amount at 31.12.2019	255,460	52,496	25,128	–	2,617	335,701
Net carrying amount at 31.12.2020	273,498	51,766	23,755	–	2,943	351,962

3. Participations in associates

	31.12.2020	31.12.2019
In CHF 1,000		
Opening balance	80,619	77,481
Acquisitions / capital increases	–	368
Disposals	–	9
Change in consolidation scope	–	0
Conversion differences	–31	–619
Result from associates	6,888	7,255
Received dividends	–3,366	–4,170
Impairment	202	295
Closing balance	84,312	80,619

Equity method values of associates to 31.12.2020 (according to Swiss GAAP FER).

	Metanord SA	Nord Energia Group	SES Group ¹	Various	Total
In CHF 1,000					
Non-current assets	57,179	5,161	452,759	79	515,178
Current assets	2,948	28,937	73,895	921	106,701
Assets	60,127	34,098	526,654	1,000	621,879
Equity	14,002	20,642	252,510	907	288,061
Long-term liabilities	44,352	2,551	163,976	4	210,883
Current liabilities	1,773	10,905	110,168	89	122,935
Liabilities and equity	60,127	34,098	526,654	1,000	621,879
Revenues	7,961	17,233	145,574	–	170,768
EBITDA	1,464	9,559	40,992	–104	51,911
Net result	–605	4,560	19,697	–128	23,524
AET's shareholdings, in %	33.33%	40%	30%	various	
AET's share of the equity	4,667	8,257	75,753	302	88,979
Impairments	–4,667	–	–	–	–4,667
Value of participations in associates	0	8,257	75,753	302	84,312

¹ Excluding Calore SA, Senco Holding SA and Senco Sagl, because fully consolidated

The shares of Metanord SA are pledged in favour of creditors of the company. The assets of the company are impaired on the basis of the present value of the expected cash flows.

4. Long-term securities

	31.12.2020	31.12.2019
In CHF 1,000		
Swissgrid AG	12,589	12,589
Trianel Kohlekraftwerk Lünen GmbH & Co. KG	12,362	13,215
Kraftwerke Mattmark AG	11,174	11,331
AKEB Aktiengesellschaft für Kernenergie-Beteiligungen Luzern	6,300	6,300
Terravent AG	2,250	2,250
Aliunid AG	490	–
./ impairment	–490	–
Other	244	244
Total	44,919	45,929

The participation into Trianel Kohlekraftwerk Lünen GmbH & Co. KG is amortised on a straight-line basis according to the duration of the power purchase agreement in force.

The investment into Kraftwerke Mattmark AG is amortised on a straight-line basis to the equity value expected at expiration of the concession.

5. Advances and loans to participations

	31.12.2020	31.12.2019
In CHF 1,000		
Terravent AG	11,153	11,604
Metanord SA	8,200	8,200
Other	–	–
Total	19,353	19,804

The advances to Terravent AG and Metanord SA are entirely subordinated.

6. Intangible assets

	Usage rights	Energy procurement rights	Intangible assets under development	Other intangible assets	Total
In CHF 1,000					
Cost value at 01.01.2019	27,074	144,555	3,407	9,988	185,024
Change in consolidation scope	–	–	–	–	–
Reclassification	–	–	–251	176	–75
Additions	–	–	628	–	628
Disposals	–	–	–	–285	–285
Conversion differences	–	–	–	–17	–17
Cost value at 31.12.2019	27,074	144,555	3,784	9,862	185,275
Change in consolidation scope	–	–	–	–	–
Reclassification	–	–	–3,092	997	–2,095
Additions	–	–	1,203	5	1,208
Disposals	–	–	–	–	–
Conversion differences	–	–	–	–1	–1
Cost value at 31.12.2020	27,074	144,555	1,895	10,863	184,387
Accumulated amortisation at 01.01.2019	–18,808	–127,957	–	–8,979	–155,744
Change in consolidation scope	–	–	–	–	–
Reclassification	–	–	–	–	–
Amortisation	–286	–1,844	–	–414	–2,544
Additions	–	–	–	–	–
Disposals	–	–	–	285	285
Impairments	–	–8,500	–	–	–8,500
Conversion differences	–	–	–	17	17
Accumulated amortisation at 31.12.2019	–19,094	–138,301	–	–9,091	–166,486
Change in consolidation scope	–	–	–	–	–
Reclassification	–	–	–	–	–
Amortisation	–285	–782	–	–377	–1,444
Additions	–	–	–	–	–
Disposals	–	–	–	–	–
Impairments	–	–5,472	–	–	–5,472
Conversion differences	–	–	–	1	1
Accumulated amortisation at 31.12.2020	–19,379	–144,555	–	–9,467	–173,401
Net carrying amount at 01.01.2019	8,266	16,598	3,407	1,009	29,280
Net carrying amount at 31.12.2019	7,980	6,254	3,784	771	18,789
Net carrying amount at 31.12.2020	7,695	0	1,895	1,396	10,986

Usage rights include rights for utilisation of third party plants, in particular related to exclusive usage of third party power grid plants, as well as concession fees paid in respect of hydro power concessions.

The energy procurement rights mainly refer to an energy procurement contract with EDF (expiration 31.12.2027); it has been impaired due to the prevailing market conditions. In 2020 an increase of the impairment has been made necessary by the development of the expected market parameters.

7. Other short-term assets

	31.12.2020	31.12.2019
In CHF 1,000		
Other short-term receivables from associates	20,270	361
Other short-term receivables from other related parties	3,430	729
Other short-term receivables from third parties	23,935	21,127
./. allowance for doubtful receivables	-595	-
Positive replacement values of transactions valued at market value	13,291	25,752
Energy related and similar certificates	3,622	4,068
Inventories of spare, spare parts and consumables	3,140	3,335
Total	67,093	55,372

Other short-term receivables from associates as of 31.12.2020 mainly refer to a short-term loan to the associate Società Elettrica Sopracenerina SA (SES).

8. Prepayments and accrued income

	31.12.2020	31.12.2019
In CHF 1,000		
Associates	5,469	4,615
Other related parties	7,097	8,445
Third parties	84,932	95,685
Work in progress	1,187	923
Total	98,685	109,668

The balance includes amounts in foreign currency for EUR 52.2 million (EUR 62.6 million at 31.12.2019).

Accrued income mainly includes the value of energy sold during the last reporting month and not yet invoiced.

9. Receivables from goods and services

	31.12.2020	31.12.2019
In CHF 1,000		
Associates	4,967	4,290
Other related parties	2,045	328
Third parties	17,133	16,186
./. allowance for doubtful receivables	-3,155	-3,180
Total	20,990	17,624

The balance includes amounts in foreign currency for EUR 1.8 million (EUR 1.3 million at 31.12.2019).

10. Cash and cash equivalents

	31.12.2020	31.12.2019
In CHF 1,000		
Balances in CHF	65,348	80,488
Balances in foreign currencies	8,933	6,971
Total	74,281	87,459

11. Provisions

	Energy onerous contracts	Current and deferred taxes	Personnel related expenses	Other	Total
In CHF 1,000					
Carrying amount at 01.01.2019	12,044	497	2,152	2,658	17,351
<i>thereof long-term</i>	11,437	170	–	1,236	12,843
<i>thereof short-term</i>	607	327	2,152	1,422	4,508
Change in consolidation scope	–	–	–	–	–
Increase	–	400	1,346	295	2,041
Utilisation	–607	–84	–	–68	–759
Release	–433	–17	–34	–544	–1,028
Carrying amount at 31.12.2019	11,004	796	3,464	2,341	17,605
<i>thereof long-term</i>	10,294	157	–	1,322	11,773
<i>thereof short-term</i>	710	639	3,464	1,019	5,832
Change in consolidation scope	–	–	–	–	–
Increase	3,268	325	1,472	2,638	7,703
Utilisation	–710	–629	–1,630	–68	–3,037
Release	–	–16	–	–283	–299
Carrying amount at 31.12.2020	13,562	476	3,306	4,628	21,972
<i>thereof long-term</i>	11,970	143	–	1,315	13,428
<i>thereof short-term</i>	1,592	333	3,306	3,313	8,544

Provisions for energy onerous contracts mainly include the negative present value of an energy purchase agreement with the Azienda Cantonale dei Rifiuti. The provision is determined according to the current energy price expectations for the contract period (2030) and the current EUR/CHF exchange rate.

Deferred income taxes are computed considering a 20% income tax rate.

The provision for personnel related expenses represents the value of overtime worked and not-taken holidays.

12. Long-term financial liabilities

	31.12.2020	31.12.2019
In CHF 1,000		
Liabilities due between 1 and 5 years	89,854	87,625
Liabilities due between 5 and 10 years	88,000	108,000
Liabilities due after 10 years	84,000	84,000
Total	261,854	279,625

13. Other short-term liabilities

	31.12.2020	31.12.2019
In CHF 1,000		
Other short-term liabilities towards associates	166	64
Other short-term liabilities towards other related parties	4,263	3,013
Other short-term liabilities towards third parties	10,153	7,379
Negative replacement values of transactions valued at market value	4,103	15,474
Total	18,685	25,930

14. Short-term financial liabilities

	31.12.2020	31.12.2019
In CHF 1,000		
Financial liabilities in CHF	23,100	5,100
Financial liabilities in foreign currency	–	2,174
Total	23,100	7,274

Short-term financial liabilities consist of reclassified long-term financial liabilities with residual duration shorter than 12 months.

15. Accrued liabilities and deferred income

	31.12.2020	31.12.2019
In CHF 1,000		
Associates	731	653
Other related parties	2,700	1,434
Third parties	82,341	89,331
Total	85,772	91,418

The balance includes amounts in foreign currency for EUR 52.9 million (EUR 57.4 million at 31.12.2019).

Accrued liabilities mainly includes the value of energy purchased during the last reporting month and not yet invoiced.

16. Payables from goods and services

	31.12.2020	31.12.2019
In CHF 1,000		
Associates	48	353
Other related parties	5,395	3,386
Third parties	11,400	11,424
Total	16,843	15,163

The balance includes amounts in foreign currency for EUR 6.3 million (EUR 6.3 million at 31.12.2019).

17. Energy income

	2020	2019
In CHF 1,000		
Energy sales in Switzerland	359,460	355,212
Energy sales in Italy	30,432	51,814
Energy sales in Germany	359,521	431,267
Energy sales in France	50,621	98,059
Other energy income	10,655	25,022
Total	810,689	961,374

The item other energy income includes the economic effect of the mark to market valuation of energy and CO₂ emission rights forward transactions acquired within the trading portfolio.

18. Other operating income

	2020	2019
In CHF 1,000		
Income from services	9,678	8,066
Own work capitalised	4,241	4,654
Other	4,702	4,580
Total	18,621	17,300

19. Energy purchases

	2020	2019
In CHF 1,000		
Purchases from participations	-74,337	-82,605
Long-term contractual purchases	-31,395	-33,473
Purchases on the market	-633,834	-780,644
Total	-739,566	-896,722

The expenses related to the energy offtaken from the production participations held by the Canton Ticino (Officine idroelettriche della Maggia SA, Officine idroelettriche di Blenio SA and Verzasca SA) are included within purchases from participations.

20. Personnel expenses

	2020	2019
In CHF 1,000		
Salaries and other compensation	-25,749	-25,276
Social contributions	-5,756	-5,472
Other expenses	-531	-657
Recoveries from insurance companies	255	213
Total	-31,781	-31,192

In 2020 the total compensation of the six executive committee members has been of CHF 1.7 million (gross of the legal contributions).

Employees of the Group

	31.12.2020	31.12.2019
Full time equivalent		
Permanent employees	236.5	231.9
Auxiliary employees	12.3	9.7
Apprentices	37.0	31.0
Total	285.8	272.6

21. Other operating expenses

	2020	2019
In CHF 1,000		
Water fees	-15,239	-14,860
Local taxes and other contributions	-3,704	-4,056
Other	-6,376	-5,748
Total	-25,319	-24,664

Other contributions include the payment of accumulation contributions to power plants upstream to AET's plants for CHF 1.0 million.

22. Financial result

	2020	2019
In CHF 1,000		
Interest income	304	525
Income from participations	1,053	1,045
Exchange rate differences	965	738
Interest payments	-6,373	-6,525
Other financial expenses	-144	-110
Total	-4,195	-4,327

Exchange rate differences include the cost of foreign exchange currency hedging operations.

23. Extraordinary result

	2020	2019
In CHF 1,000		
Reversal of impairments on non-current assets	202	295
Profit from disposal of non-current assets	16	688
Release of provisions	11	566
Other extraordinary income	206	549
Increase of provisions	-5,644	-185
Impairments of non-current assets	-5,472	-8,543
Other extraordinary expenses	-934	-1,523
Total	-11,615	-8,153

The impairments increase relates to the energy procurement contract with EDF, whose value has been reassessed because of the deteriorated economic expectations for the upcoming years.

24. Goodwill

The positive difference between the acquisition cost of a participation and its equity value is treated as goodwill. It is offset with retained earnings without impact on the income statement in the acquisition year.

If the goodwill paid were capitalised on the balance sheet and amortised on a straight-line basis over 5 years, the consolidated balance sheet and the consolidated income statement would present the following variations:

	2020	2019
In CHF 1,000		
Goodwill, historical cost	1,493	1,493
Goodwill, net book value	895	1,194
Equity (retained earnings)	1,194	1,493
Amortisation goodwill of the year	-299	-299
Net result	-299	-299

25. Contingent liabilities

AET issued guarantees in favour of financing parts of former participations, which have been disposed. As of 31.12.2020 those had a value of CHF 4.9 million (31.12.2019: CHF 14.0 million); in the context of the sales of those participations, AET has been granted with pledges or guarantees in order to be kept armless from those exposures.

26. Other non-recognisable commitments

In the context of the management of its energy portfolio, the AET Group has entered into transactions on the futures markets and finalised various long-term energy purchase agreements involving irrevocable obligations.

Energy purchase contracts and market transactions

	Market transactions	Long-term contracts
Cumulative volume in CHF 1,000		
2021	337,987	33,795
from 2 to 5 year	255,509	144,433
over 5 year	–	84,812

AET Group further has an offtake commitment for the energy produced by its own power generation participations and the participations of the Canton Ticino, paying its production cost quota. The duration of these obligations is undetermined and depends on the future developments of those participations.

AET Group also has entered into a cross-border interconnection capacity agreement with expiration 2022 and with an annual volume of CHF 6.9 million (value of the indexed contact based on 2020 prices and year-end exchange rate).

At 31.12.2020 AET Group has derivative financial instruments subscribed for interest rate hedging purpose for a contractual volume of CHF 10 million (31.12.2019: CHF 10 million).

Forward currency operations

31.12.2020	Maturity year 2021		Maturity year 2022	
	Amount in currency (in 1,000)	Average exchange rate (currency/CHF)	Amount in currency (in 1,000)	Average exchange rate (currency/CHF)
Operation				
Buy EUR	–	–	–	–
Sell EUR	–	–	–	–

31.12.2019	Maturity year 2020		Maturity year 2021	
	Amount in currency (in 1,000)	Average exchange rate (currency/CHF)	Amount in currency (in 1,000)	Average exchange rate (currency/CHF)
Operation				
Buy EUR	11,800	1.10	–	–
Sell EUR	17,000	1.11	–	–

Forward foreign currency transactions have been entered into with the purpose of hedging expected future foreign currency cash flows.

At 31.12.2020 Group AET has no off-balance sheet lease commitments (31.12.2019: unchanged)

27. Pension benefit obligations

	Coverage rate	Economic benefit/ economic obligations for the Group	Change recognised in the income statement	Expense for contributions of the period	Pension benefit expense within personnel expenses
CPE Fondazione di Previdenza Energia					
In CHF 1,000					
31.12.2020	112.5%	–	–	–2,590	–2,590
31.12.2019	109.2%	–	–	–2,477	–2,477

28. Transactions with related parties

Transactions with associates

	2020	2019
In CHF 1,000		
Energy income	31,655	27,131
Service and other income	13,349	15,831
Financial income	97	–
Energy purchases	387	164
Service and other expenses	10,213	10,260

Transactions with other related parties

	2020	2019
In CHF 1,000		
Energy income	312	927
Service and other income	2,659	2,304
Financial income	587	735
Energy purchases	73,909	81,880
Service and other expenses	2,136	2,222

29. Risk assessment

The Board of Directors and Management give the utmost attention and deploy the necessary resources for the valuation and management of risks in order to adhere to the standards of the sector. The management and valuation of the company's risks have been integrated into the company's operating procedures, in order to guarantee the maximum effectiveness.

From a financial point of view the AET Group is exposed to following main risk factors:

Volume risk: is the risk associated with the variation in the sales volume, respectively of production volumes compared to forecasts. Its principal cause is the meteorological risk in that the meteorological deviations from the long-term averages cause variations in consumption and production from the hydroelectric plants that are difficult to predict. In the long-term the AET Group manages this risk by diversifying its supplies with long-term contracts and participations. In the medium to short-term this risk is managed with a gradual rebalancing of the portfolio using updated forecasts and historical data. In addition the AET Group can count on reserve capacity from its own hydroelectric plants.

Market risk: is the risk associated with the variations in the price of energy on the markets and the fluctuation of exchange rates. The AET Group manages this risk by monitoring the evolutions and the expectations of market prices and consequently hedges the positions. The foreign exchange risk is managed through hedging operations. Market risks mostly have an effect on the quantity of energy sold and produced resulting from the volume risk that can not be efficiently hedged in advance because unknown.

Counterparty risk: is the risk of loss related to payment default of commercial counterparties. The wholesale activity is mainly performed with large Swiss and bordering countries power companies. Exposure limits are determined for each counterparty, based on their economic and financial situation. Counterparty risk related to the Swiss commercial / distribution activity is managed through the constant monitoring of the receivable positions, the subscription of receivables insurances, the request of bank guarantees or deposits.

Regulatory risk: relates to the introduction or modification of laws, acts or rules at Swiss or European level, which might have an impact on the activity of the AET Group. The AET Group constantly monitors the regulatory developments, adopting the necessary adjustments.

30. Subsequent events

2020: no significant event.

2019: on the 11.03.2020 the world health organisation has declared the coronavirus (COVID-19) outbreak pandemic, which has reached, among others, vast European territories. Switzerland and the Canton Ticino in particular have been strongly affected too. Like many other European governments, the Swiss government has declared the "extraordinary situation" and has imposed a lockdown, significantly restricting the economic and social activities. This caused sharp energy consumption reductions, which caused a major price reduction of all energy commodities. As of today, it's not yet possible to quantify the economic and financial impact for AET, an impact is expected on the 2020 operating result, whereas no material impact is expected on the balance sheet positions.

Audit report by KPMG SA on the consolidated financial statements


KPMG SA

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**Report of the Statutory Auditor to the Gran Consiglio of Repubblica e Cantone Ticino
Azienda elettrica ticinese, Bellinzona**
Report of the Statutory Auditor on the consolidated financial statements

As statutory auditor, we have audited the accompanying consolidated financial statements (from page 23 to page 47) of Azienda elettrica ticinese, which comprise the balance sheet, income statement, cash flow statement, statement of changes in equity and notes for the year ended 31 December 2020.

Board of Directors' Responsibility

The Board of Directors is responsible for the preparation of the consolidated financial statements in accordance with the requirements of Swiss GAAP FER, the requirements of Swiss law and Act of Azienda elettrica ticinese. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Swiss law, Swiss Auditing Standards and Act of Azienda elettrica ticinese. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control system. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements for the year ended on 31 December 2020 give a true and fair view of the financial position, the results of operations and the cash flows in accordance with Swiss GAAP FER and comply with Swiss law and Act of the Azienda elettrica ticinese.



Azienda elettrica ticinese, Bellinzona
Report of the Statutory Auditor
on the consolidated financial statements
the Gran Consiglio of Repubblica e Cantone Ticino

Report on Other Legal Requirements

We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 CO) and that there are no circumstances incompatible with our independence.

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

KPMG SA

A handwritten signature in blue ink, appearing to read 'Orlando Lanfranchi'.

Orlando Lanfranchi
Licensed Audit Expert
Auditor in Charge

A handwritten signature in blue ink, appearing to read 'Silas Citrini'.

Silas Citrini
Licensed Audit Expert

Lugano, 22 April 2021



In summer 2020, the five wind turbines were installed and commissioned. The base of the towers consists of precast concrete elements piled one on top of the other.





The towers are 98 metres high and weigh approximately 100 tonnes; the first 75 metres are made from concrete elements, the remaining 23 from a single piece of steel.





The nacelle, hub and generator weigh a total of 116 tonnes.

Financial statements

Balance sheet

Assets

		31.12.2020	31.12.2019
In CHF 1,000	Notes		
Plants and equipment		202,185	210,452
Land and buildings		48,902	49,582
Tangible fixed assets under construction		23,756	16,346
Other tangible fixed assets		2,933	2,607
Tangible fixed assets	2	277,776	278,987
Participations	3	44,051	44,301
Long-term securities	4	44,675	45,685
Advances and loans to participations	5	49,284	37,194
Other financial assets		364	452
Financial assets		138,374	127,632
Usage rights		7,388	7,609
Energy procurement rights		0	6,254
Intangible assets under development		1,852	1,679
Other intangible assets		1,395	771
Intangible assets	6	10,635	16,313
Non-current assets		426,785	422,932
Other short-term assets	7	53,589	43,022
Prepayments and accrued income	8	98,676	109,414
Receivables from goods and services	9	20,953	15,775
Cash and cash equivalents	10	61,021	77,303
Current assets		234,239	245,514
Assets		661,024	668,446

Liabilities and equity

		31.12.2020	31.12.2019
In CHF 1,000	Notes		
Endowment capital		40,000	40,000
General reserves		67,000	67,000
Statutory reserves		51,000	51,000
Results carried forward		98,357	100,301
Net result		9,230	1,256
Equity		265,587	259,557
Long-term provisions	11	11,481	10,294
Other long-term liabilities		1,137	1,137
Long-term financial liabilities	12	243,000	266,000
Long-term liabilities		255,618	277,431
Short-term provisions	11	5,556	4,374
Other short-term liabilities	13	18,309	25,594
Short-term financial liabilities	14	23,000	2,174
Accrued liabilities and deferred income	15	78,679	84,737
Payables from goods and services	16	14,275	14,579
Current liabilities		139,819	131,458
Liabilities		395,437	408,889
Liabilities and equity		661,024	668,446

Income statement

		2020	2019
In CHF 1,000	Notes		
Operating income			
Energy income	17	809,101	959,263
Grid income		37,401	38,866
Other operating income	18	21,343	19,787
Operating income		867,845	1,017,916
Operating expenses			
Energy purchases	19	-756,933	-915,710
Grid expenses		-14,248	-13,902
Personnel expenses	20	-31,222	-30,457
Service and material expenses		-6,819	-7,826
Depreciation on tangible fixed assets	2	-13,874	-13,662
Amortisation on intangible assets	6	-1,379	-2,479
Other depreciation and amortisation		-1,260	-1,260
Other operating expenses	21	-21,818	-21,051
Operating expenses		-847,553	-1,006,347
Operating result		20,292	11,569
Financial result	22	-2,373	-2,565
Ordinary result		17,919	9,004
Non-operating result		-	-
Extraordinary result	23	-8,689	-7,748
Net result		9,230	1,256

Cash flow statement

	2020	2019
In CHF 1,000		
Net result	9,230	1,256
Depreciation on tangible fixed assets	13,874	13,662
Amortisation on intangible assets	1,379	2,479
Other depreciation and amortisation	1,260	1,260
Change in provisions	2,369	-136
Change in impairments	5,472	8,500
Profit / loss from disposal of non-current assets	-16	25
Other non cash expenses and income	177	137
Change in receivables, prepayments and accrued income and other short-term assets	-5,007	323
Change in payables, accrued liabilities and deferred income and other short-term liabilities	-13,647	-5,948
Cash flow from operating activities	15,091	21,558
Outflows for investment in tangible fixed assets	-12,823	-8,385
Inflows from disposal of tangible fixed assets	165	137
Outflows for investment in intangible assets	-1,163	-623
Inflows from disposal of intangible assets	-	-
Outflows for investment in financial assets	-12,803	-8,715
Inflows from disposal of financial assets	595	21,171
Cash flow from investing activities	-26,029	3,585
Issuance / repayment of short-term financial liabilities	-2,144	-3,910
Issuance / repayment of long-term financial liabilities	-	-195
Interests on capital, due to the State	-3,200	-3,200
Distribution of dividends to the State	-	-
Cash flow from financing activities	-5,344	-7,305
Cash and cash equivalents at the beginning of the year	77,303	59,465
Cash flow	-16,282	17,838
Cash and cash equivalents at the end of the year	61,021	77,303

Statement of changes in equity

	Endowment capital	General reserves	Statutory reserves	Results carried forward	Net result	Equity
In CHF 1,000						
Equity at 01.01.2019	40,000	67,000	51,000	112,331	-8,830	261,501
Allocation of result	-	-	-	-8,830	8,830	-
Interests on capital, due to the State	-	-	-	-3,200	-	-3,200
Distribution of dividends	-	-	-	-	-	-
Net result 2019	-	-	-	-	1,256	1,256
Equity at 31.12.2019	40,000	67,000	51,000	100,301	1,256	259,557
Allocation of result	-	-	-	1,256	-1,256	-
Interests on capital, due to the State	-	-	-	-3,200	-	-3,200
Distribution of dividends	-	-	-	-	-	-
Net result 2020	-	-	-	-	9,230	9,230
Equity at 31.12.2020	40,000	67,000	51,000	98,357	9,230	265,587

Notes to the financial statements

1. Accounting principles

The financial statements 2020 of the Azienda Elettrica Ticinese (AET) were prepared in accordance to the Swiss GAAP FER as a whole and approved by the Board of Directors on the 22.04.2021.

Assets and liabilities are valued with uniform principles. The most significant accounting principles are described in the following.

1.1. Tangible fixed assets

Tangible fixed assets are valued at their acquisition or construction cost, taking into account the necessary technical-economical depreciation and any necessary impairment. Depreciation is computed on a straight-line basis, considering the technical life of the assets generally accepted within the sector. Land is not depreciated. Tangible fixed assets under construction are reported at construction cost, tangible fixed assets under construction are not depreciated. The following minimum and maximum depreciation periods for each tangible fixed asset category are applied:

Civil works	40 – 80 years
Electromechanical installations	40 – 50 years
Electromechanical equipments	15 – 35 years
Power lines	30 – 55 years
Substations and transformers	20 – 35 years
Buildings	40 – 50 years
Photovoltaic plants	20 – 30 years
Machinery and tools	5 – 25 years
Vehicles	3 – 10 years
IT equipments	3 – 5 years

Renewal or optimisation investments on plants are capitalised if useful life, capacity or performance of the involved plant are significantly improved.

1.2. Financial assets

Financial assets are reported at their cost value, adjusted for any impairment. For production participations, organised according to the principle of energy withdrawal at generation costs, the investment value exceeding the expected equity value at the end of the useful life of the power plant is depreciated on a straight-line basis according to the useful life of the power plant. Long-term advances in foreign currency are converted at the year-end exchange rates.

1.3. Intangible assets

Intangible assets are capitalised at their acquisition cost taking into account the necessary technical-economical amortisation and any necessary impairment. Amortisation is computed on a straight-line basis, considering the useful life of the asset. Usage right without expiration are amortised on the basis of the technical life of the involved plant (40-80 years).

1.4. Energy related and similar certificates

Energy related and similar certificates acquired within the trading portfolio are booked at their market value (mark to market) at the balance sheet date, changes in market value incurred during the financial year are recorded in the income statement within other energy income. Energy related and similar certificates, acquired for the purpose of hedging of the generation portfolio of AET, are booked at their weighted average purchase price.

1.5. Inventories

Inventories include small tools, spare parts and consumables. They are valued at their weighted average purchase price, taking into account any impairment for slow-moving items or obsolescence.

1.6. Receivables

Receivables are reported at their face value, taking into account potential losses. Foreign currency receivables are converted at year-end exchange rate.

1.7. Cash and cash equivalents

Cash and cash equivalents are reported at their face value and include cash in hand and account balances at financial institutions. Balances in foreign currencies are converted at year-end exchange rate.

1.8. Impairment

At each balance sheet date, all assets are tested for any impairment indicators. In case of existence of such indicators, the recoverable amount, that is the higher between the net selling price and the value in use, is computed. The value in use is generally computed on the basis of the present value of the expected future cash flows. If necessary, the carrying value is adjusted to the recoverable amount through the recording of an impairment. In case of improvement of the recoverable amount, the carrying value is revaluated at maximum to the value according to the original depreciation scheme.

1.9. Provisions

Provisions are deemed to cover probable future disbursements related to legal or implicit obligations arising from past events. Long-term provisions are reported at the present value at the balance sheet day of the expected future disbursement.

1.10. Liabilities

All liabilities are reported at their nominal value. Liabilities in foreign currency are converted at year-end exchange rate.

1.11. Contingent liabilities

All contingent liabilities and other non-recognisable commitments existing at the balance sheet date are disclosed in the notes to the financial statements.

1.12. Energy forward sale and purchase transactions

Energy forward sale and purchase transactions, as well as the economic result of energy related transactions with financial instruments, made within the trading portfolio are booked at their market value at the balance sheet date (mark to market). Positive and negative replacement values (the difference between the market price at the balance sheet date and the contract price) are booked within other short-term assets and other short-term liabilities respectively. Changes in market value incurred during the financial year are recorded in the income statement within other energy income.

Energy forward sale and purchase transactions, as well as the economic result of transactions with energy related financial instruments, entered for the purpose of hedging of AET's generation portfolio are recognised in the income statement at delivery.

1.13. Revenues

Grid income and other operating income are recognised within the income statement when they are incurred. All revenues are recorded net of price reductions, sale taxes and value added taxes.

1.14. Pension funds

The personnel of AET is affiliated to a multi-employer independent pension institution of the energy sector. The financial implications of the pension schemes in place, regardless of their structure and legal form, are included in the financial statements. Surplus payments or deficits are determined on the basis of the latest available financial statements of the pension funds involved. Any liabilities (economic obligations) or any assets (economic benefits) in addition to the payment of the regular premiums are recorded in the financial statements. Economic obligations are recognised when pension liabilities are undercovered, generating a future cash outflow for the company in the form of restructuring contributions. Economic benefits consist of future positive cash flow resulting from the use of employer's contribution reserves or other benefits. The yearly contributions, the yearly change in any economic obligations and economic benefits, as well as the change in the employer's contribution reserve, are recorded in the income statements under personnel expenses.

1.15. Income taxes

AET is not subject to any income tax.

1.16. Related party transactions

Transactions with subsidiaries include all transactions and debit / credit relationships with companies controlled by AET through its voting rights majority. Transactions with associates include all transactions and debit / credit relationships with companies of which AET holds between 20% and 50% of the voting rights. Transactions with other related parties include transactions with the power generation / procurement companies Officine idroelettriche della Maggia SA, Officine idroelettriche di Blenio SA, Verzasca SA, Ritom SA held by the Canton Ticino as well as Kraftwerke Mattmark AG, AKEB Aktiengesellschaft für Kernenergie-Beteiligungen Luzern and Trianel Kohlekraftwerk Lünen GmbH & Co. KG held by AET for less than 20%. AET offtakes the respective share of energy and pays the related production / procurement costs.

2. Tangible fixed assets

	Plants and equipment	Land and buildings	Tangible fixed assets under construction	Other tangible fixed assets	Total
In CHF 1,000					
Cost value at 01.01.2019	509,458	60,075	25,557	8,016	603,106
Reclassification	14,273	498	-16,371	1,600	-
Additions	945	174	7,331	251	8,701
Disposals	-2,644	0	-171	-341	-3,156
Cost value at 31.12.2019	522,032	60,747	16,346	9,526	608,651
Reclassification	3,260	242	-4,115	603	-10
Additions	4,660	-	11,525	336	16,521
Disposals	-682	-	-	-328	-1,010
Cost value at 31.12.2020	529,270	60,989	23,756	10,137	624,152
Accumulated depreciation at 01.01.2019	-301,114	-10,258	-	-6,860	-318,232
Reclassification	-	-	-	-	-
Depreciation	-12,355	-907	-	-400	-13,662
Additions	-316	-	-	-	-316
Disposals	2,205	-	-	341	2,546
Accumulated depreciation at 31.12.2019	-311,580	-11,165	-	-6,919	-329,664
Reclassification	-	-	-	-	-
Depreciation	-12,339	-922	-	-613	-13,874
Additions	-3,698	-	-	-	-3,698
Disposals	532	-	-	328	860
Accumulated depreciation at 31.12.2020	-327,085	-12,087	-	-7,204	-346,376
Net carrying amount at 01.01.2019	208,344	49,817	25,557	1,156	284,874
Net carrying amount at 31.12.2019	210,452	49,582	16,346	2,607	278,987
Net carrying amount at 31.12.2020	202,185	48,902	23,756	2,933	277,776

3. Participations

	31.12.2020	31.12.2019
In CHF 1,000		
Società Elettrica Sopracenerina SA (SES)	21,052	21,052
Metanord SA	11,505	11,505
./ impairment	-11,505	-11,505
SPE Società per Partecipazioni Energetiche SA	8,000	8,000
./ impairment	-8,000	-8,000
Parco eolico del San Gottardo SA	7,861	7,861
Lucendro SA	6,551	6,801
TERIS Teleriscaldamento del Bellinzonese SA	6,000	6,000
Senco Holding SA	1,149	1,149
Calore SA	1,000	1,000
Capriasca Calore SA	438	438
Total	44,051	44,301

The shares in Metanord SA are pledged in favour of creditors of the company, the impairment has been determined on the basis of the present value of expected cash flows.

The participation into Lucendro SA is amortised on a straight-line basis to the equity value expected at expiration of the concession.

4. Long-term securities

	31.12.2020	31.12.2019
In CHF 1,000		
Swissgrid AG	12,589	12,589
Trianel Kohlekraftwerk Lünen GmbH & Co. KG	12,362	13,215
Kraftwerke Mattmark AG	11,174	11,331
AKEB Aktiengesellschaft für Kernenergie-Beteiligungen Luzern	6,300	6,300
Terravent AG	2,250	2,250
Aliunid AG	490	-
./ impairment	-490	-
Other	0	0
Total	44,675	45,685

The participation into Trianel Kohlekraftwerk Lünen GmbH & Co. KG is amortised on a straight-line basis according to the duration of the power purchase agreement in force.

The investment into Kraftwerke Mattmark AG is amortised on a straight-line basis to the equity value expected at expiration of the concession.

5. Advances and loans to participations

	31.12.2020	31.12.2019
In CHF 1,000		
Parco eolico del San Gottardo SA	16,467	3,904
SPE Società per Partecipazioni Energetiche SA	15,300	15,377
./ impairment	-10,886	-10,941
Terravent AG	11,153	11,604
Metanord SA	8,200	8,200
Lucendro SA	4,900	4,900
TERIS Teleriscaldamento del Bellinzonese SA	4,000	4,000
Other	150	150
Total	49,284	37,194

The advance to SPE Società per Partecipazioni Energetiche SA (SPE) is subordinated for an amount of CHF 15 million and has been impaired because of the deterioration of the financial and economic conditions of the participations held by SPE.

The advances to Terravent AG and Metanord SA are entirely subordinated.

6. Intangible assets

	Usage rights	Energy procurement rights	Intangible assets under development	Other intangible assets	Total
In CHF 1,000					
Cost value at 01.01.2019	15,586	144,555	1,232	9,517	170,890
Reclassification	–	–	–176	176	–
Additions	–	–	623	–	623
Disposals	–	–	–	–68	–68
Cost value at 31.12.2019	15,586	144,555	1,679	9,625	171,445
Reclassification	–	–	–987	997	10
Additions	–	–	1,160	3	1,163
Disposals	–	–	–	–	–
Cost value at 31.12.2020	15,586	144,555	1,852	10,625	172,618
Accumulated amortisation at 01.01.2019	–7,756	–127,957	–	–8,508	–144,221
Reclassification	–	–	–	–	–
Amortisation	–221	–1,844	–	–414	–2,479
Additions	–	–	–	–	–
Disposals	–	–	–	68	68
Impairments	–	–8,500	–	–	–8,500
Accumulated amortisation at 31.12.2019	–7,977	–138,301	–	–8,854	–155,132
Reclassification	–	–	–	–	–
Amortisation	–221	–782	–	–376	–1,379
Additions	–	–	–	–	–
Disposals	–	–	–	–	–
Impairments	–	–5,472	–	–	–5,472
Accumulated amortisation at 31.12.2020	–8,198	–144,555	–	–9,230	–161,983
Net carrying amount at 01.01.2019	7,830	16,598	1,232	1,009	26,669
Net carrying amount at 31.12.2019	7,609	6,254	1,679	771	16,313
Net carrying amount at 31.12.2020	7,388	0	1,852	1,395	10,635

Usage rights include rights for utilisation of third party plants, in particular related to exclusive usage of third party power grid plants, as well as concession fees paid in respect of hydro power concessions.

The energy procurement rights mainly refer to an energy procurement contract with EDF (expiration 31.12.2027); it has been impaired due to the prevailing market conditions. In 2020 an increase of the impairment has been made necessary by the development of the expected market parameters.

7. Other short-term assets

	31.12.2020	31.12.2019
In CHF 1,000		
Other short-term receivables from subsidiaries	270	272
Other short-term receivables from associates	20,000	89
Other short-term receivables from other related parties	3,430	729
Other short-term receivables from third parties	10,036	8,990
Positive replacement values of transactions valued at market value	13,291	25,752
Energy related and similar certificates	3,622	4,068
Inventories of spare parts and consumables	2,940	3,122
Total	53,589	43,022

Other short-term receivables from associates as of 31.12.2020 refer to a short-term loan to the associate Società Elettrica Sopracenerina SA (SES).

8. Prepayments and accrued income

	31.12.2020	31.12.2019
In CHF 1,000		
Subsidiaries	1,071	1,106
Associates	5,468	4,378
Other related parties	7,090	8,431
Third parties	83,203	94,111
Work in progress	1,844	1,388
Total	98,676	109,414

The balance includes amounts in foreign currency for EUR 52.9 million (EUR 63.1 million at 31.12.2019).

Accrued income mainly includes the value of energy sold during the last reporting month and not yet invoiced.

9. Receivables from goods and services

	31.12.2020	31.12.2019
In CHF 1,000		
Subsidiaries	2,458	1,879
Associates	4,967	4,265
Other related parties	2,042	319
Third parties	11,486	9,312
Total	20,953	15,775

The balance includes amounts in foreign currency for EUR 3.2 million (EUR 2.4 million at 31.12.2019).

10. Cash and cash equivalents

	31.12.2020	31.12.2019
In CHF 1,000		
Balances in CHF	56,637	71,330
Balances in foreign currencies	4,384	5,973
Total	61,021	77,303

11. Provisions

	Energy onerous contracts	Personnel related expenses	Other	Total
In CHF 1,000				
Carrying amount at 01.01.2019	12,044	2,152	608	14,804
<i>thereof long-term</i>	11,437	–	–	11,437
<i>thereof short-term</i>	607	2,152	608	3,367
Reclassification	–	–	–	–
Increase	–	1,346	40	1,386
Utilisation	–607	–	–	–607
Release	–433	–34	–448	–915
Carrying amount at 31.12.2019	11,004	3,464	200	14,668
<i>thereof long-term</i>	10,294	–	–	10,294
<i>thereof short-term</i>	710	3,464	200	4,374
Reclassification	–	–	–	–
Increase	2,087	1,472	1,330	4,889
Utilisation	–710	–1,630	–	–2,340
Release	–	–	–180	–180
Carrying amount at 31.12.2020	12,381	3,306	1,350	17,037
<i>thereof long-term</i>	11,481	–	–	11,481
<i>thereof short-term</i>	900	3,306	1,350	5,556

Provisions for energy onerous contracts mainly include the negative present value of an energy purchase agreement with the Azienda Cantonale dei Rifiuti. The provision is determined according to the current energy price expectations for the contract period (2030) and the current EUR/CHF exchange rate.

The provision for personnel related expenses represents the value of overtime worked and not-taken holidays.

12. Long-term financial liabilities

	31.12.2020	31.12.2019
In CHF 1,000		
Liabilities due between 1 and 5 years	80,000	83,000
Liabilities due between 5 and 10 years	83,000	103,000
Liabilities due after 10 years	80,000	80,000
Total	243,000	266,000

13. Other short-term liabilities

	31.12.2020	31.12.2019
In CHF 1,000		
Other short-term liabilities towards subsidiaries	189	150
Other short-term liabilities towards associates	166	64
Other short-term liabilities towards other related parties	4,263	3,013
Other short-term liabilities towards third parties	9,588	6,893
Negative replacement values of transactions valued at market value	4,103	15,474
Total	18,309	25,594

14. Short-term financial liabilities

	31.12.2020	31.12.2019
In CHF 1,000		
Financial liabilities in CHF	23,000	–
Financial liabilities in foreign currency	–	2,174
Total	23,000	2,174

Short-term financial liabilities consist of reclassified long-term financial liabilities with residual duration shorter than 12 months.

15. Accrued liabilities and deferred income

	31.12.2020	31.12.2019
In CHF 1,000		
Subsidiaries	1,066	1,016
Associates	12	4
Other related parties	2,688	1,434
Third parties	74,913	82,283
Total	78,679	84,737

The balance includes amounts in foreign currency for EUR 53.0 million (EUR 57.4 million at 31.12.2019).

Accrued liabilities mainly includes the value of energy purchased during the last reporting month and not yet invoiced.

16. Payables from goods and services

	31.12.2020	31.12.2019
In CHF 1,000		
Subsidiaries	–	1,826
Associates	28	324
Other related parties	5,395	3,373
Third parties	8,852	9,056
Total	14,275	14,579

The balance includes amounts in foreign currency for EUR 6.0 million (EUR 7.3 million at 31.12.2019).

17. Energy income

	2020	2019
In CHF 1,000		
Energy sales in Switzerland	356,368	353,410
Energy sales in Italy	31,855	51,424
Energy sales in Germany	359,521	431,267
Energy sales in France	50,621	98,059
Other energy income	10,736	25,103
Total	809,101	959,263

The item other energy income includes the economic effect of the mark to market valuation of energy and CO₂ emission rights forward transactions acquired within the trading portfolio.

18. Other operating income

	2020	2019
In CHF 1,000		
Income from services	13,315	12,215
Own work capitalised	3,978	3,607
Other	4,050	3,965
Total	21,343	19,787

19. Energy purchases

	2020	2019
In CHF 1,000		
Purchases from participations	–80,641	–89,145
Long-term contractual purchases	–31,395	–33,473
Purchases on the market	–644,897	–793,092
Total	–756,933	–915,710

The expenses related to the energy offtaken from the production participations held by the Canton Ticino (Officine idroelettriche della Maggia SA, Officine idroelettriche di Blenio SA and Verzasca SA) are included within purchases from participations.

20. Personnel expenses

	2020	2019
In CHF 1,000		
Salaries and other compensation	-25,303	-24,691
Social contributions	-5,657	-5,338
Other expenses	-517	-641
Recoveries from insurance companies	255	213
Total	-31,222	-30,457

In 2020 the total compensation of the six executive committee members has been of CHF 1.7 million (gross of the legal contributions).

Employees of the company

	31.12.2020	31.12.2019
Full time equivalent		
Permanent employees	232.1	227.3
Auxiliary employees	12.3	9.7
Apprentices	37.0	31.0
Total	281.4	268.0

21. Other operating expenses

	2020	2019
In CHF 1,000		
Water fees	-12,873	-12,494
Local taxes and other contributions	-3,262	-3,656
Other	-5,683	-4,901
Total	-21,818	-21,051

Other contributions include the payment of accumulation contributions to power plants upstream to AET's plants for CHF 1.0 million.

22. Financial result

	2020	2019
In CHF 1,000		
Interest income	498	641
Income from participations	2,337	2,348
Exchange rate differences	1,002	689
Interest payments	-6,066	-6,134
Other financial expenses	-144	-109
Total	-2,373	-2,565

Exchange rate differences include the cost of foreign exchange currency hedging operations.

23. Extraordinary result

	2020	2019
In CHF 1,000		
Profit from disposal of non-current assets	16	–
Release of provisions	–	566
Other extraordinary income	177	457
Impairments of non-current assets	–5,472	–8,500
Increase of provisions	–3,287	–
Other extraordinary expenses	–123	–271
Total	–8,689	–7,748

The impairments increase relates to the energy procurement contract with EDF, whose value has been reassessed because of the deteriorated economic expectations for the upcoming years.

24. Contingent liabilities

	31.12.2020	31.12.2019
In CHF 1,000		
Guarantees in the interest of:		
Subsidiaries	22,823	22,935
Associates	–	–
Third parties	4,945	14,023
Total	27,768	36,958

Guarantees are issued as security of financing facilities granted to group companies or as security for operating commitments. Guarantees issued in the interest of third parties are related to the financing of disposed plants for which coverage AET obtained respective pledges or guarantees.

25. Other non-recognisable commitments

In the context of the management of its energy portfolio, AET has entered into transactions on the futures markets and finalised various long-term energy purchase agreements involving irrevocable obligations.

Energy purchase contracts and market operations

	Market transactions	Long-term contracts
Cumulative volume in CHF 1,000		
2021	337,987	33,795
from 2 to 5 years	255,509	144,433
over 5 years	–	84,812

AET further has an offtake commitment for the energy produced by its own power generation participations and the participations of the Canton Ticino, paying its production cost quota. The duration of these obligations is undetermined and depends on the future developments of those participations.

AET also has entered into a cross-border interconnection capacity agreement with expiration 2022 and with an annual volume of CHF 3.6 million (value of the indexed contract based on 2020 prices and year-end exchange rate).

Forward currency operations

31.12.2020	Maturity year 2021		Maturity year 2022	
	Amount in currency (in 1,000)	Average exchange rate (currency/CHF)	Amount in currency (in 1,000)	Average exchange rate (currency/CHF)
Operation				
Sell EUR	–	–	–	–

31.12.2019	Maturity year 2020		Maturity year 2021	
	Amount in currency (in 1,000)	Average exchange rate (currency/CHF)	Amount in currency (in 1,000)	Average exchange rate (currency/CHF)
Operation				
Sell EUR	17,000	1.11	–	–

Forward foreign currency transactions have been entered into with the purpose of hedging expected future foreign currency cash flows.

At 31.12.2020 AET has no off-balance sheet lease commitments (31.12.2019: unchanged).

26. Pension benefit obligations

	Coverage rate	Economic benefit/ economic obligations for the company	Change recognised in the income statement	Expense for contributions of the period	Pension benefit expense within personnel expenses
CPE Fondazione di Previdenza Energia					
In CHF 1,000					
31.12.2020	112.5%	–	–	–2,590	–2,590
31.12.2019	109.2%	–	–	–2,477	–2,477

27. Transactions with related parties

Transactions with subsidiaries

	2020	2019
In CHF 1,000		
Energy income	8,321	10,400
Service and other income	3,896	4,017
Financial income	913	816
Energy purchases	19,785	21,197
Service and other expenses	30	32

Transactions with associates

	2020	2019
In CHF 1,000		
Energy income	31,655	27,131
Service and other income	13,325	15,806
Financial income	741	644
Energy purchases	62	17
Service and other expenses	2,409	1,981

Transactions with other related parties

	2020	2019
In CHF 1,000		
Energy income	312	927
Service and other income	2,372	2,050
Financial income	527	694
Energy purchases	73,909	81,880
Service and other expenses	2,090	2,201

28. Risk assessment

The Board of Directors and Management give the utmost attention and deploy the necessary resources for the valuation and management of risks in order to adhere to the standards of the sector. The management and valuation of the company's risks have been integrated into the company's operating procedures, in order to guarantee the maximum effectiveness.

From a financial point of view AET is exposed to following main risk factors:

Volume risk: is the risk associated with the variation in the sales volume, respectively of production volumes compared to forecasts. Its principal cause is the meteorological risk in that the meteorological deviations from the long-term averages cause variations in consumption and production from the hydroelectric plants that are difficult to predict. In the long-term AET manages this risk by diversifying its supplies with long-term contracts and participations. In the medium to short-term this risk is managed with a gradual rebalancing of the portfolio using updated forecasts and historical data. In addition AET can count on reserve capacity from its own hydroelectric plants.

Market risk: is the risk associated with the variations in the price of energy on the markets and the fluctuation of exchange rates. AET manages this risk by monitoring the evolutions and the expectations of market prices and consequently hedges the positions. The foreign exchange risk is managed through hedging operations. Market risks mostly have an effect on the quantity of energy sold and produced resulting from the volume risk that can not be efficiently hedged in advance because unknown.

Counterparty risk: is the risk of loss related to payment default of commercial counterparties. Sales are mainly made to large Swiss and bordering countries power companies. Exposure limits are determined for each counterparty, based on their economic and financial situation. Counterparty risk related to the Swiss commercial / distribution activity is managed through the constant monitoring of the receivable positions, the subscription of receivables insurances, the request of bank guarantees or deposits.

Regulatory risk: relates to the introduction or modification of laws, acts or rules at Swiss or European level, which might have an impact on the activity of AET. AET constantly monitors the regulatory developments, adopting the necessary adjustments.

29. Subsequent events

2020: no significant event.

2019: on the 11.03.2020 the world health organisation has declared the coronavirus (COVID-19) outbreak pandemic, which has reached, among others, vast European territories. Switzerland and the Canton Ticino in particular have been strongly affected too. Like many other European governments, the Swiss government has declared the "extraordinary situation" and has imposed a lockdown, significantly restricting the economic and social activities. This caused sharp energy consumption reductions, which caused a major price reduction of all energy commodities. As of today, it's not yet possible to quantify the economic and financial impact for AET, an impact is expected on the 2020 operating result, whereas no material impact is expected on the balance sheet positions.

Proposal for allocation of result

The Board of Directors, in accordance with article 18 LAET (respectively article 671, Paragraph 2 of the Swiss Code of Obligations), proposes to allocate the result as follows:

In CHF 1,000	
Net result 2020	9,230
– to the State: 8% interest on the endowment capital	–3,200
– dividend to the State	–
– allocation to the general reserves	–
Allocation to the results carried forward	6,030

Audit report by KPMG SA on the financial statements



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Report of the Statutory Auditor to the Gran Consiglio of Repubblica e Cantone Ticino Azienda elettrica ticinese, Bellinzona

Report of the Statutory Auditor on the Financial Statements

As statutory auditor, we have audited the accompanying financial statements (from page 55 to page 77) of Azienda elettrica ticinese, which comprise the balance sheet, income statement, cash flow statement, statement of changes in equity and notes for the year ended 31 December 2020.

Board of Directors' Responsibility

The Board of Directors is responsible for the preparation of the financial statements in accordance with the requirements of Swiss GAAP FER, the requirements of Swiss law and Act of Azienda elettrica ticinese. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Swiss law, Swiss Auditing Standards and Act of Azienda elettrica ticinese. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control system. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements for the year ended on 31 December 2020 give a true and fair view of the financial position, the results of operations and the cash flows in accordance with Swiss GAAP FER and comply with Swiss law and Act of the Azienda elettrica ticinese.



Azienda elettrica ticinese, Bellinzona
Report of the Statutory Auditor
on the Financial Statements
the Gran Consiglio of Repubblica e Cantone Ticino

Report on Other Legal Requirements

We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 CO) and that there are no circumstances incompatible with our independence.

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and Act of the Azienda elettrica ticinese. We recommend that the financial statements submitted to you be approved.

KPMG SA

A handwritten signature in blue ink, appearing to read 'Orlando Lanfranchi'.

Orlando Lanfranchi
Licensed Audit Expert
Auditor in Charge

A handwritten signature in blue ink, appearing to read 'Silas Citrini'.

Silas Citrini
Licensed Audit Expert

Lugano, 22 April 2021



The blades, which are 43.8 metres long and weigh 9.7 tonnes, were transported individually along the bends and tunnels using a special vehicle trailer to control their direction and inclination.





The assembly of the blades, 15 in total, required the use of two mobile cranes with a height of over 100 metres. Low or no wind were needed to lift each shovel.

Annexes

AET Group companies

	Value	Nominal equity at 31.12.2020 In 1,000	Participation at 31.12.2020 %	Participation at 31.12.2019 %
AKEB Aktiengesellschaft für Kernenergie – Beteiligungen Luzern (AKEB) , CH-Luzern <i>Nuclear energy participations and offtake rights</i>	CHF	90,000	7.00	7.00
Aliunid AG , CH-Zug <i>On-line energy sale platform</i>	CHF	166	3.76	–
Calore SA , CH-Locarno <i>Production and distribution of thermal energy</i>	CHF	2,000	65.00	65.00
Capriasca Calore SA , CH-Capriasca <i>Production and distribution of thermal energy</i>	CHF	1,313	33.33	33.33
Geo-Energie Suisse AG , CH-Zürich <i>Development of geothermal power</i>	CHF	2,150	4.65	4.65
Kraftwerke Mattmark AG (KW Mattmark) , CH-Saas Grund <i>Sub-participation through Axpo Trading AG. Hydroelectric power generation</i>	CHF	90,000	8.41	8.41
Lucendro SA , CH-Airolo <i>Hydroelectric power generation</i>	CHF	3,000	100.00	100.00
Metanord SA , CH-Bellinzona <i>Gas distribution</i>	CHF	18,000	33.33	33.33
Parco eolico del San Gottardo SA (PESG) , CH-Airolo <i>Wind power generation</i>	CHF	6,000	70.00	70.00
Senco Holding SA , CH-Locarno <i>Holding participation into hydroelectric power generation (micro power plants)</i>	CHF	150	65.00	65.00
CEL Bedretto SA , CH-Bedretto <i>Hydroelectric power generation</i>	CHF	200	13.00	13.00
CEL Buseno SA , CH-Buseno <i>Development of a hydroelectric power plant</i>	CHF	100	13.00	13.00
CEL Campo Vallemaggia SA , CH-Campo Vallemaggia <i>Hydroelectric power generation</i>	CHF	400	14.30	14.30
CEL Cauco SA , CH-Cauco <i>Development of a hydroelectric power plant</i>	CHF	100	13.00	13.00
CEL Cerentino SA , CH-Cerentino <i>Hydroelectric power generation</i>	CHF	200	13.00	13.00
CEL Dalpe SA , CH-Dalpe <i>Hydroelectric power generation</i>	CHF	200	11.70	11.70
CEL Lavizzara SA , CH-Lavizzara <i>Hydroelectric power generation</i>	CHF	200	13.00	13.00
Senco Sagl , CH-Locarno <i>Services in favour of hydroelectric power plants promoted by Senco Holding SA</i>	CHF	220	65.00	65.00

	Value	Nominal equity at 31.12.2020 In 1,000	Participation at 31.12.2020 %	Participation at 31.12.2019 %
Società Elettrica Sopracenerina SA (SES), CH-Locarno <i>Power distribution company</i>	CHF	16,500	30.00	30.00
Energie Rinnovabili Losone (ERL) SA, CH-Losone <i>Biomass thermal energy</i>	CHF	2,700	10.00	10.00
Enerti SA, CH-Monteceneri <i>Production and distribution of thermal energy</i>	CHF	200	9.27	9.92
SES Controlli Sagl, CH-Locarno <i>Service company</i>	CHF	20	30.00	30.00
SES Collaudi Sagl, CH-Locarno <i>Service company</i>	CHF	20	24.00	24.00
Società della Funicolare Locarno - Madonna del Sasso SA (FLMS), CH-Locarno <i>Ownership and operation of a funicular</i>	CHF	900	4.09	4.09
Società Locarnese di Partecipazioni e Immobiliare SA (SAP SA), CH-Locarno <i>Real estate company</i>	CHF	2,064	29.99	29.99
SPE Società per Partecipazioni Energetiche SA (SPE), CH-Bellinzona <i>Holding company</i>	CHF	8,000	100.00	100.00
AET Italia Srl, I-Milan <i>Trading of cross-border interconnection capacity</i>	EUR	871	100.00	100.00
CEG Srl, I-Milan <i>Holding and services</i>	EUR	120	100.00	100.00
Nord Energia SpA, I-Milan <i>Management of cross-border interconnection power line (Merchant Line)</i>	EUR	10,200	40.00	40.00
CMC MeSta SA, CH-Bellinzona <i>Detention of Mendrisio – Stabio cross-border power line</i>	CHF	6,000	40.00	40.00
Swissgrid AG, CH-Aarau <i>Swiss transmission system operator</i>	CHF	320,398	1.66	1.66
TERIS Teleriscaldamento del Bellinzonese SA (TERIS), CH-Bellinzona <i>Production and distribution of thermal energy</i>	CHF	10,000	60.00	60.00
Terravent AG, CH-Luzern <i>Wind power generation</i>	CHF	17,952	12.53	13.37
Trianel Kohlekraftwerk Lünen GmbH & Co. KG (TKL), D-Aachen <i>Coal power generation, Lünen</i>	EUR	147,944	15.84	15.84

Statistical informations

Production and purchases of AET Group

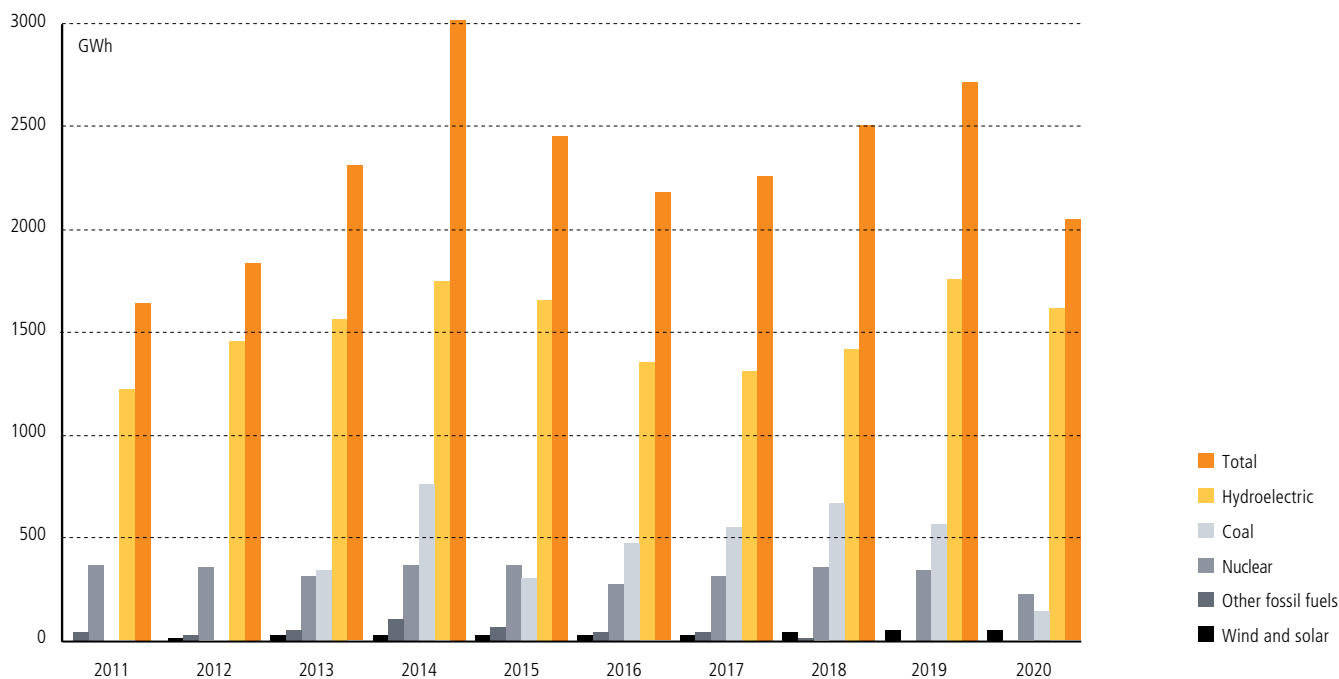
	Winter	Summer	2020	2019
In GWh				
Production AET Group				
AET Biaschina	195	217	412	476
AET Piottino	163	154	317	349
Lucendro	109	14	123	131
AET Stalvedro	29	30	59	66
AET Ofima exchange	9	40	49	43
AET Ponte Brolla	3	4	7	13
AET Tremorgio	8	2	10	8
Photovoltaic	1	3	4	4
Total production AET Group	517	464	981	1,090
Production participations (share attributable to AET Group)				
Maggia	176	137	313	315
Blenio	109	68	177	205
Verzasca	40	37	77	78
KW Mattmark	31	25	56	63
Senco Group	2	3	5	4
SES Giumaglio	3	4	7	7
SES Ticinetto	1	2	3	3
Terravent AG	32	16	48	46
AKEB	129	86	215	336
KK Leibstadt	8	6	14	14
Trianel TKL	114	40	154	566
Total production participations	645	424	1,069	1,637
Long-term contracts ¹	308	332	640	642
Purchases on the market	6,767	6,554	13,321	16,308
Total	8,237	7,774	16,011	19,677

¹ Delivery contractualised for more than 5 years

Supply of AET Group

	Winter	Summer	2020	2019
In GWh				
Sales to distribution companies	1,091	767	1,858	1,978
Sales to end customers	235	183	418	438
Sales on the market	6,891	6,804	13,695	17,234
Own consumption and losses	20	20	40	27
Total	8,237	7,774	16,011	19,677

Production AET Group and participations





The St. Gotthard wind farm began regular production in late autumn 2020. The building site will be completed in the summer of 2021 with the completion of the environmental compensation and land improvement works envisaged in the project.



Photos: Sertus Image/Nicola Demaldi
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