

Azienda Elettrica Ticinese

Annual Report **2021**

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:

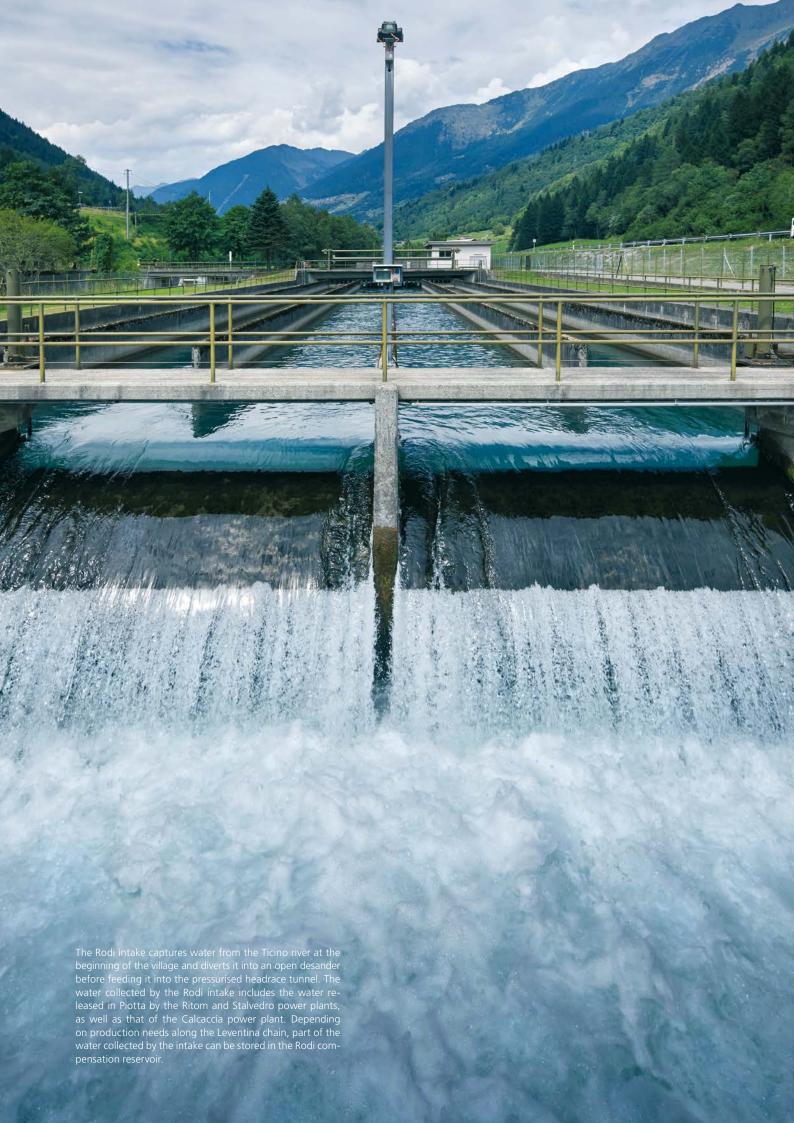
- the report of the Board of Directors for the year 2021;
- the auditors' report;
- the financial statements for the year 2021;
- the proposal for allocation of result.

The english version of the AET 2021 Annual Report is merely a translation: the official version is the italian text.



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2021 in summary

Key figures

	2021	2020	2019	2018	2017
In CHF million					
Operating income	790	867	1,018	871	872
Operating result	33	23	16	-15	-19
Net result	19	13	9	-2	-13
Equity	356	340	329	323	328
Equity in % of balance sheet total	36.5%	43.9%	42.7%	41.8%	40.3%
Non-current assets	518	512	501	506	527
Balance sheet total	976	773	771	775	813
Distribution of dividends to the State	3	_	_	_	_
Interest on capital, due to the State	3	3	3	3	3
Employees of the Group (full time equivalent)	298.2	285.8	272.6	265.3	252.9
	2021	2020	2019	2018	2017
In GWh					
Production AET Group	945	981	1,090	955	814
Production participations	1,514	1,069	1,637	1,550	1,451



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* (in office until 31.08.2021)
Cereghetti Claudio, *Vice Chairman* (from 07.10.2021)
Cauzza Dino
Codoni – Sulmoni Marika
Gianora Fabiana
Pantani Tettamanti Roberta (in office from 01.12.2021)
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*





Introduction by the Chairman

A sudden change of perspective

Numerous unresolved issues relating to energy transition planning in Europe and Switzerland emerged in 2021 in the space of just a few months and in all their complexity. The situation was further complicated by the conflict in Ukraine which erupted in February 2022, bringing new elements of uncertainty and instability to the whole system. The international energy sector is now facing major questions, which are forcing all its players to question the objectives and strategies adopted over the last decade.

As far as the electricity market is concerned, 2021 was marked by a veritable surge in wholesale prices, which reached new all-time highs with multiple values in relation to the previous year. This development had a positive impact on the results of AET, which was able to exploit its excess production at particularly favourable conditions and to close the financial year with a more than satisfactory result. On the other hand, many of its customers, who had been accustomed to a decade of low prices, were caught off guard by the rapidity of a trend that was difficult to predict on such a large scale.

On the political front, however, negotiations on a framework agreement, including an electricity agreement, with the European Union (EU) were abandoned, and the $\rm CO_2$ law proposed by the Federal Council was rejected at the ballot box. The failure to conclude a framework agreement has brought the issue of the security of the electricity supply during the winter months to the fore, given that in the absence of an agreement, the EU provides no guarantee of energy import capacities in the immediate future. Switzerland is thus faced with the need to build up energy reserves in the short term and to speed up the process of increasing electricity production in the medium to long term. The rejection of the $\rm CO_2$ law is meanwhile forcing the Federal Council to revise some of its plans to promote the production of energy from renewable sources.

The picture that emerges is rather precarious and is made even more unpredictable by the uncertainties surrounding the consequences of the war in Ukraine on the global energy system. This has suddenly become apparent to politicians and the media, who have put the issue of energy at the top of their agendas in recent months. While this attention is positive, because it means that the alarm we have been sounding for years has finally been heard, there is a risk that the issue will become the prey of political campaigns, slowing down the process of finding a solution that is acceptable to all parties.

In this context, AET has no choice but to remain vigilant, to monitor the evolution of international scenarios and to wait for the guidelines regarding Switzerland's energy policy to be clarified. In the face of increasing market volatility, a stable legal framework that provides guarantees and clear timeframes is an essential condition for launching the investments needed to renovate the national production system.

AET's position

The increase in electricity prices on the wholesale markets and the growing fears about security of supply in the winter have changed the expectations placed on AET. Large customers are now more aware of market dynamics and pay more attention to purchasing strategies. In contrast, policymakers have acquired a clearer perception of the role that the company can and must play in ensuring a stable and secure supply.

AET, which has long been confronted with market volatility and has often emphasised the need for a clear legal framework, was not unprepared for this task. The strategy adopted over the last decade, which includes investment in the development of electricity generation from renewable local sources and the promotion of efficiency through new carriers such as heat and hydrogen, examines possible future scenarios and aims to offer pragmatic responses to both the changing needs of customers and the requirements of the energy transition. The results obtained in recent years demonstrate the validity of the choices made.

The future is nevertheless full of challenges, in relation to the economic, political, and technological aspects. Constantly rising prices and their extreme volatility represent a tangible risk, forcing market operators to act with the utmost caution. The Federal Council is aware of this, and in April 2022 presented a rescue plan for electricity companies that might run into liquidity problems. In terms of security of the electricity supply, politicians must rapidly provide clear guidelines for the entire sector, otherwise it will prove impossible to make the necessary investments in time to ensure a stable, secure, and climate-neutral energy system for the years to come. The years to come will be decisive: AET is ready to do its part.



Giovanni Leonardi

Chairman





Management report

A fast-growing market

The 2021 financial year was closed with an operating result of CHF 33 million (2020: CHF 23 million) and a consolidated net profit of CHF 19 million (2020: CHF 13 million), confirming the positive trend of the last two years.

The result, which was up on the previous year, benefited from the massive increase in energy prices on the wholesale markets and was aided by good hydroelectric production figures, which were broadly in line with 2020.

Production

Electricity

Hydroelectric production at AET's plants during the 2021 financial year stood at 934 GWh: this result was above the average for the 2011 – 2020 period, but down 4% on the previous year. Hydroelectric production from participations reached 637 GWh, in line with 2020 and above the multi-year average. Hydropower production in Ticino benefited in particular from the abundant rainfall in summer, which compensated for the other relatively dry periods of the year.

AET's share of production at the German plant in Lünen was 543 GWh, 3.5 times higher than in 2020. The increase was due to the favourable development of the relationship between the price of fuel and the cost of CO₂ certificates. Due to the hedges entered into in the previous years, it was not possible to take full advantage of the increase in market prices, resulting in an operating loss to be borne by AET of approximately CHF 30 million.

Production from the St. Gotthard wind farm stood at 10.8 GWh in its first year of operation. The figure is lower than the plant's production potential and was determined by numerous adjustments to the generators and control software. Full operation of the park was not achieved until early autumn 2021, and production figures for the following months confirm the project assumptions.

Production from nuclear participations in Switzerland and France stood at 291 GWh, up 27% on the 2020 financial year, but lower than expected due to the poor availability of the French nuclear park and an extended shutdown of the Leibstadt power plant.

Thermal energy

TERIS Teleriscaldamento del Bellinzonese SA, a 60% participation of AET, connected a dozen new customers to its grid, confirming the achievement of its objectives. The company also offered its expertise to third parties, working with Calore SA in Locarno and with AET on the "Vecchia Biaschina" industrial estate in Bodio.

Calore SA, a company owned by AET and Società Elettrica Sopracenerina SA (SES), officially presented the "Verbano 2030" project, which includes the extension of Locarno's district heating network to the Rusca-Saleggi district and the construction of a new thermal plant powered by heat pumps that will use the heat from Lake Verbano. Initial feedback from potential customers has been positive, and planning work is ongoing.

Capriasca Calore SA, a company owned in equal shares by AET, the Azienda Elettrica di Massagno (AEM) and the Municipality of Capriasca, commissioned the new district heating plant in Tesserete. The connection of clients was completed during the year before the start of the cold season.

In December, AET, the Azienda Cantonale dei Rifiuti (ACR), Azienda Multiservizi di Bellinzona (AMB), Società Elettrica Sopracenerina SA (SES) and Azienda Elettrica di Massagno (AEM) SA set up PIÙCALORE SA, a new district heating service company. PIÙCALORE SA brings together the resources and expertise of the individual partners in a single company and plans to invest more than CHF 100 million over the next 15 years in the development of district heating networks in Ticino.

Metanord SA, a company in which AET holds a 33% stake, closed the 2021 financial year with a positive result made possible by the increase in sales volumes, the adoption of technical solutions to reduce consumption peaks and the favourable development of market conditions.

Energy trade

The market

While prices on the power exchanges hit record lows in 2020 due to the COVID-19 pandemic, the situation was reversed in 2021 with all major markets reaching new positive records. The rise in prices lasted throughout the year, with an acceleration from the summer reaching levels in the last quarter up to 5.5 times those of the previous year.

This situation was driven primarily by the price of gas, which was impacted by fears that stocks in Europe would not be sufficient to cope with the winter of 2021-22, because of higher than the normal consumption during the previous winter. Delays in obtaining permits for the Nord Stream 2 gas pipeline between Russia and Germany contributed to investor uncertainty and market volatility.

Sales

The volumes of energy traded in 2021 increased compared to previous years, both in "full supply" mode and as fixed-volume contracts. Numerous contracts with distributors in Ticino and Moesano were also extended.

The range of products and services offered by AET is constantly being updated to respond to customer needs and increasing competition. The development of digital solutions for customers in Ticino and the rest of Switzerland continued in 2021. Particular attention was paid to the growth of the online energy sales portal *kwick-energy.ch*, which was set up in 2020 in cooperation with Società Elettrica Sopracenerina SA (SES), and to which the Azienda Elettrica di Massagno (AEM) SA also contributed. The project lays the foundations for expanding collaboration with other distribution companies in the areas of energy sales and digital services.

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

Grid

The modernisation of AET's supra-regional distribution network continued in 2021 with the start of work to underground the 50 kV overhead lines between Stalvedro and Rodi, and in Valle di Blenio between Pollegio and Acquarossa.

The Ospizio-Diga Lucendro medium-voltage line planned as a compensation measure for the wind farm was completed on the St. Gotthard Pass. The overhead line was completely dismantled.

With regard to substations, planning work began for renovations in Avegno and Pollegio with SES, and in Castione, Cadenazzo and Giubiasco with AMB. The new joint AET and Ofima/Ofible emergency control centre was inaugurated at the Iragna substation, guaranteeing the redundancy of the centre in Monte Carasso.

In the field of services for third parties, AET carried out specialist activities on behalf of Swissgrid at the Mendrisio, Lavorgo and Verbano substations. Finally, in agreement with Federal Roads Office – FEDRO, the construction site was prepared for the second St. Gotthard motorway tunnel.

Strategic projects

Part of the first year of operation of the St. Gotthard wind farm was spent fine-tuning the wind turbines and optimising the parameters of the software that controls production, blade orientation, the shutdown to protect birds and bats, and the ice detection system. Individual generators were deactivated for certain periods of time in order to allow these operations to take place. The plant then became fully operational in September. The environmental compensation works envisaged in the project were completed in the summer.

In the course of the year the planning works related to the renovation of the Piottino power plant have been initiated. The planned works include the replacement of the three turbine-alternator units, targeted interventions on the civil engineering works and the refurbishment of the building. Contracts for the general design and the initial rehabilitation of the hydraulic works have already been awarded. The planned investment amounts to approx. CHF 50 million. Work will begin in 2022 and be completed in 2027.

AET also provides services in the areas of grid connection, civil engineering and generator electromechanics to Ritom SA, the company that is building the new Ritom power plant, which is owned 75% by Swiss Federal Railways – SBB and 25% by the Canton Ticino. After commissioning, AET will manage the Canton's share of the plant's production and take care of its maintenance. During 2021, work continued on drilling the penstock using a tunnel boring machine, whilst in the powerhouse the assembly of the generating units has begun. The work is scheduled for completion in 2025.

Conclusion

The year 2021 ended with a positive result, boosted by the exceptional rise in prices on the whole-sale markets in the last quarter. The framework conditions under which AET operates have changed radically compared to just a few years ago. The markets are characterised by extreme price volatility, but the trend is still upwards. Unresolved issues relating to the security of supply in the winter and an unstable international political environment do not suggest any signs of stabilisation in the short term. AET must remain vigilant in light of this situation.

On the other hand, the company is adequately equipped and has the necessary technical, human and financial resources to meet the challenges of the market and to respond to changes in energy policies. The strategy implemented over the last decade has focused on strengthening production from renewable local sources, and investments have been concentrated in the canton on the areas of hydroelectric, photovoltaic, wind and thermal energy. Production and transport infrastructures are constantly being modernised, as are IT management tools and sales models. On the personnel side, a great deal of effort is being put into training and acquiring new skills. In this regard, it should be noted that the renewal of the collective labour agreement was concluded in 2021. The new agreement was approved by employees by a very large majority following negotiations held in a particularly constructive atmosphere. This is a sign of trust on the part of the employees and represents an additional factor in ensuring the stability of the company.

Regardless of the consequences of the conflict between Russia and Ukraine on the international energy system, and whatever direction is taken by the national energy policy, the company is ready to react and engage with all its resources.

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 2021	10,602
– to the State: 8% interest on the endowment capital	-3,200
– dividend to the State	-3,000
– allocation to the general reserves	-
Allocation to the results carried forward	4,402

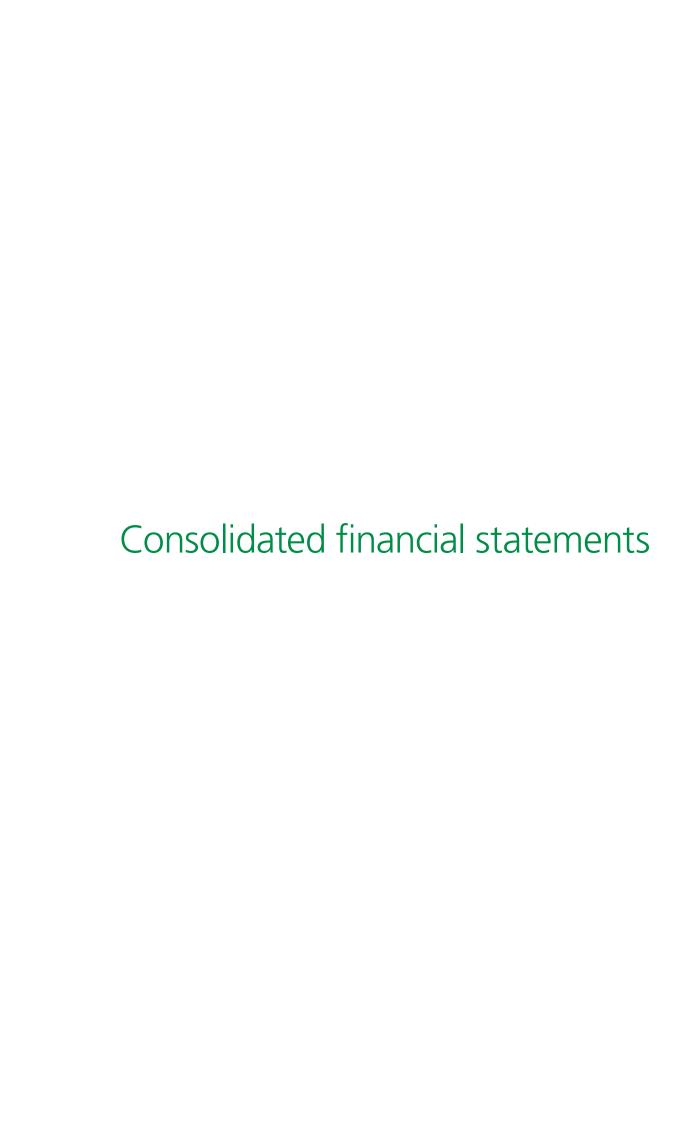
The Board of Directors proposes to the State Council and the Grand Council the approval of:

- the financial statements for the year 2021;
- the proposal for allocation of result;
- the discharge to the Board of Directors and the Management for their activity.









Consolidated balance sheet

Assets

	31.12.2021	31.12.2020
In CHF 1,000 Notes		
Plants and equipment	269,560	273,498
Land and buildings	50,922	51,766
Tangible fixed assets under construction	31,838	23,755
Other tangible fixed assets	2,768	2,943
Tangible fixed assets 2	355,088	351,962
Participations in associates 3	88,879	84,312
Long-term securities 4	44,220	44,919
Advances and loans to participations 5	18,789	19,353
Other financial assets	288	378
Financial assets	152,176	148,962
Usage rights	7,430	7,695
Energy procurement rights	7,430	0
Intangible assets under development	1,407	1,895
Other intangible assets	2,092	1,396
Intangible assets 6	10,929	10,986
Non-current assets	518,193	511,910
	,	
Other short-term assets 7	184,290	67,093
Prepayments and accrued income 8	181,909	98,685
Receivables from goods and services 9	12,079	20,990
Cash and cash equivalents 10	79,283	74,281
Current assets	457,561	261,049
Assets	975,754	772,959

Consolidated financial statements

Liabilities and equity

	31.12.2021	31.12.2020
In CHF 1,000 Notes		
Endowment capital	40,000	40,000
Conversion differences	-10,923	-8,965
Retained earnings	296,993	285,652
Net result	18,845	12,903
Equity attributable to AET	344,915	329,590
Minority interests	10,852	9,949
Group equity	355,767	339,539
Long-term provisions 11	23,283	13,428
Other long-term liabilities	5,742	5,194
Long-term financial liabilities 12	269,687	261,854
Long-term liabilities	298,712	280,476
Short-term provisions 11	16,081	8,544
Other short-term liabilities 13	74,597	18,685
Short-term financial liabilities 14	105,962	23,100
Accrued liabilities and deferred income 15	107,819	85,772
Payables from goods and services 16	16,816	16,843
Current liabilities	321,275	152,944
Liabilities	619,987	433,420
Liabilities and equity	975,754	772,959

Consolidated income statement

		2021	2020
In CHF 1,000	Notes		
Operating income			
Energy income	17	729,877	810,689
Grid income		39,600	37,401
Other operating income	18	20,576	18,621
Operating income		790,053	866,711
Operating expenses			
Energy purchases	19	-647,652	-739,566
Grid expenses		-23,092	-22,003
Personnel expenses	20	-33,125	-31,781
Service and material expenses		-7,264	-5,848
Depreciation on tangible fixed assets	2	-18,247	-16,950
Amortisation on intangible assets	6	-715	-1,444
Other depreciation and amortisation		-1,012	-1,013
Other operating expenses	21	-25,470	-25,319
Operating expenses		-756,577	-843,924
Operating result		33,476	22,787
Financial result	22	-3,528	
Result from associates	3	7,631	6,888
Ordinary result		37,579	25,480
Non-operating result		_	
Extraordinary result	23	-17,219	-11,615
Result before income taxes	23	20,360	13,865
Income taxes		-612	-386
Group net result		19,748	13,479
Minority interests		-903	-576
Net result attributable to AET		18,845	12,903

Consolidated financial statements

Consolidated cash flow statement

	2021	2020
In CHF 1,000		
Net result	18,845	12,903
Minority interests to income statement	903	576
Depreciation on tangible fixed assets	18,247	16,950
Amortisation on intangible assets	715	1,444
Other depreciation and amortisation	1,012	1,013
Change in provisions	17,113	4,352
Change in impairments	119	5,270
Profit / loss from disposal of non-current assets	-1,058	-16
Result from associates	-4,529	-3,522
Other non cash expenses and income	-1,392	-113
Change in receivables, prepayments and accrued income and other short-term assets	-192,088	-4,159
Change in payables, accrued liabilities and deferred income and other short-term liabilities	77,135	-11,262
Cash flow from operating activities	-64,978	23,436
Outflows for investment in tangible fixed assets	-20,526	-31,124
Inflows from disposal of tangible fixed assets	48	16
Outflows for investment in intangible assets	-431	-1,208
Inflows from disposal of intangible assets	_	-
Outflows for investment in financial assets	-240	-240
Inflows from disposal of financial assets	1,154	603
Cash flow from investing activities	-19,995	-31,953
Issuance / repayment of short-term financial liabilities	81,456	-7,244
Issuance / repayment of long-term financial liabilities	11,781	5,789
Payments related to minority shareholders	_	_
Interests on capital, due to the State	-3,200	-3,200
Distribution of dividends to the State	_	_
Cash flow from financing activities	90,037	-4,655
Cash and cash equivalents at the beginning of the year	74,281	87,459
Cash flow	5,064	-13,172
Conversion differences on cash and cash equivalents	-62	-6
Cash and cash equivalents at the end of the year	79,283	74,281

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 01.01.2020	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
Allocation of result	_	_	12,903	-12,903	-	-	-
Interests on capital, due to the State	_	_	-3,200	_	-3,200	-	-3,200
Distribution of dividends	_	_	_	_	-	-	-
Capital increases	_	_	_	_	-	-	-
Conversion differences	_	-1,958	1,638	_	-320	-	-320
Change in consolidation scope	_	_	_	_	-	-	-
Offset consolidation difference	-	-	-	-	-	-	-
Net result 2021	_	_	_	18,845	18,845	903	19,748
Equity at 31.12.2021	40,000	-10,923	296,993	18,845	344,915	10,852	355,767

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Notes to the consolidated financial statements

1. Accounting principles

The 2021 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 05.05.2022.

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 31.12.2021	Shareholding at 31.12.2020		
		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 31.12.2021.

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 2021 and 2020 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.

Currency	Share capital	Shareholding at 31.12.2021	Shareholding at 31.12.2020
	in 1,000	%	%
CHF	1,313	33.33	33.33
CHF	18,000	33.33	33.33
EUR	10,200	40.00	40.00
CHF	1,000	31.20	_
CHF	16,500	30.00	30.00
	CHF CHF EUR CHF	Currency capital in 1,000 CHF 1,313 CHF 18,000 EUR 10,200 CHF 1,000	Currency capital at 31.12.2021 in 1,000 % CHF 1,313 33.33 CHF 18,000 33.33 EUR 10,200 40.00 CHF 1,000 31.20

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)	2021	2020
Exchange rate on the balance sheet date 31.12	1.0362	1.0816
Average exchange rate	1.0810	1.0705

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1.2. Accounting principles

Assets and liabilities are valued in accordance to 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 transformators	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	Other tangible fixed assets	Total
In CHF 1,000					
Cost value at 01.01.2020	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
Change in consolidation scope	_	_	-	-	-
Reclassification	11,598	20	-12,045	199	-228
Additions	808	135	20,128	277	21,348
Disposals	-2,046	_	_	-215	-2,261
Conversion differences	_	_	_	-7	-7
Cost value at 31.12.2021	720,444	65,853	31,838	10,593	828,728
Accumulated depreciation at 01.01.2020	-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
Change in consolidation scope	_	_	-	-	-
Reclassification	_	_	-	_	-
Depreciation	-16,651	-999	-	-597	-18,247
Additions	_	_	-		-
Disposals	2,353	_	_	161	2,514
Conversion differences	_	_	_	7	7
Accumulated depreciation at 31.12.2021	-450,884	-14,931	_	-7,825	-473,640
Net carrying amount at 01.01.2020	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
Net carrying amount at 31.12.2021	269,560	50,922	31,838	2,768	355,088

3. Participations in associates

31.12.2021	31.12.2020
84,312	80,619
312	_
_	_
-72	_
-119	-31
7,631	6,888
-3,102	-3,366
-83	202
88,879	84,312
	84,312 312 - -72 -119 7,631 -3,102 -83

Equity method values of associates to 31.12.2021 (according to Swiss GAAP FER).

	Metanord SA	Nord Energia Group	SES Group ¹	Various	Total
In CHF 1,000					
Non-current assets	56,763	1,919	468,840	2,354	529,876
Current assets	2,966	30,354	77,833	1,014	112,167
Assets	59,729	32,273	546,673	3,368	642,043
Equity	14,252	18,115	270,125	1,850	304,342
Long-term liabilities	43,738	2,729	165,760	1,424	213,651
Current liabilities	1,739	11,429	110,788	94	124,050
Liabilities and equity	59,729	32,273	546,673	3,368	642,043
Revenues	8,700	15,727	151,653	278	176,358
EBITDA	2,297	8,587	45,571	89	56,544
Net result	250	4,028	21,155	-59	25,374
AET's shareholdings, in %	33.33%	40%	30%	various	
AET's share of the equity	4,750	7,246	81,038	595	93,629
Impairments	-4,750	_		-	-4,750
Value of participations in associates	0	7,246	81,038	595	88,879

¹ Excluding Calore SA, Senco Holding SA and Senco Sagl, because fully consolidated and PIÙCALORE SA, which is considered within the participation share of the group.

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

	31.12.2021	31.12.2020
In CHF 1,000		
Swissgrid AG	12,936	12,589
Trianel Kohlekraftwerk Lünen GmbH & Co. KG	11,509	12,362
Kraftwerke Mattmark AG	11,017	11,174
AKEB Aktiengesellschaft für Kernenergie-Beteiligungen Luzern	6,300	6,300
Terravent AG	2,250	2,250
Aliunid AG	690	490
/. impairment	-690	-490
Other	208	244
Total	44,220	44,919

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 operating concession.

5. Advances and loans to participations

	31.12.2021	31.12.2020
In CHF 1,000		
Terravent AG	10,589	11,153
Metanord SA	8,200	8,200
Other	-	_
Total	18,789	19,353

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 01.01.2020	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
Change in consolidation scope	_	_	_	-	_
Reclassification	_	_	-896	1,124	228
Additions	23	_	408	-	431
Disposals	_	_	_	-	_
Conversion differences	_	-	-	-9	-9
Cost value at 31.12.2021	27,097	144,555	1,407	11,978	185,037
Accumulated amortisation at 01.01.2020	-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
Change in consolidation scope	_	_	_	-	_
Reclassification	_	_	_	-	_
Amortisation	-288	_	_	-427	-715
Additions	_	_	_	-	_
Disposals	_	_	_	-	_
Impairments	_	_	_	-	-
Conversion differences	_	_	_	8	8
Accumulated amortisation at 31.12.2021	-19,667	-144,555	-	-9,886	-174,108
Net carrying amount at 01.01.2020	7,980	6,254	3,784	771	18,789
Net carrying amount at 31.12.2020	7,695	0,234	1,895	1,396	10,986
Net carrying amount at 31.12.2021	7,430	0	1,407	2,092	10,929

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.

7. Other short-term assets

	31.12.2021	31.12.2020
In CHF 1,000		
Other short-term receivables from associates	20,259	20,270
Other short-term receivables from other related parties	1,146	3,430
Other short-term receivables from third parties	94,369	23,935
./. allowance for doubtful receivables	-311	-595
Positive replacement values of transactions valued at market value	63,112	13,291
Energy related and similar certificates	2,080	3,622
Inventories of spare, spare parts and consumables	3,635	3,140
Total	184,290	67,093

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

The sharp increase of energy market prices caused a substantial increase of the liquidity, which AET has to deposit to guarantee the execution of futures transactions on the exchange (margin calls). Those margin calls are booked within "Other short-term receivables from third parties".

Further, the increase in market price of energy has caused a strong growth of the position "Positive replacement values of transactions valued at market value", which is offset by the corresponding increase of the liability position "Negative replacement values of transactions valued at market value".

8. Prepayments and accrued income

	31.12.2021	31.12.2020
In CHF 1,000		
Associates	5,188	5,469
Other related parties	10,540	7,097
Third parties	164,062	84,932
Work in progress	2,119	1,187
Total	181,909	98,685

The balance includes amounts in foreign currency for EUR 131.3 million (EUR 52.2 million at 31.12.2020). Accrued income mainly includes the value of energy sold during the last reporting month and not yet invoiced.

9. Receivables from goods and services

	31.12.2021	31.12.2020
In CHF 1,000		
Associates	409	4,967
Other related parties	427	2,045
Third parties	13,718	17,133
J. allowance for doubtful receivables	-2,475	-3,155
Total	12,079	20,990

The balance includes amounts in foreign currency for EUR 1.7 million (EUR 1.8 million at 31.12.2020).

10. Cash and cash equivalents

	31.12.2021	31.12.2020
In CHF 1,000		
Balances in CHF	39,672	65,348
Balances in foreign currencies	39,611	8,933
Total	79,283	74,281

11. Provisions

	Energy onerous contracts	Current and deffered taxes	Personnel related expenses	Other	Total
In CHF 1,000	Contracts	taxes	ехрепзез	Other	Total
Carrying amount at 01.01.2020	11,004	796	3,464	2,341	17,605
thereof long-term	10,294	157	_	1,322	11,773
thereof short-term	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
thereof long-term	11,970	143	-	1,315	13,428
thereof short-term	1,592	333	3,306	3,313	8,544
Change in consolidation scope	-	_	-	-	_
Increase	12,620	366	1,700	6,175	20,861
Utilisation	-1,592	-323	-1,000	-	-2,915
Release	-489	-14	-23	-28	-554
Carrying amount at 31.12.2021	24,101	505	3,983	10,775	39,364
thereof long-term	16,736	128	-	6,419	23,283
thereof short-term	7,365	377	3,983	4,356	16,081

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 has been increased by CHF 12.6 million due to changes in market parameters.

Deffered 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

	31.12.2021	31.12.2020
In CHF 1,000		
Liabilities due between 1 and 5 years	103,265	89,854
Liabilities due between 5 and 10 years	83,422	88,000
Liabilities due after 10 years	83,000	84,000
Total	269,687	261,854

13. Other short-term liabilities

	31.12.2021	31.12.2020
In CHF 1,000		
Other short-term liabilities towards associates	60	166
Other short-term liabilities towards other related parties	4,533	4,263
Other short-term liabilities towards third parties	9,448	10,153
Negative replacement values of transactions valued at market value	60,556	4,103
Total	74,597	18,685

14. Short-term financial liabilities

	31.12.2021	31.12.2020
In CHF 1,000		
Financial liabilities in CHF	69,697	23,100
Financial liabilities in foreign currency	36,265	_
Total	105,962	23,100

15. Accrued liabilities and deferred income

	31.12.2021	31.12.2020
In CHF 1,000		
Associates	542	731
Other related parties	6,389	2,700
Third parties	100,888	82,341
Total	107,819	85,772

The balance includes amounts in foreign currency for EUR 69.3 million (EUR 52.9 million at 31.12.2020). Accrued liabilities mainly includes the value of energy purchased during the last reporting month and not yet invoiced.

16. Payables from goods and services

	31.12.2021	31.12.2020
In CHF 1,000		
Associates	795	48
Other related parties	6,932	5,395
Third parties	9,089	11,400
Total	16,816	16,843

The balance includes amounts in foreign currency for EUR 2.5 million (EUR 6.3 million at 31.12.2020).

17. Energy income

	2021	2020
In CHF 1,000		
Energy sales in Switzerland	408,790	359,460
Energy sales in Italy	17,394	30,432
Energy sales in Germany	240,463	359,521
Energy sales in France	51,067	50,621
Other energy income	12,163	10,655
Total	729,877	810,689

The item other energy income includes the economic effect of the mark to market valuation of energy and CO_2 emission rights forward transactions acquired within the trading portfolio.

18. Other operating income

	2021	2020
In CHF 1,000		
Income from services	11,160	9,678
Own work capitalised	4,255	4,241
Other	5,161	4,702
Total	20,576	18,621

19. Energy purchases

	2021	2020
In CHF 1,000		
Purchases from participations	-99,860	-74,337
Long-term contractual purchases	-32,237	-31,395
Purchases on the market	-515,555	-633,834
Total	-647,652	-739,566

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

	2021	2020
In CHF 1,000		
Salaries and other compensation	-27,026	-25,749
Social contributions	-5,875	-5,756
Other expenses	-517	-531
Recoveries from insurance companies	293	255
Total	-33,125	-31,781

In 2021 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

	31.12.2021	31.12.2020
Full time equivalent		
Permanent employees	241.0	236.5
Auxiliary employees	12.2	12.3
Apprentices	45.0	37.0
Total	298.2	285.8

21. Other operating expenses

	2021	2020
In CHF 1,000		
Water fees	-15,239	-15,239
Local taxes and other contributions	-4,001	-3,704
Other	-6,230	-6,376
Total	-25,470	-25,319

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

22. Financial result

	2021	2020
In CHF 1,000		
Interest income	185	304
Income from participations	1,122	1,053
Exchange rate differences	1,624	965
Interest payments	-6,299	-6,373
Other financial expenses	-160	-144
Total	-3,528	-4,195

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

23. Extraordinary result

	2021	2020
In CHF 1,000		
Profit from disposal of non-current assets	1,058	16
Release of provisions	489	11
Reversal of impairments on non-current assets	-	202
Other extraordinary income	54	206
Increase of provisions	-18,486	-5,644
Impairments of non-current assets	-119	-5,472
Other extraordinary expenses	-215	-934
Total	-17,219	-11,615

Profit from disposal of non-current assets relates for CHF 0.9 million to the price adjustment of elements of the national transmission grid sold to Swissgrid AG in 2013.

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:

	2021	2020
In CHF 1,000		
Goodwill, historical cost	1,493	1,493
Goodwill, net book value	596	895
Equity (retained earnings)	895	1,194
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 31.12.2021 those had a value of CHF 4.7 million (31.12.2020: CHF 4.9 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 sale and purchase agreements involving irrevocable obligations.

Energy sale and purchase contracts and market operations

31.12.2021		Energy sales	Er	nergy purchases
Cumulative volume in CHF 1,000	Market transactions	Long-term contracts	Market transactions	Long-term contracts
2022	695,103	30,460	621,646	39,224
from 2 to 5 year	404,727	134,619	310,625	164,111
over 5 year	3,536	186,048	_	51,567
31.12.2020		Energy sales	Er	nergy purchases
Cumulative volume in CHF 1,000	Market transactions	Long-term contracts	Market transactions	Long-term contracts
2021	373,407	32,965	337,987	33,795
from 2 to 5 year	274,955	117,515	255,509	144,433
over 5 year	4,106	158,640	_	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 3.3 million (value of the indexed contact based on 2021 prices and year-end exchange rate).

At 31.12.2021 AET Group has derivative financial instruments subscribed for interest rate hedging purpose for a contractual volume of CHF 9.3 million (31.12.2020: CHF 10 million).

Forward currency operations

31.12.2021	М	aturity year 2022	M	aturity year 2023
Operation	Amount in currency (in 1,000)	Average exchange rate (currency/CHF)	Amount in currency (in 1,000)	Average exchange rate (currency/CHF)
Sell EUR	207,500	1.05	8,000	1.08
	M	aturity year 2022	M	aturity year 2023
Operation	Amount in currency (in 1,000)	Average exchange rate (currency/EUR)	Amount in currency (in 1,000)	Average exchange rate (currency/EUR)
Buy USD	12,187	0.86	2,352	0.86

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

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

At 31.12.2021 Group AET has no off-balance sheet lease commitments (31.12.2020: unchanged).

27. Pension benefit obligations

CPE Fondazione di Previdenza Energia	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
In CHF 1,000					
31.12.2021	125.2%	_	-	-2,653	-2,653
31.12.2020	112.5%	-	-	-2,590	-2,590

28. Transactions with related parties

Transactions with associates

	2021	2020
In CHF 1,000		
Energy income	29,740	31,655
Service and other income	13,789	13,349
Financial income	82	97
Energy purchases	357	387
Service and other expenses	9,609	10,213

Transactions with other related parties

	2021	2020
In CHF 1,000		
Energy income	213	312
Service and other income	3,223	2,659
Financial income	558	587
Energy purchases	100,701	73,909
Service and other expenses	1,786	2,136

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 it's 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 it's 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 implementation or modification of laws, acts or rules at Swiss or European level, which might have an impact on the activity of the AET Group. In order to ensure an high level of surveillance and compilance, the AET Group constantly monitors regulatory developments, acting on internal policies and making appropriate corrections whenever necessary.

30. Subsequent events

2021: at the begin of 2022 the geopolitical tensions around Ukraine and its invasion by Russia have put additional pressure on the energy markets, with sharp increases of prices and volatility, pushing forward the development already seen in the fourth quarter of 2021. This situation causes and increase of the financial risks of AET and the need of higher cash deposits to cover forward market transactions (margin calls). AET has implemented portfolio management and treasury measures to mitigate the impact of these developments. The tensions on the energy markets also cause uncertainties about the availability of natural gas and consequently of electricity, especially in respect of the winter 2022/23. AET is working in close connection with the federal authorities and the other players of the sector contributing to the efforts to ensure the energy supply of the country.

2020: no significant event.

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 25 to page 49) 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 2021.

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 2021 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.

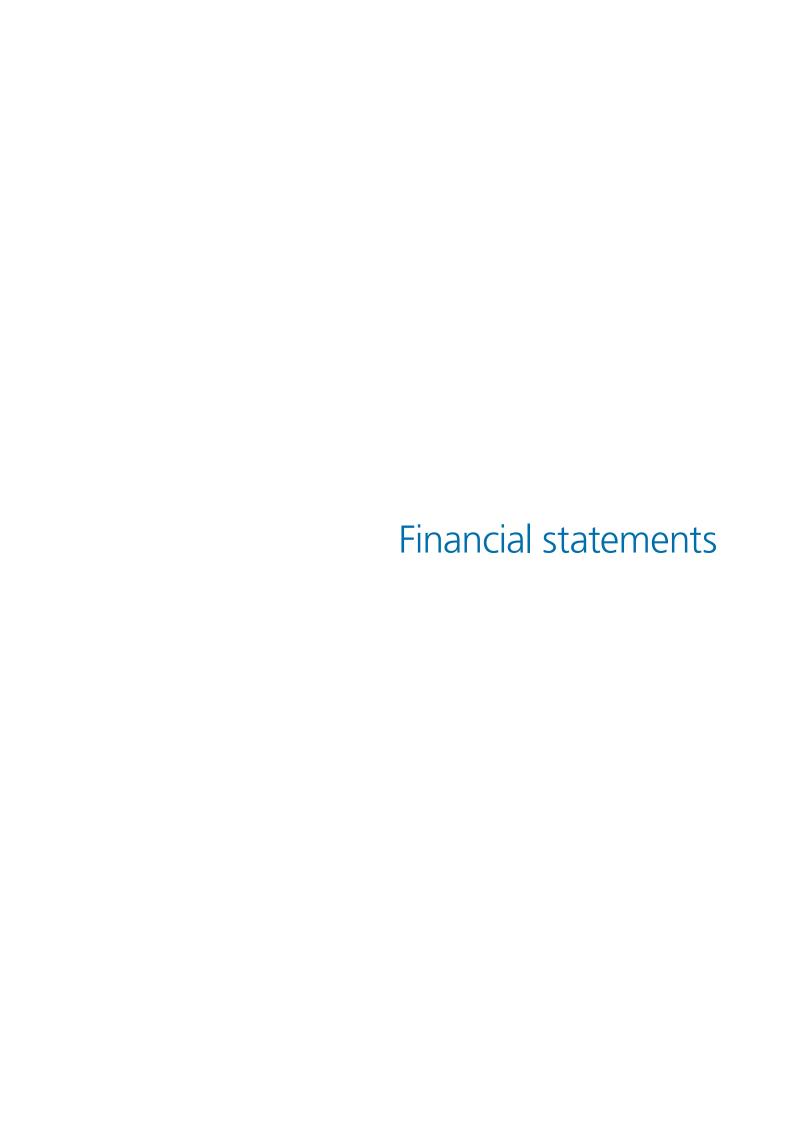
We recommend that the consolidated financial statements submitted to you be approved.

KPMG SA

Silvan Jurt Licensed Audit Expert Auditor in Charge Silas Citrini Licensed Audit Expert

Lugano, May 5, 2022





Balance sheet

Assets

	31.12.2021	31.12.2020
In CHF 1,000 Notes		
Plants and equipment	197,279	202,185
Land and buildings	48,122	48,902
Tangible fixed assets under construction	31,693	23,756
Other tangible fixed assets	2,763	2,933
Tangible fixed assets 2	279,857	277,776
Participations 3	44,041	44,051
Long-term securities 4	44,012	44,675
Advances and loans to participations 5	34,810	49,284
Other financial assets	275	364
Financial assets	123,138	138,374
Usage rights	7,165	7,388
Energy procurement rights	7,103	0
Intangible assets under development	1,340	1,852
Other intangible assets	2,092	1,395
Intangible assets 6	10,597	10,635
Non-current assets	413,592	426,785
Non-current assets	413,332	420,763
Other short-term assets 7	171,088	53,589
Prepayments and accrued income 8	182,617	98,676
Receivables from goods and services 9	11,570	20,953
Cash and cash equivalents 10	64,978	61,021
Current assets	430,253	234,239
Assets	843,845	661,024

Liabilities and equity

	31.12.2021	31.12.2020
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	104,387	98,357
Net result	10,602	9,230
Equity	272,989	265,587
Long-term provisions 11	19,736	11,481
Other long-term liabilities	1,137	1,137
Long-term financial liabilities 12	243,000	243,000
Long-term liabilities	263,873	255,618
Short-term provisions 11	13,098	5,556
Other short-term liabilities	74,274	18,309
Short-term financial liabilities 14	104,265	23,000
Accrued liabilities and deferred income 15	100,231	78,679
Payables from goods and services 16	15,115	14,275
Current liabilities	306,983	139,819
Liabilities	570,856	395,437
Liabilities and equity	843,845	661,024

Income statement

		2021	2020
In CHF 1,000	Notes		
Operating income			
Energy income	17	724,682	809,101
Grid income		39,600	37,401
Other operating income	18	21,573	21,343
Operating income		785,855	867,845
Operating expenses			
Energy purchases	19	-664,800	-756,933
Grid expenses		-16,382	-14,248
Personnel expenses	20	-32,574	-31,222
Service and material expenses		-7,085	-6,819
Depreciation on tangible fixed assets	2	-13,757	-13,874
Amortisation on intangible assets	6	-650	-1,379
Other depreciation and amortisation		-1,260	-1,260
Other operating expenses	21	-21,907	-21,818
Operating expenses		-758,415	-847,553
Operating result		27,440	20,292
Financial result	22	-1,753	-2,373
Ordinary result	22	25,687	17,919
Non-operating result		-	_
Extraordinary result	23	-15,085	-8,689
Net result		10,602	9,230

Cash flow statement

	2021	2020
In CHF 1,000		
Net result	10,602	9,230
Depreciation on tangible fixed assets	13,757	13,874
Amortisation on intangible assets	650	1,379
Other depreciation and amortisation	1,260	1,260
Change in provisions	15,797	2,369
Change in impairments	_	5,472
Profit / loss from disposal of non-current assets	-896	-16
Other non cash expenses and income	-612	177
Change in receivables, prepayments and accrued income and other short-term assets	-192,057	-5,007
Change in payables, accrued liabilities and deferred income and other short-term liabilities	78,480	-13,647
Cash flow from operating activities	-73,019	15,091
Outflows for investment in tangible fixed assets	-16,120	-12,823
Inflows from disposal of tangible fixed assets	48	165
Outflows for investment in intangible assets	-384	-1,163
Inflows from disposal of intangible assets	_	_
Outflows for investment in financial assets	-240	-12,803
Inflows from disposal of financial assets	14,911	595
Cash flow from investing activities	-1,785	-26,029
Issuance / repayment of short-term financial liabilities	81,961	-2,144
Issuance / repayment of long-term financial liabilities	_	_
Interests on capital, due to the State	-3,200	-3,200
Distribution of dividends to the State	_	_
Cash flow from financing activities	78,761	-5,344
Cash and cash equivalents at the beginning of the year	61,021	77,303
Cash flow	3,957	-16,282
Cash and cash equivalents at the end of the year	64,978	61,021

Statement of changes in equity

	Endowment capital	General reserves	Statutory reserves	Results carried forward	Net result	Equity
In CHF 1,000						
Equity at 01.01.2020	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
Allocation of result	_	_	_	9,230	-9,230	_
Interests on capital, due to the State	_	_	_	-3,200	_	-3,200
Distribution of dividends	_	_	_	-	_	_
Net result 2021	_	_	_	-	10,602	10,602
Equity at 31.12.2021	40,000	67,000	51,000	104,387	10,602	272,989

Notes to the financial statements

1. Accounting principles

The financial statements 2021 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 05.05.2022.

Assets and liabilities are valued in accordance to 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 transformators	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 01.01.2020	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
Reclassification	6,443	20	-6,890	199	-228
Additions	2,274	135	14,827	277	17,513
Disposals	-2,046	_	-	-215	-2,261
Cost value at 31.12.2021	535,941	61,144	31,693	10,398	639,176
Accumulated depreciation at 01.01.2020	-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
Reclassification	_	-	-	-	-
Depreciation	-12,230	-935	-	-592	-13,757
Additions	-1,393	_	-	-	-1,393
Disposals	2,046	_	-	161	2,207
Accumulated depreciation at 31.12.2021	-338,662	-13,022	_	-7,635	-359,319
Net carrying amount at 01.01.2020	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
Net carrying amount at 31.12.2021	197,279	48,122	31,693	2,763	279,857

3. Participations

	31.12.2021	31.12.2020
In CHF 1,000		
Società Elettrica Sopracenerina SA (SES)	21,052	21,052
Metanord SA	11,505	11,505
J. impairment	-11,505	-11,505
SPE Società per Partecipazioni Energetiche SA	8,000	8,000
J. impairment	-8,000	-8,000
Parco eolico del San Gottardo SA	7,861	7,861
Lucendro SA	6,301	6,551
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
PIÙCALORE SA	240	_
Total	44,041	44,051

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 operating concession.

4. Long-term securities

	31.12.2021	31.12.2020
In CHF 1,000		
Swissgrid AG	12,936	12,589
Trianel Kohlekraftwerk Lünen GmbH & Co. KG	11,509	12,362
Kraftwerke Mattmark AG	11,017	11,174
AKEB Aktiengesellschaft für Kernenergie-Beteiligungen Luzern	6,300	6,300
Terravent AG	2,250	2,250
Aliunid AG	690	490
J. impairment	-690	-490
Other	0	0
Total	44,012	44,675

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 operating concession.

5. Advances and loans to participations

	31.12.2021	31.12.2020
In CHF 1,000		
SPE Società per Partecipazioni Energetiche SA	11,985	15,300
./. impairment	-10,428	-10,886
Terravent AG	10,589	11,153
Metanord SA	8,200	8,200
Parco eolico del San Gottardo SA	5,414	16,467
Lucendro SA	4,900	4,900
TERIS Teleriscaldamento del Bellinzonese SA	4,000	4,000
Other	150	150
Total	34,810	49,284

The advance to SPE Società per Partecipazioni Energetiche SA (SPE) is subordinated 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

		Energy procurement rights	Intangible assets under development	Other intangible assets	Total
In CHF 1,000					
Cost value at 01.01.2020	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
Reclassification	-	_	-896	1,124	228
Additions	_	_	384	-	384
Disposals	_	_	_	-	-
Cost value at 31.12.2021	15,586	144,555	1,340	11,749	173,230
Accumulated amortisation at 01.01.2020	-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
Reclassification	_	_	_	-	-
Amortisation	-223	_	_	-427	-650
Additions	-	_	_	-	_
Disposals	-	_	-	-	-
Impairments	-	-	-	-	-
Accumulated amortisation at 31.12.2021	-8,421	-144,555	_	-9,657	-162,633
Net carrying amount at 01.01.2020	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
Net carrying amount at 31.12.2021	7,165	0	1,340	2,092	10,597

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.

7. Other short-term assets

	31.12.2021	31.12.2020
In CHF 1,000		
Other short-term receivables from subsidiaries	259	270
Other short-term receivables from associates	20,000	20,000
Other short-term receivables from other related parties	1,146	3,430
Other short-term receivables from third parties	81,175	10,036
Positive replacement values of transactions valued at market value	63,112	13,291
Energy related and similar certificates	2,080	3,622
Inventories of spare parts and consumables	3,316	2,940
Total	171,088	53,589

Other short-term receivables from associates as refer to a short-term loan to the associate Società Elettrica Sopracenerina SA (SES). The sharp increase of energy market prices caused a substantial increase of the liquidity, which AET has to deposit to guarantee the execution of futures transactions on the exchange (margin calls). Those margin calls are booked within "Other short-term receivables from third parties".

Further, the increase in market price of energy has caused a strong growth of the position "Positive replacement values of transactions valued at market value", which is offset by the corresponding increase of the liability position "Negative replacement values of transactions valued at market value".

8. Prepayments and accrued income

	31.12.2021	31.12.2020
In CHF 1,000		
Subsidiaries	1,858	1,071
Associates	5,188	5,468
Other related parties	10,539	7,090
Third parties	162,410	83,203
Work in progress	2,622	1,844
Total	182,617	98,676

The balance includes amounts in foreign currency for EUR 132.5 million (EUR 52.9 million at 31.12.2020). Accrued income mainly includes the value of energy sold during the last reporting month and not yet invoiced.

9. Receivables from goods and services

	31.12.2021	31.12.2020
In CHF 1,000		
Subsidiaries	2,242	2,458
Associates	387	4,967
Other related parties	380	2,042
Third parties	8,561	11,486
Total	11,570	20,953

The balance includes amounts in foreign currency for EUR 3.3 million (EUR 3.2 million at 31.12.2020).

10. Cash and cash equivalents

	31.12.2021	31.12.2020
In CHF 1,000		
Balances in CHF	26,995	56,637
Balances in foreign currencies	37,983	4,384
Total	64,978	61,021

11. Provisions

	Energy onerous contracts	Personnel related expenses	Other	Total
In CHF 1,000	Contracts	схрепаса	Other	Total
Carrying amount at 01.01.2020	11,004	3,464	200	14,668
thereof long-term	10,294	_	_	10,294
thereof short-term	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
thereof long-term	11,481	-	-	11,481
thereof short-term	900	3,306	1,350	5,556
Reclassification	_	-	-	-
Increase	12,620	1,700	3,400	17,720
Utilisation	-900	-1,000	-	-1,900
Release	_	-23	-	-23
Carrying amount at 31.12.2021	24,101	3,983	4,750	32,834
thereof long-term	16,736	_	3,000	19,736
thereof short-term	7,365	3,983	1,750	13,098

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 has been increased by CHF 12.6 million due to changes in market parameters.

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

12. Long-term financial liabilities

	31.12.2021	31.12.2020
In CHF 1,000		
Liabilities due between 1 and 5 years	93,000	80,000
Liabilities due between 5 and 10 years	70,000	83,000
Liabilities due after 10 years	80,000	80,000
Total	243,000	243,000

13. Other short-term liabilities

	31.12.2021	31.12.2020
In CHF 1,000		
Other short-term liabilities towards subsidiaries	189	189
Other short-term liabilities towards associates	60	166
Other short-term liabilities towards other related parties	4,533	4,263
Other short-term liabilities towards third parties	8,936	9,588
Negative replacement values of transactions valued at market value	60,556	4,103
Total	74,274	18,309

14. Short-term financial liabilities

	31.12.2021	31.12.2020
In CHF 1,000		
Financial liabilities in CHF	68,000	23,000
Financial liabilities in foreign currency	36,265	_
Total	104,265	23,000

15. Accrued liabilities and deferred income

	31.12.2021	31.12.2020
In CHF 1,000		
Subsidiaries	2,214	1,066
Associates	20	12
Other related parties	6,389	2,688
Third parties	91,608	74,913
Total	100,231	78,679

The balance includes amounts in foreign currency for EUR 69.9 million (EUR 53.0 million at 31.12.2020).

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

16. Payables from goods and services

	31.12.2021	31.12.2020
In CHF 1,000		
Subsidiaries	1,585	_
Associates	102	28
Other related parties	6,919	5,395
Third parties	6,509	8,852
Total	15,115	14,275

The balance includes amounts in foreign currency for EUR 1.5 million (EUR 6.0 million at 31.12.2020).

17. Energy income

	2021	2020
In CHF 1,000		
Energy sales in Switzerland	402,159	356,368
Energy sales in Italy	18,750	31,855
Energy sales in Germany	240,463	359,521
Energy sales in France	51,067	50,621
Other energy income	12,243	10,736
Total	724,682	809,101

The item other energy income includes the economic effect of the mark to market valuation of energy and CO_2 emission rights forward transactions acquired within the trading portfolio.

18. Other operating income

	2021	2020
In CHF 1,000		
Income from services	13,146	13,315
Own work capitalised	4,021	3,978
Other	4,406	4,050
Total	21,573	21,343

19. Energy purchases

	2021	2020
In CHF 1,000		
Purchases from participations	-107,000	-80,641
Long-term contractual purchases	-32,237	-31,395
Purchases on the market	-525,563	-644,897
Total	-664,800	-756,933

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

	2021	2020
In CHF 1,000		
Salaries and other compensation	-26,587	-25,303
Social contributions	-5,776	-5,657
Other expenses	-504	-517
Recoveries from insurance companies	293	255
Total	-32,574	-31,222

In 2021 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

	31.12.2021	31.12.2020
Full time equivalent		
Permanent employees	236.7	232.1
Auxiliary employees	12.2	12.3
Apprentices	45.0	37.0
Total	293.9	281.4

21. Other operating expenses

	2021	2020
In CHF 1,000		
Water fees	-12,873	-12,873
Local taxes and other contributions	-3,345	-3,262
Other	-5,689	-5,683
Total	-21,907	-21,818

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

22. Financial result

	2021	2020
In CHF 1,000		
Interest income	369	498
Income from participations	2,170	2,337
Exchange rate differences	1,675	1,002
Interest payments	-5,783	-6,066
Other financial expenses	-184	-144
Total	-1,753	-2,373

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

23. Extraordinary result

	2021	2020
In CHF 1,000		
Profit from disposal of non-current assets	896	16
Other extraordinary income	39	177
Increase of provisions	-16,020	-3,287
Impairments of non-current assets	-	-5,472
Other extraordinary expenses	-	-123
Total	-15,085	-8,689

Profit from disposal of non-current assets relates to the price adjustment of elements of the national transmission grid sold to Swissgrid AG in 2013.

24. Contingent liabilities

	31.12.2021	31.12.2020
In CHF 1,000		
Guarantees in the interest of:		
Subsidiaries	12,412	22,823
Associates	-	_
Third parties	4,738	4,945
Total	17,150	27,768

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 sale and purchase agreements involving irrevocable obligations.

Energy sale and purchase contracts and market operations

31.12.2021		Energy sales	E	nergy purchases
Cumulative volume in CHF 1,000	Market transactions	Long-term contracts	Market transactions	Long-term contracts
2022	695,103	30,460	621,646	39,224
from 2 to 5 years	404,727	134,619	310,625	164,111
over 5 years	3,536	186,048	_	51,567
31.12.2020		Energy sales	E	nergy purchases
Cumulative volume in CHF 1,000	Market transactions	Long-term contracts	Market transactions	Long-term contracts
2021	373,407	32,965	337,987	33,795
from 2 to 5 years	274,955	117,515	255,509	144,433
over 5 years	4,106	158,640	_	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 1.7 million (value of the indexed contact based on 2021 prices and year-end exchange rate).

Forward currency operations

31.12.2021	Ma	Maturity year 2022		Maturity year 2023	
Operation	Amount in currency (in 1,000)	Average exchange rate (currency/CHF)	Amount in currency (in 1,000)	Average exchange rate (currency/CHF)	
Sell EUR	207,500	1.05	8,000	1.08	
	Ma	turity year 2022	M	aturity year 2023	
Operation	Amount in currency (in 1,000)	Average exchange rate (currency/EUR)	Amount in currency (in 1,000)	Average exchange rate (currency/EUR)	
Buy USD	12,187	0.86	2,352	0.86	

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

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

At 31.12.2021 AET has no off-balance sheet lease commitments (31.12.2020: unchanged).

26. Pension benefit obligations

CPE Fondazione di Previdenza Energia	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
In CHF 1,000					
31.12.2021	125.2%	-	-	-2,653	-2,653
31.12.2020	112.5%	_	_	-2,590	-2,590

27. Transactions with related parties

Transactions with subsidiaries

	2021	2020
In CHF 1,000		
Energy income	8,494	8,321
Service and other income	3,176	3,896
Financial income	335	913
Energy purchases	19,466	19,785
Service and other expenses	9	30

Transactions with associates

	2021	2020
In CHF 1,000		
Energy income	29,740	31,655
Service and other income	13,766	13,325
Financial income	1,072	741
Energy purchases	76	62
Service and other expenses	2,891	2,409

Transactions with other related parties

	2021	2020
In CHF 1,000		
Energy income	213	312
Service and other income	2,932	2,372
Financial income	466	527
Energy purchases	100,701	73,909
Service and other expenses	1,739	2,090

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 it's 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 it's 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 implementation or modification of laws, acts or rules at Swiss or European level, which might have an impact on the activity of AET. In order to ensure an high level of surveillance and compliance, AET constantly monitors regulatory developments, acting on internal policies and making appropriate corrections whenever necessary.

29. Subsequent events

2021: at the begin of 2022 the geopolitical tensions around Ukraine and its invasion by Russia have put additional pressure on the energy markets, with sharp increases of prices and volatility, pushing forward the development already seen in the fourth quarter of 2021. This situation causes and increase of the financial risks of AET and the need of higher cash deposits to cover forward market transactions (margin calls). AET has implemented portfolio management and treasury measures to mitigate the impact of these developments. The tensions on the energy markets also cause uncertainties about the availability of natural gas and consequently of electricity, especially in respect of the winter 2022/23. AET is working in close connection with the federal authorities and the other players of the sector contributing to the efforts to ensure the energy supply of the country.

2020: no significant event.

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 2021	10,602
- to the State: 8% interest on the endowment capital	-3,200
– dividend to the State	-3,000
– allocation to the general reserves	-
Allocation to the results carried forward	4,402

Audit report by KPMG SA on the 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 Financial Statements

As statutory auditor, we have audited the accompanying financial statements (from page 53 to page 75) 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 2021.

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 2021 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

Silvan Jurt Licensed Audit Expert Auditor in Charge Silas Citrini Licensed Audit Expert

Lugano, May 5, 2022



Annexes

AET Group companies

rticipation 31.12.2020
%
7.00
7.00
3.76
65.00
33.33
4.65
8.41
100.00
33.33
70.00
_
65.00
13.00
13.00
14.30
13.00
13.00
11.70
13.00
65.00

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	Value	Nominal equity at 31.12.2021	Participation at 31.12.2021	Participation at 31.12.2020	
		In 1,000	%	%	
Società Elettrica Sopracenerina SA (SES), CH-Locarno Power distribution company and grid management	CHF	16,500	30.00	30.00	
Energie Rinnovabili Losone (ERL) SA , CH-Losone Production and distribution of thermal energy	CHF	2,700	10.00	10.00	
Enertì SA, CH-Monteceneri Production and distribution of thermal energy	CHF	200	9.27	9.27	
SES Controlli Sagl, CH-Locarno Service company	CHF	20	30.00	30.00	
SES Collaudi Sagl, CH-Locarno Service company	CHF	20	24.00	24.00	
Società della Funicolare Locarno - Madonna del Sasso SA (FLMS), CH-Locarno					
Ownership and operation of a funicular	CHF	900	4.09	4.09	
Società Locarnese di Partecipazioni e Immobiliare SA (SAP SA), CH-Locarno	CHF	2,064	29.99	29.99	
Real estate company	CHF	2,004	29.99	29.99	
SPE Società per Partecipazioni Energetiche SA (SPE), CH-Bellinzona Holding company	CHF	8,000	100.00	100.00	
AET Italia Srl, I-Milan Trading of cross-border interconnection capacity	EUR	871	100.00	100.00	
CEG Srl, I-Milan Holding and services	EUR	120	100.00	100.00	
Nord Energia SpA, I-Milan Management of cross-border interconnection power line (Merchant Line)	EUR	10,200	40.00	40.00	
CMC MeSta SA, CH-Bellinzona Detention of Mendrisio – Stabio cross-border power line	CHF	6,000	40.00	40.00	
Swissgrid AG, CH-Aarau Swiss transmission system operator	CHF	334,495	1.62	1.66	
TERIS Teleriscaldamento del Bellinzonese SA (TERIS) , CH-Bellinzona Production and distribution of thermal energy	CHF	10,000	60.00	60.00	
Terravent AG, CH-Luzern Wind power generation	CHF	17,952	12.53	12.53	
Trianel Kohlekraftwerk Lünen GmbH & Co. KG (TKL) , D-Aachen Coal fired power generation, Lünen	EUR	147,944	15.84	15.84	

Statistical informations

Production and purchases of AET Group

	Winter	Summer	2021	2020
In GWh				
Production AET Group				
AET Biaschina	146	268	414	412
AET Piottino	106	183	289	317
Lucendro	74	44	118	123
AET Stalvedro	22	37	59	59
AET Ofima exchange	5	28	33	49
AET Ponte Brolla	4	7	11	7
AET Tremorgio	8	2	10	10
Parco eolico del San Gottardo (70% share of AET)	4	3	7	_
Photovoltaic	1	3	4	4
Total production AET Group	370	575	945	981
Production participations (share attributable to AET Group)				
Maggia	162	135	297	313
Blenio	91	100	191	177
Verzasca	33	49	82	77
KW Mattmark	29	22	51	56
Senco Group	1	3	4	5
SES Giumaglio	3	5	8	7
SES Ticinetto	1	3	4	3
Terravent AG	27	16	43	48
AKEB	141	144	285	215
KK Leibstadt	4	2	6	14
Trianel TKL	288	255	543	154
Total production participations	780	734	1,514	1,069
Long-term contracts ¹	310	331	641	640
Purchases on the market	4,165	3,827	7,992	13,321
Total	5,625	5,467	11,092	16,011

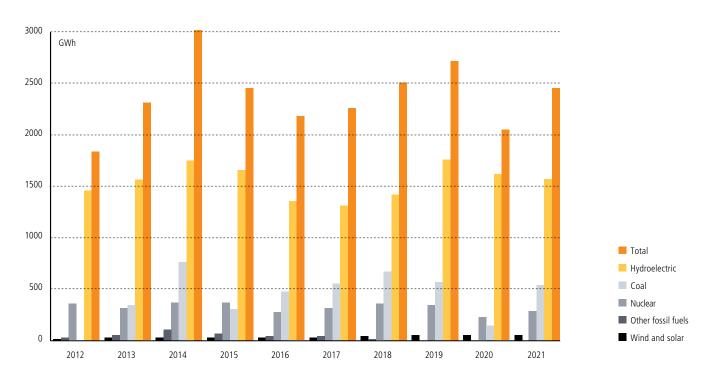
¹ Delivery contractualised for more than 5 years

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Supply of AET Group

	Winter	Summer	2021	2020
	vviiitei	Julilliei	2021	2020
In GWh				
Sales to distribution companies	976	722	1,698	1,858
Sales to end customers	207	176	383	418
Sales on the market	4,434	4,561	8,995	13,695
Own consumption and losses	8	8	16	40
Total	5,625	5,467	11,092	16,011

Production AET Group and participations







Azienda Elettrica Ticinese

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