

WATER COMPANY DATA SHEETS AND OVERSEAS ACTIVITIES

This chapter illustrates the activities of some Group companies not included in the scope of the Consolidated Non-Financial Statement (see Disclosing sustainability: methodological note). In particular, data and information are provided relating to the main operating Companies for the water sector in Umbria and Tuscany, consolidated using the equity method in the statutory financial statements, and to the companies that are active abroad in the same sector.

Water activities in Umbria and Tuscany

UMBRA ACQUE

Umbra Acque SpA is a company with predominantly public capital, 40% owned by Acea SpA, which manages the Integrated Water Ser-

vice in the area of Optimal Territorial Conference – Umbria 1 consisting of 38 Municipalities, of which 37 in the province of Perugia and 1 in the province of Terni, with a total population of around 494,000 inhabitants served.

MANAGEMENT SYSTEMS

Umbra Acqua has an **Integrated Quality, Environment and Safety Management System (QAS)**, in compliance with the **UNI ISO 9001:2015, UNI ISO 14001:2015 e ISO 45001:2018 standards** and holds the **SOA certification** for the **OG6** (in class II) and **OS22** (in class III) categories and **qualification for design and construction** (up to the 8th classification). The analysis laboratory is accredited according to the UNI ISO/IEC 17025:2005 standard and for the purposes of **monitoring drinking water**, in line with the Ministerial Decree 14/06/2017.

QUALITY DELIVERED: MAIN INTERVENTIONS ON THE NETWORKS AND CONTROLS ON DRINKING WATER AND WASTE WATER

SIZE OF NETWORK, MAIN WORKS, METERS AND CHECKS ON DRINKING WATER AND NETWORKS (2021)

size of drinking-water network - data in GIS	6,358 km (1,388 km of supply network, 4,970 km of distribution)
type of work	
interventions due to network failure/leak detection	17,851 interventions (17,645 due to faults, 206 leak detection)
meter installations (new installation and replacement)	28,843 interventions (5,939 new installation, 22,904 replacements)
network extension	26 km of expanded network
network reclamation	50.3 km of reclaimed network
drinking water quality control	6,376 samples collected and 116,891 tests performed

SIZE OF NETWORK, WORKS AND CHECKS ON SEWERAGE WATER AND NETWORKS (2021)

size of sewerage network - data in GIS	1,853 km
type of work	
interventions due to network failure	1,109 interventions
planned interventions	96 interventions
network extension	39 km of expanded network
network reclamation	17 km of network reclaimed following video inspection
quality control on wastewater for sewerage networks	400 samples collected and 6,012 tests performed

HUMAN RESOURCES IN FIGURES

GENERAL DATA ON PERSONNEL (2020-2021)

(no.)	2020			2021		
	men	women	total	men	women	total
composition of the staff						
executives	4	0	4	5	0	5
managers	9	1	10	10	2	12
clerical workers	72	92	164	72	92	164
workers	211	0	211	209	0	209
total	296	93	389	296	94	390
contract type						
staff with permanent contract	274	77	351	280	89	369
<i>(of which) part-time staff</i>	0	7	7	0	7	7
permanent staff	18	14	32	12	4	16
staff under apprenticeship contracts	4	2	6	4	1	5
total	296	93	389	296	94	390
changes						
incoming staff	20	14	34	9	3	12
outgoing staff	15	4	19	9	2	11
turnover rate (%)	11.8	19.4	13.6	6.1	5.3	5.9
incoming rate (%)	6.8	15.1	8.7	3.0	3.2	3.1
outgoing rate (%)	5.1	4.3	4.9	3.0	2.1	2.8

INDUSTRIAL ACCIDENTS AND FREQUENCY AND SEVERITY INDICES (2020-2021)

	2020	2021 (*)
accidents (no.)	5	5
total days of absence	465	234
hours worked (*)	633,642	659,520
frequency index (FI) (number of accidents per 1,000,000/working hours) (*)	7.89	7.58
severity index (SI) (days of absence per 1,000/working hours) (*)	0.73	0.35

(*) The data is estimated.

TRAINING 2020-2021

course type	courses (no.)		training (hours)		costs (€)	
	2020	2021	2020	2021	2020	2021
advanced training	1	1	8	6	2,340	310
technical-specialised	57	77	4,096	7,842	56,779	82,211
legal	5	2	96	8	2,393	538
managerial	20	10	1,922	149	32,525	2,689
safety	17	20	3,419	1,780	30,022	16,716
total	100	110	9,541	9,785	124,059	102,464

employees trained	2020			2021 (*)		
	men	women	total	men	women	total
(no.)	296	93	389	303	96	399

breakdown of training hours by qualification						
	men	women	total	men	women	total
executives	161	0	161	219	0	219
managers	369	28	397	359	61	420
clerical workers	2,497	2,113	4,610	2,396	3,309	5,705
workers	4,373	0	4,373	3,441	0	3,441

(*) The figures are higher than the number of employees as they include employees who provided services only for a few months of the year.

Training provided during the year was held almost entirely via **e-learning** and involved **100% of personnel**. The **“smart workers” training course** with in-depth information on privacy, IT security and time management and the one on **corporate waste management** are among the topics most dealt with.

Employees of the commercial area received courses on **stress management**, and personnel on the operations side were involved in training courses on **new management software**. Finally, like every year, **safety** training continued in compliance with applicable laws.

ENVIRONMENTAL ACCOUNTS**PRODUCTS AND ANALYTICAL TESTS**

	u. m.	2019	2020	2021	Δ% 2021/2020
WATER BALANCE (*)					
drinking water from the environment	Mm³	58.13	58.60	56.34	-3.9
from the surface	Mm ³	0	0	0	-
from wells	Mm ³	44.30	44.82	42.80	-4.5
from springs	Mm ³	11.22	10.61	10.20	-3.9
of which water from other aqueduct systems	Mm ³	2.61	3.17	3.34	-5.4
total drinking water leaving the aqueduct system (c) = (a+b)	Mm³	30.51	31.38	31.04	-1.1
total drinking water dispensed and billed in the network (a)	Mm³	29.50	28.73	28.61	-0.4
measured volume of water delivered to users	Mm ³	29.50	28.73	28.61	-0.4
volume consumed by users and not measured	Mm ³	0	0	0	-
total drinking water authorised and not billed in the network (b)	Mm³	1.01	2.65	2.43	-8.3
measured unbilled authorised consumption	Mm ³	0.85	1.21	0.74	-38.8
unmeasured unbilled authorised consumption	Mm ³	0.16	1.44	1.69	17.4
LOSS ASSESSMENT ACCORDING TO ARERA RESOLUTION 917/17 R/IDR					
water leaks	Mm ³	28.13	27.22	25.30	-7.1
water loss percentages	%	48.4	46.45	44.90	-3.2
TREATED WASTE WATER					
water treated in the main treatment plants	Mm³	56.5	56.8	59.3	4.4
ANALYTICAL TESTS ON DRINKING WATER AND WASTE WATER					
no. analytical tests on drinking water	no.	135,500	107,257	116,891	9.0
of which no. analytical tests on surface water	no.	6,500	7,209	7,350	2.0
no. analytical tests on wastewater (**)	no.	38,481	35,610	42,404	19.1

(*) The 2021 figures are estimated.

(**) The figure includes analyses carried out at treatment plants and industrial waste.

RESOURCES USED	u. m.	2019	2020	2021	Δ% 2021/2020
COLLECTION, SUPPLY AND DISTRIBUTION OF DRINKING AND NON-DRINKING WATER					
materials					
sodium hypochlorite	t	60.0	91.7	93.1	1.6
sodium chloride	t	200.0	213.6	221.6	3.7
hydrochloric acid	t	200.0	206.5	210.1	1.7
aluminium polychloride	t	12.0	11.5	11.1	-3.5
phosphoric acid (10%)	t	9.0	0	0	-
WASTE WATER TREATMENT					
materials					
polyelectrolyte emulsion	t	90.9	123.4	95.0	-23.0
ferric chloride (40%)	t	28.0	61.5	114.3	85.9
mineral oil and fats	t	1.40	0	0	-
OTHER CONSUMPTION					
drinking water (*)	m³	28,889	20,222	59,178	-
<i>drinking water consumed for non-industrial water uses (offices, outside showers etc.)</i>	m ³	2,282	1,597	10,416	-
<i>drinking water consumed for process water uses (washing machinery and bays, etc.)</i>	m ³	26,607	18,625	42,762	-

(*) The figures for 2020 and 2021 are estimated considering the partial closure of offices and the different organisation of work following the health emergency.

ENERGY CONSUMPTION	u. m.	2019	2020	2021	Δ% 2021/2020
FUELS					
vehicle fuels					
diesel	l	422,430	410,000	456,600	11.4
petrol	l	7,497	7,000	5,800	-17.1
ELECTRICITY					
total electricity for drinking water	GWh	72.82	69.13	69.45	0.5
<i>electricity for water pumping stations</i>	GWh	72.45	68.78	69.11	0.5
<i>electricity for offices</i>	GWh	0.37	0.35	0.34	-2.9
total electricity for waste water	GWh	22.56	22.78	23.22	1.9
<i>electricity for treatment</i>	GWh	17.70	17.86	17.94	0.4
<i>electricity for pumping stations</i>	GWh	4.74	4.81	5.17	7.5
<i>electricity for offices</i>	GWh	0.11	0.12	0.11	-8.3

ENERGY EFFICIENCY (2019-2021)

action	energy savings achieved (kWh)		
	2019	2020	2021
extraordinary maintenance on plants	-	75,000	150,000

In 2021, extraordinary maintenance work was completed on the San Giovenale plant of the IWS, with adoption of **more efficient technology** that enabled an estimated energy saving of approximately 150 MWh.

WASTE	u. m.	2019	2020	2021	Δ% 2021/2020
SPECIFIC WASTE FROM TREATMENT OF WASTE WATER					
treatment sludge (*)	t	16,436	14,941	13,868	-7.2
sand and sediment from treatment	t	1,332	1,057	1,353	28.0
WASTE EXCLUDING SLUDGE AND SAND					
hazardous waste (**)	t	7.2	20.2	8.0	-60.4
non-hazardous waste (*)	t	5,931	4,940	3,767	-23.7

(*) The figure includes liquid sludge transported to other plants for the dewatering process, for a value of 5,269 t in 2019, 4,940 t in 2020 and 2,525 t in 2021.

(**) The increase in 2020 is due to the exceptional disposal of vehicles and company cars.

TOTAL COD IN INPUT AND OUTPUT (2019-2021)

(t/year)	2019	2020	2021
COD _{in}	18,481.6	17,135.4	13,401.1
COD _{out}	2,365.5	2,288.4	1,556.4

OUTPUT PARAMETERS FOR THE MAIN TREATMENT PLANTS (2019-2021)

parameter	average values (mg/l) 2019	average values (mg/l) 2020	average values (mg/l) 2021
BOD ₅ (*)	20.1	18.6	12.3
COD	41.9	40.3	21.0
SST	25.5	30.8	12.0
NH ₄ ⁺	6.5	5.0	2.0
phosphorous	2.0	2.0	2.0

(*) The output BOD₅ value is expressed with the value of the limit of quantification (LOQ) equal to 12.3, resulting in all analytical calculations being lower than this value.

PURIFICATION EFFICIENCY OF THE MAIN TREATMENT PLANTS (2019-2021)

parameter	average values (%) 2019	average values (%) 2020	average values (%) 2021
100 x (COD _{in} - COD _{out})/COD _{in}	87.2	87.0	88.4
100 x (SST _{in} - SST _{out})/SST _{in}	89.1	89.4	95.7
100 x (NH ₄ ⁺ _{in} - NH ₄ ⁺ _{out})/NH ₄ ⁺ _{in}	83.5	86.4	93.8
100 x (P _{in} - P _{out})/P _{in} (*)	34.0	33.0	35.0

(*) Umbr Acque does not detect the phosphates leaving the treatment plants, as the standard does not fix the limit but the total phosphorus as required by tab. 2 of Annex 5 in part III of the Consolidated Environmental Law (TUA), with a closer monitoring of the nutrient discharged onto surface water bodies.

PUBLIACQUA

Publiacqua SpA is a mixed ownership Company with a majority public interest, owned by Acea through Acque Blu Fiorentina SpA, which manages the Integrated Water Service in the area of Optimal Territorial Conference no. 3 – Medio Valdarno, with a total population of approximately 1.2 million citizens served.

MANAGEMENT SYSTEMS

Publiacqua has an **Integrated Quality, Environment and Safety Management System (QAS)** in compliance with the **UNI EN ISO 9001:2015, 14001:2015 and 45001:2018** standards for its main operations. The analysis laboratory is accredited according to the **UNI ISO/ IEC 17025:2005** standard. In 2021, the **UNI ISO 37001:2016** Corruption Prevention Management System was implemented, obtaining certification.

QUALITY DELIVERED: MAIN INTERVENTIONS ON THE NETWORKS AND CONTROLS ON DRINKING WATER AND WASTE WATER**SIZE OF NETWORK, MAIN WORKS, METERS AND CHECKS ON DRINKING WATER AND NETWORKS (2021)**

size of drinking-water network - data in GIS	6,825 km (1,389 km of supply network, 5,436 km of distribution)
TYPE OF WORK	
interventions due to network failure/leak detection	4,105 interventions (3,488 due to faults, 617 leak detection)
meter installations (new installation and replacement)	7,448 interventions (3,073 new installations and 4,375 replacements) and 38,625 mass replacements under contract
network extension	1.7 km of expanded network
network reclamation	35 km of reclaimed network
drinking water quality control	10,334 samples collected and 319,410 tests performed

SIZE OF NETWORK, WORKS AND CHECKS ON SEWERAGE WATER AND NETWORKS (2021)

size of sewerage network - data in GIS	3,736 km
TYPE OF WORK	
interventions due to network failure	3,891 interventions
planned interventions	1,132 interventions
network extension	22.3 km of expanded network
network reclamation	10.2 km of reclaimed network
quality control on wastewater for sewerage networks	2,827 samples collected and 43,841 tests performed

HUMAN RESOURCES IN FIGURES

GENERAL DATA ON PERSONNEL (2020-2021) (*)

(no.)	2020			2021		
	men	women	total	men	women	total
composition of the staff						
executives	3	1	4	3	1	4
managers	14	8	22	15	7	22
clerical workers	185	143	328	187	142	329
workers	255	6	261	259	5	264
total	457	158	615	464	155	619
contract type						
staff with permanent contract	422	153	575	421	153	574
<i>(of which) part-time staff</i>	3	9	12	3	7	10
permanent staff	11	5	16	6	2	8
staff under apprenticeship contracts	24	0	24	37	0	37
total	457	158	615	464	155	619
changes						
incoming staff	37	14	51	29	7	36
outgoing staff	22	4	26	22	10	32
turnover rate (%)	12.91	11.39	12.52	10.99	10.97	10.99
incoming rate (%)	8.10	8.86	8.29	6.25	4.52	5.82
outgoing rate (%)	4.81	2.53	4.23	4.74	6.45	5.17

(*) The figures for 2020 have been modified after the consolidation.

INDUSTRIAL ACCIDENTS AND FREQUENCY AND SEVERITY INDICES (2020-2021)

	2020	2021
accidents (no.) (*)	16	9
total days of absence (**)	238	323
hours worked (***)	1,015,197	1,037,016
frequency index (FI) (number of accidents per 1,000,000/working hours)	15.76	8.68
severity index (SI) (days of absence per 1,000/working hours)	0.23	0.31

(*) Accidents with effects lasting for more than one day are considered.

(**) The value also excludes days of absence related to persistent or reopened injuries from previous years.

(***) This is the sum of ordinary and overtime hours.

TRAINING (2020-2021) (*)

course type, hours provided and costs

course type	courses (no.)		training (hours)		costs (€)	
	2020	2021	2020	2021	2020	2021
advanced training (**)	5	2	78	182	5,906	2,641
IT	3	3	37	398	3,544	3,962
technical-specialised	42	44	3,061	4,298	49,610	58,104
managerial	7	5	1,281	809	8,268	6,603
administrative-managerial (***)	40	54	1,198	2,249	47,248	71,309
safety	43	46	2,679	4,102	50,792	60,745
total	140	154	8,334	12,038	165,368	203,364
employees trained						
(no.)	2020			2021		
	men	women	total	men	women	total
	362	137	499	464	154	618
breakdown of training hours by qualification						
executives	67	36	103	44	10	54
managers	248	158	406	244	61	305
clerical workers	1,734	1,610	3,343	2,060	1,420	3,480
workers	4,460	21	4,481	6,608	52	6,660

(*) Some figures for 2020 have been restated after the final calculations.

(**) The advanced training courses provided to employees are managed by Acea SpA, which bears part of the costs.

(***) In 2021, the administrative-managerial item includes 1,143 hours of training on Anti-corruption issues.

In 2021, the provision of courses on **safety** and related to in-depth projects on **technology and systems** continued, with particular reference to updates on work equipment; the updating of skills relating to the regulations pertaining to Legislative Decree no. 231/01.

E-learning sessions were also held, such as the **managerial training** course **dedicated to the organisational climate**. The continuation of the emergency situation did not allow in-class teaching.

ENVIRONMENTAL ACCOUNTS

PRODUCTS AND ANALYTICAL TESTS

	u. m.	2019	2020	2021	Δ% 2021/2020
WATER BALANCE (*)					
drinking water from the environment	Mm³	157.7	148.6	146.8	-1.2
<i>from the surface</i>	<i>Mm³</i>	<i>101.2</i>	<i>92.9</i>	<i>91.9</i>	<i>-1.1</i>
<i>from wells</i>	<i>Mm³</i>	<i>44.4</i>	<i>43.4</i>	<i>42.9</i>	<i>-1.2</i>
<i>from springs</i>	<i>Mm³</i>	<i>11.4</i>	<i>11.6</i>	<i>11.5</i>	<i>-0.9</i>
<i>of which water from other aqueduct systems</i>	<i>Mm³</i>	<i>0.7</i>	<i>0.7</i>	<i>0.5</i>	<i>-28.6</i>
total drinking water leaving the aqueduct system (e) = (a+b+c+d)	Mm³	88.2	85.1	87.6	2.9
total drinking water dispensed and billed in the network (a)	Mm³	79.6	77.6	78.6	1.3
<i>measured volume of water delivered to users</i>	<i>Mm³</i>	<i>79.6</i>	<i>77.1</i>	<i>78.1</i>	<i>1.3</i>
<i>volume consumed by users and not measured</i>	<i>Mm³</i>	<i>0</i>	<i>0.5</i>	<i>0.5</i>	<i>-</i>
total drinking water authorised and not billed in the network (b)	Mm³	0.4	0.4	0.4	-
<i>measured unbilled authorised consumption</i>	<i>Mm³</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>-</i>
<i>unmeasured unbilled authorised consumption</i>	<i>Mm³</i>	<i>0.4</i>	<i>0.4</i>	<i>0.4</i>	<i>-</i>
drinking water exported (sub-distributors) (c)	Mm³	0.6	0.8	0.8	-
measured process losses (d)	Mm³	7.6	6.3	7.8	23.8
LOSS ASSESSMENT ACCORDING TO ARERA RESOLUTION 917/17 R/IDR					
water leaks (**)	Mm ³	69.5	63.5	59.2	-6.8
water loss percentages	%	44.1	42.7	40.3	-5.6
TREATED WASTE WATER					
water treated in the main treatment plants	Mm³	105.1	97.5	98.2	0.7
ANALYTICAL TESTS ON DRINKING WATER AND WASTE WATER					
no. analytical tests on drinking water	no.	261,251	288,321	319,410	10.8
<i>of which no. analytical tests on surface water (***)</i>	<i>no.</i>	<i>24,497</i>	<i>26,665</i>	<i>25,761</i>	<i>-3.4</i>
no. analytical tests on waste water	no.	40,127	39,580	43,841	10.8

(*) The figures for 2020 have been restated after the final calculations.

(**) The value of the water losses coincides with the "total lost volume (WLtot)" and includes the unmeasured treatment losses, the supply losses and the total distribution water losses.

(***) Analysis of crude surface water (untreated).

RESOURCES USED

	u. m.	2019	2020	2021	Δ% 2021/2020
COLLECTION, SUPPLY AND DISTRIBUTION OF DRINKING AND NON-DRINKING WATER					
materials					
sodium hypochlorite	t	1,384	1,117	1,097	-1.8
sodium chloride	t	351	347	349	0.6
hydrochloric acid	t	378	403	402	-0.2
flocculant	t	5,818	5,055	5,028	-0.5
purate	t	353	349	414	18.6
sulphuric acid	t	565	523	608	16.3
oxygen	t	37	90	76	-15.6
acetic acid	t	126	113	112	-0.9
carbon dioxide (*excluding drinking fountains)	t	804	634	648	2.2
ferrous chloride	t	30	45	37	-17.8
phosphoric acid	t	16	13	18	38.5
WASTE WATER TREATMENT					
materials					
polyelectrolyte emulsion	t	378	289	307	6.2
sodium hypochlorite	t	70	61	64	4.9
peracetic acid, caustic soda, polyamine/anti-foaming agent	t	15	13	12	-7.7
polyaluminium chloride (PAC)	t	4,354	4,382	4,151	-5.3
lime	t	530	527	693	31.5
acetic acid 80%	t	524	712	684	-3.9
OTHER CONSUMPTION					
drinking water (*)	m³	n/a	182,775	275,109	50.5

(*) The figure has been estimated.

ENERGY CONSUMPTION	u.m.	2019	2020	2021	Δ% 2021/2020
FUELS					
process fuels - wastewater					
methane	Sm ³	64,541	84,214	90,109	7.0
biogas produced	m ³	668,720	609,120	593,478	-2.6
heating fuels					
methane	Sm ³	51,059	60,429	53,431	-11.6
diesel fuel	l	4,600	4,500	5,000	11.1
lpg	l	1,960	1,822	1,750	-4.0
vehicle fuels					
diesel	l	353,462	349,724	360,131	3.0
petrol	l	16,404	26,913	26,172	-2.8
ELECTRICITY (*)					
total electricity for drinking water	GWh	76.9	72.6	71.2	-1.9
<i>electricity for water pumping stations</i>	GWh	75.4	71.4	69.6	-2.5
<i>electricity for offices</i>	GWh	1.5	1.2	1.6	33.3
total electricity for waste water	GWh	36.4	35.9	35.0	-2.5
<i>electricity for treatment</i>	GWh	32.5	31.5	30.5	-3.2
<i>electricity for pumping stations</i>	GWh	3.8	4.3	4.4	2.3
<i>electricity for offices</i>	GWh	0.1	0.1	0.1	-

(*) The figures have been restated after final calculations, and varies from the figure published last year.

ENERGY EFFICIENCY (2019-2021)

action	energy savings achieved (kWh)		
	2019	2020	2021
network efficiency improvement	1,350,000	4,110,000	3,195,000
Osmannoro plant – new process blower	60,000	-	-
Villamagna 90 office - LED relamping	6,100	10,700	-
relamping offices	-	-	6,700

The greatest energy savings in 2021 can be traced back to the works on the water networks aimed at reducing losses, which allowed an estimated energy saving of 3,195 MWh. Also significant are the works for pumping of the Coverciano Aqueduct to reduce dissipation and dispersion and improve the quality of the power supply; the

installation of a new pump and an impeller in the Anconella water purifier stations, for the more efficient management of intermediate flows and the minimisation of dissipative regulations when the required flow rates are lower (night-time hours). These interventions will create savings from 2022.

WASTE	u.m.	2019	2020	2021	Δ% 2021/2020
SPECIFIC WASTE FROM TREATMENT OF WASTE WATER					
treatment sludge	t	30,145	28,760	30,873	7.3
sand and sediment from treatment	t	1,274	1,328	1,284	-3.3
WASTE EXCLUDING SLUDGE AND SAND					
hazardous waste	t	54.4	32.6	83.6	156.4
non-hazardous waste	t	8,356	8,205 (*)	7,173	-12.6

(*) The figure was restated following actual recorded consumption.

TOTAL COD IN INPUT AND OUTPUT - SAN COLOMBANO TREATMENT PLANT (2019-2021)

(t/year)	2019	2020	2021
COD _{in}	17,463	14,536	14,851
COD _{out}	1,403	1,321	1,691

OUTPUT PARAMETERS - SAN COLOMBANO TREATMENT PLANT (2019-2021)(*)

parameter	average values (mg/l) 2019	average values (mg/l) 2020	average values (mg/l) 2021
BOD ₅	1.5	2.2	2.1
COD	12.8	13.8	15.6
SST	4.1	4.8	4.9
NH ₄ ⁺	0.6	0.5	1.0
phosphorous	0.8	0.8	0.7

(*) It should be noted that the San Colombano waste water treatment plant (600,000 population equivalent) treats about half of Publiacqua's global waste water.

OUTPUT PARAMETERS FOR THE MAIN TREATMENT PLANTS (2019-2021) (*)

parameter	average values (mg/l) 2019	average values (mg/l) 2020	average values (mg/l) 2021
BOD ₅	2.6	2.2	2.1
COD	18.2	14.3	17.1
SST	6.3	4.9	4.7
NH ₄ ⁺	2.9	0.7	1.1
phosphorous	1.6	0.9	0.8

(*) The figures include 38 treatment plants, including San Colombano, which treat a total of 98% of wastewater and 96% of the organic load (COD) of Publiacqua.

PURIFICATION EFFICIENCY OF THE MAIN TREATMENT PLANTS (2019-2021)

parameter	average values (%) 2019	average values (%) 2020	average values (%) 2021
100 x (COD _{in} - COD _{out})/COD _{in}	91.2	89.4	93.2
100 x (SST _{in} - SST _{out})/SST _{in}	94.8	95.1	92.3
100 x (NH ₄ ⁺ _{in} - NH ₄ ⁺ _{out})/NH ₄ ⁺ _{in}	98.0	97.9	95.8
100 x (PO ₄ ⁻³ _{in} - PO ₄ ⁻³ _{out})/PO ₄ ⁻³ _{in}	74.8	74.0	72.7

PURIFICATION EFFICIENCY OF THE 38 MAJOR TREATMENT PLANTS (2019-2021) (*)

parameter	average values (%) 2019	average values (%) 2020	average values (%) 2021
100 x (COD _{in} - COD _{out})/COD _{in}	92.0	90.9	88.4
100 x (SST _{in} - SST _{out})/SST _{in}	95.6	96.1	93.9
100 x (NH ₄ ⁺ _{in} - NH ₄ ⁺ _{out})/NH ₄ ⁺ _{in}	96.7	97.4	95.8
100 x (PO ₄ ⁻³ _{in} - PO ₄ ⁻³ _{out})/PO ₄ ⁻³ _{in}	72.0	73.3	73.0

(*) The figures include 38 treatment plants, including San Colombano, which treat a total of 98% of wastewater and 96% of the organic load (COD) of Publiacqua.

ACQUE

Acque SpA manages the Integrated Water Service in the area of Optimal Territorial Conference 2 Lower Valdarno on the basis of the concession agreement issued by the Autorità Idrica Toscana (AIT), consisting of 53 Municipalities in the provinces of Pisa, Lucca, Florence, Pistoia and Siena, with a total population of approximately 735,000 user accounts served.

MANAGEMENT SYSTEMS

Acque has implemented an **Integrated Management System based on quality, environment, safety, energy efficiency and social responsibility, road safety and the prevention of corruption**. In addition, the laboratory is accredited pursuant to the **UNI CEI EN ISO/IEC 17025:2018** standard and the Pagnana treatment plant in Empoli has **EMAS IV registration**.

QUALITY DELIVERED: MAIN INTERVENTIONS ON THE NETWORKS AND CONTROLS ON DRINKING WATER AND WASTE WATER**SIZE OF NETWORK, MAIN WORKS, METERS AND CHECKS ON DRINKING WATER AND NETWORKS (2021)**

size of drinking-water network (*) - data in GIS	6,024 km (815 km of supply network, 5,209 km of distribution)
TYPE OF WORK	
interventions due to network failure/leak detection	18,677 interventions (18,242 due to faults, 435 leak detection)
meter installations (new installation and replacement)	20,991 interventions (7,087 new installation, 13,904 replacements)
network extension	0.4 km of expanded network
network reclamation	49 km of reclaimed network
drinking water quality control	9,301 samples collected and 297,342 tests performed

SIZE OF NETWORK, WORKS AND CHECKS ON SEWERAGE WATER AND NETWORKS (2021)

size of sewerage network - data in GIS	3,080 km
TYPE OF WORK	
interventions due to network failure	3,243 interventions
planned interventions	1,532 interventions
network extension	0.6 km of expanded network
network reclamation	2.85 km of reclaimed network
quality control on wastewater for sewerage networks	7,829 samples collected and 122,803 tests performed

(*) The figures are estimated and coincide with the RQTI 2020 amounts sent to ARERA at the end of 2021.

HUMAN RESOURCES IN FIGURES**GENERAL DATA ON PERSONNEL (2020-2021)**

(no.)	2020			2021		
	men	women	total	men	women	total
composition of the staff						
executives	2	2	4	2	2	4
managers	6	4	10	7	4	11
clerical workers	96	158	254	95	159	254
workers	149	0	149	150	0	150
total	253	164	417	254	165	419
contract type						
staff with permanent contract	247	161	408	249	163	412
<i>(of which) part-time staff</i>	2	29	31	1	30	31
permanent staff	6	3	9	0	2	2
staff under apprenticeship contracts	0	0	0	5	0	5
total	253	164	417	254	165	419
changes						
incoming staff	10	5	15	11	2	13
outgoing staff	9	0	9	10	1	11
turnover rate (%)	7.5	3.0	5.8	8.3	1.8	5.8
incoming rate (%)	4.0	3.0	3.6	4.3	1.2	3.1
outgoing rate (%)	3.6	-	2.2	3.9	0.6	2.6

INDUSTRIAL ACCIDENTS AND FREQUENCY AND SEVERITY INDICES (2020-2021)(*)

	2020	2021
accidents (no.)	3	7
total days of absence (**)	62	359
hours worked	667,740	654,851
frequency index (FI) (number of accidents per 1,000,000/working hours)	4.49	10.69
severity index (SI) (days of absence per 1,000/working hours)	0.09	0.55

(*) The increase in the number of accidents and the extent of severity compared to the previous year is linked to the full resumption of operations, which in 2020, had been reduced as a result of the lockdown period caused by the Covid-19 pandemic.

(**) The value also excludes days of absence related to persistent or reopened injuries from previous years.

TRAINING 2020-2021**course type, hours provided and costs (*)**

course type	courses (no.)		training (hours)		costs (€)	
	2020	2021	2020	2021	2020	2021
IT	4	2	282	403	4,302	0
new hires	0	1	0	1,001	0	0
technical-specialised	29	33	674	1,766	11,115	12,488
managerial	2	3	80	97	2,020	270
safety	26	36	1,610	4,105	17,670	9,891
environment	1	1	48	8	0	0
cross-cutting	9	4	851	148	12,661	0
training pursuant to Legislative Decree no. 231/01	2	1	228	250	3,488	0
e-learning training	1	7	27	386	404	0
total	74	88	3,800	8,164	51,660	22,649

employees trained (**)						
(no.)	2020			2021		
	men	women	total	men	women	total
	227	135	362	286	174	460
breakdown of training hours by qualification						
executives	18	10	28	116	32	148
managers	105	81	186	161	43	204
clerical workers	879	1,540	2,419	1,933	3,314	5,247
workers	1,167	0	1,167	2,565	0	2,565

(*) Emergency tests are excluded; by new hires, we mean the coaching of new staff by more experienced workers.

(**) The figures are higher than the number of employees, as they include employees of other companies, posted workers and workers who provided services only for a few months of the year.

ENVIRONMENTAL ACCOUNTS

PRODUCTS AND ANALYTICAL TESTS	u. m.	2019	2020	2021	Δ% 2021/2020
WATER BALANCE (*)					
drinking water from the environment	Mm³	76.94	74.74	74.74	-
<i>from the surface</i>	Mm ³	3.24	3.27	3.27	-
<i>from wells</i>	Mm ³	59.84	57.32	57.32	-
<i>from springs</i>	Mm ³	5.86	6.29	6.29	-
<i>of which water from other aqueduct systems</i>	Mm ³	7.99	7.86	7.86	-
total drinking water leaving the aqueduct system (e) = (a+b+c+d)	Mm³	46.18	46.08	46.08	-
total drinking water dispensed and billed in the network (a)	Mm³	43.97	43.63	43.63	-
<i>measured volume of water delivered to users</i>	Mm ³	43.97	43.63	43.63	-
<i>volume consumed by users and not measured</i>	Mm ³	0	0	0	-
total drinking water authorised and not billed in the network (b)	Mm³	0.30	0.28	0.28	-
<i>measured unbilled authorised consumption</i>	Mm ³	0.08	0.07	0.07	-
<i>unmeasured unbilled authorised consumption</i>	Mm ³	0.22	0.21	0.21	-
drinking water exported to other systems (c)	Mm³	1.04	0.96	0.96	-
measured process losses (d)	Mm³	1.22	1.09	1.09	-
LOSS ASSESSMENT ACCORDING TO ARERA RESOLUTION 917/17 R/IDR					
water leaks	Mm ³	30.8	28.7	28.7	-
water loss percentages	%	40.0	38.3	38.3	-
TREATED WASTE WATER					
water treated in the main treatment plants	Mm³	46.7	46.4	44.6	-3.9
ANALYTICAL TESTS ON DRINKING WATER AND WASTE WATER					
no. analytical tests on drinking water (including analytical tests on surface water)	no.	329,752	357,585	297,342	-16.8
no. analytical tests on waste water	no.	128,459	122,766	122,803	-

(*) The figures for 2020 have been restated following consolidation and differ from those previously published. The 2021 figures are estimated to be equal to those for 2020.

RESOURCES USED	u. m.	2019	2020	2021	Δ% 2021/2020
COLLECTION, SUPPLY AND DISTRIBUTION OF DRINKING AND NON-DRINKING WATER					
materials					
laboratory reagents (chemical section and microbiological section)	t	2.03	2.31	1.86	-19.5
sodium hypochlorite	t	208.82	180.13	231.26	28.4
hydrochloric acid	t	351.09	477.99	339.45	-29.0
potassium permanganate	t	2.75	4.17	4.12	-1.2
aluminium polychloride	t	181.73	208.59	194.19	-6.9
DREWO 8155 PG powder	t	5.00	0	0	-
DREFLO 908 PG powder	t	3.98	0	0	-
salt in bags	t	7.20	1.00	1.00	-
sodium chloride	t	354.34	366.69	362.42	-1.2
caustic soda	t	0.55	2.37	0.75	-68.4
citric acid	t	1.23	2.55	0.85	-66.7
alifons L	t	0	0.13	0	-
aluminium polychlorosulphate	t	11.55	0	0	-

WASTE WATER TREATMENT

materials

polyelectrolyte emulsion	t	169.08	233.87	193.57	-17.2
aluminium polychloride	t	12.00	19.50	7.50	-61.5
ferric chloride for sludge dehydration	t	496.03	527.69	545.60	3.4
sodium hypochlorite for final disinfection	t	11.55	29.20	11.05	-61.9
acetic acid	t	0.10	0	0.05	5
sulphuric acid	t	1.25	0.99	0	-1
caustic soda (sodium hydroxide) - Solvay	t	1.15	2.02	1.35	-33.2
citric acid removed	t	0	0	0.05	-
biotek base L - biological reactivator	t	0.04	0.04	0	-
biotek clar - biological reactivator	t	0.25	0.25	0.30	20.0
desmell Bio L - odorigenic emissions treatment	t	0.08	0	0.10	-
nutrients	t	545.50	1,135.59	1,320.49	16.3

OTHER CONSUMPTION

drinking water (*)	m³	297,077	284,305	284,305	-
<i>drinking water consumed for non-industrial water uses (offices, outside showers etc.)</i>	<i>m³</i>	<i>118,963</i>	<i>215,604</i>	<i>215,604</i>	<i>-</i>
<i>drinking water consumed for process water uses (washing machinery and bays, etc.)</i>	<i>m³</i>	<i>178,114</i>	<i>68,701</i>	<i>68,701</i>	<i>-</i>

(*) The figures have been restated following consolidation and differ from those previously published. The 2021 figures are estimated to be equal to those for 2020.

In 2021, Acque used approximately **418,873 m³ of recovered water** for washing the sheets of sludge dehydration equipment (belt presses) and for the backwashing of the Pollino water plant filters in Porcari (Lucca).

ENERGY CONSUMPTION

	u.m.	2019	2020	2021	Δ% 2021/2020
FUELS					
process fuels - drinking water/non-drinking water					
diesel fuel	l	1,300	1,500	2,050	36.7
process fuels - wastewater					
diesel fuel	l	1,100	0	500	-
heating fuels					
methane	Sm ³	56,244	50,743	55,583	-9.5
lpg	l	17,781	15,419	17,847	-15.7
vehicle fuels					
diesel	l	202,128	228,802	240,882	5.3
petrol	l	33,962	15,373	26,950	75.3
methane	kg	52,084	23,884	15,308	-35.9
ELECTRICITY					
total electricity for drinking water	GWh	53.80	51.09	50.99	-0.2
<i>electricity for water pumping stations</i>	<i>GWh</i>	<i>53.34</i>	<i>50.72</i>	<i>50.33</i>	<i>-0.8</i>
<i>electricity for offices</i>	<i>GWh</i>	<i>0.46</i>	<i>0.37</i>	<i>0.66</i>	<i>78.4</i>
total electricity for waste water	GWh	32.83	32.29	31.90	-1.2
<i>electricity for treatment</i>	<i>GWh</i>	<i>25.70</i>	<i>24.66</i>	<i>24.49</i>	<i>-0.7</i>
<i>electricity for pumping stations</i>	<i>GWh</i>	<i>6.85</i>	<i>7.40</i>	<i>7.00</i>	<i>-5.4</i>
<i>electricity for offices</i>	<i>GWh</i>	<i>0.28</i>	<i>0.23</i>	<i>0.41</i>	<i>78.3</i>

ENERGY EFFICIENCY (2019-2021)

action	energy savings achieved (kWh)		
	2019	2020	2021
Pieve a Nievole (PT) inter-municipal treatment plant: implementation of microbubbles oxidative section Line 2	-	-	303,095
treatment plant via Hangar Pontedera (PI): implementation of microbubbles oxidative section	261,150	252,650	208,020
La Fontina (PI) treatment plant: replacement of air distribution plates lines 1 and 2	-	577,230	472,605

Acque has implemented energy efficiency improvements, such as the replacement of the oxygenation system on the Pieve a Nievole and Pontedera (PI) treatment plants, which led achieving, in 2021, energy savings indicated in the table equal to over 983 MWh.

WASTE	u.m.	2019	2020	2021	Δ% 2021/2020
SPECIFIC WASTE FROM TREATMENT OF WASTE WATER					
treatment sludge	t	21,953.18	19,879.80	20,246.84	1.8
sand and sediment from treatment	t	1,279.04	1,981.55	1,412.77	-28.7
WASTE SLUDGE AND SAND					
hazardous waste	t	42.93	24.96	16.80	-32.7
non-hazardous waste	t	61,408.12	72,919.75	63,778.23	-12.5

TOTAL COD IN INPUT AND OUTPUT (2019-2021)

(t/year)	2019	2020	2021
COD _{in}	22,017	22,808	22,021
COD _{out}	1,382	1,268	1,212

OUTPUT PARAMETERS FOR THE MAIN TREATMENT PLANTS (2019-2021) (*)

parameter	average values (mg/l) 2019	average values (mg/l) 2020	average values (mg/l) 2021
BOD ₅	6.3	5.5	4.7
COD	27.9	25.5	24.3
SST	7.0	5.0	5.9
NH ₄ ⁺	3.5	3.0	3.3
phosphorous	2.3	2.0	2.2

(*) Installations with a treatment capacity greater than or equal to 10,000 population equivalent are considered.

PURIFICATION EFFICIENCY OF THE MAIN TREATMENT PLANTS (2019-2021)(*)

parameter	average values (%) 2019	average values (%) 2020	average values (%) 2021
100 x (COD _{in} - COD _{out})/COD _{in}	93.7	95.0	95.4
100 x (SST _{in} - SST _{out})/SST _{in}	95.7	97.8	98.2
100 x (NH ₄ ⁺ _{in} - NH ₄ ⁺ _{out})/NH ₄ ⁺ _{in}	90.6	92.7	92.7
100 x (PO ₄ ⁻³ _{in} - PO ₄ ⁻³ _{out})/PO ₄ ⁻³ _{in}	68.8	73.0	68.3

(*) Installations with a treatment capacity greater than or equal to 10,000 population equivalent are considered.

Overseas activities

Acea operates abroad, in the water sector¹⁷³, with regards to **technical aspects or the commercial management of the service**, including through **staff training** and the **transfer of know-how** to local businesses. In particular, it is present in Honduras, Dominican Republic and Peru through companies created **in partnership with local and international stakeholders**, in an area inhabited by over 10 million people.

AGUAS DE SAN PEDRO

Agua de San Pedro ASP is the holder of a 30-year contract for the management of the integrated water service in the city of San Pedro Sula in Honduras, and during the year it continued with the projects for the **expansion, treatment and improvement of the water service and sewerage network** in the city. The water network stretches approximately 2,170 km and the sewerage network approximately 1,270 km.

The Company has a **Quality Management System** certified according to the **UNI ISO 9001:2008** standard and the laboratories are accredited according to the **UNI ISO/IEC 17025:2005** standard: the process is underway to obtain the **Anti-Corruption Management** certificate according to the **UNI ISO 37001** standard.

AGUAS DE SAN PEDRO SA – MAIN COMPANY AND OPERATING DATA

country (area)	Honduras (San Pedro Sula)
users	122,308
inhabitants served	733,848
customer	municipal administration
duration of the contract	01.02.2001 – 01.02.2031
purpose of the project	concession of the integrated water service for the town of San Pedro de Sula
shareholders	Acea SpA 60.65%, Ireti SpA 39.35%
no. of employees	388
turnover (in € thousand)	37,210

¹⁷³ Overseas activities have a limited incidence from an economic and financial viewpoint, in terms of consolidation percentage, but a brief description of them is given here because of their social importance.

The **pandemic emergency** slowed certain activities, such as establishment of new connections and other maintenance works, but operating teams have always been in the field guaranteeing service continuity. The Company **suspended service disconnection** for customers with unpaid bills, and payment periods were extended without applying interest expense and for customers without meters invoicing continued only of the administrative component for very low economic value.

From the start of the emergency, **biosecurity and personnel-protection measures** have been established, updated on the basis of the guidelines issued by the government and WHO protocols, including: preparation of the **biosecurity protocol** that reviewed working methods and the use of company tools to ensure social distancing and avoid contact, **provision of PPE** to limit the spread of the virus and specific **training** of personnel with clear and simple messages on how to take care, in order to protect each other, in the workplace and in the family, and the role of water during the pandemic to guarantee hygiene procedures. In addition, a Covid-19 **vaccination** programme was implemented for all employees.

Despite the difficulties, the Company continued activity to offer **technical assistance to rural communities** and implemented **initiatives for the protection of the environment**, in the context of the **programme for the conservation** of the El Merendón **natural reserve**, declared a protected area for the production of water in San Pedro Sula. The initiatives include:

- the “Un millón de Árboles para el Merendón” **reforestation** project, planting approximately 82 thousand fruit and wood trees, the reforestation of an area of 107 hectares for the benefit of 308 producers;
- **fire prevention**. In this regard, in recent years, the Company has contributed with construction of **surveillance towers** and is ac-

tive with campaigns for protection of the territory and involvement of the fire-prevention team. In 2021, the team intervened to **put out 2 fires** in Merendón, which involved 11 hectares of forests and, thanks to the surveillance towers, they managed to prevent 160 fires from starting in the Rio Manchaguala basin;

- **advice on the 3 Sectoral Committees for Water Management**, including support in the preparation of reports and plans for the preservation of supply micro-basins;
- **social and technical assistance** for the rural communities of Merendón, with organisation of 25 laboratories in the micro-basin communities of Rio Manchaguala, Rio Frio and El Palmar, concerning maintenance of biofilters, hygiene and environmental care (for a total of 200 people involved from 25 communities); periodic supervision was carried out on the 2,200 drinking water biofilters installed in just as many homes in the Merendón communities, and training was provided to children belonging to the Infant Health Committees on the use and maintenance of biofilters, as well as on sanitation practices for the protection of health and the environment.

ACEA DOMINICANA SA

Acea Dominicana deals with the commercial management of the water service **in the northern and eastern areas of Santo Domingo** in the **Dominican Republic**. The activities include the management of customer relations, the billing cycle and cost estimates, the installation of new meters (21,800 meters installed in 2021), maintenance of existing meters and directing the works for new connections.

The Company implemented a **Quality Management System** certified according to the **UNI ISO 9001:2015 standard**, which covers all activities performed.

ACEA DOMINICANA SA – MAIN CORPORATE AND OPERATING DATA

country (area)	Dominican Republic (north and east Santo Domingo)
users served	188,371
customers	Corporación del Acueducto y Alcantarillado de Santo Domingo (CAASD) and Corporación de Acueducto y Alcantarillado de Boca Chica (CORAABO)
duration of the contract	01/10/2003 – 30/09/2023
purpose of the project	commercial management of the water service
shareholders	Acea SpA 100%
no. of employees	139
turnover (in € thousand)	4,175

Due to the pandemic emergency and its persistence, educational campaigns were suspended aimed at students of schools, issued in previous years to raise awareness on the correct use of water, along with campaigns on reforestation. For the former, an attempt was made to introduce the virtual mode, but due to the lack of vehicles and electric service in many public schools in East and North Santo Domingo, it was not possible to provide the service.

During the year, **employee training on occupational health** continued, and, in particular, on stress management, the quality management system and customer service and support, for a total of 642 hours of training. Regarding **health and safety**, in order to contain

the spread of Covid-19, the Company adhered to regulations issued and implementing measures to protect its employees from infection.

OPERATING COMPANIES IN PERU

The operating Companies in Lima (Peru) manage part of the water services on behalf of the local publicly owned water company SEDAPAL (drinking water and sewerage Service in Lima) with projects defined in their calls for tenders. The Group companies active in 2021 were: Consorcio Agua Azul, Consorcio Servicio Sur, Consorcio Acea and Consorcio Acea Lima Sur.

MAIN CORPORATE AND OPERATING DATA

country (area)	Peru (Lima)
customer	Sedapal (Drinking water and sewerage service in Lima, state owned)
duration of the contracts	<p>Consorcio Agua Azul: 07/04/2000 – 18/06/2027</p> <p>Consorcio Servicio Sur: 24/08/2018 – 24/08/2021</p> <p>Consorcio Acea: 5/12/2020 – 5/12/2023</p> <p>Consorcio Acea Lima Norte: 7/01/2021 – 7/01/2024</p> <p>Consorcio Acea Lima Sur: 18/12/2021 – 18/12/2024</p>
shareholders	<p>Consorcio Agua Azul: Acea SpA (44%), Marubeni Co. (29%), Inversiones Liquidas SAC (27%)</p> <p>Consorcio Servicio Sur: Acea International (50%), Acea Ato 2 (1%), Conhydra (29%), Valjo (14%), India (6%)</p> <p>Consorcio Acea: Acea Perú SAC (99%), Acea Ato 2 (1%)</p> <p>Consorcio Acea Lima Norte: Acea Perú SAC (99%), Acea Ato 2 (1%)</p> <p>Consorcio Acea Lima Sur: Acea Perú SAC (99%), Acea Ato 2 (1%)</p>
no. of employees	<p>Consorcio Agua Azul: 31</p> <p>Consorcio Servicio Sur: 41 (August 2021)</p> <p>Consorcio Acea: 949</p> <p>Consorcio Acea Lima Norte: 578</p> <p>Consorcio Acea Lima Sur: 95</p>
turnover (in € thousand)	<p>Consorcio Agua Azul: 12,608</p> <p>Consorcio Servicio Sur: 4,290</p> <p>Consorcio Acea: 7,202</p> <p>Consorcio Acea Lima Norte: 10,443</p> <p>Consorcio Acea Lima Sur: 21</p>

Specifically:

- **Consorcio Agua Azul**, a subsidiary of Acea SpA, manages the treatment and supply of drinking water in the **northern area of Lima**; to this end, using the surface and underground waters of the Chillón river it built a water treatment plant capable of satisfying the drinking water needs of the area, which it will manage until 2027, when it will be transferred to the State;
- **Consorcio Servicio Sur** is a special purpose vehicle led by Acea International in partnership with Peruvian partners, which manages the corrective maintenance contract for the water and sewerage system in the **area south of Lima**. The contract, which began in August 2018 and finished in August 2021, was implemented **in the area of Surquillo** and involved the extraordinary maintenance works required for the maintenance of full functionality of the water and sewerage service, and of hygiene, sanitary and environmental conditions;
- **Consorcio Acea**, controlled by Acea Peru was awarded for the management and control of 253 pumping stations for drinking water serving the **Ate, Breña and San Juan de Lurigancho areas in the central area of Lima** at the end of 2020;
- the **Consorcio Acea Lima Norte**, attributable to Acea Peru, manages the maintenance of the drinking water and sewerage service for the **Comas and Callao areas in the northern area of Lima**;
- Since the end of 2021, the **Consorcio Acea Lima Sur**, a subsidiary of Acea Peru, has been carrying out maintenance activities on the drinking water and sewerage systems for the **Surquillo area in the southern area of Lima**.

Below is some significant information from the standpoint of sustainability relating to the various companies operating in Peru.

The **Consorcio Agua Azul** has adopted an **Integrated Quality and Environment System** according to **UNI ISO 9001:2015** and **UNI ISO 14001:2015** aimed at optimising production processes and reducing the environmental impact through energy efficiency and the

limited use of materials.

During the year, the **programme of health and safety in the workplace and first-aid training** continued, which for reasons connected to the health emergency was only provided to employees. Continuous training on the issue enabled **maintenance of the result of zero accidents at work** in 2021. The Company adopted biosecurity and personal-protection measures, limiting the number of personnel in the office and altering the shift patterns of operational teams, in addition to issuing **rapid antigen tests** and **molecular tests** for personnel. The pandemic has also caused the suspension of consolidated activities, carried out in previous years and with a positive impact on the territory, including courses organised with the Asociación de Productores Ecológicos organisation of the Chillón valley, on the use of fertilisers, crop treatment and maintenance of organic certification for farmed crops, and the training courses at the Faculty of Engineering of the National University of Peru and curricular internships for students. However, in 2021, the Consorcio resumed distribution of **educational kits** to 7 local schools, with the aim of developing a link with local communities, and in particular, to promote school attendance. For the Christmas holidays, the **children of local schools and children of employees were delivered toys and Christmas packages**.

From the standpoint of the **sharing economy**, **Consorcio Servicio Sur** allowed employees to use **company cars** for **commuting** and to share them with other employees. Regarding **health and safety**, in order to contain the spread of Covid-19, the Company introduced measures to limit infections amongst employees, including working from home and performance of **regular testing**. In addition, training was provided to employees in the context of **health prevention** during the year. Finally, the **Consorcio Acea** and the **Consorcio Acea Lima Norte** provided training to employees in 2021 regarding **health prevention** and aimed at making them aware of the vaccine in order to contain the spread of Covid-19.