

May 2023 - IX SIMPÓSIO GERMANO-CABO-VERDIANO DE ENERGIA

Eficiência Energética e Energias Renováveis para o Setor do Turismo em Cabo Verde



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01 GROUP: Background

> 20 years the renewable sector

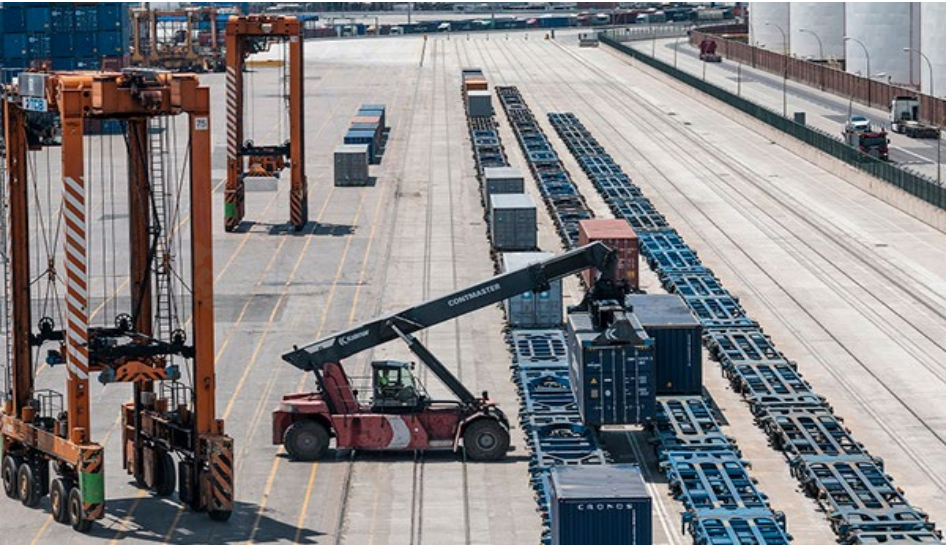
> 45 years in the energy sector

Family Blay 1928

EBRSA 1968
TERSACO 1981
TCB 1992
INVERSAGIT, SL 1998

Family Rovira 1975 | GASOILS ROVIRA, SL 1992

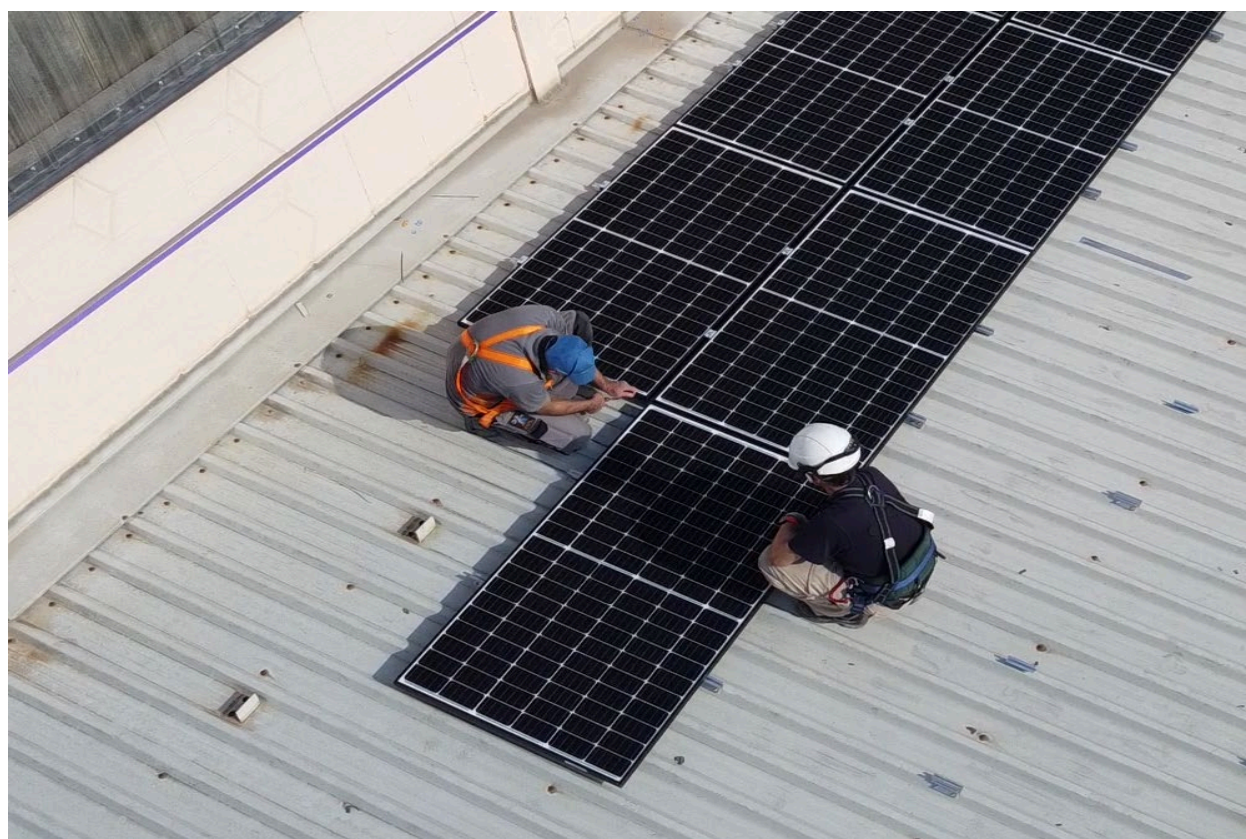
> 90 years in logistics and infrastructure management sector



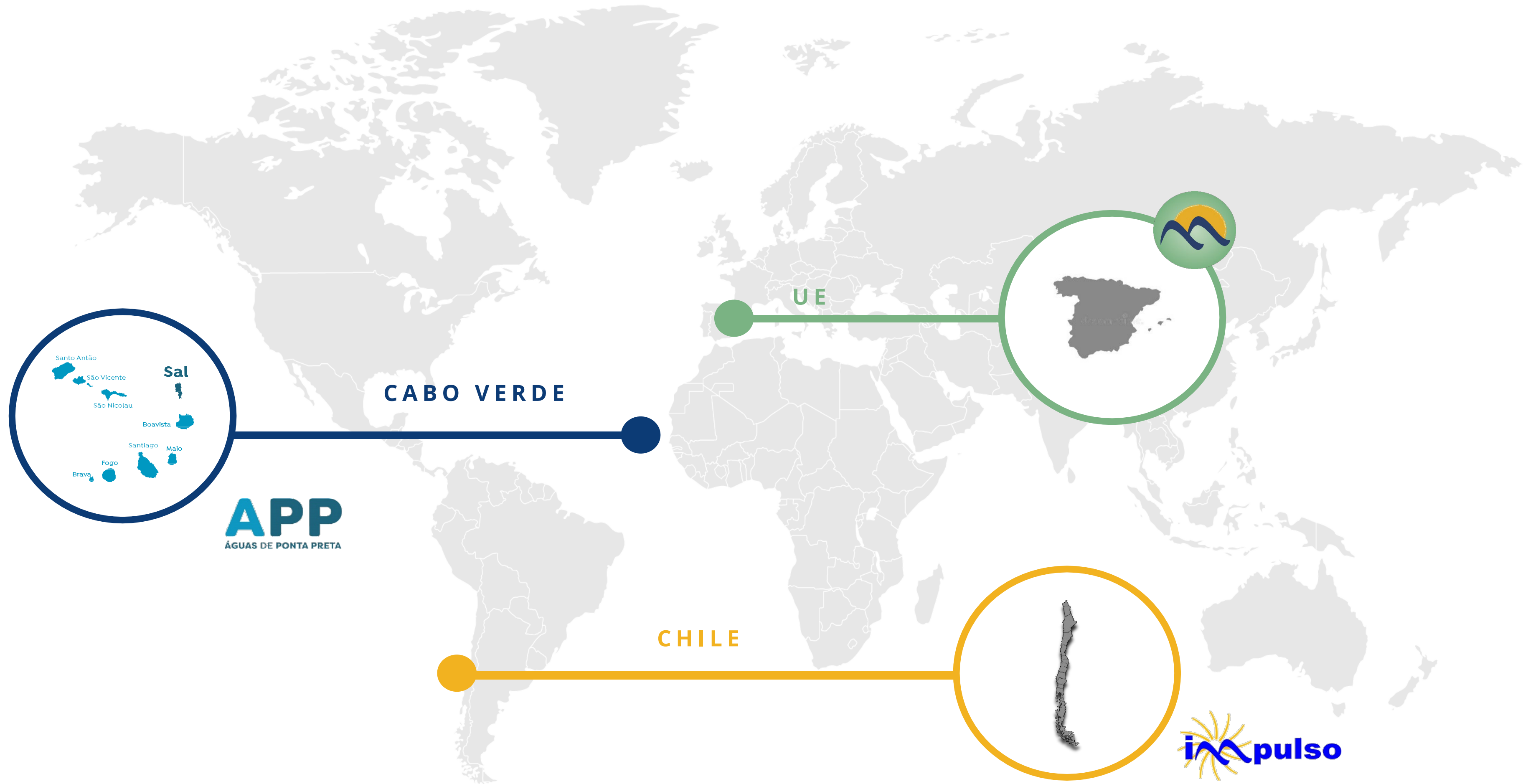
01 GROUP: Current Activities



Development, Investment and Operation of Water Cycle and Energy Infrastructures for Utility Services



01 GROUP: Current Activities / International Presence



01 GROUP: Aguas de Ponta Preta / Sal Island



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02 COUNTRY and SECTOR: Cabo Verde

GEOGRAPHICALLY

Located 500 Kms off the west coast of Africa
10 islands archipelago nine of which are inhabited.
Connectivity issues for service delivery, energy, water, education and health.
Only 10% of its territory is classified as arable land and mineral resources are limited.

SOCIOECONOMIC

Growth average (2016-19) 4.7 % (3.4 in per capita terms)
Poverty decline from 24.5 % in 2015 to 11.5 % in 2019
Overall deficit 1.8 % (2019) / 8.9 % (2020)
Development Partners are key contributors

TRADE BALANCE

On the demand side it was driven by net exports and private investment and consumption.
On the supply side growth was driven by tourism activities and growth in domestic non-tradable services.
The privatization efforts of the government helped support investor and consumer confidence.

ENERGY and WATER

Strategic factor for sustainable development
High dependence on primary energy sources.
Energy demand increasing (challenge)

Water Origen
97% dessalation

AREA - 4.033 km² (10 islands + 5 minors)

POPULATION (2020) – 556.857

GDP (2019) – 1.770.-M€

GNI per capita – 3.219.-€

TOURISM (2019) – 20% GDP



02 THE ORIGINAL PROJECT: The country, Cabo Verde

ENERGY

- Strategic factor for sustainable development
- High dependence on primary energy sources.
- Energy demand increasing (challenge)
 - *National Energy Sustainability Program (PNSE)*
 - *Energy Efficiency in Equipment and Buildings Project (PEEE)*

Ilha (2019)	Termical Prod. (kWh)	Renewable Prod. (kWh)	
Sal	66.589.975	25.691.350	27,8%
São Vicente	58.402.875	21.992.819	27,4%
Boa Vista	37.151.711	8.357.253	18,4%
Santiago	207.747.035	39.308.791	15,9%
Santo Antão	15.239.384	2.177.974	12,5%
Maio	3.843.360	177.962	4,4%
Fogo	14.309.504	633.178	4,2%
São Nicolau	6.999.796	143.690	2,0%
Brava	2.873.892	28.598	1,0%

Total Production (kWh)	511.669.146	
Termical Prod, (kWh)	413.157.532	80,7%
Renewable Prod. (kWh)	98.511.614	19,3%
	Eólica	16,9%
	Solar	2,3%

Fossil Fuel import

- 210.000.-Tn (2019)
- 172.000.-Tn (2020)
- Aprox 100.-M€

Uses

- 39% Intl. Marine
- 25% Aviation
- 18% Energy Production



02 COUNTRY and SECTOR: Cabo Verde / macroeconomic data

Tabela 101 - Produto Interno Bruto a preços correntes em Milhões de ECV (2016-2020)

	2016	2017	2018 ^P	2019 ^P	2020 ^P
Setor Primário	13 847	12 185	10 269	9 652	8 636
Setor Secundário	27 808	30 969	34 868	37 663	37 458
Setor Terciário	102 436	105 999	111 873	119 828	97 069
Total VAB	144 090	149 154	157 010	167 142	143 164
Impostos líquidos de subsídios sobre os produtos	21 692	23 944	26 688	28 060	21 747
PIB	165 782	173 097	183 698	195 202	164 911

Tabela 110 - PIB per capita (em ECV), por ilha (2013-2017)

	2013	2014	2015	2016	2017
Cabo Verde	300 139	297 870	302 381	312 067	321 945
Santo Antão	220 754	226 790	221 060	236 453	256 046
S. Vicente	298 107	307 561	312 391	300 644	325 054
S. Nicolau	251 850	264 177	250 749	242 455	271 167
Sal	523 864	498 558	495 827	689 219	591 369
Boa Vista	637 904	575 090	468 225	485 980	580 162
Maio	259 378	233 294	203 553	209 168	217 988
Santiago	290 601	286 019	296 222	289 619	298 066
Fogo	207 005	206 444	222 146	222 736	243 789
Brava	209 532	226 168	228 598	206 622	227 817

Fonte: INE, Contas nacionais

GDP (2019) – 1.770.-M€
GNI per capita – 3.219.-€

Tabela 128 - Movimento de passageiros, por natureza do tráfego, segundo os aeroportos

	Natureza	2016	2017	2018	2019	2020
Total	Doméstico	764 285	929 595	884 784	821 227	249 679
	Internacional	1 451 607	1 719 636	1 817 448	1 950 704	526 319
	Total	2 215 892	2 649 231	2 702 232	2 771 931	775 998
AIAC - Sal	Doméstico	161 116	181 670	183 405	176 892	46 469
	Internacional	753 580	911 119	1 001 231	1 015 936	261 693
	Total	914 696	1 092 789	1 184 636	1 192 828	308 162
AIPNM - Praia	Doméstico	286 083	370 425	367 897	328 450	106 564
	Internacional	236 501	291 931	269 443	320 520	103 798
	Total	522 584	662 356	637 340	648 970	210 362
AIAP - Boa Vista	Doméstico	65 382	79 084	69 387	63 430	17 325
	Internacional	399 667	433 694	456 393	511 452	124 463
	Total	465 049	512 778	525 780	574 882	141 788
AICE - S. Vicente	Doméstico	157 563	183 329	159 903	150 281	46 758
	Internacional	61 859	82 892	90 381	102 796	36 365
	Total	219 422	266 221	250 284	253 077	83 123
AD - Fogo	Doméstico	55 168	72 949	66 810	66 464	23 372
AD - S. Nicolau	Doméstico	26 476	27 038	23 536	21 977	4 965
AD - Maio	Doméstico	12 497	15 100	13 846	13 733	4 226

Fonte: Aeroportos e Segurança Aérea (ASA)

TOURISM (2019) – 20% GDP

Tabela 146 - Número de estabelecimentos, quartos, camas, capacidade de alojamento e pessoal ao serviço (2016 – 2020)

	2016	2017	2018	2019	2020
N.º Estabelecimentos	233	275	284	284	124
N.º de Quartos	11 435	12 463	13 187	13 092	2 614
N.º de Camas	18 382	20 421	21 046	21 059	4 094
Capacidade de Alojamento	24 376	26 987	27 860	27 911	5 655
Pessoal ao Serviço	7 742	8 825	9 417	9 050	1 577

Fonte: INE, Inventário Anual de Estabelecimentos Hoteleiros

Tabela 147 - Número de Estabelecimentos por tipo de estabelecimento de alojamento (2016 – 2020)

	2016	2017	2018	2019	2020
Total	233	275	284	284	124
Hotéis	64	69	73	73	29
Pensões	59	62	88	77	41
Pousadas	8	9	10	10	5
Hotéis-apartamentos	17	20	21	22	8
Aldeamentos turísticos	8	10	10	4	2
Residenciais	77	105	82	98	39

Fonte: INE, Inventário Anual de Estabelecimentos Hoteleiros

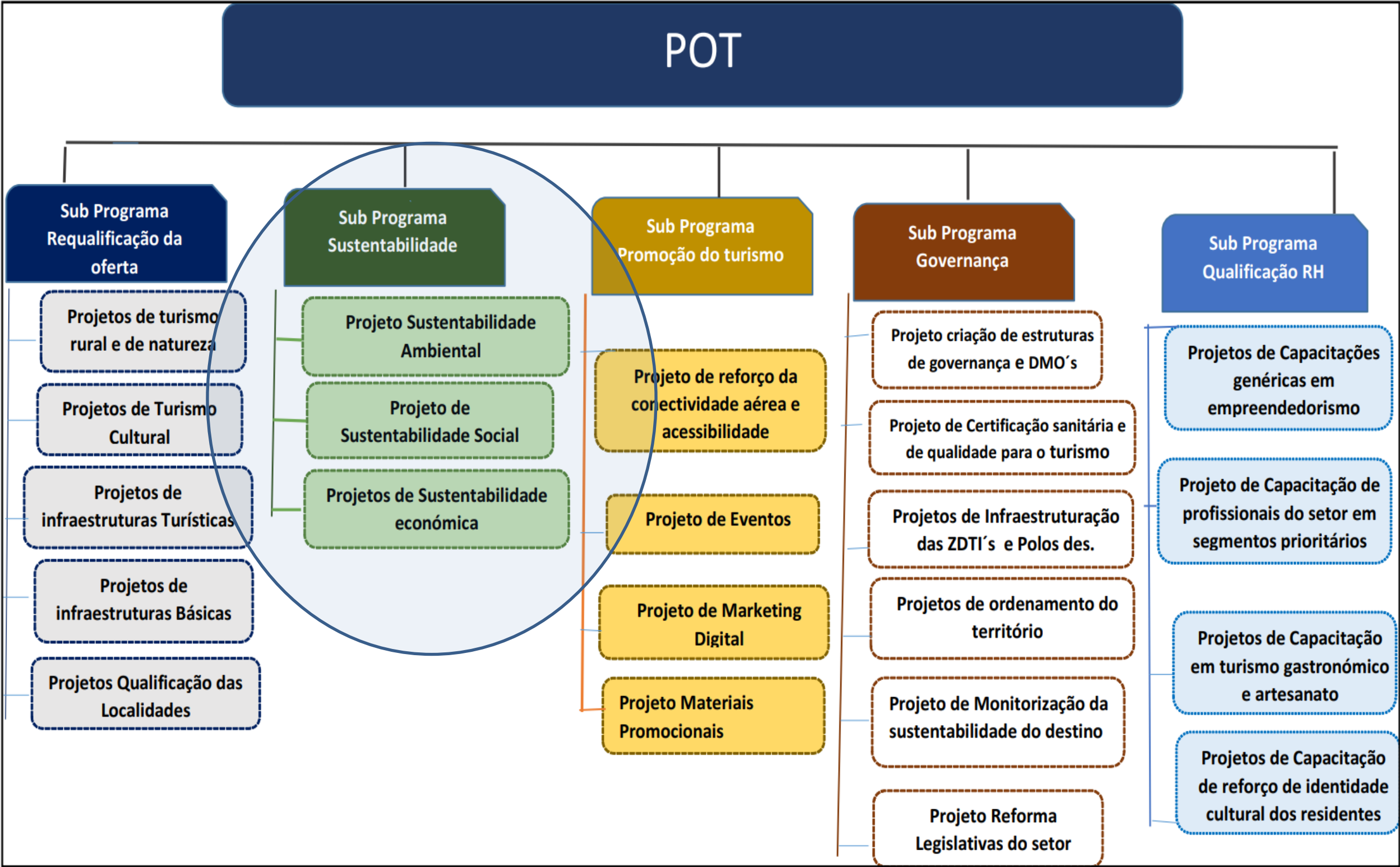
Tabela 154 - Dormidas nos estabelecimentos de alojamento turístico por país de residência habitual dos hóspedes (2016 – 2020)

	2016	2017	2018	2019	2020
Total	4 092 551	4 597 477	4 935 891	5 117 403	1 150 641
Cabo Verde					
Cabo-verdianos	122 423	130 504	171 564	185 789	70 965
Estrangeiros	5 835	7 655	4 783	9 949	5 689
Estrangeiros					
África do Sul	1 082	1 090	1 494	1 959	418
Alemanha	529 586	526 985	596 115	621 923	119 390
Áustria	7 489	8 618	16 306	42 428	10 730
Bélgica + Holanda	478 660	529 271	551 543	538 035	128 587
Espanha	43 356	47 605	65 393	73 576	10 062
Estados Unidos	14 174	16 782	18 510	23 982	5 515
França	325 497	353 888	401 530	403 394	108 646
Reino Unido	1 225 913	1 440 460	1 492 958	1 617 149	311 163
Itália	259 806	277 231	219 723	162 569	27 473
Portugal	318 095	356 868	364 059	413 932	50 540
Suíça	35 989	59 521	57 943	77 407	14 528
Outros países	724 646	840 999	973 970	945 311	286 935

Fonte: INE, Inquérito mensal à movimentação de hóspedes

02 COUNTRY and SECTOR: Tourism Sector

TOURISM SECTOR – 20% GDP (2019)
Programa Operacional do Turismo (POT)



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02 APP ORIGINAL PROJECT: Shareholder structure



DEVELOP TOURISM AREA - Ponta Preta

1998 / 2000

Promotor: Cabocan

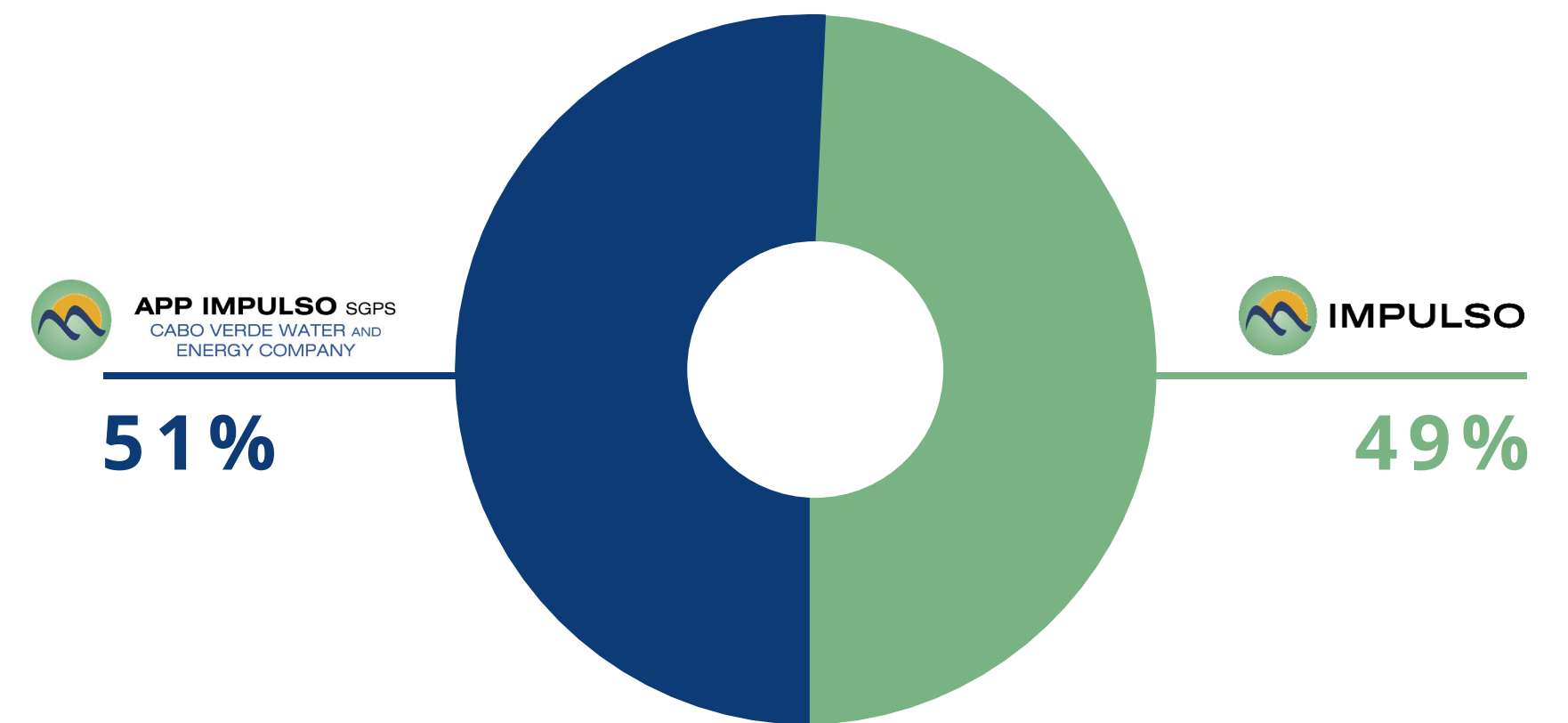
Land Area: 100 Ha

Capacity: 10.000 pax

UTILITY COMPANY - AGUAS de PONTA PRETA

Constituição: Maio de 2000

Início da Actividade: Setembro de 2001



02 APP ORIGINAL PROJECT: Company objectives



Sustainable development of the territory

Sustainable development of tourism

Quality service performance with service guarantee

Maximize use of existing resources (sea water / sun / wind)

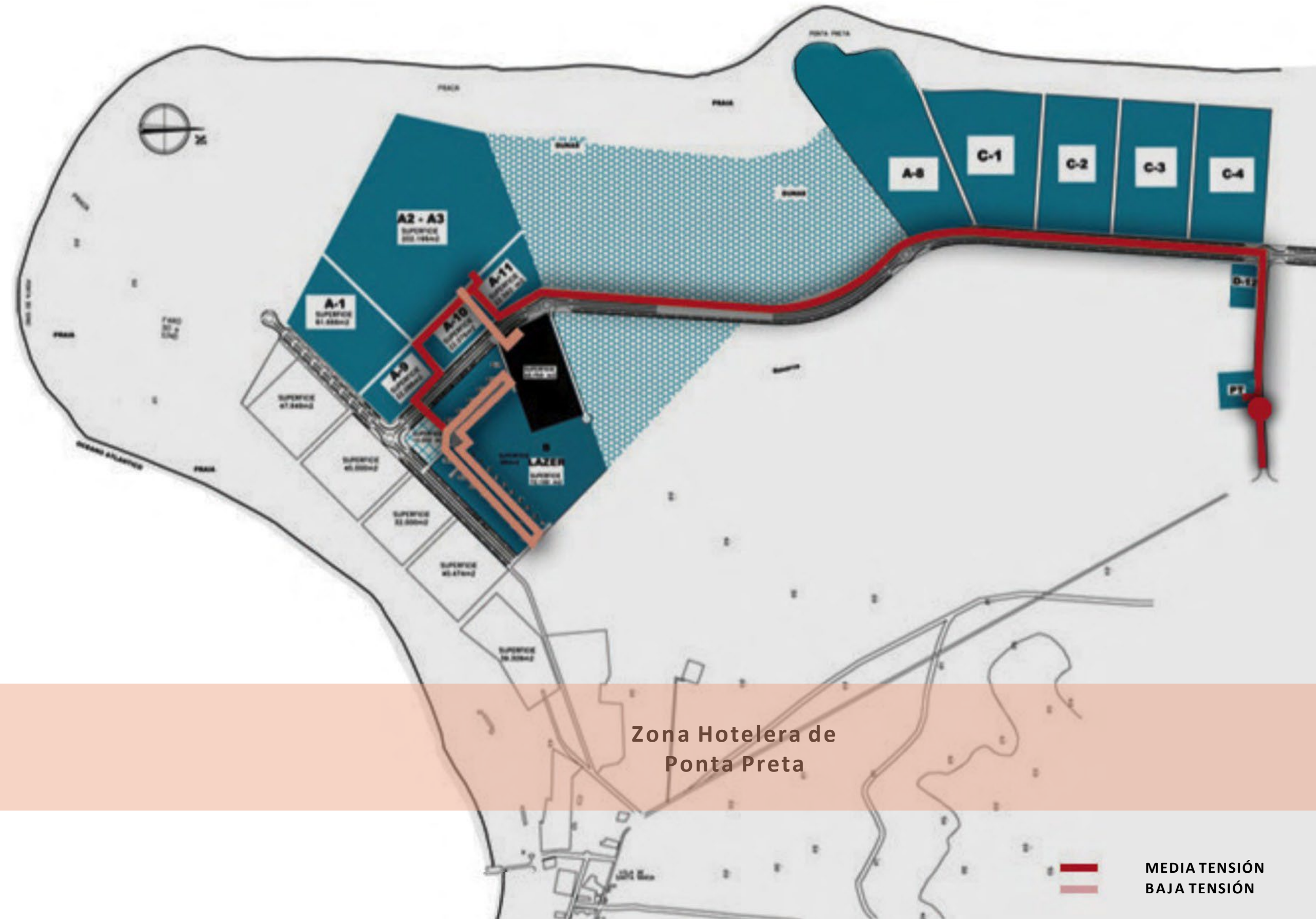
Introduction of a new resource (reuse of regenerated wastewater)

Integrated resource planning

Economic sustainability of the project with adequate financing criteria

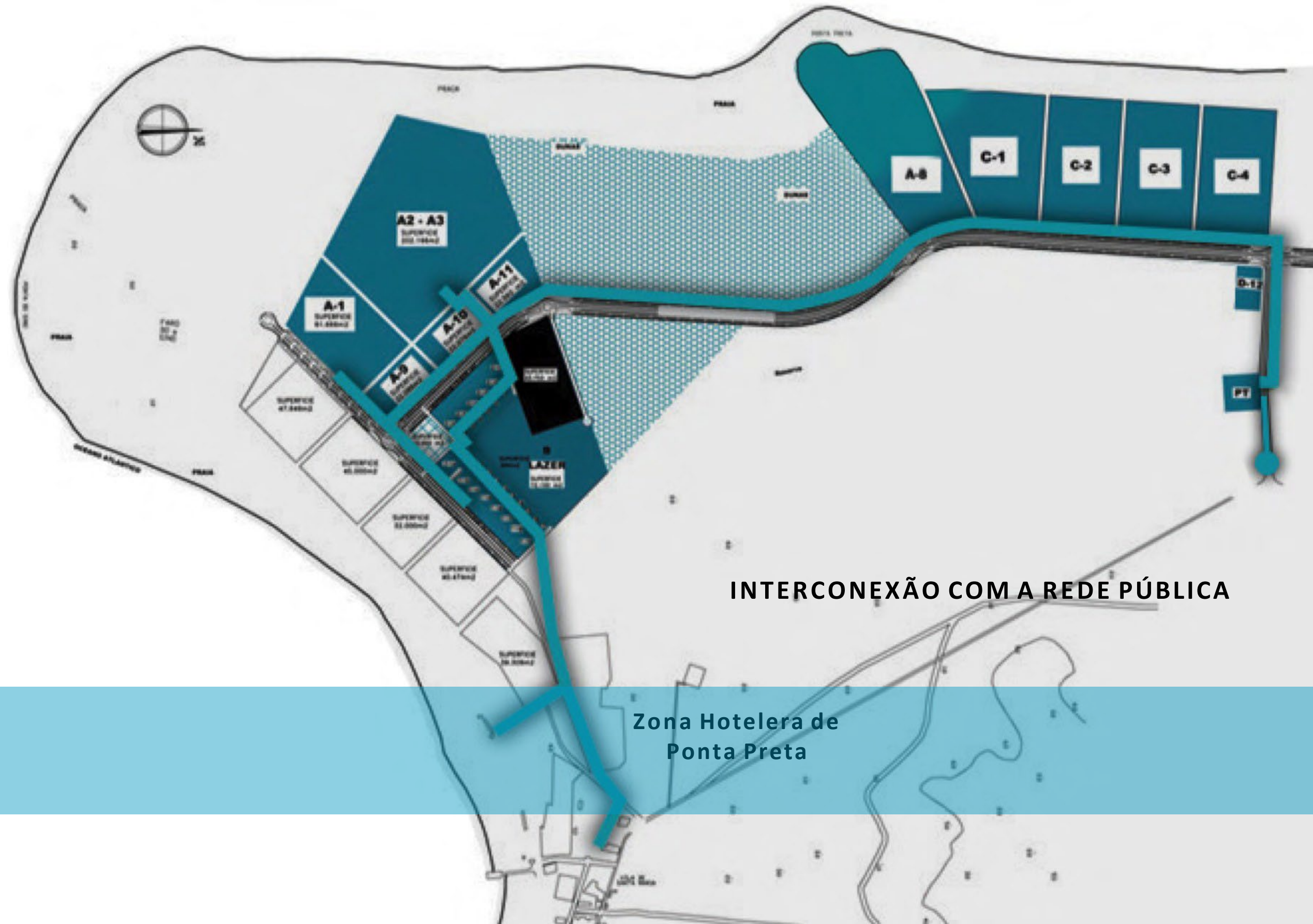
02 APP ORIGINAL PROJECT: Built Infrastructures

Energy distribution network



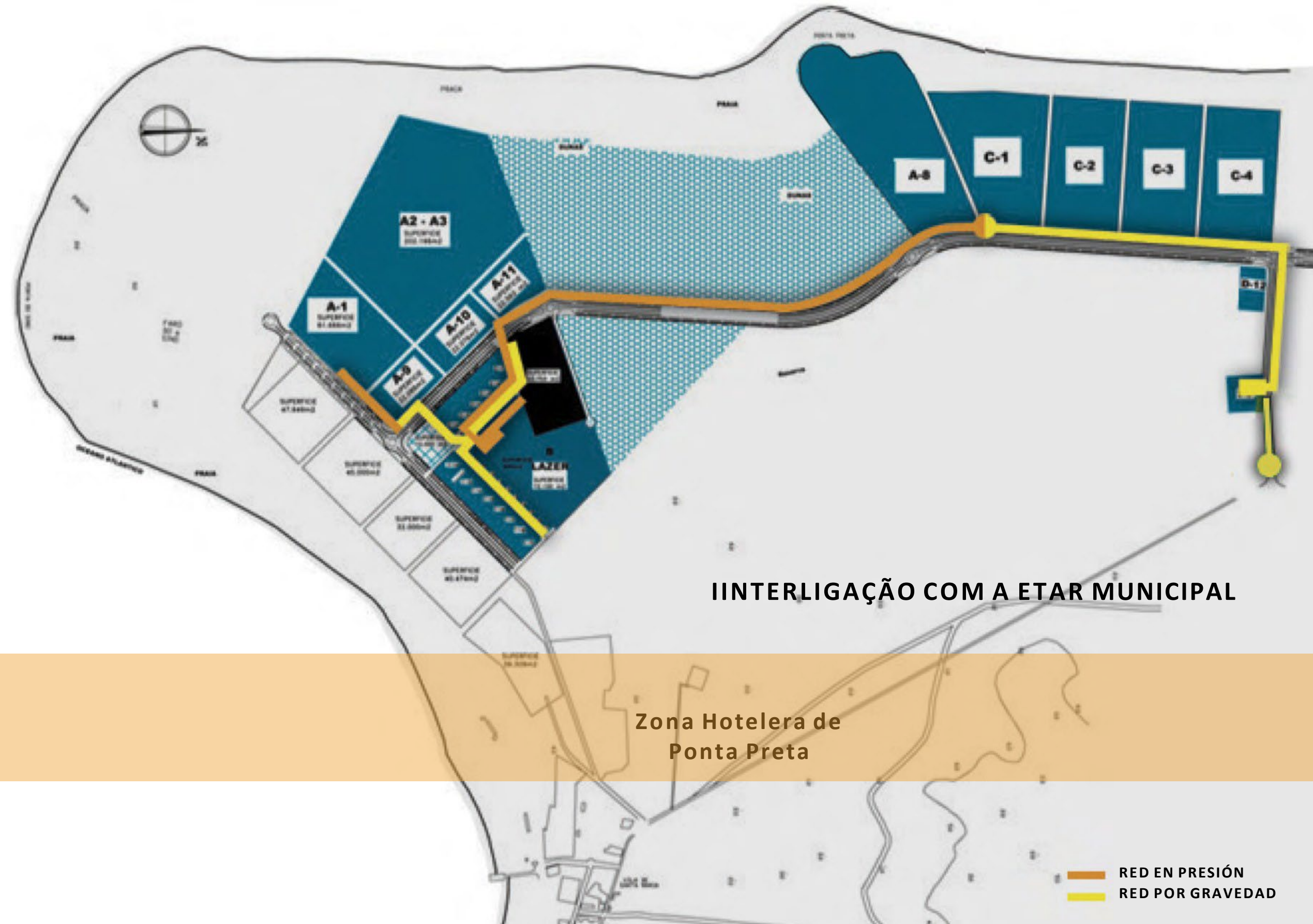
02 APP ORIGINAL PROJECT: Built Infrastructures

Potable water supply network



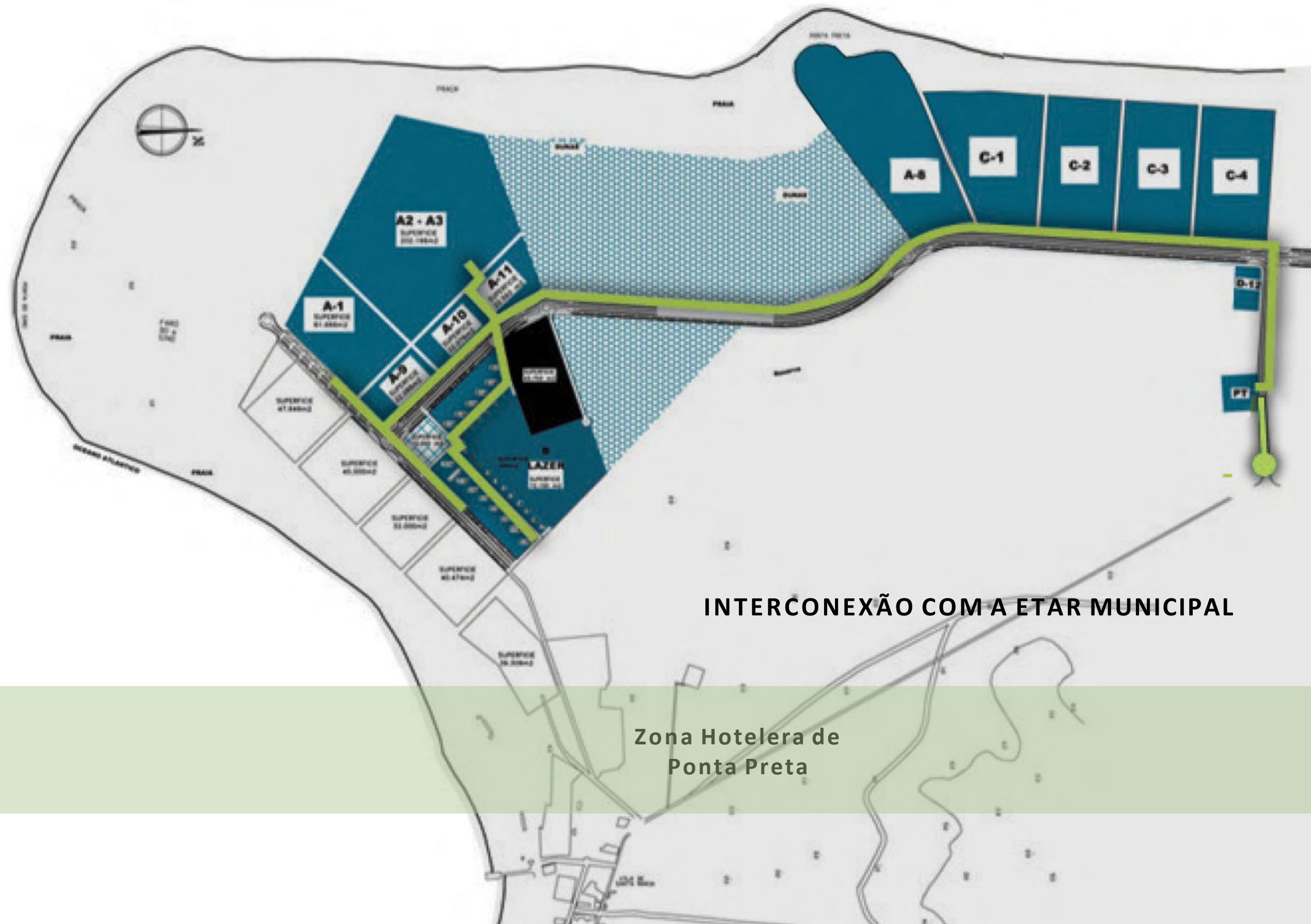
02 APP ORIGINAL PROJECT: Built Infrastructures

Sanitation (waste water) network



02 APP ORIGINAL PROJECT: Built Infrastructures

Regenerated water network



02 THE ORIGINAL PROJECT: Massive integration of renewables

Integrated System Management Energy + Integrated Water Cycle



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03 20TH ANNIVERSARY BALANCE / ACHIEVEMENT

Ensuring demand for basic services, energy, water and sanitation.

Complementing the public concessionaire in the tourist development of Santa Maria

Transfer of cutting-edge technology in energy and water

Investments about 35.-M€

Transfer of industrial culture and training to skilled jobs

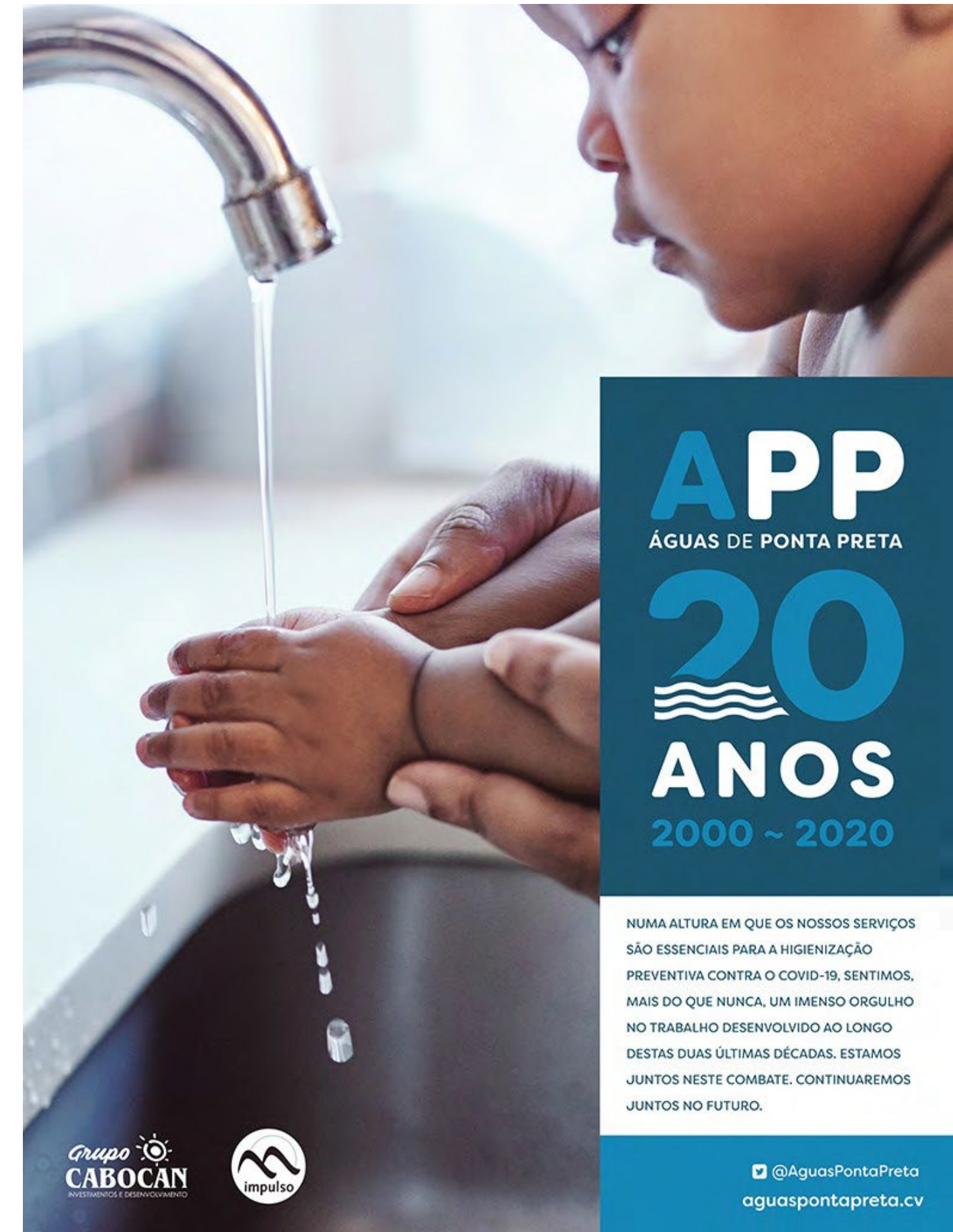
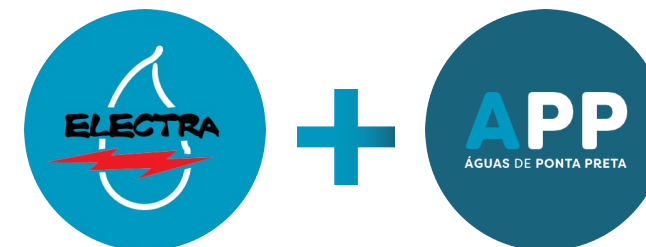
More 150 stable jobs

Private initiative financing with modern formulas

Promotion of public-private partnerships

"0" emptying of wastewater at sea

Aliança Estratégica
com a Electra



04 THE 20TH ANNIVERSARY BALANCE

Direct investment →	> 35 M€
Tax payments →	> 11 M€
Work force →	> 150 stable jobs
Local work force →	> 95%

FINANCING STRUCTURE

2000-17 → Project Finance EU comercial bank (BancSabadell + BCA)

2017 - ... → Banca Caboverdiana (CECV / BCN / BAI / ...)

2023 - ... → Capital Markets / Green Bonds (BVCV / ...)

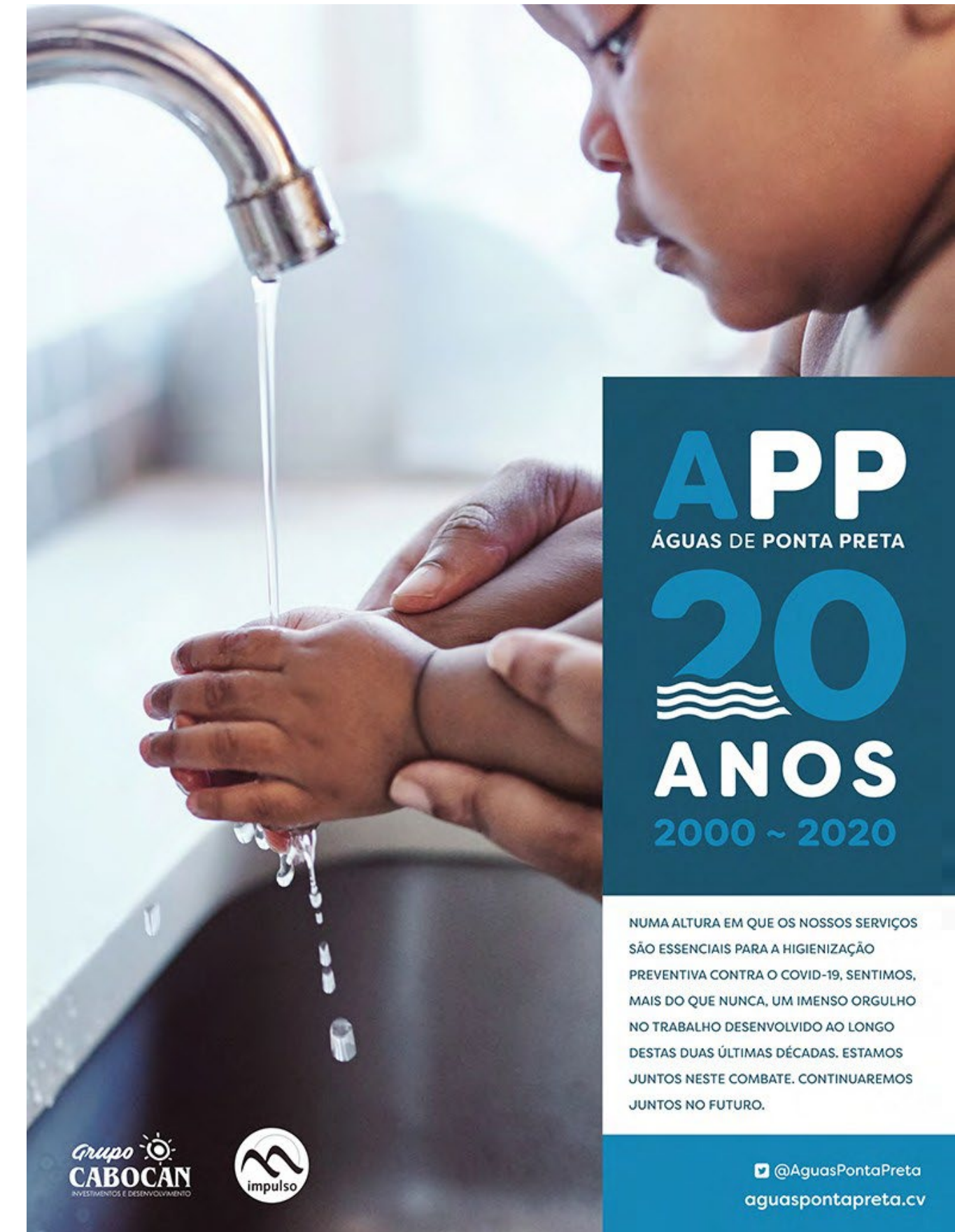
Promoving Public-Private partnerships

National Authorities

Local Authorities

UE

Develop and Multilateral partners



03 20TH ANNIVERSARY BALANCE / Activity lines and technology

- **POTABLE WATER** > PRODUCTION AND DISTRIBUTION OF DESALINIZED WATER

DESALINATION > REVERSE OSMOSIS + ISOBARIC CHAMBERS (KINETICS)

- **SANITATION** > SEWAGE COLLECTION AND WASTEWATER TREATMENT

- **REUSE** > REGENERATED WATER PRODUCTION AND DISTRIBUTION

REGENERATION > TERTIARY TREATMENT

- **ENERGIA** > GENERATION AND DISTRIBUTION OF ELECTRICAL ENERGY

ENERGIA > THERMIC (FUEL 180 + GASOLEO) + SOLAR PV

- **MANAGEMENT** > HYDRAULIC AND ENERGY INFRASTRUCTURES

MANAGEMENT > SCADA + INTERNET + PHONE + TELECONTROL



03 20TH ANNIVERSARY BALANCE: Basic services

WATER PRODUCTION AND SUPPLY

Developed Area → 100 Ha - Santa Maria - Ilha do Sal

Capacity → 10.000 pax / 400.000 pax/año

Distribution Net → 6 km

Production Capacity → 3.000m³/dia

Annual Production / Distribution → 710.000 m³

ENERGY GENERATION AND DISTRIBUTION

Developed Area → 100 Ha - Santa Maria - Ilha do Sal

Capacity → 10.000 pax / 400.000 pax/año

Distribution Net → 5 km

Potencia Instalada → 10,1.-MW

Potencia Renovable → 4,1.-MWp

Annual Production / Distribution → 27.200 kWh

WASTEWATER NET, TREATMENT AND WATER REUSE

Sal Island Surface → 220 km²

Population → 40.000 hab + 10.000 pax

Net → 70 km + 9 Pump Stations

Treatment Capacity → 4.500m³/day

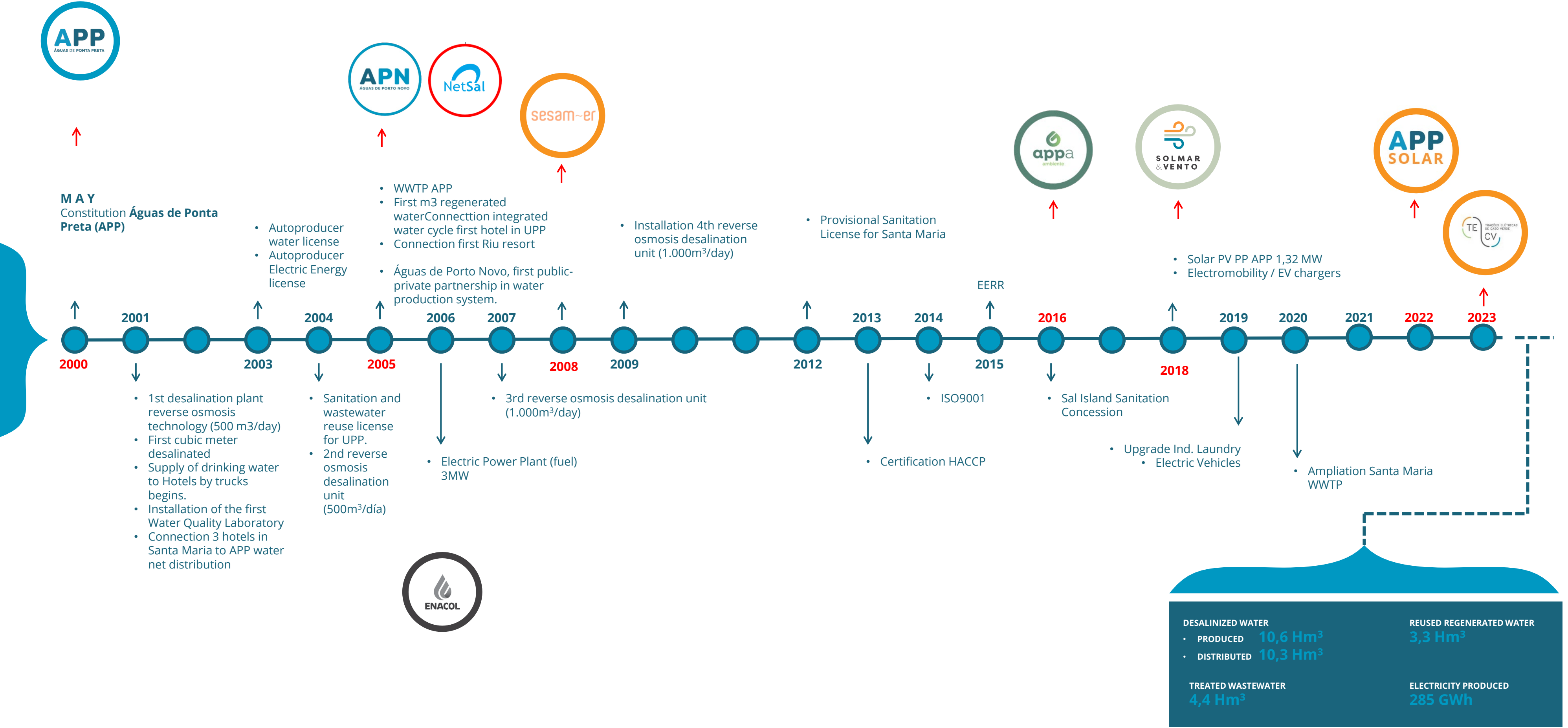
Annual Production / Distribution → 656.000 m³

Integrated Infrastructures Management

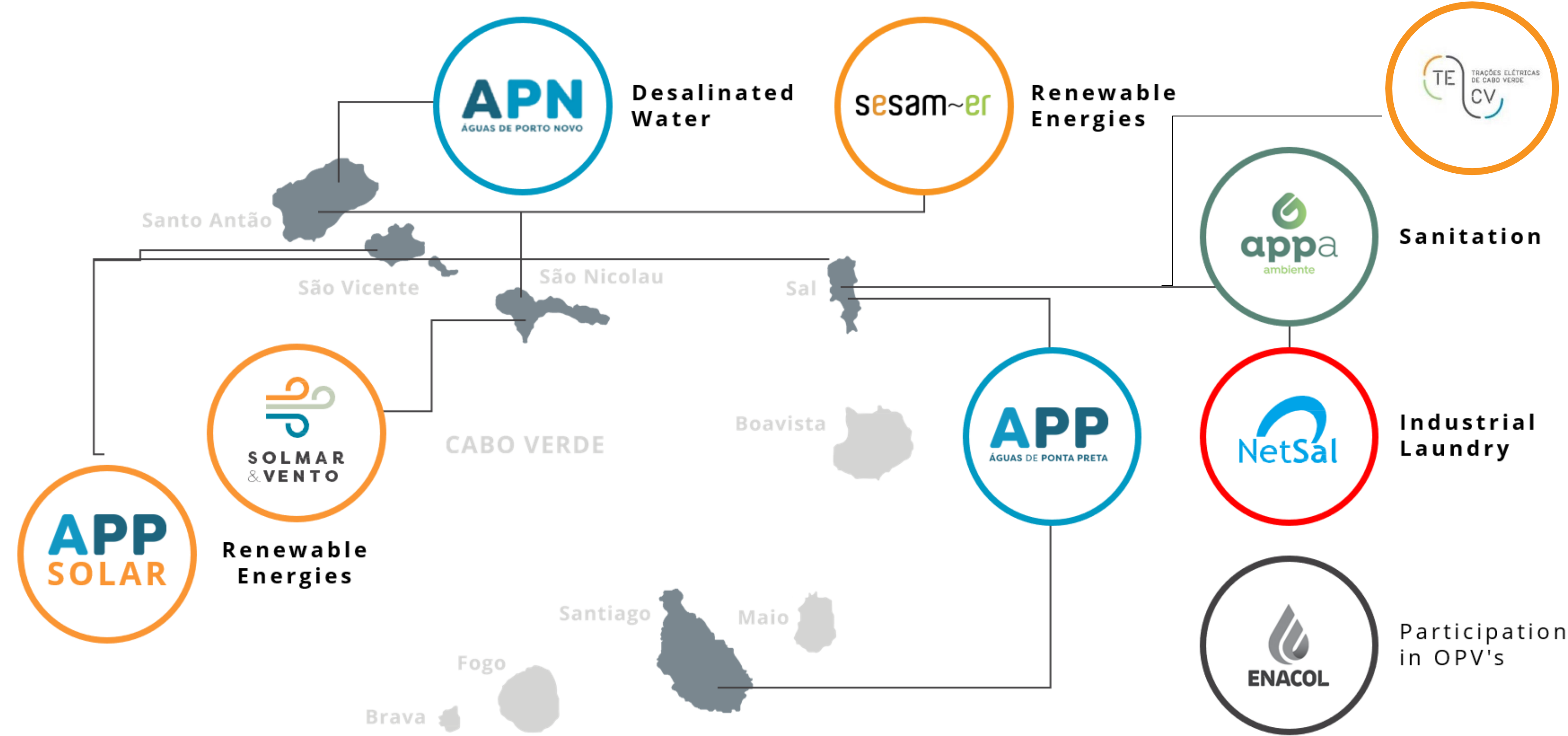


MANAGEMENT - TECNOLOGICAL SYSTEMS
SCADA + INTERNET + REMOTE MESUREMENT + TELECONTROL
SSG - SUSTAINABLE SMART GRID

03 20TH ANNIVERSARY BALANCE: Timeline activities



03 20TH ANNIVERSARY BALANCE : Companies and Projects Geographical Location



03 20TH ANNIVERSARY BALANCE : Projects, Services and Assets



02 THE ORIGINAL PROJECT: Quality Commitment

3 of the 4 main companies are certified with **ISO9001: 20015**
and 2 are certified with **HACCP** certified (food safety)

NEXT STEPS

- ISO45001** – Safety and health segurança e saúde
- ISO50001** – Energetic efficiency
- ISO14001** – Enviromental Management
- ISO22000** – Food safety



	GENDER		TOTAL	NACIONALITIES		
	WOMEN	MEN		EUROPEAN 	CABOVERDIAN 	OTHERS
GENERAL MANAGERS		1	1	1		
DIVISION MANAGERS	4		4		4	
UNIT MANAGERS		6	6	1	4	1 
SPECIALIST	10	7	17		17	
OPERATIONAL	38	90	128		123	5 
TOTAL	52	104	156	2	148	6
	34%	66%		1%	95%	4%

SUPPORT ENGINEERING	INDUSTRIAL ENGINEERS	CIVIL ENGINEERS	MSc SCIENCE	MSc ECONOMICS ECONOMICS Degree
	12	6	1	2
ENERGY TEAM	10	1		
WATER CYCLE TEAM	2	5	1	2

04 THE 20TH ANNIVERSARY BALANCE / technology transfer

TRANSFER OF CUTTING-EDGE TECHNOLOGY IN WATER SECTOR ACTIVITIES

ILURCO – water deposits (ESP)
DAGA – mechanical water equipment (ESP)
FERRO SYSTEM – plastic adductions (ESP)
AVK – water valves (ESP)
SULZER – pumps and flow systems (CHE)
KROHNE – process analytics (GER)
SAVECO – water equipment (ITA-FRA)
HANNA – lab instruments (ITA)
CAT PUMPS – pumps (BEL)
GRUNDFOS – pumps (DEN)
ALFA-LAVAL – pumps (SWE)
KEMIRA – chemical components (FIN)

TRANSFER OF CUTTING-EDGE TECHNOLOGY IN ENERGY SECTOR ACTIVITIES

WÄRTSILÄ – energy engines (FIN)
REC solar – solar PV modules (NOR)
SMA – inverters (GER)
SIEMENS – electronics (GER)
TOP CABLE – electrical cable (ESP)
MAPNER – blowing engines (ESP)
TECNO CONVERTING – technical steel (ESP)
Circutor – EV chargers (ESP)

INDUSTRIAL LAUNDRY TECHNOLOGY

GIRBAU – laundry (ESP)
CHRISTEYNS soaps and chemicals (BEL)

Connecting Europe with Africa:
Promoting economic collaboration
and dialogue



ATHENS, OCTOBER 2021

Trade EU/CV



CAPEX
50% - 80%

OPEX
10% - (eq. 50-80%)



ENTERPRISE GREECE
INVEST & TRADE



04 THE 20TH ANNIVERSARY BALANCE / Added Value activities



Industrial Laundry for hotel sector

Current capacity 30.000 Kg/day

CAPEX Increasing capacity 2020 - 2.000.000.-€



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Renewable Energy at Porto Novo Desalination Plant - 55 kWp

2005 - PPP precedent in Cabo Verde



Porto Novo Sea Water Desalination Plant



2008 - BOT Contract Precedent in Cabo Verde

30 year concession

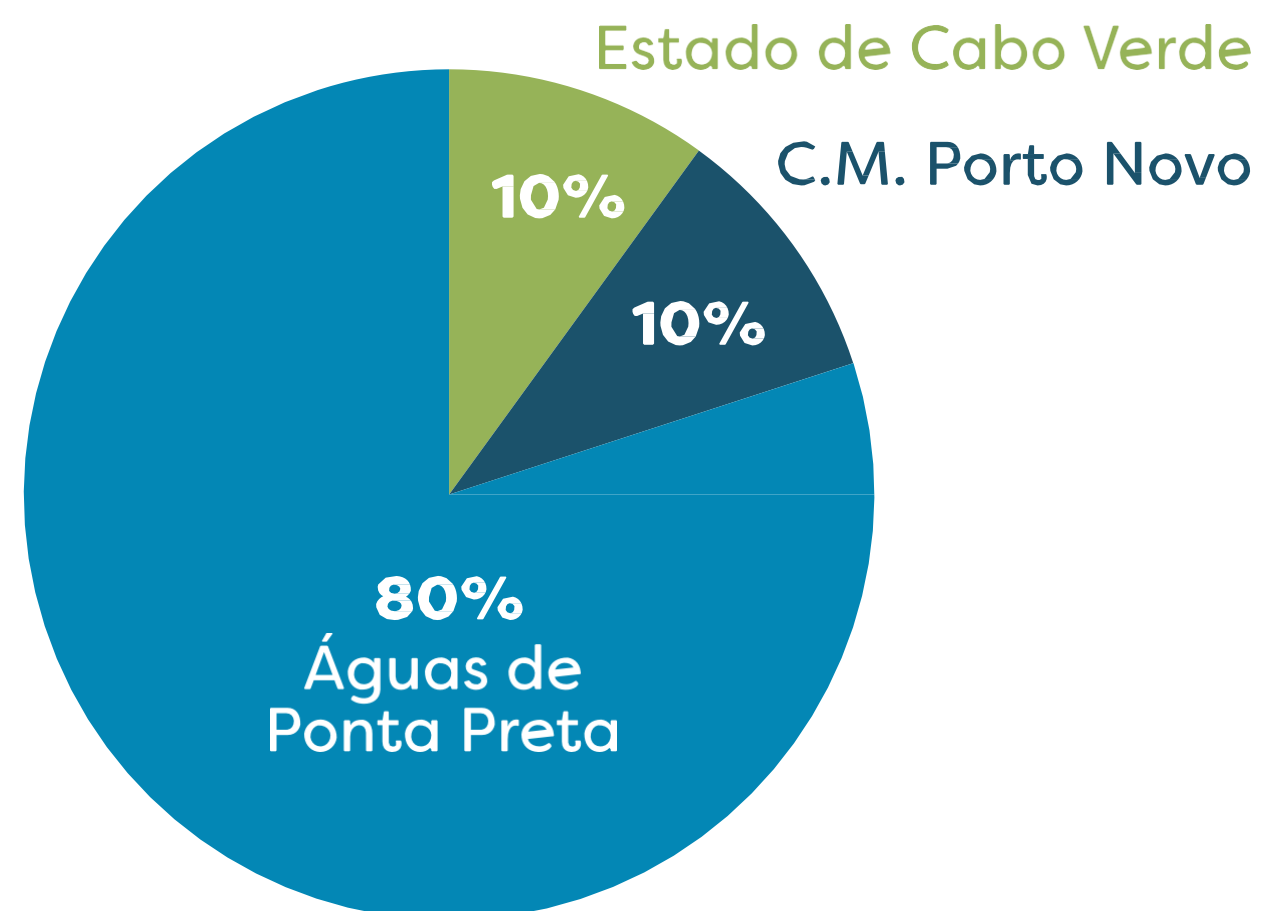
Installed capacity: 1000 m³/day (2x500)

3,63 Hm³ produced

3,56 Hm³ supplied



2023 – AdSA – Santo Antão Water Cycle Intermunicipal Company



PV Modules 385 Wp Monocrystalline - PERC

Aluminium supporting structure

String Inverters

Annual EE Consumption → 623 MWh

Annual PV Production → 102 MWh (16%)

Installed Power → 55 kWp

Investment → 80.000.-€



**PHOTOVOLTAIC PLANT
+
TRANSFORMER STATION**

**- 30%
Energetic Costs**

**↓
Decrease Water Cost for
population**

Renewable Energy at Porto Novo Desalination Plant - 55 kWp

10%



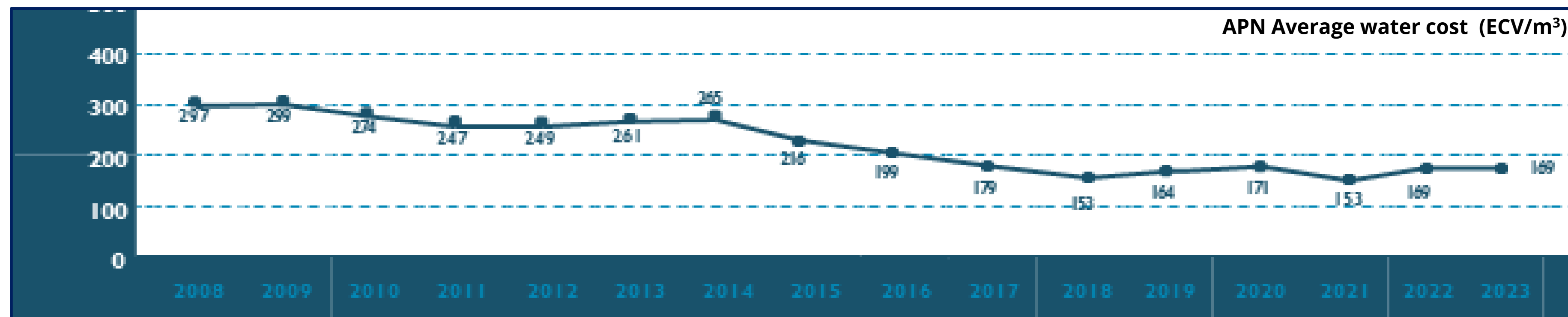
Ministério da Indústria,
Comércio e Energia
Direção Nacional da Indústria, Comércio e Energia

30%

APN
ÁGUAS DE PORTO NOVO

60% (*)

BCN
BANCO CABOVERDIANO
DE NEGÓCIOS



Santa Maria WWTP expansion – 3.750 m³ / 302 kWp

2021

Increasing capacity

Investment → 4.000.000.-€

Energy → 350.000.-€

Impacts:

- Depuration
- Re-use water source
- Agriculture water uses
- High energy efficiency

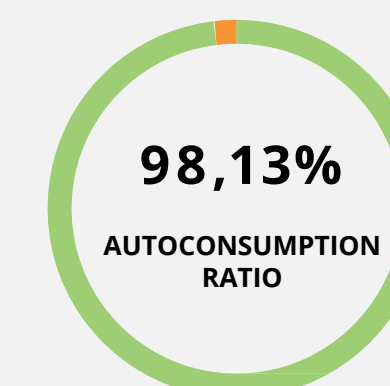


PV Modules 410Wp
Monocrystalline – PERC

Aluminium supporting
structure

String Inverters

Annual PV Production
Forecast
1.650 MWh



05.1

Basics services supply / Water and Energy Nexus

Santa Maria WWTP expansion – 3.750 m³ / 302 kWp

2021 Increasing capacity and Process Upgrade

- Investment → 4.000.000.-€
- Energy → 350.000.-€

2%



Ministério da Indústria,
Comércio e Energia
Direção Nacional da Indústria, Comércio e Energia

8%



90%^(*)



05.2 CURRENT COMPANY FOCUS

Energy Utility Scale Power Plants and Storage



APP
ÁGUAS DE PONTA PRETA



Cabo Verde,
Chile and
Spain

68 PV power plants operation -

16.279 kWp

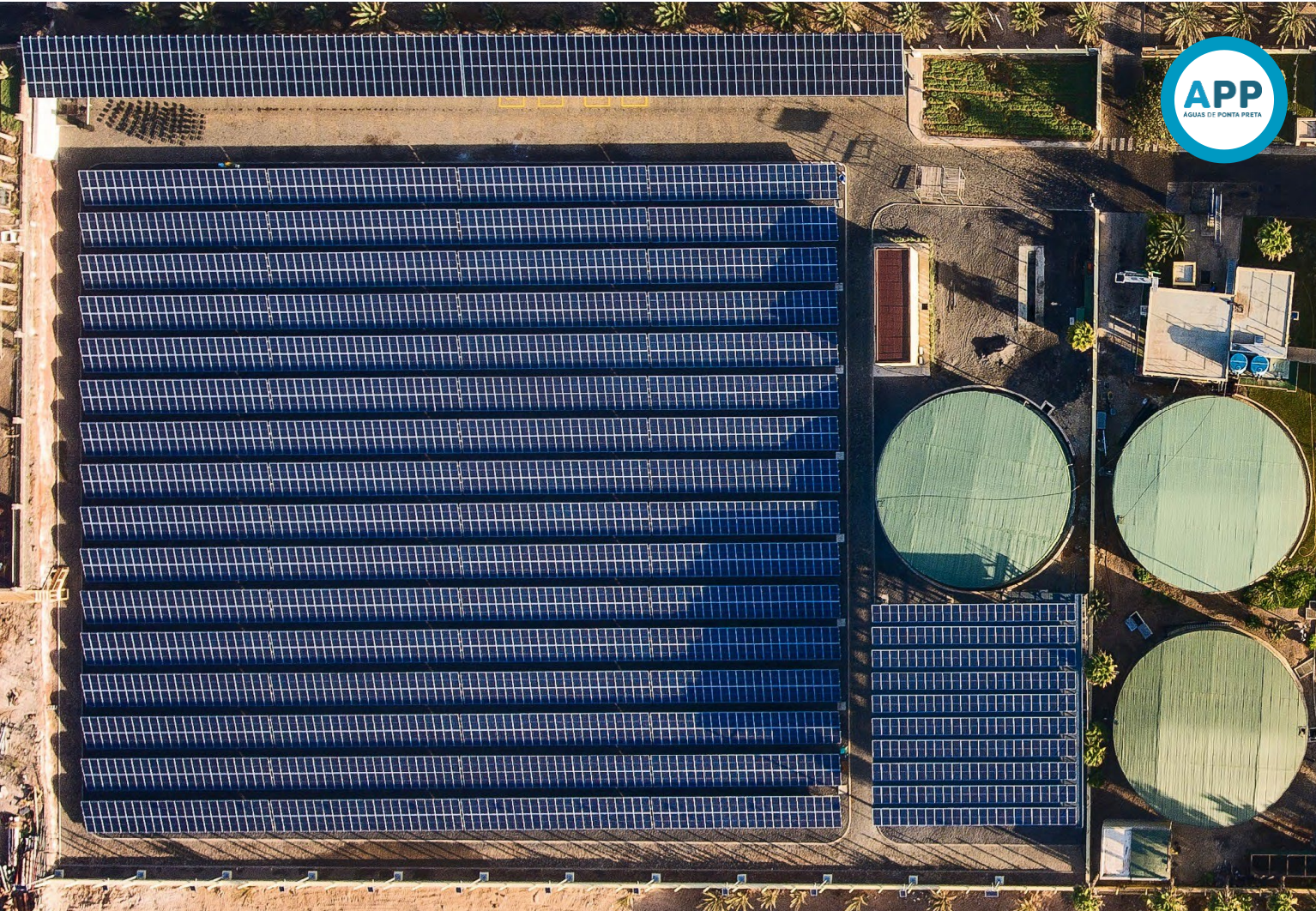
9 PV power plants in progress -

25.500 kWp

05.2

CURRENT COMPANY FOCUS

Energy Utility Scale Power Plants and Storage



05.2 CURRENT COMPANY FOCUS / DISTRIBUTED GENERATION

Hotel and institutional focus solutions



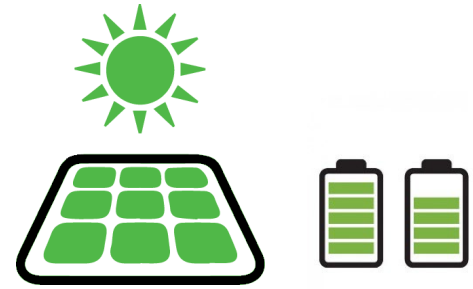
05.2 CURRENT COMPANY FOCUS/ DISTRIBUTED GENERATION

Distributed Generation and Off-grid solution

		CENTRAL FOTOVOLTAICA	ILHA	PAÍS	DONO	POTÊNCIA (kWp)	TIPO	ANO INÍCIO
 ÁGUAS DE PONTA PRETA TOTAL OPERATION 4.181 kWp	01	Monte Trigo	Santo Antão	Cabo Verde	C.M. do Porto Novo	38	off-grid	2012
	02	ETAR-Ponta Preta	Sal	Cabo Verde	APP	21	on-grid	2015
	03	Carriçal	São Nicolau	Cabo Verde	Câmara Municipal de Ribeira Brava	22	off-grid	2015
	04	Santa Maria-Fátima	Sal	Cabo Verde	ELECTRA	2 344	on-grid	2016
	05	Salmoura	Sal	Cabo Verde	APP	17	on-grid	2016
	06	Telecontrolo-Ponta Preta	Sal	Cabo Verde	APP	33	on-grid	2018
	07	NETSAL-Ponta Preta	Sal	Cabo Verde	APP	117	on-grid	2018
	08	Terreno-Ponta Preta	Sal	Cabo Verde	APP	972	on-grid	2018
	09	Armazém-Ponta Preta	Sal	Cabo Verde	APP	77	on-grid	2018
	10	Parking-Ponta Preta	Sal	Cabo Verde	APP	118	on-grid	2019
	11	Hotel Odjo d'Água	Sal	Cabo Verde	Hotel Odjo d'Água	78	on-grid	2019
	12	Residência Palha Verde	Sal	Cabo Verde	Hotel Odjo d'Água	6	on-grid	2019
	13	Figueiras	Santo Antão	Cabo Verde	Câmara Municipal de Ribeira Grande	38	off-grid	2019
	14	Ribeira Alta	Santo Antão	Cabo Verde	Câmara Municipal de Ribeira Grande	22	off-grid	2019
	15	Planalto Norte	Santo Antão	Cabo Verde	Câmara Municipal do Porto Novo	22	off-grid	2019
	16	Academico Aeroporto	Sal	Cabo Verde	AAAS (Academia futebol)	9	on-grid	2019
	17	Alto Solarim	Sal	Cabo Verde	Cooperativa Agrícola Alto Solarim	14	off-grid	2019
	18	Escola Kate Surf Mitu & Djo	Sal	Cabo Verde	KiteSurf Mitu&Djo	13	off-grid	2019
	19	ETAR – Santa Maria	Sal	Cabo Verde	app-ambiente	302	on-grid	2022
	20	Ninho dos Piratas	Sal	Cabo Verde	JS-Actividades Náuticas	39	off-grid	2023
	21	Hotel Hilton	Sal	Cabo Verde	APP	126	on-grid	2023
	22	Supermercado SUCATA	Sal	Cabo Verde	Supermercado SUCATA	42	on-grid	2023
	23	Bolona	Santo Antão	Cabo Verde	Câmara Municipal do Porto Novo	15	off-grid	2023

05.2 CURRENT COMPANY FOCUS

Energy Utility Scale Power Plants and Storage

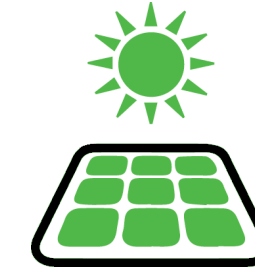


PVSA - Photovoltaic Solar Power Plant with Storage on Santo Antão island

- 719.-kWp
- 669.-kWh

Floating Photovoltaic Solar Power Plant with storage on WWTP Espargos / Sal island

- 1.000.-kWp
- 6.000.-kWh



Salamansa Solar Power Plant / Sao Vicente island

- 6.-MWp

Santa Maria Solar Power Plant / Sal island

- 6.-MWp



Storage APP Solar Plant / Sal island

3.000.-kWh

Storage Santa Maria WWTP / Sal island

1.500.-kWh

05.3 CURRENT COMPANY FOCUS

Electro Mobility Project



A KICK-OFF DECISION
2019

ELECTRICAL
MOBILITY
ACTION PLAN
(PNME)

PILOT EXPERIENCE

07/02/2019
FIRST EV
100% IN CV

7 UNITS



05.3

CURRENT COMPANY FOCUS

Electro Mobility Project / Challenge

1.704
kWh/kWp
year

30km

Despite being of volcanic origin, Ilha do Sal is flat and has just 30km of length

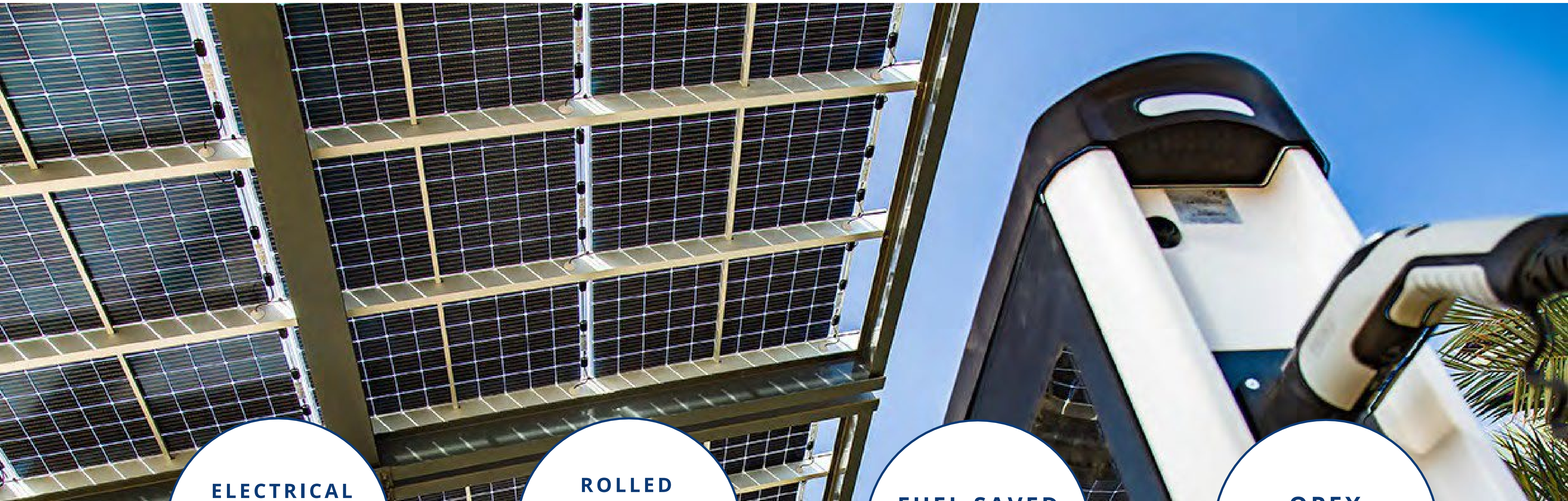
05.3 CURRENT COMPANY FOCUS

Electro Mobility Project / Fleet



05.3 CURRENT COMPANY FOCUS

Electro Mobility Project / Fleet



**ELECTRICAL
CONSUMPTION**

23.440 kWh

**ROLLED
DISTANCE**

142.000 km

FUEL SAVED

7.120 lts

OPEX

- 30%

Magnitudes and Results

05.3 CURRENT COMPANY FOCUS

Electro Mobility Project / APP Network

2018



2022



2023

Instalation in Construction
3 units

Planned in Progress
15 units

ProMEC Program
20 units



05.3 CURRENT COMPANY FOCUS

Electro Mobility Project / Public Network

2022

First Public EV Charge Point in Cabo Verde

Hotel Odjo d'Agua



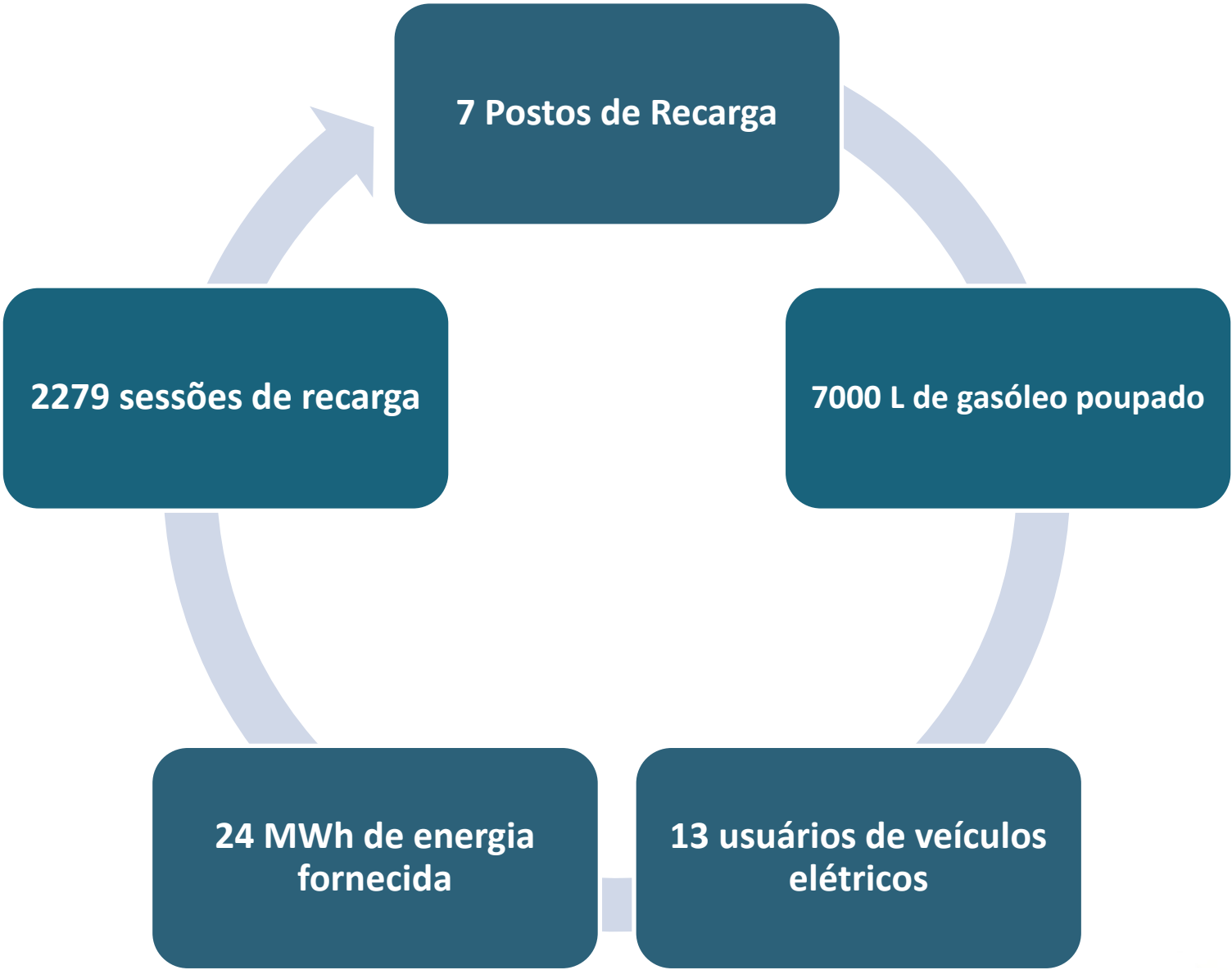
2023

Intl. Airport Amilcar Cabral



05.3 CURRENT COMPANY FOCUS

Electro Mobility Project / Public Service



Ilha de Santo Antão



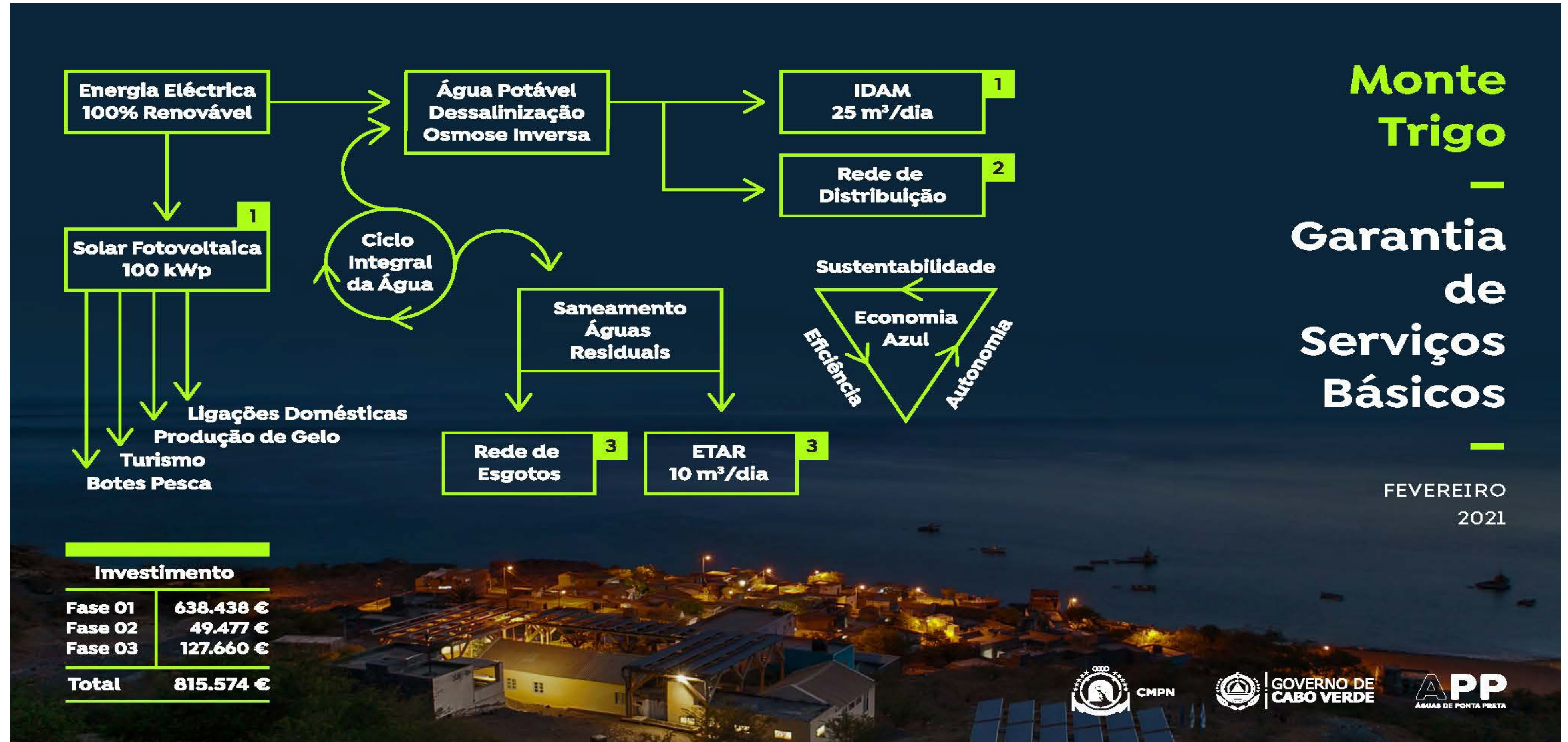
.....
Monte Trigo
40 kWp
.....

1ª Localidade 100% Renovável / 1st Location 100% Renewable (2012)
Parceria coordenada pela APP / Coordinated partnership by APP (CM Porto Novo / UE)
275 Habitantes Beneficiados / Inhabitants Benefited

Monte Trigo - Casa de Gelo
15 kWp

05.4 CURRENT COMPANY FOCUS

Sustainability Projects / Monte Trigo



05.4 CURRENT COMPANY FOCUS

Sustainability Projects / Ecocentro Santa Maria



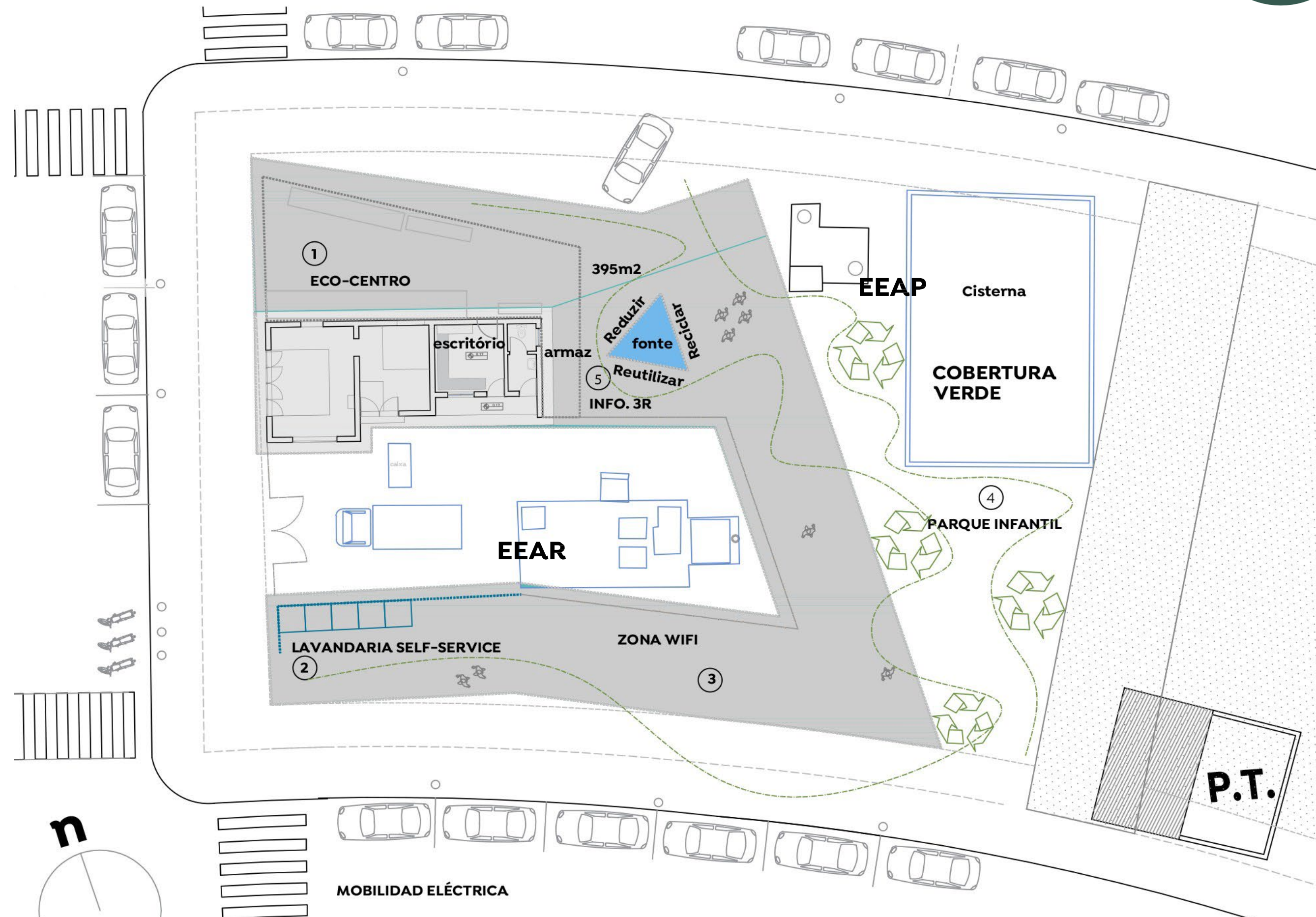
Reduce
Reduzir



Re-use
Reutilizar



Recycle
Reciclar



05.4 CURRENT COMPANY FOCUS

Sustenibility Projects / Ecocentro Santa Maria



Wastewater + Rainwater Pump Station

Waste Collection Point

Electrical Vehicle Charging Hub

Self-service Domestic Laundry

REN

Coworking



00 ÍNDEX

01 Group and Company overview

02 Country and Sector

03 APP - Original Project

04 20th anniversary balance

05 Company Current Focus

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05.2 Energy Utility Scale Power Plants and Storage

05.3 Electro Mobility Project

05.4 Sustenibility Projects

→ **06 Aproaching ways**

06 APPROACHING WAYS

FOCUS
TECHNOLOGY

SERVICE

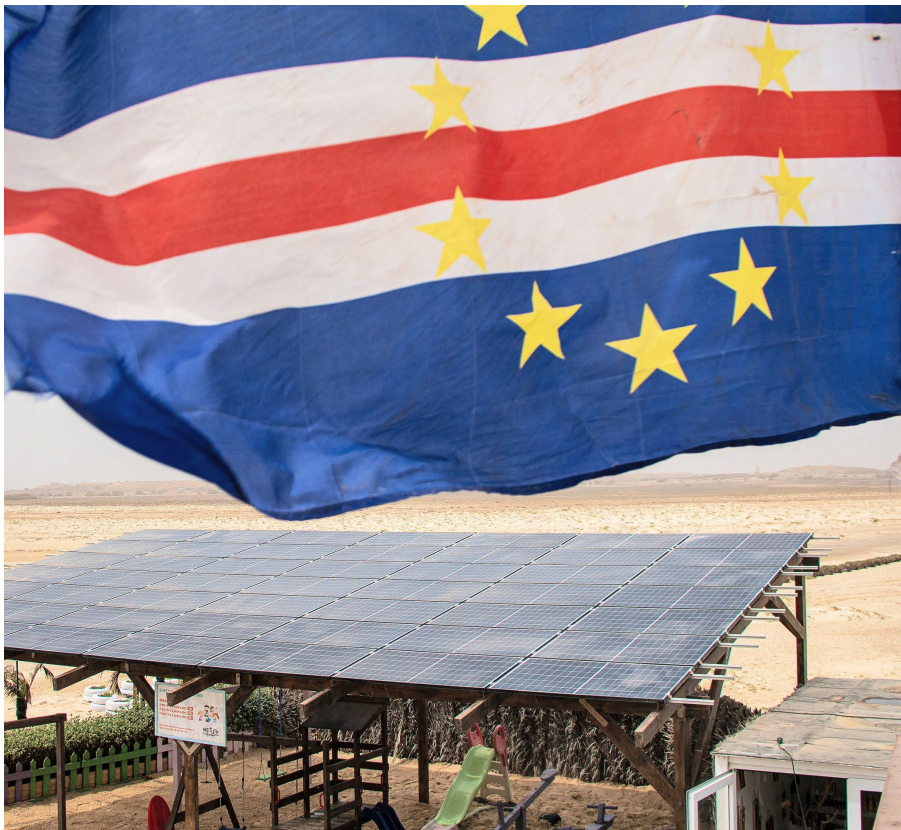
PATIENCE

SUSTAINABILITY ³

INVESTMENT

QUALITY

IMPACT



**OBRIGADO PELA ATENÇÃO !
THANK YOU !!!**

