

of the European Union



AEWEN

Africa Europe Water Energy Network

Project under GA number 101035935

D1.2: Directory of EU SMEs 15/01/2022

Deliverable's leader(s): TWEED

Participants of the deliverable:





	INDEX PER TARGET SECTORS AND TARGET COUNTRIES						Agriculture	Ļ	Education	Local authorities ¹	ism	r(s) ²	000	gal	sia
р	Company Name	Water	Energy		Domestic	Industry	Agric	Health	Educ	Loca	Tourism	Other(s)	Morocco	Senegal	Tunisia
1	ABN ENGINEERING & CONSULTING		~		•	/	~	~					~	~	~
2	APB ENERGY	~	~	•	•	/	~	~		~	~			~	
3	AQUASSAY	~			•	/				✓			~	~	~
4	BENOO	~	✓		•	/	~			~				~	✓
5	BGEO	~								~		~	~	~	~
6	BLUEPHAGE	~			•	/				~					
7	CREATECH SOLUTIONS SL	~			N	/				~			~		
8	DEFCON8	~	✓	•	/			~	~	~	✓		~		
9	DELPOWER		✓		•	/	~	✓	✓	~	✓	~	~	~	~
10	E4SMA SRL	~	✓		•	/				~			~		~
11	ECO-SISTEMS WATERMAKERS SL	~		•	/ ~	/	✓			✓	✓	✓	✓		✓
12	ECOBIOQUAL SRL	~	~		•	/	~			~			~		✓
13	ECOMACCHINE SRL	~			•	/				✓			✓		~
14	ELIOSYS	~	✓		•	/				✓			✓	✓	✓
								1	1.	11		فالمرج والار			



I	NDEX PER TARGET SECTORS AND	COUNTRIES						es ¹						
р	Company Name	Water	Energy	Domaetic lica	Industry	Agriculture	Health	Education	Local authorities	Tourism	Other(s) ²	Morocco	Senegal	Tunisia
15	ENERGTRADE	~	~	~	~	~						~	~	~
16	ENERGY POOL DEVELOPMENT		~		~				~		~			~
17	ENERSOL	~	✓	~	~	~			~				~	
18	EUTECTIC SYSTEM SRL	~	✓		~				~			~		~
19	EVOCELLS	~	✓	~	~				~			~	~	~
20	EXTRIS SRL	~										~		~
21	FERPLANT SRL		✓		~		~		✓			~		~
22	<u>GREENFISH</u>	~	~		~				~			~	~	✓
23	GREENPLUG ENGINEERING	~	✓		~				✓		~	~	~	
24	GROUPE ER2I	~	~	~	~	~	~			~	~	~	~	~
25	HELIOSLITE		✓		~	~			✓		~	✓	~	~
26	HYDRAO	~	✓	~	~	~			~	~		~		~
27	HYDROO PUMP INDUSTRIES, SL	~			~	~			✓			✓		✓
28	HYDROSCAN	~	~		~				✓			~		~



INDEX PER TARGET SECTORS AND TARGET COUNTRIES															
р	Company Name	Water	Energy		Domestic use	Industry	Agriculture	Health	Education	Local authorities	Tourism	Other(s) ²	Morocco	Senegal	Tunisia
29	IDRORICERCHE SRL	~				~				~		~	~	~	~
30	IED CONSULT		~							~		~	~	~	~
31	INOVAYA	~				~		~		~				~	
32	INSENSUS PROJECT SRL	~	~			~	~			~			~	~	~
33	IRIDRA SRL	~			~	~	~			~	~		~	~	~
34	IRIS SRL	~	~		~	~	~			~			~	~	~
35	JANSON LAWFIRM	~	~			✓				✓			~	~	~
36	JLA HYDRO		~		~	~	~		~	~					
37	KEIKEN ENGINEERING	✓	~			~				~	✓		~		~
38	KING DIAMOND SLU	~				~	~	~		~	~		~		
39	LAGAZEL		~		~				~	~	~			~	
40	LUCISUN		~		~	~				~			~	~	~
41	MEC SRL		~			~	~			~			~		
42	MITIS SA		~			✓	✓			✓			✓	✓	✓
						1. N	lunic	ipali	ties	/ Loc	al au	thorities			



I	NDEX PER TARGET SECTORS AN								es ¹						
					Jomestic use	stry	Agriculture	th	Education	Local authorities	rism	Other(s) ²	Morocco	egal	sia
р	Company Name	Water	Energy		Don	Industry	Agri	Health	Edu	Loci	Tourism	Othe	Mor	Senegal	Tunisia
43	<u>nepsen (formerly</u> Transénergie <u>)</u>		~		•	~	~			~		~	~	~	~
44	<u>ODIT-E</u>		~		•	 Image: A start of the start of				~				~	
45	PANECO AMBIENTE SRL	~		•	/	/	~			~			~	~	~
46	POD ONE – DHBC	~	~		•	~	~	~	~	~			~	~	~
47	REGIS MOTORS		~		•	 Image: A start of the start of							~	~	~
48	RUTTEN NEW ENERGY SYSTEM		~		•	~	~	~	~	~	✓			✓	
49	SASSO SRL	✓	✓		•	 Image: A start of the start of	✓	✓		~	~	~	~	~	~
50	SAVE INNOVATIONS	~	✓		•	~	~			~			~	~	~
51	SEA MARCONI TECHNOLOGIES		✓		•	 Image: A start of the start of				✓					
52	SEACOOP STP	~	✓				~		~	~			~	~	
53	SEED-ENERGY		✓		•	~				~		~	~		~
54	SHER INGÉNIEURS-CONSEILS SA	~	✓		•	~	~					~		~	
55	SIGMADAF CLARIFIERS SL	~	✓			 Image: A start of the start of							~		~



I	NDEX PER TARGET SECTORS AN	OUNTRIES	use					rities ¹						
						Agriculture	_	ation	authorities	E S B	(s) ²	000	gal	<u></u>
р	Company Name	Water	Energy	Domestic	Industry	Agric	Health	Education	Local	Tourism	Other(s)	Morocco	Senega	Tunisia
56	SOTRAD WATER	~	✓	~	~	~	~		~				~	
57	SURTEC	~	~		~	~	~	~	~				~	
58	TUCAI	✓		~		~	~		~			~	~	~
59	UNEX APARELLAJE ELECTRICO, SL	~	~		~				~			~		~
60	WATER, ENVIRONMENT AND BUSINESS FOR DEVELOPMENT, SL	~	~		~	~	~	~	~	~		~		~
61	WATEROLOGIES SL	~	~	~	~	~			~	~		~	~	~
62	WAVE FOR ENERGY SRL	~	✓		~				~	~	~	~	~	~
63	WELL PUMPS	~	~	~	~	~			~				~	

- Municipalities / Local authorities
 Tourism, well-being and leisure





ABN Engineering & Consulting Roche-La-Molière • France www.abnec.com

Skills, services, products, technologies

ABN Engineering & Consulting is specialised in industrial freezing, clean rooms and energy saving. It offers solutions to provide cold room and tunnel, clean rooms with natural fluids solutions and energy saving. The company also has an offgrid cold room for farmers withouit easy access to energy.

Company's expertise goes from engineering to maintenance, including conception, installation, training, etc.



ABN Engineering & Consulting provides industrial freezing and clean room solutions that are economical in energy consumption. It is specialised in improving energy consumption of existing installations. The solar cooler enables cold storage in areas without easy access to a reliable energy power.

R&D - R&I Studies - Design - Consultancy Funding Maintenance Dismantling & Recycling Training & Certification

Training & Certification
 Education
 Promotion & Awareness

7 AFFORMABLE AND CLEAN ENERGY

Preservation of Water Resources Water Catchment Water Treatment Water Quality Control Water Adduction/Transport Water Distribution Water Storage Wastewater Collection Wastewater Treatment Water Desalination Hardware - Smart metering Software - Digitalisation - Data Other(s)

Manufacturing & Production

6 CLEAN WATER AND SANITATION

6

Distribution & Installation

Marketing

Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind On-shore Wind Hydropower Combined Heat & Power Geothermal Biomass - Biofuel Micro-grids Hydrogen Energy Storage Energy Efficiency Hardware - Smart Metering Software - Digitalisation - Data



PROJECTS IN AFRICA:

Morocco, Tunisia, Algeria, Lybia, Ivory Coast, Senegal, Togo, Cameroon

Other(s)





APB ENERGY Charvonnex• France www.apb-energy.fr

Skills, services, products, technologies

APB Energy provides solar offgrid systems and solar pumping systems since 2007. Systems are sized and adapted to each project according to needs. Technical support and training can also be provided. The company is active in Africa with several hundred systems commissioned and operating.

> Solar pumping, system sizing, solar pumping project management

R&D – R&I **Operations & Maintenance Dismantling & Recycling** Studies - Design - Consultancy Training & Certification Funding Manufacturing & Production Education **Distribution & Installation** Promotion & Awareness Marketing CLEAN WATER AND SANITATION 6 6 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport Hvdropower Water Distribution Combined Heat & Power Water Storage Geothermal Wastewater Collection **Biomass - Biofuel** Wastewater Treatment Micro-grids Water Desalination Hydrogen Hardware - Smart metering **Energy Storage** Software - Digitalisation - Data

Energy Efficiency Hardware - Smart Metering Software - Digitalisation - Data Other(s)

AFFORDABLE AND CLEAN ENFROY

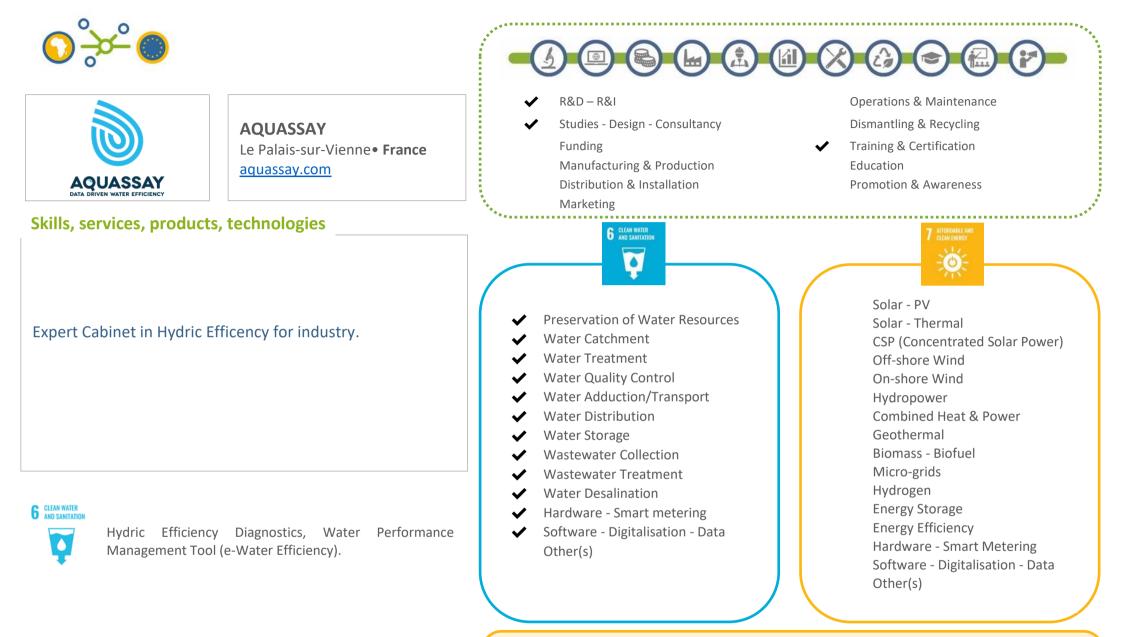
6 CLEAN WATER

Rural electrification, offgrid solar system design and supply, project management

Other(s)

PROJECTS IN AFRICA:

Benin, Burkina Faso, Ivory Coast, Congo Republic, DRC, Mali, Niger, Togo, Mauritania, Magascar, Comoros





PROJECTS IN AFRICA: Algeria, Tunisia





Benoo Bordeaux• France benoo.africa

Skills, services, products, technologies

Benoo is a company specialised in off-grid solar projects. It's "raison d'être" : Empower African businesses in the context of climate change.

Benoo offers a standardized approach to address productive use projects based on 3 digital tools :

- Insight : Automated analysis of final customers needs
- Foresight : Predictive analysis of energy consumption
- Opps : Productive use equipment lease and management



Benoo develops a project in Tunisia where water and energy production are combined to create a business place for local entrepreneurs. We called the concept "connected oasis"

R&D - R&I **Operations & Maintenance** Studies - Design - Consultancy **Dismantling & Recycling** Training & Certification Funding Manufacturing & Production Education **Distribution & Installation Promotion & Awareness** Marketing CLEAN WATER AND SANITATION 6 6 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport Hydropower Water Distribution **Combined Heat & Power** Water Storage Geothermal Wastewater Collection **Biomass** - Biofuel Wastewater Treatment Micro-grids Water Desalination Hydrogen Hardware - Smart metering **Energy Storage** Software - Digitalisation - Data Energy Efficiency Other(s) Hardware - Smart Metering Software - Digitalisation - Data **** Other(s)

7 AFFORDABLE AND CLEAN ENERGY In the energy field it offers digital tools to accelerate the project development, the technical sizing and the management of productive units based on off-grid energy and efficient equipments.



PROJECTS IN AFRICA: Ghana, Togo, Burkina Faso, Senegal, Tunisia





BGEO GRANOLLRES• Spain www.bgeo.es

Skills, services, products, technologies

BGEO is a knowledge-driven company. They are core developers of Giswater software as well as the co-founders of Giswater Association (www.giswater.org). Using Open Source technology among others, our vision is to help water utilities sharing knowledge to improve their efficiency and resilience

6 CLEAN WATER

Experts and core developers of Giswater software (www.giswater.org). Giswater is the world's leading open source GIS & WATER MODELING TOOLS solution for water utilities. More than 8 million people are served by utilities using Giswater in America, Africa and Europe. The best value for money solution to help water utilities to improve their efficiency and resilience, with the added incentive that it provides a true knowledge transfer for end users.

R&D - R&I **Operations & Maintenance**

Studies - Design - Consultancy Funding Manufacturing & Production **Distribution & Installation** Marketing

> CLEAN WATER AND SANITATION 6

> > 6

Dismantling & Recycling

Training & Certification Education Promotion & Awareness



Preservation of Water Resources Water Catchment Water Treatment Water Quality Control Water Adduction/Transport

- Water Distribution Water Storage Wastewater Collection Wastewater Treatment Water Desalination
- Software Digitalisation Data Other(s)

Hardware - Smart metering

Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind **On-shore Wind** Hydropower Combined Heat & Power Geothermal **Biomass** - Biofuel Micro-grids Hydrogen **Energy Storage Energy Efficiency** Hardware - Smart Metering Software - Digitalisation - Data Other(s)



PROJECTS IN AFRICA: South Africa





Bluephage el Prat de Llobregat• Spain www.bluephage.com

Skills, services, products, technologies

Bluephage is a company that comercialises kits for analysis of viral indicators in water.

6 CLEAN WATER AND SANITATION

They control microbiological quality of water



PROJECTS IN AFRICA: South Africa





Createch Solutions SL Vic• Spain www.createch360.com

Skills, services, products, technologies

Createch360^o built an amazing team combining both process and IT engineers, having deployed their Intelligent Control Platform in more than 150 sites in more than 20 countries. Their solution helps the wastewater treatment operators to optimize the plants and reduce the current O&M costs.

6	CLEAN WATER AND SANITATION
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Createch has developed its own Intelligent Control Platform to provide their customers a holistic solution to optimize the WWTPs Control. Their solution improves the stability and reliability of the processes, increases process performance and reduces significantly the O&M costs, such aeration power and chemical dosing. Over and beyond the Platform customizable Process Intelligence Tools to support strategic decision as we as day-to-day operations.

R&D - R&I **Operations & Maintenance** Studies - Design - Consultancy **Dismantling & Recycling** Training & Certification Funding Manufacturing & Production Education **Distribution & Installation** Promotion & Awareness Marketing 6 CLEAN WATER AND SANITATION 0 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport

> Water Distribution Water Storage Wastewater Collection

- Wastewater Treatment
 Water Desalination
 Hardware Smart metering
- Software Digitalisation Data Other(s)

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PROJECTS IN AFRICA:





Defcon8 Barcelona• Spain www.defcon8.com

Skills, services, products, technologies

Defcon8 is a water technology company committed to solving critical water challenges with technological innovation. We are creating a more sustainable world by enabling our customers to optimise water usage.

Smart Cities need smart water. Acc. to UN water demand will outstrip it's availability by 4 % in 2 3 . Apart from aerators, flow limiters, eco taps,... which are necessary there is around a 18% unleashed potencial savings in water usage by changing our behavior.

6 CLEAN WATER AND SANITATION Defcon8 foster savings in buildings by raising awareness. They provide real time feedback and gamification to users when and where water is being used. 5-18% savings are achieved through behaviour changes in our daily habits.

R&D - R&I **Operations & Maintenance** Studies - Design - Consultancy **Dismantling & Recycling** Training & Certification Funding Manufacturing & Production Education **Distribution & Installation** Promotion & Awareness Marketing CLEAN WATER AND SANITATION 6 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport Hydropower Water Distribution **Combined Heat & Power** Water Storage Geothermal Wastewater Collection **Biomass** - Biofuel Wastewater Treatment Micro-grids Water Desalination Hydrogen Hardware - Smart metering **Energy Storage** Software - Digitalisation - Data Energy Efficiency Other(s) Hardware - Smart Metering



Their smart water flow monitor has been installed in hotels, offices, hospitals, households. About half of the water saved is warm, hence the energy & CO2 savings associated. A typical household of 2p could save 9m3 of water, 240kwh and 0,11T CO2 / yr.

PROJECTS IN AFRICA:

Software - Digitalisation - Data

Other(s)





Delpower Thimister-Clermont• **Belgium** <u>delpower.be</u>

Skills, services, products, technologies

Delpower offers software development for energy audit and energy efficiency advisory.

Easee allows to create energy balance and simulate investments for energy efficiency and renewables. It helps companies build multisite energy management, and obtain a better visbility on their action plan and follow up of the situation. easee could help african countries acquire the expertise related to the construction of energy reduction strategies and plan the energy transition.



<u>easee.energy</u> is an energy and CO2 audit software which helps companies build efficient and optimized action plan to reduce CO2 emissions

R&D – R&I **Operations & Maintenance** Studies - Design - Consultancy **Dismantling & Recycling** Training & Certification Funding Manufacturing & Production Education **Distribution & Installation Promotion & Awareness** Marketing CLEAN WATER AND SANITATION 6 0 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport Hydropower Water Distribution Combined Heat & Power Water Storage Geothermal Wastewater Collection **Biomass** - Biofuel Wastewater Treatment Micro-grids Water Desalination Hardware - Smart metering Hydrogen Software - Digitalisation - Data **Energy Storage** Other(s) Energy Efficiency Hardware - Smart Metering Software - Digitalisation - Data Other(s)



PROJECTS IN AFRICA:





E4SMA Srl Torino• Italy www.e4sma.com

Skills, services, products, technologies

R&D – R&I **Operations & Maintenance Dismantling & Recycling** Studies - Design - Consultancy Training & Certification Funding Manufacturing & Production Education **Distribution & Installation** Promotion & Awareness Marketing CLEAN WATER AND SANITATION 6 0 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport

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E4SMA provides services in the area of energy planning, policy, environment, and develop energy, environmental and economic models. E4SMA delivers analyses to support energy decision makers on climate policies, energy security, technology perspectives, impacts of climate change on the energy system, etc.

Scenario based integrated analysis of energy and water

6 CLEAN WATER

7 AFFORDABLE AND CLEAN ENERGY

Scenario based integrated analysis of energy technology assessment



Water Distribution

Water Desalination

Wastewater Collection

Wastewater Treatment

Hardware - Smart metering

Software - Digitalisation - Data

Water Storage

Other(s)

PROJECTS IN AFRICA:

Ethiopia, Morocco

Hydropower **Combined Heat & Power** Geothermal **Biomass** - Biofuel Micro-grids Hydrogen **Energy Storage Energy Efficiency** Hardware - Smart Metering Software - Digitalisation - Data Other(s)





ECO-SISTEMS WATERMAKERS SL Sabadell / Barcelona• Spain www.eco-sistems.com

Skills, services, products, technologies

Eco-Sistems Watermakers designs, develops and manufactures watermakers known for their energy-saving seawater desalinisation systems.

The company's innovative design, development and production centre in Sabadell (Barcelona) collaborates regularly with the Polytechnic University of Catalonia. Eco-Sistems Watermakers opens up its ground-breaking analysis and testing laboratories to the University, as well as the contributing the know-how of its experts in fluid mechanics. Eco-sistems Watermakers is advanced technology and quality Service guaranteed.



The EFFICIENT T-2000 and 4000 watermakers feature the most advanced technology on the market and can make any sort of saltwater drinkable: from that extracted directly from the sea to that from saline phreatic layers.

They are fully autonomous devices, portable or fixed depending on the model, that can produce 2,000 or 4,000 litres of drinking water per hour; perfect for small business, industrial, agricultural or domestic use.

The main feature of the EFFICIENT series is its patented energy-recovery system, which considerably reduces the power needed, using up to 80% less than the rest of the devices available on the market. Image: A set of the set of the

Preservation of Water Resources Water Catchment Water Treatment Water Quality Control Water Adduction/Transport Water Distribution Water Storage Wastewater Collection Wastewater Treatment

6 CLEAN WATER AND SANITATION

6

Water Desalination
 Hardware - Smart metering
 Software - Digitalisation - Data
 Other(s)

Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind **On-shore Wind** Hydropower Combined Heat & Power Geothermal **Biomass** - Biofuel Micro-grids Hydrogen **Energy Storage Energy Efficiency** Hardware - Smart Metering Software - Digitalisation - Data Other(s)

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PROJECTS IN AFRICA: South Africa





ECOBIOQUAL SRL Torino• Italy www.ecobioqual.it

Skills, services, products, technologies

ecoBIOQUAL is a consultant society working in the field of ecotoxicology, mutagenesis and applied biology, referring to environment, human health and quality of both products and industrial activities. It's a highly specialised society coworks with scientific research centres and University.



ecoBIOQUAL is a highly specialized society that propose a new approach relating to environment quality and occupational exposure, using biological assays (ecotoxicity and mutagenicity assays) developed in a laboratory following standards methods both national, and international (OCSE, ASTM, USEPA, Environment Canada).The approach proposed integrate biological science with other environmental sciences, providing a wide range of bioassays on microrganisms, animal organisms and plants to evaluate human activities impact on freshwater and seawater quality, groundwaters, drinking waters, wastewaters. Biological test can are also used for the evaluation of wastewater treatment plants efficiency.



ecoBIOQUAL offers its professional knowhow in the renewable energy sector such as the production of energy from the anaerobic digestion of urban wastes and wastes derived from different processes (sludges, animal manure, wastes from food industry).

✓ R&D – R&I

Studies - Design - Consultancy
 Funding
 Manufacturing & Production
 Distribution & Installation
 Marketing

6 CLEAN WATER AND SANITATION

6

Operations & Maintenance Dismantling & Recycling Training & Certification Education Promotion & Awareness

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Preservation of Water Resources Water Catchment Water Treatment

Water Quality Control
 Water Adduction/Transport
 Water Distribution
 Water Storage
 Wastewater Collection
 Wastewater Treatment
 Water Desalination
 Hardware - Smart metering
 Software - Digitalisation - Data
 Other(s)

Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind **On-shore Wind** Hydropower Combined Heat & Power Geothermal **Biomass - Biofuel** Micro-grids Hydrogen **Energy Storage Energy Efficiency** Hardware - Smart Metering Software - Digitalisation - Data Other(s)

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PROJECTS IN AFRICA:





6 CLEAN WATER

Ecomacchine Srl Grugliasco - Turin• Italy www.ecomacchine.it

Skills, services, products, technologies

treatment equipment.

Ecomacchine has been the first manufacturer in Italy to design and make the whole range of machines employed for waste or primary water treatment plants. It works now as qualified as supplier of both public water treatment and private companies, including some petrochemical World leading companies.

Ecomacchine works not only in design and manufacturing but also supporting its clients in equipment sizing and with after sales services.

Design, construction and sales of water and wastewater

R&D - R&I
Studies - Design - Consultancy Funding
Manufacturing & Production Distribution & Installation Marketing

Preservation of Water Resources Water Catchment

- Water Treatment
 Water Quality Control
 Water Adduction/Transport
 Water Distribution
 Water Storage
 Wastewater Collection
- Wastewater Treatment
 Water Desalination
 Hardware Smart metering
 Software Digitalisation Data
 Other(s)

Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind **On-shore Wind** Hydropower **Combined Heat & Power** Geothermal **Biomass** - Biofuel Micro-grids Hydrogen **Energy Storage Energy Efficiency** Hardware - Smart Metering Software - Digitalisation - Data Other(s)

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PROJECTS IN AFRICA: Tunisia, Algeria, Egypt



ELIOSYS

ELIOSYS Liège• Belgium www.eliosys.eu

Skills, services, products, technologies

ELIOSYS, with a ISO 17025 accredited testing laboratory and an engineering services, is a SME specialized in renewable energy technology and system.

The company offers support for all renewable energy projects from user requirements definition to interpretation of the results or recommendations.

Eliosys also provides expertise in energy efficiency and renewable energy-based systems to offer project leaders (architects, companies or public authorities) a complete service.

6 CLEAN WATER AND SANITATION ELIOSYS offers technical support with their experts in photovoltaics, solar thermal, hybrid (PVT), heat pumps and micro wind turbines. These renewable thechnologies can generate power for the cleaning water systems.

R&D - R&I **Operations & Maintenance** Studies - Design - Consultancy **Dismantling & Recycling** Training & Certification Funding Manufacturing & Production Education **Distribution & Installation Promotion & Awareness** Marketing CLEAN WATER AND SANITATION 6 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore** Wind Water Adduction/Transport Hydropower Water Distribution Combined Heat & Power Water Storage Geothermal Wastewater Collection **Biomass** - Biofuel Wastewater Treatment Micro-grids Water Desalination Hydrogen Hardware - Smart metering **Energy Storage** Software - Digitalisation - Data Energy Efficiency Other(s)

Energy Efficiency
 Hardware - Smart Metering
 Software - Digitalisation - Data
 Other(s)



They also offer technical acceptance during or after the technical works. Eliosys regularly carries out SAT (site acceptance test) and FAT (factory accetance test) for renewable energy projet. The engineering services can design and follow energy solutions and the ELIOSYS lab can validate all these solutions to any climat.

PROJECTS IN AFRICA: Senegal, Egypt, Tunisia, Morocco





EnergTrade Strambino• Italy www.energtrade.com

Skills, services, products, technologies

R&D – R&I **Operations & Maintenance Dismantling & Recycling** Studies - Design - Consultancy Training & Certification Funding Manufacturing & Production Education **Distribution & Installation** Promotion & Awareness Marketing CLEAN WATER AND SANITATION 6 6 0

EnergTrade is an Italian company, with over fifty years of experience in the energy sector behind it. EnergTrade is specialized inB2B trading of products to produce energy: solar panels, hydro and wind turbines, generators, batteries.

6	CLEAN WATER And Sanitation

EnergTrade has been producing hydroelectricity for 3 generations and we sell hydroelectric turbines all over the world.

Preservation of Water Resources Water Catchment Water Treatment Water Quality Control Water Adduction/Transport Water Distribution Water Storage Wastewater Collection Wastewater Treatment Water Desalination Hardware - Smart metering Software - Digitalisation - Data Other(s)

Solar - PV

1

Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind **On-shore Wind** Hydropower Combined Heat & Power Geothermal **Biomass** - Biofuel Micro-grids Hydrogen **Energy Storage Energy Efficiency**

Hardware - Smart Metering Software - Digitalisation - Data Other(s)

7 AFFORDABLE AND CLEAN ENERGY

B2B trading of products to produce energy: solar panels, hydro and wind turbines, generators, batteries.



PROJECTS IN AFRICA: Kenya, Ivory Coast





Energy Pool Development Le Bourget-du-Lac-Cedex• France www.energy-pool.eu

Skills, services, products, technologies

At the centre of the smart grid revolution, Energy Pool manages and optimises the energy consumption of complex systems (industrial sites, distributed generation, renewable energy, storage asset, etc.) for a smarter and more sustainable energy management.



operations, HV Network Flexibility monetization and Decarbonization industrial of processes, Energy Management System - Software.

6 6 Preservation of Water Resources Water Catchment Water Treatment Water Quality Control Water Adduction/Transport Water Distribution Water Storage Wastewater Collection Wastewater Treatment Water Desalination Hardware - Smart metering Software - Digitalisation - Data

R&D – R&I **Operations & Maintenance Dismantling & Recycling** Studies - Design - Consultancy Training & Certification Funding Manufacturing & Production Education **Distribution & Installation** Promotion & Awareness Marketing CLEAN WATER AND SANITATION 0 Solar - PV 1 Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind **On-shore Wind** Hydropower Combined Heat & Power Geothermal **Biomass** - Biofuel Micro-grids Hydrogen **Energy Storage** Energy Efficiency Other(s) Hardware - Smart Metering Software - Digitalisation - Data

Other(s)

PROJECTS IN AFRICA:





ENERSOL Battice • Belgium www.enersol.be

Skills, services, products, technologies

Enersol is active in solar, windturbines, storage solutions and charging solutions as well as HVAC for B2B and B2C applications.

From a few kWp to several MWp stations, fully scalable, fully customizable. Integrators/EPC who cover the design, construction and maintenance of all their projects.

6 CLEAN WATER AND SANITATION

Water pumps coupled with solar/windturbines and storage solutions



Services and products in windturbines, solar stations, storage and charging stations





PROJECTS IN AFRICA:

Burkina Fasso, Mozambique, DRC, Senegal, Mali, Nigeria, Sudan





Eutectic System S.r.l. Dovadola - FC• Italy www.esfrigo.it

Skills, services, products, technologies

Eutectic System is an Italian company specialized in cool and frozen solutions using eutectic technology for storage and distribution of perishable goods.

Its technologies and services are easy to use, they entail no fuel consumption and allow flexibility in order to save energy.

6	CLEAN WATE And Sanita
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Water production through condensation of the umidity of the air and ECA techology for sanitisation of water (Acqua di rugiada station).



Other(s)



Production of condensing unit and eutectic devices with P.C.M. Phase Change Materials and storage of latent energy for the conservation of pherishable goods thermal conditionings of buildings.



PROJECTS IN AFRICA: Algeria





EVOCELLS Baillonville• Belgium www.evocells.be

Skills, services, products, technologies

Evocells is the largest Belgian producer of solar photovoltaic pannels.

The company's products are quality driven by a cautious selection of component and its own manufacturing recipe. 100% of the modules are double tested by flashing and electroluminescence.

On top of the manufacturing, EVOCELLS can provide a service of engineering, installation and maintenance of solar plant. The complete package from the manufacturer to the installation gives to the customer the best and longest warranties on the market.



Understanding of the link between water distribution and energy production.



Photovoltaic energy, Photovoltaic panel production with high Belgian Quality, Photovoltaic expertise, Battery storage, Energy production and engineering according to customer needs.



PROJECTS IN AFRICA: Morocco, Madagascar

Preservation of Water Resources Water Catchment Water Treatment Water Quality Control Water Adduction/Transport Water Distribution Water Storage Wastewater Collection Wastewater Treatment Water Desalination Hardware - Smart metering Software - Digitalisation - Data Other(s)

R&D - R&I

Funding

Marketing

Studies - Design - Consultancy

Manufacturing & Production

6 CLEAN WATER AND SANITATION

Distribution & Installation

Operations & Maintenance Dismantling & Recycling Training & Certification Education Promotion & Awareness

Solar - PV



Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind On-shore Wind Hydropower Combined Heat & Power Geothermal Biomass - Biofuel Micro-grids Hydrogen Energy Storage Energy Efficiency Hardware - Smart Metering Software - Digitalisation - Data Other(s)





EXTRIS srl Colverde (CO)• Italy www.extris.com

Skills, services, products, technologies

EXTRIS is an Italian manufacturer of technical fabrics used for the production of screen printing stretched frames or to produce high precision and fine micrometer filters. The company consists of a weaving department with highly sophisticated looms and a fabrication department where high-tech machines are used.

Application areas of EXTRIS filters range from water and food filters, to automotive sector filters as well as filtration for the chemical industry. EXTRIS is also capable of producing non-standard fabrics to help solve specific filtration problems. <image><image><text><text><text><text><text>

Preservation of Water Resources Water Catchment

- Water Treatment
 Water Quality Control
 Water Adduction/Transport
 Water Distribution
 Water Storage
 Wastewater Collection
- Wastewater Treatment
 Water Desalination
 Hardware Smart metering
 Software Digitalisation Data
 Other(s)

Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind **On-shore Wind** Hydropower **Combined Heat & Power** Geothermal **Biomass** - Biofuel Micro-grids Hydrogen **Energy Storage Energy Efficiency** Hardware - Smart Metering Software - Digitalisation - Data Other(s)

6 CLEAN WATER AND SANITATION

Extris supplies filters for irrigation or for drinking water.



PROJECTS IN AFRICA: Tunisia, Morocco, Egypt





Ferplant srl Torino• Italy www.ferplant.it

Skills, services, products, technologies

Ferplant is specialized in the design and construction of plants for the production of energy from renewable and similar sources such as the organic fraction of solid urban waste.



Design and construction of plants for the production of energy from renewable and similar sources such as the organic fraction of solid urban waste.

R&D – R&I **Operations & Maintenance Dismantling & Recycling** Studies - Design - Consultancy Training & Certification Funding Manufacturing & Production Education **Distribution & Installation** Promotion & Awareness Marketing 6 CLEAN WATER AND SANITATION 0 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control On-shore Wind Water Adduction/Transport Hydropower Water Distribution Combined Heat & Power Water Storage Geothermal Wastewater Collection **Biomass** - Biofuel Wastewater Treatment Micro-grids Water Desalination Hydrogen Hardware - Smart metering **Energy Storage** Software - Digitalisation - Data **Energy Efficiency** Other(s) Hardware - Smart Metering Software - Digitalisation - Data

Other(s)

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PROJECTS IN AFRICA: Morocco





Greenfish Brussels• Belgium www.greenfish.be

Skills, services, products, technologies

Greenfish has developed a 360° approach to accelerate sustainable transformation and reach climate neutrality.

They support their customers in defining sustainability ambitions, assessing footprint and engineering innovative solutions to make products and services competitive and sustainable.



6 CLEAN WATER

Consulting services



PROJECTS IN AFRICA:





GreenPlug Engineering Ixelles• Belgium www.greenplug.eu

Skills, services, products, technologies

GreenPlug Engineering offers engineering & consultancy services in renewable energy (Hydropower, Wind, Solar, Storage)

They mainly work on small and medium plants (0,1 - 20MW) and have a strong international and African experience.

6 CLEAN WATER AND SANITATION GreenPlug engineering studies run-of-the-river and reservoir hydropower projects in compliance with the highest environmental standards. Know-how in the turbining of networks' waters: irrigation, waste- or drinking water.

R&D – R&I **Operations & Maintenance** Studies - Design - Consultancy **Dismantling & Recycling** Training & Certification Funding Manufacturing & Production Education **Distribution & Installation** Promotion & Awareness Marketing CLEAN WATER AND SANITATION 6 6 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control On-shore Wind Water Adduction/Transport Hydropower Water Distribution Combined Heat & Power ✓ Water Storage Geothermal Wastewater Collection **Biomass - Biofuel** Wastewater Treatment Micro-grids Water Desalination Hydrogen Hardware - Smart metering **Energy Storage** Software - Digitalisation - Data Energy Efficiency Other(s) Hardware - Smart Metering Software - Digitalisation - Data Other(s)

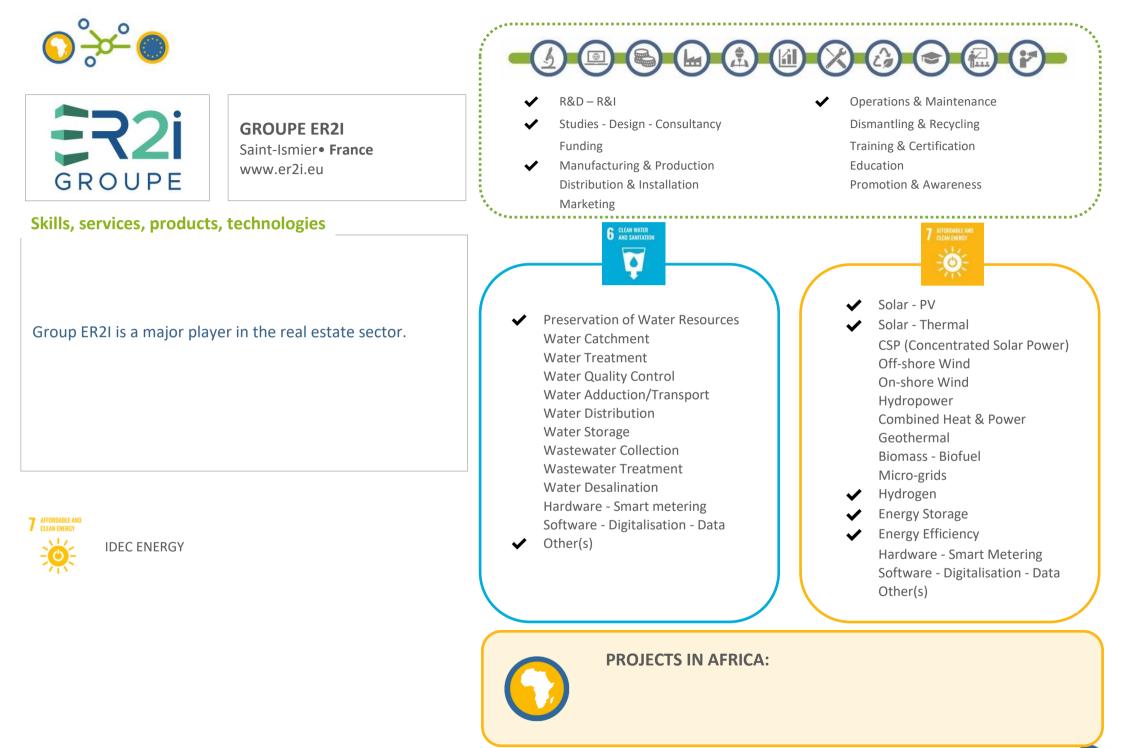
PROJECTS IN AFRICA:



Energy resource Assessment, Feasibility study & Design, Owner's Engineer and Construction management, Technical due diligence.



Currently working in Kenya, DR Congo, Rwanda, Madagascar. Past experience in Burundi, Cameroon, Chad, Djibouti, Mali, Morocco, Mozambique, Niger, Rwanda, Senegal, Tanzania.







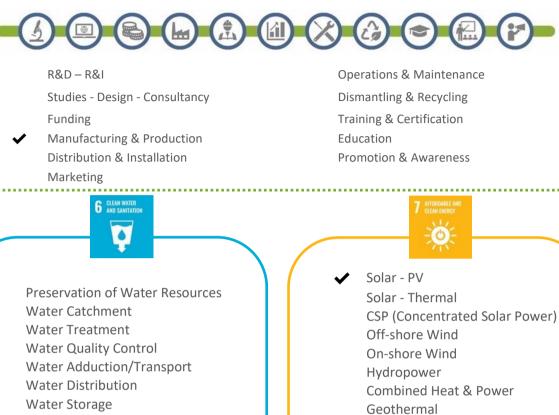
HeliosLite Le Bourget-du-Lac• France helioslite.com

Skills, services, products, technologies

HeliosLite is a "technological challenger" in the field of photovoltaic structures (e.g. trackers and floating PV) with patented and field proven products to lower the cost of energy and open new markets notably off-grid and selfconsumption applications.



HeliosLite is an equipment provider combining a patented mechanical structure with electronic control, monitoring and smart phone O&M application for ground mounted, PV power plants from 5kWp (one tracker) to 1MWp (200 trackers). HeliosLite works for developers of energy production & storage solutions.



Water Storage Wastewater Collection Wastewater Treatment Water Desalination Hardware - Smart metering Software - Digitalisation - Data

Biomass - Biofuel Micro-grids Hydrogen Energy Storage Energy Efficiency

Hardware - Smart Metering Software - Digitalisation - Data Other(s)



Other(s)

PROJECTS IN AFRICA: South Africa, Senegal, Morocco





HYDRAO Grenoble• France pro.hydrao.com

Skills, services, products, technologies

HYDRAO offers smart solution for water preservation. The solutions raise consumers awareness and encourage them to adopt an eco-responsible behaviour. It also offers a set of innovative and easy-to-use products & services to help individuals and companies to take action on their water consumption.

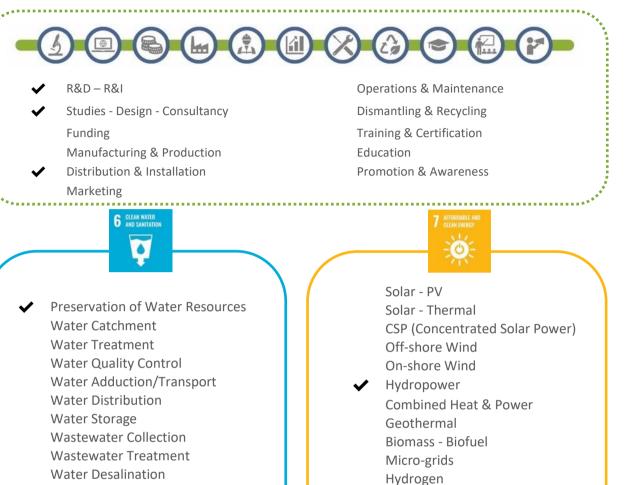


HYDRAO Smart Shower allows to reduce water consumption thanks to the Nudge pedagogy and an economic flow. Its solution also allows to monitor water consumption in the shower. HYDRAO Meter allows to follow water consumption in real time to know it better and to be able to quickly detect abnormal consumption (leaks, etc.)



HYDRAO Showers reduce hot water consumption in the shower. This means that less energy is needed to heat the water.

All the technologies work without batteries thanks to a micro-turbine. HYDRAO shower heads save up to 7 % of hot water. This means both water and energy savings. They also save up to 3 times more CO2 than they emit during their manufacture.



- Hardware Smart metering
- Software Digitalisation Data Other(s)

Energy Storage
 Energy Efficiency
 Hardware - Smart Metering
 Software Digitalization Date

 Software - Digitalisation - Data Other(s)





hydroo

HYDROO PUMP INDUSTRIES, S.L. PALOL DE R. (Girona)• Spain www.hydroo.com

Skills, services, products, technologies

Hydroo manufactures a wide range of pumping solutions for the most demanding applications. They design efficient pumps in connection with our own RD&I Excellence Centre. Hydroo also provides engineering services for hydraulic systems and equipment. Their Tests Centres sized up to 1000 m³/h, 40 bar and 160 kW provide performance warranty to 100% of our production.

6 CLEAN WATER

Pumping solutions for building services, industry, irrigation and industrial process. Customers find out the highest performance in booster sets and pressurization, firefighting sets, underground water, HVAC, drainage and sewage, utilities, desalination and OEM integrations.

Operations & Maintenance R&D - R&I Studies - Design - Consultancy **Dismantling & Recycling Training & Certification** Funding Manufacturing & Production Education **Distribution & Installation Promotion & Awareness** Marketing CLEAN WATER AND SANITATION 6 6 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport Hydropower Water Distribution Combined Heat & Power Water Storage

- Wastewater Collection
- ✓ Wastewater Treatment
- Water Desalination
 Hardware Smart metering
 Software Digitalisation Data
 Other(s)

Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind On-shore Wind Hydropower Combined Heat & Power Geothermal Biomass - Biofuel Micro-grids Hydrogen Energy Storage Energy Efficiency Hardware - Smart Metering Software - Digitalisation - Data Other(s)



PROJECTS IN AFRICA:

Agadir (Morocco) WWTP pump units, RO plants in Egypt and Tunis. Drinking water projects in Kenya and irrigation projects in Uganda, among the regular supplies and distribution in several countries.

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Hydroscan Gembloux• Belgium www.hydroscan.eu

Skills, services, products, technologies

Hydroscan is a world-leading expert in holistic, integrated solutions for more sustainable and cost-effective water management. They are in first instance water engineers that deliver preventive warning for water impacts and smart urban water solutions.

Their smart water management solutions in these 3 key markets are :

- Hydro portal & LeakRedux [®] Real-time leakage warning system and operational leakage reduction management

- RioScan[®] Integrated 3D measuring technology , structural failure forecasting and 3D visualisation (cloud)

-Flood4Cast [®] real-time forecasting on urban floods and operational disaster management



Hydroscan offers smart water solutions in 3 markets: Drinking water management, Sewer management, Urban flood management. Their target groups are the Public (Water Utilities, Regions, provinces, Cities, Ministries/Governments, Regulators, Industry, Emergency services) and the Private sector (Banks & Funds, International consultancy groups, Insurances).



The products and services offered in the water sector (Hydraulic modeling, detection of leaks to reduce NRW, real time modeling,...) will help utilities and water infrastructures managers to better manage and optimize their infrastructures with a reduction of energy consumption.



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Idroricerche S.r.l. Chiusa di Pesio• Italy www.idroricerche.com

Skills, services, products, technologies

Idroricerche is active in the research, planning and implementation of customized and turnkey solutions for the efficient and ecological use of water in the Food&Beverage industry, especially mineral water, brewery, wine, dairy and water for drinking purposes.

Idroricerche offers tailor-made ecological applications for the improvement of production processes, based on integrated water cycle: incoming water, process water at the points of use, service water, waste water and renoval of incoming water.

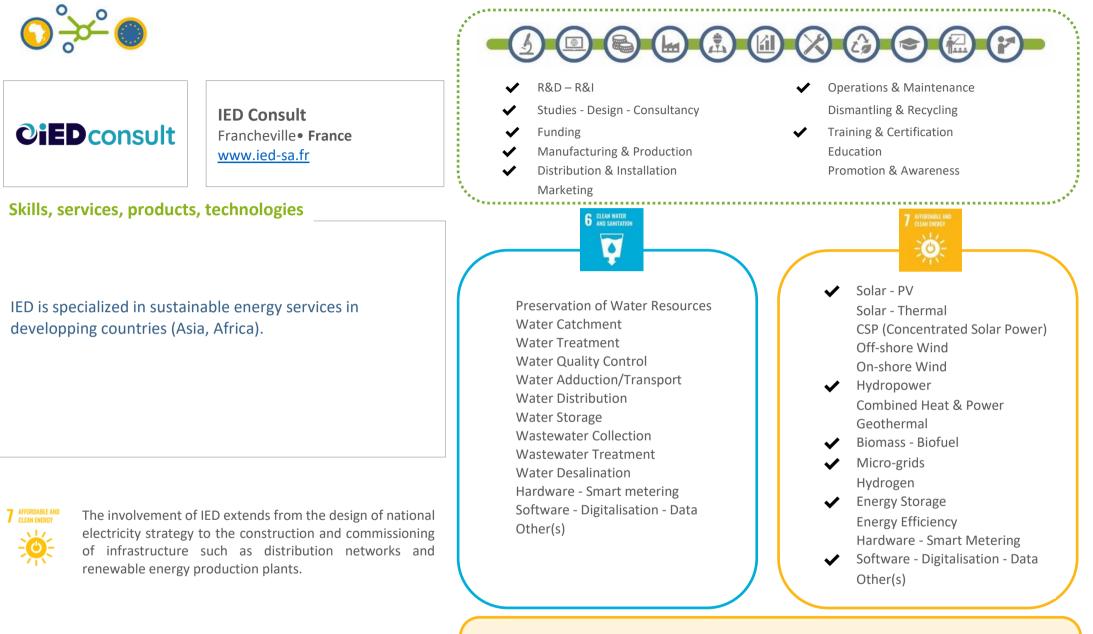
Its microfiltration systems are useful in food & beverage. Idroricerche also works in hydrogeological research for water extraction.



Hydrogeological research (non-invasive studies), intake works (springs and wells), piping storage and plant distribution, all kind of water treatment (reverse-osmosis, microfiltration, ultrafiltration, softening, chlorine dosage, activated carbon systems...), automation for managing plants, springs, wells, plants sanitizing, CIP systems, enzymatic washing, water saving systems, dynamic filtration plants for cheese firming water, brine filtration plants.



PROJECTS IN AFRICA:



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PROJECTS IN AFRICA:

Uganda, Kenya, Mali, DRC, Senegal, Benin, Tanzania, Congo, Niger, Madagascar, Guinea, Gabon, Cameroon





InovaYa Lyon• France inovaya.com

Skills, services, products, technologies

InovaYa is a french start-up with social utility goal. It develops innovative water filtration devices for drinking water access and reduces waterfootprint for industrial sector.

6 CLEAN WATER

InovaYa develops new technology for water filtration and treatment to improve drinking water access. Its technology works without consumable nor chemical products and with a minimum of maintenance. It can filter any kind of fresh water source and make it drinkable. The filters works during 10 years thanks to an algorithm which cleans them automaticaly.



InovaYa's device works with a minimum of electricty needs and can be plugged to solar panel, water turbine or work with gravity only.





Biomass - Biofuel Micro-grids Hydrogen Energy Storage Energy Efficiency Hardware - Smart Metering Software - Digitalisation - Data Other(s)

PROJECTS IN AFRICA: DRC (Democratic Republic of Congo)

Hardware - Smart metering

Other(s)

Software - Digitalisation - Data





InSensus Project srl Pino Torinese• Italy www.in-sensus.com

Skills, services, products, technologies

InSensus Project a designer and manufacturer of cutting edge data loggers, from sensor to visualization software. InSensus offers ingenious monitoring solutions for Structural Health Monitoring of Infrastructures, Land and Snow Slide Monitoring, Pipeline Structural Health Monitoring, Boat/Ship Structural Monitoring.

The solutions are able to monitor the performance of structures so as pipes dams wind turbines ect, to optimize maintenance and to prevent failure.

SUPERMICRON FOR UNDERGROUND and overground PIPES.

A revolutionary system, able to monitor continuously and with great precision the behavior of external or underground pipelines, alerting in real time in case of deformations and anomalous pressure variations or angular displacements and capable of identifying any leaks and their exact location.



6 CLEAN WATER

Same technology can be applied to penstocks and hydrogen transport. The SuperMicron sensor is perfect for off and onshore wind turbines.



PROJECTS IN AFRICA:





IRIDRA S.R.L. Firenze• Italy www.iridra.eu

Skills, services, products, technologies

IRIDRA is an engineering SME based in Florence (ITALY) founded in 1998 by a multidisciplinary group of professionals with multi-year experience in sustainable water management and nature based solution

IRIDRA staff designed over 3 constructed wetland (CW) systems to face several problems (domestic, urban and industrial wastewater, landfill leachate, extensive systems for agricultural and highway runoff, Combined Sewer Overflows) in different geographical situations (Italy, North Africa, Moldavia, India, Sri Lanka, Cuba, Honduras, Palestine). For most of the CW realized, IRIDRA team worked also on supervision and participated to the CW management and monitoring during the years after the operation. IRIDRA designed and supervised the realization of the nowadays biggest treatment wetland for secondary treatment in the World: the treatment plant of Orhei (Moldova).



Design, assistance to construction, R&D, dissemination, training on sustainable water management and nature based solutions.



R&D – R&I
 Studies - Design - Consultancy
 Dismantling & F

Funding Manufacturing & Production Distribution & Installation Marketing

> 6 CLEAN WATER AND SANITATION

> > 6

Operations & Maintenance Dismantling & Recycling Training & Certification Education Promotion & Awareness

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- Preservation of Water Resources
 Water Catchment
- Water Treatment
 Water Quality Control
 Water Adduction/Transport
 Water Distribution
 Water Storage
 Wastewater Collection
- Wastewater Treatment
 Water Desalination
 Hardware Smart metering
 Software Digitalisation Data
- Other(s)

Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind **On-shore Wind** Hydropower Combined Heat & Power Geothermal **Biomass** - Biofuel Micro-grids Hydrogen **Energy Storage Energy Efficiency** Hardware - Smart Metering Software - Digitalisation - Data Other(s)

PROJECTS IN AFRICA: Malawi, Mozambique, Tunisia, Tanzania





Iris srl Orbassano• Italy www.irissrl.eu

Skills, services, products, technologies

IRIS is a strong innovative SME, based in the industrial area of Turin, specialized in the integration and development of technologies for the circular economy in small-scale industrial and civil institutions (recovery of resources, water, energy, raw materials).

IRIS major technologies are related to:1. Waste to energy. The plasma conversion reactor.2. Plasma Water treatment. Thanks to this technology bacteria and microorganisms are eliminated and the formation of algae is prevented.



IRIS has conceived, designed and patented the Greenplasma Cold treatment, that uses high voltage discharge but very short electrical pulses to treat any fluid. Applied to water, it eliminates bacteria, prevents the formation of algae, eliminates non-biodegradable pollutants. IRIS also integrates water technologies.



IRIS has conceived, designed and patented, with the use of thermal plasma technology, a treatment that allows, due to the high temperatures reached (up to 5000 $^{\circ}$ C), to transform any organic compound into gas, separating it from matrix. The system has great potential in circular economy applications as it allows the recovery of raw materials and energy, without harmful emissions.



PROJECTS IN AFRICA:



III Janson

Janson lawfirm bruxelles• Belgium www.janson.be

Skills, services, products, technologies

The Energy, Climate Change and Mobility Department of the law firm Janson Baugniet is specialised in legal and regulatory matters related to renewable energy.

Janson lawfirm offers legal and regulatory assistance; Provides legal expertise in the implementation of energy projects, including energy efficiency projects; Conducts and assists in legal studies and benchmarking in energy and renewable energy;

Provides advice in contract drafting (energy supply, PPA, B.O.T of power plants, LNG, pipeline matters, financial arrangements, etc.), negotiations, and in the development of new renewable energy sources.

6 CLEAN WATER AND SANITATIO

Regulatory and tariff structure licensing

7 CLEAN ENERGY

Regulatory, tariff, grid code, access to the grid and smart grid infrastructure, distribution and metering, protection of investment, development of a financing structure, financing opportunities and public-private partnerships, rural electrification, energy storage, energy efficiency projects, low-carbon growth, capacity building, development of policy, governance and institutional frameworks.

R&D – R&I Studies - Design - Consultancy Funding Manufacturing & Production Distribution & Installation Promotion & Awareness

Preservation of Water Resources Water Catchment Water Treatment Water Quality Control Water Adduction/Transport Water Distribution Water Storage Wastewater Collection Wastewater Treatment Water Desalination Hardware - Smart metering Software - Digitalisation - Data

CLEAN WATER AND SANITATION

Marketing

✓ Other(s)

- Solar PV
- Solar Thermal
- CSP (Concentrated Solar Power)

0

- Off-shore Wind
- On-shore Wind
- ✓ Hydropower
- ✓ Combined Heat & Power
- ✓ Geothermal
- Biomass Biofuel
- Micro-grids
- Hydrogen
- Energy Storage

Energy Efficiency
 Hardware - Smart Metering
 Software - Digitalisation - Data
 Other(s)



PROJECTS IN AFRICA:

Algeria, Benin, Burkina Faso, Burundi, Djibouti, DR Congo. ECOWAS region, Guinea, Ivory Coast, Madagascar, Mali, Morocco, Niger, Nigeria, Rwanda, Senegal, Togo.





JLA Hydro Assesse• Belgium www.jlahydro.be

Skills, services, products, technologies

JLA Hydro is a Belgian based company specialized in the design, manufacturing and installation of tailor-made hydro turbogenerators.

JLA Hydro turbines are designed for heads ranging between 3 and 80 metres and flow rates from 30 to 1600 l/s, generating powers from 5 to 500 kW.



Design, manufacture and installation of hydroelectric equipment. Operations and maintenance through powerful remote management tools and regular routine maintenance and visits. Rehabilitation of old turbines. Training to develop existing local capacity in the pico-hydropower sector: generating electricity from 1 to ~ 20 kW from a waterfall. With objective to enable local entrepreneurs to design, manufacture and operate hydroelectric equipment.

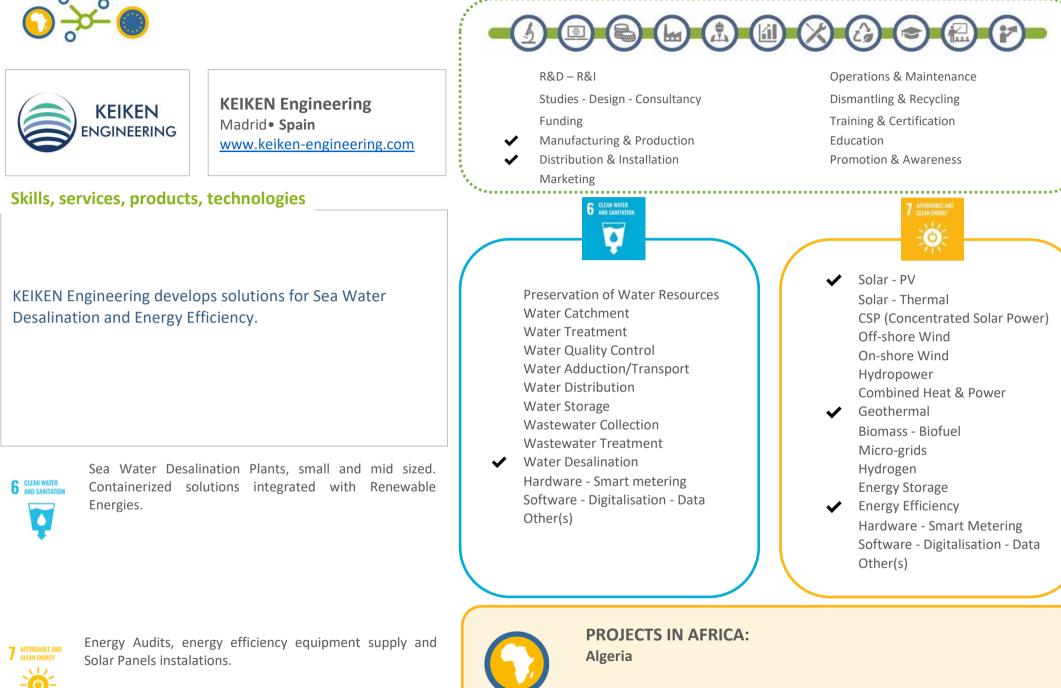
R&D - R&I **Operations & Maintenance Dismantling & Recycling** Studies - Design - Consultancy Training & Certification Funding Manufacturing & Production Education **Distribution & Installation** Promotion & Awareness Marketing CLEAN WATER AND SANITATION 6 6 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport Hydropower Water Distribution Combined Heat & Power Water Storage Geothermal Wastewater Collection **Biomass** - Biofuel Wastewater Treatment Micro-grids Water Desalination Hydrogen Hardware - Smart metering **Energy Storage** Software - Digitalisation - Data **Energy Efficiency** Other(s) Hardware - Smart Metering Software - Digitalisation - Data



PROJECTS IN AFRICA: DR Congo, Kenya, Rwanda, Burundi, Cameroon, Madagascar

Other(s)









KING DIAMOND SLU SANT PERE DE RIBES -**BARCELONA• Spain** www.ufbaf.com

Skills, services, products, technologies

They provide UFBAF DN BIOLOGICAL DENITRIFICATION for REMOVAL OF NITRATES (NO₃) FROM WATER BY REDUCTION TO NITROGEN GAS (N₂)

CO₂ emissions reduction compared to reverse osmosis. Minimal operational cost.

Zero waste, NO₃ to N₂, clean technology.

Modular construction. This makes it easy to adapt to load variations and possible expansions.

CLEAN WATER

Removal of Nitrates (NO₃) from water by reduction to Nitrogen gas (N₂)

R&D – R&I **Operations & Maintenance** Studies - Design - Consultancy **Dismantling & Recycling** Training & Certification Funding Manufacturing & Production Education **Distribution & Installation Promotion & Awareness** Marketing CLEAN WATER AND SANITATION

Preservation of Water Resources Water Catchment

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Water Treatment Water Quality Control Water Adduction/Transport

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- Water Distribution Water Storage
- Wastewater Collection
- Wastewater Treatment Water Desalination Hardware - Smart metering Software - Digitalisation - Data Other(s)

Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind **On-shore Wind** Hydropower **Combined Heat & Power** Geothermal **Biomass** - Biofuel Micro-grids Hydrogen **Energy Storage Energy Efficiency** Hardware - Smart Metering Software - Digitalisation - Data Other(s)

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PROJECTS IN AFRICA:





Lagazel Saint-Galmier• France www.lagazel.com

Skills, services, products, technologies

Lagazel manufactures solar lamps and solar-home-systems in France and Africa.



R&D and production of off-grid solar products : solar lamps, solar-home-systems, collective charging station, bulblights, battery pack. Local production and sub-contracting for other players. Repair and refurbishing of components from solar products.

R&D – R&I **Operations & Maintenance Dismantling & Recycling** Studies - Design - Consultancy **Training & Certification** Funding Manufacturing & Production Education **Distribution & Installation** Promotion & Awareness Marketing 6 CLEAN WATER AND SANITATION 0 0 Solar - PV 1 Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport Hvdropower Water Distribution Combined Heat & Power Water Storage Geothermal Wastewater Collection **Biomass** - Biofuel Wastewater Treatment Micro-grids Water Desalination Hydrogen Hardware - Smart metering **Energy Storage** Software - Digitalisation - Data

Energy Storage Energy Efficiency Hardware - Smart Metering Software - Digitalisation - Data Other(s)



Other(s)

PROJECTS IN AFRICA: Burkina Faso, Benin, Senegal, Mali





LuciSun Brussels• Belgium www.lucisun.com

Skills, services, products, technologies

LuciSun is a Research and Consulting company active in solar energy.

LuciSun is a company that has been created by a team of highly-skilled engineers and scientists in the fields of solar energy and energy meteorology. The company specialises in advanced consulting services, simulation tools, data analytics and R&D for the solar energy sector, mostly regarding photovoltaic (PV) applications.



LuciSun offers services to solar energy plant managers, consulting companies, investment entities, and public bodies. These services include energy yield simulation, performance assessment, due diligence, risk assessment, monitoring data analysis, reporting, as well as fault detection and diagnosis.





PROJECTS IN AFRICA: Benin, Tunisia, Egypt





MEC SRL Turin• Italv www.mecsrl.net

Skills, services, products, technologies

MeC is a consultancy firm based in Italy and USA. MeC core business is Cost Analysis, and in particular Should Cost, Cost Reduction and Benchmarking. MeC concentrates its activities in particular on: Should Cost: analysis of variable costs and investments; Cost Tracking: cost monitoring and control; Cost Benchmark: evaluation of competitor products; Cost Reduction: identification of value optimization opportunities. Thanks to its business, clients are able to know and control the exact costs of what they buy and/or produce, and to obtain new information on the market of their interest, thus increasing their competitiveness.

7 AFFORDABLE AND CLEAN ENERGY

Cost Analysis for solar panels located in solar plants (Variable and Investments).



Feasibility and make-buy logic; MeC answer to questions such as "Where is it convenient to produce? Do the countries where the panels will be installed have the technologies and skills necessary for production and assembly of the panels? Would the the customer like to use local labor for assembly?" and similar questions.

R&D - R&I **Operations & Maintenance** Studies - Design - Consultancy **Dismantling & Recycling Training & Certification** Funding Manufacturing & Production Education **Distribution & Installation Promotion & Awareness** Marketing CLEAN WATER AND SANITATION 6 6 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport Hydropower

Water Distribution Water Storage Wastewater Collection Wastewater Treatment Water Desalination Hardware - Smart metering Software - Digitalisation - Data Other(s)

Micro-grids Hydrogen **Energy Storage** Energy Efficiency Hardware - Smart Metering

Combined Heat & Power

Geothermal

Biomass - Biofuel

- Software Digitalisation Data
- Other(s) ~



MEC is opening its new Company "MEC COSTING" in Tanger Free Zone -Morocco







7 AFFORDABLE AND CLEAN ENERGY MITIS SA Angleur• Belgium www.mitis.be

Skills, services, products, technologies

MITIS develops, manufactures, sells, and services innovative energy converters for the transition to decentralized, low greenhouse gas and efficient energy production. Company's systems are based on flameless combustion microturbines applied to Combined Heat and Power.

Production ranges from 10 to 20 kWe and 90 kW of heat.

The solutions "micro-10 HP" and "micro-20" combine a flameless combustion microturbine with a heat pump as an ultra efficient gas heat pump. The microturbine produces up to 10 kWe (Micro-10) or 20 kWe (Micro- 20) of DC electricity and heat (35 kWth) through the clean combustion of natural gas, biogas or liquid fuels. The heat pump works with a natural refrigerant (R290) and DC powered compressors from the automobile industry. Our solution offers a very efficient and novel capability when feeded by biogas as our flameless combustion ensures very low emissions while our novel microtubine produces electricity. The microturbine and the heat pump connect through a DC microgrid. The heat pump combines four separate refrigeration loops and exploits air renewable energy to produce up to 40 kWth of renewable heat or cool. The solution is very modular since multiple systems can be combined on the same microgrid to yield higher power.

- R&D R&I
 Studies Design Consultancy
 - Funding

Water Catchment

Water Treatment

Water Distribution

Water Storage

Other(s)

Water Quality Control

Wastewater Collection

Wastewater Treatment

Hardware - Smart metering

Software - Digitalisation - Data

Water Desalination

Water Adduction/Transport

Manufacturing & Production Distribution & Installation Marketing

> 6 CLEAN WATER AND SANITATION

> > 6

Preservation of Water Resources

Operations & Maintenance Dismantling & Recycling Training & Certification Education Promotion & Awareness

> 7 AFTORBABLE AND CLEAN ENERGY

Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind On-shore Wind Hydropower

- Combined Heat & Power
 Geothermal
 Biomass Biofuel
 Micro-grids
 Hydrogen
 Energy Storage
- Energy Efficiency
 Hardware Smart Metering
 Software Digitalisation Data
 Other(s)

PROJECTS IN AFRICA:





NEPSEN (formerly Transénergie) Lyon• France www.transenergie.eu

Skills, services, products, technologies

Transénergie is an independent consulting and engineering firm specialised in renewable energies since 1992. The team is part of the NEPSEN group: turnover of 11M €, 150 employees, mainly consulting engineers.



Solar photovoltaics (ground mounted, rooftop, carports, floating) : owner's engineering, pre-feasibility studies, feasibility studies, energy yield analysis, site surveys, construction monitoring, performance analysis, project management, technical due diligence, certified training.
Renewable energy strategy involving GIS methodology and various renewables (not only solar)
Charging stations for electric vehicles

- Off-grid networks / hybrid solar plants (PV + li-ion storage or diesel generator)
- Green Hydrogen

R&D – R&I **Operations & Maintenance** Studies - Design - Consultancy **Dismantling & Recycling** Training & Certification Funding Manufacturing & Production Education **Distribution & Installation Promotion & Awareness** Marketing CLEAN WATER AND SANITATION 6 6 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport Hvdropower Water Distribution Combined Heat & Power Water Storage Geothermal Wastewater Collection **Biomass** - Biofuel Wastewater Treatment Micro-grids

Energy Storage
 Energy Efficiency
 Hardware - Smart Metering
 Software - Digitalisation - Data
 Other(s)

Hydrogen



Water Desalination

Other(s)

Hardware - Smart metering

Software - Digitalisation - Data



Odit	

Odit-e Meylan• France odit-e.com

Skills, services, products, technologies

Odit-e is digitalizing the electricity distribution networks to support their managers in the energy transition.



Odit-e's main innovation consists in automatically modeling electricity distribution networks from data from smart meters.

Based on this model, the company offers four services to optimize these networks by improving the quality of service, the quality of supply and the capacity of PV production while minimizing losses.

R&D – R&I **Operations & Maintenance Dismantling & Recycling** Studies - Design - Consultancy **Training & Certification** Funding Manufacturing & Production Education **Distribution & Installation** Promotion & Awareness Marketing CLEAN WATER AND SANITATION 6 6 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport Hvdropower Water Distribution Combined Heat & Power Water Storage Geothermal Wastewater Collection **Biomass** - Biofuel Wastewater Treatment Micro-grids Water Desalination Hydrogen Hardware - Smart metering **Energy Storage** Software - Digitalisation - Data Energy Efficiency Other(s) Hardware - Smart Metering

> PROJECTS IN AFRICA: Burkina Faso, Madagascar, Kenya, Tanzania



44

Software - Digitalisation - Data

Other(s)





6 CLEAN WATER AND SANITATIO Paneco Ambiente S.r.l. Cuneo (CN)• Italy www.bioecologicalsystem.com

Skills, services, products, technologies

Paneco Ambiente is a young and dynamic reality that boasts over 40 years of virtuous history dedicated with passion and commitment to ecology, the green economy and microbiodiversity.

> The line of products dedicated to the aquatic ecosystem is the conclusion of the important air-land-water trio also represented in the company logo. The goal of Ecocandy[®] initially was to respond to the increasingly frequent requests of agricultural / industrial companies with accumulation tanks affected by excessive algal growth. It then developed to include products to improve the welfare of fish farmed species. Especially in the most delicate phases.

> Ecocandy[®] is the innovative line dedicated to the aquatic ecosystem, and includes products:

√ completely natural and 100% biodegradable

v easily applicable and modular according to needs
 v extremely complex and multivalent, consequently able to act without causing sudden upheavals

All our products are developed to be completely ecosustainable and environmentally friendly. The goal of the Ecocandy[®] line is to offer an alternative to the use of algaecides and substances of chemical origin. In fact, the latter, in addition to being harmful to the environment, are now no longer provided for by recent legislation (copper in flakes).

R&D – R&I
 Studies - Design - Consultancy
 Funding
 Manufacturing & Production
 Distribution & Installation
 Marketing

Operations & Maintenance Dismantling & Recycling Training & Certification Education Promotion & Awareness

Preservation of Water Resources

6 CLEAN WATER AND SANITATION

6

- ✓ Water Catchment
- ✓ Water Treatment
- Water Quality Control
 Water Adduction/Transport
 Water Distribution
- Water Storage
 Wastewater Collection
- Wastewater Treatment
 Water Desalination
 Hardware Smart metering
 Software Digitalisation Data
 Other(s)

Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind **On-shore Wind** Hydropower Combined Heat & Power Geothermal **Biomass** - Biofuel Micro-grids Hydrogen **Energy Storage Energy Efficiency** Hardware - Smart Metering Software - Digitalisation - Data Other(s)

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PROJECTS IN AFRICA: Algeria





POD ONE - DHBC Paris• France www.podoneconsulting.eu

Skills, services, products, technologies

Consulting company which is specialised in business strategy to modernize and transform public administration for governments in Africa : Senegal, Chad, Mali, Niger, Burkina, Guinea, Central African Republic. Pod One - DHBC leads projects in accordance with sustainable objectives of the United Nations.

6 CLEAN WATER

Proposes devices for providing drinking water and wastewater treatment powered by solar. Pod One - DHBC provides, sets up and maintains systems with its teams and reference partners. Packaged offer for disadvantaged areas: wastewater treatment and drinking water production in container. Projects currently under study for the areas of northern Mali, Senegal and Niger.



Pod One is involved in Senegal, Mali, Chad and Niger for the decarbonation of essential services, particularly for hospitals, health centers, and provides kits to supply with solar electricity villages (2000 to 5,000 inhabitants) who do not have electricity. Company's strength is to propose solutions mixing solar technologies to give the autonomy of operation to the necessary energy and those of telemedicine which are also decarbonated.





PROJECTS IN AFRICA:

Senegal, Mali, Chad, Niger, Burkina, Guinea, Morocco, Tunisia





Regis Motors Torino• Italy regis-motors.com

Skills, services, products, technologies

Regis Motors SRL is an innovative start-up, the core of the company is the production with its own brand of an entire family of Full Electric vehicles, called EpicO, with unique technological contents compared to the competition and exclusively equipped with proprietary powertrain systems.



EpicO is a compact electric vehicle, classified as a heavy quadricycle in the commercial version with L7e CU approval. In the company's plans, the project was created to meet the needs of the goods distribution of the so-called "last mile" and the distribution of goods in general, with a vehicle capable of carrying out a daily activity within urban centers.



R&D - R&I

Funding

Marketing

Studies - Design - Consultancy

Manufacturing & Production

6 CLEAN WATER AND SANITATION

6

Distribution & Installation

PROJECTS IN AFRICA:





Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind On-shore Wind Hydropower Combined Heat & Power Geothermal Biomass - Biofuel Micro-grids Hydrogen Energy Storage Energy Efficiency Hardware - Smart Metering Software - Digitalisation - Data

Other(s)

47





Rutten New Energy System Herstal• Belgium www.rutten-nes.com

Skills, services, products, technologies

Rutten NES is a Belgian company founded in 2013 and basing its development on innovation and the search for simple solutions, particularly in the renewable energy sector. The company holds 35 patents and has commercialized many ground-breaking products and solutions.

To avoid premature aging and failure of the electrochemical storage system, Rutten NES decided to develop a totally innovative system that is not sensitive to high temperatures, with a storage capacity that does not degrade over time and which components are totally non- polluting and completely and easily recyclable.

This ecological and sustainable solution has been developed thinking of the most vulnerable remote communities and Small Island Developing States (SIDS) so as to provide them with a reliable access to solar photovoltaic energy 24 hours a day, for many, many days.



Solar photovoltaic generation combined with hydropneumatics long term energy storage for off-grid electrification.



R&D - R&I Studies - Design - Consultancy Funding Manufacturing & Production Manufacturing & Production Distribution & Installation

Preservation of Water Resources Water Catchment Water Treatment Water Quality Control Water Adduction/Transport Water Distribution Water Storage Wastewater Collection Wastewater Treatment Water Desalination Hardware - Smart metering Software - Digitalisation - Data Other(s)

6 CLEAN WATER AND SANITATION

6

Marketing

Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind

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- On-shore Wind
 Hydropower
 Combined Heat & Power
 Geothermal
 Biomass Biofuel
- Micro-grids
 Hydrogen
 - Energy Storage
 Energy Efficiency
 Hardware Smart Metering
 Software Digitalisation Data
 Other(s)

PROJECTS IN AFRICA:

Currently mainly working with Senegal, Cape Verde and São Tomé e Príncipe.





Sasso srl Cuneo• Italy www.sasso-italy.com

Skills, services, products, technologies

Sasso has one century experience in the distributed energy and water treatment technologies

Sasso can offer many solutions: power from few We up to 1MWe, stand-alone and grid-connected, hybrid solutions.

pumps - turbines - pv-pumping - hydro-pumping-storage - hydro-IoT.

R&D – R&I **Operations & Maintenance** Studies - Design - Consultancy **Dismantling & Recycling Training & Certification** Funding Manufacturing & Production Education **Distribution & Installation** Promotion & Awareness Marketing 6 CLEAN WATER AND SANITATION 0 0 Solar - PV 1 Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control On-shore Wind Water Adduction/Transport Hydropower Water Distribution Combined Heat & Power Water Storage Geothermal Wastewater Collection **Biomass** - Biofuel

- - ✓ Hydrogen
 - Energy Storage

Micro-grids

- Energy Efficiency
- ✓ Hardware Smart Metering
- Software Digitalisation Data Other(s)



6 CLEAN WATER

pumps - turbines - pv-pumping - hydro-pumping-storage energy-IoT - energy efficiency - demande/response - microgrid - pv-solutions - hydroelectric-solutions



 \checkmark

PROJECTS IN AFRICA:

Wastewater Treatment

Hardware - Smart metering

Software - Digitalisation - Data

Water Desalination

Other(s)

Ethiopia, Zimbawe, South Africa, Morocco, Burkina Faso, Kenya, Tanzania, Mali, Senegal





SAVE INNOVATIONS Seyssins • France www.save-innovations.com

Skills, services, products, technologies

Save Innovations develops, manufactures and markets dedicated solutions for Smart Water applications.

6 CLEAN WATER AND SANITATION The SMART PICOGEN is an autonomous permanent diagnostic station for the water networks. Thanks to the inline monitoring of physico-chemical measurements (up to 7 parameters) and their real-time communication.

R&D – R&I **Operations & Maintenance Dismantling & Recycling** Studies - Design - Consultancy Training & Certification Funding Manufacturing & Production Education **Distribution & Installation** Promotion & Awareness Marketing CLEAN WATER AND SANITATION 6 6 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport Hydropower \checkmark Water Distribution Combined Heat & Power Water Storage Geothermal Wastewater Collection **Biomass** - Biofuel Wastewater Treatment Micro-grids Water Desalination Hydrogen Hardware - Smart metering **Energy Storage** Software - Digitalisation - Data **Energy Efficiency**

- Hardware Smart Metering
- Software Digitalisation Data Other(s)



The PICOGEN[®], labeled Solar Impulse Efficient Solution, is a turbine for the power supply of the instrumentation of water networks.



Other(s)

PROJECTS IN AFRICA:

Ongoing discussions in Cameroun, Senegal, Ivory Coast and Niger





Sea Marconi Technologies Collegno (Turin)• Italy www.seamarconi.com

Skills, services, products, technologies

Sea Marconi operates in the key sectors of energy and the environment, being a leader in the market of services, technologies and products for the management of electrical equipment. Sea Marconi is also engaged in the development of plants for the thermochemical conversion of biomass into bioenergy.

7 AFFORDABLE AND CLEAN ENERGY

Sea Marconi is a comprehensive strategic partner alongside the most important industrial groups in the field of the production, transmission and distribution of power. Sea Marconi's market is expanding, also thanks to the awarding of prestigious international tenders issued by world organisations in Developing Countries. The core business of the company, the TransfoClean[®] product and service portfolio, includes services, products and technologies finalised toward the Life Cycle Management (LCM) of fleets of strategic equipment with insulating fluids supporting the holders in the difficult and very delicate task of asset management, loss prevention and environmental protection. Sea Marconi designed and implemented different units for the thermochemical conversion of a large variety of feedstock, including biomass, electronic waste, waste tyres, etc., into bioenergy and bioproducts.

R&D - R&I **Operations & Maintenance** Studies - Design - Consultancy **Dismantling & Recycling Training & Certification** Funding Manufacturing & Production Education **Distribution & Installation Promotion & Awareness** Marketing CLEAN WATER AND SANITATION 6 6 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport Hydropower Water Distribution **Combined Heat & Power** Water Storage Geothermal Wastewater Collection

- Biomass Biofuel
 Micro-grids
- Hydrogen
 Energy Storage
 Energy Efficiency
 Hardware Smart Metering
 Software Digitalisation Data
 Other(s)

PROJECTS IN AFRICA:

Wastewater Treatment

Hardware - Smart metering

Software - Digitalisation - Data

Water Desalination

Other(s)





Seacoop stp Turin• Italy www.seacoop.com

Skills, services, products, technologies

SEAcoop is a consultancy specialised in agriculture, forestry and earth sciences. SEAcoop STP operates in land management to define sustainable solutions for the management of natural capital and ecosystem services.

Seacoop operates also for the development of energy communities

Water management, hydrology and hydrogeology. Water quality monitoring.

R&D – R&I **Operations & Maintenance** Studies - Design - Consultancy **Dismantling & Recycling** Training & Certification Funding Manufacturing & Production Education **Distribution & Installation** Promotion & Awareness Marketing 6 CLEAN WATER AND SANITATION 0 0 Solar - PV 1 Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport Hydropower Water Distribution Combined Heat & Power Water Storage Geothermal Wastewater Collection **Biomass** - Biofuel Wastewater Treatment Micro-grids Water Desalination Hydrogen Hardware - Smart metering **Energy Storage** Software - Digitalisation - Data **Energy Efficiency** Other(s) Hardware - Smart Metering



6 CLEAN WATER

Biomass, hydroelectric and photovoltaic power plants design. Energy Communities management.



PROJECTS IN AFRICA: Uganda Software - Digitalisation - Data

Other(s)





SEED-Energy Grenoble• France seed-energy.fr

Skills, services, products, technologies

Seed-Energy is a software editor.

7 AFFORDABLE AND CLEAN ENERGY Seed-Energy is expert in techno-economics and modeling of energy systems. It develops and markets the software ODYSSEY, the tool for design, optimization and investment decision support in energy projects. ODYSSEY builds a digital twin of the system (photovoltaics, batteries, fuel cells, electrolyzers, storages, etc.) and uses it in dynamic simulations to give an insight on its operation over several years. Combined with the use of artificial intelligence, ODYSSEY optimizes the energy system (sizing, control).

ODYSSEY has the capacity to perform a complete technical, economic, and environmental feasibility study of an energy system by providing key indicators to decision makers such as net present value, payback time, rate of return, avoided CO2 emissions, etc. It can help any energy actor finding the suitable business models to address. next ODYSSEY has been labelized "Efficient Solution" 2019 by Solar Impulse Foundation among 1,000 solutions around the world for climate and environment protection, and "Energized By Tenerrdis" by the French Cluster for the Energy Transition.

CLEAN WATER AND SANITATION 6 6 Preservation of Water Resources Water Catchment Water Treatment Water Quality Control Water Adduction/Transport Water Distribution Water Storage Wastewater Collection Wastewater Treatment Water Desalination Hardware - Smart metering Software - Digitalisation - Data Other(s)

Studies - Design - Consultancy

Manufacturing & Production

Distribution & Installation

R&D - R&I

Funding

Marketing

PROJECTS IN AFRICA:

Operations & Maintenance Dismantling & Recycling Training & Certification Education Promotion & Awareness



Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind **On-shore Wind** Hydropower **Combined Heat & Power** Geothermal **Biomass** - Biofuel Micro-grids Hydrogen **Energy Storage Energy Efficiency** Hardware - Smart Metering Software - Digitalisation - Data Other(s)





SHER Ingénieurs-Conseils S.A. Vedrin• Belgium www.sher.be

Skills, services, products, technologies

SHER Ingénieurs-Conseils is a Belgian consulting and engineering company active worldwide. Founded in 1985 and its head office is located in Namur (Belgium) since 1997.

The company brings innovative solutions for developing countries in the Water, Environment, Energy and Infrastructure.

Rural development, social development & food security Geomatics



Integrated water resources management Irrigation and hydro-agricultral development Water supply and sanitation

- ✔ R&D R&I
- Studies Design Consultancy
 Funding
 Manufacturing & Production
 Distribution & Installation
 Marketing

6 CLEAN WATER AND SANITATION

0

Operations & Maintenance Dismantling & Recycling Training & Certification Education Promotion & Awareness

- Preservation of Water Resources
- ✓ Water Catchment
- Water Treatment
 Water Quality Control
- ✓ Water Adduction/Transport
- ✓ Water Distribution
 - Water Storage
 Wastewater Collection
 Wastewater Treatment
 Water Desalination
 Hardware Smart metering
 Software Digitalisation Data
 Other(s)

Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind On-shore Wind Hydropower

0

Combined Heat & Power Geothermal Biomass - Biofuel Micro-grids Hydrogen Energy Storage Energy Efficiency Hardware - Smart Metering Software - Digitalisation - Data Other(s)



Hydropower (up to 15 MW) & sustainable energy



PROJECTS IN AFRICA: Sub-Saharan Africa





SIGMADAF CLARIFIERS SL CORNELLA DE TERRI / GIRONA• Spain sigmadafclarifiers.com

Skills, services, products, technologies

SIGMA is a wastewater treatment company with more than 40 years of experience, whose reputation is based on costeffective and reliable modular products. They design water treatment plants and create systems of cleaning solutions to reuse water for agricultural and industrial applications.

DAF, CAF and MBR units

6 CLEAN WATER

Industrial Wastewater treatment plants. SIGMA uses the latest technology mix in DAF Systems and over 25 years of experience in its use for all types of industries. They are committed to the continuous improvement of their equipment. SIGMA designs all the equipment manufactured in the company. Each component is identified with a unique code to control the state of each piece and simplify the subsequent assembly. They minimise the faults that could arise when manufacturing and increase the quality of their products.



R&D – R&I **Operations & Maintenance** Studies - Design - Consultancy **Dismantling & Recycling Training & Certification** Funding Manufacturing & Production Education **Distribution & Installation Promotion & Awareness** Marketing CLEAN WATER AND SANITATION 6 6 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport Hydropower Water Distribution **Combined Heat & Power** Water Storage Geothermal Wastewater Collection **Biomass** - Biofuel Wastewater Treatment Micro-grids Water Desalination Hydrogen

Hardware - Smart metering Software - Digitalisation - Data Other(s)

Energy Storage Energy Efficiency Hardware - Smart Metering

Software - Digitalisation - Data

Other(s) 1

PROJECTS IN AFRICA:





Sotrad Water Nivelles• Belgium www.sotradwater.be

Skills, services, products, technologies

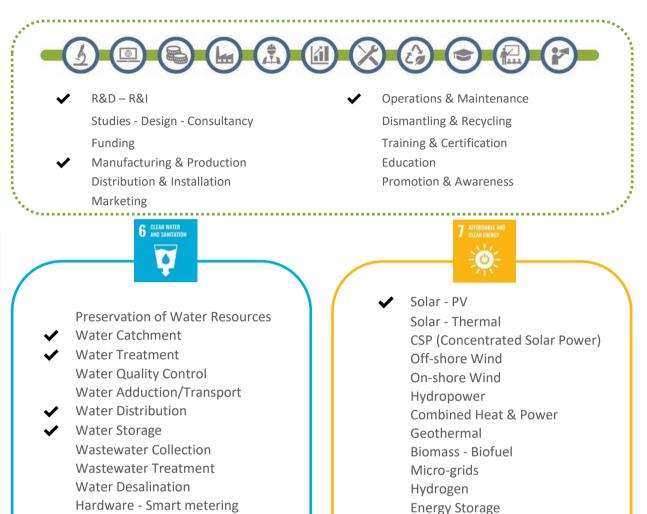
Sotrad Water actively participates in facilitating access to drinking water for rural populations and improving the quality of life by implementing innovative and sustainable water solutions.

6 CLEAN WATER AND SANITATIO The range of Pump&Drink units is designed to provide sustainable, turnkey solutions for drinking water in rural communities. These solar stations come on new boreholes wells or in replacement of obsolete manual pumps.

In complement, Sotrad Water makes water treatment units for intermediate and peri-urban areas, in standard 20' or 40' fully equipped containers. These units are designed to meet the needs of small cities, base camps, industries and hospitals.



Powered by solar energy or connected to the electricity grid, the water treatment plant units operate automatically, ecologically and efficiently to produce up to 200 m3/h.



PROJECTS IN AFRICA:

Software - Digitalisation - Data



Other(s)

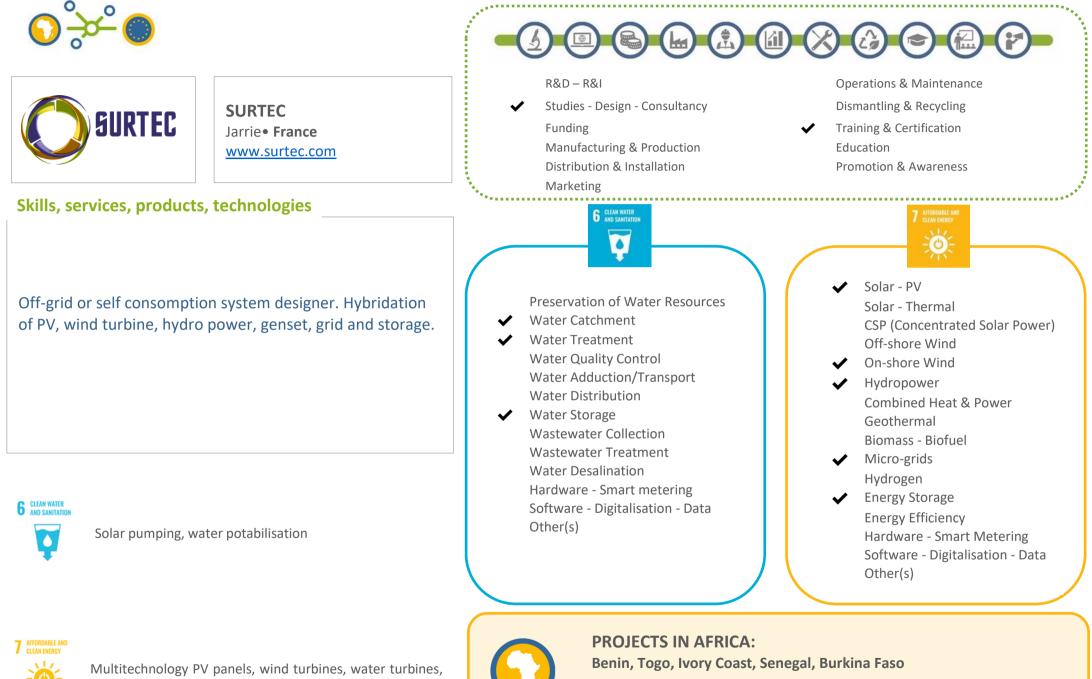
Ivory Coast, DRC, Nigeria, Togo, Sierra Leone, Benin, Tanzania, Mozambique, Cameroon

Energy Efficiency

Other(s)

Hardware - Smart Metering

Software - Digitalisation - Data







Tucai Barbera del valles• Spain www.tucai.com

Skills, services, products, technologies

Experts in water flexible connectors

Hoses and valves manufacturer. They have an anti-fraude water valve patented

6 CLEAN WATER AND SANITATION

The company designs, produces and sells water flexible connectors and valves for sanitary, heating and HVAC



Software - Digitalisation - Data ✓ Other(s)

Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind **On-shore Wind** Hydropower **Combined Heat & Power** Geothermal **Biomass - Biofuel** Micro-grids Hydrogen **Energy Storage Energy Efficiency** Hardware - Smart Metering Software - Digitalisation - Data Other(s)



PROJECTS IN AFRICA:

Selling in several countries: Morocco, Saudit arabia, Egypt, South Africa, Madagascar, Turkey





Unex aparellaje electrico, S.L, Hospitalet de Llobregat ,(Barcelona) • Spain www.unex.net

Skills, services, products, technologies

Unex is a 57-year specialist manufacturer of non-metallic cable management systems with head office in Barcelona and manufacturing in Spain, with 28 branches in several countries and delivering to more than 50 countries.



Corrosion-resistant non-metallic thermoplastic Cable Management Systems such as Cable Trays, Ladders, Ties made of own formulated raw materials. These insulating solutions have very high durability and contribute to low OPEX costs and higher electrical safety for the installation. Unex has >40 year old existing installations in several countries' water sector.



Corrosion-resistant non-metallic thermoplastic Cable Management Systems such as Cable Trays, Trunkings, Cable Ties made of own formulated raw materials. These electrically insulating solutions have very high durability under severe and prolonged UVs and contribute to low OPEX costs, better reliability and higher electrical safety for the installation.



PROJECTS IN AFRICA:



Morocco, Tunisia, Algeria, Egypt, Senegal, Malawi, South Africa, Namibia, Mozambique, Angola, Reunion, Mauritius





WE&B Barcelona• Spain www.weandb.org

Skills, services, products, technologies

WE&B is a specialised environmental consulting company. By way of a cross-disciplinary focus, WE&B integrates social and business systems to solve complex environmental problems.

They can develop social network analysis (SNA) that provides insights into the power, influence and networking ability of the organisations within the water and energy sectors.

WE&B also undertakes a full diagnosis of a product, industry, sector or economy with insights, action plans and recommendations to bring it in line with circular economy principles.

R&D – R& **Operations & Maintenance** Studies - Design - Consultancy **Dismantling & Recycling** Training & Certification Funding Manufacturing & Production Education **Distribution & Installation** Promotion & Awareness Marketing CLEAN WATER AND SANITATION 6 6 0 Solar - PV Preservation of Water Resources Solar - Thermal Water Catchment CSP (Concentrated Solar Power) Water Treatment Off-shore Wind Water Quality Control **On-shore Wind** Water Adduction/Transport Hydropower Water Distribution Combined Heat & Power

Water Catchinent Water Treatment Water Quality Control Water Adduction/Transport Water Distribution Water Storage Wastewater Collection Wastewater Treatment Water Desalination Hardware - Smart metering Software - Digitalisation - Data

✓ Other(s)

CSP (Concentrated Solar Power Off-shore Wind On-shore Wind Hydropower Combined Heat & Power Geothermal Biomass - Biofuel Micro-grids Hydrogen Energy Storage Energy Efficiency Hardware - Smart Metering Software - Digitalisation - Data

✓ Other(s)



PROJECTS IN AFRICA: Links Between Agricultrural Practices and Biodiversity in Mediterranean Landscapes (IUCN MED) // Stakeholders Engagement, Knowledge& Communications on Coastal Zones Management in West Africa (World Bank)// AfriAlliance: Africa-EU Innovation Alliance for Water and Climate (European Comission- H2020) // Transfer and capitalization of green circular economy practices (Union for the Mediterranean).



Water₀logies

Waterologies SL Igualada• Spain www.waterologies.com

Skills, services, products, technologies

United Nations supplier nº 466753 in Water Emergency devices and in remote places. Waterologies developed a mini-device that can clean large amount of water connected to a solar pannel, battery, even an smartphone, removing 99,99% of bacteria and 100% of turbidity. Solutions from 3W to 100W.

Waterologies designs, manufactures and supplies compact water treatment plants with a plug & play installation, with remote management to ensure proper operation and proper maintenance. Experts in microfiltration, ultrafiltration, nanofiltration and reverse osmosis

They carry out Industrial Symbiosis, treating industrial water effluents and transforming the waste from these treatments into valuable products.

Circular Economy

6 CLEAN WATER AND SANITATION

AFFORDABLE AND

Special low power devices for emergency and remote places for clean water.

Water treatment plants with a plug & play installation.

Solar solutions for water treatment.





PROJECTS IN AFRICA: Guinea-Conakry: Solardistech15, Madagascar





Wave for Energy Srl Torino• Italv www.waveforenergy.com

Skills, services, products, technologies

Wave for Energy is a spinoff company from Politecnico di Torino Engineering School, born to develop, industrialize and commercialize innovative renewable energy generation technologies in offshore environment.

The Wave for Energy team has more than 50 years collective experience in designing, prototyping, testing and development of technologies to generate energy from offshore renewable energy sources.

6 CLEAN WATER

Wave for Energy is developing integrated wave-wind-solar energy generation technologies for the production of clean desalinated water. The systems can be used for small scale applications, offshore or near shore, or for powering large desalination plant. The nexus between offshore renewable energy generation and water desalination is a win-win solution, since desalinated water represents a great solution to convert and store the intermittent generation potential of the energy sources.



The first technology developed by W4E is the ISWEC wave energy converter. This technology has been licensed to Eni Spa and W4E is still involved in engineering, optimization and development activities. The company has been developing an integrated point absorber wave energy converter integrating also wind and solar technologies. This system can be scaled down for small scale applications and scaled up for large scale installations.

- R&D R&I
 - Studies Design Consultancy Funding Manufacturing & Production **Distribution & Installation** Marketing

CLEAN WATER AND SANITATION

6

Operations & Maintenance Dismantling & Recycling Training & Certification Education **Promotion & Awareness**



- Preservation of Water Resources Water Catchment Water Treatment Water Quality Control Water Adduction/Transport Water Distribution Water Storage Wastewater Collection Wastewater Treatment
- Hardware Smart metering
- Software Digitalisation Data Other(s)

Solar - PV Solar - Thermal CSP (Concentrated Solar Power) Off-shore Wind **On-shore Wind** Hvdropower Combined Heat & Power Geothermal **Biomass - Biofuel** Micro-grids Hydrogen **Energy Storage Energy Efficiency** Hardware - Smart Metering Software - Digitalisation - Data Other(s) 1

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PROJECTS IN AFRICA:





Well Pumps Fleurus• Belgium www.wellpumps.eu

Skills, services, products, technologies

Well Pumps is a manufacturer of water pumps and solar pumping solutions.

Well pumps offers solar pumping solutions for all the range of pumping (surface pumps, borehole pumps, sewage pumps, swimming pool pumps,...) for powers up to 220 kW with a patented hybrid solution for continuous operations (AC and DC power sources blended).

6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY Well Pumps manufactures fully integrated solar pumping solutions, for all type of pumps, all powers up to 220kW and fully automatic and patented Hybrid solar pumping systems (AC and DC power sources)



PROJECTS IN AFRICA:

Other(s)



For more information on the Belgian SMEs please contact TWEED :: <u>www.clustertweed.be</u> :: <u>cdelahaye@clustertweed.be</u> For more information on the French SMEs please contact Tenerrdis :: <u>www.tenerrdis.fr</u> :: <u>Ingrid.MILCENT@tenerrdis.fr</u> For more information on the Italian SMEs please contact Environment Park :: <u>www.envipark.com</u> :: <u>giulia.razetti@envipark.com</u> For more information on the Spanish SMEs please contact CWP :: <u>www.cwp.cat</u> :: <u>comunicacio@cwp.cat</u>

