



COMPANY PROFILE

SUMMARY

WHO WE ARE

KEY NUMBERS
OUR CIRCULAR MISSION
OUR MULTIDISCIPLINARY TEAM
CUSTOMERS AND PARTNER

WHAT WE DO

WHERE WE ARE SERVICES OWAC FOR NRRP INNOVATION BIM CERTIFICATES









OWAC, acronym for Open Water Company, is an engineering company that operates within the **ENVIRONMENTAL** sector developing circular economy initiatives that have true impact on people's lives and the Planet

Thanks to the expertise acquired for over two decades and our constant research for technological progress we have become a highly specialised engineering company when it comes to designing multifunctional industrial platforms. An **EFFICIENT WORKFLOW** that minimises indetermination margins is achieved by integrating different technologies, using advanced control systems and supporting interoperability during project development

"DEL CARATTERE DEGLI ABITANTI
D'ANDRIA
MERITANO DI ESSERE RICORDATE
DUE VIRTÙ:
LA SICUREZZA IN SÉ STESSI
E LA PRUDENZA.
CONVINTI CHE
OGNI INNOVAZIONE NELLA CITTÀ
INFLUISCA SUL DISEGNO DEL CIELO
PRIMA D'OGNI DECISIONE
CALCOLANO I RISCHI E I VANTAGGI
PER LORO E PER
L'INSIEME DELLE CITTÀ E DEI MONDI"

ITALO CALVINO, LE CITTÀ INVISIBILI



WASTE TO ENERGY INTEGRATED PLANTS

Energy independency has become a major strategic factor for all nations. **WASTE TO ENERGY** industrial platforms support circular economy systems allowing the **VALORIZATION OF WASTE** and the recovery of secondary materials

The transition to sustainability requires a **SYSTEMIC RECONVERSION OF DESIGN METHODOLOGIES**. The solutions adopted to mitigate the development of such projects, lead to choices that take into account different elements such as combining the technical needs of production with the carefulness towards the natural or anthropized surroundings



THE USE OF THE BIM
METHODOLOGY ENABLES
A CONTINUED CONTROL
AND ANALYSIS OF THE
PROJECTS LIFE CYCLES,
FROM CONCEPTUAL
PHASES TO MONITORING
AND OPERATIONAL PHASES,
DOWN TO DEMOLITION AND
THE RECOVERY OF
REUSABLE MATERIALS (LCA)

OWAC is a leading engineering company specialised in waste treatment and waste to energy, environmental remediation, water treatment and renewable energy

Our services cover all project phases and its entire lifecycle

We use BIM methodology and advanced monitoring systems to reduce risks and costs while securing quality control and compliance with regulatory and legal requirements.

KEY NUMBERS
OUR CIRCULAR MISSION
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KEY NUMBER

We work within the environmental engineering framework and use cutting-edge technologies to develop **CIRCULAR ECONOMY** systems that aim to raise energy efficiency, integration and sustainability

All our activities are oriented towards **ECO SUSTAINABLE PROJECTS** that contribute to reduce non recyclable materials, create value from recyclables and preserve the Planet



countries served



user served



70_{ML} hours of engineering







OUR CIRCULAR MISSION

"SOME CHANGES ARE SO SLOW, YOU DON'T NOTICE THEM, OTHERS ARE SO FAST, THEY DON'T NOTICE YOU"

ASHLEIGH BRILLIANT

Think green_act circular, thoughts and actions walk together and reinforce each other to create a **NEW DEVELOPMENT MODEL** that holds the planet and human well-being at heart, and is in line with the sustainable goals set by the United Nations

We recognize today's environmental problems and we believe in the need of a drastic mitigation of carbon emissions, the reduction of the exploitation of raw materials and the balance of environmental principles, The solution is a multidisciplinary approach that brings together innovation, entrepreneurial development and social responsibility

The company's **AMBITION** is to support the development of a thriving sustainable world from an environmental, social and economic perspective



OUR MULTIDISCIPLINARY TEAM

A constant approach towards innovation coupled with great teamwork have led to recognized excellency levels. Our most important resource to generate change is **PEOPLE**, their multidisciplinary skills and their energy

OWAC is the acronym for Open Water Company. As stated by the Founder and CEO Rocco Martello: «Imagining vast and mutable horizons, such as the marine environment, trains us daily to solve problems dynamically, competently and flexibly, and prepares us to new learnings and to technological progress". We take great care of human capital and **SHARED KNOWLEDGE**, which, through slow stratification and daily commitment, is transfered to new arrivals

The international presence of the company and the ongoing relationship with research institutes, escalates continuous inhouse competences and strengthens the skills of external consultants, most of whom have been working with us for years

Today, OWAC counts with over 50 specialised professionals that enable high quality results and provide customers WITH PRIME SOLUTIONS AND DESIGNS. An integrated workflow is achieved by using advanced technologies and interconnected digital solutions for data management



ORGANIZATION CHART

MANAGING DIRECTOR

Rocco Martello

archt. Francesco Briguglia ARCHITECTURE eng. Massimo Bonomo MECHANICAL eng. Maurizio Migliorino ELECTRICAL eng. Giovanni Cangemi **AUTOMATION**

eng. Carlo Butticè BIM MANAGER_CIVIL eng. Liborio Ardizzone ENERGY AND ENVIRONMENT eng. Riccardo Molteni INDUSTRIAL PROCESSES geol. Carmelo Ferla GEOLOGY

Waste treatment Remediation Decommissioning Industrial Architecture Structure Operation & Maintenance Survey Monitoring Geology Hydraulics Energy Electric Site Management Plants Management Research & Development Landscape Architecture Automation Building Information Modeling

Administration Tender Legal Affairs Audit and quality management International relations Stategic development



CUSTOMERS AND PARTNERS

To overcome new global challenges that require taking sensible and measured actions, we believe in **SYNERGIES** and international cooperation. This is why we have strengthened networks, agreements and important partnerships and work together with research institutions, universities and government agencies to daily and collectively build progress

Owac has an important bilateral agreement with the Sino-Italian Centre for Environmental Sustainability **SICES** in Shanghai, born from the alliance between the Italian and Chinese Ministries for the Environment, with the aim of promoting multilateral sustainable development projects



Recently we have established an operational office within the Tongji University of Shanghai

With the University of Palermo (UNIPA) and the University of the South Pacific (USP) we are working on solutions to implement sustainable energy projects in the small Islands of the Pacific



































































We design sustainable, efficient and innovative solutions within the field of environmental engineering

Our waste to energy plants produce energy, enable the reuse of materials, reduce CO₂ emissions, and minimise waste to landfill

SERVICES
OWAC FOR NRRP
INNOVATION
BIM
CERTIFICATES

WHERE WE ARE

WE LOOK FOR PEOPLE WHO BELIEVE IN **CHANGE**, WANT TO PARTICIPATE IN THE GLOBAL GREEN TRANSITION AND WHO WANT TO WORK IN SMART AND SUSTAINABLE MANAGEMENT OF RESOURCES.

We are present in several countries where we collaborate with government institutions and local industry players.

OWAC has its headquarters in Palermo (Italy), and international branches in Africa (Senegal), the United Arab Emirates (Dubai), and China (Shanghai). Advanced communication systems are used to guarantee performance and quality services

With this in mind we have set up the OWAC Environmental Development Hub **OWAC_EDH**, to connect sector experts, research institutes and the best technology providers and address environmental issues transversally enabling a global approach to projects and research

SERVICES

Our services cover the entire workflow required when implementing a project, **FROM CONCEPTION DESIGNS TO MONITORING DURING OPERATIONS**. We provide strategic advice to public and private clients for the development of strategies to solve large-scale environmental issues

Constant innovation together with great teamwork enable us to achieve recognized levels of excellency



OWAC

ENGINEERING COMPANY

HEADQUARTERS

PALERMO

DAKAR

INTERNATIONAL DESK

SHANGHAI

COMMERCIAL DESK

DUBAI



OWAC'S

COMMITMENT TO THE NATIONAL RECOVERY AND RESILIENCE PLAN (NRRP)

The NRRP recognizes the investments on infrastructure essential for the **DEVELOPMENT** and **COHESION** of all European member states, and provides unprecedented financial resources to be allocated to modernise and rebuild infrastructural assets. Consistent with the strategies adopted by the European Commission, the Plan encourages an integrated development approach that finds synergistic balance between the economic, social and environmental aspects, and the technical elements

With this in mind, the entire system of waste collection, management, waste treatment, recovery and disposal has set new targets:

- reduce the production of waste at the source;
- implement, expand and make the segregated waste collection system more efficient;
- improve waste materials recovery systems;
- promote and make energy recovery systems from waste more efficient;
- minimise residual waste to send to final disposal (landfill)

The entire integrated waste management system therefore, is a clear example of applied circular economy and becomes a fundamental resource, in terms of material and energy recovery, that will benefit the same users who generate the waste



Today, Owac is developing projects within **NRRP** framework for several public and private clients, providing a wide range of integrated industrial platforms and solutions

Sistema Ambiente Provincia di Napoli S.p.A. (SAPNA) -Municipality of Tufino

Highly automated project for the modernisation of an existing platform with the integration of a new section of Organic Fraction of Municipal Solid Waste (OFMSW) for the production of quality compost and biomethane

Sistema Ambiente Provincia di Napoli S.p.A. (SAPNA) -Municipality of Giugliano

Highly automated project for the modernisation of an existing platform with the integration of a new section of OFMSW for the production of quality compost and biomethane

Agenzia territoriale della Regione Puglia per il servizio di gestione dei rifiuti S.p.A. (AGER) - Municipality of Lecce

Integrated anaerobic / aerobic plant for treatment of the OFMSW from separate collection and production of biomethane and quality compost

Acquedotto Pugliese S.p.A. - Municipality of Foggia

Biogas and biomethane production plant from biomass source (sludge from the biological purification process)

Salerno Pulita S.p.A. - Municipality of Salerno

Biogas production plant and treatment for the OFMSW

Asja Ambiente Italia S.p.A. - Municipality of Castellana

Waste to energy plant for the production of quality compost and biomethane from the OFMSW and valorisation of the residual fraction

Asja Ambiente Italia S.p.A. - Municipality of Mazzarrà Sant'Andrea

Waste to energy plant for the production of quality biomethane and compost with material recovery from the treatment of urban waste

Asja Ambiente Italia S.p.A. - loc. Bellolampo -Municipality of Palermo

Waste to energy plant for the production of biomethane from the organic fraction coming from the plant of mechanical biological treatment of MSW and production of biomethane from the OFMSW deriving from the separate collection

ASIA Napoli S.p.A. - Municipality of Napoli

Highly automated plant with low human resources needed for the segregation, valorisation and recycling of waste paper and cardboard

Sistema Ambiente Provincia di Napoli S.p.A. (SAPNA) -Municipality of Caivano

Highly automated plant with low human resources needed for the segregation, valorisation and recycling of waste paper, cardboard and glass













INNOVATION

We adopt <u>cutting-edge</u>
<u>technologies</u> that make
our processes continuously
more efficient

Technological innovation is one of our main levers to create value. Thanks to an innovative and standardised design methodology, We are able to meet high quality international standards

To have an integrated design approach we use **BIM** methodology, **DRONES AND LASER SCANNER** for the monitoring and surveys and **DIGITAL TWIN** models for final design phases and work supervision

Today, Owac is one of the first companies certified UNI / PdR 74: 2019 for **ARCHITECTURAL DESIGN**, **STRUCTURAL AND INSTALLATION WITH METHODOLOGY BIM**; the inhouse presence of BIM MANAGERS, BIM COORDINATORS and BIM SPECIALISTS guarantees a well-equipped BIM certified team specialised on information digital processes management, construction and modelling, in compliance with

UNI 11337-7 STANDARD

OWAC holds ISO 9001 certifications for the design and construction management in the industrial sector and is an Accredited **ENERGY SERVICE COMPANY** (ESCo).

Furthermore, the team holds CERTING certifications for "waste treatment and disposal - remediation projects - industrial wastewater treatment plants " and the team are recognized national experts by PdR / UNI 13: 2019 - ITACA protocol



In line with the national industrial policy, which aims at providing substantial changes by encouraging investments in technological innovation, OWAC guarantees the **DIGITIZATION OF PRODUCTION PROCESSES** by foreseeing machinery and technologies compliant with the provisions of the National Plan INDUSTRY 4.0 approved on 21 September 2016

Thanks to the **INTEGRATION** AND **INTERCONNECTION** between subjects, machinery and devices, we combine physical and virtual worlds to use data and information efficiently, and allow the development of smart and fully digitalized models of production







Building Information Modeling



BIM (Building Information Modeling) is an integrated method of work, supported by software's, which allows to integrate in a single digital model, the entire lifecycle of a project - making the reports, designs, economic data, and contracts always available and interconnected allowing to CHECK AND ANALYSE THE LIFE CYCLE using intelligent models, from design to monitoring in the operational phases, up to demolition and recovery of reusable materials.

The adoption of the BIM methodology for the development of projects is increasingly required, sometimes mandatory. We use BIM with a **STRUCTURED APPROACH,** optimising internal design processes and execution of orders, ensuring a reduction of inconsistencies, costs and production times

Thanks to an open platform for sharing the project and the collaborative interoperability methods, each figure involved has the necessary tools to plan, design and build more efficiently

METHODOLOGY, OUR
WORKFLOW IS FULLY
DIGITALIZED, ENABLING
TO SPEED UP THE DESIGN
PROCESS, CONSTRUCTION AND
COMISSIONING PHASES AND
SUPPORT O&M, REDUCING
COSTS AND UNPREDICTED

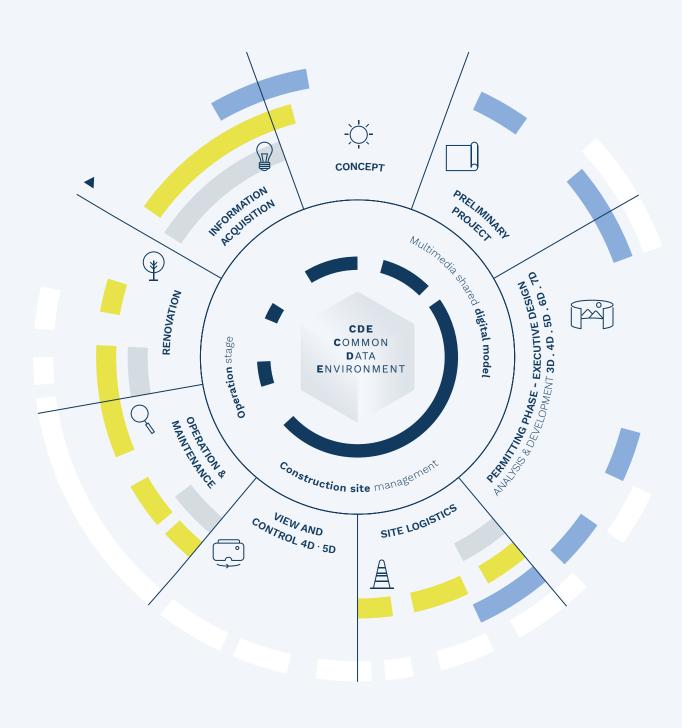
DUE TO THE BIM

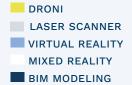
SITUATIONS

The use and integrate cutting-edge technologies, such as drones during surveys and monitoring phases and advanced control devices, such as virtual reality systems, allows to CUT DOWN THE MARGIN OF ERROR AND GUARANTEE THE REDUCTION OF MANAGEMENT COSTS

Our business-oriented approach and our trained multidisciplinary team enables the company to offer optimal solutions that meet market needs and respond effectively to current environmental concerns

We guarantee a **COMPLETE AND CERTIFIED BIM SERVICE** within the digital information management processes, construction and BIM modelling, in accordance with the **UNI 11337-7 STANDARD**







CERTIFICATO N. CERTIFICATE No.

30233/14/S

SI CERTIFICA CHE IL SISTEMA DI GESTIONE PER LA QUALITÀ DI IT IS HEREBY CERTIFIED THAT THE QUALITY MANAGEMENT SYSTEM OF

OWAC ENGINEERING COMPANY S.R.L.

VIA RESUTTANA, 360 90146 Palermo (PA) ITALIA
NELLE SEGUENTI UNITÀ OPERATIVE / IN THE FOLLOWING OPERATIONAL UNITS

VIA RESUTTANA, 360 90146 Palermo (PA) ITALIA E CANTIERI OPERATIVI

È CONFORME ALLA NORMA / IS IN COMPLIANCE WITH THE STANDARD

ISO 9001:2015

E AL REGOLAMENTO TECNICO ACCREDIA RT-21, APPLICABILE IN ITALIA
PER I SEGUENTI CAMPI DI ATTIVITÀ / FOR THE FOLLOWING FIELD(S) OF ACTIVITIES

CISQ is a member of



The International Certification Network www.iqnet-certification.com

Per informazioni sulla validità del certificato, visitare il sito www.rina.org

For information concerning validity of the certificate, you can visit the site www.rina.org

Per i requisiti della norma non applicabili al campo di applicazione del sistema di gestione dell'organizzazione, riferirsi alle informazioni documentate relative.

Reference is to be made to the relevant documented information for the requirements of the standard that cannot be applied to the Organization's management system scope

EROGAZIONE DI SERVIZI DI PROJECT MANAGEMENT. PROGETTAZIONE IN AMBITO CIVILE E INDUSTRIALE CON APPLICAZIONE DI METODOLOGIA BUILDING INFORMATION MODELLING (BIM). DIREZIONE LAVORI. VERIFICHE SULLA PROGETTAZIONE DELLE OPERE AI FINI DELLA VALIDAZIONE/APPROVAZIONE, AI SENSI DELLA NORMATIVA VIGENTE.

IAF:34

PROVISION OF SERVICES OF PROJECT MANAGEMENT. DESIGN IN THE CIVIL AND INDUSTRIAL FIELD WITH BUILDING INFORMATION MODELING METHODOLOGY APPLICATION (BIM). SUPERVISION OF WORKS. CHECK OF WORKS DESIGN FOR VALIDATION/APPROVAL IN ACCORDANCE WITH CURRENT LEGISLATION.

La validità del presente certificato è subordinata a sorveglianza periodica annuale / semestrale ed al riesame completo del sistema di gestione con periodicità triennale

The validity of this certificate is dependent on an annual / six monthly audit and on a complete review, every three years, of the management system

L'uso e la validità del presente certificato sono soggetti al rispetto del documento RINA: Regolamento per la Certificazione di Sistemi di Gestione per la Qualità

The use and validity of this certificate are subject to compliance with the RINA document: Rules for the certification of Quality Management Systems

Prima emissione First Issue

12.02.2014

Data decisione di rinnovo Renewal decision date

10.02.2020

Data scadenza Expiry Date 11.02.2023

Data revisione Revision date

19.10.2022

Maurizio Mazzapicchi

Catania & Palermo Management System Certification, Head





SGQ N° 002 A

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC Signatory of EA, IAF and ILAC Mutual Recognition Agreements



RINA Services S.p.A. Via Corsica 12 - 16128 Genova Italy



www.cisq.com

CISQ è la Federazione Italiana di Organismi di Certificazione dei sistemi di gestione aziendale CISQ is the Italian Federation of management system Certification Bodies



CERTIFICATO N. CERTIFICATE No.

103/19/ESCO

SI CERTIFICA CHE L'ORGANIZZAZIONE
IT IS HEREBY CERTIFIED THAT THE ORGANISATION

OWAC ENGINEERING COMPANY S.R.L.

VIA RESUTTANA, 360 90146 PALERMO (PA) ITALIA

NELLE SEGUENTI UNITÀ OPERATIVE / IN THE FOLLOWING OPERATIONAL UNITS

VIA RESUTTANA, 360 90146 Palermo (PA) ITALIA

E' CONFORME ALLA NORMA / IS IN COMPLIANCE WITH STANDARD

UNI CEI 11352:2014

Schema di certificazione secondo la circolare ACCREDIA elaborata ex art. 12 comma 1 del D. Lgs. 4 luglio 2014, n. 102, approvato con Decreto interministeriale (Ministero dello Sviluppo Economico e Ministero dell'Ambiente e della Tutela del Territorio e del Mare) del 12 Maggio 2015

PER IL SEGUENTE CAMPO DI APPLICAZIONE / FOR THE FOLLOWING SCOPE

EROGAZIONE DI SERVIZI ENERGETICI.

PROVISION OF ENERGY SERVICES.

La validità del presente certificato è subordinate a sorvegianza periodica e al risseme completo del sistema con periodicità triamale. The validità of this certificate in subject to periodic surveillance and to a completo review or system every three years. L'uso e la validità del presente certificato sono seggetti al rispetto del documento Rinks. Regolamento per l'utilizzo del logotipo Rinks. The use and validità di this certificate are authent to completose with the RINKs document. Rules for the use of the RINKs certification boo.

Prima emissione First issue

22.05.2019

Data scadenza Expiry Date

21.05.2022

Revision date

22.05.2019

ACCREDIA 3

PRD Nº 002 B

Hembro degli Accordi di Hutuo Riccecetmento BA, IAF e SLAC Signatory of SA, IAF and ILAC Hutual Recognition Agreements Giovanni Taormina

Palermo Management System Certification, Head

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IQNet, the association of the world's first class certification bodies, is the largest provider of manager System Certification in the world. IQNet is composed of more than 30 bodies and counts over 150 subsidiaries all over the globe.

CERTIFICATO

CERTIFICATE 21042BIM

SI CERTIFICA CHE IL SISTEMA DI GESTIONE DI WE HEREBY CERTIFY THAT MANAGEMENT SYSTEM OPERATED BY

OWAC ENGINEERING COMPANY S.r.I.

Via Resuttana, 360 - 90146 Palermo PA

UNITA' OPERATIVE CERTIFICATE OPERATIONAL CERTIFIED UNITS

Via Resuttana, 360 - 90146 Palermo PA

E' CONFORME ALLA PRASSI DI RIFERIMENTO IS IN COMPLIANCE WITH REFERENCE PROCEDURE

UNI/PdR 74:2019

PER I SEGUENTI TIPI DI PRODOTTI, PROCESSI E SERVIZI COVERING THE FOLLOWING KIND OF PRODUCTS, PROCESSES AND SERVICES

EA: 34

progettazione architettonica, strutturale e impiantistica

architectural, structural and plant design

PRIMA EMISSIONE FIRST ISSUE 02/08/2021

EMISSIONE CORRENTE CURRENT ISSUE 02/08/2021

SCADENZA **EXPIRY** 31/07/2024



Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC Signatory of EA, IAF and ILAC Mutual Recognition Agreements

II Presidente e Direttore Generale Ing. Lorenzo Orsenigo

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www.cisq.com

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