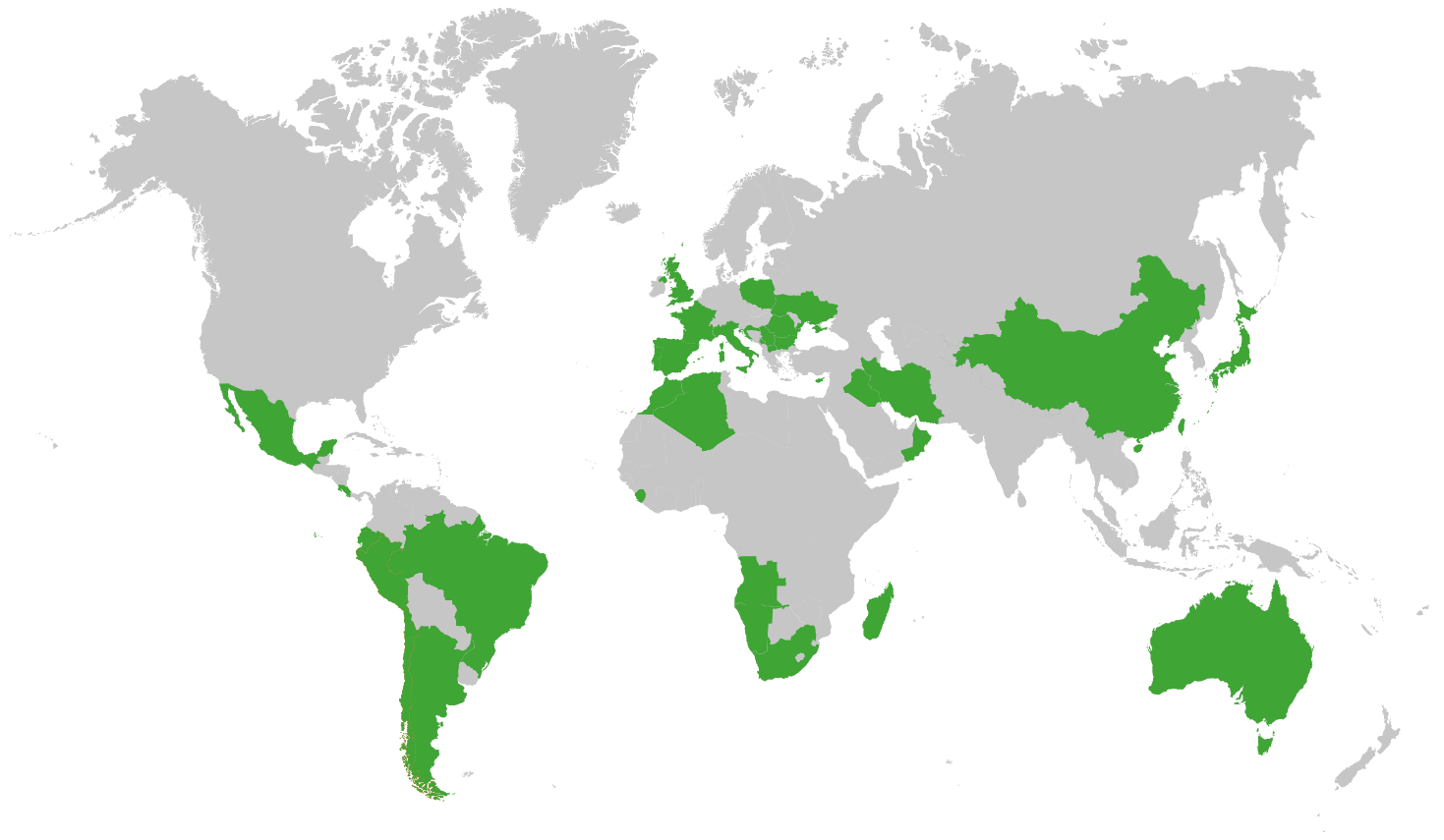


Environmental and waste management

INTERNATIONAL WORKS



2023



We perform engineering consultancy, design and management service in the environmental and sustainable energy field, with a presence in various areas of the world.

ACTIVITIES

Project management, planning, permitting, design, construction supervision, operation and maintenance supervision of industrial plants for the treatment, recovery and disposal of waste, in particular:

- Plants for the treatment and separation of waste;
- Plants for the aerobic and anaerobic composting with bio-gas production and energy recovery both from waste and vegetable and organic biomasses;
- Sanitary landfills and related plants for the extraction, treatment and energy recovery of bio-gas;
- Waste to energy plants – combustion with energy recovery from waste and biomasses;
- Plants for the production of biological fuels (biodiesel, vegetable combustible oil) from agricultural, vegetable, forest and no-food productions.

SERVICES

- Specialist consulting, study, conception, engineering in the environmental and energy sector, including feasibility studies and technical, financial and economical sustainability;
- Studies and analyses of environmental impact and environmental sustainability;
- Consulting and services for business organization, directional assistance, commercial, financial and technological development and environmental technology;
- Promotion, realization and management of all the activities of collection, improvement, recovery and recycling of waste, both in Italy and in foreign countries, including any possible initiative of commercial and industrial kind inherent to such activities for the production, distribution and commercialization of energy produced by traditional and renewable sources;
- Marketing of municipal waste and of those derived from activities of commerce, agriculture, crafts, industry and services;
- Marketing of the energy produced and deriving from said waste;
- Marketing of the materials derived from the working and treatment of waste;
- Marketing and negotiation of the emission rights (emission trading) and of energy green certificates both for itself and somebody else's behalf;
- Hiring and concession of business brokering and/or agency firms with and without mandate in the sectors specified above;
- Planning of communication campaigns and environmental education.

ENVIRONMENTAL PLANT ENGINEERING

1. Design, permitting, procurement, project management, construction supervision, assistance to the start up and to the operation of Waste to Energy plants including biomasses.
2. Design, permitting, procurement, project management, construction supervision, assistance to the start up and to the operation of sanitary landfills with biogas collection and energy recovery.
3. Design, permitting, procurement, project management, construction supervision, assistance to the start up and to the operation of plants for treatment and separation of municipal solid waste with production of RDF, recyclables recovery and biodegradable matter separation for bio-gas production or aerobic composting.
4. Design, permitting, procurement, project management, construction supervision, assistance to the start up and to the operation P of Anaerobic Digestion Plants (bio-gas production) for biogas production and energy recovery from biodegradable waste.
5. Evaluations and due-diligence on behalf of Italian and foreign Investors for the acquisition of W.T.E plants and/or acquisition of shares in companies operating in the waste sector.

ALGERIA

- Design, Management and Supervision of the Construction concerning a WTE plant for Djelfa Province.

Counterpart: **Wilaya de Djelfa**

- Design, Management and Supervision of the Construction concerning a WTE plant for Mostaganem Province.

Counterpart: **Wilaya de Mostaganem**

- Design, Management and Supervision of the Construction concerning a WTE plant for Ghardaia Province.

Counterpart: **Wilaya de Ghardaia**

- Design, Management and Supervision of the Construction concerning a WTE plant for Tamanrasset Province.

Counterpart: **Wilaya de Tamanrasset**

- Design, Management and Supervision of the Construction concerning a WTE plant for Adrar Province.

Counterpart: **Wilaya de Adrar**

- Design, Management and Supervision of the Construction concerning a WTE plant for Ain Temouchent Province.

Counterpart: **Wilaya de Ain Temouchent**

- Design, Management and Supervision of the Construction concerning a WTE plant for Algeri Province.

Counterpart: **Ministry of Environment and Territory Democratic and Popular Republic of Algeria**

- Design, Management and Supervision of the Construction concerning a WTE plant for Annaba Province.

Counterpart: **Ministry of Environment and Territory Democratic and Popular Republic of Algeria**

- Design, Management and Supervision of the construction concerning a WTE plants for: Guelma Province; Ouargla Province; Tlemecen Province; El Oued Province; Chlef Province; Oum El Bouaghli Province; Bordj Bou Arreridj Province; Souk Aharas Province.

Counterpart: **Ministry of Environment and Territory Democratic and Popular Republic of Algeria**

- Pre-Feasibility Study for a new Desalination Plant powered from WtE Plant in Orano Willaya : Water to Waste Project (on going).

ARGENTINA

- Buenos Aires: Villa Soldati & Port WTE Plant, Preliminary design, feasibility study. 930.000 t/y.
Counterpart: [International Operator](#)
- Buenos Aires: Avellaneda WTE Plant, Preliminary design, feasibility study. 150.000 t/y.
Counterpart: [International Operator](#)
- WTE Plant Buenos Aires Barrio 31 & Waste mechanical treatment plant, Preliminary design, feasibility study. 30.000 t/y.
- Feasibility Study of Waste Management System in Buenos Aires County.

AUSTRALIA

- Kwinana WtE Plant, detailed design of piping, power generation and mechanical bottom ash: 400.000 t/y
Counterpart: [International Operator](#)

BULGARIA

- Feasibility study of a coincineration coal-MSW plant. City of Sliven.
Counterpart: [Toplofikacia](#)

CHINA

- Feasibility study for the implementation of a medical waste incinerator and energy recovery in the city of Beijing.
Counterpart: [City of Beijing](#)
- Demonstration project for environmentally sustainable medical waste disposal in the people Republic of China.
Counterpart: [State Environmental Protection Administration of Popular Republic of China](#)
- Selection of a suitable landfill site for the implementation of a plant for the extraction and use of the generated biogas with preparation of technical and economic feasibility study, in the framework of clean development mechanism.
Counterpart: [City of Handan, Mudanjang and other 4 cities from scouting](#)
- Feasibility study of a plant for production of electricity and heat through anaerobic digestion of pig manure in the city of Luoe accordance with procedures CDM - Clean Development Mechanism.
Counterpart: [State Environmental Protection Administration of Popular Republic of China](#)
- Feasibility study of a plant for production of electricity and heat from anaerobic digestion of cows manure in the city of Yinchuan, in the framework of the Clean Development Mechanisms.
Counterpart: [City of Yinchuan](#)

CHINA

- Feasibility study and design of a system for industrial hazardous waste treatment and disposal in Beijing Municipality.
Counterpart: [Beijing Municipality](#)
- Feasibility study and design of a plant for treatment, recovery and disposal of batteries in Beijing.
Counterpart: [Beijing Municipality](#)
- Feasibility study and preliminary design of a plant for production of electricity and heat from pig slaughtering waste in the city of Luoyang in the framework of Clean Development Mechanisms.
Counterpart: [City of Luoyang](#)
- Feasibility study of a plant for the production of electricity from landfill biogas in the city of Yinchuan in the framework of the Clean Development Mechanisms.
Counterpart: [City of Yinchuan](#)
- Feasibility study of a plant for production of electricity from landfill biogas in the city of Haikou in the framework of the Clean Development Mechanisms.
Counterpart: [City of Haikou](#)
- Feasibility study of a plant for production of electricity from landfill biogas in the city of Tianjin in the framework of the Clean Development Mechanisms.
Counterpart: [Municipality of Tianjin - TEDA](#)
- Feasibility study for the implementation of a new waste management system including the design of the separation and recyclables recovery plant in the Island of Chongming.
Counterpart: [City of Shanghai](#)
- Planning of waste management intervention after earthquake - city of Wudu (Gansu Province – China).
Counterpart: [Ministry of Science & Technology of the People's Republic of China](#)
- Sino-Italian cooperation project – waste management pilot implementation in Ningxia village. - Project Status: under development.
Counterpart: [Foreign Co-operation Office Ministry of Environmental Protection the People's Republic of China](#)

COSTA RICA

- WTE Plant, Preliminary design, feasibility study. 550.000 t/y.
Counterpart: [Proactiva Medio Ambiente – Veolia Group](#)

CROATIA

- Integrated approach to environmental protection by the production of desalted drinkable sea-water through the use of renewable energy in the croatian islands of Vis and Mljet.
Counterpart: [Municipality of Mljet and Vis and County of Dubrovnik-Neretva](#)

- Feasibility study for the implementation of a new waste management system within the Neretva county.

Counterpart: [County of Dubrovnik-Neretva](#)

- Due Diligence and Feasibility study for the revamping existing biomass plant and implementation of a new WtE plant, 50.000 t/y (Varazdin).

Counterpart: [Mondo Pulito \(private investor\)](#)

CYPRUS

- Owner Engineer activities, Engineer site supervision for mechanical erection, design, construction and operation of integrated waste management facilities (I.W.M.F.) and waste transfer station (W.T.S.) Limassol Region.

Counterpart: [International Consortium](#)

ECUADOR

- Feasibility study and development of a solution for the use of MSW to generate non-fossil electrical or other renewables energy from urban solid waste of the district of Rumiñahui (Quito).

Counterpart: [International Consortium](#)

FRANCE

- Preliminary design for tender participation Design and construction of a waste gasification plant for power and heat production RDF: 100.000 tons/y.

INDIA

- Supervision for Engineering Boiler System (single pressure, water tubes, heat recovery steam generators (HRSG) and auxiliaries, located in India.

Counterpart: [Paul Wurth – Italy](#)

IRAN

- Feasibility study concerning a WTE plant for Teheran.

Counterpart: [International Operator](#)

ITALY

- Milano (Sesto S. Giovanni): Construction design of the new "Bioplatform" (fluidized bed furnace for the combustion of sewage sludge (60,000 ton/y), pre-treatment and anaerobic digestion of the organic fraction of MSW (50.000 t/y) with the production of bio-methane.

- Verona: Ca' del Bue Plant New WtE Plant (grate) MSW 190.000 ton/year, Electrical power capacity: 24 MWe.
- Verona: Ca' del Bue Plant Revamping of MBT & WtE Plant (Fluidized Bed), 156.000 t/y
- Milano (Busto Arsizio): Revamping and Operation & Maintenance of an existing WtE plant 130.000 t/y and construction of a new multiutility Plant: Mechanical Treatment and Sorting of recyclables materials: plastic, bulky waste; bottom ash treatment and sodium & bicarbonate recuperation Plant.
- Firenze: Sesto Fiorentino new WtE plant 136.000 t/y.
- Firenze: Scarlino, Revamping of WtE, Fluidized Bed.
- Salerno: new WtE plant 300.000t/y.
- Sardinia: Ottana, new WtE & Biomass plant, 375.000 t/y.
- Sardinia: Macomer new WtE plant 65.000 t/y.
- Napoli (Avellino), new WtE Plant (industrial waste) 432.000 t/y.
- Roma (Colleferro), new WtE plant 200.000 t/y.
- Roma (Cassino), new WtE plant 100.000 t/y; (Terni) new WtE plant 100.000 t/y.
- Sicily (Augusta), new WtE plant 500.000 t/y.
- Sicily (Agrigento), new WtE plant 360.000 t/y.
- Palermo, new WtE plant 500.000 t/y.

Counterpart: **International Operators**

- Genova (Imperia), new BMT plant with energy production (biogas) 100.000 t/a MSW.
- Genova (Imperia), Basic & Final Design for construction a new balefill sanitary landfill for MSW disposal (378.000 mc) & MBT Plant (capacity 102.000 t/y).
- Sardinia (Olbia), new Anaerobic Digestion Plant: 50.000 t/y of MSW' organic fraction, green waste and slaughter waste- biogas & bio methane for energy production.
- Sardinia (Olbia), new MBT Plant for recycling of 30.000 t/y bulky and sanitary waste.
- Calabria (Rossano), new MBT Plant for recycling of 10.000 t/y of sanitary waste (on going).
- Veneto (Contarina), new MBT Plant for recycling of 10.000 t/y sanitary waste (on going).
- Lombardia (Mantova), Revamping of waste treatment waste plant, MSW: 110.000 ton/y
- Umbria (Perugia) New MBT Plant for recycling of 10.000 t/y sanitary waste (on going).

- Umbria (Orvieto). Final Design for Revamping and Operation & Maintenance of an existing MSW treatment plant MSW: 100.000 ton/year.
- Puglia (Taranto). Technical and administrative consulting for definition and design of revamping activities, to improve the plant reliability and efficiency. MSW: 73.000 ton/year.

Anaerobic Digestion Plants with biogas & biomethane production (work in progress)
Feasibility study and preliminary design of Anaerobic Digestion Plants (agricultural and green waste; animal manure; agricultural by-products): relating to 3 plants, with biogas production and biomethane up grading. The plants are located in various Italian regions.

Counterpart: **Public or Privates Operators**

MACEDONIA

- Preparation of project studies, design and tender documentation for establishing of and integrated and financially self-sustainable waste management system in East and Northeast Region.

Counterpart: **D'Appolonia**

MALDIVE ISLANDS

- WtE in Tilafushy Island - GREATER MALE WTE PLANT: preliminary Owner Engineering of a new WtE Plant (500.000 t/y of MSW), refurbishing of a old landfill. (on going).

Counterpart: **International Operator**

MEXICO

- Mexico City WtE Plant, Feasibility study and Preliminary design, 1.000.000 t/y of MSW.

Counterpart: **International Operator**

NAMIBIA

- Preliminary design and feasibility study for the future urban waste management in Windhoek County.

Counterpart: **International Operator**

OMAN SULTANATE

- Feasibility Study and Basic Design for Development of five Anaerobic Digestion & Biogas Plant in Oman: 5 plants designed, in 4 different sites, with different anaerobic digestion technologies and processes (wet, semi-dry, plug-flow digestors etc.)

and different materials: organic fraction of MSW, no-food waste from agri-food and fish markets, agricultural biomass (vegetables and livestock manure), sludge from civil water treatment, slaughterhouse waste. In the plants there are mechanical-biological pre-treatment sections of the waste to be sent for digestion.

- Consultancy services for waste to energy independent power plant project at Barka. Technical support for review design of the WtE plant in Barka - including drafting of tender documentation for Construction and O&M. (on going).
- Basic Engineering Design and Project Cost Estimation Study for the Fisheries Port of Duqm: electrical, I&C and electromechanical and cooling engineering: size 400.000 t/y of fishing treatment (on going).

Counterpart: various Government Authority

PORTUGAL

- WTE Plant, Preliminary design, feasibility study. 200.000 t/y

Counterpart: Port'Ambiente - Tratamento de Resíduos Industriais

ROMANIA

- Feasibility study and action plan for the implementation of a new waste management system including the segregated collection of specific waste streams and the mixed residual stream within the Bucharest-Ilfov Region.

Counterpart: Romanian Ministry of Environment and County council

- Feasibility study and preliminary design of the plant's system needed in order to comply with european directives as reflected in the national waste management plan and Bucharest city waste management plan – Bucharest-Ilfov Region.

Counterpart: Romanian Ministry of Environment and County council

- Feasibility study and design of a transfer station serving the north municipalities of the Bucharest-Ilfov Region.

Counterpart: Romanian Ministry of Environment and County council

- Industrial waste inventory and classification in the area of Bucharest-Ilfov Region.

Counterpart: Romanian Ministry of Environment and County council

SERBIA

- Support activities for capacity building dedicated to central and local authorities of the Republic of Serbia on the collection and disposal of solid urban and industrial waste.

Counterpart: Peripheral and Central Authorities of the Republic of Serbia

- Urban waste management plan for Pancevo.

Counterpart: Municipalities of Pancevo, Kovin, Kovac and Opovo (South Banat Region)

- Industrial waste management plan for Pancevo.
Counterpart: **SIZC - South Industrial Zone Complex – Pancevo**
- IB-MUM - Model for the promotion of the organizational structure of public utilities in some countries of the Balkans.
Counterpart: **Serbian and Bulgarian Public Authority**

SIERRA LEONE

- Navy oil plant Bid Technical Specific. for 24 MWe navy oil in Sierra Leone.
Counterpart: **Piaggio Service**

SOUTH AFRICA

- Owner's Engineering for Design, Construction and startup for Biomass Plant (cranes) with energy production systems in Mkuze – Zululand Province. 50.000 t/y.
Counterpart: **NAVOSYNC Ltd – PTY**

TURKEY

- Owner's Engineering for Design for incineration plant - rotary furnace: hazardous and sanitary waste. 40.000 t/y.
Counterpart: **ALKATASH Ltd – Istanbul**

UNITED KINGDOM

- WtE Locstock, 600.000 t/y of MSW. Preliminary engineering of Thermal Cycle.
Counterpart: **ACCIONA - Madrid**

UKRAINE

- Integrated cycle of waste: feasibility study and assistance for its design and implementation in some ukrainian cities.
Counterpart: **peripheral and central Ukrainian authorities, the State Committee for residential services, the municipalities of Mariupol, Chervonograd and Khelmintsky**

URUGUAY

- Pre-feasibility study for a new incinerator of 30,000 t/y of special and dangerous waste in the Port of Montevideo: rotary furnace with energy recovery
Counterpart: **International Operator**

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