

ENVIRONMENT - GREEN INFRASTRUCTURE ENGINEERING AND CONSULTING



ocean[®]
ENERGY AND ENVIRONMENT CONSULTING COMPANY



**YOUR STRATEGIC
PARTNER FOR
SUSTAINABLE
PROJECTS'
DEVELOPMENT IN
THE ENERGY AND
ENVIRONMENTAL
SECTORS**



We operate at the intersection of these two critical fields – energy and environment, drawing on the deep expertise of our multidisciplinary team.

The quality and diversity of our services are supported by rigorous professional standards, tailored approaches, and an organisational culture rooted in innovation and excellence.

Our greatest asset is our human capital – dedicated professionals who deliver integrated solutions, aligned with our clients' goals and today's complex challenges.

We are committed to building a sustainable future through smart, efficient, and compliant solutions. By actively supporting the energy transition and environmental protection, we help reduce the environmental impact of industrial and urban infrastructure investments, while ensuring full alignment with national and European regulations.



The key personnel involved in environmental projects are certified by line ministries, banking institutions or certified training providers in areas such as environmental impact assessment for investment projects, water management, soil quality improvement on historically contaminated sites, integrated waste administration and climate change mitigation - adaptation.

Our Team



CCEM senior experts have over 30 years of experience in preparing documentation required to deliver ESIA analyses and to obtain specific environmental permits, approvals, and construction - operational authorizations for all types of investments.

CCEM experts recommend:

- BAT implementation for monitoring, controlling and reducing air pollution; modelling the dispersion of pollutant substances (SO₂, NO_x, PM, etc.) in the atmosphere (i.e. Flue gases desulphurisation systems - FGD); Carbon Capture Usage and Storage - CCUS);
- Responsible management of water resources;
- Protecting and circulating surface-waters; planning watercourse regulation works; implementing floods protection systems, rainwater and storm water draining systems, and sustainable irrigation infrastructure;
- Designing industrial wastes landfills dewatering, waste-water treatment systems and sludge treatment and re-use plants; industrial water-cooling systems;
- Sites decontamination and closure of industrial waste landfills through exploitation / reprocessing, bioremediation, and encapsulation solutions;
- Adopting solutions for a circular economy by promoting the conversion of non-recyclable wastes (wet fraction) into usable forms of energy (electricity, heat or fuel) - "waste-to-energy" concept.

Accreditations & Authorisations

CCEM is certified by SRAC and IQNet for the implementation of an Integrated Quality and Environmental Management System, in accordance with ISO 9001:2015 and ISO 14001:2015 standards requirements.



The certified activities include preparation of studies, design, basic and detailed engineering in the energy and environmental sectors, as well as business and management consulting services.

The company is also committed to compliance and service excellence, holding accreditations and authorizations from key national authorities, such as:

- ANRE - National Regulatory Authority for Energy;
- TRANSELECTRICA - National TSO;
- MMAP - Ministry of Environment, Waters and Forests;
- ANIF - National Land Improvement Agency;
- IGSU – CNSIPC - National Centre for Fire Safety and Civil Protection.



Fields of expertise

ENVIRONMENT

1. Air, water and soil quality;
2. Climate change mitigation and adaptation;
3. Integrated industrial wastes management.

UTILITIES and GREEN INFRASTRUCTURE

4. Water supply, wastewater treatment and sewerage systems;
5. Integrated domestic wastes management;
6. Remediation – reclamation – repurposing of former industrial sites (i.e. mining perimeters, tailing dumps, historically contaminated sites, etc);
7. Irrigation systems.



Core Services

CCEM designs, develops, and implements integrated solutions for environmental protection, across the entire project lifecycle, including planning, financing identification, procurement and contracting, execution, and commissioning. Our specialists start from ground-zero design for new investments or prepare technical documentation for existing projects, including as-built / upgrading / retrofitting / remediation / economic reintegration / expansion or closure.



- ✓ **TECHNICAL, ECONOMIC, COMERCIAL - INSTITUTIONAL CONSULTING and PROJECT FINANCING**
- ✓ **PERMITTING**
- ✓ **ENGINEERING**
- ✓ **PROJECT MANAGEMENT and ONSITE SUPERVISION**
- ✓ **RESEARCH & INNOVATION**

Core Services

TECHNICAL, ECONOMIC, COMERCIAL - INSTITUTIONAL CONSULTING and PROJECT FINANCING

- Technical, economic, environmental and social viability of investments through different studies:
 - options analysis for technological solutions to improve air, water or soil quality;
 - opportunity, pre-feasibility, feasibility studies;
 - CBA, risk & sensitivity analyses;
 - ESIA or SEA in EBRD, EIB and WB standards;
 - other environmental studies and support analyses (i.e. environmental balances level I and II; security reports; environmental risk assessment; site reports; topographic surveys; geotechnical, geological, and hydrogeological investigations; physic-chemical lab determinations; radiological analyses; etc.);
- Policies and measures, strategies and action plans; biannual national reporting to EC (air quality and GHG); regional/national guidelines (i.e. Air Quality Plans, INEGES, SNEEGHG, EU-ETS);
- GHG emissions monitoring, reporting and verification; carbon footprint calculation;
- Expert appraisal and technical surveys;
- Land behaviour monitoring, including slopes stabilisation;
- Project funding applications;
- Tenders' documentation and public procurement.

PERMITTING

- Documentation required for permits issuance for greenfield or brownfield projects (i.e. plant operation; construction or demolition; site organisation and management; firefighting; environmental; IPPC (Integrated Pollution Prevention and Control); urbanism; water management; electricity and gas grids connection; sanitary; State Inspectorate in Construction; Aeronautical Authority; etc.);
- Regulatory compliance: Proof of compliance with local, national, and European regulations concerning environmental standards, land use, urbanism, and safety;
- Public outreach records: Records demonstrating community engagement or public consultations.

ENGINEERING

- Basic Design Solutions: Crafting initial conceptual designs aligned with client requirements and industry standards;
- Detail Design Expertise: Developing comprehensive engineering blueprints;
- As-built – final post-construction documentation;
- Cross-Border Compliance: Ensuring designs comply with both domestic and foreign regulations and standards.

PROJECT MANAGEMENT and ONSITE SUPERVISION

- Our certified PMs maintain close relations with the client, offering technical assistance throughout project implementation, in connection also with the general contractor.

RESEARCH & INNOVATION

- Our specialists are open to collaborations on national and European research funding programs.

Clients



The clients to whom we have provided our services come from various sectors:

- energy industry (large producers – fossil CHPPs/PPs; renewable energy producers and prosumers; electricity and/or heat transmission and/or distribution systems operators)
- oil and gas industry
- manufacturing - petrochemistry
- metallurgical industry
- cement industry
- mining
- construction
- agriculture
- local public administration (mayoralities; DHS operators)
- waste management operators
- water-wastewater operators
- regional authorities (county councils, Intercommunity Development Association - ADI)
- governmental entities
- international financial institutions
- general contractors (EPC)
- consulting and research.

Relevant Projects Portfolio

ENVIRONMENT

- EIA for 2,5 GW in conventional energy (natural gas), and for 13 MWp in solar energy;
- ESIA for 210 km OHL 400 kV interconnection Romania - Republic of Moldova;
- impact of air pollutant emissions assessed for 26 industrial activities → environmental technical consulting (dispersion modelling and/or permitting);
- 18 industrial and public utility activities with measures for GHG emission reduction and climate change adaptation → environmental technical consulting;
- 711 ha of industrial wastes dumps (closure, post-closure monitoring, remediation-reclamation-repurposing, expansion) → technical consulting; permitting; engineering; onsite technical assistance during construction;
- 23 ha radioactive waste disposal site → permitting;
- 2,680 mc/h in industrial water management systems → technical consulting; permitting;
- 130 km of watercourses affected by extreme hydrometeorological phenomena, subject to sanitation, cleaning, unblocking and dredging works → emergency design and technical assistance;
- 20,173 ha of irrigated surfaces → technical consulting; permitting and 11.7 km of irrigation channels, including 3 pumping stations → onsite technical assistance during retrofitting;
- inventories, forecasts, reduction policies and measures for air pollutants (SO₂, NO_x, PM, etc.) and GHG emissions at national level.

PUBLIC UTILITIES. GREEN INFRASTRUCTURE

- 51 streets with water and/or sewage networks (upscaled and/or resized) → techno-economic consulting (FS); permitting; basic and detail engineering;
- over 400 end-users' connections and service lines to the water – sewerage infrastructure → permitting; engineering (basic design);
- 4.3 ha ecological sludge landfill → techno-economic consulting (FS, closure and field studies, phytoremediation); permitting; engineering (basic - detail design); onsite technical assistance and operation monitoring;
- 15 ha urban wastes dumps (closure, management centres) → technical consulting; permitting; engineering; onsite technical assistance;
- analyses and reports (CBA, FS, IA etc.) for financing applications EU funds (Modernisation Fund, PDD, PNRR, AFIR, PNDR).





For additional information
regarding our project
portfolio, please contact us
at office@ccem.ro,
providing your contact
details and area of interest,
and we will be pleased to
share the requested
information.

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