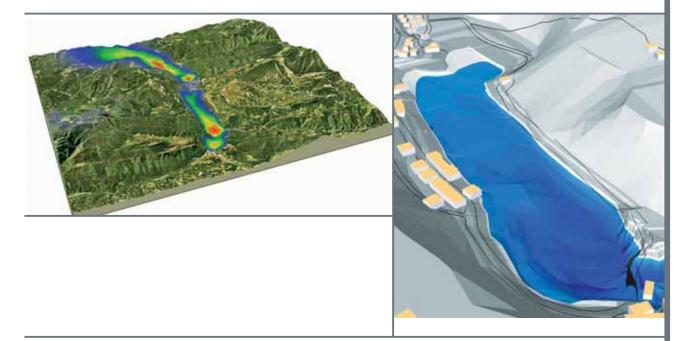
# **Environmental Assessment** and Permitting

## For a sustainable hydroelectric development.

CESI has over 20 years of experience in providing Impact Assessment and Environmental Permitting Services in power, gas, infrastructure and transport sectors. CESI has performed environmental studies for about 70 renewable power generation projects over the last six years and can deliver Environmental assessment for any project by analyzing the environmental, social and economical aspects.



CESI is a key player in consulting services related to Dam Safety, Structural Engineering, Environmental Management of Industrial Plants, Natural Risks Mitigation and Environmental Impact Assessment. CESI's services cover both new plants construction and existing plants management/revamping: from environmental impact studies and permitting to emergency and risk mitigation plans and remediation design.

Monitoring campaigns are carried out to assess air and water quality, electromagnetic field and noise pollution. Modelling techniques are applied to identify polluting sources and to evaluate the effects of different polluting scenarios.

CESI can perform seismic and static monitoring of civil structures (e.g. dams) and protection of monumental heritage, numerical analysis to verify the behaviour of the structure with operating loads and loads associated to hypothetical scenarios of interest (e.g. earthquake).



#### **CESI's expertise**

CESI can assess any projects' impact on the environment, by analyzing the environmental, social and economic aspects. Its long time experience allows to handle complex and multidisciplinary projects and to assist Clients in developing their business not just being compliant with all current and future legislative requirements, but to overcome them, transforming environmental costs into business strengths and opportunities.

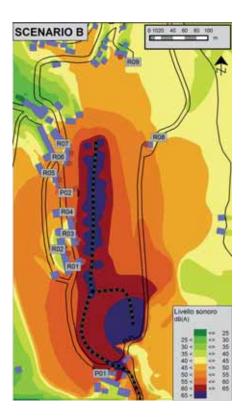
CESI can leverage on-state-of-the-art assessment tools, from field measurements, laboratory test, statistical analysis and modeling techniques. It can also grant support and advise in complying with SEA (Strategic environmental assessment) and environmental authorization regulations such as EIA (Environmental Impact Assessment) or IEA (Integrated Environmental Authorization).

Our main services are:

- permitting requirements analyses and support;
- public consultation and stakeholder engagement;
- support during the authorization procedure;
- site and route selection studies;
- environmental impact assessments, ecological studies, landscape reports;
- environmental monitoring and management plan design.

CESI offers a comprehensive and exhaustive analysis of the project by means of a deep integration of bibliographical researches, field campaigns, and modeling applications for all the environmental compartments (air, water, soil, flora and fauna, etc.).

CESI has over 20 years of experience providing Impact Assessment and Environmental Permitting Services to projects in power, gas, infrastructure and transport sectors. CESI employs professionally trained, competent staff who have the necessary skills and experience required to provide businesses with an effective and quality assured service to match your requirements and expectations.



#### **Main references**

Are the following:

#### CCS (Carbon capture and storage)

CESI performed the exploration well EIS for Porto Tolle Project.

#### Sustainable development of the electricity grid

CESI supported the Clients in planning the sustainable development of the Electrical grid by identifying the best suitable environmental and technical alternative.

#### Thermoelectric power generation

CESI performed environmental studies for about 30 projects over the last five years.

The first Concentrated Solar Power plant in the World to use molten salt for heat transfer and storage CESI supported the Client during EIA procedure.

#### Renewable power generation (Eolic, Geothermal, Biomass, Hydro)

CESI performed environmental studies for about 70 projects since 2007 until today.

#### Gas Storage

CESI performed environmental studies for about 30 projects since 2007 until today.

CESI performed the EIS for Porto Tolle Project.

Impact estimation and assessment can be performed also by means of modeling and site survey activities by Senior/Junior experts and CESI Lab specialized on following items:

- ecological (flora and fauna);
- landscape;
- geological;
- electromagnetic field;
- noise;
- air pollution;
- soil;
- water impact (chemical pollution and physical impact);
- coastline erosion;
- mitigation;
- non-technical summary.

### **CESI's Business Areas:**

- Testing, Inspection and Certification services for HV, MV and LV electrical components;
- Engineering and Consulting services for power systems and markets, transmission and distribution grids, generation plants, renewable and hydro plants;
- Environmental Consulting and Structural Engineering services for Energy, T&D, Industry and Transport sectors;
- Production of Solar Cells for Space and Terrestrial (CPV) applications.

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