Lorenzo Bertolè

Lorenzo Bertolè is *Head of EnviroSocioPermitting, Sustainable Operations and Energy Transition* within *Arcadis Italia* based in Milano.

Lorenzo has more than 25 years of experience in Sustainable Development with particular reference to Power and Oil&Gas sectors, supporting clients in developing new projects from the inception phase to the operation phase.

He participated as *Technical Director* to many projects of various industrial installations, such as **pipelines**, **power plants, refineries, power lines, motorway, waste treatment plants**, in the domestic and international markets.

From 2009 to 2021 he worked on **Major International Projects classified by EU as Project of Common Interest** (CPI), such as Trans Adriatic Pipeline (TAP), Ionian Adriatic Pipeline (IAP), Eastmed.

In year 2014 Lorenzo was the coordinator and chairman of a meeting between the Italian Ministry of Environment and a delegation of Japanese Ministry of Environment with the aim of reviewing the Japanese environmental legislation for the Power Sector.

In year 2014-2015 Lorenzo was **Technical Director for the development of Environmental and Technical Guidelines for the Upstream Business Cycle for a major Oil and Gas company**, addressing environmental & social challenges.

During 1998 takes part with TEI s.p.a. in an Hydrological Study regarding Po basin (Autorità di Bacino del fiume Po).

From 1998 to 1999 tecnical expert by Ecoitalia (Servizi Industriali Group s.r.l.) for technical and economical management of Site Remediation.

From 1999 to 2002 cooperates by engineering practices for Environmental Impact Studies, Planning and Direction of Work.

From 2003 to 2021 he was part of the Environmental Assessment & Planning Team of ERM Italia (from 2015 to 2021 as Technical Director).

Lorenzo managed a significant number of projects in several countries across Europe, Africa and Middle/Far East: Albania, Tunisia, Algeria, Indonesia, Italy, Ivory Coast, Libya, United Arab Emirates. In the frame of these projects, he had the opportunity to develop a strong professional skill **applying International Standards, such as IFC, EBRD to Development Projects**.

Professional Affiliations & Registrations

- 2010 Qualification as "Noise Expert" in Regione Lombardia (Italy) (*Law n.* 447/95)
- 2006 Admidssion as Controller in the Emissions Trading Scheme
- 1999 Chartered Member of National Association of Engineers
- 1999 Qualification as Building Safety Coordinator (*ex art.10 D.Lgs.* 494/96)

Fields of Competence

- Environmental Engineer
- Environmental Impact Studies
- Environmental and Social Management and Monitoring Plans
- International Development Projects
- Environmental and Hydrological Studies
- Site Remediation

Politecnico di Milano

85722 – Ecolologia e sostenibilità dei sistemi produttivi (training support). Years 2017/18; 2018/19; 2019/20; 2020/2021.

Education

• 1997 – Degree in Environmental Engineering, Politecnico di Milano

Languages

- Italian, native speaker
- English, fluent
- German

Key Industry Sectors

- Oil & Gas
- Energy
- Automotive
- Light & Heavy Manufacturing

Key Projects

Bagnoli. Director (Invitalia - 2023 - ongoing)

Director for the development of the Environmental Impact Assessment for the Remedition and Reinstatement Project of the Bagnoli – Coroglio coastal polluted area.

Eastmed. Technical Director (*Project of Common Interest – CPI***) (IGI Poseidon, 2020 – 2021)** Technical Director and Program Manager for the development phase of the the Eastern Mediterranean Pipeline Project (EastMed). About 2.000 km long, the 1.400km offshore gas pipeline links Israel, Cyprus and Greece via Crete, before traversing 550km through the Greek mainland to its final210 km stretch along the Ionian coast to reach Italy via the Poseidon Pipeline.

Ionian Adriatic Pipeline (*Project of Common Interest – CPI*). Environmental Lead (Western Balkans Investment Framework, 2018- 2020). Advisory role for the development of the Preliminary Design and ESIA of the Ionian Adriatic Gas Pipeline – Montenegro and Albania Sections.

Trans Adriatic Pipeline (Project of Common Interest -CPI) ESIA and pre-construction activities- Greece, Albania, Italy (2009-2020). Technical Director Technical Director for the Environmental Social Impact Assessment of a natural gas pipeline project, through Greece, Albania, Italy. The activities included Quality Assurance and Control of activities and deliverables, meetings with Italian Ministry of Environment, Regional and local Authorities, definition of Mitigation Measures and Monitoring Plan, Stakeholders Engagment Plan, Public Consultations. The following preconstruction activities, included the fulfilment/compliance to the MoE prescriptions related to the Environmental Social Impact Assessment, coordination and meetings with the Trans Adriatic Pipeline Project Team, meetings with Ministry of Environment.

Sicily – Malta Natural Gas Pipeline Connection, Tractebel Engineering, (2015- 2016). Technical Director The overall scope of the project is primarily to establish a connection from Malta to the European Gas Network through a Natural Gas pipeline to Supply Natural Gas for electricity generation and to support Maltese inland market.

Technical Guidelines Framework for the Upstream Business Cycle (2014-2015). Confidential O&G Client. Technical Director.

The activities included the design, developement and implementation of the Environmental and Technical Guidelines (risk management focused) to ensure a consistent approach to addressing environmental & social challenges applicable to the O&G business lifecycle. The guidelines were developed compliant with the relevant International Standards (IFC/WB) and the Company integrated ISO 14001 Management System.

Coordinator and Chairman of a meeting between the Italian Ministry of Environment and a delegation of Japanese Ministry of Environment (2014).

The meeting was requested by the Japanese delegation of the Ministry of Environment with the aim of reviewing the Japanese environmental legislation for the Power Sector.

Environmental Impact and Social Assessment Study for a Offshore Oil&Gas Exploration Project, South Italy (Confidential Client, 2011). Project Manager and Technical Director

Full ESHIA for an Offshore Exploration Drilling. The impacts evaluation focused on ecology, landscape and sediment dispersion.

Environmental Impact Assessment of the 380 kV Powerline "Villanova-Gissi", Abruzzo, Italy (Abruzzoenergia, 2010-2011). Technical Director The project aimed at the preparation of an Environmental Impact Assessment related to the construction of a new 380 kV Powerline, 69 km long in Abruzzo (Italy). The impacts evaluation focused on ecology, landscape and electromagnetic fields. The activities include meetings with Italian Ministry of Environment, Regional and local Authorities, definition

Environmental Supervisor for the Resettlement Plan for Kalivac Dam, Albania (Hydro/ Deutsche Bank, 2008-2009). Project

of Mitigation Measures and Monitoring Plan.

The Kalivac Dam is a large hydro power plant dam which is being constructed on the river Vjosa in Southern Albania. ERM was commissioned the integration of the existing Environmental and Social Assessment of the project and the preparation of the Resettlement Action Plan in compliance with IFC and World Bank standards. The project includes public consultation activities, filed investigations and audits, and modelling of environmental variables such as eutrophication and temperature. The Environmental Management and Monitoring Plan is also comprised in the scope of work.

Environmental Impact Assessment and Social Impact Assessment of the new Coal Fired 1.600 MW Power Plant of Porto Romano, Albania (ENEL, 2009). Project Manager

Project Manager of the project aimed at the preparation of an Environmental Impact Assessment (including Mitigation Measures and Monitoring Plan) and Social Impact Assessment related to the construction of 1.600 MWe Coal Fired Thermal Power Plant in Albania. The impacts evaluation focused on air, noise and traffic due to the coal logistics. Dispersion models were used for the evaluation of the impacts on air, water quality and noise. A preliminary BAT assessment was performed.

Environmental Impact Assessment of Taranto'Refinery Widening (ENI R&M, 2007). Project Manager

Project Manager of the project aimed at the preparation of the Environmental Impact Assessment related to the increase of the processing capacity from 6.5 to 10 milion tons of crude oil of Taranto's Refinery (Italy). The impacts evaluation focused on air, noise and traffic due to the oil logistics. Dispersion models were used for the evaluation of the impacts on air, water quality and noise.

Environmental Impact Assessment and IPPC Application for the Biomass Power Plant of Ottana (BioPower Sardegna, 2007). Project Manager

The project aimed at the preparation of the Environmental Impact Assessment for the construction of a 37 MWe Biomass Power Plant. The impacts evaluation focused on air, noise and traffic due to the fuel logistics. Dispersion models were used for the evaluation of the impacts on air and noise. The IPPC application was focused on the analisys of the applicable Best Available Technics.

IPPC Application for the Power Plant of Torrevaldaliga Sud (Tirreno Power, 2006). Project Manager

The project aimed at the preparation of the IPPC Application for the existing Combined Cicle Power Plant. The application was focused on the analisys of the Best Available Technics for Large Combustion Plants.

Assessment for the Validation of the CO₂ Emissions Communication of Brindisi Sud Coal Fired Power Plant (Certiquality, 2006).

The assessment included audits in the Power Plant to verify procedures, methods and calculations of $\rm CO_2$ Emissions.

IPPC Application for the Coal Fired Power Plant of Fiume Santo (SS, Sardegna), (Endesa, 2006). Project Manager

Project Manager of the project aimed at the preparation of the IPPC Application for the existing Power Plant and for the building of the tird coal fired section and the simultaneously disclosure of the oil fired section of the Thermal Power Plant. The application was focused on the analisys of the Best Available Technics for Large Combustion Plants (*Chapter 4: "Coal and Lignite"*).

Assessment of the suitability to the Certification of the CO₂ Emissions Monitoring Methodology in the European Emissions Trading Scheme: Monitoring Methodology Evaluation for 3 Power Plants by Mean of a Monitoring and Communication Report Model Prepared by ERM, Execution of On-Site Visits at 2 Power Plant. (Tirreno Power, 2006). Project Manager.

Environmental Impact Assessment of the Extension to the Third Lane of Motorway A9 Lainate-Como-Chiasso (SPEA Ingegneria Europea, 2004). Project Manager

Autorizzo al trattamento dati ai sensi del GDPR 2016/679 del 27 aprile 2016 (Regolamento Europeo relativo alla protezione delle persone fisiche per quanto riguarda il trattamento dei dati personali).