

M&P

MORONI & PARTNERS



More than
FOUR GIGAWATTS
of experience

Energy planning, engineering,
and integrated advisory services

www.moroniepartners.com

ENGINEERING DIVISION

More energy, less talk

ENERGY PRODUCTION AND MANAGEMENT

Development, design, construction supervision and health and safety operations for:

- PV plants
- Solar Thermodynamic plants
- Biomass and biogas plants
- Wind farms
- Hydroelectric plants
- Combined Heat and Power plants (CHP)
- Solar thermal and solar cooling plants
- Energy Efficiency actions
- Permission procedures for long distance transmission lines
- Energy audit and energy diagnosis actions
- Optimization and repowering of operating plants
- Incentives (Feed-in-Tariff, Feed-In-Premium, Green Certificates)

INNOVATIVE BUILDING

- Innovative low energy consumption and passive buildings
- Energy and environmental certification
- High efficiency HVAC plants
- Civil and industrial electric plants



**GREECE
PHOTOVOLTAIC PLANTS
28,8 MWp**

Technical Advisory services.



**BANGKOK (THAILAND)
PHOTOVOLTAIC PLANTS
1,3 MWp**

Engineering services.



**PROVINCE OF RAVENNA (ITALY)
PHOTOVOLTAIC PLANT
35 MWp**

Technical Advisory services.



**PROVINCE OF SALERNO (ITALY)
PHOTOVOLTAIC PLANT
24 MWp**

Technical Advisory services.



**PROVINCE OF FOGGIA (ITALY)
WIND FARM 32,7 MW**

Technical Advisory services



**GALWAY (IRELAND)
WIND TURBINES 20,60,100
AND 250 kW**

Technical Advisory services.



**PROVINCE OF MACERATA (ITALY)
BIOGAS PLANT
1 MWe**

Engineering services.



**PROVINCE OF PESARO (ITALY)
ENERGY EFFICIENCY:
MECHANICAL, ELECTRIC AND
SPECIAL PLANTS**

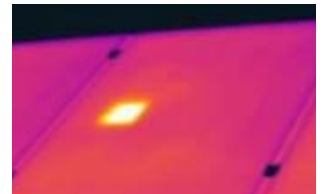
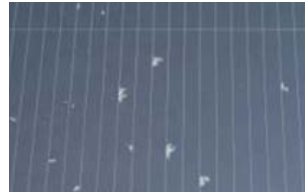
Engineering services.

TECHNICAL ADVISORY DIVISION

Check the quality of your investment

PHOTOVOLTAICS

Technical, instrumental and administrative Due Diligence
Performance Ratio Measurements
IR-Thermographic analysis in compliance with UNI EN 473
Laboratory tests in compliance with IEC 61215 and IEC 61646
Provisional and Final Acceptance tests (PAC and FAC)
Health and Safety Operations



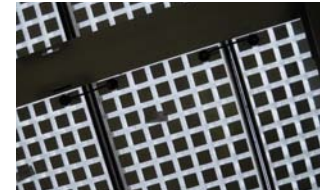
SOLAR THERMODYNAMIC (CSP)

Technical and administrative Due Diligence
Plants and technology bankability Due Diligence
Direct Normal Irradiation Measurements
Advisory Services for suppliers selection
Tests on CSP tracking system



CONCENTRATION PHOTOVOLTAICS (CPV)

Technical, instrumental and administrative Due Diligence
Plants and technology bankability Due Diligence
Tests on CPV tracking system
Laboratory tests in compliance with IEC 62108
Provisional and Final Acceptance tests (PAC and FAC)



WIND

Technical Due Diligences
Wind Assessment
Annual Energy Production estimation (P50 P75 P90)
Power Curve measurement
N.D.T. on moving parts
Acoustics measurements



HIGH ALTITUDE WIND ENERGY

Consultancy for technologies and plants bankability
Project technical analysis and yield estimation
Technical-administrative and technical-instrumental Due Diligence
Asset management



HYDROELECTRIC

Technical Due Diligences
Installation site analysis
Verification of the technology
Hydrometric data analysis
Energy yield estimation



BIOGAS / BIOMASS

Technical Due Diligence
Advisory Services for technologies bankability
Third-party start-up verification
Biological Laboratory test
Production and procurement costs optimization
Atmospheric emission analysis



ENERGY EFFICIENCY

SERVICES FOR ENTERPRISES

- Technical advisory for ISO 50001 certification
- Customized Energy management services
- Energy Audit
- Energy diagnosis
- Energy supply contracts analysis
- Contracts analysis for third-party financing
- Feasibility studies on CHP and trigeneration plants
- High efficiency lighting solutions
- Energy efficiency solutions
- Consumptions monitoring
- Certification of achieved saving
- Technical Advisory on energy efficiency bonds request

SERVICES FOR FINANCIAL INSTITUTES AND INVESTMENT FUNDS

- Technical Advisory on bankability of specified technologies
- Technical due diligences
- Consumptions monitoring
- Certification of achieved saving

REAL ESTATE

- Real Estate evaluation
- Property valuation according to national and International Valuation Standards (IVS)
- Property valuation according to the guidelines for the assessment of properties as a warranty for the credit exposure (ABI);
- Specialized technical evaluation services for banks and investment funds aimed to the recovery of property (property conditions, abuse, technological plants verification) including:
 - Overall analysis of internal and external environmental impact to the property
 - Impact and cost for hazardous waste removal and disposal
 - Impact and cost impact for machinery waste removal and disposal
 - Overall machinery value assessment (disposal cost/benefit analysis)



ASSET MANAGEMENT DIVISION

Our experience for your investment care

M&P Asset Management services help the investors for technical and administrative management of PV plant, in order to increase the investment value and the revenues ensuring the compliance with local laws and regulations.

The service includes:

Suppliers selection and O&M contract subscription

On field survey of O&M activities

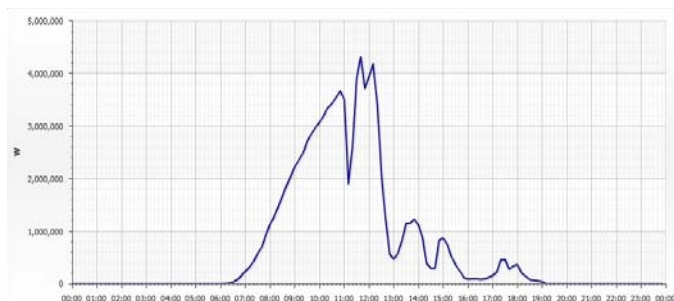
Remote monitoring of PV plant performances

PV plants performance assessment

Support in the relationship with National Energy Management Operator, Custom Agency and Transmission System Operator

Support to administrative and accounting management of the investment

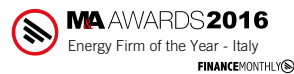
Legal and fiscal management support





More than Four Gigawatts of experience

Clean energy production for a better world.



Moroni & Partners, one of the largest Italian energy engineering consultants with more than 4 GW of experience, executes Engineering, Technical Advisory and Asset Management services.

A team of more than **50 professionals** working on renewable energy sources and high energy efficiency systems is able to satisfy the needs of banks, investors, industrial customers, public entities and EPC contractors.

Three business divisions are the pillars of our structure:

The Engineering Division: executes the permission process, the design, the construction surveillance and the safety of power plants. Furthermore this division offers energy saving solutions in industrial, civil and tertiary sectors.

The Technical Advisory Division: carries out consultancy activities and instrumental analyses on operating energy plants, working with major banks and investment funds as well as with investors asking for an independent survey on their investment.

The Asset Management Division: performs a complete plant management, from performance monitoring to management of administrative and fiscal fulfillments related to RES activities.

CERTIFICATIONS:

Moroni & Partners cares about services quality, environmental respect, energy rational use and workers' health and safety, obtaining these voluntary certifications:

- ISO 9001:2015
Quality management
- ISO 14001:2004
Environmental management
- BS OHSAS 18001:2007
Occupational health and safety

TECHNICAL COMMITTEES:

Moroni & Partners takes part effectively on the issue of technical regulations. It is a member of the following technical committees:

- TC 82 - Solar photovoltaic energy systems
- TC 88 - Wind turbines
- TC120 - Electrical Energy Storage (EES) Systems
- TC 313 - Smart grids
- TC 315 - Energy Efficiency

CERTIFIED OPERATORS:

The staff of Moroni & Partners is constantly trained and certified and it is composed by:

- Thermographic Operators Level 2 (UNI EN 473)
- PEI and PES technicians for under voltage works (CEI EN 50110-1; CEI 11-27)
- Certified operators for overhead works, (art 37 and 77 D.Lgs. 81/2008)
- Energy experts (DPR 75/2013)
- Energy and Environmental experts (prot. Itaca) (LR Marche 14/2008)
- Acoustic technicians (Law 447/95)

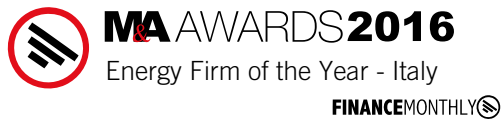
CHOSEN BY:



ACCREDITED:



AWARDS:



WHERE WE OPERATE:



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