

The Renewable Energy Network Project



**Guide: The
Renewable
Energy Market
in Italy**

The exploitation and development of renewable energies are among the fundamental themes of modern society, taking into account the environmental and socio-economic implications.

In Italy the energy problem has a structural nature; encouraging the use of renewable energies and the development of related technologies becomes an economic priority, which regards, at various levels, the whole country.

Italy is a net importer of raw materials, especially energy. Because of the sharp rise in world prices over the previous two year period the energy trade balance recorded a sharp worsening. Moreover, not including the energy component, the Italian trade balance remains largely in surplus. During the last year, despite the appreciation of the Euro, Italy has recovered slightly even in terms of world share.

In this context, the Ministry of Economic Development supports the activities of the Italian Chambers of Commerce abroad and, in particular, wants to enhance the project „renewable energy“.

On the assumption that the response to a global problem such as that energy can be found only at the international level, this project supports concrete and targeted actions of international co-operation in the renewable energies field.

This guide, edited as part of the project, wants precisely to highlight, among international trading and institutional operators, the Italian potential in developing the industry. The ultimate goal is to set up both international collaboration aimed at increasing long-term competitiveness of Italian firms, and to draw the attention of foreign investors to our country.

The Ministry of Economic Development
Directorate General for the Promotion of Trade

Dr. Gianfranco Caprioli
Director General



Ministero dello Sviluppo Economico



Guide: **The Renewable Energy Market in Italy**

Introduction: **“The Italian Chambers of Commerce Abroad and the “Energies of the Future”” network project** p. 5/6

Part One: **“Status of renewable energy in Italy”** p. 7

■ The Market p. 8-17

■ Legal framework and incentives p. 18/19

Part Two: **“Companies in the sector”** p. 21-45

Part Three: **Contacts/Links** p. 46

Imprint

The Renewable Energy Network Project
of the Italian Chambers of Commerce Abroad
Project leader:
Italienische Handelskammer für Deutschland e.V.
Camera di Commercio Italiana per la Germania
Friedrich-Ebert-Anlage 58
D-60325 Frankfurt am Main
www.itkam.de ■ info@ccig.de



CAMERA DI COMMERCIO
ITALIANA PER LA GERMANIA
ITALIENISCHE HANDELSKAMMER
FÜR DEUTSCHLAND
Fondata nel 1917

INTRODUCTION: "The Italian Chambers of Commerce Abroad and the network project "Energies of the Future""

The Italian Chambers of Commerce Abroad (CCIE) are national and local associations of entrepreneurs and professionals recognised by the Italian Government according to Law No. 518 of 1.7.1970. By tradition these associations were set up and developed throughout the world in places with a prevalent Italian presence.

They are present in 48 countries with 140 offices, have over 24,000 member businesses, of which approximately 70% are local companies, which operate or are interested in working with Italy. The Italian Chambers of Commerce Abroad carry out activities aimed at facilitating the access of Italian businesses to foreign markets, promoting the setting up of contacts to conclude business and carrying out intense information and communication measures, both through a constant monitoring of sector trends and through the publication of user-friendly guides to each national scenario.

The Italian Chambers of Commerce Abroad realise multiple activities aimed at helping companies in their business by facilitating contacts to conclude transactions through the organisation of exhibitions, collective participation in international and local shows, accommodating missions from Italy and in Italy, seminars, conventions and workshops, with bilateral meetings between Italian companies and local companies, technology days, fashion shows, image-making projects, gastronomy days, food-and-wine tasting fairs and events to attract foreign investments. These initiatives are supported by an intensive information and communication campaign via portals, web sites and the publication of papers, newsletters, catalogues, CD ROM and publicity ad hoc campaigns.

Their support to businesses includes both the more traditional sections of "Made in Italy" products, and those with greater technological and innovative value. Operating in a network, the CCIE are able to make available to the operators who contact them a vast wealth of experience and knowledge, stemming the single markets on which they operate and rooted in a common matrix: Italy.

One of these network projects is "Energies of the Future", which in 2008 is in its third year with the following participants: the CCIE of Frankfurt as leader, ten other European

Chambers (Barcelona, Brussels, Lisbon, London, Lyon, Madrid, Munich, Stockholm, Thessaloniki, Zurich) and a South American Chamber (Rio de Janeiro).

The general intent of the CCIE in contributing through the "Energies of the Future" project to the development of energies from renewable sources in Italy is based on two considerations:

- Since the energy problem is global, the response must be international and founded on a system of cooperation and exchange between businesses and institutions of various countries;
- The development of new sources of energy production does not depend solely on the availability of a physical resource in one country but especially on the development of adequate technologies for the utilisation of that resource and the transfer of said technologies from one country to another.

Therefore the general objectives are to:

- Launch collaborations, exchange technologies and know-how with companies in countries where a more advanced level of technology has been reached than in Italy (e.g. Germany, Sweden, Switzerland and Spain) and with countries whose technology level and utilisation of renewable energy is lower than in Italy and need supplies from more advanced countries to meet the obligations of the Kyoto protocol;
- Contribute with foreign operators to highlight the importance of the alternative energies sector and affirm that the development of technologies of renewable energy is becoming a vital element of industrial development policy in Italy;
- Collaborate with foreign businesses to foster awareness of the Italian need to increase investments in technologies by promoting location in Italy;
- Contribute to the international development and competitiveness of Italian businesses in this sector through comparison and association with international operators;
- Highlight the international importance of the Italian Trade Fair scenario, also for innovative sectors, and help it become a major crossroads for businesses.



INTRODUCTION: “The Italian Chambers of Commerce Abroad and the network project “Energies of the Future””

The 2008 project on the development of renewable energy completes the development process which started in 2006 and 2007. In the first year the project brought to the attention of foreign industry and institutions the potential and importance of the alternative energies sector in Italy and created opportunities for exchange and collaboration between Italian and foreign companies of the sector. In the second year it organised study-trips abroad focused on broadening contact with and knowledge of more developed technologies to increase the competitiveness and level of technology of Italian companies.

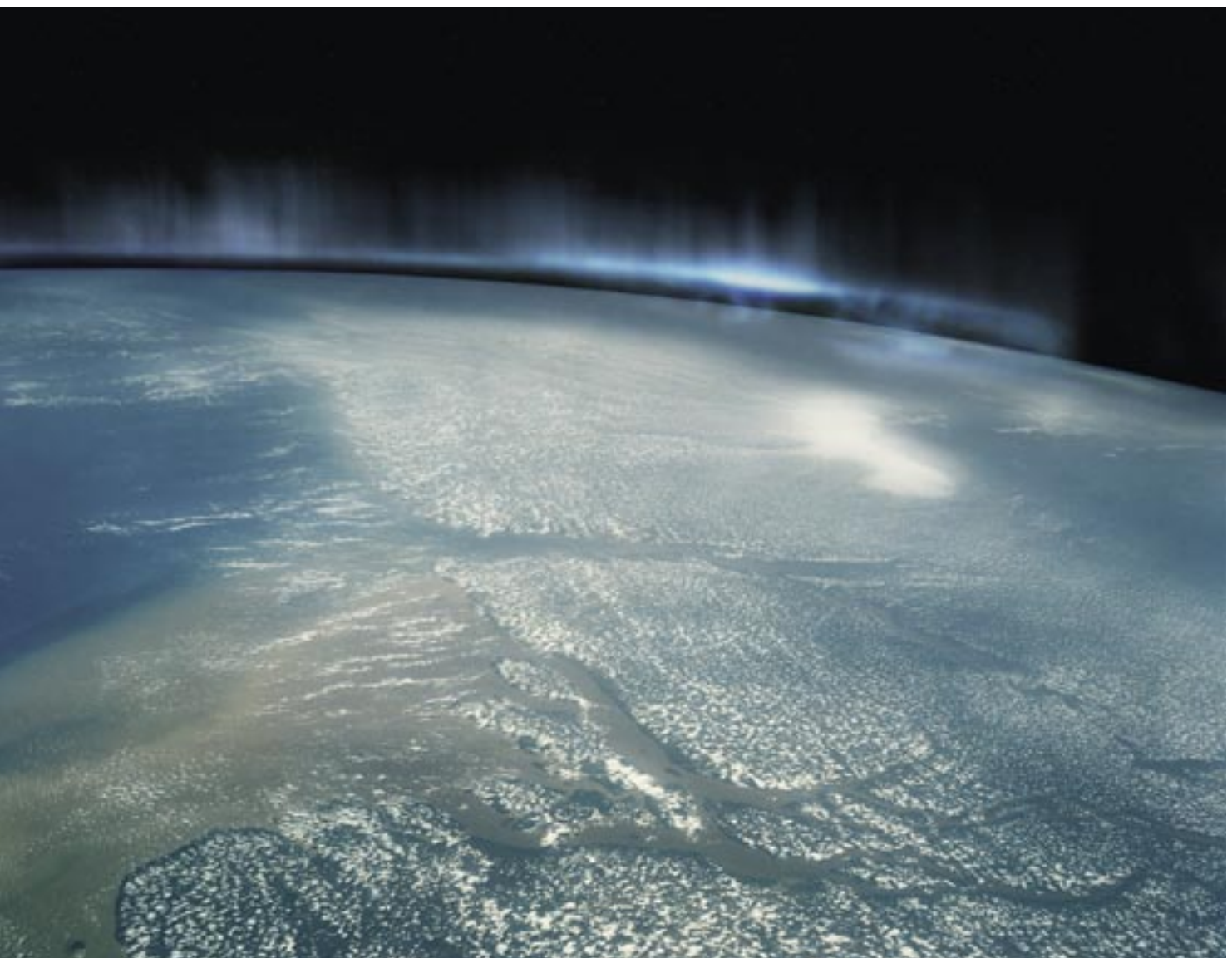
In 2008 the companies involved in the project noticed the need to contribute to:

- Highlight with foreign operators the technological excellence achieved by Italian businesses in various sectors of energy from renewable sources (e.g. research on silicon-

free materials in Puglia, geothermal technology in Tuscany – Larderello, etc.), a benefit to single business and the overall visibility of the sector;

- Start commercial collaborations, in particular the exchange of know-how between companies producing innovative technologies in the field of renewable energy and foreign businesses;
- The international development and increase in competitiveness of Italian businesses in the sector through exchanges and associations with international operators.

In the framework of the objectives set forth in the project, this guide to the renewable energy sector in Italy sets out to be a fundamental instrument for highlighting the state of the art of energy technologies and incentive mechanisms in Italy. The information in the guide will contribute to creating international alliances with Italian companies of the sector.



Market

The energy resources

In order to meet its energy needs, Italy depends much more on imports of energy than any of the countries of the EU-27. Energy imports – in particular oil and methane – are currently over 85% of Italy’s need. The causes of this are the rejection of or taboo against nuclear energy, which dates back to 1987 and a popular referendum of 1986, in the low reserve of fossil fuel energy resources and the scarce utilisation of potential of renewable energy in this country.

Among the G8 nations, Italy is the only one that does not have nuclear power plants. In consideration of the extremely high dependence on imports of methane and oil – which are constantly increasing in price – and the growing emissions of CO₂ (greenhouse effect), the antinuclear front is starting to back down. According to a statistic published by the Financial Times in February 2008 concerning the acceptance of nuclear energy in various countries, 58% of the Italians interviewed declared they were in favour of using nuclear power plants. After the electoral victory of the centre-right coalition, this possibility has become more realistic. However it would require medium-term planning. In this case, recourse could be made to the know-how of national businesses, such as the Enel industrial energy group or the Ansaldo Nuclear business belonging to the Finmeccanica Group. These entities participate in the construction of reactors in France, Slovakia and Rumania.

As stated earlier, the amount of energy from its own fossil fuels is negligible in Italy. Only in the Sulcis area of Sardinia are there utilisable deposits of lignite. However, this carbon is not suitable to be burned directly in power plants because of the high sulphur content. There are small oil fields in the south of Sicily, near Pescara, in the Po valley, Basilicata and Sicily. There are minimal reserves of natural gas on the eastern borders of the Apennines, in the Po valley, Basilicata and Sicily. Single gas deposits have been found under the northern Adriatic Sea and the Ionian Sea. Italy purchases oil especially from North African countries, in particular Libya. The most important suppliers of gas have so far been Algeria and currently, in increasing amounts, Russia, followed by Holland and Norway.

Extreme dependence of the international energy market and climate protection measures demonstrate the urgency of analysing possibilities for utilising renewable energy sources in situ. For this reason, Italy presents a development potential still to be exploited in the individual sectors because of its excellent local conditions.

With a total length of the coasts of mainland and the islands of 7,468 km, many stretches especially in the southern areas, in Sardinia and in Sicily offer excellent conditions for the installation of wind power plants. The Alpine regions of northern Italy have a wealth of water and stretches of steep slope, which offer the possibility of hydro-electric exploitation in many places. Vast woodlands in northern Italy also provide raw material for the growing production of pellets. Especially in the Po valley there are extensive lands which can be irrigated and mechanised for the production of biomass. The sunny Mediterranean climate creates favourable conditions just about everywhere in Italy for the exploitation of solar energy. Furthermore, geothermal reserves are easily accessible in many places. There are numerous thermal springs and several extinct volcanoes, dormant but also active especially in Central and Southern Italy.

In short, sources of renewable energy are available. In order to utilise them effectively, the development of adequate technologies, targets, and long-term planning instruments and, last but not least, attractive incentives are needed.

Overall, we presented the need to change the Italian “Energy Mix”, namely the proportions of various energy sources for the national electricity production. In this case, the potential of renewable energy should be exploited much more, as required by the climate protection measures of the Kyoto Protocol signed by Italy in June 2002.

Organisation of the energy market

Totally new organisational structures were set up on the Italian energy market in the 1990s, as EU legislation was adding pressure to liberalise the production and distribution of electricity and a strong need for a change in the energy policy was becoming apparent due to latent difficulties in supply. In September 2003 there was a temporary total blackout.

These milestones are difficult to plan because energy policy falls within the competence of seven different Ministries. Until July 2006 the tasks of planning an energy policy were the competence of the Interministerial Committee for Economic Planning (CIPE) and were later passed to the Presidency of the Council of Ministers.

From the organisational point of view, the energy market has been strengthened due to deregulation. However, it has developed relatively slowly compared to other EU countries. It started in 1999 with the "Bersani Decree" which applied the EC Directive No. 92 of 1996 concerning the general common conditions of the European energy market. Gradually, the conditions of competition were deregulated for the production, importation, distribution, sale and purchase of energy. A complete deregulation of the energy market was reached in July 2007.

Thus, the previous monopoly of the ENEL (Ente Nazionale per l'Energia Elettrica; National Electricity Board) and ENI (Ente Nazionale Idrocarburi; National Hydrocarbon Board) State industrial groups on the electricity, gas and oil markets also ended. Initially in 1992 they were transformed into limited companies and then some were partially privatised. Both these businesses, each state-owned by more than 30%, are still by far the most important players on the Italian energy market. In addition to these there are other large multinational producers and distributors of electricity and gas such as Enesa, Edison Energia and Edipower, as well as numerous small suppliers of energy, some partially municipal or state-owned.

With the Bersani Decree, the sectors of production and sales were separated as well as those of the transportation and distribution of energy. For competitive reasons no industrial group can own stakes larger than 50% in one of these market areas. Thus ENEL and ENI were forced to reduce their production capacity and to sell some of their shares.

The electricity network previously managed by the ENEL monopoly was completely split up. For this reason Terna Spa was founded (Trasmissione Elettrica Rete Nazionale; National Network Electric). This company is responsible for the transmission of electricity on the high and very high voltage network over the entire Italian territory, with over 98% of the electrical infrastructure, namely about 40,000 km of lines. Terna establishes the balance between the energy required and the energy produced. It also takes care of the efficiency, maintenance and expansion of the electrical network. For the period 2006-2015, the construction of over 3,300 km of new power lines with new transformer stations for a total investment of 3.1 billion Euros has been planned. Terna is financed through a rate system established by the Electricity and Gas Authority (AEEG). This is an independent public body instituted by law in 1995 with the function of regulating and controlling the energy sectors. It fixes the prices for the technical-economic terms of access and interconnection to the networks. In addition, it must guarantee the promotion of competition and efficiency on energy markets and monitor a certain service quality standard. Energy companies that violate competition rules or the commercial protection of consumers may incur sanctions from the AEEG.

The ENEA (Ente per le Nuove Tecnologie, Energia e Ambiente; Board for New Technologies, Energy and the Environment) founded in 1994 carried out an important advisory function for energy and environmental policies. It provides basic and applied research applicable to energy, the environment, and spin-offs from the technologies it develops and their transfer.

Above all, in the sector of renewable energy, the GSE (Gestore della Rete di Trasmissione Nazionale; Manager of the National Transmission Network) must be appointed. It is an Italian limited company entirely controlled by the Ministry of the Economy and Finance and concentrates on the promotion

and stimulation of the electricity production from renewable sources. Its task is to organise, manage and supply the incentive programmes of these sources. The limited company GME (Gestore del Mercato Elettrico; Manager of the Electric Market) operates as a subsidiary of GSE. In January 2004 the latter was put in charge of the economic organisation and economic management of the electricity market, the so-called "Energy Exchange". GME acts according to the principles of neutrality, transparency and objectivity and competition between producers by providing the economic management of an adequate reserve of power.

The production of electricity

Electricity in Italy is produced most of all by imported fossil fuels. To a minimal extent, some renewable energy mined on the national territory is also used. From 1997-2006 the electricity production has increased considerably as shown in the following table:

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Solids	20,518	23,311	23,812	26,272	31,730	35,447	38,813	45,518	43,606	44,207
Natural Gas	60,649	70,213	86,217	97,608	95,906	99,414	117,301	129,772	149,259	158,079
Oil products	111,226	105,123	91,286	85,878	75,009	76,997	65,771	47,253	35,846	33,830
Others	7,668	8,094	5,931	8,791	14,147	15,788	16,406	17,945	18,207	19,304
Total thermo-electric(A)	200,061	206,741	207,246	218,549	216,792	227,646	238,291	240,488	246,918	255,420
Hydroelectricity pumping (B)	4,953	6,151	6,419	6,695	7,115	7,743	7,603	7,164	6,860	6,431
Hydroelectric (natural supply)	41,600	41,214	45,358	44,205	46,810	39,519	36,674	42,744	36,067	36,994
Wind	118	232	403	563	1,179	1,404	1,458	1,847	2,343	2,971
Photovoltaic	6	6	6	6	5	4	5	4	4	2
Geothermal	3,905	4,214	4,403	4,705	4,506	4,662	5,341	5,437	5,325	5,527
Biomass and waste	820	1,229	1,822	1,906	2,587	3,423	4,493	5,637	6,155	6,745
Total renewable (C)	46,449	46,894	51,992	51,386	55,087	49,012	47,971	55,669	49,893	52,239
Total (A+B+C)	251,463	259,786	265,657	276,629	278,994	284,401	293,865	303,321	303,672	314,090

Table 1: Gross production of electricity by source – GWh 1997 - 2006

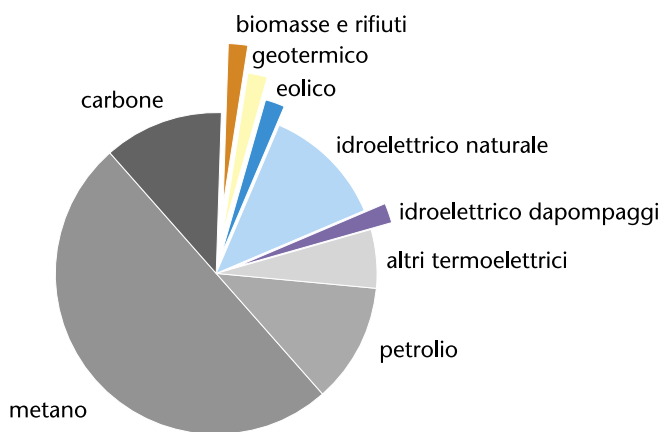
"Oil products" include: combustible oil, orimulsion, light distillates, gas oil, petcoke, low-quality products and other residues from oil processing; "Others" include: gas derivatives, heat recovery and compressed gas expansion.

Source: Elaborated by Electricity and Gas Authorities based on GRTN-TERNA data.

In one decade the total electricity production has continually increased from 251,463 GWh in 1997 to 314,090 GWh in 2006, which is approximately 25%. The percentage of the energy produced by thermoelectric power plants was 79.50% in 1997 and rose slightly to reach 81.39% in 2006. There was, however, a radical inversion of the relative importance between oil and natural gas due to the volatility of oil prices and its origin from politically unstable countries.

In 1997, renewable energy had made up approximately 18.5% of the electricity production, but it dropped to approximately 16.6% in 2006. This was mainly due to the decrease in hydroelectric power production in the Alps and some valleys of the Apennines. In the past, wind power has been constantly bolstered but it makes up 1% of the national electricity production, only. By contrast, the exploitation of solar energy is stagnating despite the existing incentive programmes. The production of geothermal power has developed rather favourably and contributed approximately 1.8% of the total electricity production in 2006. We will reach an even higher percentage with the combustion of biomass and industrial or urban waste. In 2006 by these means we managed to provide more than 2% of the national production of electric power.

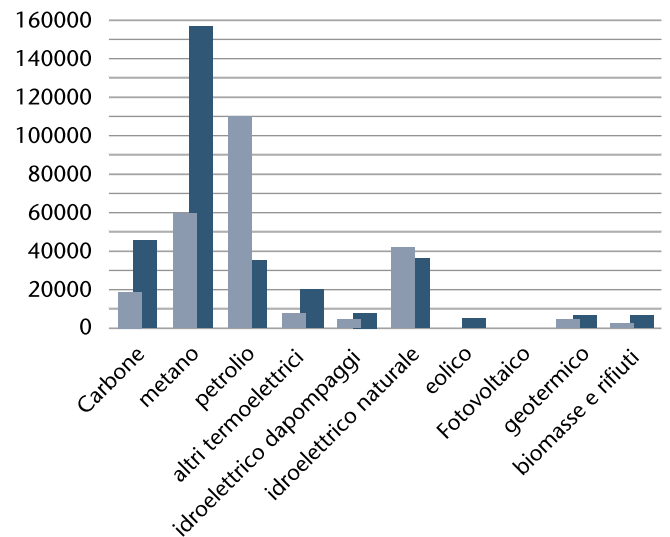
The following graphs show the production of electricity and the energy sources involved.



Graph 1: How energy is produced in Italy

Figure:
Methane
Carbon
Biomasses and waste
Geothermal
Wind
Natural hydroelectricity
Hydroelectricity from pumping
Other thermoelectric
Oil

Source: Elaborated by Electricity and Gas Authorities based on GRTN-TERNA data.



Graph 2: How the production of energy in Italy changed from 1997-2006

Figure:
Carbon
Methane
Oil
Other thermoelectric
Hydroelectricity from pumping
Natural hydroelectricity
Wind
Geothermal
Biomasses and waste

Source: Elaborated by Electricity and Gas Authorities based on GRTN-TERNA data

Utilisation of renewable sources as the key point of the energy policy

There are various urgent reasons for the expansion of renewable energy production in Italy. The most important are:

- Reduction of dependence on fossil fuels, in other words the reduction of dependence on energy imports;
- The EC objectives which require that Italy produce 25% of its electricity from renewable sources by 2012;
- Reduction of greenhouse gas emissions (CO₂) in accordance with the objective of the Kyoto Protocol.

From the figures quoted above, it can be concluded how far Italy is from the degree of exploitation of renewable energy required by the European Commission. The conditions of the Kyoto Protocol, ratified in 2002, have also not been met yet. In the period 2008-2012, Italy should reduce its carbon dioxide emissions to 6.5% lower than the emissions measured in 1990. However, Italian emissions from 1990 to present have increased by 12% instead of diminishing and therefore the reduction to be achieved by 2012 is now over 18%.

To achieve these objectives, Italy has fine-tuned a mechanism of incentives for the utilisation of energy from renewable sources. Here, we can distinguish incentive systems, aid for investments and tax concessions. Thus, as in other countries of the European Union, a national ecotax on fossil fuels was introduced in 1999 (Carbon Tax). The revenues obtained from the Carbon Tax are used for climate protection measures of and to support regenerative energy projects.

As early as 1992 the Interministerial Committee on Prices had established a 6% increase in the final price of electricity to the consumer (CIP6). The revenue from this surcharge is still used for research and investments in the sector of renewable energy. This programme, however, so far has only been exploited partially because of the imprecise interpretation of "renewable energies".

The most important stimuli for using renewable energy in electricity production stem from the "Bersani Decree" of 1999, with the introduction of the so-called "green certificates", which are traded on the market. On this market, demand is constituted by the obligation of producers and importers to introduce a minimum quota of energy produced from renewable sources: 4.55% of the amount produced and/or imported from conventional sources in the preceding year. From 2004 - 2006 this compulsory quota has increased annually by 0.35 percentage points. Source GSE) and from 2007-2012 it will increase by 0.75 percentage points. This market offers green certificates issued for the production of energy from renewable sources after the review of specific prerequisites. The price was set by GSE in 2006 at 125.28 /Mwh.

Investment aids are an additional form of incentive. They were applicable to the "Photovoltaic Roofs" programmes from 2001 to 2003 and the „Solar Heat" programmes from 2001 to 2002. The cost of installation of equipment was subsidised. Later, the so-called "Energy Account" started subsidising the rates on photovoltaic electricity produced. The incentive rates for companies producing energy with photovoltaic equipment are currently set from a minimum of 36 to a maximum of 49 euro cents per KWh produced as opposed to the market rate of 18 cents. Wind energy is also offered incentives in this manner. Here, the rate forecast for 2008 for wind power installations under 1 MW is around 0.22 /KWh.

Furthermore, private investors often also enjoy tax concessions, i.e. the deductibility of taxes on income (IRPEF) to 36% of the cost of solar panels in 2007.

Besides the national incentive programmes in Italy, the regional ones also have an impact. From 2007-2013 the multi-regional operating programme "Renewable energy and energy savings", which involves Puglia, Campania, Calabria and Sicily, grants approximately 1.6 billion euro. Overall, the focal points and conditions of the incentives have often been changed. This has led to a somewhat unclear variety of legal regulations and often overly complicated bureaucratic procedures.

Development of individual renewable sources

Hydroelectricity

Water energy is by far the major national energy source in Italy and the principal indigenous resource alternative to fossil fuel sources. There are over 2000 hydroelectric power plants mostly in the Alpine region, of which only 300 have a production capacity of more than 10 MW. Eighty percent of electricity is produced in large plants. In recent years, some small and medium plants under 10 MW have been added and they contribute 20% to the total production. The hydroelectric power plants in 2007 made up approximately 72% of the electricity production from renewable sources. Hydroelectricity is a clean energy source, without polluting emissions, and its costs are relatively low. On the other hand it varies from year to year depending on the level of rainfall. However, its potential has been almost completely exploited.

Enel is a leader in the hydroelectric sector and represents a national point of reference for the management of water. Enel has always dedicated important human and economic resour-

ces to the development of hydroelectricity in Italy. At present, its production comes from 211 medium-large installations and approximately 300 mini-hydro power plants, with a total capacity of 14,312 MW. The installations use flowing water, tanks or reservoirs and pumping. The major production plants and their rated power is: Trezzo sull'Adda (Milan) 10,871 MW, Presenzano (Caserta) 1,000 MW, Roncovalgrande (Varese) 1,000 MW, Bargi (Bologna) 330 MW, Anapo (Siracusa) 500 MW, Montorio (Teramo) 110 MW and Guadatami (Palermo) 80 MW. As regards the mini-hydro power plants, more than half of the capacity for energy exploitation per year is found in the Aosta Valley, followed by Tuscany and Emilia-Romagna. The major plant engineering works in the sector during the 20th century basically expanded the possibilities for exploiting water energy on the Italian territory. Enel's commitment today is therefore aimed principally at a strategy of improvement and technological modernization of the existing hydroelectric resources, with the objective of achieving additional increases in production and additional results in terms of enhancement of the natural habitats involved.



Geothermal Energy

Like water energy, geothermal energy also belongs to the "classic" renewable energies. Italy can define itself as a land of pioneers in the exploitation of geothermal resources; way back in 1904, we built the first geothermal power plant in the world. Based on its geological characteristics, Italy is a country with strong geothermal propensity and its potential can be exploited better than it has been to present.

The Italian geothermal potential to economically profitable depths is considerable, with high temperature resources (> 150o) concentrated in the foothills of the Apennines in Tuscany-Latium-Campania and on some volcanic islands of the Tyrrhenian Sea. It has resources of medium and low temperature (< 150o) on large areas of the national territory. The high-temperature resources lend themselves to the production of electricity and direct uses, while the medium and low temperature resources can be utilized mostly for the production of heat.

Currently 31 geothermal power plants, especially in Tuscany and Latium, produce 5.527 GWh (2006) of electricity. This corresponds to a good 10% of the total electricity from sources of renewable energy. However, exploitation of the geothermal resources has recently been in a stagnant phase, especially due to lack of incentives, which should be greater. Experts of the sector see as a realistic scenario the doubling of production of electricity in order to reach in 2020 a generation of 10 billion kWh to meet the electrical requirements of 9 million inhabitants. Italian technology and know-how in this field are leaders at the world level and are requested in many countries.

As regards direct uses, the rated power capacity in 2006 was 650 MWt. According to experts of the sector, direct geothermic applications have a growth potential that is definitely vaster than those indicated above for the production of electricity. Here, we estimate attaining a production of 6,000 MWt in the year 2020, which is sufficient to heat 800,000 apartments. Italian technology in this field has not achieved technological progress comparable to that for the production of electricity and for this reason is great potential for foreign technological collaborations.

As a whole, the electrical and non-electrical use of ground heat can therefore rise to 1.2% of the gross total consumption of energy of the country in 2020. The importance of this contribution is obvious if one considers that the anticipated growth of geothermal energy by 2020 will allow us to avoid the emissions of 8-10 million tons of CO₂ per year.



Biomasses

The growth rate of electricity generated in power plants or waste-to-energy plants from the combustion of biomass, industrial or urban waste has increased considerably in recent years. Electricity production in this sector has doubled in the period 2002-2006, thus reaching a 13% share of the total volume of electricity from renewable energy. In 2006, the production of electricity from biomass increased by 9% and reached 6.7 Mio. kWh. Italy, with 2% of its own needs covered by biomasses, is however below the European average.

Taking into account that the power which can currently be utilized from biomasses is approximately 15 Mtep, the various national plans and programs in this sector forecast the attainment in 2008-2010 of primary energy consumption from biomasses equal to 8-10 Mtep. The maximum exploitation possible from current resources of biomasses, made up mainly of agricultural and forest residues, firewood, livestock manure and the biodegradable portion of solid urban waste, potentially equals 20-25 Mtep/year. Additional quantities of raw material can be produced by renovating the non-food agricultural sector and the forest sector, together with the recovery of abandoned agro-wood territories, which extend for at least 2 million hectares. With reference to the current energy framework, increasing by 1 Mtep the primary energy from biomasses would involve investments of around 500 million euro.

However, we have to point out that biomass and industrial and urban waste are only considered a renewable energy in Italy. According to the EU directives, only the organic and plant part is considered renewable. Italy is in a position of poor development compared to other European countries, despite the high potential it has available. However, in Italy there is the need, and also the capacity, to build additional technologically modern thermoelectric power plants, so in the future the energy produced by combustion of biomass should undoubtedly increase. Experts estimate a doubling within the next few years. Piedmont, Lombardy, Emilia-Romagna, Tuscany and Sicily have the greatest potential.

However, the industry which has attracted the greatest interest in the past year is undoubtedly that of liquid biofuels. Incentives, returns and tax breaks have contributed to an increase in projects in this sector and started real race to get the biofuels. However, the growing interest in this industry has also caused a sharp upswing in supply prices of the raw materials. This sets the stage for broadening the prospects of the sector and, along with the exploitation of 'traditional' vegetable oils such as palm oil, we are also witnessing more research and testing of alternative biofuels such as Jatropha oil.

Wind energy

Currently, the exploitation of wind energy, which started in the eighties, is growing rapidly in Italy. Thanks to the new technologies adopted, the production costs of this renewable source have diminished considerably, reaching a level of competitiveness comparable to the traditional sources of energy. So wind energy has become the most profitable source of clean energy.

In Southern Italy in particular (Campania, Puglia, Abruzzo, Sardinia) one can count on the constancy of strong winds. Consequently, the wind farms are concentrated in Campania, Puglia, Molise, Sicily and Sardinia. Electricity production from wind power plants has more than doubled during the period 2002-2006. Wind power has contributed almost 6% of the total electricity production through renewable energy sources. 2007 was a record year for wind energy with more than 602 MW installed. Italy reached 2.726 MW as of 31/12/2007, a respectable position, even though far from countries such as Germany, Spain and Denmark. At the end of 2007, there were 2.943 windmills installed in Italy with an average capacity of 926 kW. The more recent installations resort to windmills of 3 MW. Even higher are the expectations for 2008 with additional power estimated at 800-900 MW.

The favourable climate for investments has greatly attracted foreign capital in addition to Italian capital. ENEL with its Green Power subsidiary is one of the major investors in Italian wind farms. Furthermore, we have Edison Special Energies Spa with French ownership and also companies from Belgium (Electrabel), Spain (Endesa) and Germany (RWE and E.ON). The largest Italian wind operator, however, is the English energy giant, International Power, which recently acquired wind farms with a capacity of 562 MW in Southern Italy. The design

leader in the wind sector in Italy is IVPC (Italian Wind Power Corporation). Simultaneously, the Italian market for wind installations has expanded. Until recently the largest installations were imported from Denmark and Germany, while today they are more frequently being manufactured on site. The future of wind "Made in Italy" plays on two fields: that of mini-installations for scattered wind generation and that of maxi-windmills for large farms. While the medium-size turbines market (from 500 to 850 KW) is firmly held by foreign producers of technology, the segments of small generators (machines with power from 20 to 50 KW suitable for installation on farms) and large generators (giants capable of developing between 1 and 2 MW of power, with towers 60-70 meters high) still remain open for Italian manufacturers.

In the market of producers of electricity from wind, besides the three historical operators (IVPC, ENEL and Edison Special Energies), which control approximately 50% of the market,

there are a number of dynamic entities. In addition, a certain number of operators are in the full development phase and they are leading the market, year after year, into an ever more competitive regime. The windmills come mostly from Vestas, followed by Gamesa, Enercon, GE Wind and Repower and recently also the Indian Suzlon has made its appearance on the national market.

However, the environmental impact and changes in the landscape due to the wind installations are becoming more and more criticised. On the other hand, it is wind energy itself that gives hope for a future reduction in emissions and the use of fossil fuels. The mood in the wind sector is very optimistic and the Italian market is one of the most dynamic in Europe. Experts estimate an average growth of 14.8% until 2012. This would mean exceeding the policy target of producing 2,500 MW of wind energy by the year 2012.



For wind energy, we identify a total capacity of 12,000 MW, 10,000 MW on land and 2,000 MW on the sea. There is an unexploited potential of 1,500 MW in Sicily. With the aim to distribute the 10,000 MW from on-shore windmills of the government proposal among the various regions, we could identify, for example, the following minimum objectives: 1,300 MW in Sardinia and the same amount in Sicily, 2,200 MW in Puglia, 900 in Calabria, 2,400 among Campania, Basilicata and Molise, 300 in Tuscany, 500 between Marche and Abruzzo, 300 in Umbria, 350 in Latium, 100 in Liguria and the same in Emilia Romagna and, finally 150 MW in the remaining northern regions.

Solar Energy

Despite the favourable development conditions, solar energy to present has not been exploited adequately. Here there is still great potential. The market of solar heat in Italy for hot water needs in 2006 reached the still relatively modest level of 130 MW installed, equivalent to 186,000 m², even though it was given incentives of strong tax deductions. For 2007 the estimate was to reach 200 MW or 286,000 m². Only 23% of the demand of collectors in 2006 was met by national production and 77% from imports, mainly from European countries. The solar heat industry should reach a total turnover of approximately 200 million euro in Italy in 2007 with more than 2,000 jobs. Solar heat production for the electricity network is not yet practiced in Italy. The areas with the most installations of plants for the production of hot water through solar energy are located in the Trentino Alto Adige. Only slowly is the market expanding to the North and South of Italy.



Also the photovoltaic market for electricity production is delayed compared to other EU countries. Photovoltaic cost is by far the highest among the renewable sources. From the economic point of view this technology is still not usually competitive. According to the most recent figures of the Manager Electric Services in Italy, in 2007 there were 8,000 plants operating for a total capacity of barely 83 MW. The solar cells are in part imported and in part supplied by Italian producers such as Eurosolare and Helios Technology.

A stimulus could come from the new law "Energy Account" of 2007 which abandons reimbursement as the sole solution and anticipates a system of twenty-year incentives for energy produced from photovoltaic installations connected on a network. This principle applies to all the categories of installations and makes it advantageous to invest in photovoltaic energy. Despite these incentives, the immense potential of the exploitation of solar energy is obvious but until now has remained almost unutilised in Italy. The data shows that although Italy maintained a weak "supremacy" up to 1994 at the European level, it was later superseded by nations such as Germany first and Spain later.

Italy's delay in developing the photovoltaic solar source is due to various causes. First of all, the fact that only in February 2007 was an incentive system decisively defined and an additional period of time had to pass until the entrepreneurial system and (especially) the banking and administrative systems understood its operation. Compared to other countries, Italy is further penalised by the lack of a mature industrial photovoltaic industry, which does not favour the ready availability on the market of valid skills and products. It must also be pointed out that the authorisation procedures for building installations, both small installations in an urban environment and often subject to excessive rules for protection of the landscape, and for large capacity grounded installations because of the problems, of landscape, and local land management.

To remedy this underdeveloped position possibly on a large scale, the Italian energy project proposes to the operation of photovoltaic installations totalling 3000 MW by 2016. Experts anticipate a growth of 30% per year for photovoltaic energy and 35% for solar heat.

Conclusions

By a much greater margin than all the other countries of the EU, Italy presents an extreme dependence on the import of fossil fuel energy and a deficit with regard to the emission standards required by the Kyoto Protocol concerning climate protection. These challenges force the Italian energy policy to favour a strong and efficient expansion of the sources of renewable energy.

A large potential of natural resources is available for the production of alternative energy, which has been insufficiently exploited up to now. Furthermore, the Italian government and the Regions must offer incentives for the use of renewable sources on a large scale.

This has created dynamic markets, in particular for wind, photovoltaic and biomass energy, which allow us to forecast high growth rates. These markets are attractive for domestic and foreign capital and favour international economic collaboration, the exchange of technology and the development of innovative national technologies.

Legal framework and incentives

As implementation of European Directive 2001/77 for incentives for the production of electrical energy from renewable sources and in order to permit the achievement of the objectives established by the Kyoto Protocol, Italy has issued a legislative regulations on renewable energy sources in a series of provisions passed by the national legislature, but also locally (Regions, Provinces and Towns) as well as Institutions of the sector, such as the Manager of Electric Service (GSE) and the Electricity and Gas Authority (AEEG). Hereinafter we will limit ourselves to illustrating the contents of the legislative provisions of greatest importance, i.e. those issued by the national legislature.

Regulatory framework: Legislative Decree No. 387 of 29 December 2003, containing the implementation of Directive 2001/77/EC

The Legislative Decree in question implements the European Directive, defining a series of measures. The most important are the following:

- Increase in the minimum share of electricity produced by installations supplied by renewable sources, which in the following year must be put into the system by the producers from conventional source (in accordance with Article 11 par. 1, 2 and 3 of the Legislative Decree of 16 March 1999, No. 79). This quota has been set for the year 2008, by subsequent provisions, at 4.55% of the value of the energy from conventional sources put into the system the previous year (2007) and each year will be increased by 0.75 percentage points up to 2012. For the following period, the legislature will see to establishing additional increases. The input obligation can also be met through the purchase of green certificates, in other words titles issued by the GSE which certify the production of energy from renewable sources. In relation to the obligations of input of energy from renewable sources as per above, those that do not produce it can fulfill them by having the GSE compute – upon presentation of the green certificates – the energy from renewable sources produced by the companies for whom the green certificates were issued;
- Only one authorization for the installation and operation of plants supplied by renewable energy sources issued following centralized and simplified procedures;
- Expectation of dispositions favouring in particular the production of electricity from the sun: these provisions were then emanated by the law on the Energy Account, the last version of which is that of the Ministerial Decree of 19 February 2007.
- Promoting– through higher incentives – biomasses, residual gases from processes of purification and biogas utilised in the sphere of a nearby industry (when between the point of withdrawal and the point of utilisation of the primary energy source, i.e. the biomass, the distance is under 70 km). But the executive decree which establishes traceability for verification of the distances between withdrawal and utilisation is still lacking.
- Provisions in favour of “water power plants”: possibility for such power plants to benefit from precedence in the dispatch, provided that the production attributable to renewable source can be estimated at more than 50%, and considering that the priority in the dispatch is granted only for the attributable production.
- Plan to guarantee the origin of the electricity produced from renewable sources
- Plan for a dedicated withdrawal system, i.e. the tapping of electricity from renewable sources produced by specific installations (i.e. installation of power under 10 MVA, as well as from installations of any power produced by utilizing the renewable sources specifically listed in Article 13 § 3 of Legislative Decree of 29 December No. 387) by the GSE based on conditions particularly favourable indicated in AEEG Resolution No. 280 of 2007.
- Plan for introduction and subsequent introduction by the AEEG of a simplified system for connection to the network by small-scale installations supplied by renewable sources (connection to the network at voltage less than 1 kW).

Incentives: Finance Law 2008 and Law of 29 November 2007 No. 222 (called "Connection to Finance")

These provisions contemplate, as an alternative and at the producer's choice:

- The incentive of issuing green certificates or
- The incentive of transferral of energy at an all-inclusive rate (alternative which is only feasible for installations of average annual nominal power not greater than 0.2 MW for wind plants and not greater than 1 MW for the other plants from renewable sources).

It must be pointed out that for the production of electricity through photovoltaic plants incentive regulations are contemplated – specific and very advantageous for the producer – called "Energy Account" and contained in the Ministerial Decree of 19 February 2007. In the photovoltaic sector it is this regulation which is applied and not the general one presented below.

The green certificates are the alternative for producers who use conventional energy sources so they can produce the energy quota from renewable sources, which they must input into the system in accordance with the regulations already illustrated before. Following the legislative provisions in question, the incentives through green certificates are obtained by the following methods:

- It is necessary to acquire, in accordance with the procedures approved with the Ministerial Decree of 21/12/2007 and as fulfilment of the prerequisites as per the preceding Ministerial Decree of 24/10/2005, the qualification of the plant with renewable source (so-called IAFR plant) which permits the application for the issue of green certificates for the production of energy from renewable sources by that specific plant for the next 15 years;
- The green certificates are issued by the GSE upon request of the producer for all the energy produced by the plant; they have a unit value of 1 MWh each and are issued in proportion to the energy produced in accordance to various coefficients based on the renewable source utilized: biomasses are given incentives through the issue of green certificates - proportional to the energy produced - greater than the incentives for production from geothermal sources;

- The green certificates are placed on the market at a price referring to the MWh of electricity, equal to the difference between the reference value, set at the time of the first application at 180 EUR / MWh and the average annual value of the transfer price of electricity defined by the AEEG in implementation of Article 13 §. 3 of Legislative Decree 387/2003, registered in the preceding year and communicated by the AEEG by 31 January of each year. According to the last calculation, the price of the individual green certificate for 2007 is around 125 EUR.

The all-inclusive rate is still awaiting executive resolution and therefore is not yet clearly regulated. From what we have been able to deduce from the regulations issued under the the Financial Law of 2008, the incentive through this rate occurs according to the following terms:

- The all-inclusive rate only remunerates the production actually put into the network and, since it assumes the transfer of the energy from renewable sources, is alternative to dedicated tapping;
- The incentive of plants that utilize renewable sources, through recognition of the all-inclusive rate similar to the incentive through the system of green certificates, has a duration of fifteen years;
- The rate amounts to different values, depending on the source utilized, varying between a minimum of 18 cents of EUR / kWh for exhaust gases and residues from purification processes, as well as biogas other than those produced by farming and forestry from the short chain, to 34 cent of EUR / kWh for wave motion and tidal motion
- The specific value of the rate can be changed every three years by decree of the Ministry.




COMPANY NAME AND LEGAL FORM**Asja Ambiente Italia SpA**

Address: Via Ivrea 70, I-10098

City and Region: Rivoli (To), Piedmont

Switchboard tel: +39 011 9579211

Switchboard fax: +39 011 9579280

E-Mail: info@asja.biz

Website: www.asja.biz

TECHNOLOGYWaste to energy biogas, wind power, photovoltaic,
mini hydro**COMPANY**

Private company

ACTIVITYEnergy production from renewable sources,
CDM-JI Project Developer**YEAR OF FOUNDATION**

1995

NUMBER OF EMPLOYEES

180

2007 TURNOVER

€ 44.612.644,82

CORRESPONDENCE LANGUAGES

Italian, English, Spanish

CONTACTIlaria Gambera, International Development Support,
i.gambera@asja.biz, +39 011 9579291**BRIEF PROFILE**

Asja is an international group that produces electrical energy from renewable sources (biogas, waste to energy gas, biomasses, wind, solar and water). Since 1995 Asja has designed and built 22 biogas energy production plants in 8 different Italian regions. Currently Asja manages 18 plants directly and one through a consortium company and in addition 8 new sites are being developed. This experience has made Asja the first Italian company to have developed CDM projects through the creation of biogas waste to energy plants in developing countries. Asja has an all-round operation in the field of Flexible Mechanisms under the Kyoto Protocol: it works as project developer, CDM/JI consultant, buyer and seller of Carbon Credits (CERs, EUAs, ERUs, VERs). Currently Asja is working on two CDM projects, Norte III and Puente Gallego (Argentina) registered at the UNFCCC. In May this year Asja won the tender for rights to the use of biogas generated from the waste plant of Belo Horizonte in the state of Minas Gerais in Brazil. Asja will have the role of designing, building and managing a biogas waste to energy capturing and combustion plant and this will lead to CER Certified Emission Reduction certification for the group.



COMPANY NAME AND LEGAL FORM

Camera di Commercio Industria Artigianato e Agricoltura di Pisa / Chamber of Commerce of Industry, Crafts and Agriculture of Pisa

Address: Piazza Vittorio Emanuele II, 5

City and region: I-56125 Pisa, Toscana

Switchboard tel: +39 050 512111

Switchboard fax: +39 050 512250

E-mail: cameracommercio@pi.camcom.it

Website: www.pi.camcom.it

CORRESPONDENCE LANGUAGES

Italian; English

CONTACT

Dott.ssa Laura Granata, in charge of Patents, Brands and Technological Innovation, Tel.: +39 050 512319, e-mail: laura.granata@pi.camcom.it

BRIEF PROFILE

The Camera di Commercio Industria Artigianato e Agricoltura di Pisa - Chamber of Commerce for Industry, Crafts and Agriculture of Pisa was founded in 1962 and is a public organisation that works in the general interest of companies in the province of Pisa, for which it promotes economic interest. A protagonist in the local economy, the Chamber of Commerce is connected to the network of the entire national and international chamber system, making it a privileged portal for companies in terms of access to domestic and foreign markets. The Chamber's main office is in Pisa with other branches throughout the provincial territory. In the 1990's it set up two Special Companies, structures of high specialist experience administered under private law.

The Chamber's roles include interventions aimed at aiding economic development of the territory and the competitiveness of the local business system in order to favour innovation and transfer of technologies, environmental protection in terms of company activities, and development of infrastructures and valorisation of territory resources.

In this view, for several years the Chamber of Commerce of Pisa has made one of its strategic objectives the promotion and realisation of initiatives aimed at providing incentive for greater and better exploitation of renewable energies available in the region, in sustaining the development and internationalisation of SMEs operating in the sector and conducting awareness and information campaigns on this issue.

The most southern part of the province of Pisa, which includes the areas of Larderello, Montecerboli, Monteverdi Marittimo and Castelnuovo Val di Cecina, is characterised for geothermal phenomena of exceptional importance.

Larderello can be considered the "cradle" of geothermal studies on a worldwide level. Towards the mid 1800's the first uses of geothermal energy were made here, using the steam from the subsoil for the operation of machinery as an alternative to steam machines. It was here that in 1904, through a steam machine connected to a generator, it was possible to light up several light bulbs and again in 1913 the first real geothermal electrical plant in the world began operation.

Larderello is still today one of the largest geothermal centres in the world where there is deeper perforation and where the temperatures reached by the fluids are higher. It is a real scientific and industrial reference point on a worldwide level.

In February 2008 thanks to the collaboration with the academic and production worlds and with local territorial organisations, the first Italian "Centre of Excellence in Geothermal Studies" was founded in Larderello.

The Centre brings together a temporary association of three research centres in Pisa (University of Pisa, the Scuola Superiore Sant'Anna and the Geosciences and Geo-resources Institute of the CNR), the COSVIG (Consortium for the development of geothermal areas) and the municipalities of the Tuscan geothermal area and is a structure dedicated to applied research, training activities and technical-scientific consultancy on an international level. Its main objectives are the valorisation of geothermal resources, the evaluation of the effects of their use, the study of their sustainability and modes of promotion.

**COMPANY NAME AND LEGAL FORM:****CCLG ENERGY Srl**

Address: Via Ettore Benini, 4
 City and region: I-47100 Forlì, Emilia-Romagna
 Switchboard tel: +39 0543 84173
 Switchboard fax: +39 0543 83272
 E-mail: info@cclg.it
 Website: www.cclg.it

TECHNOLOGY

Photovoltaics, Biomass, Wind power, Rational Use of Power

COMPANY/ASSOCIATION

CCLG Srl (Ltd)

ACTIVITY

Civil, industrial, nautical electricity plants, domotics and alternative energy

YEAR OF FOUNDATION

2005

NUMBER OF EMPLOYEES

120

2007 TURNOVER

€ 15,548,373.00

CORRESPONDENCE LANGUAGES

Italian, English, French

CONTACT

Enzo Cortesi, Chief Executive Office, enzo.cortesi@cclg.it / chiara.cortesi@cclg.it (Secretariat)

BRIEF PROFILE

CCLG Energy is a new company division created by CCLG, a company that has been leading the civil, industrial and nautical electrical engineering sector for thirty years. For some time now CCLG has been operating in photovoltaics and can boast being faithful and truly reliable after having carried out ambitious and very important projects on a national level. CCLG stands out above the rest for its high number of experiences also in domotics, intended as an ideal means for rationally using electricity.

CCLG has a design studio dedicated to renewable energy made up of 4 engineers, a team of professional installers as well as 3 offices in Italy, Forlì for the Eastern regions, La Spezia for the West, and in the South in the province of Lecce there is a new office, which was the last to open in 2008.

CCLG clients include companies, private households and public authorities.

CCLG's main aim is to create a company network capable of operating all over the territory and beyond, following up the constant commitment to research and development in the field of renewable energy.

REFERENCES

MITSUBISHI ELECTRIC



COMPANY NAME AND LEGAL FORM

DLA Piper Italy

Address: Via Cordusio, 2
 City and region: I-20123 Milan, Lombardia
 Switchboard tel: +39 02 806181
 Switchboard fax: +39 02 80618201
 E-Mail: wolf.kuehne@dlapiper.com
 Website: www.dlapiper.com

TECHNOLOGY

Law firm

COMPANY/ASSOCIATION

Professional association

ACTIVITY

Any kind of legal services for renewable energies regarding regulatory, administrative, corporate, commercial, real estate, construction, labour, antitrust law

YEAR OF FOUNDATION

1993

NUMBER OF EMPLOYEES

150

2007 TURNOVER

€ 24,000,000.00

CORRESPONDENCE LANGUAGES

English, Italian, German, French, Spanish

CONTACT

Wolf Michael Kühne, Partner DLA Piper Italy,
 Via Cordusio 2, I-20123 Milan; Tel: +39 02 80 618 1;
 E-mail: wolf.kuehne@dlapiper.com.

BRIEF PROFILE

DLA Piper is a global legal services organization with offices across Europe, Middle-East, Americas, Australasia and Africa. It counts over 3,600 lawyers located in 64 offices and 25 countries. DLA Piper has been named „Global Law Firm of the Year“ at The Lawyers Award 2006 and offers a wide range of legal services assisting clients worldwide in all business sectors, from M&A/Corporate, banking, real estate, project finance, environmental, regulatory, energy and many others.

The Italian offices of DLA Piper count over 100 lawyers based in the two offices of Milan and Rome assisting clients in respect of Italian, English, German and US law in particular in the following areas: banking, real estate, project finance, regulatory, tax, private equity, corporate/M&A, environmental and energy. Our lawyers speak fluently Italian and English. Two partners and one senior associate are German native speakers and also speak fluently Italian and English.



OUR ENERGY PRACTICE

Our firm has a strong practice focused on energy matters. The team is led by Wolf Michael Kühne: Mr. Kühne is German Rechtsanwalt and Italian Avvocato, with specific experience in public procurements, energy and corporate sectors. Chambers has listed him as leading individual in band 3. The team also counts one partner, two senior associates, two associates and two trainees; they are all expert in energy transactions and able to cover, thanks also to, when necessary, the contribution of other colleagues from the other departments of the firm, all matters involved from corporate to environmental, town planning, construction, project finance and regulatory issues. The team has been recently joined by a third senior associate who will be based in our Rome office: he is professor of Energy Law at University of Rome La Sapienza and University of Bergamo and has deep knowledge and expertise in the oil gas & gas regulatory sector as well as in renewables.

Our energy practice group has assisted companies from the energy and oil & gas industry, since the beginning of the liberalization process of the Italian electricity market in 1999 and of the gas market in 2000. We have also assisted companies in the renewables sector (e.g. geothermic, hydroelectric, bio-mass, photovoltaic, wind farm etc.), since the introduction of the CIP 6 system (incentives system for producers of energy from renewable sources), and with the Green Certificates and their trade and the so called Conto Energia (energy account) for the accrual of incentives in the photovoltaic sector.

Our lawyers have also acted for clients involved in the production and supply of electricity, co-generation plants, as well as for companies involved in the gas sector and trading of energy.

During the last years our practice has grown as to the number of its members, expertises, deals and presence in the market. As to our most significant deals in the renewables sector we would indicate: a) assistance to the second largest German company in the field of supply of energy in the acquisition of a 50% participation in the 4th Italian company in the renewables sector, developing more than 80 projects in wind and bio-mass sector, with an aggregate of more than 960 Mw; b) assistance in the authorization and construction of a 800 MW power plant in Northern Italy; c) assistance to a major Italian construction and management company on negotiating the construction contract of a Waste to Energy plant of about 62 Mwh in Sicily, financed under the project financing technique; d) assistance to a Belgian investment fund for the acquisition of photovoltaic plants in Italy; e) assistance to a German company in the dismissal of all Italian operations in the renewables sector, in particular in the hydroelectric and wind farm sectors, to an Italian company.



COMPANY NAME AND LEGAL FORM

ERGO Srl

Address: Via Misericordia, 86
 City and region: I-56025 Pontedera (PI), Toscana
 Tel: +39 333 7594950
 Fax: +39 050 883839
 E-mail: f.rizzi@sssup.it

TECHNOLOGY

supply of support services for the development of renewable energy plants

COMPANY/ASSOCIATION

company (Ltd)

ACTIVITY

technology assessment, due diligence, environmental and energy audits, development of investment strategies, technical-scientific consulting in the environmental and energy sector, technical-regulatory consulting and support in strategic permitting, communication and consensus building, integrated quality-environment-safety consulting to private companies and public authorities, system and product certification, consulting in the market context and in the economic and financial incentive systems.

YEAR OF FOUNDATION

2006

NUMBER OF EMPLOYEES

10

2007 TURNOVER

(operating since the third four-month period of 2007)

CORRESPONDENCE LANGUAGES

Italian, English

CONTACT

Ing. Francesco Rizzi, partner, f.rizzi@sssup.it,
 +39 050 883803, +39 333 7594950

BRIEF PROFILE

ERGO has been founded upon a network of developed economic and technical-scientific know-how in the context of the curriculum of the Scuola Superiore di Studi Universitari Sant'Anna di Pisa - Sant'Anna School of Advanced Studies of Pisa and its aim is to offer a set of interdisciplinary services dealing with the complex issues of sustainability.

The company was launched in 2006 from a consolidated network of university research bodies and therefore it aims at launching itself on the market with consulting services for the analysis, design, assessment and optimisation of initiatives for sustainable development, integrated by specific skills regarding technical-scientific and regulatory consulting for the transfer of research and design results for access to funding and for preparation for tenders. To this regard ERGO can benefit from important contacts with the Sant'Anna School of Advanced Studies, which acts as a symbiotic incubator, and from its network of public and private contacts.

The company aims at transferring methods and tools that are in line with the scientific output matured through University research activities onto the market.

These, may be broken down into five main macro-categories:

- The support of territorial planning and management strategies according to sustainable logic
- Technical-scientific transfer in the agricultural, energy and environmental field
- Company management and the implementation of standards relating to the process, to the product and to social responsibility
- Technical, regulatory and economic analyses and assessments
- Analyses of the stakeholders, communication and permit management



In dealing with the entire range of consulting services for the promotion and development of projects in the environmental sector, especially as far as renewable energy sources are concerned, ERGO represents the ideal support for companies keen to develop their business in Italy.

ERGO offers its articulated range of services to foreign companies interested in developing plants on the Italian territory. Thanks to their experience, to their know-how of the territory, to the network of professionals from the university field, and to the large number of authoritative and industrial partners which over the years have consolidated relationships with the Sant'Anna School of Advanced Studies, ERGO in fact provides the perfect link for optimising all aspects, from market analysis and research of the necessary contacts for regulatory analyses, from management of the authorisation documents to achieving permits from the authorities and local communities, from technology assessment to the certification of both the process and the product.

In adopting ERGO's services, companies will be backed up when it comes to all their investment initiatives and, under the guidance of ERGO's team of experts, fully develop the opportunities the Italian system has to offer.

REFERENCES

In addition to having laid down framework agreements with the main international companies operating in the waste disposal and treatment and renewable energy source sectors, ERGO can boast consolidated relationships with the Universities and authorities through their professionals. To this regard references shall be provided upon request.

**COMPANY NAME AND LEGAL FORM:****Fortore Energia SpA**

Address: Piazza della Repubblica, 5
 City and region: I-71036 Lucera (FG), PUGLIA
 Switchboard tel: +39 0881 520134
 Switchboard fax: +39 0881 520401
 E-mail: fortore@fortoreenergia.it
 Website: www.fortoreenergia.it

TECHNOLOGY

(Photovoltaics, Solar power, Biomass, Wind power, Geothermal heat, Hydroelectricity, Rational Use of Power)

COMPANY/ASSOCIATION

Fortore Energia Spa (Joint-stock company)

ACTIVITY

Power generation from renewable energy sources

YEAR OF FOUNDATION

2001

NUMBER OF EMPLOYEES IN THE COMPANY/GROUP

60

2007 TURNOVER

€ 20,400,000.00

CORRESPONDENCE LANGUAGES

Italian, German, English

CONTACT

Antonio Salandra, President of Fortore Energia Spa,
 presidente@fortoreenergia.it , Tel. +39 0881 520134

BRIEF PROFILE

Fortore Energia SpA was launched at the end of 2001 from a joint venture between the mountain communities "Fortore Beneventano" and "Monti Dauni Settentrionali", as well as with some other companies already operating in the energy sector. Legal headquarters are in Lucera (FG). The registered capital is of € 7,500,000.00. The holding includes Fortore Energia, leading business groups in the renewable energy sector as well as in the agricultural-food industry. The group operates in the Italian regions of Campania, Puglia and Calabria, as well as in Armenia, Romania and Brazil. The company designs, builds and manages plants and services for power generation from renewable energy sources.

The development initiatives aim at:

- training qualified professionals.
- safeguarding the environment.
- optimising the territory.

Thanks to the work of "Fortore Servizi", Fortore Energia SpA can offer services tied to the generation and sale of electricity from renewable sources, and to the optimisation of the territory, in particular when it comes to:

- designing, building and managing services and systems for the generation of power from renewable sources.
- optimising production and landscape layout.
- environmental and cultural optimisation of the territory.
- promotion of green initiatives.
- the diffusion and application of scientific, technological, management and organisational know-how and the transfer of technologies.
- bio-monitoring and the "qualification" of the geographic area of the district, aimed at optimising the production and services in the agricultural, industrial and tourist sectors.

The Fortore Energia SpA clients are wholesalers and distributors of electricity.

Their main partners for research and training activity are authorities, universities, and research institutes.

Industrial partners:



- Gruppo Tozzi – production of electrical components for plants.
- Gruppo Aleandri – production of precompressed materials for the industry.
- Gruppo Millenium – production of photovoltaic panels.
- Gruppo Ianus – production of precompressed materials for the industry.
- Mekkanika – mechanical systems for the industry.

Fortore Energia SpA is making substantial investments in the production of power from renewable sources.

Up to 2008 Fortore Energia SpA:

- has in operation wind farms for a total of 130 MW of power.
- the industrial plans (2008-2011) foresee a further 200 MW, on the basis of the authorised wind farms, for an overall investment of € 528,000,000.00.
- projects for wind farms for 680 MW are waiting for approval.
- scheduled production of 30 MW of biomass electricity.
- scheduled production of 100 MW of hydroelectric energy.
- scheduled production of 80 MW of photovoltaic energy.

Considering the abovementioned programming the company has set itself the following aim: to produce an annual rate of 1 billion KWH within 2012.

REFERENCES

The plants are to be considered exemplary for their environmental quality and for the way they have been introduced in the landscape, they have obtained recognition on a national and international level through publications and participation at exhibitions and congresses.





COMPANY NAME AND LEGAL FORM:

Gala SpA

Address: Via Pietro Borsieri, 20
 City and region: I-00195 Roma (RM), Lazio
 Switchboard tel: +39 06 373 57 441
 Switchboard fax: +39 06 373 50 632
 E-mail: info@galaenergia.it
 Website: www.galaenergia.it

TECHNOLOGY

Photovoltaics, wind power, rational use of energy

COMPANY

Gala SpA (joint-stock company)

ACTIVITY

GALA supplies electricity and actively supports its customers in identifying and applying all the necessary measures that can help save energy.

YEAR OF FOUNDATION

2001

2007 TURNOVER

€ 39,953,182.00

CORRESPONDENCE LANGUAGES

Italian, French, English, Polish

CONTACT

Antonio Rizzo – Sales Manager, a.rizzo@galaenergia.it,
 tel. 0039 06 373 57 441

BRIEF PROFILE

GALA:

- was admitted on June 11th 2007, with resolution number 134/07, to the registry kept by the Authority for Electric Energy and Gas of eligible electricity retailers, which supply end users, e.g. private households, with low voltage power;
- is a user of dispatching services;
- has been qualified by GME (the Electricity Market Operator) as an Electricity Exchange trader;
- is qualified to trade on the French Electricity Exchange (Power Next);
- is a Balance Responsible Entity in France;
- operates as a withholding tax agent, in respect of the payment of the excise duty payable on electricity supplies.

In a nutshell, GALA:

- trades in electric energy
- implements measures aimed at achieving energy efficiency
- produces energy from renewable sources

GALA supplies electricity to public and private sector users, in all fields, ranging from manufacturing to the tertiary sector, from agriculture to tourism, from retail to healthcare.

GALA has set up wind farms with an output of approx. 300 MW and hydroelectric power plants with an output of approx. 75 MW, and is currently engaged in the construction of photovoltaic (the target of 10MW within the next 10 years), solar thermal energy, biomass power plants, etc.



ICQ HOLDING SpA

COMPANY NAME AND LEGAL FORM:**ICQ Holding SpA**

Address: Via Ombrone, 2/G
 City and region: I-00198 Rome, Lazio
 Switchboard tel: + 39 0 6 8404301
 Switchboard fax: + 39 0 6 840430231
 E-mail: info@gruppoicq.com
 Website: www.icqholdingspa.com

TECHNOLOGY

Biomass, Wind power, Biogas, Hydroelectrics, Energy Saving,
 Green Certificates, Emission Trading, Esco

COMPANY/ASSOCIATION

Gruppo ICQ

ACTIVITY

Power generation from renewable energy sources

YEAR OF FOUNDATION

1994

NUMBER OF EMPLOYEES

30

2007 TURNOVER

€ 24,000,000

CORRESPONDENCE LANGUAGES

Italian, English, French

CONTACT

Ing. Luigi De Simone, Managing Director, luigi.
 desimone@gruppoicq.com, + 39 06 840430201

BRIEF PROFILE

ICQ Holding SpA operates in all the sectors of the competitive energy and environmental sectors and in particular in the field of renewable sources and energy saving. What is more it can provide an integrated approach to the industry, ranging from technical-environmental assessments, to the design, building and management of the plants.

ICQ Holding can offer: Consulting and Design services, Plant building, ESCO, Operation & Maintenance, Bio-combustion production, Renewable energy production, the trading of: energy, green certificates, white certificates, emission trading.

The group can boast alliances with the main industrial groups in the business areas which require action:

Foster Wheeler Italiana SpA
 Ormat Ltd
 Power One SpA
 Westinghouse Ltd
 STA SpA - Gruppo Unieco
 Schmack Biogas Srl

Considering the ever increasing important role played in the sector, as well as its widespread presence on the Italian territory, the ICQ Group has opened and is opening offices abroad for the implementation of their activity. ICQ Holding SpA is the company at the head of the ICQ Group, which can boast partnership in about 60 companies and the organisation can offer a complete service capable of satisfying all the energy market needs.



COMPANY NAME AND LEGAL FORM:

ITS

Viale Liegi, 44
 I-00198 ROMA
 Tel: +39.06.8555311
 +39.081.6040941
 Fax: +39.06.8549390
 WS: www.its-tecnologie.com
 e-mail: info@its-tecnologie.com

TECHNOLOGY

Photovoltaics, solar heating, biomass, wind power, geo-thermal power, rational use of power

COMPANY

ITS – Ingegneria Tecnologie Servizi Srl (Ltd)

ACTIVITY

integrated engineering services

YEAR OF FOUNDATION

1993

NUMBER OF EMPLOYEES

50

2007 TURNOVER

€ 2,350,000.00

CORRESPONDENCE LANGUAGES

Italian, English, German, French

CONTACT

Prof. Giovanni PERILLO, Managing Director.

BRIEF PROFILE

ITS offers its services to utilities and businesses from the public and private sectors and to all those requiring an adequate professional and managerial support. ITS assumes complete responsibility for every intervention: from the preliminary planning phase to the delivery of the finished product.

Services

- Technical and financial feasibility studies, finance sourcing;
- research and development, property services;
- organisation and supply of services to public and private sector businesses and utilities engaged in production activities in a wide range of economic and technical areas;
- design management and testing in all areas of engineering, architecture, plant technology and the environment;
- direct execution of contract or contract management on behalf of third parties;
- studies and works for the protection and monitoring of the environment, research and development of advanced technology for energy saving processes and the elimination of pollutants;
- design, construction and management of production plants;
- development of projects and works for the disposal, treatment, purification and recovery of waste products.



COMPANY NAME AND LEGAL FORM:

M.D.F. Energia Srl

Head office/operative address: Viale di Levante, 139

City and region: I-71042 Cerignola (FG), Puglia

Switchboard tel: +39 0885411904

Switchboard fax: +39 0885411904

Sales office address: Via Marco Polo, 37/4 – I-10129 Torino

E-Mail: info@mdfenergia.com

Website: www.mdfenergia.com

BRIEF PROFILE

This dynamic company is based in Cerignola (FG) and with offices in Turin, has been operating in the renewable energy sector for 4 years and thanks to its partnerships with both Italian and foreign companies, that have now become consolidated over the years, has become one of the 5 leading companies for the generation and sales of small/medium wind power turbines up to 1 MWp.

From 0.5 kwp to 1 MWp wind power turbines, photovoltaic projects, products that are all turn-key and complete with insurance and financial services for the investment backup.

The company is looking for solid international partners for the sales/export of their products, particularly of the 20kw wind turbines.

TECHNOLOGY

Medium wind power, mini wind power, photovoltaics

COMPANY

M.D.F. Energia Srl (Ltd)

ACTIVITY

Project development and sale of turn-key solutions

YEAR OF FOUNDATION

2004

NUMBER OF EMPLOYEES

total of 15 in-house and outsource

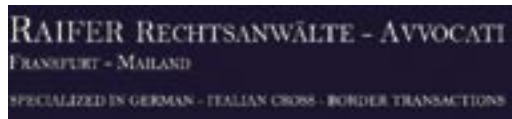
CORRESPONDENCE LANGUAGES

Italian, English

CONTACT

Davide Raffaelli, AD, davide.raffaelli@mdfenergia.com,

Tel +39 0885411904, mobile +39 3357745948



COMPANY NAME AND LEGAL FORM:

Raifer Rechtsanwälte - Avvocati

Paul-Ehrlich-Str. 15
60596 Frankfurt am Main
Tel.: +49 69 69 712 58 - 0
Fax: +49 69 69 712 58 - 20

Via San Paolo 13
20121 Milan
Tel.: +39 02 30 468 50 - 0
Fax: +39 02 30 468 50 - 1
www.raifer.de

TECHNOLOGY

(Photovoltaics, Solar power, Biomass, Wind power, Geothermal heat, Rational use of power)

ACTIVITY

Legal services

YEAR OF FOUNDATION

2007

NUMBER OF EMPLOYEES

12

CORRESPONDENCE LANGUAGES

Italian, German, English

CONTACTS

DAVID RAIFER, Partner, Frankfurt / Milan,
Tel. Frankfurt: +49 69 69 712 58 - 0
Tel. Milan: +39 02 30 468 50 - 0, Mobile +49 174 3303386
E-mail: david.raifer@raifer.de

MARIALINDA PAPI, LL.M., Associate, Frankfurt / Milan,
Tel. Frankfurt: +49 69 69 712 58 - 0
Tel. Milan: +39 02 7260 5500, Mobile +49 173 7465623
E-mail: marialinda.papi@raifer.de

BRIEF PROFILE

RAIFER RECHTSANWÄLTE - AVVOCATI provides legal services specialised in cross-border operations between Italy and Germany, with offices in Frankfurt am Main and Milan. The firm is specialised in providing legal services to German companies in Italy and to Italian companies in Germany, with regard to all Italian and German Corporate and Commercial Law issues, in particular in the field of complex cross-border transactions between German and Italian companies. In addition Raifer can offer clients CORPORATE LEGAL SERVICES (www.corporate-legalservices.com) which is a support when it comes to all the legal issues tied to day-to-day company life. As far as the renewable energy field is concerned in particular, Raifer is currently assisting various German clients in the implementation of photovoltaic projects in Southern Italy (contracts for the use of factory roofs for the installation of photovoltaic plants, turn-key procurement contracts with the developing company, contracts with investors, etc.). With regard to wind power projects the firm has assisted foreign clients in carrying out operations in several Italian regions (the purchase and sale of wind farms in Sardinia, Co-development Agreements for the development of wind farms in Liguria, Campania and Puglia etc.).

REFERENCES

SELECTED REFERENCES IN THE RENEWABLE ENERGY SECTOR:

- Antaris Solar GmbH
- Enertrag AG
- IBC Solar AG
- Welivit AG (Münchener Rück Group)

**COMPANY NAME AND LEGAL FORM:****Relight Srl**

Address: Via Vincenzo Monti, 8
 City and region: I-20123 Milano, Lombardia
 Switchboard tel: +39 02 87399651
 Switchboard fax: +39 02 87399652
 E-Mail: info@relight.it
 Website: www.relight.it

TECHNOLOGY

Photovoltaics, wind energy, bioenergies and hydroelectric power

COMPANY/ASSOCIATION

Relight Srl (Ltd)

ACTIVITY

Production of energy from renewable sources

YEAR OF FOUNDATION

2003

CORRESPONDENCE LANGUAGES

Italian, English

CONTACT

Marina Salerno, Marketing and Public Relations Manager,
 marina.salerno@relight.it, +39 02 87399651
 Alessia Farioli, Communications Manager, Alessia.
 farioli@relight.it, +39 02 87399651

BRIEF PROFILE

Relight is a leading player in renewable energy market in the Mediterranean: it purchases, develops and manages project portfolios and invests in new ventures. It invests in wind, photovoltaic, biomass/biofuel and hydroelectric projects at every development stage.

Relight develops all the activities in a project value chain, through the site selection, the financial, legal and fiscal structuring of the project, the plant's construction and the plant management in the long period.

Producing clean energy from renewable sources, Relight is able to develop any renewable energy project. It follows every development stage and manages the operative plant.

Relight invests in the development of renewable sources, in innovative technologies and in new ventures.

Relight has a strong network of institutional relationships and is interested in finding new partners (companies, associations, Institutions) which share its same vision of sustainable development.

Relight works in close contact with banks and private investment funds. It also has a constant relationship with landowners and local authorities.

Relight is developing and managing over 3000 MW assets, directly or through its subsidiaries.

Relight aims at finding new investment opportunities and to enter new markets with good renewable energy potential and limited political risks.



COMPANY NAME AND LEGAL FORM:

Rimini Fiera SpA

Address: Via Emilia, 155
 City and region: I-47900 Rimini, Emilia Romagna
 Switchboard tel: +39 0541 744111
 Switchboard fax: +39 0541 744200
 E-mail: riminifiera@riminifiera.it
 Webpage: www.riminifiera.it

COMPANY / ASSOCIATION

SpA (Joint-stock company)

ACTIVITY

Organisation of Fairs, Exhibitions and Congresses

YEAR OF FOUNDATION

1970

NUMBER OF EMPLOYEES

126

2007 TURNOVER

€ 51,087,169.00

CORRESPONDENCE LANGUAGES

Italian, English, German, French and Spanish

CONTACTS

Alessandra Astolfi – Project Manager –
a.astolfi@riminifiera.it
 +39 0541 744492; +39 349 3000274

BRIEF PROFILE

For the second year, KEY ENERGY faces the hottest topics of a rapidly evolving energy scenario, alongside ECOMONDO, the leading trade fair about the environment and sustainable development.

KEY ENERGY intends raising the issue of sustainable energy, which is at the heart of the debate on the industrial development of our economic and social system, in line with Kyoto protocol and 2020 commitments.

PRODUCTS AND SERVICES OFFERED

THE EXPO

Macro sectors

THE SOURCES

Solar thermal / Biomass / Photovoltaic / Biogas / Wind /
 Biofuels / Hydroelectric / Exploiting waste for energy /
 Geothermal energy

ENERGY SAVING AND EFFICIENCY

Cogeneration and trigeneration / Distributed generation
 and microgeneration / District heating / Architecture and
 construction

SUSTAINABLE MOBILITY AND HYDROGEN

Sustainable mobility / Vehicles with low
 environmental impact / Hydrogen

ENERGY MARKETS

Global Carbon Market / Energy trading / Financial products



TARGET CLIENTS/PARTNERS

VISITORS' OPINION OF KEY ENERGY:

77% of the trade members who visited the 1st edition of Key Energy considered it good or excellent!
The aspects that met with the most positive feedback were the large number and importance of the exhibitors!

OBJECTIVES

KEY ENERGY and ECOMONDO spotlight energy and environment issues by means of a comprehensive expo and a focus on regulations, incentives and education, as these are questions that not only regard companies' competitiveness, but also our families and the planet's health.

FOCUS ON:

- The spotlight is on the Regions, which, according to the 2008 Italian Finance Law, will have to revise their environmental energy plans, adapting them to the objectives laid down by the Government, and will play an increasingly incisive role in the development of renewable energy policies, efficiency and transport. In fact, it is increasingly clear that, without the active involvement of Regions and Local Authorities, the objectives of Kyoto and those set for after 2012 are unachievable, also due to the measures of assessment of carbon credits obtained by most active organizations.
- the expansion of sustainable mobility, by means of Mobility Management policies, innovative systems and technologies, shared good practices and the use of vehicles and fuel with low environmental impact is another priority for greenhouse gas reduction.
- the role of flexible mechanisms that foresee large investments in Eastern countries and those under development, bearing in mind the delay in the commitments, it will lastly be necessary to carefully monitor these aspects



COMPANY NAME AND LEGAL FORM:

SIB SIBER SRL

Address: Via G. di Vittorio
 City and region: I-40013 Castel Maggiore (Bologna),
 Emilia-Romagna
 Switchboard tel: +39 051 700712
 Switchboard fax: +39 051 701658
 E-mail: info@sibsiber.com
 Website: www.sibsiber.com

TECHNOLOGY

biomass

COMPANY/ASSOCIATION

Sib Siber Srl (Ltd)

ACTIVITY

engineering

YEAR OF FOUNDATION

1982

NUMBER OF EMPLOYEES

20

2007 TURNOVER

€ 4,500,000.00

CORRESPONDENCE LANGUAGES

Italian, English, French

CONTACT

Dott.ssa Elena Cattoi – Sales office - +39 335 7086048 –
 ecattoi@sibsiber.com

BRIEF PROFILE

SIB SIBER began with the production of industrial burners. It then turned to post-combustion systems for the abatement of toxic substances, and then to energy development by transforming heat flows generated from products into electricity.

SIB SIBER has a wide range on offer: compact monobloc burners (SPC), high and medium speed side burners (ZS), heat exchangers, gas safety torches, hot water generators, regeneration and thermal post-combustion systems, biomass boilers and generators.

SIB SIBER's mission is to contribute to autonomous energy development, be it for supply or for individual use for electricity and/or for heating.

REFERENCES

Malagrotta waste disposal site (Rome)

**COMPANY NAME AND LEGAL FORM:****Sorgent.e Srl**

Address: Via Sorio, 120
 City and region: I-35141 Padova, Veneto
 Switchboard tel: +39 049 2969550
 Switchboard fax: +39 049 2969551
 E-Mail: info@sorgent-e.com
 website: www.sorgent-e.com

TECHNOLOGY

photovoltaic, biomass, solar heat, wind power,
 hydroelectricity

COMPANY/LEGAL FORM

Srl (Ltd)

ACTIVITY

investment into renewable energy plants worldwide

YEAR OF FOUNDATION

2003

NUMBER OF EMPLOYEES

30

2007 TURNOVER

€ 15,000,000.00

CORRESPONDENCE LANGUAGES

English, French, Italian, Spanish, Portuguese

CONTACT

Daniele Boscolo, Manager, d.boscolo@sorgent-e.com,
 +39 049 2969550

BRIEF PROFILE

Sorgent.e is a limited liability company by Italian law that operates as a share holding company in the renewable energy sector. The equity shares owned by Sorgent.e are the fruit of over ten years of development and work in the energy sector by experienced managers in collaboration with other leading companies in the sector. The company's mission is to enhance its shares by evaluating individual investments and partnerships with local primary operators of the sector, intervening with its own financial resources.

PRODUCTS AND SERVICES OFFERED

Our company commitment is aimed at development activities, building, running, maintenance and management of generation plants with a specific role in the development of technologically innovative solutions for the renewable energies industry.

Development & Environmental Engineering

Water, wind, sun, earth and biomasses: all of these resources when readily available can be used for generating electrical energy. Sorgent.e's objective is to identify new sites for the creation of new plants. Studies into feasibility and territorial marketing of renewable energy resources, territorial studies aimed at evaluating the potential of renewable sources, identifying opportunities for creating renewable energy plants in the territory, evaluating their technical-economic feasibility, their environmental insertions and authorisation processes.



Engineering Activity

A single integration of specific skills in the field of renewable energies using the highest technology when necessary and the synergy of experience, integrated solutions and engineered processes. From the feasibility studies into optimisation of resources and plants comes a wide range of services and solutions in different areas of engineering. Sorgent.e has the know-how for implementing hydro-electricity, thermal solar, photovoltaic and wind power plants not to mention for designing civil and industrial buildings following the most innovative solutions for energy saving and bio-climatic architecture:

- Design, installation, running and monitoring of renewable energy generation systems;
- Energy saving in civil and industrial buildings: study and design of energy saving and optimisation systems (HVAC - Heating, Ventilating and Air Conditioning); bioclimatic architecture and characterisation of building components and materials;
- The Environment and Energy: consultancy in the use of recycling technology and conservation of natural resources; district heating plants; combined systems (CHP - Combined Heat and Power systems); consultancy in the reuse of agricultural and forest waste and other types of biomass.
- Construction and Management during the design stage of plants.

Running and Maintenance:

Sorgent.e provides services of running and maintenance and other management services for the numerous plants it holds contracts for with both public and private companies. Its range of services can be summed up into a global solution:

- Investment Planning and Legal and Financial Consultancy for Project Financing.
- Management of production and plant maintenance.
- Marketing of energy and Green Certificates, RECS, Emission Credits, ...
- Risk management;
- Contract management;
- Financial and economic Accounting;
- Environmental compatibility and Quality Systems Management.

TARGET CLIENTS / PARTNERS

Public bodies, companies and private clients. Suppliers of equipment and project developers. Our financial and technical solutions include energy saving techniques, environmental energy services and the building of plants for energy production from renewable sources, such as photovoltaic systems, wind power plants, hydro-electrical and hybrid plants (solar-wind-hydro-conventional) for isolated users.

OBJECTIVES

Investing into renewable sources: we invest into new clean energy plants with you, we evaluate your location and your resources. New renewable energy plants consistently give reduced CO2 emissions: take the road towards sustainable development with us.

New scenarios open up on the energy market: Sorgent.e is the reference point for taking on new challenges and for creating new business opportunities.

Counting on Sorgent.e means choosing the certainty of resolving all energy needs using the most advanced tested technology of high environmental value.



With wind: Wind is one of the sources of energy for generating electricity. A detailed analysis of the anemometric and morphological potential of the locations, knowledge and experience in the applied technologies and most of all, an avant-garde operational proposal have given the possibility for several private clients and public administrations to participate in this type of clean production.

With water: Water is an indispensable element for man, and with us is also the source for generating electrical energy. New technological frontiers allow us to exploit marginal opportunities that up until today have been neglected. If there is a water way on your land or in the territory you live in, it can be used for a hydro-electrical plant.

With the sun: The sun is a never ending source of energy and with us is also the source for generating heat and electricity. We have a large number of opportunities for investing into the sun.

With biomasses: Agricultural waste, wood waste and vegetable oils turn into a source of energy with us. Operators of the sector and farms can complete their business and become a role player on the market of renewable energies.

REFERENCES

Hydro-electrical

- Paullo (Mi - Italy) 2.500 kW
- Bolenzana (LO - Italy) 2.500 kW
- S.Anna (CN – Italy) 4.000 kW
- Lircay (Talca – Chile) 22.000 kW
- Mariposa (Talca – Chile) 7.500 kW
- Genivolta I (CR – Italy) 1.500 kW
- Genivolta II (CR – Italy) 1.000 kW
- Pikel (VI – Italy) 4.000 kW
- Cassano (MI – Italy) 2.500 kW
- Belgiardino II (LO – Italy) 1.000 kW

Wind power

- Rotondella (MT – Italy) 18 MW
- Campomaggiore (PT – Italy) 10.5 MW

Photovoltaic

- Perpignan (France) 1.200 kW
- Cerignola (BA – Italy) 998 kW

**COMPANY NAME AND LEGAL FORM:****S.T.E. SpA**

Address: Via Sorio, 120

City and Region: I-35141 Padova, Veneto

Switchboard tel: +39 049 2963900

Switchboard fax: +39 049 2963901

E-Mail: ste@ste-energy.com

Website: www.ste-energy.com

TECHNOLOGYHydropower, wind power, photovoltaics, biomass,
solar heating**COMPANY/ASSOCIATION**

S.T.E. SpA

ACTIVITYDesign, supply, building, start-up, maintenance and
management of hydro power, wind power, photovoltaics,
biomass, solar heating systems**YEAR OF FOUNDATION**

1995

NUMBER OF EMPLOYEES

97

2007 TURNOVER

€ 30,000,000

CORRESPONDENCE LANGUAGES

ITALIAN, ENGLISH, SPANISH, FRENCH

CONTACT

Criscia Vecchiato, Energy Division Sales Manager,

c.vecchiato@ste-energy.com,

+39 049 2963900, +39 329 4580028

BRIEF PROFILE

With more than two hundred systems implemented over the past years in Italy and abroad, and with its branch offices located in various countries, STE energy today is one of the major operators in the field of energy and plant engineering.

STE energy was established in 1995 in Padua, Italy. It develops, designs, builds and manages energy production plants, especially hydropower and electrical and thermotechnical systems, as a general contractor. It also builds wind, solar and biomass cogeneration systems and electric energy production, transport and distribution plants all around the world.

Thanks to collaboration with important research centres and partnerships with leading global suppliers, STE energy is able to carry out the engineering for preliminary and final projects, water pipes and electromechanical works, to build civil engineering projects and to build, assemble, and to start-up plants and systems.



PRODUCTS AND SERVICES

ACTIVITY:

Turn-key solutions, maintenance and management, engineering, building, project financing, E.S.CO, legal assistance

PRODUCTS:

ELECTRICAL

Automation and control systems
Electrical protection systems
Low voltage switchboards
Medium voltage switchboards
High voltage stations

CIVILIAN AND HYDRAULIC

Hydraulic systems
Refurbishment
New structures

MECHANICAL

Hydraulic turbines
Pump stations
Generators
Water intake systems
Mechanical constructions

HEATING

Boilers
Refrigeration units –heat pumps - absorbers
Solar heating
Biomass heating
Central heating

TARGET CLIENTS / PARTNERS

Private investors, Municipal companies, E.S.Co's, Irrigation consortiums, Water supply utilities, Hospitals, Public authorities, Municipalities, Provinces, Universities, Hotel groups, Airports, Ports, Railways, Motorways

AIMS

S.T.E.'s mission is to organise and coordinate plants and networks in the Energy sector on an international level. In addition, the company aims at optimising the feasible results, thanks to an excellent use of their own operative structures. They identify new energy resources, in particular renewables, develop technologies, make the most of the available human, technical and financial resources.

In particular, S.T.E. is specialised in the design, building, management, development and maintenance of plants for the production, transport, supply and use of electrical energy, according to eco-friendly economic and yield factors.



REFERENCES

MAIN REFERENCES IN THE ENERGY SECTOR

Hydroelectric Plant Lican- Chile, Hydroelectric Plant Kusluk – Turkey, Hydroelectric Plant Rescia (CO), Hydroelectric Plant San Clemente – Chile, Hydroelectric Plant Adacami – Turkey, Hydroelectric Plant Castellaneta (BA), Hydroelectric Plant Figazzano (BA), Hydroelectric Plant Linificio Nazionale Villa D’Almè (BG), Hydroelectric Plant Prato Mele (BG), Hydroelectric Plant Fonderia (BG), Hydroelectric Plant Cakirlar – Turkey, Hydroelectric Plant Grotta d’Angelo (SA), Hydroelectric Plant Picientino (SA), Hydroelectric Plant Gunayse – Turkey, Hydroelectric Plant Selimoglu – Turkey, Hydroelectric Plant Lircay – Chile, Hydroelectric Plant Lamas IV – Turkey, Hydroelectric Plant Lamas III – Turkey, Hydroelectric Plant of Antolina (VB), Hydroelectric Plant of Bellano (LC), Hydroelectric Plant of Akkoy – Turkey, Hydroelectric Plant of Spigno (AL), Hydroelectric Plant of Mulino Marano (NO), Hydroelectric Plant of Hatillo – Dominican Republic, Hydroelectric Plant of Magueyal - Dominican Republic, Hydroelectric Plant of Brazo Derecho - Dominican Republic, Hydroelectric Plant of Tirino Medio (PE), Hydroelectric Plant of Tirino Inferiore (PE), Hydroelectric Plant of Yucari Manahoz (Turkey), Hydroelectric Plant of Incesu (Turkey), Hydroelectric Plant of Sarmasik 2 (Turkey), Hydroelectric Plant of Sarmasik 1 (Turkey), Hydroelectric Plant of Cassano Magnano (MI), Hydroelectric Plant of Belgiardino 2 (LO), Hydroelectric Plant of Santa Domenica (RC), Hydroelectric Plant of Villanova and S. Teresa (PE), Hydroelectric Plant of Chirurgo (Chile), Hydroelectric Plant of Maso Corona (TN), Hydroelectric Plant of Genivolta 2 (CR), Hydroelectric Plant of Rovegro (VB), Hydroelectric Plant of Pontey (AO), Hydroelectric Plant of Fallara (RC), Hydroelectric Plant of Caldenno (SO), Hydroelectric Plant of Porlezza (CO), Hydroelectric Plant of Calope – Ecuador, Hydroelectric Plant of Scifà (RC), Hydroelectric Plant of Cassibile (SR), Hydroelectric Plant of Tombetta (VR), Hydroelectric Plant of Los Negros – Costa Rica, Hydroelectric Plant of Zarolo (SO), Hydroelectric Plant of Sarcedo (VI), Hydroelectric Plant of Ceto (BS), Hydroelectric Plant of Zogno – Bergamo (BG), Hydroelectric Plant of Dronero – Cuneo (CN), Hydroelectric Plant of YUKARI MERCAN – Turkey,

Hydroelectric Plant of Paullo – Milan (MI), Hydroelectric Plant of Drop - Canada, Hydroelectric Plant dell’ Arsa Pieve Vergonte (VB), Hydroelectric Plant of Pikel – Italy, Hydroelectric Plant of Alta Civetta – Italy, Hydroelectric Plant of Monte Carafa – Italy, Hydroelectric Plant of Battaglia – Italy, Hydroelectric Plant of Padula – Italy, Hydroelectric Plant of Genivolta – Italy, Hydroelectric Plant of Pamuk – Turkey, Hydroelectric Plant of Voltabarozzo – Italy, Hydroelectric Plant of Bertinoro – Italy, Hydroelectric Plant of Bolenzana – Italy, Hydroelectric Plant of Quartiano – Italy, Hydroelectric Plant of Belgiardino – Italy, Hydroelectric Plant of Valmaira – Italy.

Energy Services of various ESU buildings - plant upgrading - Padua (PD), E.R.P. Area Parco Iris est - Padua (PD), Biomass thermal power plant Camporgiano Municipal Buildings (LU), Biomass thermal power plant Municipality of Conco (VI), Central heating sub-plants of the Municipality of Temù (BS), Biomass and Cogeneration Thermal Plant Municipality of Temù (BS), Gas control and reading station – Egypt, Pump station of Travacone Colorno - (PR), Sub-stations at the Military Chapel Cima Grappa - (VI), Power Plant Jebel Ali & Desalination “K” Station – Dubai, Power Plant Al Taweelah A1 - United Arab Emirates, Sub-station G.G.I. building “Via Ferretto” Mogliano (TV),

Wind Farms Municipality of Campomaggiore (MT), Wind Farms Municipality of Rotondella (MT), Municipal Wind Turbine Farms Municipalities of Quero (BL) - Perarolo (BL) - Puos d’Alpago (BL),

Photovoltaic plants on buildings and car parks – S. Stefano al Mare - (IM), Photovoltaic Plants municipal buildings – Roncadelle -(BS), Photovoltaic Plants school buildings – Florence - (FI), Photovoltaic Plants municipal buildings – Pedavena -(BL)



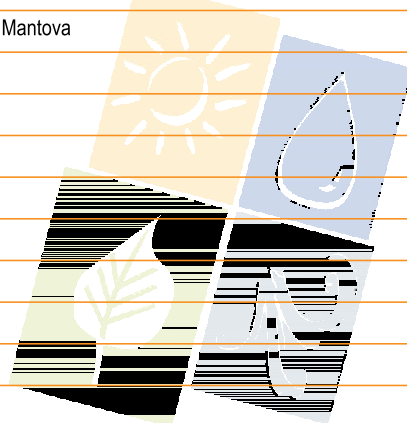
network
energie rinnovabili

The „Network **Er**“ arises from the need to create a communication network within which to enhance the experience of Chambers of Commerce on the renewable energy issue in the agri-food and agro-industrial industry, favouring a link with the territory and the agricultural and industrial entrepreneurial fabric that characterizes it.

The aim of the „Network **Er**“ is the promotion of the experience gained nationally and internationally, to offer a point of reference on renewable energy diffusion through:

- supplying information
- promoting technology transfer to enterprises
- designing of renewable energy facilities.

- Agriculture Territory Environments and Markets (Agrimercati) – special agency of the Chamber of Commerce of Milan and the markets' management consortium of Milan Assomercati
- Regional Centre for agricultural Research and Assistance (Cersaa) – special agency of the Chamber of Commerce of Savona
- Service Centre for small and medium-sized enterprises (Cesp) – special agency of the Chamber of Commerce of Matera
- Centre for Innovation and Economic Development (Cise) – special agency of the Chamber of Commerce of Forlì-Cesena
- PromolImpresa – special agency of the Chamber of Commerce of Mantova
- Chamber of Commerce of Arezzo
- Chamber of Commerce of Florence
- Chamber of Commerce of Gorizia
- Chamber of Commerce of Grosseto
- Chamber of Commerce of Padova
- Chamber of Commerce of Rovigo
- Italian Chamber of Commerce Munich
- Italian Chamber of Commerce for Germany (Frankfurt)
- Italian-Hellenic Chamber of Commerce of Thessaloniki



www.energieininnovabili.org

Institutions

Autorità per l'Energia Elettrica e il Gas (AEEG), Piazza Cavour 5, I-20121 Milan, Tel.: +39 02 655651, Fax: +39 02 65565266, Mail: info@autorita.energia.it, Internet: www.autorita.energia.it

Ente Nazionale per l'Energia Elettrica (ENEL), Polo Energie Alternative (PAL), Via A. Volta, I-20093 Cologno Monzese (MI), Tel.: +39 02 72241, Fax: +39 02 72245253, Mail: info@enel.it, Internet: www.enel.it

Ente Nazionale Idrocarburi (ENI), Piazzale Mattei 1, I-00144 Rome, Tel.: +39 06 59821, Fax +39 06 59822141, Mail: segreteriaassociata.azionisti@eni.it, Internet: www.eni.it

Ente per le Nuove Tecnologie, Energia e Ambiente (ENEA), Lungotevere Thaon di Revel, 76, I-00196 Rome, Tel.: +39 06 36271, Fax: +39 06 36272591, Mail: comunicazioneweb@sede.enea.it, Internet: www.enea.it

Federazione Italiana Uso Razionale dell'Energia (FIRE), FIRE c/o ENEA Casaccia, Via Anguillarese 301, I-00123 Rome, Tel.: +39 06 3048 3626, Fax: +39 06 3048 6449, Mail: fire@fire-italia.it, Internet: www.fire-italia.it

Gestore della Rete di Trasmissione Nazionale (GSE), Viale Maresciallo Pilsudski 92, I-00197 Rome, Tel.: +39 06 8011 1, Fax: +39 06 8011 4392, Mail: info@gsel.it, Internet: www.gsel.it

Gestore del Mercato Elettrico S.p.A. (GME), Viale Maresciallo Pilsudski 92, I-00197 Rome, Tel.: +39 06 8012, Fax: +39 06 8012 4524, Mail: info@mercatoelettrico.org, Internet: www.mercatoelettrico.org

Trasmissione Elettrica Rete Nazionale (Terna Spa), Via Arno 64, I-00198 Rome, Tel.: +39 06 8313 8111, Fax: +39 06 8313 8317, Mail: info@terna.it, Internet: www.terna.it

Renewable Energies

Associazione Produttori di Energia da Fonti Rinnovabili (APER), APER is located in Piazza L. di Savoia 24, I-20124 Milan (MI), Tel.: +39 02 76319199, Fax: +39 02 76397608, Mail: info@aper.it, Internet: www.aper.it

Federazione Italiana Produttori Energia Rinnovabile (FIPER), Via Polveriera 50, I-23037 Tirano (SO), Tel.: +39 0342 706278, Fax: +39 0342 711973 Mail: segreteria.nazionale@fiper.it, Internet: www.fiper.it

Federazione Produttori Energia Elettrica Fonti Rinnovabili (Federpern), Via Roma 178, Mailbox 29, I-10070 Cafasse (TO), Tel.: +39 0123 417438, Fax: +39 0123 417527, Mail: federpern@libero.it, Internet: www.federpern-italia.it

Solar Energy

Associazione Nazionale dell'Industria Solare Fotovoltaica (ASSOSOLARE), Viale Lunigiana 46, I-20125 Milan, Tel.: +39 02 66989156, Fax: +39 02 67074193, Mail: info@assosolare.org, Internet: www.assosolare.org

Gruppo Imprese Fotovoltaiche Italiane (GIFI) Via Gattamelata 34, I-20149 Milan, Tel.: +39 02 3264228, Fax: +39 02 3264217, Mail: info@gifi-fv.it, Internet: www.gifi-fv.it

International Solar Energy Society (ISES) Italy, Via Tommaso Grossi 6, I-00184 Rome, Tel.: +39 06 77073610, Fax: +39 06 77073612, Mail: info@isesitalia.it, Internet: www.isesitalia.it

Wind Energy

Associazione Nazionale Energia del Vento (ANEV), Via Piemonte 39, I-00187 Rome, Tel.: +39 06 42014701, Fax: +39 06 42004838, Mail: segreteria@anev.org, Internet: www.anev.org

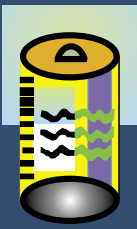
Geothermal Energy

Unione Geotermica Italiana (UGI), Piazza San Giorgio 6, I-56126 Pisa, Tel.: +39 050 9711376, Fax: +39 050 9711376, Mail: umberto.rossi-casa@poste.it, Internet: www.ugi.it

Biomass

Associazione Italiana per la Promozione della Cogenerazione (COGENA), Via Isonzo 34, I-00198 Rome, Tel.: +39 06 20369638, Fax: +39 06 20369376, Mail: assomac@assomc.it, Internet: www.assomac.it

Italian Biomass Association (ITABIA), Via Acireale 19, I-00182 Rome, Tel.: +39 06 7021118, Fax: +39 06 70304833, Mail: itabia@mclink.it, Internet: www.itabia.it



The Renewable Energy Network Project



Camera di Commercio
Belgo-Italiana

www.ccitabel.com

info@ccitabel.com



CAMERA ITALO-BRASILEÑA DI COMMERCIO
E INDUSTRIA DI RIO DE JANEIRO

www.camaraitaliana.com.br

info@camaraitaliana.com.br



Camera di Commercio Italiana per la Svizzera

Fondata nel 1909

www.ccis.ch

info@ccis.ch



CAMERA DI COMMERCIO
ITALIANA PER LA GERMANIA
ITALIENISCHE HANDELSKAMMER
FÜR DEUTSCHLAND
Fondata nel 1911 gegründet

www.itkam.de

info@ccig.de



Camera di Commercio Italiana
Monaco di Baviera

Italienische Handelskammer
München

www.italcam.de

info@italcam.de

cci

Camera di
Commercio Italiana
Barcelona

www.camaraitaliana.com

info@camaraitaliana.com



www.italcamara-es.com

info@italcamara-es.com



chambre de commerce
Italienne de Lyon

www.ccielyon.com

cci@ccielyon.com



THE ITALIAN CHAMBER
OF COMMERCE
AND INDUSTRY
FOR THE UK

www.italchamind.org.uk

info@italchamind.org.uk



CAMERA DI COMMERCIO
ITALO-ELLENICA DI SALONICCO



ΕΠΑΝΟ - ΙΤΑΙΚΟ
ΕΠΙΜΕΛΗΤΗΡΙΟ ΘΕΣΣΑΛΟΝΙΚΗΣ

www.italchamber.gr

camerait@otenet.gr



www.ccitalia.pt

lisboa@ccitalia.pt



CAMERA DI COMMERCIO ITALIANA PER LA SVEZIA
ITALIENSKA HANDELSKAMMAREN I SVERIGE

www.italchamber.se

info@italchamber.se



supported by

Ministero dello Sviluppo Economico