



**SUSTAINABILITY
REPORT**
2011

ECON

added respons
value creat

Transparent

Environment
responsibility

Renewable
energy

Strategies
for the
environment

Corporate Sustainable
G

economic
sustainability
Sustainable
investments
Social
responsibility
Welfare
Health and
Safety
development
performance



**SUSTAINABILITY
REPORT
2011**

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The first Sustainability Report in 2007 marked an important cultural transition from a mainly HSE approach to sustainability to a more mature approach that also takes account of the social dimensions of our work and the importance of our relations with our stakeholders.

Five years on we are able to appreciate how this cultural change has not just been manifest in a series of Corporate Social Responsibility actions as a consequence of production activities, but how it has become a concrete incentive for the development of an integrated business model that can exploit the opportunities of CSR and fully incorporate them into our strategies.

These are complex years during which the global crisis has profoundly altered the pre-existing economic and social equilibriums in a cultural context that stands out for the greater levels of awareness and an increasing desire to participate.

The challenge is to remain open to dialogue and interaction with all stakeholders so we are ready to take immediate advantage of opportunities and act in a consistent, structured and harmonious manner. The goal is to create mid and long-term value for the business and the wider economic, environmental and social context within a framework of positive actions that can guarantee the stability and continuity of the choices made.

It is therefore for a system of values with which we have always been synonymous and for a precise strategic approach that ERG has adopted and pursued a very concrete series of sustainability goals, described in detail in this Report.

Exploiting our best managerial resources, in 2011 we continued to display great determination in pursuing our commitment to guaranteeing the Group's solidity in this difficult and unpredictable economic climate.

We pursued economic sustainability by carrying out operations that enabled us to overcome the most delicate moments in the refining segment and which, at the same time, gave us the financial capacity to invest in other business sectors, such as renewable energies; in this way we have further diversified the portfolio of our activities, limiting our exposure to risk and pursuing a growth programme even in this extremely testing climate.

Environmental sustainability is at the heart of our activities and our interests not only through the important developments in the renewable energies sector but, as ever, also through stringent, transparent and continually updated policies and constantly monitored action programmes.

In 2011 we rewrote our Code of Ethics so that the values and principles that

underpin our work remain aligned with the evolution of the context in which we work and can therefore represent live, contemporary and crucial points of reference for all stakeholders.

None of the results achieved in recent years would have been possible without the excellent human capital with which our Group has always been synonymous: this is why we encourage the growth of our people with professional training programmes as well as programmes also focused on individual potential. Despite the far from favourable economic climate, we have continued to

develop CSR activities in our communities of reference, planning and realising initiatives that are best equipped to express and interpret the company's values, with particular focus on the social requirements of the communities.

The Sustainability Report enables us to illustrate, in a transparent and exhaustive manner, the ways in which we pursue our economic, environmental and social development goals, but is also an important way of observing ourselves, of monitoring our results and, therefore, of continuously identifying areas for improvement and growth.



Edoardo Garrone
Chairman



Alessandro Garrone
Chief Executive Officer

HISTORY OF THE GROUP

1938-2011



Edoardo Garrone
founds ERG in Genoa



ERG completes the first
Italian oil logistics structure
in Arquata Scrivia



Following the
acquisitions of the
Chevron and ELF
networks (1984),
ERG has a 5% share
of the retail market



Together with
Edison Mission
Energy, ERG founds
ISAB Energy for the
construction of the
first plant in Europe
for the gasification
of oil residues and
cogeneration

1938

Production at the
Genoa San Quirico
Refinery begins

1947

1967

1971

ERG joins the project
to develop the ISAB
Refinery in Priolo.
Production begins
in 1975



1985

1988

ERG takes
control of ISAB.
Activities cease at
the Genoa Refinery



1993



1997

ERG floated on the stock exchange

1999

ERG publishes its first HSE Report



2000

ISAB Energy begins to produce and market electricity



2004

Edoardo Garrone Foundation founded



2006

ERG acquires 51.33% of the share capital of EnerTAD taking a decisive step forwards in the growth and consolidation of its position in the renewable energies sector



2007

ERG publishes its first Sustainability Report, with GRI level of C. This became A in 2008



2009

Following major "environmentalisation" works at the thermoelectric plants, ERG Power is born



2010

The Consolidated Financial Statements and the Sustainability Report are interactive and on the corporate website

ERG GROUP

An energy group with one primary goal: to create lasting value over time

Listed on the Milan stock exchange since 1997, our Group operates in three sectors: **Renewable Energy Sources, Power & Gas and Refining & Marketing**. It also does this through our subsidiaries and some joint ventures with high-profile operators at international level. Our strategy is to create a **diversified energy group**, whose main objective is **to create lasting value** by increasing profitability and continuously reducing its dependence on volatile external factors, also through the balanced management of its portfolio.

RENEWABLE ENERGY SOURCES

Through the subsidiary **ERG Renew**, we work in the sector of the generation of electricity from renewable sources with **548 MW of wind power** at 31 December 2011, of which 158 in Puglia, 140 in Campania, 98 in Calabria, 40 in Molise, 38 in Sicily, 9 in Lazio, 2 in Liguria and 64 in France.

We are also active in the development of new initiatives in Eastern Europe through **LUKERG Renew**, a joint venture between ERG Renew and LUKOIL. The considerable increase in capacity

in 2011 is mainly due to the completion of the wind farm in Fossa del Lupo in Calabria (CZ), operational since 1 July 2011 with a capacity of 97.5 MW, and the acquisition of ERG Eolica Campania, with an installed capacity of 111.8 MW.

ERG Renew is also completing the Ginestra wind farm in Campania (40 MW, 28 MW of which already operational at 31 December 2011) and in the second half of September 2011 began construction work on the Amaroni wind farm in Calabria (22.5 MW), which is expected to become operational by the end of 2012. During 2011 a photovoltaic plant with an installed capacity of 968 kWp, owned by ISAB Energy Solare which, in turn, is 51% owned by ERG, also became operational at the ISAB Energy site.



The strategy

With ERG Renew we are active in developing the generation of electricity from renewable sources, with special focus on the wind sector. The strategic plan aims to **strengthen its presence**

IN 2011 MAJOR
INCREASE IN
INSTALLED
CAPACITY

**TWO
THERMOELECTRIC
PRODUCTION
PLANTS WITH AN
INSTALLED
CAPACITY OF
1,000 MW**

on the domestic market so it can become one of the leading operators in Italy, thanks also to the Amaroni farm, scheduled to become operational by the end of 2012.

As well as the French market, where ERG Renew already has significant presence, the attention is particularly focused on **Eastern Europe** (thanks mainly to the joint venture with LUKOIL, known as LUKERG Renew, initially focused on Bulgaria and Romania), which offers great development potential.

The goal is to **build a diversified and geographically balanced portfolio of assets** in the mid-term, also in order to

optimise regulatory risk management.

On 2 February 2012, LUKERG Renew signed an agreement for the purchase of 100% of a wind farm in Bulgaria, in the region of Dobrich, for an installed capacity of around 40 MW.

POWER & GAS

Another sector in which our Group is active is that of the marketing of electricity, steam and gas. ERG's principal investments in the sector are:

→ **ISAB Energy**: power plant electricity generation (528 MW), based on the gasification of asphalt originating from the adjacent ISAB Refinery in Priolo (Sicily);



At 31 December 2011

KEYWORD:
EXPLOIT
ELECTRICITY
ASSETS

→ **ERG Power**: the owner of the multi-company plant in Priolo (480 MW), including the combined cycle plant fuelled by natural gas and the counter-pressure units of the power station.

There are also two projects currently undergoing authorisation.

The first is **Ionio Gas**, a joint venture with Shell Energy Italia for the development of a liquefied natural gas (LNG) re-gasification plant at the Priolo site.

The second is **ERG Rivara Storage** (15% ERG, 85% Independent Gas Management - Independent Resources Group), a company for the development and management of an underground natural gas storage site in Rivara in the municipality of San Felice sul Panaro, Modena.

The strategy

Our Group continues to pursue the strategic line of the **maximum exploitation of its electricity assets**: the IGCC site belonging to ISAB Energy (51% ERG), operational since 2000 through the 20-year CIP 6 agreement, and the new CCGT plant owned by subsidiary ERG Power, fully operational since April 2010, with an installed capacity of around 480 MW. The latter supplies utilities and electricity to industry customers of the Priolo site, supplying the rest of the electricity produced to the market.

Another key goal is that of **entering the gas infrastructure sector** through two projects currently at the permitting phase: Ionio Gas and ERG Rivara Storage.

The ISAB Energy substation





Shot of the ISAB Sud refinery

TOTALERG: A JOINT VENTURE THAT HAS STRENGTHENED OUR COMPETITIVENESS

REFINING & MARKETING

Our Group is active in the **Coastal Refining** sector via a joint venture with LUKOIL that controls the ISAB refinery in Priolo, one of the biggest sites in the Mediterranean in terms of both capacity (320,000 barrels/day) and complexity (9.3 on the Nelson index).

We are also active in the **Integrated Downstream** segment through TotalErg, a joint venture with Total, with a network of approximately 3400 stores (market share of approx. 12%) and fuel sales of 4 million m³/year, and through ERG Oil Sicilia (EOS), 100% owned by ERG, and operative in the Retail and Wholesale sectors in Sicily.

TotalErg also operates in the refining sector (Raffineria di Roma, 100% owned, and Raffineria Sarpom in Trecate invested at 26%).

The strategy

In the **Coastal Refining** sector we continue to pursue a **strategy of improving the efficiency and flexibility of plants**.

In the **Integrated Downstream** segment we work on an ongoing structural improvement process aimed at **maximizing the profitability of the sales channel and improving sustainability in the long term**.

Within this context, on 1 October 2010 ERG finalised an agreement with the French group Total for the merger of Total Italia and ERG Petroli; through this joint venture we benefitted from the strengthening of our competitive position on the market with the creation of important synergies in terms of sales and costs ■

ERG IN A NUTSHELL – SOME NUMBERS

■ CONSOLIDATED
REVENUES

6,798 MLN €

■ EBITDA AT ADJUSTED
REPLACEMENT COST*

284 MLN €

■ GROUP NET PROFIT AT
ADJUSTED REPLACEMENT
COST

(49) MLN €

■ NET INVESTED
CAPITAL

2,842 MLN €

■ INVESTMENTS
ADJUSTED*

156 MLN €

■ ADJUSTED GROUP
INDEBTEDNESS
AT END OF 2011 *

1,179 MLN €

■ MAXIMUM MARKET
CAPITALIZATION

1,614 MLN €

■ EMPLOYEES
AT PERIOD END

652

■ ELECTRICITY
GENERATION

7,436 GWh

■ PROCESSING OF CRUDES
IN REFINERIES
(BARRELS/DAY)

150.000

■ RETAIL MARKET SHARE**

12%

■ SERVICE STATIONS**

3,383

* Results at replacement costs do not include inventory gains (losses) and non-recurring items. The EBITDA at adjusted replacement costs also includes ISAB S.r.l.'s (a joint venture with LUKOIL) and TotalErg S.p.A.'s (a joint venture with TOTAL) performance, proportionally to ERG's shareholding.

** Data for TotalErg S.p.A., a joint venture 51% owned by ERG S.p.A.

THE ERG GROUP PLANTS

PLANT	PROV.	DATE OF ENTRY INTO OPERATION / DATE OF ACQUISITION	INSTALLED CAPACITY IN MW	SYSTEM	ALLOCATION CO ₂ * kt\YEAR
-------	-------	--	--------------------------------	--------	--

WIND ITALY

Eolo - Viticuso	FR	01-2002	9.0	green certificates	
Pian dei Corsi	SV	06-2002	1.6	green certificates	
San Vincenzo	FG	01-2005	42.0	green certificates	
San Ciro	FG	01-2006	30.0	green certificates	
Vicari	PA	12-2008	37.5	green certificates	
Faeto	FG	04-2009	24.0	green certificates	
Rotello	CB	01-2010	40.0	green certificates	
Ascoli Satriano	FG	06-2010	61.8	green certificates	
Fossa del Lupo	CZ	07-2011	97.5	green certificates	
Ginestra**	BN	08-2011	40.0	green certificates	
Bisaccia	AV	08-2011	23.6	green certificates	
Lacedonia	AV	08-2011	18.0	green certificates	
Molinara	BN	08-2011	25.0	green certificates	
Baselice	BN	08-2011	27.0	green certificates	
Foiano di Val Fortore	BN	08-2011	18.0	green certificates	
Total			495.0		

WIND FRANCE

Le Carreau		10-2006	9.2	feed-in tariff	
Lihus		12-2006	11.5	feed-in tariff	
Hetomesnil		12-2006	11.5	feed-in tariff	
La Bruyère		10-2006	11.5	feed-in tariff	
Les Mardeaux		10-2006	11.5	feed-in tariff	
Plogastel		04-2010	9.2	feed-in tariff	
Total			64.4		

PHOTOVOLTAIC

ISAB Energy Solare	SR	06-2011	0.97	feed-in tariff	
Total			0.97		

THERMOELECTRIC

ERG Power	SR	04-2010	480		1,748
ISAB Energy	SR	04-2000	528	CIP 6	371
Total			1,008		

* The allocation of CO₂ emission quotas are assigned freely based on the decisions of the relative national authority.

** At 31 December 2011 the farm, authorised for 40 MW, was exercising 28 MW.

A YEAR OF RENEWABLE ENERGY SOURCES

250 MW of growth thanks to new acquisitions and the conclusion of ongoing projects

In 2011 we enjoyed considerable growth in the renewable energies sector, carrying forward our industrial energy diversification project.

Operating with this in mind, **we brought together the three most important sustainability principles:** the creation of lasting value over time, the reduction of the environmental impact of our activities and the ability to guarantee the future generations the possibility of satisfying their requirements with the resources available.

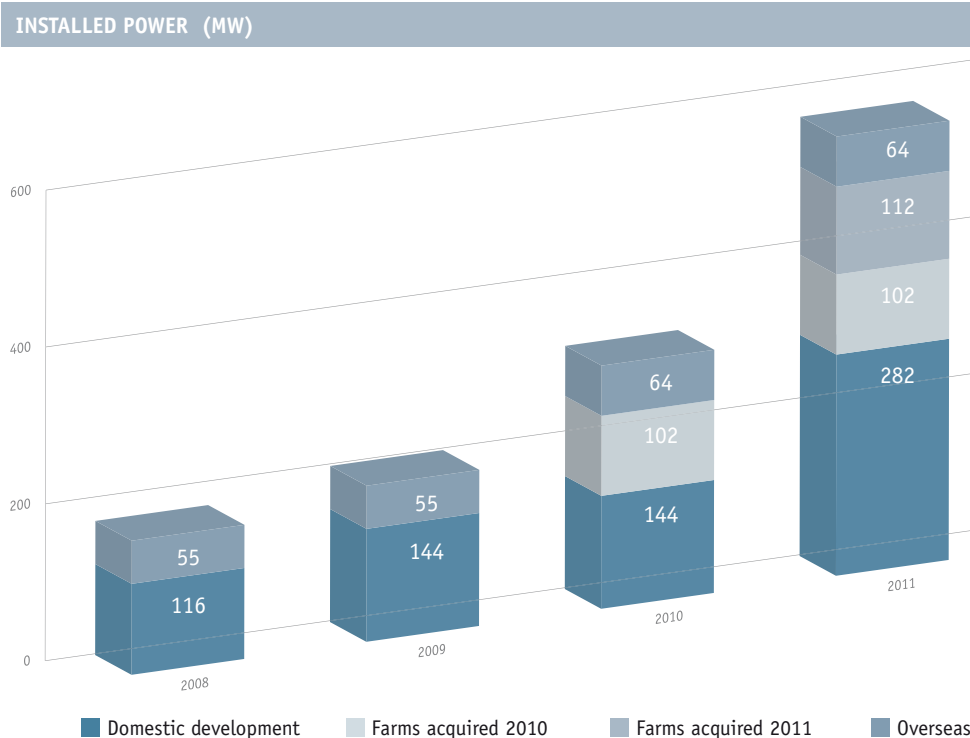
During the year, **the capacity installed in renewable sources grew by around 250 MW.** This was made possible thanks to the conclusion of a number of authorisation processes that began in recent years and a number of acquisitions of farms that were already operational.

More specifically, the following projects were concluded during the year:

- the Fossa del Lupo wind farm, which extends across the municipalities of Palermiti, Gasperina and Vallefiorita (CZ), with an installed capacity of 97.5 MW;
- the Ginestra degli Schiavoni (BN) wind farm, which has an installed capacity of 40 MW, 28 MW of which was being produced at 31 December 2011;
- the acquisition of IVPC Power 3, owner of five wind farms operational since 2008, located in the provinces of Avellino and Benevento. Here the

FOSSA DEL LUPO WIND FARM: THE NUMBERS

- **Second biggest Italian** wind farm in terms of installed capacity.
- The preparatory work took **16 months:** work began on 22 February 2010 and the farm became fully operational on 28 June 2011.
- The farm comprises **39 turbines** with an **80 metre** tower and a rotor **90 metres** in diameter.
- It covers an area of **1,360 hectares** and it takes **45 minutes** by car to travel from end to the other.
- Over **280 km of cables** have been laid – equal to the distance between Florence and Rome – to connect the turbines to the substation.
- Around **14,500 m³ of cement** was used for the foundations and around 2,500 tonnes of steel for the reinforcements.
- Over **100 landowners** were involved and agreements were made with **5 local councils** ■



total installed capacity is around 112 MW and it is estimated that around 240 GWh of electricity is generated a year when fully operational;

→ ISAB Energy Solare, the photovoltaic plant made up of 4,329 photovoltaic modules covering a surface of over 6,900 m² with a nominal total capacity of 968 kWp. The panels are positioned on the roofs of the car-parks,

the offices and the warehouses at the ISAB Energy plant.

During the year the process to acquire authorisation for the 22.5 MW wind farm in Amaroni (CZ) was completed. Adjacent to the Fossa del Lupo farm, it can be regarded as a natural extension. Construction work began and will involve the installation of nine 2.5 MW turbines.

GINESTRA WIND FARM: THE NUMBERS

- Date of **first connection** to the national electricity: 10 June 2011.
- Total area covered by farm: **10 km²**.
- Total length of roads in farm: **17 km**.
- Length of cables to connect turbines to substation: **35 km**.
- Anemometer towers: **2**.
- Around **17,000 m³ of cement** was used for the foundations and around **1,700 tonnes of steel** for the reinforcements ■

WITH
LUKERG RENEW
**WE CONTINUE
OUR OVERSEAS
DEVELOPMENT
IN THE FIELD
OF RENEWABLE
ENERGIES**

Overseas development

During the year the foundations were laid for the further development of renewable activities. Indeed **LUKERG Renew was founded, a joint venture between ERG Renew and LUKOIL – Ecoenergo**, a LUKOIL Group company active in the renewable energies sector.

The company was founded on 15 July 2011, has its head offices in Vienna and has been operational since 1 September. At the end of 2011 it did not have any employees with operations carried out directly by employees of the two partners. Through LUKERG Renew we plan to **make significant investments in the renewable energies market in Eastern**

European countries and in Russia:

initially, scouting activities will be concentrated in Bulgaria and Romania, extending subsequently to the Ukraine and Russia. The strategy envisages growth both through the development of proprietary projects and the seeking of new acquisition opportunities.

In February 2012 the new company signed an agreement regarding the **acquisition of the first wind farm in Bulgaria**: a 40 MW plant already operational since 2009. With this operation LUKERG Renew, a few months after it was set up, entered the Bulgarian wind energy market with a market share of around 10% ■

IN THE REFINING SECTOR, IN PARTNERSHIP WITH LUKOIL

Reduced exposure in the refining sector

On 31 January 2011, our Board of Directors approved the exercising of the Put option (the sale of our shareholding) for an 11% stake in the ISAB Refinery.

The operation forms part of a 2008 agreement signed with LUKOIL that involved the **creation of a joint venture**

for the joint management of ISAB Refinery in Priolo (Sicily) and which **gave ERG a put option on its stake** that could be exercised in one or more solutions.

ISAB is therefore 60% owned by LUKOIL and 40% owned by ERG and continues to be managed by the two shareholders on the basis of the existing shareholders agreement with joint governance in terms of the main business decisions and an operating agreement that guarantees its autonomy and management independence.

ERG
EXERCISES ITS
**PUT OPTION
ON ISAB**

This operation enabled our Group to retain an adequate industrial role in the refining business in partnership with LUKOIL, as per the Group's strategy, and to further strengthen its financial structure.



The plants of the ISAB Nord refinery

Faced with a complex economic scenario, determined by the ongoing crisis in the refining sector, and in the context of a strategy aimed at guaranteeing

the creation of long-term value, on 31 January 2012 our Board of Directors approved the **exercising of a put option for an additional 20% shareholding in ISAB**.

ISAB Refinery is therefore currently 80% owned by LUKOIL and 20% owned by ERG, which will in any case remain present on the ISAB Board of Directors and in the management committees.

As well as reducing the level of exposure in the refining sector, this operation, which forms part of the Group's diversification strategies, enables us to **further strengthen our financial structure** at a time when the credit system is undergoing a severe crisis, and to continue to invest in other more profitable sectors, particularly that of renewable energies ■

IREN, AN AGREEMENT THAT CONSOLIDATES OUR ELECTRICITY BUSINESS

On 10 November 2011 we signed a binding framework agreement with IREN with the aim of optimising and consolidating our industrial presence in the electricity business. The agreement made between ERG and IREN, through subsidiary IREN Mercato, involves the signing of a **supply contract by which ERG will supply IREN Mercato with 2 TWh of electricity a year** for six years, beginning on 1 January 2012.

Thanks to this contract, IREN Mercato will be able to supplement its annual portfolio of electricity supplies used mainly to supply end customers. The framework agreement also regulated **IREN Mercato's acquisition of the branch of ERG responsible for the marketing and sale of electricity** to over 15,000 business and mid-business customers, thus guaranteeing a degree of continuity. Together with this branch of the company, 11 employees were also transferred to IREN to guarantee the functioning of the business: as the contract came into effect on 1 January 2012, the employees were still considered ERG employees on 31 December 2011 ■

KEYWORDS: SOLIDITY AND FLEXIBILITY

A structured and competent model to ensure long-lasting Corporate Governance

**FLEXIBILITY
ENABLES THE
COMPANY TO
EVOLVE IN
AN ORGANIC
AND
CONSISTENT
WAY
ACCORDING TO
REQUIREMENTS**

In order to ensure lasting sustainability the governance system of an entity as complex as a company must obey two fundamental criteria: solidity and flexibility. The first is ensured by identifying clear rules and procedures, the balanced breakdown of powers and delegation and the implementation of process monitoring and control mechanisms.

Flexibility, meanwhile, enables an organisation to evolve responding quickly and effectively to the need for change typical in modern economies.

Solidity and flexibility are ensured through Corporate Governance capabilities and activities including statutory bodies and board committees that adhere to formalised procedures when performing their duties.

The **Statutory Bodies** are:

- the **Board of Directors**: 1 Chairman, 1 Deputy Chairman, 1 Chief Executive Officer and 9 Directors, of which 4 are independent, 2 are non-executive and 3 are executive. There is also an Honorary Chairman;

- the **Board of Statutory Auditors**, 1 Chairman, 2 regular members and 3 substitute members;

- the **Shareholder's Meeting**.

The **Board Committees** include:

- the **Internal Control Committee**, 1 Chairman and 2 members;
- the **Strategic Committee**, 1 Chairman and 4 members;
- the **Nominations and Remuneration Committee**, 1 Chairman and 2 members.

APPOINTMENT OF DIRECTORS

Directors are **appointed based on lists presented by Shareholders** which, supplemented with information on the personal and professional characteristics of the candidates and an indication of whether they meet the independence requirements, must be filed at least 25 days prior to the Shareholder's Meeting.

In accordance with CONSOB regulations, only shareholders who alone, or together with other shareholders, represent at least 2% of the share capital may present the lists. Each shareholder may present or be involved in the presentation of just one list and each candidate may only feature in one list.

All candidates must possess the requisites of honourability established for members of the Supervisory Bodies by

**ONLY
SHAREHOLDERS
THAT REPRESENT
AT LEAST
2% OF THE
CAPITAL
CAN PRESENT
LISTS**

the laws in force, as well as the professional requisites demanded by the role.

All Directors, with the exception of one, are appointed from the list that receives the majority of votes. The remaining position is appointed from the minority list that obtained most votes. In the event of the presentation of just a single list, the Directors are elected from the list presented.

All those that possess at least one share may vote.

In accordance with the Articles of Association **voting can only be carried out in person or by proxy**, with no forms of electronic voting from remote locations currently supported. The Board of Directors meets at least once a quarter to inform the Board of Statutory Auditors on the Group's activities and on the most important business, financial and capital transactions undertaken by the company or its subsidiaries and particularly those where there may be a potential conflict of interest.

During the 2011 financial year the **Board of Directors held 8 meetings**.

THE INTERNAL CONTROL COMMITTEE

Made up of three Independent Directors, the Internal Control Committee **advises and issues recommendations to the Board of Directors** and fulfils the role and responsibilities indicated in the Corporate Governance Code.

In carrying out its functions, the Committee has wide access to corporate information and departments. Its members have adequate experience in accounting and finance.

The Chairman of the Board of Statutory Auditors or another Statutory Auditor contribute to the Committee's work.

Depending on the topics covered at any given time, the Chairman of the Board of Directors, the CEO and the Corporate General Manager, as well as Group management representatives, employees and representatives of the auditing firm and other subjects, may also take part.

The head of Internal Audit is invited to participate in meetings to inform the Committee, at least once a quarter, on activities carried out and those on the agenda. In 2011 the **Committee held 11 meetings**.

THE STRATEGIC COMMITTEE

The Strategic Committee **advises and issues recommendations** to the CEO and the Boards of Directors of the holding and operating companies.

In accordance with strategies and policies approved by the Board of Directors, it **defines strategic business and portfolio guidelines** as well as policy guidelines on strategic finance and individual extraordinary finance operations,

**THE STRATEGIC
COMMITTEE
DEFINES
STRATEGIC
GUIDELINES
IN THE AREAS
OF BUSINESS,
PORTFOLIO AND
FINANCIAL
MATTERS**

monitoring the progress of their implementation over time.

The Committee also examines, as a precautionary measure, the multi-year strategic plans and investment budgets

of the Group and the operating companies, as well as significant investments, evaluating their congruity in terms of Group strategy.

THE BOARD OF DIRECTORS AND THE COMMITTEES AT 31 DECEMBER 2011

ROLE	MEMBERS	LIST (M/m) ⁽¹⁾	EXECUTIVE	NON EXECUTIVE	INDEPENDENT OF CODE AND T.U.F.	% PARTECIPAZIONE ⁽²⁾	NO. OTHER POSITIONS ⁽³⁾	INTERNAL CONTROL COMMITTEE		NOMINATIONS AND REMUNERATION COMMITTEE	
								(4)	(2)	(4)	(2)
Chairman	Edoardo Garrone	M	Yes			100%	2				
Deputy Chairman	Giovanni Mondini	M	Yes			100%	1				
Chief Executive Officer	Alessandro Garrone	M	Yes			100%	2				
Director	Massimo Belcredi	M			Yes	88%	1	Yes	100%	Sì	100%
Director	Luca Bettonte	M	Yes			100%	–				
Director	Lino Cardarelli	M			Yes	75%	–			Sì	80%
Director	Alessandro Careri			Yes		100%	–				
Director	Aldo Garozzo	M		Yes		100%	–				
Director	Giuseppe Gatti	M	Yes			100%	–				
Director	Antonio Guastoni	M			Yes	100%	5	Yes	91%		
Director	P. Francesco Lanzoni	M			Yes	88%	–	Yes	100%	Yes	100%
Director	Graziella Merello	M	Yes			100%	–				

DIRECTORS WHO CEASED ACTIVITIES DURING YEAR IN QUESTION

Deputy Chairman	Pietro Giordano	M	Yes			80%	–				
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Note

- (1) This column indicates M/m according to whether the member was elected from the majority list (M) or the minority list (m).
- (2) This column indicates the percentage participation of Directors at the Board of Directors and Committee meetings (no. appearance/ no. meetings held during period in which the member has held their position).
- (3) This column indicates the number of Director or Auditor positions held by the relative subject in other companies listed on regulated markets, including foreign markets, in financial, banking, insurance companies of significant size.
- (4) This column indicates participation by a member of the BoD in the Committee.

THE COMMITTEE MAKES RECOMMENDATIONS REGARDING THE REMUNERATION OF GROUP SENIOR MANAGEMENT

THE NOMINATIONS AND REMUNERATION COMMITTEE

Composed of three independent directors, this Committee **makes recommendations to the Board regarding the remuneration of the CEO** and directors that cover specific roles. At the CEO's request, it also makes recommendations concerning the pay policies for the company's senior management and the Group's management incentive scheme.

The Chairman, the CEO and the Corporate General Manager also contribute to the work of the Committee. When the Committee discusses proposals for the remuneration of the Chairman and the CEO, these two figures are not present at the meeting.

During the 2011 financial year the **Committee held 10 meetings**.

It is very important to underline that, upon the proposal of the Nominations and Remuneration Committee, on 10 December 2011 the Board of Directors approved the new "Policy of remuneration of the members of the Board of Directors, the General Manager and other Executives with strategic responsibilities," which will be applied as of 2012.

The tables illustrating the amounts paid to Directors, Auditors, General Managers and Strategic Managers, as well as the stock options assigned to them, are reported in the "Remuneration Report" available at www.erg.it ■

SIGNIFICANT INVESTMENTS AT 31 DECEMBER 2011

DECLARANT	DIRECT SHAREHOLDER	% SHARE OF ORDINARY SHARE CAPITAL	% SHARE OF VOTING CAPITAL
San Quirico S.p.A.	San Quirico S.p.A.	55.942	55.942
San Quirico S.p.A.	Polcevera S.A.	6.905	6.905
Trade winds Global Investors LLC	Trade winds Global Investors LLC *	10.006	10.006
Generali Investments Italy SGR S.p.A.	Generali Investments Italy SGR S.p.A.	2.228	2.228

* As manager, among others, of the TRADEWINDS INSTITUTIONAL INVESTMENT TRUST-TRADEWINDS GLOBAL ALL CAP PORTFOLIO fund which holds 2.027% and the NUVEEN TRADEWINDS GLOBAL ALL CAP FUND which holds 2.614%.

THE RULES OF CORPORATE GOVERNANCE

A consistent and structured system to protect all of our shareholders

As part of our Corporate Governance system we have introduced a series of internal procedures that all companies and employees must obey to guarantee a degree of consistency in the method of managing the Group. The goal of the system is to **guarantee the transparency of operations** with the ultimate expectation of providing a guarantee to all shareholders and protecting, even more importantly, minority shareholders.

Below is a summary of the main features of Corporate Governance:

- the Procedure for the management and processing of sensitive information and for the dissemination of communications and information to the public;
- the Code of Conduct as regards Internal Dealing;
- the Guidelines for the identification and implementation of significant operations;
- the Code of Conduct for Directors of Group companies;
- the Report procedure on significant operations by the subholdings;
- the Procedure for transactions with related parties.
- the Policy for compensating members of the Board of Directors, the General Manager and other Managers with strategic responsibilities.

For details on the specific procedures refer to the paragraph "Report on Corporate Governance and Shareholdings" in the financial statements ■

EFFECTIVE RISK MANAGEMENT

Internal Control system

Many activities are carried out by numerous employees at all levels of the company with the aim of contributing to the development of the Group. To ensure that each of these actions has

maximum sustainable value and contributes to the **healthy and consistent management of the company** a catalysing element is required: the Internal Control System (ICS).

This is the series of procedures, rules and organisational structures that contribute to guaranteeing the protection of the social capital, efficiency and ef-

THE INTERNAL
CONTROL SYSTEM
**INCLUDES
ALL RULES,
PROCEDURES
AND
DEPARTMENTS**

fectiveness of corporate processes, the reliability of financial information, the respect for laws and regulations as well as the Articles of Association and internal procedures. It is designed by company management and applied by all company resources, whilst the monitoring of its successful application is the job of the supervisory bodies summarised in the table.

ENTITY	ICS RESPONSIBILITY
Board of Directors	Guides and evaluates the adequacy of the ICS, examines and approves strategic, industrial and financial plans, evaluates the adequacy of the corporate, administrative and accounting structure, evaluates general management performance and makes resolutions regarding strategic, economic, capital or financial operations.
Executive Director appointed to oversee ICS	Identifies principal company risks, implements the guidelines established by the Board of Directors looking after the planning, realisation and management of the ICS and constantly verifying its adequacy and effectiveness, responsible for adjusting this system to the dynamics of operating conditions and the legislative and regulatory sphere.
Internal Control Committee	Supports, with suitable preliminary activities, the valuations and decisions of the Board of Directors with regard to the ICS, as well as those relative to the approval of the period financial reports, expresses opinions on specific aspects regarding the identification of the main business risks, examines the periodical reports issued by the Internal Audit department.
Officer in charge of Internal Control	Internal Audit Director: this figure is responsible for checking that the ICS is working and appropriate, as well as checking the functionality and suitability of the ICS through an audit plan based on a structured process of analysis and the prioritising of the main risks.
Internal Audit	Guarantees objective and independent “assurance” and “consultancy” with the aim of improving the efficacy and efficiency of company processes with regard to ICS monitoring. Helps the company to pursue its goals through a systematic professional approach that generates value added as it seeks to evaluate and improve risk control and management processes.
Risk Office	Guarantees, in close coordination with the risk “owner” areas: the existence and the implementation of the procedures, processes and series of controls suitable for the identification and evaluation of relevant risks; the definition of policies for corporate risk management.
Supervisory Body	Guarantees the suitability of the Organization & Management Model pursuant to Italian Legislative Decree 231/2001, monitors its observance, promotes initiatives for the teaching and dissemination of the Model and periodically informs the Internal Control Committee and the Board of Directors of any problems that emerge, identifying the corrective actions to be taken.

THE AUDIT PLAN IS CLEARLY DEFINED BUT FLEXIBLE SO IT CAN TAKE ACCOUNT OF NEW REQUIREMENTS THAT EMERGE DURING THE COURSE OF ACTIVITIES

INTERNAL AUDIT PROCESS

Internal Audit activities are carried out by internal personnel to monitor the effectiveness of the Internal Control System: these activities comply with international standards issued by the Institute of Internal Auditors (IIA).

The Audit Plan is established according to two principles:

- **the creation of a multi-year plan** structured over three years, with the aim of guaranteeing coverage during the period of all macro-processes (identified by the Enterprise Model);
- **the definition of a risk-based plan** based on the potential risk identified by the Business Process Risk Assessment or internal evaluations.

The annual planning of activities takes account of the following elements: management requests;

- requests from company entities (Internal Control Committee, Supervisory Bodies and Board of Statutory Auditors);
- any requirements that the Internal Audit Director may have when carrying out roles related to the post of Officer in charge of Internal Control;
- results from previous Audits (follow-ups);
- regulatory changes.

The Annual Audit Plan must represent an established, but not rigid, operational objective. The flexibility of the Plan enables it to take account of any changes that become necessary during the period, following requirements that emerged at a later stage and the emergence of new developments and circumstances.

Activities can be classified as follows:

- **Audit:** activities designed to **analyse a process, understand risks, identify and verify the functioning** of the controls established and suggest corrective actions. Following each audit an evaluation of the adequacy and effectiveness of the ICS is expressed.
- **Follow-up:** activities designed to verify the implementation of the corrective actions formulated during the audit (Action Plans).
- **Monitoring:** activities designed to **verify the respect for the established rules** and monitoring protocols adopted: for example Internal Audit conduct to verify the functioning of the protocols pursuant to Italian Legislative Decree 231/01.

FINAL BALANCE OF AUDIT ACTIVITIES 2011

Auditing activities	13
Follow-up activities	9
Monitoring pursuant to Leg. Decree 231/01	11

WHAT IS ENTERPRISE RISK MANAGEMENT?

Enterprise Risk Management (ERM) was published in 2004 by the Committee of Sponsoring Organizations of the Treadway Commission (CoSO).

The framework describes the most important principles, components and concepts of enterprise risk management and provides a detailed roadmap to identify and manage risk. The ERM is based on Internal Control - Integrated Framework, the best-known and most widely distributed international standard for the internal control system, published in 1992 again by the CoSO ■

RISK MANAGEMENT PROCESS

As well as highlighting an incredible series of fraudulent activities, the major financial scandals of recent years also underlined the inadequacy of traditional internal control systems, overly concentrated on monitoring activities and not paying sufficient attention to the relationship between governance and risk management, a component that was only afforded a marginal role.

According to the current definition, however, **risk management is perceived as essential in management activities**, closely connected with both Corporate Governance (with top management needing to receive all necessary information for effective risk management) and the Internal Control System (in order to guarantee the accurate monitoring of the risks to which company activities are exposed).

This evolution in the thought process has resulted in a transition from a moni-

toring and compliance approach (particularly in terms of accounting) to a vision whereby **risk management becomes an integral part of internal control systems**, a move from a reactionary approach to an approach based on anticipation and proactiveness that can create value for stakeholders.

Given the structural changes that our Group has undergone in recent years, a decision was made to **align the risk management system with the company's new requirements** paying particular attention to the dissemination of information on the functioning of the Internal Control System at all levels of the organisation.

Specific organisational responsibilities were established and an integrated risk management process was launched based on internationally-shared Enterprise Risk Management (ERM) principles with particular reference to the CoSO framework (promoted by "The Committee of Sponsoring Organizations of the Treadway Commission").

**RISK MANAGEMENT
IS BASED ON A
PROACTIVE AND
FORWARD-THINKING
APPROACH
THAT CREATES
VALUE FOR
STAKEHOLDERS**

More specifically, with regard to the figures involved in the process the following were set up:

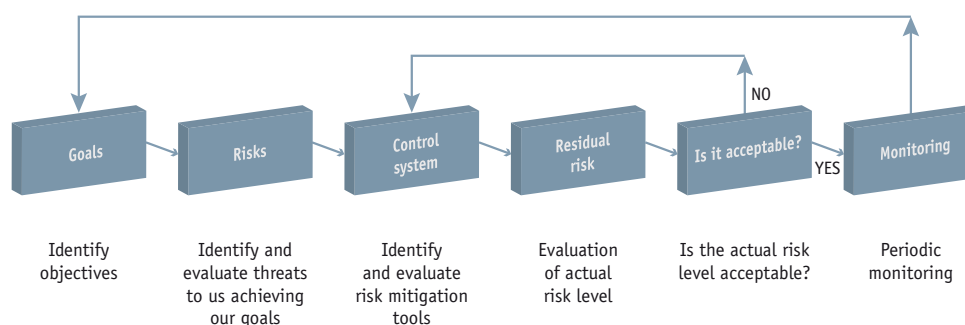
- the **Risk Office**, which has the goal of guaranteeing the existence and implementation of procedures, processes and a series of controls for the identification, evaluation and management of risks connected with the Group's activities according to the indications of the top management and the Internal Control Committee, and in compliance with all laws and regulations in force;
- the **Financial Risk Management**

Office, which guarantees specialised support in the evaluation of financial, insurance and market risk management operations as well as respect for general market risk management policies;

- **a series of committees** (Credit, Risk, Investment, etc.) which carry out secondary monitoring activities in their areas of responsibility and support the decisions of the top management;

- **the various company departments** which, as part of their role, supervise risk areas from an operations perspective.

RISK ANALYSIS PROCESS



In 2011 we were able to constantly monitor risk levels and manage any eventual criticalities that emerged. This was possible thanks to specific business strategy review and risk management processes, efforts to continuously adapt processes, supporting procedures and information systems, and analysis and benchmark projects, as well as regular monitoring activities and reports to the top management. As regards the

implementation of the new integrated risk management process, in 2011 the Risk Office identified potential events (internal and external) that could negatively affect the Group's ability to meet its strategic goals, i.e. those of greatest significance for the business.

Risks were identified considering the organisational and business structure and were classified into four categories: **strategic, operational, financial and**

**THE RISK MATRIX
PROVIDES THE
MANAGEMENT
WITH AN
OVERVIEW**

compliance (to laws and regulations).

Thereafter, risks were measured on the basis of the Control Risk Self-Assessment (CRSA) methodology, combining two different parameters: probability and impact.

This evaluation, initially focused on “inherent” risk (in the absence of any mitigating actions by the management), was later placed at the “residual” risk level considering the existing controls. With the identification of relevant risk factors to monitor and manage, as well as the identification of monitoring-management responsibilities, the risk assessment process concluded.

If you would like a more detailed analysis of the identified risks please refer to the “Risks and uncertainties” section of the Report.

A BODY THAT MONITORS ADMINISTRATIVE RESPONSIBILITY

In 2001, Italian Legislative Decree no. 231 introduced a new administrative responsibility regime to Italian law that makes it possible to touch the assets of entities, and therefore the economic interests of shareholders, that have benefitted from the commitment of certain crimes. The Group has adopted a Code of Ethics and the principal Group companies have adopted an Organisation and Management Model – periodically updated in order to ensure compliance with regulatory, company and organisational modifications - and appointed a Supervisory Body made up of an Independent Director in the role of Chairman, an Internal Audit Director and a

COMPLIANCE 231/01 – A NEW ORGANISATION AND MANAGEMENT MODEL

During the second half of 2011 we carried out a series of activities to ensure that we continue to respect the concept of compliance pursuant to Legislative Decree 231/01, and we developed, when drafting the new Model 231, a new operating methodology consistent with best practices and guidelines in the sector. The new ERG S.p.A. Organisation and Management Model pursuant to Legislative Decree 231/01 was approved by the Board of Directors and stems from the need to **redefine the risk profiles in the light of the company and organisational changes of the last two years** and new crimes introduced (so-called “Environmental crimes”). Also approved were the “Guidelines for the adoption of the Organisation and Management Model pursuant to Legislative Decree 231/2001 in the ERG Group companies”, through which the parent company aims to provide the methodological indications that the individual companies must follow in their independent management of compliance 231. The Models are published on the ERG website and the ERGgate intranet ■

**ALL REPORTS
SHOULD BE
ADDRESSED TO
ODV@ERG.IT**

Risk Office Manager. This body is responsible for verifying compliance with the Code of Ethics, monitoring the correct and effective operation of “Model 231” and coordinating updating operations. In order to carry out its activities the Supervisory Body drafts an annual plan that is presented to the Board of Directors by 31 December of each year, before the Risk Office and Internal Audit department put it into effect.

The Supervisory Body of parent company ERG is also responsible for guiding and coordinating the Supervisory Bodies appointed by other Group companies as concerns the methodologies they should use, and coordinating training activities.

As regards compliance, pursuant to Leg. Decree 231/01, ERG has given the Internal Audit department a supporting

role to the Supervisory Body in its verification and monitoring activities with regard to respect for the rules defined in the Model, while the Risk Office has been given the role of providing support in Model adoption and updating activities.

REPORTS TO THE SUPERVISORY BOARD

The Supervisory Body has the task of monitoring the correct functioning, efficacy and observance of the Model; anybody can notify the Supervisory Body of violations or suspected violations of the prescriptions of the Code of Ethics and/or Model by sending an email to odv@erg.it.

INTERNAL MONITORING OF THE FINANCIAL REPORTING AND DISCLOSURE PROCESS

Our Group has defined its own internal risk management and control system in relation to the financial reporting and disclosure process at consolidated level. The goal of this system is to significantly mitigate the risks in terms of the reliability, accuracy and timeliness of the financial reporting and disclosure process.

The Model was presented to the Internal Control Committee of parent company ERG S.p.A., quoted on the stock exchange, and is applied, from a logical

231 TRAINING

In the first part of 2011 all of the Group’s personnel completed an online training course on the issues of the administrative responsibility of entities, the main types of crime and codes of conduct, as well as the compliance tools developed by the company. The training activities were carried out through a specific computer platform that is able to trace the activities carried out by every single participant ■

THE GROUP'S NEW CODE OF ETHICS

Aside from the provisions of the laws in force, the Code of Ethics represents a valid **tool for raising the awareness** of all employees and collaborators and all other stakeholders (Shareholders, Public Administration, clients, suppliers, agents, generic third parties etc.) so they can carry out their activities adopting correct and transparent conduct in line with the values upheld by the ERG Group. On 10 November 2011 the Board of Directors **approved a new version** of the Code which, as well as meeting the need to adapt to the best practices and guidelines in the sector, seeks to strengthen our message to our stakeholders as regards the commitment to ensuring that company activities follow an ethically correct line of conduct. The Code of Ethics is adopted by all Group companies, and must be applied by all addressees in all their activities and in any country in which they operate. Furthermore, the Group will only agree to work with a partner if they make a similar commitment to respecting the contents and principles of the Code ■

and methodological perspective and as regards the principles of control and correct processes, to the ERG Group companies to whom it has been issued via publication on the company intranet and communications to all personnel. With its resolution of 15 December 2009 the Board of Directors appointed the Manager responsible for preparing the company's financial reports.

The ERG Group decided to adopt a working method that involves the following steps:

- identification and assessment of the risks applicable to financial reporting;
- identification of controls for risks identified both at entity level and process level;
- evaluation of controls and management of the monitoring process in

terms both of design and of operations and effectiveness, with the aim of reducing risks to a level considered "acceptable" (information flows, management of "gaps", remedial action plans, reporting system, etc.).

The entire process is managed by the Processes and Compliance department which works with the Administration Manager and, according to internal practices, regulates all administrative/accounting procedures mapping and aligning those in force, planning intervention at process and information system level or procedures to remedy any absence of control ■

THE DIALOGUE WITH INSTITUTIONAL STAKEHOLDERS

A relationship defined by transparency

Monitoring evolving trends and the requests emerging from the political and administrative spheres is very important if we are to better guide the strategic company choices we make in our business sectors.

One of the tools we use to carry out this task is constant dialogue with Bodies and Institutions at different levels through active collaboration, making our knowhow and specific expertise available to them.

ERG's supervisory activities in the institutional sphere focus on the activities of entrepreneurial trade associations, locally, nationally and at European level (Confindustria, Assoelettrica, Concawe, Unione Petrolifera, etc.). With these, relationships are maintained by our representatives in statutory bodies and through participation in specific commissions or round tables.

In accordance with our Code of Ethics and our Organisational Model (pursuant to Leg. Decree 231/01), it should be noted that our Group makes no direct or indirect contributions, in any form, to

political or trade union parties, movements, committees or organisations, nor to their representatives or candidates, with the exception of cases due to specific current regulations.

ERG considers the integrity of its relations, its image and reputation to be values that, as common assets, must be protected and developed in all areas. There can be no justification for any behaviour on the part of the Corporate Governance bodies (or employees and collaborators in general), when carrying out tasks or roles that have been entrusted to them, that is contrary to the laws in force, the Code of Ethics or internal regulations, even if motivated by the pursuit of the company's interests. Such conduct is explicitly forbidden and will result in the company adopting sanctions.

INTERNATIONAL ROUND TABLE

In March 2010, ERG opened an office in Brussels with the aim of supporting the international growth of the business.

The main goal is to provide the Group's top management with an overview of the legislative panorama and its evolution in the area of energy (thermoelectric and renewable) and petroleum.

The monitoring process includes both the overall regulatory framework and individual acts.

**INTEGRITY,
IMAGE AND
REPUTATION
ARE VALUES THAT
ERG PROTECTS
AND CULTIVATES
IN ALL AREAS**

The context in which we operate includes all European Community institutions: the Council that represents the Governments, the Parliament that represents the Peoples, the Commissions, which are the technical bodies, and the representatives of the Brussels office.

The activities and dialogue with the latter are facilitated by the transparent relations typical of the European Community: the guarantee of the representatives for each issue, direct contacts and transparent agendas make it possible to manage easily and effectively ■

CSR MANAGEMENT

An integrated management system to guarantee business activities based on sustainability

THE MANAGEMENT OF OUR FOUNDING PRINCIPLES, EXPRESSED IN THE CODE OF ETHICS, IS OUTLINED IN THE SUSTAINABILITY REPORT

In our Group, Corporate Social Responsibility (CSR) is **managed by a specific structure**, established according to a governance model that follows the method adopted within all areas of the Group.

The founding principles of our approach to business are issued by the Board of Directors and summarised, clarified and disseminated via the Code of Ethics, a new version of which was approved in November 2011.

The management of these principles is coordinated by a committee made up of the top management. It is also supervised on a daily basis by a specific structure and monitored through a reporting

system based on KPI which is outlined on an annual basis in the Sustainability Report.

This management system, integrated and coordinated with the principles of CSR, **guarantees that social and environmental issues are at the basis of our business** and guarantees their integration in all daily and development activities.

CSR GOVERNANCE TOOLS

The CSR structure comprises three key elements, each of which with its own specific tasks: the Sustainability Committee, the CSR Initiatives Evaluation Committees and the Sustainability De-

partment. In addition there is also the Supervisory Body with the activities designed to ensure respect for the Code of Ethics.

The Sustainability Committee

This committee comprises our top management and all Line Managers and CEOs of the operating companies.

Meetings are called by the Group Chairman and it deals with:

- **discussing general sustainability issues** applied to the company;
- **analysing periodic reports on environmental and workplace injury performance** providing appropriate guidelines;
- **guiding the reporting process** and drafting the Sustainability Report.

CSR Initiatives Evaluation Committees

As part of the Institutional and International Relations department two work-

ing groups were set up to **analyse all of the requests** that arrive from the community, **choosing the most deserving on the basis of the values they express** and the positive effect they have on the community in question. The first of these two groups is part of the Communications department, in the Genoa office, and analyses and selects activities in which ERG is directly involved.

The second group, known as VIRS (*Valutazione Iniziative Responsabilità Sociale* - Social Responsibility Initiatives Evaluation) involves representatives of ERG and ISAB and examines the initiatives proposed by Sicily, the territory of reference for the industrial activities of the two companies.

Sustainability Department

This department **supervises daily activities** together with the onsite Health, Safety and Environment (HSE) departments, **analysing KPI trends**. It has the task of making periodical reports to the

WHAT ARE KPI?

The acronym KPI stands for Key Performance Indicators.

It is an index that monitors company performance trends.

There are four main types:

- quantitative indicators, which measure the volume of the process work;
- quality indicators, which evaluate the quality of the process output according to specific standards (e.g. relations with an output model or customer satisfaction);
- cost indicators;
- service or time indicators: these measure response times from the launch of the process until its conclusion ■

THE SAFETY OF PEOPLE AND ENVIRONMENTAL PROTECTION

ARE ELEMENTS THAT UNDERPIN OUR APPROACH TO BUSINESS

Sustainability Committee as regards HSE, as well as coordinating activities for the drafting of the Sustainability Report. Another of its tasks is that of acting as a referee for the integration of CSR policies within the Group.

Supervisory Body (pursuant to Italian Legislative Decree 231/2001)

As well as the tasks already outlined relative to the monitoring of the Administrative Responsibility of the bodies, the Supervisory Body also has the task of monitoring compliance with the principles in the Code of Ethics with specific reference to those regarding respect for human rights and the equal opportunities guaranteed to all employees and collaborators.

POLICY AND CERTIFICATION TO PROTECT HEALTH, SAFETY AND THE ENVIRONMENT

The significant attention our Group focuses on Health, Safety and the Environment is demonstrated by our ongoing activities in the area of HSE policies and certification.

HSE policy

In 2011 **we published the new version of the Health, Safety and Environment Policy**. The text was analysed by the Sustainability Committee which met on 12 December 2011. The ap-

proved document was signed by the Chairman and distributed internally, via intranet and posters, and externally, via the website.

The previous edition of the policy dated back to August 2003. Since then the Group has undergone significant reorganisation, the Code of Ethics has been reviewed, reiterating the commitment to HSE issues even more strongly, and the regulatory framework has changed considerably. We therefore thought it necessary to produce an updated document that takes account of all of these changes and presents them in the context of our “way of doing business”, producing a **more up-to-date “point of reference” for the Group companies**.

Particular emphasis was laid on the principle according to which the “safety of people and environmental protection” are key elements that underpin our business approach. We then emphasised the importance of the Code of Ethics and ethics in our relations with stakeholders. Finally, close attention was focused on the appropriateness of verifying and certifying the HSE management systems according to recognised standards (ISO 14001 and OHSAS 18001).

HSE certification

The implementation and development of integrated, effective and efficient management systems for **reducing**

specific risks to a minimum is one of our sustainability commitments. This is down to our nature and is intrinsic to our way of doing business:

- ➔ the Group's mission and vision are expressed in the contributions it makes to the building of a future that is both "energetic and sustainable": taking all management measures that can help to meet this goal is a natural consequence;
- ➔ we take a mid to long-term business approach that guarantees truly sustainable development through energy efficiency. Obtaining certification means implementing a virtuous mechanism that, as well as providing value added to a producer that is "genetically" in touch with environmental problems, implements and innovates corporate management strategies, optimises resources and reduces waste;
- ➔ the adoption of certified management systems is a guarantee, for the community and the competent authorities, that consolidated and periodically checked procedures, as well as suitable analyses and controls (also conforming to regulatory requirements), are implemented at the Group's sites to guarantee the protection of the health of workers and the environment ■



ERG PLANT CERTIFICATION



ISO 14001



ISO 14001



OHSAS 18001

SUSTAINABILITY REPORT

For 5 years this document has communicated our goals and illustrated our performance to all stakeholders

Our Sustainability Report celebrates its 5th birthday. During this long period the Group has evolved significantly and everything that has happened, step by step, has been outlined in this document. Indeed the Report always has been, and will continue to be **an important tool for communicating objectives and performance levels in the environmental, social and economic sectors** with the aim of encouraging dialogue with internal and external stakeholders.

In terms of content, we set ourselves the goal of enriching the information we provide on a yearly basis: the data and information gathering process involves all Group departments and companies, under the supervision of the Sustainability Committee. Issued on an annual basis, the Report is approved by the Board of Directors of ERG.

Methodological references

This document was drafted in accordance with the **"Sustainability Report-**

ing Guidelines GRI G 3.1" published in 2011 by the Global Reporting Initiative, which are a well-known international reference model for preparing sustainability reports. As in 2010, the information gathered in 2011 was integrated with that requested by the Electric Utilities Sector Supplement approved in 2009 and specifically for companies in the electric utilities sector.

The information and data contained in the document refer to the subsidiaries at 31 December 2011 and reflect the Group's consolidation scope in accordance with IAS-IFRS accounting standards: **the economic/financial values are based on the ERG Group's consolidated financial statements**, which have already been audited.

Data on personnel, work organisation and training also refer to the aforementioned consolidation scope unless otherwise indicated at the bottom of the tables.

The principal atmospheric emissions are calculated through continuous measurements at emission points and, where necessary, by intermittent measurements integrated with estimates that take into account both the combustion systems and the quality of the fuels used. In particular, **CO₂ emissions are certified by an independent third party**, as provided for by the law.

THE GATHERING OF DATA AND INFORMATION INVOLVES ALL OF THE GROUP'S DEPARTMENTS AND COMPANIES, UNDER THE SUPERVISION OF THE SUSTAINABILITY COMMITTEE

SEVEN REQUISITES GUARANTEE THE QUALITY OF THE INFORMATION IN THE REPORT

Guaranteeing quality information

To guarantee the necessary quality of the information contained in the Report, everything that we publish has to fulfil seven requisites:

- **content:** the information presented may really interest stakeholders;
- **comprehensiveness:** all relevant issues and indicators are covered;
- **balance:** the issues are presented transparently and objectively irrespective of their quality;
- **comparability:** all data is presented in a 3-year context to make it easy to compare and analyse the evolution of the indicators over time;
- **accuracy:** the presented data is calculated very accurately. Any errors relating to previous years are corrected and duly highlighted;
- **timeliness:** the Report is issued during the year, straight after the publication of the financial statements;
- **clarity:** a straightforward tone is used so it can easily be understood by all stakeholders.

External auditing and distribution

Once again, in 2011 we **achieved Level A status with regard to the application of GRI guidelines** and the completeness of the information included in the Report was verified by GRI.

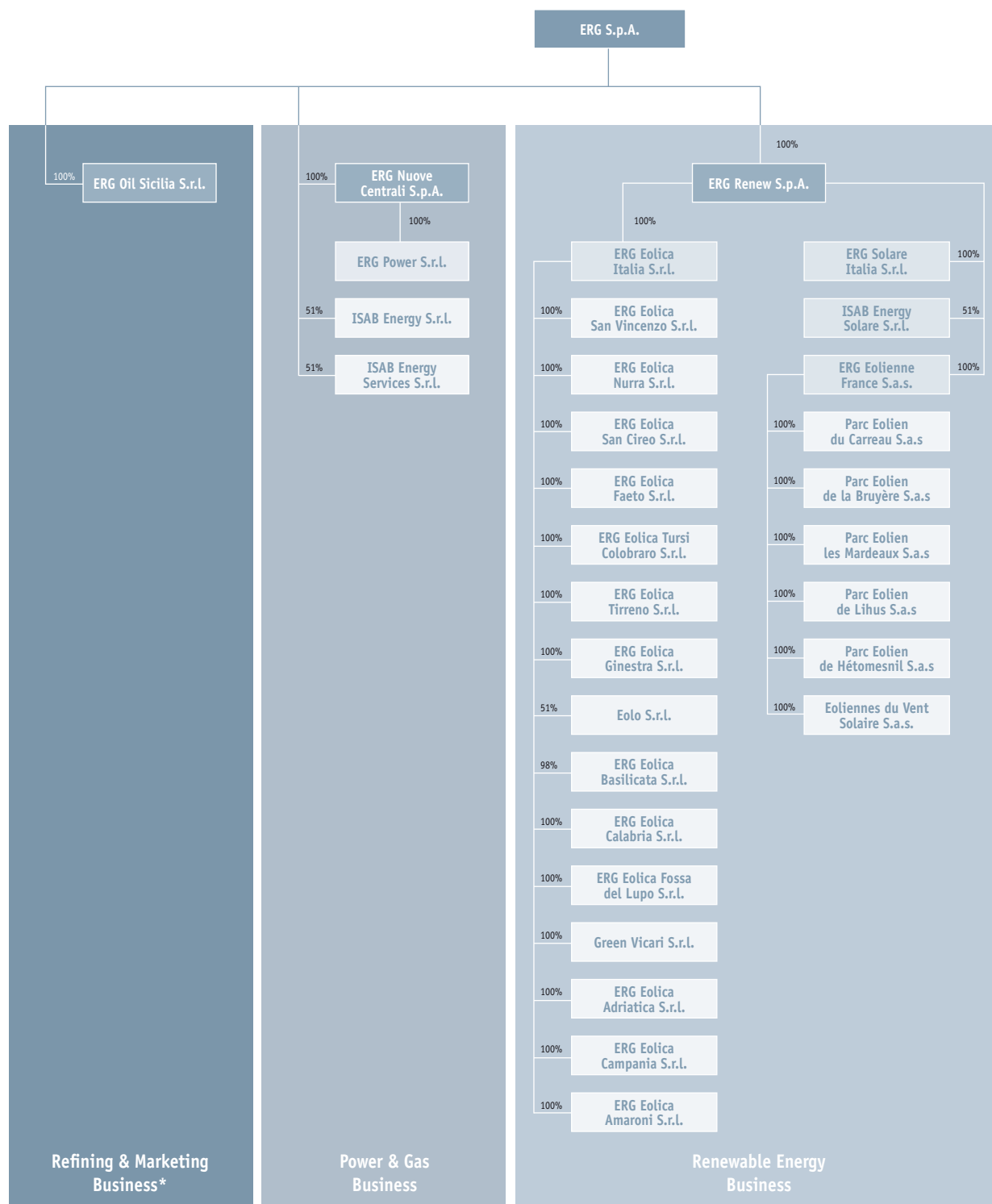
The document is **widely distributed both within the Group, via intranet, and externally through the internet** where it is available in both a downloadable version and a navigable version. We send either a printed or a digital copy of the document to the main stakeholders in the community.

Finally, to maximise the distribution of the document **we send a copy to anybody that requests one by sending an email to sustainability@erg.it**. This new distribution policy, adopted after the 2009 Report, has enabled us to develop contacts with an increasing number of interested stakeholders and to reduce the number of printed copies by over 60% in just two years ■

WHAT IS THE GLOBAL REPORTING INITIATIVE?

The Global Reporting Initiative (GRI) is a non-profit organisation that seeks to contribute to the creation of global economic sustainability providing sustainability parameters (GRI indices) that shape the reporting activities of businesses. Through the guidelines contained in the "Sustainability Reporting Framework" all businesses and organizations are in a position to measure their economic, social, environmental and governance performances ■

SCOPE OF 2011 SUSTAINABILITY REPORT



* The joint ventures TotalErg S.p.A. and ISAB S.r.l. are excluded from the reporting boundary.

STAKEHOLDER ANALYSIS

We are strongly committed to getting to know and listening to our stakeholders so we can act in their interests

OUR RELATIONS
WITH OUR
STAKEHOLDERS
ARE BASED ON THE
PRINCIPLES OF
INTEGRITY,
HONESTY,
TRANSPARENCY
AND ACCURACY

According to classic definition by R. Edward Freeman, when we talk about stakeholders we mean “all easily identifiable individuals and groups who can influence or be influenced by the Group’s activities in terms of products, policies and work processes”. At ERG we have always placed great emphasis on dialogue and the requests of the community and our stakeholders. **Paying close attention to them is crucial if we are to understand their expectations and interests** and, as a consequence, define and update commitments and specific economic, social and environmental responsibility objectives creating mid to long-term value for the business and the social context.

In 2006, thanks to our partnership with a company specialised in “social analysis”, we conducted a survey on a large sample of the population, opinion leaders and opinion makers aimed at identifying the needs and preferences of the community so as to examine the community’s perception of ERG and prepare a scale of priority expectations.

The survey was repeated in 2009 to get some up-to-date feedback on activities carried out in the community of reference, to evaluate the popularity of the actions performed over the previous three years and to trace new guidelines for action.

The results of the analysis highlighted the **growing appreciation among stakeholders for the activities ERG has performed within the community.**

As a result, when developing new activities we have maintained an approach that is consistent with the actions carried out in the past. We have concentrated our activities on the areas of social development, safeguarding the environment and the health of the community, and promoting culture and sport among the young. In 2010 ERG further advanced the process of **identifying its stakeholders** through a series of interviews with those that have most external contact.

In 2011, meanwhile, we held a working session aimed at **identifying the expectations that each category of stakeholder** has of our Group. The 2011 Sustainability Report was therefore structured in such a way as to provide an answer to this in the simplest and most exhaustive way.

The Group’s relations with both its internal and external stakeholders are based on the fundamental values detailed in the Code of Ethics, i.e. moral integrity and personal honesty, transparency and accuracy ■



STAKEHOLDER	STAKEHOLDER EXPECTATIONS
Institutions European Union, Governments, Ministries, Regulatory bodies, Public Administration, Trade associations.	Collaboration, technical support and sharing of information. Participation in the territorial planning of activities. Respect for the legislation in force in all countries in which the Group operates.
Financial community	Creation of value. Corporate Governance and risk management. Transparency and timeliness with regard to economic and financial information.
Shareholders	Creation of value for shareholders. Corporate Governance and risk management. Representation of minorities.
Environment	Prevention and environmental respect underpins corporate strategy. Safeguarding environmental matrices (air, water, soil) and continuous monitoring of results.
Local communities Cultural, religious and research associations, health service, schools and universities, NGOs, Committees of citizens, residents close to production plants.	Consideration of their requirements. Contribution to and support for local initiatives and local communities. Access to information. Safeguarding of assets and environment. Health and safety.
People and trade union organisations Workers with employee contracts, workers without employee contracts, trade unions.	Equal opportunities. Workplace safety. Professional development for all employee categories. Participation in company life and all related initiatives. Work-life balance. Stability.
Suppliers	Respect for all competition and antitrust laws in the countries in which it operates. The safety of in-field activities.
Customers	Maximising value for the consumer. Quality and continuity in the supply of electricity and steam (site customers). Product quality (retail customers).
Media	Complete, timely and transparent information.

SUSTAINABILITY COMMITMENTS

	AREA OF COMMITMENT	STATUS
ENERGY PACKAGE	<ul style="list-style-type: none"> ■ Increase the production of electricity from renewable sources, in particular wind power 	<ul style="list-style-type: none"> ■ Production has increased 11-fold since 2006
	<ul style="list-style-type: none"> ■ Improve the energy efficiency of thermoelectric production by 20% by 2011 (baseline 2006) 	<ul style="list-style-type: none"> ■ Energy efficiency improvement of 24.3%
INNOVATION	<ul style="list-style-type: none"> ■ Support the Group strategy with appropriate initiatives in the research and innovation field 	<ul style="list-style-type: none"> ■ Research and development projects launched in the thermovoltaic and organic photovoltaic sector
HSE MANAGEMENT SYSTEMS	<ul style="list-style-type: none"> ■ Complete ISO 14001 and OHSAS 18001 certification for all industrial sites by 2012 	<ul style="list-style-type: none"> ■ 80% of plants ISO 14001 and OHSAS 18001 certified
SAFEGUARDING THE ENVIRONMENT	<ul style="list-style-type: none"> ■ Improve the atmospheric emissions of the thermoelectric installations by 2013, through the application of the "best techniques available" 	<ul style="list-style-type: none"> ■ Ongoing reduction of emissions of all macro-pollutants
	<ul style="list-style-type: none"> ■ Avoid 1.2 Mt of CO₂ emissions by 2013 (baseline 2006) 	<ul style="list-style-type: none"> ■ 893 kt of CO₂ emissions avoided thanks to renewable energies
	<ul style="list-style-type: none"> ■ Contribute to the renovation of areas of the thermoelectric plants no longer in use by 2015 	<ul style="list-style-type: none"> ■ Operations launched to demolish the plants
SAFETY	<ul style="list-style-type: none"> ■ Consolidate the safety culture, both within the company and for third party companies, pursuing the goal of "zero injuries" 	<ul style="list-style-type: none"> ■ "Zero injuries" at industrial sites
PEOPLE	<ul style="list-style-type: none"> ■ Pursue managerial excellence through the system of corporate expertise and the guidelines of the ERG managerial development model 	<ul style="list-style-type: none"> ■ Over 24,000 hours of training in 2011 with an average of 4.4 days per employee
	<ul style="list-style-type: none"> ■ Improve relations with personnel through engagement processes and communication tools 	<ul style="list-style-type: none"> ■ TEAM project launched
COMMUNITY	<ul style="list-style-type: none"> ■ Facilitate the development of the local communities through economic, social and environmental initiatives in the field 	<ul style="list-style-type: none"> ■ Around EUR 2 million spent in 2011 for activities in the communities
COMMUNICATION	<ul style="list-style-type: none"> ■ Communicate with and inform our stakeholders in an increasingly complete, transparent and timely manner 	<ul style="list-style-type: none"> ■ In the 2011 webranking we climbed 3 positions as a website and 2 positions in terms of sustainability
SUPPLIERS	<ul style="list-style-type: none"> ■ Consolidate a system of qualifying and evaluating suppliers on the basis of objective principles and with an eye on issues relating to Health, Safety and the Environment 	<ul style="list-style-type: none"> ■ 1,674 qualified suppliers on the new web platform

1

ECONOMIC RESPONSIBILITY

■ 11,095

MILLION EURO
ECONOMIC VALUE
DISTRIBUTED

■ 2

MILLION EURO
OF COMPENSATION
FOR THE COMMUNITY

ECONOMIC
responsibility
added value created
transparency

■ 560_{MW}
OF INSTALLED CAPACITY
IN RENEWABLE SOURCES

■ 7,436_{GWh}
OF ELECTRICITY
PRODUCED

■ 98.5%
AVAILABILITY
OF ITALIAN
WIND FARMS

mic
bility
Sustainable
invest

ECONOMIC VALUE GENERATED AND DISTRIBUTED

ADJUSTED REPLACEMENT COST (MILLION EURO)

	2011	2010	2009
Production value	11,257	9,121	6,216
Economic value distributed	(11,095)	(8,966)	(6,241)
Production costs	(10,727)	(8,568)	(5,850)
Compensation of personnel	(180)	(181)	(178)
Compensation of public administration	(45)	(70)	(10)
Compensation of debt capital ⁽¹⁾	(74)	(64)	(68)
Compensation of risk capital ⁽²⁾	(67)	(81)	(133)
Compensation for the community	(2)	(2)	(2)
Economic value withheld by Group	162	155	(25)
Amortisation and depreciation	247	220	183
Compensation of the company	(85)	(65)	(208)

(1) Interest paid and other financial expenses for indebtedness.

(2) Overall dividends distributed by the Group.

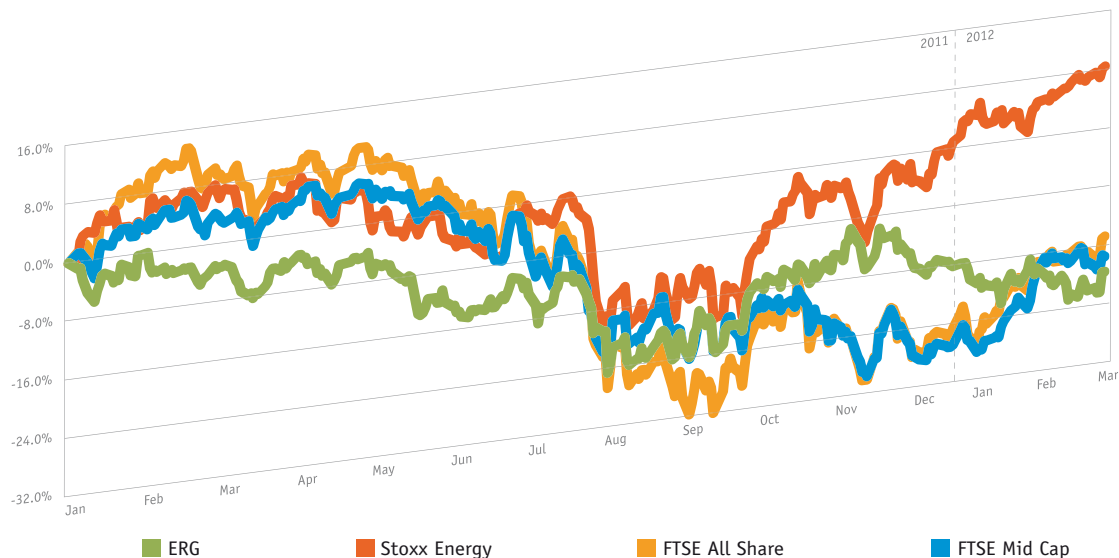
	2011	2010	2009
Net value added	11,257	9,121	6,216
Production costs	(10,727)	(8,568)	(5,850)
Compensation of personnel	(180)	(181)	(178)
Compensation of public administration	(45)	(70)	(10)
Compensation of debt capital	(74)	(64)	(68)
Compensation for the community	(2)	(2)	(2)
Amortisation and depreciation	(247)	(220)	(183)
Result before third party interests	(18)	16	(75)
Result of third party shareholders	(31)	(36)	(5)
Net Group result	(49)	(20)	(80)

THE ERG GROUP ON THE STOCK EXCHANGE

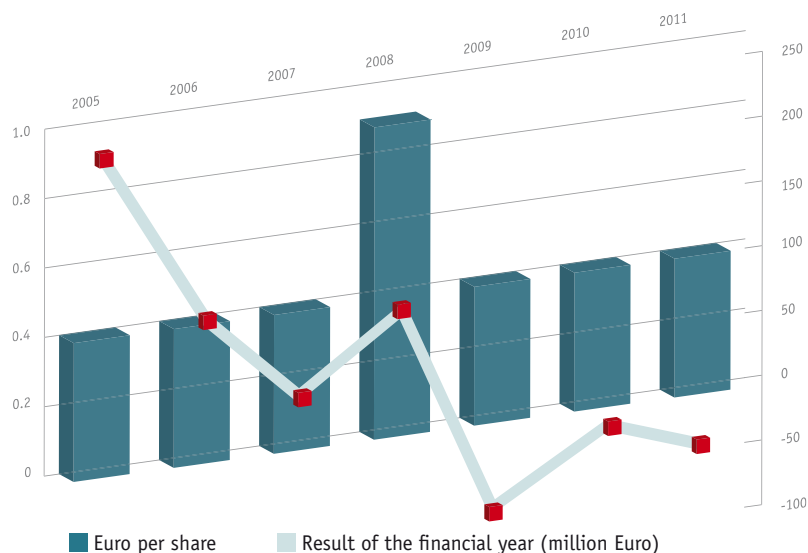
At 31 December 2011 the closing price for ERG shares (Blue Chips) was EUR 8.78, 16% lower than at the end of 2010 following a 1% decrease in the European sector index (Stoxx Energy Index) and a 27% fall in the FTSE All Share Index. At 31 December 2011 capitalisation on the stock exchange amounted to approximately EUR 1,320 million (1,571 million at the end of 2010) ■

ERG ON THE STOCK EXCHANGE

ERG VS. STOXX ENERGY INDEX, FTSE ALL SHARE AND FTSE MID CAP – % VARIATION FROM 1/1/2011 TO 5/3/2012



TREND COMPENSATION OF SHAREHOLDERS IN COMPARISON WITH RESULTS OF THE FINANCIAL YEAR



COMPENSATION OF SHAREHOLDERS

Our Group has always followed a very prudent asset management policy in order to guarantee the long-term continuity of the company. An analysis of financial result trends over the years and related distributed dividends is further evidence of the success of this prudential approach. Although financial results have not been positive in the last 3 years, ERG has been able to satisfactorily compensate the capital invested by its shareholders with a constant dividend over time (in 2008 an extraordinary dividend was paid out following the operation with LUKOIL) ■

PLANT PRODUCTION AND CAPACITY

PLANT	INSTALLED CAPACITY IN MW	PRODUCTION IN GWh			TECHNICAL AVAILABILITY ⁽¹⁾		
		2011	2010	2009	2011	2010	2009
WIND ITALY							
Eolo - Viticuso	9.0	15.2	14.9	15.2	98.7%	98.5%	99.4%
Pian dei Corsi	1.6	1.3	1.2	1.2	91.1%	91.8%	90.7%
San Vincenzo	42.0	68.3	61.4	57.7	98.8%	96.8%	96.6%
San Ciro	30.0	57.8	50.2	49.6	98.9%	96.5%	93.7%
Vicari	37.5	58.4	74.6	59.4	97.8%	90.6%	92.9%
Faeto	24.0	39.8	38.9	26.4	98.2%	98.1%	97.1%
Rotello	40.0	86.3	46.3	–	99.1%	99.5%	–
Ascoli Satriano	61.8	129.3	45.9	–	98.4%	98.5%	–
Fossa del Lupo	97.5	71.7	–	–	–	–	–
Ginestra ⁽²⁾	40.0	18.5	–	–	–	–	–
Bisaccia	23.6	15.4	–	–	–	–	–
Lacedonia	18.0	10.6	–	–	–	–	–
Molinara	25.0	20.4	–	–	–	–	–
Baselice	27.0	18.8	–	–	–	–	–
Foiano di Val Fortore	18.0	14.9	–	–	–	–	–
Total Wind Italy	495.0	626.6	333.4	209.6	98.5%	96.8%	95.3%
WIND FRANCE							
Le Carreau	9.2	19.2	21.6	21.3	97.5%	99.0%	95.1%
Lihus	11.5	20.9	20.7	19.9	98.0%	96.5%	90.7%
Hetomesnil	11.5	21.7	20.9	21.4	98.2%	97.8%	94.7%
La Bruyère	11.5	20.7	23.4	23.7	98.2%	97.3%	96.4%
Les Mardeaux	11.5	18.8	21.6	21.2	98.5%	98.7%	97.3%
Plogastel	9.2	12.2	8.6	–	98.5%	98.8%	–
Total Wind France	64.4	113.5	116.8	107.6	98.17%	98.00%	94.80%
MINI-HYDRO							
Total Mini-Hydro	–	–	2.7	4.9	–	–	–
PHOTOVOLTAIC							
ISAB Energy Solare	1.0	0.6	–	–	–	–	–
Total Photovoltaic	1.0	0.6	–	–	–	–	–
TOTAL RENEWABLE SOURCES							
	560.4	740.7	452.9	322.1	–	–	–
THERMOELECTRIC							
ERG Power	480	3,041	2,903	687	⁽³⁾ 98.2%	–	–
ISAB Energy	528	3,655	3,331	2,005	84.9%	–	–
TOTAL THERMOELECTRIC	1,008	6,696	6,234	2,692		–	–
TOTAL ELECTRICITY PRODUCTION							
		7,436	6,688	3,009			

(1) The total value is calculated as the weighted mean of the individual technical availabilities as against the installed capacity of the farm.

(2) At 31 December 2011 the farm, authorised for 40 MW, was exercising 28 MW.

(3) Figure refers exclusively to CCGT.

TRANSPARENCY AND TIMELINESS FOR INVESTORS

The Investor Relations Department guarantees constant communications with the financial community

THE INVESTOR
RELATIONS
DEPARTMENT
IS FOCUSED ON
MAINTAINING
AND
DEVELOPING
RELATIONS
WITH ANALYSTS,
SHAREHOLDERS
AND INVESTORS

Our Group has always maintained constant relations with the market and financial community, in compliance with current regulations on the disclosure of privileged and confidential information. Through our structures, as well as targeted company procedures, we can guarantee the **utmost transparency and timeliness of our communication activities**, with the goal of punctually providing each investor with all information they need to be able to make their evaluations and investment choices.

More specifically, the Investor Relations Department serves as a link between our Group and the financial community. It is specifically entrusted

with maintaining and developing relations with analysts, shareholders and institutional investors, both for equity and fixed income.

TRANSPARENCY AND TIMELINESS AT THE SERVICE OF FINANCIAL MARKETS

The aim of our attentive financial communications activities is to **publish understandable information on the company's economic/financial performance**, its development prospects and the strategic guidelines implemented by the management, and to make sure this information is comprehensible to the market.

Transparent and punctual communication is essential for **spreading the Group's values** (particularly in the event of excessive fluctuations on the stock exchange during negative economic climates), raising awareness within

ERG AND ECONOMIC RESPONSIBILITY

Our strategy is to create a diversified energy Group whose main goal is to create long-term value through the growth of profitability and the constant reduction of the dependence on volatile external sources, also through the balanced management of the portfolio.

ERG's growth strategy, strongly focused on renewable energy sources, also includes intense activity in the field of research and innovation ■

the market on the strategies undertaken and promptly responding – through the Investor Relations Department – to the questions posed by analysts and investors.

FINANCIAL COMMUNICATION TOOLS

Our financial communications are developed through **contacts with financial analysts** (both buy-side and sell-side), and **encounters with institutional investors** in both one-on-one meetings and national and at international road shows.

The company website www.erg.it, structured in line with best practices, is another essential tool for ensuring thorough and constantly updated communications and also includes specific sections dedicated to the Press, Investor Relations and Corporate Governance.

The website includes all press communications, financial statements and reports, company presentations, documents relative to shareholder's meetings and all corporate information required by current regulations. In general we provide investors with all necessary documentation so they can form an opinion of the company and its activities.

In addition, **the website also has webcast and conference call presentations on the quarterly figures and**

their full transcripts: with the goal of ensuring the broadest and most transparent communications possible, participation in these conferences is an open call to all kinds of analysts and investors.

The constant dialogue with the public and financial community takes place not only through the complete availability of the Investor Relations team, but also a dedicated electronic mailbox used to respond to the information requests often sent by shareholders and anyone interested in the Group and its business ■

**ALL
DOCUMENTS
REQUIRED BY
INVESTORS
TO EVALUATE THE
COMPANY CAN BE
FOUND ON OUR
WEBSITE**



POSITIVE EVALUATION FOR OUR SUSTAINABILITY

A transparent dialogue with sustainability analysts to ensure a greater understanding of our business

ERG WAS ADDED TO THE LIST OF SUSTAINABLE BUSINESSES

There is one special set of stakeholders that we are always only too happy to dialogue with, obviously with respect for the confidentiality of relevant information, and the principles of transparency, completeness and truthfulness in the disclosure of information, as established by our Code of Ethics: analysts in the field of sustainability.

This is because we believe that dialogue can lead to an improved understanding of our business.

In September 2010 ERG was included on the “Benchmark” and “Leaders” indices in the new series of FTSE ECPI indices: the rating is based on a broad

information base relating to Environmental, Social and Governance (ESG) issues and the positioning achieved was very positive.

These results were confirmed again in 2011. In addition, in 2012 ECPI will use ERG as an energy sector case-study for an analysis that it is carrying out on businesses that have **demonstrated a particular degree of attentiveness to all areas of sustainability.**

In 2011 we offered similar support for the evaluation of another ratings agency, OEKOM. As in the previous case, the preliminary evaluation was shared and information was supplied in order to provide **a more in-depth overview of the company’s workings.**

At the end of the evaluation process, the verdict was “good” and ERG was added to the list of “sustainable” businesses ■

WHO IS ECPI?

ECPI, founded in 1997, was the first Italian company to deal exclusively with socially responsible investments and sustainable finance. It is active in research, the assignment of ratings and the creation of sustainability indices. ECPI promotes and works to integrate traditional financial analyses with non-financial analysis, founded on intangible values and non-traditional risk factors such as environmental, social and governance factors, commonly known as ESG ■

ERG POWER ENTERS DISPATCHING SERVICES MARKET

A move that has enabled us to fully exploit all of our plant and organisational potential

Three key elements are at the basis of the ERG Power investment (the new CCGT plant): **efficiency, environmental sustainability and economic sustainability**. These weren't goals in their own right but the key to the development of the 2011 projects and in particular the joining of the Dispatching Services Market (DSM).

The DSM is the **tool through which Terna** (manager of the national grid) **avails itself of the electricity** required for the management and control of the national electricity grid, guaranteeing the balance between production and consumption at all times.

Naturally the technical requirements of balancing require timely modularity throughout the day as well as fast reaction times in the event of specific intervention requests from the Manager. Given the nature of the services exchanged in this market, **Terna requests suitable plant performances**, as established by the Network Code,



The ISAB Energy path

and telecommunications systems that guarantee reliability and safety.

The entrance into the DSM of the ERG Power plant, unique in Italy for the various types of plants located within it (as well as the production of electricity the plant also supplies steam to many businesses at the Priolo site), has made it necessary to seek innovative solutions in order to **develop an integrated system for the management of each of the four turbines present** and for the regulation of the utilities supplied. As such, to guarantee the plant perfor-

ERG POWER'S ENTRY INTO THE DSM HAS MADE IT NECESSARY TO CONSTANTLY SEEK INNOVATIVE SOLUTIONS

mances established by the Network Code, new advanced automation systems have been developed as well as new hardware and software, telecommunications systems and evolutions of measuring systems.

As well as the technical aspects, it was also necessary to reorganise the Energy Management Department at the Priolo site so that the staff could provide 24-hour coverage.

Entering this market has therefore enabled us to fully exploit all of our plant

and organisational potential. The elevated capacity to “modulate” ERG Power electricity production is therefore one of the real strengths of the plant, representing for Terna a **reserve source** for the production of electricity that can be managed in real time to resolve congestion, balance problems and, in general, network safety problems.

The project was completed, by the established deadline, with participation in the Dispatching Services Market confirmed by Terna on 30 September 2011 ■

RAINBOW, AN IMPORTANT COMPANY EFFICIENCY PROJECT

The ISAB Energy IGCC plant has put itself to the test, analysing and improving its business processes in order to meet modern requirements

Aside from the purely statistical aspects and results, it is essential that projects also guarantee **long-lasting value**: they must become a solid part of the Group’s foundations. At the same

time they must guarantee sustainable working methods for those involved.

On the basis of these assumptions, in a highly dynamic scenario such as the one we are currently experiencing, the **ISAB Energy IGCC plant sought to put itself to the test**. Indeed, given the uncertainties of the present (mainly regulatory in nature) and the recent past (technical in nature), this important plant has decided to remodel its future.

The impetus for this change comes from the squeeze that the Regulatory Body is applying to subsidies, which until now have contributed to the revenues of all plants that benefit from the CIP 6/92 regulation.

TO REDUCE COSTS
THE FOCUS HAS
BEEN PLACED ON
**MAKING
PROCESSES
MORE
EFFICIENT
RATHER THAN
MAKING STAFF
OR BUDGET CUTS**

This was how the Rainbow project at ISAB Energy was established, thanks to which many business processes, in the direction of plants, in the management and the optimisation of fixed and variable costs, have been reviewed.

One new aspect of the project was the way in which cost savings were achieved: rather than the “classic” reduction of staff numbers or the budget, the emphasis was placed on the **efficiency opportunities that derive from an analysis of the processes.**

There was a shift from a “hereditary” approach in the review of the budget to a “zero based” approach, and it was therefore rewritten on the basis of what was really required.

The company was strongly behind the Rainbow project: the sponsors are the top management of ISAB Energy Services (the company that manages operational activities at ISAB Energy) assisted by all directors and some staff departments.

During the first phase – from March to June – **the company processes in each department** (50 in total) were mapped to identify strengths, weaknesses, possible areas of improvement, greater efficiency, areas where response times could be shortened and forecasting improved. Subsequently the **8 priority processes were**

identified, which were immediately the subject of further analysis. In addition to this analysis there were also the random suggestions collected in the “ideas tray” specially set up and located in various areas of the plant, from which over 50 precise opportunities resulted.

Each opportunity selected, and therefore **every project, is entrusted to an Owner** who, with the help of a working group, answers to the sponsor with regard to the fulfilment and implementation of the task.

The first results were already seen in 2011, after just 6 months of activity, and led to a contribution of around EUR 3.7 million. The most demanding part of the implementation process will be in the first half of 2012 when the final results of all of the main projects come to light.

The most valuable actions we plan to carry out as part of the 2011-2014 plan include:

- the strengthening of existing machines;
- the attainment of white certificates thanks to recent energy efficiency projects;
- the reduction of maintenance costs, with greater use of predictive maintenance as opposed to traditional preventive maintenance ■

**AFTER JUST
6 MONTHS
THE PROJECT
RESULTED IN
CONTRIBUTIONS
OF AROUND
EUR 3.7
MILLION**

MISTRAL, THE BASIS FOR BUILDING A SUSTAINABLE BUSINESS

ERG Renew has launched a project to review its business processes with the emphasis on improvement and sustainable growth

IN THE FIRST
ANALYSIS PHASE
THE WORKING
GROUP DEVELOPED
SOLUTIONS
FOR THE
SUSTAINABILITY
OF THE
BUSINESS

Gradual and sustainable growth in Italy and overseas. This is the goal of ERG Renew, which has laid the foundations for this project by undertaking a targeted initiative to review its business processes: the **Mistral Project**.

The rapid growth of installed capacity in recent years, together with major changes in the operational management of farms (e.g. advanced remote control systems, hybrid plant management and maintenance model), have made it necessary to **review the principal company processes**, from Pipeline Development to Farm Construction, from Operational Management to Performance Analysis. The process analysis activities began during the final quarter of 2011, a period that saw a special working group **put together a series of recommendations for the improvement and sustainability of the business**.



The Vicari wind farm

On the basis of the work carried out prior to December, the same group then launched a phase comprising the **detailed review of existing processes and the design of new processes**, which will keep them occupied for the first quarter of 2012. In addition to this key initial phase a series of procedures and operating instructions was developed that will regulate the new processes and complete the ERG Renew quality management system ■

THE WIND PEOPLE

A company Anemology Department that will make the difference

THANKS TO ITS BROAD ANALYSIS EXPERTISE, ERG RENEW IS REGARDED AS A SERIOUS, RELIABLE AND WELL-PREPARED ORGANISATION

One of the jewels in the crown of our Group, not found in all of the major Italian businesses in the wind power sector and part of the ERG Renew technical departments, is the Anemology Department.

Our decision to create this Department was shaped by our desire to develop “our own point of view”, a level of **expertise that enables us to make all kinds of evaluations and ensures the company need not depend on external consultants.**

As such, after five years of activity, the professional skills we have acquired and the large quantity of data on which the analyses are carried out guarantees a solid basis thanks to which ERG Renew is recognised as a serious, reliable and well-prepared organisation, also by bank advisors that evaluate project financing proposals.

The aim of the wind analysis process is to **extract the producibility data relating to a wind farm** (i.e. how many kWh can be produced in a year) enabling those who manage the economics to evaluate the profitability of an

investment. Going into greater detail, the analysis process is structured into 3 main actions.

Data collection

The Department has around **sixty wind towers located in the places of interest.** These are mainly sites where the development of wind farms is planned (scouting) or where there are already functioning farms.

These towers, between 30 and 80 metres tall (the latter height is designed to measure winds at the heights normally reached by turbines), are equipped with sensors that **continuously measure speed, wind direction and temperature**, transmitting them to a switchboard at the base of the tower. All of this data, memorised every 10 minutes, is gathered in the company database, making it possible to develop a significant historical log (many towers have been operational for over 5 years) as well as, given their territorial distribution, an in-depth understanding of the areas of interest (where investments are concentrated).

Validation and processing of data

The collected data is **analysed and validated by an operator** who eliminates data which is unreliable due to technical, transmission or other problems. By correlating the data from the tower

An evocative image
of Faeto wind farm



with that coming from nearby towers, it is possible to further improve the quality of the data and, through statistical calculations, increase the temporal series of available data. At the end of the processing phase we have an **output that is representative of the entire series of measurements** carried out at the site.

Producibility analysis

The output of the wind characteristics of the site, together with the 3D model of the land (which, as well as accurately describing the orography of the land provides information on the presence and the type of potential obstacles to normal wind flows), represents the main input for the simulation software. This software is able to calculate the characteristics of the air currents that transit in the study area. As such, once the layout of the project has been inserted in the calculation model (where by layout we mean the positioning of the wind

turbines, which takes account of their geometric features and functioning), it is possible to **estimate the quantity of energy produced every year by the wind farm**.

The entire process can be used to **improve the definition of the plant layout or to evaluate the producibility of a plant that may be purchased**.

In the first case, generally speaking, when the farm is developed internally, the Department also makes suggestions on the best location for the turbines. In this way it is possible to maximise the output of the farm, avoiding aerodynamic interference between the blades. In the latter case, meanwhile, the Anemology Department makes a producibility forecast regarding the original project. The results of this analysis are then transferred to the departments that deal with calculating the profitability of the investment and, consequently, the purchase price of the project ■

WHAT IS ANEMOLOGY?

Anemology (from the Greek *ánemos*=wind) is the part of meteorology that studies the wind. At ERG Renew it is used to identify the most suitable places for installing a wind generator in order to ensure the best possible performances. To do this, it is necessary to evaluate the wind data collected via the wind towers ■

EXTENDING THE LIFETIMES OF WIND FARMS AND CIVIL WORKS

ERG Renew is adopting operating instructions for the correct maintenance and conservation of its developments

As part of its Safety Management System (SMS) ERG Renew is equipping itself with operating instructions for the maintenance of wind farm civil works. These are contained in the "Management Manual".

The aim is to **maintain the efficiency of the constructed site over time**, making it possible to **extend the useful life of the "wind farm" system** and at the same time guaranteeing **respect for the policy** adopted by the company in the area of sustainability.

As an alternative, the System pledges

to provide the company with monitoring systems that make it possible to **identify problems as they emerge** restoring the efficiency of each constructed elements in the shortest time possible.

With regard to the various technological units that comprise a wind farm (so-called subsystems), and therefore the qualities of the relevant materials and components, the manual will provide indications so that all necessary operations for their conservation can be carried out. The monitoring timeframes for quickly recognising anomalous incidences of deterioration, so that specialist intervention can be organised, will also be indicated.

The operating instructions will be subdivided into three sub-programmes:

→ the **monitoring** sub-programme, which defines the type of controls used to establish the performance level of the site during its useful life, at the same time identifying the dy-

THE OPERATING INSTRUCTIONS WILL BE DIVIDED INTO THREE AREAS: MONITORING, INTERVENTION AND PERFORMANCE

IMPROVING ROAD CONDITIONS FOR THE COMMUNITY

During the construction of a wind farm the work done on the local road system is of major importance. Such work takes place because it will be necessary to transport pieces of blades and other items of extraordinary dimensions and weights (a turbine blade is 40 metres long!) along minor roads, often mountain roads. In many cases such requirements necessitate the widening or modification of municipal, provincial or state roads. When the works are concluded these infrastructure works are often opened to the public with residents being able to benefit from improved services and safety levels ■



Internal roads at the Vicari farm

namic of a drop in performance level (preventive checks);

- the **intervention** sub-programme, which outlines the various maintenance operations so each unit can be correctly conserved (scheduled maintenance);
- the **performance** sub-programme, which identifies, according to the requisites of the unit, a series of parameters that are monitored during its life cycle with an eye on efficiency and environmental sustainability.

The combination of these controls makes it possible to **increase the capacity of the farm** over time (accessibility at all times without problems), **reduce extraordinary maintenance** (typically more onerous) and **guarantee the long-term nature of the investment**.

Ginestra wind farm: efficiency and environmental performance indicators

The Ginestra degli Schiavoni wind farm (BN) comprises a high/medium tension electric substation and 16 turbines for

an overall capacity of 32 MW.

The civil works that must remain functional to guarantee the correct functioning of the wind farm are:

1. **structural works** (foundations, turbines and electric substation building);
2. **technological works** (pipes, wells);
3. **road infrastructures** (roads, gutters, drainage ditches);
4. **geotechnical engineering works** (gabionades, wooden cribwalls);
5. **electrical engineering works** (cable ducts, fibre optics).

Performance indicators were identified for each of these.

We focus particular attention on the maintenance of road infrastructures and hydraulic works: in fact for the road infrastructures constructed the monitoring and maintenance is designed to **prevent instability** mainly originating from rain-water infiltrations. To permit the free flow of water gutters and drainage ditches have been created to capture the water that flows along roads. This water is then sent to natural water bodies.

Every quarter the wear and tear and

cleanliness of the channels will be monitored together with the absence of erosion and the level of compacting of the road and the assembly platform, the growth of spontaneous vegetation and other elements that can be inspected. On a **half-yearly basis**, meanwhile, mainte-

nance activities will be carried out to restore channels that have deteriorated, add missing pieces to the little canals and other elements, clean and remove deposits, detritus and foliage, arrange accessory evacuation items and the drainage of runoff water ■

INNOVATION AND DEVELOPMENT

We continue on our path towards an energy future connected with renewable sources

In 2011 we continued with our commitment to development projects in the field of electricity production from renewable sources. This was made possible thanks to **important partnerships with various institutions and universities**, with whom we share a strong interest in developing sectors such as the **photovoltaic and thermovoltaic sectors**.

ORGANIC PHOTOVOLTAIC

Among the most innovative technologies, organic photovoltaic certainly represents one of the most interesting research areas. The functioning of organic cells **artificially imitates the**

process of chlorophyll photosynthesis. The experiments are focused on a wide range of materials ranging from vegetable-based pigments to polymers and hybrid organic/inorganic materials. Located close to Rome, in the municipality of Fontenuova, is the Consorzio DyePower R&D Centre. The first controlled atmosphere (in terms of pressure, humidity and dust) “clean rooms” have already been set up at the Centre and host the equipment for the **pilot production of the first organic photovoltaic panels**. Work will be completed by 2012 with other clean rooms and the completion of the pilot production line.

In the meantime the research has produced **important results in the field of the lasting stability of the product, the colours, transparency, weight and footprint** of the panels. The intervals between the cells, which created a few problems from an aesthetic perspective because of the presence of co-

THE ORGANIC
PHOTOVOLTAIC
PANELS
GUARANTEE
GREATER
ELECTRICITY
EFFICIENCY
THAN
AMORPHOUS
SILICON PANELS

OURS IS AN
ADVANCED
TECHNOLOGY
BASED ON
LOW-COST
MATERIALS
AND PROCESSES

lourless “strips” between the coloured cells, were changed from approximately 0.5 cm to less than a millimetre. The aim is to have even lower values in order to produce a more uniform and pleasing appearance. It has been shown that the electric producibility of the photovoltaic panels in a vertical position is slightly superior to that of amorphous silicon panels. In addition, unlike organic photovoltaic panels the latter are matt and therefore unsuitable for architectural applications.

Finally, the first studies on the positioning of these products in the reference markets (quality facades and vernacular architecture) have got underway.

THERMOVOLTAIC

The thermovoltaic project seeks to provide an important solution to the problem of **energy recovery**. More specifically it is aimed at all industrial, automotive and construction scenarios (as well as specific niches such as aerospace) where a **relevant portion of the energy is dispersed into the environment in the form of heat**. Examples include the mufflers on our cars or their engines, industrial furnaces, boilers, transformers and all those technologies in which the transformation of energy results in a significant loss in terms of heat.

The principle used is that of the Seebeck effect which, **taking temperature**

differences as a starting point (e.g. between the warm surface of a car muffler and the surrounding air), **is able to generate electricity**.

Devices of this type have existed for a long time but are based on technologies that use very rare and expensive materials, such as tellurium. The technology that we have employed, on the other hand, is based on low-cost materials and processes, the result of cutting-edge research in the field of nanostructures.

As such ERG, together with Bicocca University of Milan, has set up a research group, **DeltaTi Research, which has the goal of producing a number of concrete demonstrations based on the new technology by 2012**.

The group has already filed eight patents in order to safeguard this highly innovative technology it has developed. Aside from Bicocca University, the Bologna CNR Centre on materials, the Universities of Modena and Verona, and the Democritos Institute of Athens are also involved in the project.

In 2011 the reference market for the various types of product that may be produced was defined, while in 2012 the study on the market positioning of the new systems, for performances and product and process costs, will be completed ■

2

ENVIRONMENTAL RESPONSIBILITY

■ 307_{kt}
OF CO₂ AVOIDED BY USING
RENEWABLE ENERGY
SOURCES

■ 89.2%
WATER RETURNED
TO THE NATURAL CYCLE

Environmental responsibility Renewable energies Strategies for the environment

■ 37%

NATURAL GAS RELATIVE
TO TOTAL PRIMARY
ENERGY SOURCES

■ 0.205

toe/MWheq
THERMOELECTRIC
INSTALLATION EFFICIENCY

■ 0

PETROLEUM
PRODUCT LEAKAGE

ACTIONS AGAINST GLOBAL WARMING

Our Group is strongly committed to supporting the “20-20-20 Climate and Energy Package”

The “Europe 2020” strategy is aimed at sustaining the growth of the Union through the definition of five objectives to be reached by 2020. Our Group considers this strategy as an opportunity to develop its sustainability and corporate social responsibility programmes.

Employment, research and innovation, climate change and energy, education and the fight against poverty are the main themes on which the strategy is based.

In particular, we align our activities to the “20-20-20 Climate and Energy Package” in the fight against climate change, by implementing strategic measures with a view to **obtaining a sustainable development within our business portfolio**. The strategic position and industrial development of ERG will therefore be in line with the objectives indicated by the European Union and capable of combining economic sustainability with social and environmental sustainability.

Promoting and increasing the use of **fossil fuels** with a low environmental impact (such as natural gas) develop-

ing **renewable energy sources**, using **technologies with a low environmental impact** and **energy efficiency** represent our commitments to the Sustainability targets established on a European level.

THE CLIMATE AND ENERGY PACKAGE

The “20-20-20 Climate and Energy Package”, which is part of the European Union sustainable growth strategy, was elaborated with a view to combating climate change.

The objectives that the European Union is to reach by 2020 are:

- **to reduce greenhouse gas emissions** by 20% with respect to 1990 levels;
- **to increase the use of energy from renewable sources to at least 20%** of the gross final energy consumption;
- **to reduce consumption** within the EU by at least 20% through the implementation of measures that increase energy efficiency.

These objectives can be achieved through the implementation of a regulatory framework set by several European Union Directives that specifically envisage:

- an Emission Trading system within which a certain number of emission allowances are allocated. This number is calculated by the EU and is gradu-

OUR
INDUSTRIAL
DEVELOPMENT
WILL COMBINE
ECONOMIC
SUSTAINABILITY
WITH SOCIAL AND
ENVIRONMENTAL
SUSTAINABILITY

ally reduced year by year towards the target of a 20% reduction in GHG emissions in 2020;

- national legally-binding objectives (17% for Italy) for the percentage represented by energy from renewable in final gross primary energy consumption;
- energy consumption reduction targets (27.9 Mtoe for Italy).

The targets and measures for reaching them are determined by the European Parliament, Commission and Council.

THE CENTRAL ROLE OF THE ENERGY SECTOR

In the crucial period which sees the expiry of the Kyoto Protocol (December 2012) and the start of the third phase of

the Emission Trading system (January 2013), the energy sector will clearly have to make a major commitment to **reach the targets set** and **develop sustainable energy production methods** that enable it to respect the new constraints imposed by the regulatory framework.

The reduction in greenhouse gas emissions, the principal objective of the Kyoto Protocol also plays a central role in the "Climate and Energy Package".

The new rules of the third Emission Trading phase, in which **the allowances will be allocated through auctions**, create a complex and challenging scenario for the energy sector, which will have to adapt to sustainability to an ever-increasing degree.

ERG AND ENVIRONMENTAL PERFORMANCE

Environmental protection, pursued through an improvement in the environmental efficiency of processes and adequate pollution prevention, is interpreted and developed within our Group in a consistent, systemic manner with respect to the safe performance of our operations. The management of water is centred on the minimization of withdrawals and the reuse of process water. Under given conditions, even the water recovered from the safety and decontamination activities are reused at the production sites. Atmospheric emissions are primarily minimised by increasing the use of low-carbon and low-sulphur fuels and carrying out specific activities aimed at lowering and controlling emissions. Investments in the thermoelectric sector have also enabled old generation plants to be replaced with new, more efficient facilities both from a technological and environmental perspective. Prevention and protection operations performed on the topsoil and subsoil are performed on the basis of plans focusing on: analysis and assessment of new projects, restoration operations, environmental characterization and safety activities ■

THE CLIMATE AND ENERGY PACKAGE WAS ELABORATED TO COMBAT CLIMATE CHANGE

The increase in the tendency to invest in new low-emission technologies is an objective strongly pursued by the European Commission.

The economic crisis and the consequent reduction in European industrial production have simplified the process for reaching the emission reduction targets. Nevertheless, the long-term reduction of business activities in the EU has led to a surplus supply of European Union Allowances (EUA) and therefore a downward trend in prices.

Significant reductions in the greenhouse gas emissions may also be obtained through the **development of clean energy**.

Over the past few years, the energy from renewable sources has grown significantly, both in Europe and in Italy (in 2011 an incidence of 24% of renewable energy sources in the gross internal consumption was recorded) and is expected to account for an ever-increasing proportion of the energy mix in EU countries.

The use of "cleaner" fuels and the search for greater energy efficiency through innovative technologies are becoming more and more important. The mechanisms emerging from the Kyoto protocol, CDM (Clean Development Mechanism) and JI (Joint Implementation), enable industrialised countries to

offset their emissions by implementing projects in developing economies.

Their use is however subject to a series of conditions and their future to the agreements that will be stipulated by the international community.

THE ITALIAN CARBON FUND

In order to contribute through active participation, we have joined the Italian Carbon Fund, becoming **one of its main members in the private sector**.

It is an initiative promoted by the Ministry for the Environment, Land and Sea in collaboration with the World Bank which, since 2008, **has issued Certified Emission Reductions (CERs)** that our Group uses to reach the targets set by the Emission Trading directive.

Beyond the tangible benefits, active participation in the fund has enabled ERG to **acquire precious know-how on projects aimed at lowering emissions** on an international scale.

We have also adopted a rigorous accounting system for greenhouse gas emissions at our facilities and periodically submit a complete and accurate report that is certified by independent supervisory bodies accredited by the competent authority ■

THE USE OF "CLEAN" FUELS AND THE SEARCH FOR GREATER ENERGY EFFICIENCY ARE BECOMING MORE AND MORE IMPORTANT

A GRANT FOR CARBON STORAGE RESEARCH

ONCE
THE CO₂ IS
IN ITS SOLID
FORM
IT CAN BE
STORED SAFELY
ON THE GROUND

The research sustained by the Domenico D'Arpizio grant focuses on the accelerated carbonation process

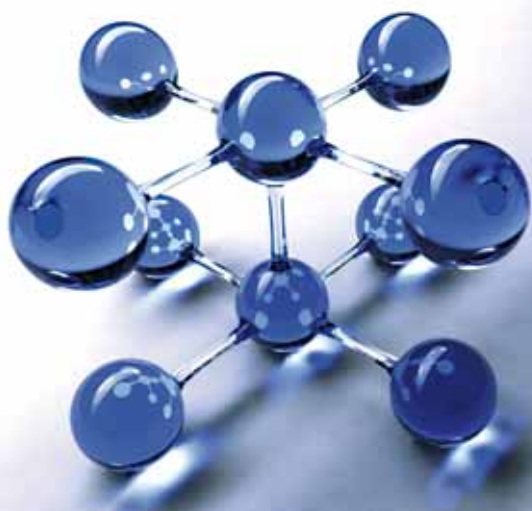
A grant dedicated to the memory of Domenico D'Arpizio, who, until 2007, was a member of the Board of our Group. In collaboration with the "G.B. Bonino" Chemical and Process Engineering Department of the Faculty of Engineering in Genoa, the research sustained by the grant concerned the capture and storage of carbon and focused in particular on the **accelerated carbonation process**.

Carbonation is a natural process that takes place over geological eras. It may however be speeded up considerably when high concentrations of carbon dioxide (CO₂) produced by capturing systems are put into contact with materials rich in calcium and magnesium, which become receptors for it.

This process enables insoluble solid carbonates (mainly calcium and magnesium carbonates) to be produced from gaseous CO₂ thus literally confining the CO₂ to a solid form. It thus becomes possible to **store it safely on the ground**.

To reveal the potential for development of this procedure more clearly, the analysis also took into account the economic aspects associated with it: the technology that is to be used is extremely advanced and its profitability will depend on the trend of the emission market.

In fact, the amount of CO₂ captured by a carbonation plant could be **valued in the form of carbon credits** ■



FUELS: LESS IMPACT, MORE EFFICIENCY

Marked growth of biodiesel due to EOS's commitment to reducing emissions and improving the energy efficiency of fuels

IN 2011
ABOUT
22,000
TONNES OF
BIODIESEL
WERE BLENDED

In line with our Sustainability policy, ERG Oil Sicilia (EOS) has focused its attention on the quality of fuels so as to minimize their environmental impact and improve their energy efficiency.

The products on which the most work has been done are diesel fuels; the measures taken to improve their quality followed the applicable national and community guidelines.

The following two strategies were adopted:

→ **to increase the use of biofuels**, above all biodiesel, in the "standard" diesel mix. These products, compared to fossil components, help to reduce

greenhouse gas emissions throughout their life cycle;

→ **to improve the energy efficiency of engines** through the mix of additives present in "Diesel One".

2001 is the year in which biofuels have been used the most: the commitment made along the entire chain made it possible to **find high-quality products that have been blended up to a percentage of 7%**, the maximum allowed by the product's specifications, which goes beyond the legal annual minimum obligations. In all, during the year, about 22,000 tonnes of biodiesel, our record in Sicily, were blended at the ISAB refinery (EOS supplier).

WHY ARE BIOFUELS "BIO"?

Biofuels belong to the alternative energy products category as they are **derived from renewable products or crops**. Their special characteristic is that when they burn they release an amount of CO₂ virtually equivalent to the amount absorbed by plants during growth so they may thus help to reduce the greenhouse effect significantly ■

**DIESEL ONE
LEADS TO A
REDUCTION
IN CO
EMISSIONS
OF 14%**

As of 2012, also as a result of the implementation of specific standards, sustainability along the biofuel production chain will be certified by an accredited organization, so as to **monitor the environmental and social data** provided by the economic operators.

On the energy efficiency improvement front, EOS also sells a line of products geared towards this improvement. In fact, due to its multifunctional mix of additives, "Diesel One" **prevents deposits forming in the injection system** by favouring the complete combustion of

the product and thus its efficient use. The test programme conducted in accordance with internationally recognized standards has demonstrated that, compared to a traditional diesel, the use of "Diesel One" leads to an **improvement in energy efficiency of over 2%** and a reduction in the emissions of carbon oxides and unburnt hydrocarbons of 14% and 11%, respectively.

Finally, it is important to remember that all automotive fuel products (gasoline and diesel) have a sulphur content of no more than 10 mg/kg ■



Corn: the principal resource for the extraction of biodiesel

ISAB ENERGY, FEWER EMISSIONS INTO THE ATMOSPHERE

A continuous
commitment to reducing
the environmental
impact of the plant

ISAB Energy has always been extremely sensitive to and aware of environmental issues, ready to make the necessary improvements to reduce its impact on the environment.

The atmospheric emissions of this plant are attributable:

- 95% to the combined cycle plant that uses Syngas (produced through the gasification of the asphalt coming from the adjacent ISAB Sud refinery);
- 5% to the Hot Oil oven (used to heat and then gasify the asphalt).

Confirming its environmental commitment and considering that the combined cycle emissions are already considerably reduced, in 2011 ISAB Energy has started taking the steps necessary to **reduce the particulate emissions coming from the combustion of the Hot Oil oven**, by applying the Best Available Techniques (BAT).

Already in its previous configuration, the Hot Oil oven ensured minimum emis-

sions due to its high thermal efficiency and the environmental quality of the fuels used: the replacement of burners made over the past few years has led to a significant reduction in atmospheric emissions, thus enabling a threshold value of 50 mg/Nm³ to be reached.

In order to pursue the objective of reducing the emissions of the oven even further, the following two strategies were adopted:

- "primary" measures consisting of the installation of systems capable of reducing the emissions further during the combustion phase;
- "secondary" measures such as electrostatic precipitators, bag filters and a washing system.

On the basis of a technical analysis conducted together with internationally recognized companies, the current BAT that could be pursued and more effectively applied to the Hot Oil oven was the **installation of new latest-generation**

FOLLOWING THE
OPERATIONS
PERFORMED,
THE EMISSION
THRESHOLD
VALUE WITH
DROP TO
30 mg/Nm³



The ISAB Energy pipeline

burners (called “Hero Special”) coupled with a suitable mix of fuels (low-sulphur fuel oil and natural gas).

The result will be a **further 40% reduction in the emission threshold value** to just 30 mg/Nm³ ■

THERMOELECTRIC POWER PLANT INDICATORS

CO₂ EMISSIONS (t)

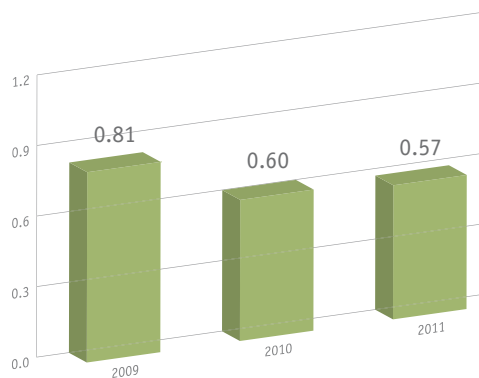


USE OF NATURAL GAS WITH RESPECT TO TOTAL PRIMARY SOURCE ENERGY (%)

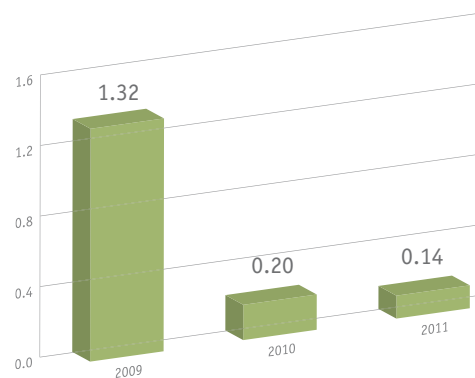


THERMOELECTRIC POWER PLANT INDICATORS

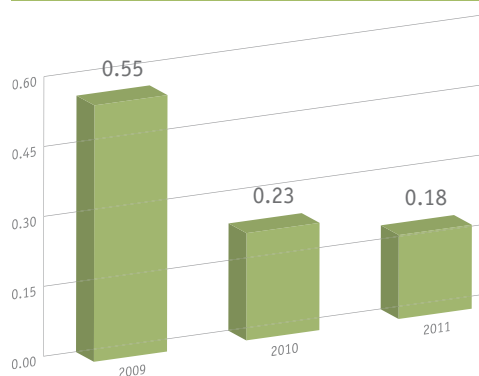
CO₂ INDEX OF THERMOELECTRIC POWER PLANTS
(t/GWheq)



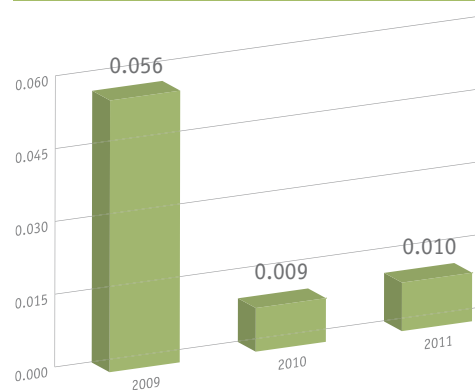
SO₂ INDEX OF THERMOELECTRIC POWER PLANTS
(t/GWheq)



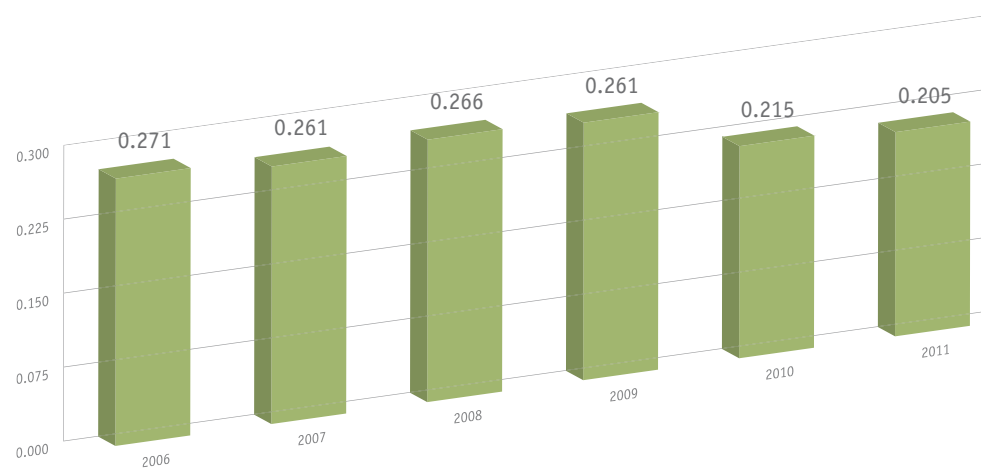
NO_x INDEX OF THERMOELECTRIC POWER PLANTS
(t/GWheq)



PARTICULATE INDEX OF THERMOELECTRIC POWER PLANTS
(t/GWheq)



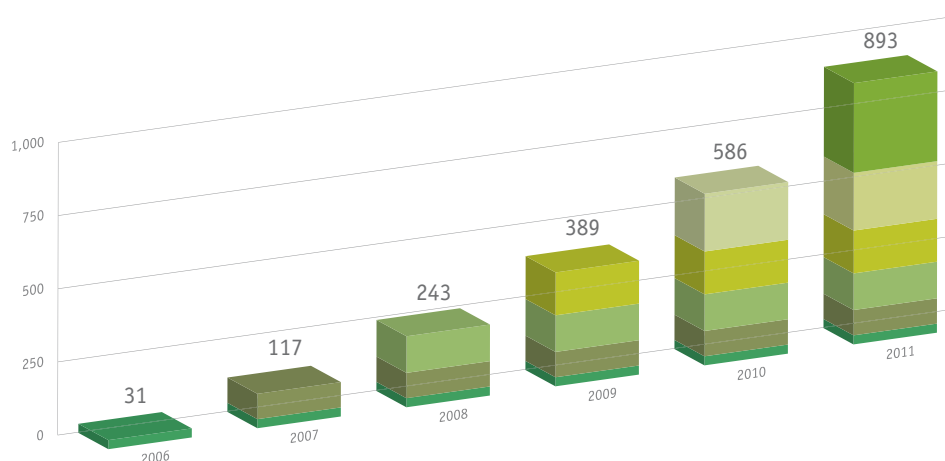
EFFICIENCY OF THERMOELECTRIC POWER PLANTS (toe/MWheq)



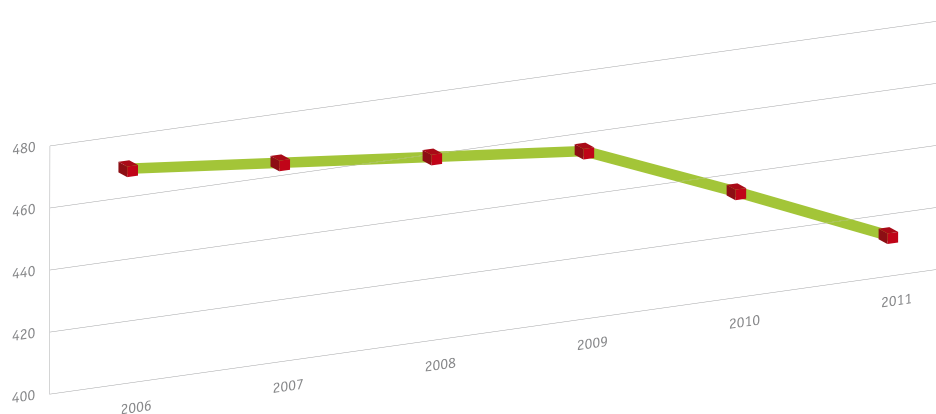
CALCULATION OF THE CO₂ AVOIDED

YEAR 2011	INSTALLED CAPACITY (MW)	PRODUCTION (GWh)	CO ₂ AVOIDED (kt)
Wind Italy	495.0	626.6	259.4
Wind France	64.4	113.5	47.0
Photovoltaic	0.97	0.6	0.2
Total	560.4	740.7	306.6

PROGRESSIVE AMOUNT OF CO₂ AVOIDED (kt)



TREND OF g CO₂/kWh CONVERSION FACTOR



The g CO₂/kWh conversion factor used to calculate the CO₂ avoided in 2006 - 2009 was taken from internal sources while, since 2010, use has been made of the one presented by Terna in its yearly reports and refers to the mix of production sources in Italy.

The reduction is correlated with the ever-increasing proportion of renewable sources in the production mix.

ERG POWER REDUCES ITS WATER CONSUMPTION

As a result of the new plants built and optimized processes we have consumed 30% less sea water and 10% less groundwater

Over the past few years, the thermoelectric power plants on the ERG Power site have made a major commitment to improving their environmental performance.

An important **water consumption optimization** plan has been implemented, thus reducing the withdrawal of water both from the sea and from the aquifer.

SEA WATER CONSUMPTION REDUCTION PLAN

Seawater is used in the circuits for cooling the units that produce electricity and steam.

Over the past few years, the operating configuration of ERG Power has seen the definitive shutdown of the CTE condensation thermoelectric power plant and the full operation of the new, modern CCGT (Combined Cycle Gas Turbine) plant.

Due to the new plants equipped with the "best available techniques" (BAT), **the consumption of seawater has dropped significantly**, that is by about 30%.

GROUNDWATER CONSUMPTION REDUCTION PLAN

Groundwater is used at the ERG Power plants to produce demineralized water, through a demineralized water system called SA9.

The demineralized water is used to supply the power plants and in the processes

Cooling water is returned to natural watercourses



of other “customer” plants on the multi-company site of Priolo.

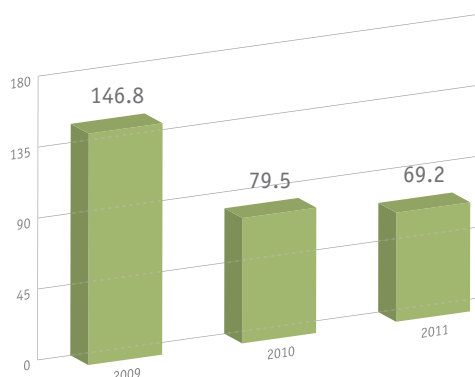
A **plant management optimization campaign** has recently been launched with a view to reducing water consumption. To do this, actions were taken mainly on two fronts:

→ operations on the parts of the plant that could have an impact on water consumption;

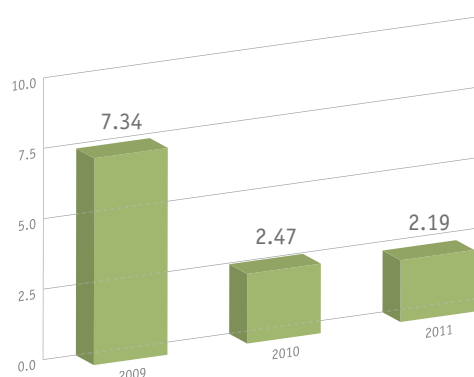
→ analysis and control of the entire plant with a view to increasing the control of the phases of production.

The implementation of these actions optimized several features, **reducing consumption by about 10%**. These results will also be confirmed and stabilized due to the further modernization (i.e. revamping) of the SA9 plant, already scheduled in the year 2011 ■

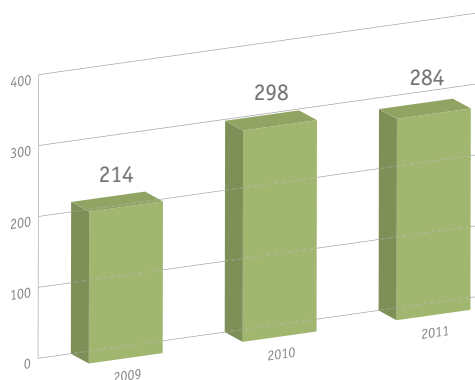
ERG POWER SEA WATER CONSUMPTION INDEX
(m³/MWh_{eq})



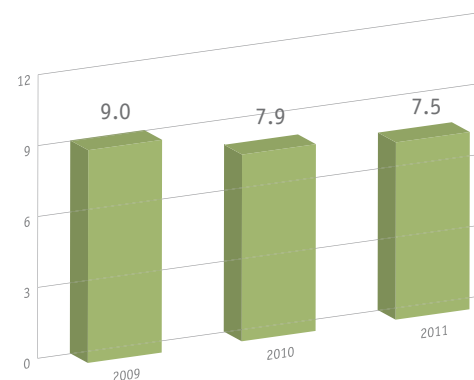
ERG POWER GROUNDWATER CONSUMPTION INDEX
(m³/MWh_{eq})



SEA WATER WITHDRAWALS (million m³)



GROUNDWATER WITHDRAWALS (million m³)



The water consumption trend should not be considered in absolute terms but in relation to the plants in operation. The reduction recorded in the year 2011 should be considered even more significant as in 2010 the power plants did not operate at their full capacity: ERG Power was put into operation in April while ISAB Energy returned to full efficiency in May 2010.

ENVIRONMENTAL COMPATIBILITY OF THE WIND FARMS

An important activity that we have carried out for years to assess the impact of our plants on the surrounding environment

THE ANALYSIS OF
THE ENVIRONMENTAL
SETTING SERVES TO
CONFIRM THE
COMPATIBILITY
OF OUR
ACTIVITIES
WITH THE
ECOSYSTEM

In developing our strategy, we always pay a great deal of attention to respecting the environmental resources situated around our plants.

The 2010 Sustainability Report already contained an assessment of the impact of the construction of a wind farm on the birdlife (Vicari) and the environmental impact of the work site for the construction of the Fossa del Lupo wind farm. During the course of the year we continued our monitoring activities at both sites to make sure that the activities carried out are **compatible with the ecosystem in which they are situated**.

VICARI, YEAR 2011

Environmental monitoring may be used to assess the direct and indirect short and medium-term effects that a wind farm could have on the migratory and non-migratory birds in the entire area occupied by the wind turbines. It is done in relation to the impacts estimated in

drawing up the preliminary feasibility studies (Environmental Impact Assessment and Incidence Assessment). The purpose of a *posteriori* monitoring is thus **to assess the effects of the operation of the wind farm on the bird-life resident in the area around it** and, where necessary, to take any suitable mitigation measures.

The field study was conducted throughout the year following the "Guidelines for constructing industrial wind power plants in Italy", drawn up by WWF Italia in 2007.

2011 was the third year of monitoring and we took advantage of the experience gained in the previous years to improve the analysis. In fact, the measurement and listening points were georeferenced, selecting the most suitable ones according to the orographic features and layout of the wind turbines. For most of the species observed, it was noted that their flying height was either above (approx. 22%) or below (approx. 55%) the critical height of the wind turbine (air swept by the blades).

In confirmation of the very low risk due to the flying behaviour of the birds, no dead birds were found at the base of the turbines.

FOSSA DEL LUPO, YEAR 2011

Environmental monitoring also permits an **analysis of the environmental vari-**

ables (habitat, flora and vegetation) influenced by the various work site phases, assessing their effects, case by case.

This analysis was conducted on the areas concerned by the work site road works and the earthmoving activities necessary to create the yards on which the towers were to be set up.

Following the closure of the work site, the observations were centred on the **site restoration and environmental remediation operations** in the immediate vicinity of the work areas, which will be subjected to renaturalization through the planting of autochthonous trees and shrubs.

→ **report the occurrence of any environmental emergencies**, so that action may be taken in the most suitable times, methods and forms;

→ **guarantee the control** of specific situations.

Post operam monitoring is performed to permit:

→ **respect of the specifications**, in terms of the execution of the work in correlation with the sensitive environmental variables;

→ **verification and analysis** of any changes that have taken place in the habitat;

→ **verification of the efficacy of the measures** taken;

→ **adoption of any other compensatory measures** that may prove necessary.

To this aim, we identified the effects to be monitored, defined the environmental indicators and the monitoring methods and, finally, established the methods for planning and taking corrective action.

On the basis of the results of the monitoring activities, the overall impact of the wind farm may be considered to be compatible with the environment, given the limited and short-term nature of the impacts of the worksite activities, such as noise emissions and the raising of dust. These conclusions are also backed up by the spontaneous flower repopulation near the worksites and the yards ■



A bird of prey flying in the area around the wind farm of Fossa del Lupo

Following the identification of the *status quo* before the start of the work (i.e. the identification of the living species and the existing habitat), the *ante operam* monitoring must:

→ **document the dynamic evolution of each individual environmental variable** subjected to “stress” during the work site phases, making an assessment of its response;

ENVIRONMENTAL MONITORING, A GOOD PRACTICE REPLICATED

We also check the impact of the wind farm of Amaroni on the birdlife

The main crests of the Apennines, where wind speed monitoring records the most continuous wind throughout the year are an ideal site for the construction of a wind farm.

It is however important to conduct a feasibility analysis of these projects not only for the landscape-related aspects but also to **discover the consequences that these plants have on the environment** as a whole and, in particular, on the fauna.

This is because, due to their position, wind farms may represent a disturbance for the bird populations both migratory and non-migratory.

Due to its geographical location at the centre of the Mediterranean, Calabria is crossed by species migrating from Europe to Africa, both in Autumn and in Spring.

In the wake of our successful monitoring on the wind farm of Vicari, we conducted a similar study on the wind farm of Amaroni: it consisted of an **environmental monitoring activity aimed at verifying the short and medium-term**

effects that the plant could have on the birds with respect to the impacts estimated in drawing up the Environmental Impact Assessment (EIA).

As it is a wind farm under construction, what has to be done now is to create the *ante operam* database that will be used for comparisons with the measurements made after its installation. The comparison of the historical series will provide interesting elements of analysis for monitoring the behaviour of the birds and their interactions with the wind farm.

The *ante operam* measurement entails **identifying the species present in the area and their behaviour**: we have adopted the bird counting methods widely used on a national and international level, with observations from both a fixed position and a mobile position, using both visual and acoustic census techniques.

In Spring, the measurements for studying the behaviour of the birds in their reproductive period (registration and analysis of vocalizations) will begin. This phase will be followed by the survey for monitoring nesting birds ■

THROUGH ANTE
OPERAM DATA
COLLECTION,
WE IDENTIFIED
NUMEROUS
SPECIES
OF BIRDS
AND THEIR
ROUTES

DEMOLITION AND SUBSEQUENT RESTORATION

The activities for remediating the area around the former power plant CTE have begun to restore it to the best conditions for future use

The traditional CTE condensation thermoelectric power plant was replaced in 2010 by the more modern CCGT (Combined Cycle Gas Turbine) cogeneration plant, fired with natural gas. In 2011 we therefore began to shut down and dismantle the tanks and electromechanical equipment (including boilers and chimneys) of the decommissioned power plant.

The area to be remediated has a total surface area of about 34,000 m². The primary objective of the work is to prepare for **the remediation of the site from the community and environ-**

mental points of view and to restore the areas to the best possible condition for future use.

The dismantling and demolition works will be carried out down to ground level, including all kinds of structures above ground, so as to clear and flatten the entire area. The only building that will be left standing is the one that housed the machine room and the control room, which will also bring the indirect advantage of reducing the waste produced.

Before the worksite is opened, the **equipment must be made safe and removed from the production process.**

To be more precise, the most important operations planned are:

- emptying of the tanks, lines and equipment that used fuel oil;
- removal of residual ash from the boilers, electric filter and silos;
- safe deactivation of electrical equipment;
- identification of asbestos in the insulation followed by its removal in accordance with the procedures in force;

**PRIMARY
OBJECTIVE:
TO RESTORE
THE SITE
FROM THE
COMMUNITY AND
ENVIRONMENTAL
POINTS OF VIEW**

The pump room of the power plant



BEFORE OPENING THE WORKSITE, THE PLANTS HAD TO BE MADE SAFE

→ verification of the safety of each part dismantled, always making the first cut cold as a precautionary measure.

Decommissioning will therefore consist in **removing all potentially contaminating substances** and in removing, dismantling and demolishing 9 tanks, the fuel oil pumping system, the connecting pipes, the machines and instruments situated outside the main building (machine room).

We commissioned this work to specialized companies which, in providing the necessary services, use the support of supervisors, specialists and other professionally competent, qualified and adequately trained workers and technicians, in possession of the necessary licences. Once the structures and systems above ground have been demolished, **we will conduct an environmental survey**, which will be completed and harmonized with the investigation and decontamination procedures already carried out on the site.

In its capacity as the customer, our Group will make daily inspections to check:

- the work site documentation and respect of the procedures adopted, for example, with regard to the safety and coordination plan, the verification of the technical and professional qualifications of the contractors and the management of any interference at worksite;
- operational worksite safety management, identifying any opportunities for improving the work activities often solved directly in the field; the checks are made by expert staff with the support of specific check lists and periodic reports are drawn up;
- environmental management, in particular, of the waste produced during analysis, classification, packaging, temporary storage, transport and disposal or recovery ■

OUR HEALTH, SAFETY AND ENVIRONMENTAL COMMITMENTS AT THE WORKSITE

- Effective organization in terms of roles and resources.
- Frequent field safety and environmental checks.
- Adequate personal protective equipment used by the staff.
- Full respect of the good practices and procedures adopted.
- Efficient management of the waste produced.
- Optimized coordination through periodic meetings ■

ENVIRONMENTAL SUSTAINABILITY BETWEEN THE PLANTS AND THE SEA

Positive results obtained from the monitoring of the water in the Bay of Santa Panagia

The ISAB Energy plant and the ISAB Refinery' South plant convey the treated water and that coming from the cooling systems of their plants into the Alpine Canal.

This flows into the marine area of the Bay of Santa Panagia, which is situated between the Northern tip of the city of Syracuse and the Southern tip of the municipality of Priolo. In the month of December 2011, the two plants performed their **annual monitoring of the quality of the water** in this area, with a view to tracing a picture of the condition of the watershed and thus verify its environmental status.

To be more precise, in line with what had been done in previous years, the activities consisted in withdrawing and analysing:

- sea water;
- water drained into the Alpine Canal;
- mussels, placed previously in the watershed;
- marine sediments, situated at various points of the marine area.

The results of the laboratory tests are sent to the competent authorities as a further guarantee of the results obtained in the previous monitoring campaigns.

These results show that **the values measured conform to the provisions laid down by the laws and reference standards** (Environmental Consolidation Act). In addition, the toxicological tests carried out on the samples showed no negative elements and the biocenosis study revealed the presence of various plant and fish species.

The environmental sustainability between the industrial activities in progress and the surrounding marine environment finds further confirmation ■

**THE BIOCECENOSIS
STUDY
REVEALED THE
PRESENCE
OF VARIOUS
PLANT
AND FISH
SPECIES**

The Bay of Santa Panagia



EFFICIENCY TO PROTECT THE LAND

The Emergency Environmental Service is provided to handle any accidents that take place

Protecting the land where our plants operate is a priority for our company.

The Emergency Environmental Service (*Pronto Intervento Ambientale, PIA*) procedures include all the activities necessary to protect it as efficiently as possible. These procedures are adopted at the Priolo Gargallo sites with a view to promptly and effectively adopting the measures for limiting the scope and minimizing the effects of pollution of the topsoil, subsoil and groundwater.

This concerns, in general, situations that could arise following random, occasional spills of hydrocarbons and/or other contaminants. These procedures provide a rapid and accurate indication of what measures should be taken to make sure that any situations in which the environment is at risk of contamination **are managed as effectively as possible**.

THE OPERATING PHASES

The *PIA* activities may be divided into 3 phases.

Phase 1: removing the substance

In the area where the event took place, our staff will make an immediate inspection to verify the situation even outside normal working hours.

At that point, the first step is taken, that is **the removal of the substance, so as to stop it from spreading**. During this phase, plant safety and fire prevention aspects and checks are also handled.

After this removal phase, the company staff responsible for the *PIA* service coordinate **the transfer and storage of the substance concerned**.

For fluids exchanged with other companies on the site, we immediately inform the company concerned so that the source can be blocked as promptly as possible.

Where necessary, the competent authorities are informed of the event within 24 hours, providing notification of the accident and the preventive measures taken in accordance with the provisions laid down by the laws in force.

Phase 2: removing the soil

The substance removal phase is followed by the **removal of the affected**

THE *PIA*
PROCEDURES
MINIMIZE
THE EFFECTS
OF POLLUTION

soil, which is also organized by our staff. According to the accessibility of the areas, the operation may be **performed by mechanical or manual means**.

The soil removed is transferred to the temporary deposit and kept in drums, big-bags, shipping containers or deposited on and covered with waterproof plastic tarpaulins until collected for disposal.

The company staff, together with specialised companies, plan and implement the activities involved in the temporary storage and subsequent disposal, recovery and treatment of the soil.

ing trenches or pumping wells) so that the authorities can assess and check them.

The operations are performed under the supervision and control of the ERG staff and with the support of specialized companies that have all the necessary technical skills and experience. The ultimate aim is to **ensure effective and efficient management of the event**.

In particular, we count on the support of companies that have considerable experience in the characterization and decontamination of sites and operate all over the country.

THE ULTIMATE AIM IS TO ENSURE EFFECTIVE AND EFFICIENT MANAGEMENT OF THE EVENT

Phase 3: verifying the efficacy of the operations

The measures for checking the efficacy of the operations performed comprise an assessment of any **residual contaminants** following the activities carried out during the previous two phases. This check is made through samples of soil and/or groundwater and/or interstitial gases.

If the preliminary investigation reveals the need for further action, the preventive and emergency safety measures to be taken are defined and immediately communicated to the competent authorities.

We design and put into operation containment systems (for example, drain-

In order to guarantee the quality of the investigations conducted, the chemistry laboratories responsible for analysing environmental matrices are extremely reliable and present the following specific characteristics:

- they are technically competent and have already worked at the Priolo Gargallo plants;
- they are accredited by SINAL (national laboratory quality accrediting system) and use official, nationally and internationally recognized analytical methods;
- they have successfully completed the intercalibration process with ARPA Sicily – Provincial ARPA Department of Syracuse – necessary for a guarantee of accurate and reliable results ■

HANDLING EMERGENCIES AT THE INDUSTRIAL SITES

ISAB Energy Services: Two Unified Internal Emergency Plans for handling emergencies promptly

THE INTERNAL EMERGENCY PLANS SERVE TO COORDINATE THE EMERGENCY PROCEDURES OF ALL COMPANIES INVOLVED

ISAB Energy Services (IES) manages the ISAB Energy (IGCC/SDA) and ERG Power plants and numerous electric substations owned by the companies present on the multicompany site of Priolo Gargallo (mainly ISAB and Priolo Servizi, with some specific services on substations of Polimeri Europa, Syndial and AIR Liquide).

Ever since the plants were put into operation, IES has adopted Internal Emergency Plans **capable of handling an emergency effectively** when it arises.

For over two years, considering the close integration of plants and emergency services between ISAB Energy and ISAB, and between ERG Power and other companies based at the site, **Unified Internal Emergency Plans have been elaborated and implemented**, through intercompany work groups. These plans are based on specific risk analyses, shared methods and resources for effectively handling these situa-

tions. These aspects are described in detail in two documents: the IGCC/SDA – ISAB South Plant Unified Emergency Plan and the Unified Internal Emergency Plan for the Multicompany Site of Priolo Gargallo. The aim of these documents is to define the coordinated management and operational procedures in case of an emergency among the companies involved.

The aims of the plans are mainly:

- **to plan operations** so as to minimize the effects and limit damage to humans, the environment and property;
- **to take the measures** necessary to protect persons and the environment;
- **to define the operational structures** and methods for handling emergency situations, with particular reference to major accidents;
- **to plan the evacuation** of employees where necessary;
- **to elaborate optimum flows of information** to the workers, local authorities and methods for implementing them;
- **to define the actions** to be taken to restore the original environmental conditions.

The Plans include the operating tasks, responsibilities and methods of the

100% EMERGENCY TRAINING

All personnel, third parties and occasional guests at our plants are **trained and informed with regard to the correct conduct to assume in emergency situations.**

Occasional guests are shown a video that summarises the building's Emergency Plan and the right conduct to adopt ■

persons involved in actively handling an emergency. They also specify the measures and rules of behaviour of the entire company and external staff involved in the emergency.

ISAB Energy Services has developed a **long-term simulated emergency plan** used to test all the possible accident scenarios identified in the Safety Report (for the South Site) or Safety Studies (for the multi-company site).

On these occasions, the company staff and third parties present at the plant are trained to implement the emergency plan through plant evacuation drills. The behaviour and operating methods of the staff involved in the management of the emergency are verified, as are their response times. This is done to identify any critical points and take appropriate corrective action with a view to continuously improving the response given.

At both plants, **emergencies are classified as "Yellow alarms", "Red alarms" and "Blue alarms".**

If an emergency with a widespread red alarm occurs, the Emergency Commit-

tee is called. If the emergency concerns the multi-company site, the counterparts of the other companies present on the site are also involved. If a Widespread or High Risk Emergency occurs, the local authorities are contacted immediately by fax and telephone.

This enables the authorities concerned to assess and, where necessary, implement the **External Emergency Plan**. This Plan is elaborated by the Prefect in order to protect the local population present in neighbouring areas of the plants.

The External Emergency Plan has the following aims:

- **to handle major industrial accidents** outside the plant area with regard to the protection of public health, safety and the environment;
- **to immediately acquire the information** necessary to establish the place, type and size of the event;
- **to deploy the civil protection system** to provide protection for the population as quickly as possible. This happens once the characteristics of

**THE AIM OF
THE EXTERNAL
EMERGENCY
PLAN IS TO
PROTECT THE
POPULATION
PRESENT IN THE
AREAS AROUND
THE PLANTS**

the accident and type of substances involved have been identified, thus ensuring action is taken promptly by the rescue teams;

→ **to take the measures for limiting the consequences** of the event and preventing others from occurring.

The Plan also establishes the announcements to be made to the population so

that everyone behaves in the most appropriate way possible.

In fact, the population concerned by an external industrial accident must be immediately informed of the emergency in progress, the behaviour to be adopted and the applicable health protection measures.

In this case, the minimum information to be communicated rapidly and repeatedly are:

- **the nature of the emergency** that has occurred, on the basis of the news available, its type, source, extent and likely development;
- **the indications to be followed** according to the gravity of the emergency in progress and any suggestions for cooperation;
- **the authorities and other bodies to be contacted** for further information, advice, assistance, rescue and any forms of collaboration.

This information is subsequently integrated with recalls, further warnings and **specific information for any groups of the population** that could be more exposed to the effects of the emergency due to their activity, function or responsibility towards the community, or the role that they take on under the particular circumstances ■

A plant fire-fighting truck



CLASSIFICATION OF EMERGENCIES

YELLOW ALARM

(LOCALIZED EMERGENCY)

A localized emergency in a restricted area of the site that the operational staff and the fire-prevention staff, coordinated by the General Shift Foreman (CTG), can **handle within a short time**. It does not entail hazards for the employees, local population or the environment.

RED ALARM

(WIDESPREAD EMERGENCY)

A more widespread emergency concerning a larger area, which may include peripheral areas of the plant. It may however **be restricted to the site area**. It entails additional internal staff and may entail calling external support (Fire brigade, ambulances, etc.). It also entails **carrying out the pre-evacuation procedure** and activating and, in some cases, reaching the gathering points and/or escape routes.

BLUE ALARM

(HIGH-RISK EMERGENCY)

A major emergency that may concern **areas outside the site** and put the safety of staff, the local populations and/or the environment at risk. It entails **involving the entire organization of the site and external bodies**, according to the presumed duration of the emergency. It also entails calling for external support (National Fire Brigade, ambulances, etc.) and **evacuating the site**. This kind of emergency may arouse considerable attention on a local or national scale and may entail implementing the External Emergency Plan.

ISAB ENERGY A MODEL FOR EUROPE

The temporary storage system for special waste at the ISAB Energy IGCC plant has become a model implemented also overseas: under the wing of the European Union, a Serbian delegation guided by the Vice-Minister for the Environment, visited the plant and attended the seminar on the storage management model ■

SAFETY ALSO TRAVELS ACROSS THE SEA

Strict controls to guarantee safe sea transport

The transport of petroleum products by sea is closely linked to environmental protection both for the quantities transported and their potential impacts.

The purchase of crude oil and the distribution of products sold on the cargo market take place by sea on ships belonging to third parties.

For this reason, **we focus our attention on the ships used** and subject them to strict quality tests carried out by highly qualified internal or external specialists that **ensure their safety** in conformance with the Group's policy and from the Corporate Social Responsibility point of view.

Our Group's policy, for example, for the transport of crude oil and fuel oil, is to make exclusive use of double-hull ships, which are notoriously safer. The Group also checks that the ships used to transport the crude oil meet the fundamental requirements laid down, which range from respect of the national and international laws and regulations to the

adoption of procedures that guarantee the safety of the operations.

We also analyse the specific working history of each ship and check that the indications given by the leading international maritime organizations (IMO – International Maritime Organization and OCIMF – Oil Companies International Marine Forum, etc.) are respected.

The Group's procedures consist of three levels of analysis and control: **Vetting, Screening** and **Safety**.

VETTING

The Vetting checks are made **before accepting the ship** and consist in making a series of structural inspections that substantially follow the guidelines of the OCIMF questionnaire for naval inspections.

The data is then entered in the SIRE (Ship Inspection Report) database which is at the disposal of all operators in the sector and thus provides significant indications on the history and characteristics of each ship.

The presence and constant updating of this database currently represent the greatest deterrent for the use, by the

OUR SHIPS ARE
SUBJECTED TO
STRICT
QUALITY
CHECKS



The wharf at ISAB Sud refinery

WE ONLY USE SAFE MODERN SHIPS

ship owners, of ships that are not kept in perfectly efficient working order and inexperienced crews of dubious skill.

The Vetting checks thus **make sure that the ERG's petroleum products are transported by carriers and on ships that minimize the risk** and meet the quality standards laid down by the Group's policy.

In 2011, **336 checks were made.**

SCREENING

Screening consists in making a series of **preventive checks on the ships that ship owners** use for the transportation of petroleum products. In this case, we request the documentation of recent tests that certify the suitability of the ship on the basis of the parameters laid down.

If any documents are missing, ERG staff or their representatives may check

these parameters by direct inspection.

In 2011, 19% of the ships inspected were rejected.

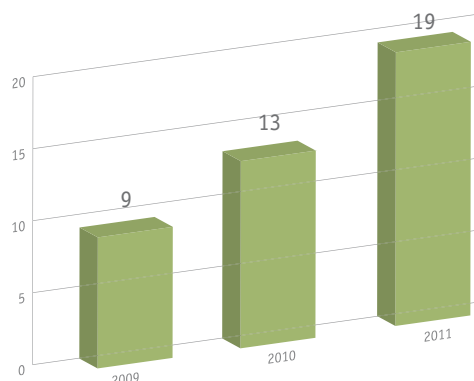
SAFETY

Lastly, Safety checks are centred on loading and off-loading operations carried out at the wharves. The purpose of the inspections is to **check that the operations are performed correctly and the safety standards established are respected** so as to prevent product spills and the risk of fume emissions.

In 2011, the Safety checks were made by ISAB staff on behalf of ERG and **covered 100% of the ships berthed** at the wharves of the refinery.

With regard to the age of the ships used, we have found that it is improving with time, as no arrivals of ships built over 20 years ago were recorded. In fact, the Group's policy advises against their use unless they reach particularly high quality and safety standards ■

SHIPS REJECTED BY THE SCREENING PROCESS (%)





Investments

Community

Well-being

Environment

Economic

Social

Responsibility

Health and

Social

Welfare

Health and

Safety

3

SOCIAL RESPONSIBILITY

80%

OF PLANTS WITH ISO 14001
AND OHSAS 18001 CERTIFICATION

0

ACCIDENTS ON THE
INDUSTRIAL SITES

95.7%

OF EMPLOYEES ON PERMANENT
EMPLOYMENT CONTRACTS

21%

FEMALE STAFF

TWO FULLY-CERTIFIED SITES

ISAB Energy Services obtains double certification for its management systems

It is now widely accepted that the adoption of a Safety Management System (SGS) brings tangible benefits in the integrated and systematic management of Health and Safety issues. It is no coincidence that sites classified as at Risk of Major Accidents are obliged to have a system of this kind by law.

These plants are generally characterized by a high degree of complexity, not only in the engineering of the plant but also in its organization and management, which have major impacts on the protection of the health and safety of the staff and plants.

Consequently, controlling this complexity effectively entails adopting rules and tools that are necessary to implement the virtuous cycle known as the Plan Do Check Act (PDCA) cycle, which consists in:

- **planning** (Policy and Objectives);
- **doing what has been planned** in respect of the rules and with the aid of the tools adopted;

- **checking that what was planned has been done** reaching the objectives (effectiveness) with the allocated resources (efficiency);
- **taking any necessary corrective action.**

All this is done with a view to obtaining a continuous improvement.

This is the setting in which, in February 2011, ISAB Energy Services received the certifying authority Det Norske Veritas (DNV), for the periodic audits necessary to re-certify the conformance of the Safety Management System (OHSAS 18001) adopted at the ISAB Energy plant.

The audit was **extremely positive**, as no “non-compliances” were reported and a few opportunities for improvement were identified.

The conformance of the system was thus confirmed by a certifying authority of international standing.

A positive outcome was obtained from the audit on all the main processes managed by the Organization and involved the entire staff. This result has enabled us to **extend the OHSAS 18001 certification of the Safety Management System for another three years**, and to make it applicable to the brand new hydrogen production plant.

In particular, the auditors pointed out that the level of maturity reached by

THE SAFETY
MANAGEMENT
SYSTEM BRINGS
BENEFITS IN
INTEGRATED
HEALTH AND
SAFETY
MANAGEMENT

**ISAB ENERGY:
A DYNAMIC,
WIDESPREAD
MANAGEMENT
SYSTEM APPLIED
ON ALL LEVELS**

the Organization on Health and Safety issues is extremely high and that the methods used to manage the company processes conform to the requirements of the reference standard.

These audits thus revealed a dynamic, widespread management system applied on all levels of the organization.

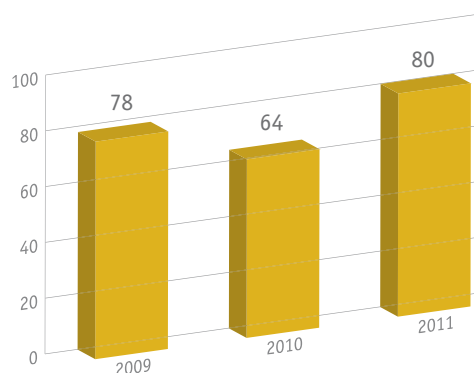
Another challenging objective that ISAB Energy Services set itself in the same period was the certification of the Safety Management System (OHSAS 18001) adopted at the ERG Power plants. After the two preliminary auditing stages laid down by the standard, conformance with the strict requirements of the OHSAS 18001 standard was certified with no delay in November here, too, **without any “non compliances” reported.**

This demonstrates the advanced stage reached by the **process of harmonization between the two sites** and everyone's commitment to ensuring safety ■

**ERG POWER:
OHSAS 18001
CERTIFICATION
OBTAINED
WITH NO
NON-COMPLIANCES**



ISO CERTIFIED PLANTS (%)



THE CERTIFICATIONS OF THE ERG GROUP

At the end of 2011, 80% of the ERG Group sites had already obtained ISO 14001 and OHSAS 18001 certification, so the sustainability objective of obtaining certification for 100% of its sites could well be reached in 2012. At the end of 2011, the only ones still to be obtained were those for the environmental management systems of the ERG Power plants which were started at all plants in 2010 ■

SAFETY, THE PROJECT IS UP AND RUNNING

Two major safety culture activities carried out by ISAB Energy Services

The marked sensitivity and commitment that ISAB Energy Services has always shown towards Safety and Environmental issues continues to grow.

In the 2010 report we mentioned that major activities were planned for 2011 with a view to **spreading the safety culture further** in the daily activities of all staff. Now that these initiatives under way, we can say that the safety project is up and running.

The activities or tools that we are talking about are the "Safety dialogues" and "Safety meetings" both attended

in the field by the department managers and shift foremen.

THE SAFETY DIALOGUES

The "Safety dialogues" are events that are held regularly in all departments.

The department managers of all ISAB Energy and ERG Power plant areas make up the "Champions' Group" which, under the supervision of the Operations manager, meets up periodically, **monitoring the number and quality of the dialogues conducted**

and, above all, any critical points identified. All operational departments have a software package for checking the results of the dialogues so to obtain useful statistics on them.

The statistics are then analysed in collaboration with the Safety, Environmental and Quality department.

This process enables the Champions' Group to receive on a monthly basis

DISCUSSIONS ON SAFETY ISSUES

HELP US TO PROGRESS AND IMPROVE

SAFETY COMPETITION FOR INTERNAL STAFF AND CONTRACTORS

The two competitions were held again in 2011 with a view to increasing internal staff and contractors' awareness of workplace safety and accident prevention, encouraging more responsible behaviour to obtain benefits in terms of improvements in working conditions. The participants propose initiatives to improve the safety of the procedures or the environmental sustainability of the plants. Due also the programmed general plant shutdown, the risks involved in working at a height and in confined spaces were maximized, thus emphasizing the importance of using Personal Protective Equipment under all circumstances. In order to underline the fact that all workers, whether internal or external, form part of a single "virtuous system" inside the company aimed at guaranteeing maximum safety in all stages of work, the prizes were awarded to the winners of both competitions on a single occasion ■



A detailed view of the cooling system of the ISAB Energy plant

a structured analysis of the problems found in the field so that appropriate corrective action can be defined, with regard both to internal staff and the staff of third-party companies. The results are then distributed to and shared with the departments through self-explanatory diagrams, and at meetings held with the third-party companies.

THE SAFETY MEETINGS

Each team led by the shift foreman holds a "Safety meeting" every month with a view to **providing the team with up-to-date information on safety issues** of particular importance for the activities to be carried out. Documents

for these meetings are drawn up by the department managers and distributed to the shift foremen.

At the end of the year, the balance shows that **all teams contributed by providing reports and indications** for a continuous improvement in safety on our plants.

At the start of the year 2012, the results of the meetings were analysed with a view to planning the actions necessary to solve the issues and critical aspects that emerged from them.

Finding time during the shift to discuss safety issues will help us to progress and improve our way of working and living at the company ■

ISAB ENERGY, THE GENERAL SHUTDOWN

A complex event
focusing on safety
in which 1,300
workers took part

WE SET UP A
"SAFETY
SHOP"
WHERE THE
NECESSARY PPE
COULD BE HIRED

In October, the general shutdown of the ISAB Energy plants began. A totally unprecedented operational and managerial event requiring a huge commitment in terms of forces and resources due to the extraordinary nature and complexity of the activities to be carried out.

Exactly 30 days afterwards, the first module of the ISAB Energy power plant was started up together with all the process units connected to it. This was possible after an intense, structured equipment loopback and circuit alignment activity.

The second module was put into production in November and, at the same time, **the entire plant was restored to its full operation.**

The complexity and size of the works required the presence at the plant of about **1,300 people** and the issue of about **9,000 work permits**: to ensure safety in all phases of the process, we implemented an ad hoc structure which,

through briefing in advance, continuous awareness and field test activities, was assigned the task of **checking that all legal obligations were correctly fulfilled.**

In particular, to guarantee constant respect of the provisions laid down by the new regulations on work in confined spaces or environments in which pollution is suspected (which came in force a few weeks before the start of the shutdown), we proceeded with:

- a careful **selection and preliminary qualification of companies**, checking their past record and the training of their workers;
- **briefing sessions for all workers** on the characteristics of the places where work was to be done;
- assigning a large **team of specialized technicians** the task of analysing the safety of the confined spaces (analysis of the oxygen content and verification of the absence of harmful substances), before allowing the workers in them (a procedure that has always been followed on the plant);
- calling a **rescue team** with specific skills (typical of cave rescue), capable of recovering injured persons from



Maintenance engineers at work

confined spaces at the workplace, at heights or in any place that is difficult to access.

A major novelty in our work organization was the setting up of a “safety shop” where contractors could **hire all the Personal Protective Equipment necessary** to ensure the safety of their workers.

In this way, everyone was put in a position to deal with their own safety, finding close at hand the best that the market offers, at particularly advantageous prices.

This organization and the work done with great determination by the ISAB Energy Services team ensured the shutdown was completed with just one minor accident, a demonstration of the effectiveness of the measures taken ■

SAFETY

**THE OPERATOR
WILL
OPERATE
THE NEW
EQUIPMENT
REMOTELY
AT A SAFE
DISTANCE FROM
ALL HAZARDS**

REVAMPING, A SAFETY IMPROVEMENT PROJECT

New equipment at the ERG Power substations

The total revamping of the electrical substations originated from investment proposals whose aim was to **constantly increase safety**, where safety

is intended to mean that of the plant operators, and also to improve the reliability of the electricity supply to the industrial site.

The first step of this revamping plan was taken by implementing a highly technological project elaborated at ERG on plants owned by ERG Power.

The investment radically changed the technical infrastructure of one of the three high-voltage electrical substations

present on the industrial site, **upgrading the equipment** to more modern technical standards.



One of the new substations

The new switchboards were equipped with an intelligent management system that **practically prevents the operator performing incorrect electrical manoeuvres**.

In fact, the operator will operate the new devices normally from the remote console, thus at a safe distance from the source of the hazard. If local action is necessary, the operator will still be safe due to the protection provided by

the armoured structure of the switchboards.

The revamping process has the following three objectives:

- **to improve and increase the safety** of the electrical distribution systems;
- **to upgrade the plant equipment** to the latest technological developments through the use of avantgarde management and remote control of the equipment;
- **to ensure continuity of the investments** and use of local workers in the workforce.

A detail that should be underlined: the work was done with a “zero impact” on the production of the industrial site; it was done during normal operation of the site, **without causing any interruptions in the service or difficulties in operating the plants**.

The revamping programme will be “replicated” on the other two substations on the site ■

ERG AND SAFETY

ERG believes that the full compatibility of its activities with the health and safety of its workers represents a primary consideration in managing its plants and activities.

ERG therefore constantly undertakes to ensure that all the companies in the group operate in full respect of the health and safety of both internal and third-party company staff, and the environment understood in its broadest sense, considering these factors carefully as early as during the elaboration of the annual and long-term operation and investment budgets and encouraging the adoption of health and safety-oriented technologies ■

INFORMATION TECHNOLOGY DEDICATED TO SAFETY

“Safework”, an innovative tool that started off at ISAB Energy and has reached ERG Power

“SAFEWORK”
FACILITATES THE
ASSESSMENT
OF THE
RESIDUAL
RISKS OF EACH
INDIVIDUAL
WORK ACTIVITY

The companies most sensitive to technological innovation have been aware for some time now that Information Technology may bring tangible added value to the management of complex issues.

In particular, technology can bring great benefit to all issues concerning the **management of residual risks associated with work activities** on plants with a Risk of a Major Accident.

This is why we developed the “Safework” application at the industrial ISAB Energy IGCC-SDA site. It was an ambitious project for computerizing the Work Permit procedure (documents through which a contractor is authorized to carry out a given activity) and interference risks, introduced in 2004 and updated with its latest release at the end of 2011.

“Safework” is an integrated IT system **that helps the company departments and third-party companies involved in the process of drawing up and managing work permits** and related forms. The aim is to ensure high levels of safe-

ty and to fulfil the obligations laid down by the laws in force (Safety consolidation act, Legislative Decree 81/08) as well as by the company procedures.

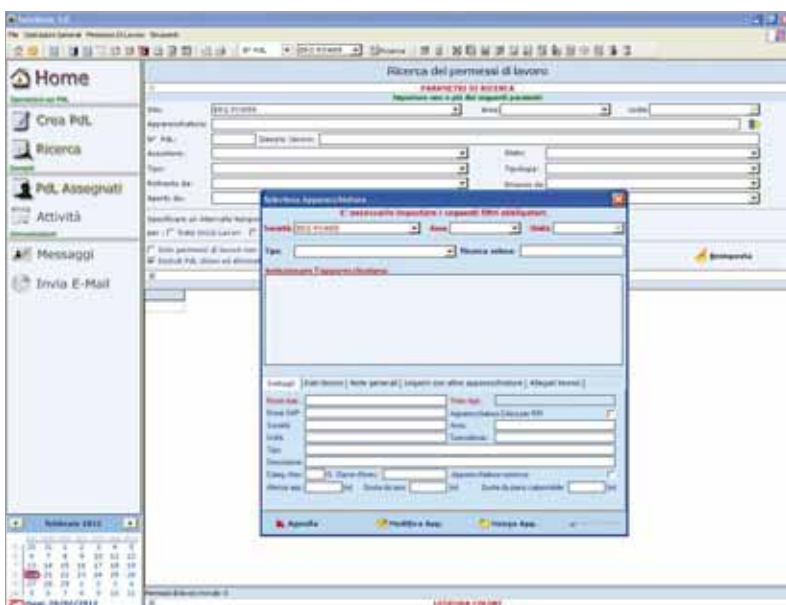
The advantages that can be obtained by using the “Safework” application can be summed up as follows:

- **improvement in the control** of the input of data and specifications by various persons involved in drawing up the work permits, through checks made automatically by the system;
- **availability of electronic authorization procedure**, ensuring respect of the procedural constraints and control of the persons involved in signing the permits;
- **improvement in the traceability, storage and filing of the forms**, through an electronic archive of all past and present work permits;
- **“shift of knowledge”**, from the implied, subjective knowledge possessed by the one person responsible for filling in the work permits to express, objective knowledge possessed by the system, through broader distribution ensured by the historical archive.

These features of “Safework” have reached the objective of ensuring, on each work permit, an accurate and comprehensive assessment of the residual risks of a given activity, in a given place,

on a given item at a given time, as laid down by the legislators, achieving the further advantage of having a historical knowledge base.

The work flow reproduced in “Safework” also guarantees respect of the legal obligations of the persons involved, from the employer to the person who actually does the work.



Safework home page

Over the years, Safework has been applied to an ever-increasing number of activities and its later versions have increased its reliability even further and adapted it to users' needs and legislative developments.

But many other functional benefits have been obtained in time.

First of all, **improvements in the operating logic**, which have enabled the system to manage the activities preparatory to the performance of a mainte-

nance operation, such as the erection of scaffolding or the electrical shutdown of a device, and the corresponding restoration activities (removal of the scaffolding, power-up, etc.): the system checks that all permits for the correlated activities have been completed before allowing the scaffolding to be dismantled or a device to be reactivated.

An equally important feature is **the possibility of correlating with the object of the work a series of automatic annexes** that then form an integral part of the work permit. Examples include the safety data sheet of the fluid or substance contained, the decontamination and blinding plan, the links with the electrical start devices in the enclosure and various other documents and valuable information for making an exhaustive risk assessment.

Finally, **the possibility of having a complete view, at any time, of all maintenance activities** on the plant, already in progress (open permits), and ready to be started (issued permits), or simply waiting to be processed (requested permits). In this way, “Safework” provides a “dashboard” for controlling the work and becomes a tool for managing work interference. This benefit may be increased in the future, by adding information on the geographical position of the plant items, so as to obtain a

The chimneys of the new ERG Power plant



“talking” map that can graphically display the work permits in progress and their exact location. Further confirmation of the usefulness of this tool was given during the general shutdown of ISAB Energy.

It was the largest and most complex operation performed since the plant was set up: it saw the presence of 1,300 per-

sons and the electronic management of about 9,000 work permits. The results, on the actual safety front, were excellent. **On 1 February 2012, the use of “Safework” was extended to the ERG Power plants** and met with great appreciation as early as the very first days on which it was used, for the switch from traditional hard copy management to advanced electronic management ■

ERG AND SAFETY IN THE OFFICE

Our commitment to ensuring the safety of office workers is expressed in the following activities:

- new recruits receive specific training on safety and preventive and protective measures taken at the workplace (building);
- at each site an appropriate number of persons are selected and given specific training on fire prevention and first-aid measures;
- company doctors are appointed to carry out the relevant health monitoring activities (periodic medical examinations) and, at the Genoa office, there is a surgery staffed by a professional nurse and, two days a week, by a doctor;
- following changes in the organization and to respond to changes in the legislation, the assessment of the risks to which the workers are potentially exposed is updated and expanded through periodic monitoring of the work environment.

The Group maintains active collaboration with the workers’ safety representatives and constantly involves them in these activities; with them we organize systematic meetings in order to discuss and evaluate any improvements that could be made ■

A SPECIAL OPPORTUNITY FOR THE "GRIMP" RESCUE TEAM

ERG Renew enabled the French rescue team to carry out drills on the wind farm of Plogastel Saint Germain

FOR THE FIRST TIME, THE GRIMP WERE ABLE TO SIMULATE A REAL-LIFE RESCUE

Last year, the wind farm of Plogastel Saint Germain, which is situated in Brittany, hosted a series of drills carried out by the rescue team of the local fire brigade. In fact, six times, between April and October 2011, **they simulated a rescue of an injured person inside the nacelle of the wind farm turbines.** The simulations were performed with the organizational support of ERG Renew. The drills entailed stopping one or two

turbines for a maximum time of four hours. They consisted of two types of simulation: an **air rescue** with a helicopter letting the rescuer down from above, and a **land rescue**, with the rescuers climbing up to the nacelle (at a height of 65 metres).

In the simulation, a dummy was used as the injured person and, depending on the case, was tied to the stretcher and hoisted up to the helicopter or let down to the ground.

The collaboration between ERG Renew and the "GRIMP" rescue team (the name given to the department of the French fire brigade trained in making rescues under hazardous conditions), was greatly appreciated as, before then, it had never been possible to simulate a "real-life" rescue ■

The helicopter arriving during the drill



SAFETY AT A HEIGHT

The ERG Renew staff is specially trained to work on wind turbines

Confirming its commitment to safety, ERG Renew sent its staff on a training course to obtain authorization to work at heights on Wind Turbine Generators (WTG).

On the first day, after a careful examination of the legislative aspects on workplace safety (Italian Legislative Decree 81/08), the course moved on to describe the **theoretical aspects of working at a height** with regard to Personal Protective Equipment (PPE), the necessary tools, methods of use, WTG climbing techniques and, finally, notions of first aid and safety rescue.

The fall-prevention PPE (harness, hooks and positioning cords) was then put on and the basic notions on the equipment and how to use it were given.

The second day consisted of action “**in the field**”. The participants were thus able to actually experience reaching the great height of the wind turbines (about 80 metres up to the hub).

The practical part of the training comprised:



Operators descending from the nacelle

A THEORETICAL AND PRACTICAL COURSE ON THE HANDLING OF EMERGENCIES ON WIND TURBINES

- ➔ techniques for climbing safely up to the WTGs;
- ➔ retrieval and rescue of accident victim on their way up and down the ladder (approach, release and passing beyond the victim, installation of the descent system, retrieval and descent of the victim and positioning of the victim on the ground);
- ➔ safe work in the nacelle;
- ➔ safe access to the hub (the rotor to which the blades of the WTG are attached);
- ➔ emergency evacuation via a rapid descent from the nacelle ■

AN INSTITUTIONAL SAFETY PROJECT

The Prefecture of Catania is promoting an industrial accident prevention project for Institutions and the Police

In 2011, at the ISAB Energy plant in Priolo, we organized two courses on workplace safety. Both were attended by fifty officials from the Prefectures and Police Headquarters and the provincial departments of the Carabinieri and the Tax Police (*Guardia di Finanza*) from Ragusa and Syracuse, the Harbour Office of Pozzallo, the Corps of Forest Rangers (*Corpo Forestale*) and Local Police (*Polizia Municipale*) from Modica, Scicli, Pachino, Melilli and Solarino.

The courses were part of the **project entitled "Industrial crime prevention", promoted by the Prefecture of Catania** within the scope of the 2007-2013 National Safety Operational Plan (PON) designed for Police officers and officials from the Institutions of the nine provinces of Sicily.

The project was dedicated to officials of the Institutions involved in the fight against crime and industrial accidents. The aim was to design a course for them

by setting up a **common information network with a view to standardizing knowledge and procedures.**

Within the scope of this project, the workplace safety and plant security activities and procedures considered to be the best practices in the field were illustrated. In particular, reference was made to the integrated plant management system (quality, environment and safety) and the company security system (access management) ■

THE
WORKPLACE
SAFETY
BEST PRACTICES
WERE
ILLUSTRATED



HUMAN RESOURCES, THE KEY TO OUR SUCCESS

The central role of
workers makes relations
with the trade unions
absolutely essential

Industrial relations play an essential role in involving all staff in the Group's activities, in mutual respect and continuous and constructive discussions. They help to underline the **central role of human resources as a distinguishing element of corporate competitiveness** and a key factor for success in new market challenges.

From this point of view, particular importance is given to relations with the workers' safety representatives, in order to optimize the development of issues related to the health and safety of workers at the workplace.

Within the scope of the central role of human resources and the intention of conciliating work with social life, ERG

has defined and developed with the trade unions some **flexibility and support tools**, such as special working hours to facilitate the return to work of new mothers, a contribution to crèche and playschool fees and leave for medical examinations. The success of these tools in support of new parents is confirmed by the fact that 100% of those taking family leave have returned to work at the company.

In addition, through the CRAL and the ERG Club, former and current employees can take part in social activities during their free time, thus making it easier for the latter to settle into the company ■

ERG AND THE UNIVERSAL HUMAN RIGHTS DECLARATION

The recognition of human rights is considered by the Group as one of the fundamental bases for conducting business to the point that reference is made to the principles of the 1948 Universal Human Rights Declaration in the Preface of the new edition of the Code of Ethics approved in November 2011. The company has also analysed the problem from the practical point of view and in its operational and economic setting but, as the ERG Group operates mainly in Italy or, at most, in Europe, we believe that the recognition of Human Rights is not a concern for us at the present time ■

THE HUMAN RESOURCE FIGURES

Let's take a look at the figures concerning the staff of our Group and its subsidiaries

93%
OF STAFF HAVE A
UNIVERSITY
DEGREE OR
HIGH-SCHOOL
DIPLOMA

On 31 December 2011, our Group **had a total internal staff of 652** plus another 49 collaborators on unpaid work experience or term contracts.

During the course of the year 20 persons were taken on and 82 left the company with a balance of 62 fewer workers than in 2010.

These figures are shown in the graphs shown below.

Analysing the trend of each individual company, ERG recorded a decrease in its staff of 31 workers (down to a total of 306) due mainly to the reorganization that resulted from the new legal entity established following the joint ventures in the refinement and downstream sectors.

ISAB Energy Services recorded an increase in its staff of 4 workers, up to a total of 289, following the acquisition and rationalization of its investment management activities formerly carried out by the holding company.

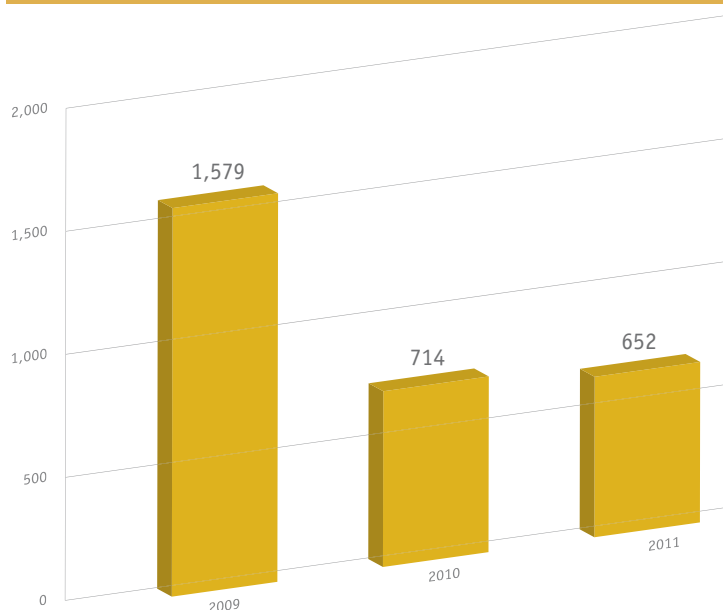
ERG Renew and its subsidiaries (with a staff of 39 on 31 December 2011) recorded a decrease of 36 workers mainly as a result of the sale of their shares in the companies DSI Servizi Industriali and SODAI Italia.

Moving onto age, the average age of the staff of our Group continues to remain slightly **below 42 years**, while that of the management is about 48 years.

As regards education, employees with a university degree or high school diploma represent 93% of the total company population: these are all elements that show how we have taken on the resources necessary for a future renewal of our lines.

In 2011, with ERG's entry into the Dispatch Service Market (DSM) through the ERG Power production unit, a new semi-shift structure was organized to ensure that this activity is permanently covered ■

EMPLOYEES AT 31/12



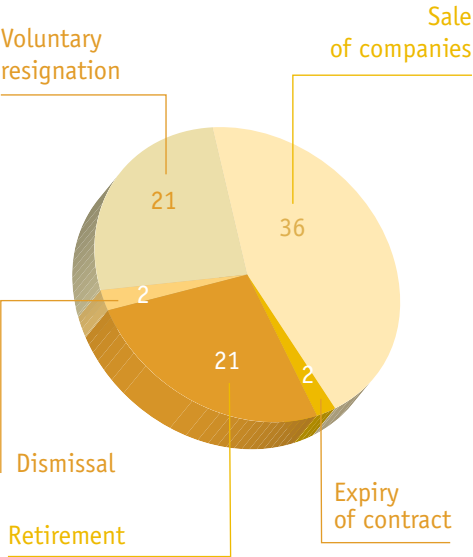
The drop in the number of employees over the years is closely linked to the extraordinary operations that led to the persons working for joint ventures and those working for the companies that have been sold leaving the scope of reporting. No reduction in staff has been caused by the closure of plants. The reduction that took place between 2009 and 2010 is attributable mainly to persons joining TotalErg and the one that took place between 2010 and 2011 to the sale of the companies DSI and SODAI.

ERG AND PEOPLE

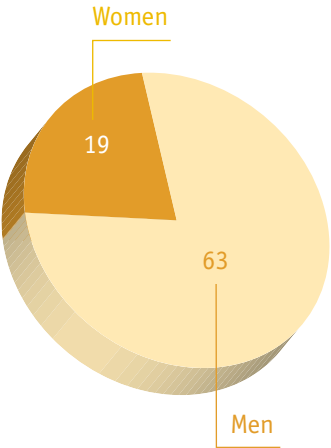
Human resources are an indispensable element for the existence, development and success of any company. ERG therefore pays particular attention to valuing, protecting and developing the abilities and skills of all its employees, so that they can realize their full potential and professionalism and, as a result, contribute to reaching the company's objectives. The definition of a precise career path and training are two strategic and interdependent elements through which the Group "takes care" of "its staff" from the moment they are taken on. The career path supports an extremely important and challenging objective, that is, to train future managers for the company, identifying their strong points and the pathways functional to their development. In particular, in its managerial development plan, ERG aims to spread its skills system based on 5 elements, which are considered to play a decisive role in reaching its business objectives: Training is the axis about which the career path turns, it accompanies the person from the moment he joins the company and pursues objectives across the company, that is, those common to all persons working for the Group and those of each individual. ERG also finds room for a less traditional type of training given outdoors in a kind of open-air training gym where the concepts summarized in the skills system are put into practice. The aim is to develop trust between colleagues, a sense of belonging, a spirit of innovation and the will to accept increasingly hard challenges ■

2011 staff turnover - 82 people left the company

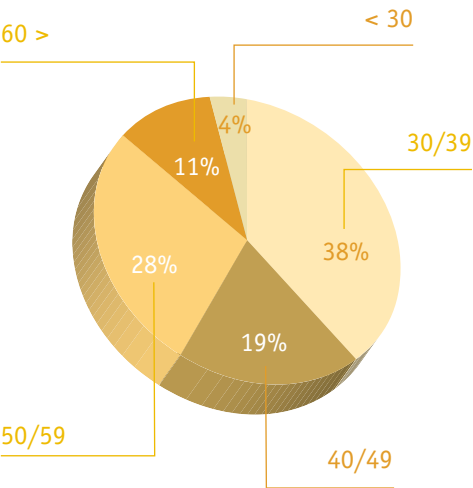
BY REASON



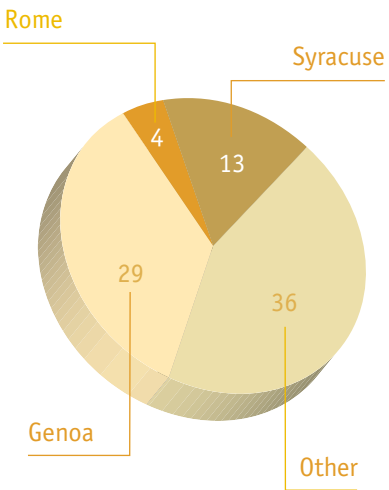
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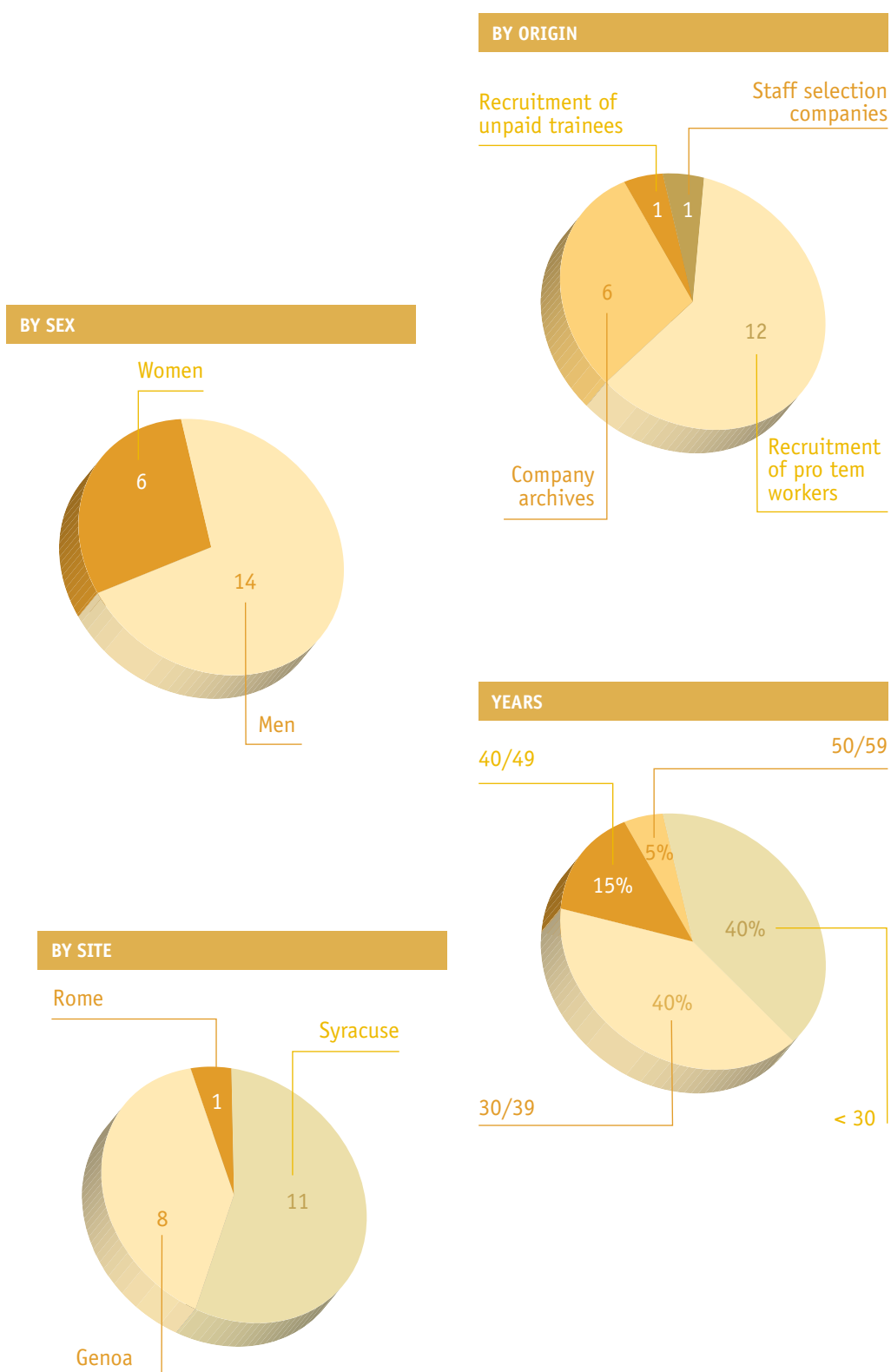
YEARS



BY SITE



2011 staff turnover - 20 people joined the company



EXPERIENTIAL TRAINING

An approach centred on experience that makes participants the protagonists of their own learning process

IN PURSUING THE OBJECTIVE, THE PARTICIPANTS USE ALL THEIR RESOURCES

For some time now we have adopted the experiential method in both our institutional and managerial training seminars. Experiential training is characterized by the **central role of experience** which, by involving the person as a whole (his mind, body and emotions), leads to the use of **new skills and lines of behaviour** unexplored up to that moment.

Experiencing things for oneself ensures that, in pursuing the objective, the participant uses all his resources, often using applying skills that he had never previously taken into consideration, above all in the work environment.

Each participant is also requested to observe **himself and others** during teamwork because feedback is a fundamental element in the reflection phase. In fact, the actual experiential phase, which may be carried out both indoors (theatre, cooking, role-playing) and outdoors (orienteering, construction of Tibetan bridges or rafts), is followed by the **reflection phase**, in which an in-

terpretation is given to what has been experienced.

It is this aspect that characterizes this kind of training the most, **differentiating it clearly from incentive activities**, to which it is often erroneously likened. In incentive activities, which are also carried out outdoors or indoors, the objective pursued is not training. As its name suggests, its aim is to provide a "stimulus"; to create a healthy atmosphere between people, to help members of the team to get to know one another and increase their feeling of belonging to the brand.

On the contrary, in experiential training, the most important phase of the entire activity is the reflection on the experience gained.

This phase, which is defined technically as de-briefing, is that in which, with the aid of the facilitator, **reflections are made on the experience**, the strong points, weak points and the successful and unsuccessful strategies adopted. The facilitator stimulates discussions and parallels with everyday working life and helps the participants to draw the appropriate conclusions. These conclusions, once shared, **will stimulate participants to tackle situations in a new way**, outside but particularly inside the work environment.

One of the fundamental ingredients for the success of the de-briefing phase is



The new training room

**THE MOST
IMPORTANT PHASE
OF EXPERIENTIAL
TRAINING IS
REFLECTION ON
THE EXPERIENCE**

feedback, as we mentioned previously. We could say that this is the present that each participant can give to the others and receive from them, to **acquire elements about themselves** and the observed behaviour, thus identifying the differences between self-perception and others' perception.

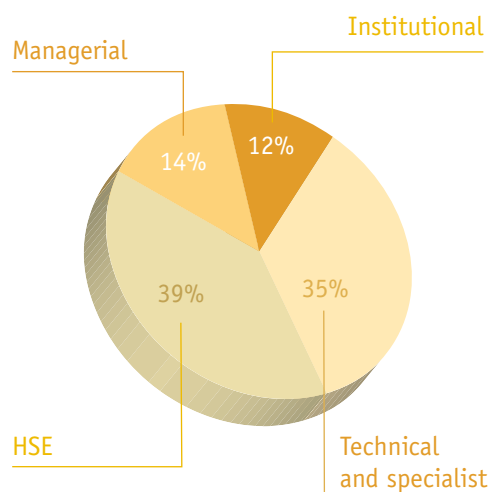
In this approach, the **participant is the real protagonist of the training process**, not just a student as in the classical educational model but an active individual capable of building his own learning process using the resources made available by the facilitator and the other participants.

In this way, the person **develops, grows and changes according to his subjective way of being**, rather than simply acquiring theoretical notions, on the basis of his own experience gained during the course and previously. Clearly, the greater the involvement of the participant's entire being, the better his learning will be.

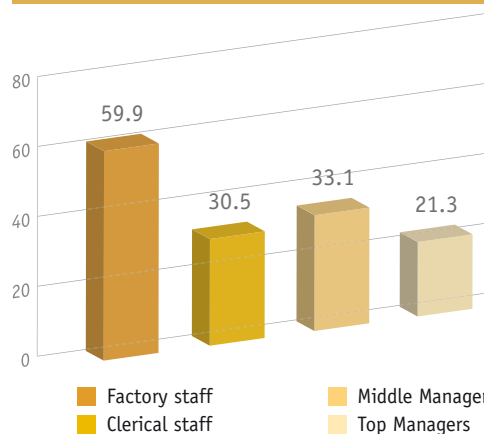
This model is particularly suitable for training adults who, compared to children, have different reasons for learning

and need to perceive **immediately the benefit of the new skill acquired**. And this is one of our reasons for choosing this method ■

TOTAL TRAINING IN 2011
24,197 hours



TRAINING IN 2011
(average hours/employee)



FOCUSING ON THE MEASUREMENT OF RESULTS

The new MBO system enhances professional skills by focusing on the expected result

A new tool for measuring the performance of Top managers and some Middle managers. It is the MBO, Management by Objectives, system that we will introduce at ERG starting from 2012. Like all significant changes, however, the preparatory activities were carried out for several months in 2011, involving several actors and using new tools.

The introduction of an MBO model represents a novelty for us, both from the cultural point of view and in terms of the evolution of the performance-related incentive systems.

From the cultural point of view and in terms of the contributions made by the persons involved, the introduction of the MBO model shifts the focus away from a system based on the (professional and managerial) assessment of objectives to a system that is based on the **measurement of specific results** reached by each individual. In addition, the close link – on all company levels –

between the expected result and the description of the objective, makes the MBO model another useful company governance tool. The MBO philosophy clearly has an impact on the incentive systems linked to the variable pay component. To be more specific, the main principles of the MBO system may be summed up as follows.

Each participant is assigned a maximum of 4 objectives, one of which is a company objective, which is the same for everyone, which “weighs” 30% of the total bonus set for each individual participant. **The remaining 70% of the bonus is subdivided into individual objectives**, on the basis of an objective “cascading” logic which starts at the top of the organization and moves down through the levels below it. It is not however just a question of weights and cascading. The real increase in quality imposed by the application of the MBO system concerns the **design and definition of the objective**.

Without neglecting the fact that the objectives must be of an economic/financial nature or related to projects of value to the company, the true methodological focus is on the **identification of the expected result**. In this sense, the MBO objective follows an on/off logic: in the balance phase, the objective will be considered reached or not reached.

THE FOCUS IS
SHIFTED FROM THE
ASSESSMENT OF
OBJECTIVES TO THE
MEASUREMENT
OF RESULTS

**IN THE BALANCE
PHASE, THE
OBJECTIVE
WILL SIMPLY
BE CONSIDERED
REACHED
OR NOT
REACHED**

The only variant allowed is a tolerable deviation from the objective set. Hence the importance of respecting these principles right from the phase in which the objective is determined and assigned. It is therefore clear how the Management by Objectives system aims **to make the most of the skills and enterprise of each individual**, and imposes an increasingly detailed knowledge of the business managed ■

OBJECTIVES FOR THE EMPLOYEES

All top and middle managers of the Group (214 persons of whom 18% women) were assigned individual objectives having an impact on the Group's results. The assessment of their performance in 2011 was based on the success they had in reaching their objectives and the strategies they adopted in relation to the Group's skills (authority, vision, enterprise, coaching and teamworking) ■

PEOPLE

**FROM INFORMATION
TO DIALOGUE**

Internal communication has adopted new tools for favouring the collection and sharing of information

In 2011, the Human Resources department launched the TEAM project, strongly sustained by the top management to encourage the involvement of the entire staff in the Group's activities and objectives.

In line with the Project's guidelines, our internal communication has consolidated some of the events and services

already launched in previous years and introduced **new tools and methods aiming at listening** to people. The objective was, on the one hand, to provide greater support to sharing information and simplifying work and, on the other, to continue to **promote the company culture and values**, creating a greater sense of belonging and collaboration between people.

**THE INFORMATION
TOOLS**

Intranet portal

Launched in April 2011, the restyling of our portal entailed initially conducting an in-depth analysis of its "usability and expectations," which involved 270 people in various different ways (focus

**MANY TOOLS
AND ACTIVITIES
FOR TALKING
TO PEOPLE
AND CREATING
A GREATER SENSE
OF BELONGING
TO THE GROUP**

groups, interviews and questionnaires). This analysis gave some important indications that were taken as **guidelines for designing the new information architecture** closer to people's "mental model" and criteria for simplifying the work and visibility of employees. We have also added tools of web 2.0 systems the use of which – once implemented – will permit greater interaction with and between users.

TeamERG

We continue to publish the TeamERG magazine, now also available in electronic form on the intranet, with an improved layout and contents due to the introduction of **new features and investigations into the activities of our partner companies**, ISAB and TotalErg.

The new contents were chosen on the basis of an internal opinion poll of all the staff in our Group, who were requested to indicate the columns of greatest interest to them among those published up to that time and their expectations in terms of contents. The new contents enrich the knowledge and spread of information throughout the Group as over 2,000 copies are distributed for each edition.

THE EVENTS
Group Meetings

We continue to organize the six-monthly meetings between Top Management and other managers, the **contents of which have been further expanded** through the contribution of 110 participants who provided useful indications by filling in specific satisfaction questionnaires.

The reports were recorded and published on the ERGgate portal.

It thus became possible to share an opportunity for an investigation and update on the development of each individual business area with all the Group's human resources. This gave increasing insight into how each individual person, through his work, can contribute to the achievement of the company's objectives. The videos present on the web have been viewed by over 320 people.



Focus

The indications collected during the listening activities carried out in redesigning the portal, restyling TeamERG and the creating the “*Cassetta delle Idee*” (Ideas Tray), were used to prepare a series of meetings called Focus, which had a triple aim: **to provide people with more information on business, to describe “who does what” at the company and to encourage discussion** in an open, informal environment. The four meetings, held in Autumn 2011 at the Genoa and Priolo sites, were voluntarily attended by 163 people. They centred on the scenario of the Group’s business sectors and a “live” connection was established for the occasion with the Rome office.

Top Management Communications

Top Management’s commitment to **communicate issues of particular im-**

portance in real time was maintained: our CEO illustrated and commented on the exercise of the first and second tranches of the put option on ISAB live on the portal: 275 contacts were recorded.

Energy Workshop

We organized a 2-day meeting to promote knowledge, trust and collaboration between the Energy business people. This meeting involved all the staff in the business unit of the Genoa and Priolo sites. It was also used as an opportunity to open a constructive debate on work methods, problem solving and improving mutual knowledge.

Inauguration of the new conference and training room

A major effort was made to equip the Genoa site with more modern facilities and thus to improve the **organization of communication events and**



The company training courses

training courses at the site. The new room has a surface area of 200 m², which, according to the needs and the number of participants, may be subdivided into 3 smaller rooms, each one equipped with the very latest audio-video technology. Its construction, which required an investment of over EUR 100,000, is capable of guaranteeing greater participation due to its logistical convenience and greater comfort.

OTHER INITIATIVES

National

Oil Championship

A substantial group of athletes represented our Group in the National Oil Championship, the multidisciplinary sports event launched in 2000 by the Italian oil companies, winning the fifth Oil Champions' trophy ■

COMMUNITY

LEARNING ABOUT SUSTAINABILITY

The 2011 ERG ISAB School Project for instructing students of all classes on socially responsible companies

For many years, the CSR activities organized in the province of Syracuse have met with great success and won many awards. Thus, in 2011, we decided to create a trademark under which to organize and coordinate all the initiatives dedicated to schools organized jointly by ERG and ISAB, in collaboration with the local institutions.

This led to the 2011 ERG ISAB School Project (Progetto Scuola), whose aim



is to accompany primary, middle and high schools students on their educational path throughout the school year, communicating the identity of socially responsible companies, in correct

THE TEACHING
ACTIVITIES

INVOLVED
OVER 3,000
STUDENTS

terms and using the most appropriate methods according to the students concerned.

The ERG ISAB 2011 School Project consists of five initiatives: the **"20th 'Archimede ed Elettra' Trophy"**, **"Mus-E"**, **"A Helmet is worth a life"** (*Un casco vale una vita*) (in collaboration with the Carabinieri Corps), **"SicurezzaAmica"** (in collaboration with the Fire Brigade) and **"Business in Action"** (*Impresa in azione*) (in partnership with Junior Achievement Italia). These initiatives involved over 3,000 students. In addition, four final events were organized involving over 1,500 people. In order to ensure that complex organizations such as schools, institutions and consultants could combine forces, tens of meetings had to be arranged.

One of the initiatives that proved to be particularly popular was the **"Archimede**

ed Elettra" trophy, a football tournament organized between teaching districts and comprehensive schools in the province, which included an inaugural event attended by the President of the youth section of the Italian Football Association, Gianni Rivera, and ended with the finals played by the boys from Syracuse. They actually won the trophy and played against their counterparts from Genoa, winners of the "ERG Ravano" trophy.

Worthy of particular note for the great enthusiasm and interest it aroused was the **"Business in Action"** event, organized for high-school students in partnership with Junior Achievement Italia. The students from the Nautical School of Syracuse presented a project that won a national award as the project having the greatest potential for development of the area ■

ERG AND ISAB WON THE "2011 JA IMPACT AWARD"

The "JA Impact Award" is a prize that Junior Achievement gives every year to the associate company whose actions have the biggest social impact in support of local education.

The 2011 edition of the prize was awarded to ERG and ISAB, who, during the year, played a leading role in the promotion of educational activities and strategies that may **have an impact on the personal and professional future of young people**. This was another tangible sign of the recognition of our social responsibility activities in the area: their direct impact on the people and their effectiveness are appreciated to an ever-increasing extent even by national operators like Junior Achievement ■

SPECIAL ATTENTION FOR OUR CHILDREN

The *Dopolavoro* ERG activities for children continue, from “*Estate Ragazzi in Gamba*” to the children’s choir

**ERG CLUB:
AN EDUCATION
CENTRE THAT
GIVES
SAILING,
HORSE-
RIDING
AND DIVING
LESSONS**

Our commitment to activities for the children of the Group’s staff continues with great enthusiasm.

In fact, in 2011, Dopolavoro ERG, in collaboration with ISAB, organized for the fifth consecutive year the “*Estate Ragazzi in Gamba*” summer camp for children, aged under 14, of the employees of the companies in our Group and ISAB in Sicily.

The spirit behind the initiative is to **get as close as possible to creating an “education centre”** that goes beyond the traditional idea of a holiday camp. The structure of the ERG Club has thus turned increasingly into a leisure centre for associated activities, such as sailing and horse-riding lessons. Even diving lessons have been held in the ERG Club swimming pool. Another important activity for the staff’s children was the formation of the **Children’s choir**, who made their debut on 17 July 2011 in “Tosca”, performed at the Maniace Arena in Syracuse.

The 21 youngsters from the Dopolavoro ERG group, all children of employees of the companies of the Group operating in the industrial area, sing in the first act of the opera ■



Diving courses held at the “ERG Club” summer camp

AN ACTIVE CONTRIBUTION THROUGH SOCIAL RESPONSIBILITY

For the ISAB Energy shutdown, we applied a model that has brought added value to the community

THE MAINTENANCE OF HIGH LEVELS OF SAFETY, RELIABILITY AND EFFICIENCY WAS GUARANTEED

In November 2011, during the ISAB Energy general shutdown, ERG and ISAB Energy Services first proposed and then applied, together with all the actors involved, a model of institutional relations inspired by community-organized governance. The objective, which was fully achieved, was to **complete the maintenance works within the pre-set terms, with an accident index of zero**. In the preparatory phase, we established trade union, industrial and institutional relations (Prefecture, Police, Local authorities, Fire brigade, Harbour offices, Provincial Council, Provincial Health Authority, Civil Defence, Labour Inspectorate, Inail, ARPA) through which the contacts were given all the technical, economic and social information about the shutdown. Following the feedback that emerged in this initial phase, we decided to take some steps with a view to favouring the implementation of a model in which each of the actors involved could make his contribution

according to a logic of close collaboration. One of the qualifying measures adopted was the decision to commission the maintenance works to **engineering, building and instrument companies already working at ISAB Energy** (companies operating in the community with workers resident in the province of Syracuse). Another measure, the **organization of "horizontal" temporary company associations** (thus facilitating the integration of professional skills) in which the payments to subcontractors were managed directly by the customers (guaranteeing direct availability of the funds in relation to the services actually rendered). Finally, the **improvement of services** on the work site (knowledge of the plant increases the efficiency of the work done in the field). The positive result of the new model of relations that we implemented was the **creation of added value for the community and the companies**, reaching the objective of guaranteeing the maintenance of high levels of safety, reliability, efficiency and consequent competitiveness on the market. At the same time, the local economy was able, yet again, in the current setting of severe occupational crisis, to count on the resource represented by the presence of major companies in the area, who preferred to favour the area in which they operate despite the possibility of saving money by having the works assigned through auction ■

A PROJECT IN SUPPORT OF PUBLIC HEALTH

ERG and ISAB continue
their commitment to
protecting public health
in the province of
Syracuse

The initiatives shared with ISAB included the launch of the "Health Project," which consists of activities in support of public health in the province of Syracuse.

In the three-year period 2007-2010, we contributed to supporting the activities of the Cancer Care Network (*RAO*) divided into three treatment centres in the area. To be more precise, we **contributed to setting up a service for chronic cancer patients** at the hospitals in the province.

In 2011, together with ISAB, we launched the continuation of the Health Project, called the "Survivors Project," which will last for three years and is dedicated to cancer survivors whose number is rapidly increasing due to the effects of early diagnosis and the progress made in its treatment.

The Provincial Health Authority of Syracuse, with our support, opened and runs a surgery that deals with the prob-

lems of long-term survivors with various forms of cancer. **These patients are followed in various aspects of their health, physical and psychosocial function** and also in relation to their personal needs, on the basis of experience and the relevant international literature.

In particular, the clinical activity will focus on identifying a relapse or secondary neoplastic disease at an early stage. It will therefore assess them in terms of the natural history of the disease.

Other important aspects that will be monitored are the prevention and cure of the patients' obesity, fertility, cognitive problems and "fatigue" ■

THE "SURVIVORS
PROJECT" IS
DEDICATED
TO PEOPLE
WHO HAVE
RECOVERED
FROM CANCER

THE WONDERS OF GREEK THEATRE

Our activities as members of the INDA Foundation continue

**A
PRESTIGIOUS
ACTIVITY
WITHIN THE
SCOPE OF THE
COMMITMENT
TO CULTURE
THROUGH SOCIAL
RESPONSIBILITY**

Our Group is the **only private member of the INDA (National Ancient Drama Institute) Foundation**, which has organized classical plays at the Greek Theatre in Syracuse since 1913.

The participation in and support of the activities of the INDA, the leading cultural organization in Sicily, constitute our most prestigious activity within the scope of the Social Responsibility commitments to culture in the area.

In 2011, the year that saw the celebration of the 42nd cycle of classical plays

at the Greek Theatre, the ERG relational event dedicated to partners and stakeholders was also taken as an opportunity, in collaboration with the Archaeological Park of Neapolis, to promote a virtually unknown space in the Latomie del Paradiso area and a visit to the "Grotta dei Cordari" cave.

These cultural assets were opened for the occasion within the scope of a **promotional project** aimed at encouraging visits by the public to the historical places of local tradition ■

View of the Greek theatre of Syracuse where the plays were performed.



A WINDMILL AT THE CENTRE OF AN ECOSUSTAINABLE SYSTEM

We have supported the construction of a zero impact system

WIND MILL: A ZERO IMPACT SYSTEM FOR MAINTAINING OPTIMUM WATER LEVELS

For over 10 years we have been supporting the activities of the Oriented Nature Reserve "Saline di Priolo". Set up in 2000 and managed by the LIPU, it is one of the **resting places of birds migrating along the route between Africa and Northern Europe** together with Vendicari (Noto), another humid area of Eastern Sicily and also a nature reserve.

The "Saline di Priolo" Oriented Nature Reserve covers an area of 50 hectares that has been used for salt cultivation for hundreds of years and has the characteristic feature of being situated at the centre of the current industrial zone. Similar areas are present along

the entire coast of Syracuse but, following their abandonment, have turned into marshland. Within the scope of the initiatives taken to enhance the value of the area, we have supported the **construction of a wind mill, as an innovative, ecosustainable system**. It is the first to be built in a humid area nature reserve. In fact, it is the first example of the use of a **system with a zero impact for maintaining optimum water levels** during the summer ■

THE ISAB ENERGY POND: AN OASIS CLOSE TO HOME

The moorhen is a fairly common wild species but to find one in your garden is quite exceptional.

Seeing them in the pond in front of the Plant Management Building is an even more extraordinary experience. And yet that's the case at ISAB Energy, in the papyrus-bordered pond. But that's not all: in 2011, the moorhens proliferated and the group of chicks, with their innate cuteness, immediately won the affection of the employees ■

A picturesque view of the salt pan and Etna from an observation box



158 EMPLOYEES HELPING OUT FLOOD VICTIMS

A sum of about EUR 80,000 was collected and donated to the Genoa diocesan branch of Caritas

Following the flood that struck Genoa last 4 November, a fund raising campaign was launched among all staff of the Group: 158 employees contributed by **donating their pay for a certain number of hours** (chosen freely by each worker) to the cause.

The amount raised, about **EUR 80,000** was presented to the Genoa diocesan

branch of Caritas during the end of year event and was **used to requalify a building that housed families that had been victims of the flood** remaining temporarily homeless. Once the families have returned to their own homes, the building will become a shelter for the needy and the disadvantaged ■



4 November 2011 – The flood in Genoa

A MIND-OPENING JOURNEY INTO THE DARKNESS

Our Group the main partner of the “Dialogue in the dark” project

A multisensory path followed in total darkness on which the participants are accompanied by expert blind guides. This is “Dialogue in the dark” (*Dialogo nel Buio*), a project proposed by the Genoa-based David Chiossone Institute, which was inaugurated on 14 October 2011 in Genoa.

Elaborated in collaboration with the Italian Union of the Blind, the Institute for the Blind in Milan, “Dialogue in the dark” is supported by the main local institutions: Regional Authority of Liguria, Provincial Authority of Genoa, the Municipal Authority of Genoa and INAIL.

In a facility with a surface area of

260 m² situated in the city centre of Genoa, small groups of visitors go on a 45-minute journey into the darkness, to experience a new way of perceiving reality, making exclusive use of their senses of touch, hearing, smell and taste. An extremely emotional experience, an extraordinary path where nothing can be seen but much can be learnt and understood.

Our Chairman, Edoardo Garrone, summed up ERG’s decision to be the main partner of the project as follows:

“The initiative is one of ERG’s main Corporate Social Responsibility activities and, following a careful selection of the projects best suited to expressing the Group’s will to contribute to the development of the area, this year ERG decided to support the David Chiossone Institute’s achievement in bringing an experience of such high social and cultural value to Genoa for the first time.

Visitors are given the opportunity to **discover an alternative way of relating to the world around us** and fully understand the everyday life of the disabled, free of all prejudice. But this setting also gives the opportunity to transform a disability into an irreplaceable specific professional skill. I believe that the ability to diversify the areas of operation in time and discover new projects to be backed with a view to stimulating the development of various social situations, is part

WE DECIDED
TO SUPPORT
AN
EXPERIENCE
OF HIGH
SOCIAL AND
CULTURAL
VALUE



of a truly sustainable approach adopted by the company. The relationship between “Dialogue in the dark” and our Group, which has been a partner of the project ever since it was ideated, is an **important example of synergism and**

coordination between several actors who, in different ways and according to their specific fields of competence, contribute to achieving a common objective: to enhance the value of the local resources” ■

COMMUNITY

THE IMPORTANCE OF DRIVING SAFELY

Main sponsor also of the Drivemotion project for increasing young people’s awareness of the importance of driving safely

authority of Genoa, the Ministry of Education – the Regional and Provincial Schooling Departments of Liguria, the Italian Red Cross and the traffic and provincial police. This project **provides a free, theoretical and practical safe driving course to about 300 newly licensed drivers** from some schools in the Genoa area.

**A FREE
SAFE DRIVING
COURSE
FOR ABOUT
300 NEWLY
LICENSED
DRIVERS**

The number of road accidents is rising continuously. In response to this and in line with the objectives established by the Italian Road Safety Plan and those of the European Union, in 2011 we renewed our contribution as the main sponsor of the Drivemotion safe driving project.

“Guida Sicura per i Giovani” (Safe Driving for Young People) is the initiative presented by the Drivemotion Safe Driving Centre for the fifth consecutive year and backed by organizations such as the Municipal authority of Genoa – Municipio VII Ponente, the Provincial



**THE AIM OF THIS
PROJECT IS TO
MAKE YOUNG
PEOPLE
AWARE OF
THEIR LIMITS
AT THE WHEEL**

It is an awareness campaign that focuses on how to drive vehicles safely.

The aim is to produce more skilled, mature and responsible young drivers on the roads, by teaching them to control the car and improving their driving skills in critical situations. But, above all, the aim is make them aware of their limits at the steering wheel. Today, safe driving courses for young people represent a fundamental element for increasing the level of safety reached by modern-day cars.

In this sense, the "Safe Driving for Young People" project does not duplicate the work done by the driving schools but represents the necessary continuation of it: its instructors, for a whole week, teach students basic techniques such as the correct driving posture and correct use of the steering wheel and the most advanced techniques necessary to control the car in unexpected situations, such as when an obstacle appears before them or they are forced to brake under slippery conditions.

The project is divided into two separate parts:

- the first part consists of a set of **theory lessons**, given using videos;
- the second part consists in the students **putting into practice the techniques** learnt in the first part.

The theoretical part of the course saw the participation of instructors of the calibre of the European rally champion Elisabetta Cavenaghi and the Genoan drivers Roberto Barchi and Luca Fasce, all supported by suitably qualified staff of the traffic and provincial police. In addition, the 2011 edition was honoured by the participation of Professor Sergio Garbarino, President of the national AIMS commission on "*Sonnolenza Incidenti Stradali*" (Sleepiness and Road Accidents). Mr. Garbarino contributed with his experiences on the theme of the danger of driving under the influence of alcohol or drugs.

The practical part was held on a fitted-out track where each student was followed constantly by the instructors: once instructor sat next to him in the car and another coordinated the exercise to be done – all under conditions of absolute safety.

The 2011 edition of Drivemotion introduced the novelty of **a test drive on a racing track for the students and their parents**, plus a visit to a factory that manufactures safety accessories for racing cars and equipment for drivers ■



**THE BIGGEST
SCHOOL
TOURNAMENT
IN EUROPE
THAT MOVES
CHILDREN
TOWARDS
THE WORLD
OF SPORT**

A MAJOR SPORTS AND SOCIAL EVENT

Our support for the 27th ERG Ravano Tournament continued in 2011

Since 1985, an extraordinary event that moves primary school children towards the world of sport has been held every year, in the name of fair play and healthy, exciting competition.

In 2010, 4,000 students took part in it, while in 2011 there was an even larger number and this led to the 27th edition of the ERG Ravano Tournament – 18th Paolo Mantovani Cup - establishing the **nth record number of participants in the five sports organized**: boy's football, girls' football, basketball, volleyball and rugby. The largest schools'

tournament in Europe (source: the Italian Football Association, FIGC) involved boys and girls in the last two years of primary school, from the four provinces of Liguria and Southern Piedmont, in 15 days of fun and excitement. In addition to the prizes for the teams that won each sport of the tournament, some special awards were also given. Examples of these were the "Fair Play Cup," for the team that was judged to be the most sporting, a prize for the best-behaved supporters, a prize for the youngest participant and a prize for the best referee.

So again in 2011, together with Sampdoria Football Club, **ERG confirmed its commitment to a classical event dedicated to youngsters** and capable of expressing important sports and social values ■

A VILLAGE FOR SAMPDORIA FANS

"Fair Play Village" is an **initiative taken by Sampdoria Football Club, which we enthusiastically backed in 2011**, with a view to creating an itinerant space in which Sampdoria fans can meet up with fans from all over Italy, even in places off the Sampdoria football club's map.

The village is a place for welcoming away fans and a meeting place for Sampdoria supporters going to away matches (the Fair Play Village are normally situated in the town centre, both in Genoa and in the other cities). The Fair Play Village, made up of inflatable and easily transportable structures, is open, free of charge, for the whole day on which the match is played. It is divided into several areas: the **Play and Outdoor Area**, where entertainment is laid on for children before the match (videogames, Sampdoria table football, kids' corner for animation and drawing, Photo Fun and competitions), **Third Half Area and Tasting Area**, where dishes from Liguria and the region of the opposing team can be tasted and where, after the match, the "Third Half" can be spent eating the characteristic "*focaccia*" from Genoa. For the 2011/2012 football season 12 Fair Play Village, 6 in Genoa and 6 away from home were organized ■

THE EDOARDO GARRONE FOUNDATION

A year rich in initiatives for introducing culture to an increasingly vast public

The Edoardo Garrone Foundation is an operational cultural foundation dedicated to the man who founded our Group in 1938.

Higher education, *lectio magistralis* of history and philosophy, literary meetings, shows and events dedicated to modern art, teaching projects and social promotion initiatives: these are the principal currents along which the Foundation's activities develop, with the aim of **bringing culture, in all its forms, increasingly closer to a vast, mixed public**. An activity that was particularly intense in 2011, not only in Genoa and Syracuse, areas in which the Foundation has always been active, but also more and more on a nationwide level.

To give a better idea of the many initiatives taken during the year, we provide some very eloquent figures here below:

- **33 meetings for 5 different culture reviews**, which involved over **22,000 people**;
- **4 higher education courses**, for a total of about **1,500 hours of teaching**,



Fondazione Edoardo Garrone

which saw the participation of **90 young graduates**;

- **3 teaching projects**, which involved over **3,000 students**, from primary school children to high school children across the whole country;
- **3 photographic and modern art exhibitions**;
- **2 book presentations**;
- **1 play**.

The culture reviews

For some years now, the series of meetings has proven to be congenial to moving the population towards culture.

Alongside the confirmation of "classical" ones such as the "**History Lessons**" held at the Palazzo Ducale and "**FEG Mondays**" at the Archivolt Theatre, two major novelties were introduced in 2011: the "**The capitals of ancient philosophy in Southern Italy**,"

6 conferences on great ancient philosophers in the main cities of Magna Grecia (Syracuse, Agrigento, Crotone, Locri, Ascea and Taranto) and, in Genoa, the "**Common Places**," 7 *lectio magistralis* by illustrious scholars on the philosophical concepts of Beauty, Happiness, Justice, Solidarity, Power, Sexuality and Life.

THE FOUNDATION'S MISSION IS TO PROMOTE INCREASINGLY POPULAR CULTURAL INITIATIVES

THE
FOUNDATION'S
EDUCATIONAL
OFFER IS
UNIQUE ON A
NATIONWIDE
LEVEL

Higher education

A particularly significant year also for intensifying the Foundation's commitment to **higher education**.

The major novelties included the introduction, in Genoa, of the first **Master's degree course in "Political Economy"**, with the aim of training high-profile professional public management figures. This course has enriched the education that the Foundation offers on a national level, with the Post-graduate course in **"Strategies for the economic valuation of cultural and tourist resources of the Mediterranean"** in Genoa, the **Management Training School** in Turin, with the Agnelli Foundation, the Pirelli Foundation and the Collège des Ingénieurs Association and the **"Edoardo Garrone's Chair"** in Syracuse. The latter experience gave rise to the idea of a new **Post-Graduate Course in Cultural Tourism for the Development of Communities**, which will be held in 2012 in Santa Margherita Ligure.

The teaching projects

From new graduates to middle-high school children down to primary school children: **the Foundation's complete and cross-discipline educational offer is unique on a nationwide level**. Among the most significant novelties on the panorama of teaching projects, the "Tech to School" project is under way, involving about 800 middle and

high school children in Genoa with a view to moving them towards scientific and technological subjects, in collaboration with IIT, the University of Genoa and companies such as ILVA and Ansaldo Energia. This is also the first initiative that sees the Foundation involved in the hi-tech sector, which is becoming increasingly strategic in the economic and industrial system of our country and the productive system of Genoa.



Other continuing successful initiatives include **"Scuola Leggendo"** (Reading School), which in Genoa, Savona, Imperia, La Spezia, Alessandria, Monza and Syracuse, involves about 1,800 primary school children, and **"Genova Scoprendo"** (Discovering Genoa), which helped over 300 children from the middle and high schools to discover the historical, artistic and cultural heritage of the city.

Modern art

Further confirmation was also given to our commitment to the world of modern art, through the **organization of exhibitions and events**, such as the personal exhibition by the young artist Loris Cecchini at Palazzo Ducale, and the photographic exhibition *"Frammenti di*

Nudo" (Fragments of Nude Art) by Fulvio Magurno at the Ligustica Academy of Fine Arts. But the commitment continues also through **participation in the Villa Croce museum support project**, through the search for a young guardian, with the aim of making a concrete contribution to ensuring the city of Genoa has an excellent modern art gallery.

Social commitment

In addition to its **support for the European multicultural project Mus-e**, with the aim of contrasting isolation and social hardship with artistic experiences at primary schools, the Edoardo Giarone Foundation decided to **tackle the themes of development, integration and social issues** by helping to bring to Genoa two initiatives of important non-

governmental organizations with whom it has been collaborating for a few years: the photographic exhibition "Born Invisible", organized by the Italian Women's Association for Development (AIDOS) – at Palazzo Ducale and the "Cerchio di Gesso" (Circle of Chalk) play brought to the Archivolt Theatre by AMREF as part of the Malkia-Regine project ■



The "Born Invisible" exhibition: a detailed view of the exhibition

COMMUNITY

"2011 FROM WORDS TO ACTION", FOCUSING ON THE FUTURE GENERATIONS

The students analysed our social responsibility activities

There is an ever-increasing number of experts that see CSR as the **construc-**

tion of values shared by the company and "society". And there is an ever-increasing number of companies that adopt a sustainable approach to business, because they know that it creates value for everyone: not only for the company itself, but also for its employees, suppliers, the community and its other stakeholders.

This is one of the reasons why many companies, like ERG, have chosen to add a special figure, the CSR manager,

to their organizational structure to help them integrate CSR in their entrepreneurial strategy.

This “philosophy” is shared by all organizations, which, like us in 2011, took part in the Corporate Social Responsibility Show, “Dal Dire al Fare” (From Words to Action), held on 24 and 25 May at the Bocconi University in Milan.

As sponsors of this seventh edition of the show, we decided to focus particular attention on a stakeholder to whom little consideration is often given: the future generations. And we did this by collaborating with a group of students from the Bocconi University where students are offered interesting courses in which they learn how to manage companies in accordance with the principles of CSR.

People who say that young people do not appreciate companies that commit themselves to protecting the environment and society are not well informed. Young people, for example, promote boycotting to “punish” companies that violate human rights and, when they have a choice, prefer to work for socially responsible companies. Both as consumers and as workers, **young people want to be able to express their opinion on the companies’ commitments**, by sending clear signals to the worlds of production and distribution.

This is one of the reasons why ERG decided to engage a group of students from the Bocconi University in an **analysis of its CSR activities**. A relationship useful both to the students and to the company and a process that led to a particularly lively and interesting discussion.

The 2011 edition of From Words to Action also proved to be an event that gave the organizations the opportunity to compare experiences and to take an active part in the debate over CSR and sustainability, thus making a concrete contribution to developing the culture on the issue ■

**FROM
WORDS
TO ACTION:
AN INITIATIVE
IN WHICH
COMPANIES ARE
ENGAGED IN
AN ACTIVE CSR
DEBATE**



OTHER COMMUNITY INITIATIVES

PROTECTION OF HEALTH AND THE ENVIRONMENT



SAN GIOVANNI PROJECT

An agreement has been stipulated by ERG, a consortium of social cooperatives Consolidas and the Municipal Authority of Syracuse to recover the public garden in piazza San Giovanni in Syracuse and carry out maintenance work on the other gardens in the area. This will be done by a team made up of patients under treatment at the Mental Health department of the Provincial Health Unit of Syracuse. It is thus an example of profitable collaboration between a private company and public authority that is realized through support for a social cooperative and that has positive repercussions on the district and the community as a whole. The recovery and management of an important area of public garden in the city will have a therapeutic effect on the disabled persons involved in the activity.



enERGia PROJECT

The "enERGia Project" is an initiative taken by the Municipal Authority of Melilli and ERG for the members of the three OAP clubs in Melilli, Villasmundo and Città Giardino. It consists of a group dancing and light exercise course in the rooms of the OAP clubs managed by the Municipal authority. The implementation of the "enERGia Project" improves the quality of the services rendered by the Municipal authority to the senior citizens at the three clubs and represents an active example of collaboration between the public and private sectors.



CULTURE AND KNOWLEDGE

2011 SYRACUSE ALMANAC

In collaboration with the Press Association, ERG and ISAB promote and produce the Syracuse Almanac, a collection of the main news items taken from the local newspapers. A discussion on Corporate Social responsibility in the local area is organized to coincide with the presentation of the news.

THE MAGNA CARTA FOUNDATION

ERG is the founding member of the Magna Carta Foundation, which, since 2004, has promoted scientific research, cultural reflection and the elaboration of proposed reforms on the main themes of political debate.

THE CIVITA FOUNDATION

ERG is also a member of CIVITA, an association for the promotion and management of the national cultural heritage and the protection, promotion and use of artistic assets through shows, cinema and European projects.

YOUNG PEOPLE AND SPORT

JUNIOR ACHIEVEMENT ITALY - BUSINESS IN ACTION

In the wake of the success of the sustainable economy format “Me and the Economy – Community and Environment” at comprehensive schools, the collaboration between Junior Achievement, ERG and ISAB was geared towards the high schools in the province of Syracuse. “Business in Action” is a competition in which students act as entrepreneurs under the guidance of tutors and company experts and share their experiences. The entrepreneurial project of the Nautical School of Syracuse was awarded a national prize as the project best suited to the prospects for development of the community.

20TH “ARCHIMEDE ED ELETTRA” TROPHY

The traditional football tournament at the schools in the province of Syracuse organized by ASD ERG reached a historical objective, its twentieth edition. The tournament played on the pitches of the ERG Sports Centre and the associated competitions saw the participation of about 1,000 students from 30 teaching districts and comprehensive schools. The school teams that won the 2011 “Archimede ed Elettra” Trophy played against the winners of the ERG Ravano Trophy in the finals held in Genoa.

SICUREZZAMICA

The SicurezzAmica competition, organized in collaboration with the Italian National Fire Brigade, saw the participation of a total of over 400 students in their third year at middle schools in Priolo, Melilli, Augusta and Sortino.

The SicurezzAmica project involved the children in a series of lessons held by teachers trained on safety issues in a seminar organized for their benefit with the participation of ERG and ISAB engineers and Firemen, including practical evacuation drills at the schools. At the end of the first phase of the competition, eight classes were admitted to the final stage in which an advertisement on safety issues was produced.





LEGALITY PROJECT “A HELMET IS WORTH A LIFE”

The Legality Project is implemented in collaboration with the Carabinieri, and is reserved for students in their final year at comprehensive schools in the province of Syracuse. Lessons were held at school on the themes of legality and safety, taken as an effect of respecting the law both on the roads and at the workplace, with a competition at the end in which a helmet is awarded to the winners at the final event held at the Greek theatre of Palazzolo Acreide.

SPONSORS OF RINASCITA MELILLESE AND PRIOLO FOOTBALL CLUBS

The footballers in the teams of Priolo e Melilli (who play in the “Promozione” and “Prima Categoria” regional championships), testimonials of the workplace safety through the “Progettosicurezza” logo on their shirts. For ERG and ISAB, safety culture represents an important company asset to be transmitted to the community within the scope of the social responsibility commitments of the two clubs. The idea came from an assessment of the opportunity of transmitting safety values based on respect of the rules and the law, through the world of amateur football.

TROGYLOS PRIOLO BASKETBALL CLUB

ERG continues to support Trogylos, the women’s basketball club that plays in division A1, in its activities, sharing its sporting successes but also, and above all, the ethical values of sport.



SYRACUSE FOOTBALL CLUB

ERG confirmed its sponsorship of Syracuse Football Club, a team that plays in Group B of the “Prima divisione” championship, as support to the most important sports club in Syracuse.

OUR SITE IS GAINING POSITIONS

WE GAINED THREE POSITIONS AND 4.25 POINTS WITH RESPECT TO THE 2010 EDITION

We have moved up to 17th place in the KWD Webranking and 14th place in the Italy Online CSR Awards

Extremely positive results were obtained in 2011 by our company site in the rankings of the two most important studies conducted on on-line corporate communication that assess the largest listed companies in Italy.

2011 KWD WEBRANKING

The KWD Webranking annual study (known in the past as H&H Webranking) reached its tenth edition in 2011 in Italy. This edition, conducted by KWD (computer division of Hallvarsson&Halvarsson) in collaboration with Lundquist and published exclusively in the "Corriere della Sera" newspaper in November, analysed **the 101 largest Italian companies by capi-**

talization and assessed their corporate communication on the web.

In these rankings, ERG obtained a result that may be defined a "counter-tendency". In fact, **our company site climbed up from 20th to 17th position with a score of 61.75 points**, while the results of the 2011 analysis confirmed a generally downward trend due to the economic crisis, which, "instead of stimulating use of the web as a tool for opening and establishing a reputation, brought it to a standstill".

Despite this, we gained three positions and 4.25 points with respect to the 2010 edition: a result that distinguishes itself on the Italian panorama where the average score dropped by almost three points, from 39.6 to 36.8.

As far as our company site is concerned, the highest scores were obtained in the assessment of the Homepage of the site and the Investor Relations area, the Social Responsibility and Corporate Governance sections.

WHO IS KWD?



King Worldwide Digital (KWD) is a prestigious Swedish consultancy company that focuses in particular on online communication.

Its Webranking study compares the websites of the main listed companies in the world with a view **to assessing the adequacy and effectiveness of the companies' online communication** in responding to stakeholders' needs. In all, considering the various national rankings and the general European ranking, it examined 950 companies based all over the world. KWD is represented in Milan by Lundquist S.r.l. ■

**THE AREAS
AWARDED
THE HIGHEST
SCORES
WERE INVESTOR
RELATIONS, SOCIAL
RESPONSIBILITY
AND CORPORATE
GOVERNANCE**

Also this year, the **assessment protocol** was drawn up on the basis of the needs of web users through specific questionnaires on the information, quality and functions requested of the sites of companies quoted by professionals (buy and sell-side analysts and economics journalists) and other stakeholders.

The 2011 protocol saw the elimination of the entire section on technology and structure of the web site, attributing **greater importance to the transpar-**

ency and contents presented on line.

Corporate Governance, Social Responsibility and Employer Branding are the sections given the most weight in the analysis.

Financial information remained fundamentally important in the 2011 edition. The area was subdivided into two sections, one entirely dedicated to the presentation of financial statements and reports and the other dedicated to financial information and shares.

WHO IS LUNDQUIST?



Lundquist is a strategic Milan-based consultancy company that specializes in online corporate communications and represents the Swedish

company Hallvarsson & Halvarsson in Italy, Austria and Switzerland.

The research programmes are dedicated to **online financial communication, use of the corporate website and social media**: it implements the same research projects in other European countries, such as Austria, Switzerland, Germany and Great Britain as well as in Italy ■

**FEW ITALIAN LISTED
COMPANIES HAVE
INTEGRATED
SUSTAINABILITY
IN THEIR ON-LINE
CORPORATE
COMMUNICATION**

2011 ITALY ONLINE CSR AWARDS

The results of the fourth edition of the Online CSR Awards were published in the October 2011 issue of the "Il Sole 24 Ore" business newspaper. **The study was based on a protocol consisting of 79 criteria** (two more than the 2010 edition) developed through a questionnaire that **involved more than 300 international experts** in Corporate Social

Responsibility. The study conducted by Lundquist underlined how a very limited number of Italian listed companies incorporate sustainability in their on-line corporate communication irrespective of the presence and contents of the Sustainability Report.

In this analysis, our site must up two places from **16th in 2010 to 14th in 2011**,

with 53 points: the result demonstrates our firm will to meet the needs of our stakeholders in terms of communication and transparency in the transmission of non-financial information.

The good result of the CSR section of the Group's site becomes even more evident when our score (53 points) is compared with the average score obtained by the companies, which was about 35.4 points.

The analysis concerned the Sustainability section of the company sites, in Italian, of the **50 companies with the largest Stock Exchange capitalization**. These sites were analysed in accordance with the protocol, to see how the companies communicate through them and to assess their performance

in the environmental and social sectors and in relation to governance and relations with their stakeholders.

The 2011 protocol was subdivided into three main areas: **Content**, which analyses the information present on the site, **User Experience**, which assesses the ease with which it can be consulted and **Ongoing Engagement**, which measures the level of dialogue and interactivity with users.

Also this year, the accent was placed on visual communication (e.g. the use of pictures, graphics and info-charts) and presence on social networks, now a consolidated form of communication widely used not only on an individual level but also on a company level ■

A MEDAL FOR ERG IN THE 2011 "OSCAR DI BILANCIO" AWARD



The Financial Statements are the most traditional tool used by companies for communicating to and obtaining the approval of their stakeholders. Trust and Transparency were the key words of the 2011 edition of the *"Oscar di Bilancio"*, a prize awarded by FERPI (Italian Public Relations Federation) under the patronage of the President of the Republic. In the year dedicated to the celebrations for the 150th anniversary of the unification of Italy, it emerged that, in a period of crisis like the one that we are now going through, **clarity of accounts and transparency of reports are appreciated to an ever-increasing degree**. The 2011 prize ceremony was held at the start of December, as has been the tradition since 2004, in the Stock Exchange building in Milan. This year again we won a place among the first three as a **finalist of the Special Prize for Corporate Governance** (which was won by the Telecom Italia Group) ■

OUR SITE SPEAKS LOUD AND CLEAR

Our commitment to improving communication with our stakeholders continues, with positive results

We have already said how important communication with our stakeholders is to us. Well, to improve the information given to every one of them, in terms of both promptness and transparency, is one of our sustainability commitments. The key tool for doing this is without doubt the web. The analyses conducted by the web assessing companies (whose results were reported in previous paragraphs) have confirmed over the years the **good position occupied by our company on the on-line communication panorama**, which confirms our constant commitment to pursuing our objective.

This year we would like to give a picture of the response of our stakeholders to our communication activities: we shall therefore analyse the statistics of the use of the interactive Sustainability Report and the Sustainability section of the **www.erg.it** site.

We underline the fact that most visits are made in the period shortly after the

on-line publication of the Sustainability Report (June/July).

THE INTERACTIVE SUSTAINABILITY REPORT

The interactive version of the Sustainability report enables the user to **"browse through" the document as though it were a site**, using the various links present to pass from one section to another.

The statistics for the year 2011 indicate **visits by about 3,600 users** to a total of about 10,000 pages: in 75% of cases, browsing lasts for less than 2 minutes, a result which, combined with the 3 pages visited by each user, is an indication of their interest in the topics discussed.

The pages that aroused the most interest were the letter to the stakeholders and the "sustainability commitments," and some of the more technical topics, such as the sections on the Group's HSE certifications and the environmental monitoring of the Vicari and Fossa del Lupo wind farms.

THE SUSTAINABILITY SECTION OF OUR SITE

At 31 December 2011, the Sustainability section of our site consisted of 27 pages of which 8 were created new in 2011: that means a **40% increase in contents and details** for our users. All the pages and subsections of the site

IN 2011,
3,600 USERS
BROWSED
THROUGH ABOUT
10,000
PAGES
OF OUR
SUSTAINABILITY
REPORT

THE SUSTAINABILITY SECTION IS THE SOURCE OF INFORMATION VISITED THE MOST BY OUR STAKEHOLDERS

have been reviewed at least once during the year, in line with our will to provide information promptly.

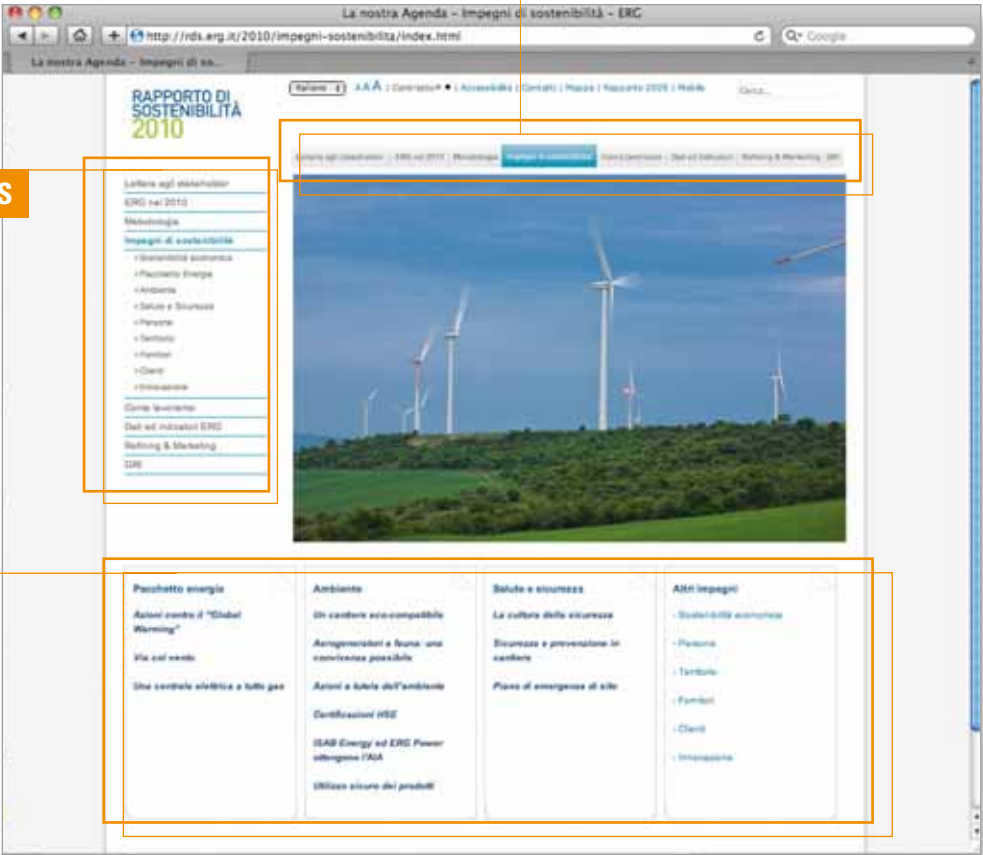
The Sustainability page of our site proved to be the **source of information visited the most by our stakeholders**: almost 4,000 users browsing through about 11,000 pages.

The areas of greatest interest were again the one from which the Sustainability Report (of the current and previous years) can be downloaded, the “How we work” section, which comprises all the HSE policies adopted by the Group, the “Our agenda” section, in particular, the pages concerning “customers” and “people”; the projects and the initiatives taken locally ■

SECTIONS OF THE SUSTAINABILITY REPORT

DETAILS OF THE TOPICS

HIGHLIGHTS



The screenshot of the interactive version of the 2010 Sustainability Report

SUSTAINABLE SUPPLIER RELATIONS

For our Group, supplier management is an ethical and social responsibility as well as an economic one

Within the scope of our industrial activity, we use a large number of companies and external professional resources who work mainly at our production sites and on our plants.

The activities that they perform are maintenance and a series of services of various kinds. With these suppliers, our Group adopts an approach based on transparency: the policy that we adopt is to **conciliate our economic interests with respect of the ethical principles** and to guarantee equal opportunities under conditions of free competition on the market.

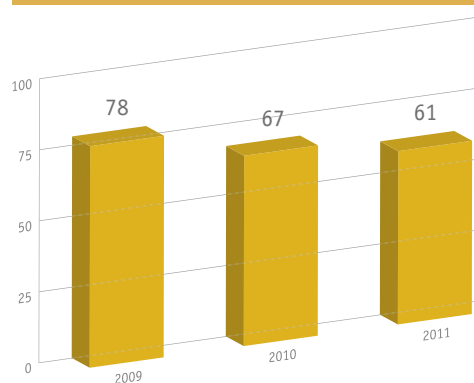
This is the approach that led to ERG, together with other important Groups, setting up i-Faber (23% ERG). It is a portal, managed by i-Faber, which represents a **“virtual marketplace” where transactions may be conducted in a transparent manner**. Within a short time it became a meeting place for medium-large companies and the supplier

market. More than 500 product categories are represented on the portal and 3,600 auctions were held in 2011.

But that's not all. The people who conduct commercial relations with our Group are subjected to a strict assessment based not only on the principles of our Code of Ethics but also on those of sustainability. In fact, all suppliers must necessarily **share and observe the Group's policies**, above all with re-

**I-FABER:
MEETING
POINT
BETWEEN
COMPANIES AND
THE SUPPLIER
MARKET**

**INCIDENCE OF PURCHASES THROUGH TENDERS
(% of value)**



The reduction in the incidence of purchases through competitions in 2011 is due to the direct assignment of the ISAB Energy shutdown activities in October 2011 to suppliers already operating at the site on framework contracts.

WE ASSESS SUPPLIERS ON THE BASIS OF THE PRINCIPLES OF OUR CODE OF ETHICS AND SUSTAINABILITY

gand to Health, Safety and the Environment. In this setting, the Group makes a careful **assessment of the professional and technological skills** of the service providers and **checks their performance** and specific knowledge of the HSE (Health, Safety and Environment) laws and regulations.

This is all supplemented with an **assessment of their economic and contributory position**, to find out their “state of health” in advance. This enables the Group to acquire information useful in identifying any potential liquidity shortages or any debts towards Public Authorities (in particular INPS, the national social security institute).

This screening phase serves to limit the risk of problems arising during the supply, with regard both to the economic sustainability of the commitment made and the legal aspects, following the assignment of long-term orders or contracts by the customer.

In detail, new suppliers are requested to submit:

- copy of the last financial statements approved;
- copy of a recent DURC form (Contribution payment certificate) or, alternatively, a copy of the DM10 form and corresponding F24 forms used to pay for the last 3 months;

→ copy of a recent certificate of registration issued by the Chamber of Commerce;

→ copy, where available, of existing quality certificates, with indications of expiry dates.

At present, to meet their requirements, all the companies in the Group refer to a **Vendor List**. This list is made up of the companies that have passed the checks mentioned previously and have thus been given “qualified supplier” status. Suppliers of products and/or services that spontaneously apply or, alternatively, those identified by the Purchasing Department through market surveys may also be included on the list. All potential suppliers must possess the necessary professional and economic requirements described previously.

The Group’s Purchasing Department periodically reviews the Vendor List with a view to rationalizing it, lowering the prices, increasing the efficiency of the supplies, and increasing the conformance of the suppliers’ work to the corporate ethical, social and environmental responsibility principles. The qualification procedure, carried out on the basis of the indications given in our guidelines, includes tasks assigned to the Corporate structure and specialist support from companies in the analysis and presentation of the applications.

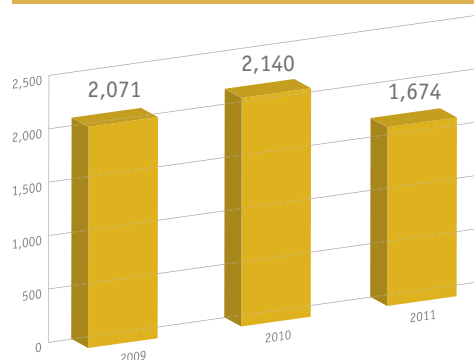
An important part of the Vendor List is

ABOUT 42% OF COMPANIES ON THE VENDOR LIST WITH LONG-TERM CONTRACTS ARE SICILIAN

represented by numerous Sicilian companies, particularly those operating in the industrial zone of Syracuse and at the Group's production sites of Priolo Gargallo. The number of Sicilian companies assigned long-term contracts is equivalent to about 42% of the total number of companies on the Vendor List.

From the economic point of view, in 2011, orders equivalent to 34% of the Group's total purchases were assigned to Sicilian companies ■

QUALIFIED SUPPLIERS



The reduction in the number of qualified suppliers in 2011 is attributable to the removal of the ERG Petroli suppliers from the company database.

CUSTOMERS

A PRECIOUS CO-MARKETING INITIATIVE

Advantages for customers from the partnership between ERG Oil Sicilia and Diamond

Diamond is a purchasing group with over 200,000 members in Sicily.

The aim of the entirely Sicilian partnership established on 1 July 2011 between ERG Oil Sicilia (EOS) and Diamond was to obtain significant discounts on the purchase of goods and services.

Many similar cases have been recorded on the market recently but very few have been successful. One of the few

is certainly the Diamond card, which, at a cost of EUR 30, guarantees major discounts in an infinite number of product categories. Practically the only **sector missing was the fuel sector**.

Hence EOS's idea to propose a relationship of collaboration that traces perfectly the basic concept of the Diamond card: **simplicity, transparency and immediacy**. This union between EOS and

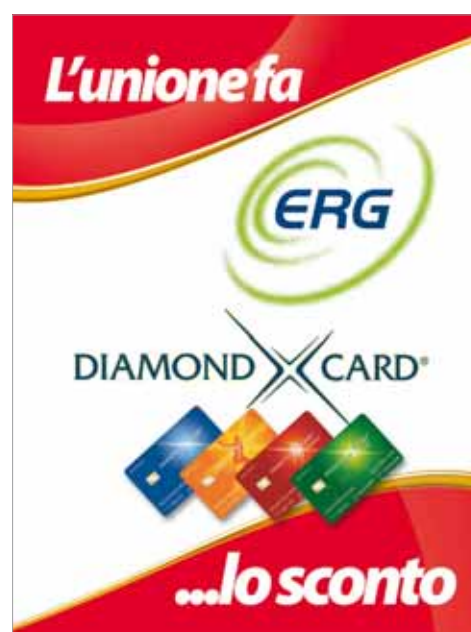
**DIAMOND CARD
HOLDERS HAVE A
DISCOUNT
PROPORTIONATE
TO THE AMOUNT
OF FUEL
PURCHASED AT THE
ERG POINTS OF SALE
SUPPORTING THE
INITIATIVE**

Diamond ("Unity gives a discount" is our slogan), which guarantees Diamond card holders a discount in proportion to the amount of fuel purchased at all ERG points of sale supporting the initiative, is already operative.

Widespread appreciation of the initiative is demonstrated by the numbers of customers, which is increasing constantly: to date, **almost 10,000 customers have filled up for a total of over a million litres of fuel and have benefited from an overall discount of over EUR 30,000.**

The number of customers is destined to increase further and will soon be extended to the province of Syracuse,

through one of the many initiatives taken: the Diamond card as a free gift to all colleagues from the Priolo pole, who are currently submitting their requests ■



CUSTOMERS

**AVANTGARDE
SERVICE AREAS
BETWEEN CATANIA
AND PALERMO**

The Gelso Bianco Nord and Gelso Bianco Sud areas restructured, paying particular attention to the environment

The Gelso Bianco Nord and Gelso Bianco Sud service areas are now a point of

reference for motorists travelling on the Catania-Palermo motorway.

In 2011, we carried out restructuring works to make them more attractive and convenient. The main operations performed in the works were the **introduction of a bar and catering service and the restructuring of the shopping areas**, by expanding and modernising them.

The toilets were also restructured and expanded to cater for parties of tourists that create a flow of many people within a very short time. Young mothers can

A PHOTOVOLTAIC SYSTEM PROVIDES ENERGY FOR ELECTRIC CARS

use the baby room, the multifunctional relaxation room and the outdoor areas equipped with a playground, picnic area and dog-park.

Camper owners have their own area with an information point and wastewater draining point.

The presence of a mechanic's workshop for maintenance work on vehicles provides reassuring support for travellers having problems with their vehicles.

Special attention has also been given to lorry drivers, who will find improved services at their disposal during their stops in the area: more functional parking from the logistical point of view, new, larger showers and the aforesaid toilets, completely renovated, guaran-

tee excellent resting conditions. For the first time ever on our network, sustainable transport has also been catered for:

electric car owners will find facilities for quickly recharging their vehicles.

The electricity will be provided by the photovoltaic plant, which has a power of 10.2 kW. This plant will guarantee a saving of 30 kg of CO₂ a day.

Finally, three main novelties for environmental protection: we have installed a system for **treating all wastewater** prior to its draining into the sewer, created a **separate waste collection point** and assembled **double-wall fuel tanks and pipes**, with continuous monitoring of the gap ■



One of the new points of sale in Sicily

ERG GROUP PERFORMANCE DATA AND INDICATORS

GROUP ECONOMIC-FINANCIAL RESULTS

		2011	2010	2009
Total revenues ⁽¹⁾	EUR million	6,798	7,899	6,237
EBITDA	EUR million	192	238	229
EBITDA at replacement cost ⁽²⁾	EUR million	156	213	22
EBITDA at adjusted replacement cost ⁽³⁾	EUR million	284	305	92
EBIT at replacement cost ⁽²⁾	EUR million	12	59	(115)
EBIT at adjusted replacement cost ⁽³⁾	EUR million	37	86	(92)
Net Profit	EUR million	96	43	45
of which Group Net Profit	EUR million	65	10	7
Group Net Profit at replacement cost ⁽⁴⁾	EUR million	(49)	(20)	(80)
Cash flow from operations	EUR million	(76.5)	119	93
Net invested capital	EUR million	2,842	2,614	2,591
Investments ⁽⁵⁾	EUR million	82	201	347
Financial leverage	%	34	28	26

For the definition and reconciliation of results at adjusted replacement cost, please refer to the chapter "Alternative performance indicators" of the 2011 financial statements.

(1) Net of excise taxes.

(2) Not including inventory gains (losses) and non-recurring items.

(3) These also include the contribution of ISAB S.r.l. (a joint venture with LUKOIL) and TotalErg's (joint venture with TOTAL) results, for the portion owned by ERG.

(4) Does not include inventory gains (losses), non-recurring items and related applicable theoretical taxes. The values also correspond to adjusted values.

(5) Investments in tangible and intangible fixed assets.

Net invested capital in 2011 includes EUR 4.1 million from grants provided by Public Administration to ERG Renew for plants.

Total revenues in 2011 include EUR 53 thousand in grants from Public Administration or the European Community for employee training activities.

The activities of the ERG Group do not include loans to political parties.

ERG SHARES

		2011	2010	2009
Year-end reference price	EUR	8.78	10.45	9.68
Maximum price 01/02/11	EUR	10.74	10.83	12.30
Minimum price 11/08/11	EUR	7.60	8.96	8.43
Average price	EUR	9.29	9.92	10.01
Average volume	no.	211,888	344,063	513,808

OPERATING DATA AND INDICATORS

		2011	2010	2009
Total electricity production	GWh	7,436	6,688	3,009
from renewable energy sources	GWh	740	453	322
Market share of domestic power generation	%	2.6	2.3	1.2
Sale of electricity	GWh	8,084	7,502	4,459

ENVIRONMENT AND COMMUNITY

		2011	2010	2009
Energy consumption (primary sources) ⁽¹⁾	TJ	62,509	⁽²⁾ 59,578	⁽²⁾ 36,132
Energy consumption (primary sources)	ktoe	1,493	⁽²⁾ 1,423	⁽²⁾ 863
of which natural gas	ktoe	548	⁽²⁾ 520	⁽²⁾ 108
Indirect energy consumption	ktoe	17	⁽²⁾ 17	⁽²⁾ 15
Thermoelectric installation efficiency	toe/MWheq	0.205	0.215	⁽²⁾ 0.261
Direct CO ₂ emissions	kt	4,128	3,998	3,406
Indirect CO ₂ emissions (imported energy)	kt	87.1	⁽²⁾ 92.8	⁽²⁾ 84.6
NO _x emissions	t	1,206	1,505	2,317
SO ₂ emissions	t	940	1,336	4,449
Particulate Emissions	t	67	62	215
CO ₂ avoided through renewable energies	kt	306	197	147
SO ₂ avoided through removal of sulphur from charge	kt	79	71	n.a.
Thermoelectric CO ₂ index	t/GWheq	0.57	⁽²⁾ 0.60	⁽²⁾ 0.81
Thermoelectric NO _x index	t/GWheq	0.18	⁽²⁾ 0.23	⁽²⁾ 0.55
Thermoelectric SO ₂ index	t/GWheq	0.14	0.20	⁽²⁾ 1.32
Thermoelectric Particulate index	t/GWheq	0.010	0.009	⁽²⁾ 0.056
Water withdrawals	millions of m ³	292	306	223
Water returned to the natural cycle	% of withdrawals	89.2	87.2	91.0
Waste produced	kt	12.0	14.0	22.0
hazardous waste	kt	3.1	2.4	2.2
non-hazardous	kt	9	12	20
sent for recycling	%	25	28	70
Petroleum product leakage	no. events	–	–	3
Petroleum product leakage	m ³	–	–	1

(1) Conversion factor 1 ktoe = 41.868 TJ.

(2) Correction of erroneous data from the 2010 Report.

PERSONNEL, ORGANISATION OF WORK AND INDUSTRIAL RELATIONS

		2011	2010	2009
Employees at 31/12	no.	652	714	1,579
at Genoa site	%	43	43	n.a.
at Syracuse site	%	51	49	n.a.
Top managers	no.	51	56	98
at Genoa site	%	73	75	n.a.
Middle managers	no.	163	168	290
Clerical staff	no.	348	383	953
Factory staff	no.	90	107	238
Other external collaborators	no.	49	53	n.a.
University graduates	%	44.5	44.1	43.2
School leaver's diploma	%	48.6	48.9	47.4
Female employment	%	21.0	20.9	28.1
Average employee age	years	41.6	41.8	42.1
Average time at company	years	17.4	12.1	13.3
Turnover	%	16.0	13.3	47.5
Absenteeism	%	2.1	2.7	2.2
Part time employees	%	2.8	2.6	2.2
Percentage of overtime	%	10.5	10.5	7.6
Unionisation rate	%	32.7	33.5	15.3
Ongoing labour disputes	no.	7	8	8
Strikes	hours	142	35	n.a.

DETAILED ANALYSIS OF PERSONNEL - 2011

	< 30 YEARS	30/50 YEARS	> 50 YEARS	TOTAL
Top managers	–	33	18	51
Middle managers	1	131	31	163
Clerical staff	17	260	71	348
Factory staff	18	62	10	90
Total Group	36	486	130	652

	MEN	WOMEN	TOTAL
Top managers	50	1	51
Middle managers	125	38	163
Clerical staff	250	98	348
Factory staff	90	–	90
Total Group	515	137	652

	MEN	WOMEN	TOTAL
Genoa	167	113	280
Rome	21	2	23
Syracuse (<i>offices</i>)	3	2	5
Syracuse (<i>plants</i>)	308	18	326
Periphery (<i>Palermo + Catania + travelling personnel</i>)	16	2	18
Total Group	515	137	652

	MEN	WOMEN	TOTAL
Fixed-term contract - Full time	25	3	28
Permanent contract - Full time	490	116	606
Part time	–	18	18
Total Group	515	137	652

	MEN	WOMEN	TOTAL
Employees that used parental leave	1	24	25
Persons returning after taking paternal leave	1	24	25
Personnel still at work after 12 months	1	24	25
Personnel resigning due to maternity	–	–	–

	EMPLOYEE	PROTECTED CATEGORY	TOTAL
Top managers	51	–	51
Middle managers	157	6	163
Clerical staff	318	30	348
Factory staff	83	7	90
Total Group	609	43	652

TRAINING

		2011	2010	2009
Total training	hours	24,197	28,423	33,971
Average training per employee	days/emp.	4.4	5.1	2.7
Trained personnel	no.	439	n.a.	n.a.

	MEN HRS/EMP.	WOMEN HRS/EMP.	MEN HOURS	WOMEN HOURS	TOTAL 2011
Top managers	22.9	4.0	1,146	4	1,150
Middle managers	35.5	30.8	4,439	1,174	5,613
Clerical staff	36.9	21.2	9,226	2,082	11,308
Factory staff	68.0	–	6,126	–	6,126
Total			20,937	3,260	24,197

SAFETY

	MEN	WOMEN	TOTAL 2011	TOTAL 2010	TOTAL 2009
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INJURIE

Genoa	1	–	1	–	–
Rome	–	–	–	–	–
Syracuse (<i>offices</i>)	–	–	–	–	–
Syracuse (<i>plants</i>)	–	–	–	1	–
Periphery (<i>Palermo + Catania + travelling personnel</i>)	–	–	–	–	–
Companies no longer in accounting scope	–	–	–	3	11
Total			1	4	11

		2011	2010	2009
Frequency index <i>no. accidents per million hours worked</i>		0.9	3.4	4.5
Severity index <i>no. of total days lost per thousand hours worked</i>		0.01	0.03	0.06
Work-related deaths	no.	–	–	–

Third-party company injuries	no.	⁽¹⁾ 1	n.a.	n.a.
Frequency index – Third-party companies		⁽¹⁾ 0.77	n.a.	n.a.
Severity index – Third-party companies		⁽¹⁾ 0.03	n.a.	n.a.
Man days worked by third-party companies		⁽¹⁾ 162,672	n.a.	n.a.

(1) Data refers to Priolo site.

HSE ECONOMIC AND OPERATIONAL RESOURCES

		2011	2010	2009
Total HSE expenses	EUR million	37	25	57
of which investments	EUR million	11	5	13
of which current expenses	EUR million	26	20	44
HSE equivalent staff as % of Group total	%	12.3	16.1	9.7
Level of ISO 14001 and OHSAS 18001 certification of industrial sites	%	80	64	78
HSE Audit	no.	27	68	64
Safety walks	no.	78	41	28

CUSTOMERS


		2011	2010	2009
Call centre efficiency – Calls answered within 30 seconds	%	⁽¹⁾ n.a.	>75.0%	n.a.
Back office efficiency – Compliance with response times for written customer claims	%	⁽¹⁾ n.a.	99.2%	n.a.
Number business customers	no.	⁽¹⁾ approx. 15,000	approx. 21,000	n.a.
Number industrial site customers	no.	11	11	n.a.




(1) Branch of company sold in late 2011.

SUPPLIERS

		2011	2010	2009
Active suppliers (at least one order)	no.	1,638	2,541	2,722
which have registered offices or a billing address in Italy	%	91.2	n.a.	n.a.
which have registered offices or a billing address in Sicily	%	24	15	16
Qualified suppliers	no.	1,674	2,140	2,071
Average qualification time	days	149	206	191
Incidence of tenders (vs. total value of purchases)	%	61	67	78
Incidence of tenders (vs. total number of purchases)	%	24	n.a.	n.a.
Ships rejected by screening process	%	19	13	9



GRI APPLICATION LEVEL*









		IN ACCORDANCE WITH GRI G3.1 GUIDELINES - 2011	C	C+	B	B+	A	A+
MANDATORY	Company self-check			REPORT VERIFIED			✓	
OPTIONAL	Checked by third parties					REPORT VERIFIED		
	Checked by GRI							REPORT VERIFIED

GRI/G3.1 INDICATORS  Total  Partial  Not covered n.a.: not applicable

* The joint ventures TotalErg S.p.A. and ISAB S.r.l. are excluded from the reporting boundary.

PROFILE

1 STRATEGY AND ANALYSIS	COVERAGE	REFERENCES	COMMENTS
1.1 Statement from the most senior decision maker of the organisation regarding the importance of sustainability for the organisation and its strategy.		4-5	
1.2 Description of key risks and opportunities.		4-5; 8-11; 14-16; 20-29; 31-34; 36-37; 39-41; 47; 62-63	

2 ORGANISATION PROFILE			
2.1 Name of the organisation		184	
2.2 Primary brands, products and/or services.		8-11	
2.3 Operational structure of the organisation, including main divisions, operating companies, subsidiaries and joint ventures.		8-11	
2.4 Location of organisation’s headquarters.		184	The list of ERG sites is available in the “Contacts” section of the corporate website www.erg.it
2.5 Number of countries in which the organisation operates, name of countries where the organisation carries out its operating activities or which are particularly important with regard to the sustainability issues covered in the report.		8-11; 13; 16	
2.6 Nature of ownership and legal form.		21	See also the “Shareholders” section on the corporate website www.erg.it
2.7 Markets served.		8-11; 13; 16; 149	
2.8 Scale of reporting organisation		8-11; 12; 21; 46; 144-145; 147	

	COVERAGE	REFERENCES	COMMENTS
2.9 Significant changes in the size, organisation or company structure during the reporting period.	■	8-11; 14-16; 21	
2.10 Awards received in reporting period.	■	115; 134-136	
EU1 Installed capacity, broken down by energy source and regulatory regime.	■	8-11; 13; 14-15	
EU2 The net energy produced, broken down by primary source and regulatory regime.	■	12-13; 46; 145	
EU3 The number of residential, industrial and commercial customers.	■	8-11; 17; 149	
EU4 Length of overhead and underground transmission and distribution lines by regulatory regime.	n.a.		ERG does not manage electricity transmission and distribution activities.
EU5 CO ₂ allocations of emissions allowances or equivalent, broken down by carbon trading framework.	■	13	

3 REPORT PARAMETERS

Report profile

3.1 Reporting period.	■	36	Since 2007 the ERG Sustainability Report has been published in June every year.
3.2 Date of most recent report if any.	■	36	Since 2007 the ERG Sustainability Report has been published in June every year.
3.3 Reporting cycle.	■	36	Since 2007 the ERG Sustainability Report has been published in June every year.
3.4 Contact point for questions regarding the report and its context.	■	184	See the "Contacts" section of corporate website www.erg.it

Report scope and boundary

3.5 Process for defining report content.	■	36-37; 39-40	
3.6 Boundary of the report.	■	36-37; 38	
3.7 State any specific limitations on the scope or boundary of the report.	■	36-37; 38	
3.8 Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organisations.	■	8-11; 14-16; 36-37; 38	
3.9 Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the indicators and other information in the report.	■	12; 36-37; 38; 46; 71; 93; 105; 144	

	COVERAGE	REFERENCES	COMMENTS
3.10 Explanation of the effect of any re-statements of information provided in earlier reports.	■	36-37; 38; 145	
3.11 Significant changes from previous reporting periods in the scope, boundary or measurement methods applied in the report.	■	12; 36-37; 38; 73; 93; 105; 144	
Content index			
3.12 GRI Context Index Table	■	150-163	
Assurance			
3.13 Policy and current practice with regard to seeking external assurance for the report.	■		ERG does not subject the Sustainability Report to external auditing.

4 GOVERNANCE, COMMITMENTS, ENGAGEMENT OF STAKEHOLDERS

Governance

4.1 Governance structure of the organisation, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organisational oversight.	■	18-21; 31-32	
4.2 Indicate whether the Chair of the highest governance body is also an executive officer.	■	20	
4.3 For organisations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	■	18; 20	See the "Governance" section of the corporate website www.erg.it
4.4 Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	■	18-19; 22-23; 111-113;	Also see "Shareholders' Meeting Regulations" section of the corporate website www.erg.it
4.5 Linkage between compensation for members of the highest governance body, senior managers and executives and the performance of the organisation.	■	21; 22; 110-111	
4.6 Processes in place for the highest governance body to ensure conflicts of interest are avoided	■	19; 22-23; 24-28	
4.7 Process to establish the composition, the qualifications and the skills of the highest governance body and related committees, including any considerations of gender and other indicators of diversity.	■	18-21	See "Corporate Governance" section of the corporate website www.erg.it
4.8 Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	■	4-5; 29; 31-34; 39	See the Code of Ethics available on corporate website www.erg.it
4.9 Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental and social performance.	■	18; 22-29; 31- 34	

	COVERAGE	REFERENCES	COMMENTS
4.10 Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	■	21; 22; 31-34	
Commitment to external initiatives			
4.11 Explanation of whether and how the precautionary approach or principle is addressed by the organisation.	■	22-29	
4.12 Externally developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes or endorses.	■		ERG does not adhere to codes of conduct, principles and charters developed by external bodies/associations.
4.13 Membership in associations and/or national/international advocacy organisations.	■	30-31; 64; 126-128; 131	
Stakeholder engagement			
4.14 List of stakeholder groups engaged by the organisation.	■	39-40	
4.15 Basis for identification and selection of stakeholders with whom to engage.	■	39-40	
4.16 Approaches to stakeholder engagement.	■	30; 39; 47-48; 111-114; 117; 122; 125; 126-128; 130-132; 137-138	
4.17 Key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting.	■	39-40; 41; 108; 111-112; 117	
ECONOMIC PERFORMANCE INDICATORS			
Management and monitoring policies and systems.	■	22-29; 31-34; 54-55; 56-58; 59; 62-64; 117-121; 125-128; 139-141; 144; 149	
EU6 Management approach to ensure short- and long-term electricity availability and reliability.	■	8-10; 17; 39-40; 50-51; 95-96	
EU7 Demand-side management programmes, including residential, commercial, institutional and industrial programmes.	■		For the activities taking place during the year please refer to the 2010 Sustainability Report. The retail branch of the company was sold in December 2011. The remaining industrial customers use the electricity and the steam produced for their production cycles.

	COVERAGE	REFERENCES	COMMENTS
EU8 Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development.	■	8-10; 14-15; 50-51; 58-59; 95-96	
EU9 Provisions for decommissioning of nuclear sites.	n.a.		ERG does not possess, neither directly nor through shareholdings, shares in companies that manage nuclear power plants.
Economic performance			
EC1 Direct economic value generated and distributed.	■	44	
EC2 Financial implications and other risks and opportunities for the organisation's activities due to climate change.	■	22-29; 31-34; 54-55; 56-58; 59; 62-64	
EC3 Coverage of the organisation's defined benefit plan obligations.	■		ERG does not manage any independent company pension plan.
EC4 Significant financial assistance received from government.	■	144	
Market presence			
EC5 Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation, divided according to gender.	■		Area regulated by the National Labour contract and supplementary agreements.
EC6 Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	■	139-141; 149	
EC7 Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	■	103; 117; 146	The ERG Group guarantees equal opportunities during its hiring procedures.
Indirect economic impact			
EC8 Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	■	56; 114-115; 117-121; 123; 125; 126-128; 130-133	
EC9 Understanding and describing significant indirect economic impacts, including the extent of impacts.	■	56; 117; 122	
EU10Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime.	□		The information required refers to the corporate strategy available on the company website www.erg.it
EU11Average generation efficiency of thermal plants by energy source and regulatory regime.	■	13; 46; 70; 145	
EU12Transmission and distribution losses as a percentage of total energy.	■		ERG does not manage electricity transmission and distribution activities.

	COVERAGE	REFERENCES	COMMENTS
ENVIRONMENTAL PERFORMANCE INDICATORS			
Management and monitoring policies and systems.	■	14-15; 33-34; 50-51; 56-57; 58-59; 62-64; 66-67; 70; 73; 74-81; 145	
Raw materials			
EN1 Raw materials used by weight or volume.	■		
EN2 Percentage of materials used that are recycled input materials.	n.a.	145	Our activities do not involve the use of recycled materials.
Energy			
EN3 Direct energy consumption by primary energy source.	■	145	
EN4 Indirect energy consumption by primary source.	■		Indirect energy consumption is covered by purchases from the national grid. Please refer to the most recent reports by GSE-Terna.
EN5 Energy saved due to conservation and efficiency improvements.	■	14-15; 33-34; 50-51; 56-57; 58-59; 62-64; 66-67; 70	
EN6 Initiatives to provide energy-efficient or renewable energy-based products and services and reductions in energy requirements as a result of these initiatives.	■	14-15; 66-67; 70	
EN7 Initiatives to reduce indirect energy consumption and reductions achieved.	■		The plants produce the energy they need for their production processes. The energy purchased on the market is only used for temporary necessities.
Water			
EN8 Total water withdrawal by source.	■	73; 145	
EN9 Water sources significantly affected by withdrawal of water.	■	73; 145	
EN10 Percentage and total volume of water recycled and reused.	■	63; 156	Water withdrawals mainly relate to sea water used for cooling the plants and apparatus. Once the cycle of reuse is terminated, the water is returned to the water source after its quality has been suitably monitored.

	COVERAGE	REFERENCES	COMMENTS
Biodiversity			
EN11 Location and size of land owned, leased, managed in or adjacent to protected areas and areas of high biodiversity value outside protected areas.	n.a.		ERG neither possesses nor manages lands in natural areas with high biodiversity values.
EN12 Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	■	74-81	
EU13 Biodiversity of habitats compared with the biodiversity of areas involved.	■	74-81	
EN13 Habitat protected or restored.	■	74-81	
EN14 Strategies, current actions, and future plans for managing impacts on biodiversity.	■	74-81	
EN15 Number of IUCN Red List species and national conservation list species with habitats in areas where the organisation operates, by level of extinction risk.	■		ERG neither possesses nor manages lands in natural areas with high biodiversity values.
Emissions, effluents and waste			
EN16 Total direct and indirect greenhouse gas emissions by weight.	■	70; 145	
EN17 Other relevant indirect greenhouse gas emissions by weight.	■		There are no other indirect emissions of significant weight that stem from the company's operations.
EN18 Initiatives to reduce greenhouse gas emissions and reductions achieved.	■	62-64; 66-67; 68-71; 145	
EN19 Emissions of ozone-depleting substances by weight.	■		ERG does not emit substances that are harmful to the ozone layer in its industrial activities.
EN20 NO _x , SO _x and other significant air emissions by type and weight.	■	69; 145	
EN21 Total water discharged by quality and destination.	■	63; 145	
EN22 Total weight of waste by type and disposal method.	■	145	
EN23 Total number and volume of significant spills.	■	145	
EN24 Weight of waste deemed hazardous.	■	145	
EN25 Identity, size, protected status and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and runoff.	■	78-81	
Products and services			
EN26 Initiatives to mitigate the environmental impacts of products and services and extent of impact mitigation.	■	62-64; 66; 68-70	

	COVERAGE	REFERENCES	COMMENTS
EN27 Percentage of products sold and their packaging materials that are reclaimed by category.	n.a.		Fuels are marketed via the ERG Oil Sicilia network and sold as “loose” products.

Compliance

EN28 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	■		There were no fines or non-monetary sanctions for the failure to comply with environmental regulations and laws.
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Transport

EN29 Significant environmental impact of transporting products and other goods and materials used for the organisation’s operations, and transporting members of the workforce.	□		This indicator is not regarded as significant for the activities carried out by the Group.
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Overall

EN30 Total environmental protection expenditures and investments by type.	■	93; 149	
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PERFORMANCE INDICATORS ON SUITABLE WORKING PRACTICES AND CONDITIONS

Management and monitoring policies and systems.	■	28; 82-85; 92-102; 103; 106-107; 108-109; 110-111; 146-148	
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Employment

EU14 Programmes and processes to ensure the availability of a skilled workforce.	■	28, 83; 105; 108-109; 111-114; 148	
EU15 Percentage of employees eligible to retire in the next 5 and 10 years, broken down by job category and by region.	■	146	Given the extremely recent introduction of the new pension law it hasn’t been possible to quantify this indicator.
EU16 Policies and requirements regarding the health and safety of employees and employees of contractors and subcontractors.	■	33-34; 82-85; 90-91; 92-93; 94-96; 97-99; 101	
LA1 Total workforce by employment type, employment contract, region and gender.	■	147	
LA2 Total number and rate of employee turnover by age group, gender and region.	■	106-107; 146	

	COVERAGE	REFERENCES	COMMENTS
LA3 Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	■		All employees enjoy the same benefits in relation to their professional position.
LA15 Return-to-work rate and retention rate after parental leave, broken down by gender.	■	103; 147	
EU17 Days worked by contractor and subcontractor employees involved in construction, operation and maintenance activities.	■	148	
EU18 Percentage of contractor and subcontractor workers who have undergone relevant health and safety training.	■	83	
Industrial relations			
LA4 Percentage of employees covered by collective bargaining agreements.	■		92% of employees adhere to the Italian Energy and Oil Collective Labour Agreement, while the other 8% adhere to the Industrial Business Managers Collective Labour Agreement.
LA5 Minimum notice period for operational changes.	■		Regulatory and compensation-related aspects refer to the National Collective Labour Agreement.
Health and safety in the workplace			
LA6 Percentage of workforce represented in the health and safety committee.	■	98-99	
LA7 Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and gender.	■	146; 148	
LA8 Education, training, counselling, prevention, and risk-control programmes in place to assist workforce members, their families, or community members regarding serious diseases.	■	82-85; 92-102	
LA9 Health and safety topics covered in formal agreements with trade unions.	■		With respect for the provisions of the Italian Energy and Oil Collective Labour Agreement.
Training and education			
LA10 Average hours of training per year per employee by employee category and gender.	■	28; 83; 108-109; 148	
LA11 Programmes for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	■	28; 83; 105; 108-109; 148	
LA12 Percentage of employees receiving regular performance and career development reviews, according to gender.	■	110-111	

	COVERAGE	REFERENCES	COMMENTS
Diversity and equal opportunity			
LA13 Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	■	20; 146-147	
LA14 Ratio of basic salary of men to women by employee category, broken down according to the most important operating sites.	■		Wages are regulated by the Italian Energy and Oil Collective Labour Agreement and the Code of Ethics, which prohibits discrimination of this type.
HUMAN RIGHTS PERFORMANCE INDICATORS			
Management and monitoring policies and systems.	■	29, 103; 139-140	
Investment and procurement practices			
HR1 Percentage and total number of significant investment agreements and contracts that include human rights clauses or that have undergone human rights screening.	■	29; 103; 139-140	ERG carries out its activities at national/European level where such aspects are protected by the law.
HR2 Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.	■	29; 103; 139-140	ERG carries out its activities at national/European level where such aspects are protected by the law.
HR3 Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	■	29; 103; 139-140	ERG carries out its activities at national/European level where such aspects are protected by the law.
Non-discrimination			
HR4 Total number of incidents of discrimination and actions taken.	■		Total number of incidents of discrimination and actions taken.
Freedom of association and collective bargaining			
HR5 Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	■	29; 103	ERG carries out its activities at national/European level where such aspects are protected by the law.
Child labour			
HR6 Operations identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour.	■	29; 103	ERG carries out its activities at national/European level where such aspects are protected by the law.
Forced labour			
HR7 Operations identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of forced or compulsory labour.	■	29; 103	ERG carries out its activities at national/European level where such aspects are protected by the law.

	COVERAGE	REFERENCES	COMMENTS
Security practices			
HR8 Percentage of security personnel trained in the organisation's policies or procedures concerning aspects of human rights that are relevant to operations.	■	29; 83; 93; 103	ERG carries out its activities at national/European level where such aspects are protected by the law.
Indigenous rights			
HR9 Total number of incidents of violations involving rights of indigenous people and actions taken.	■		No violations were recorded in 2011.
Evaluations			
HR10 Percentage and total number of activities that have been subject to review with regard to human rights and/or impact evaluation.	■	29; 103	ERG carries out its activities at national/European level where such aspects are protected by the law.
Corrective actions			
HR11 Number of complaints made regarding the respect for human rights, managed and resolved through formal complaint management mechanisms.	■		No violations were recorded in 2011.
SOCIETY PERFORMANCE INDICATORS			
Management and monitoring policies and systems.	■	23-29; 30-31; 80-87; 117	
EU19 Stakeholder participation in the decision-making process related to infrastructure development energy planning.	■		Company activities do not involve infrastructure development energy planning.
EU20 Approach to managing the impacts of displacement.	■		There was no outplacement of personnel in 2011.
EU21 Contingency planning measures, disaster/emergency management plans and training programmes, and recovery/restoration plans.	■	63; 77-78; 82-85; 97-99	
Community			
S01 Nature, scope, and effectiveness of any programmes and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	■		The new constructions and the substantial changes to the plants are subject to environmental impact assessment (EIA) procedures which foresee the involvement of the interested parties (the local communities) for the analysis of connected environmental, landscape and territorial issues.
EU22 Number of people economically or physically displaced and compensation, broken down by type of project.	■		There was no outplacement of personnel in 2011.

	COVERAGE	REFERENCES	COMMENTS
S09 Activities with a significant real or potential negative impact on the local communities.	■		The new constructions and the substantial changes to the plants are subject to environmental impact assessment (EIA) procedures which foresee the involvement of the interested parties (the local communities) for the analysis of connected environmental, landscape and territorial issues.

S010 Prevention and mitigation measures implemented for activities with significant real or potential negative impact on the local communities.	■	80-87; 117	
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Corruption

S02 Percentage and total number of business units analysed for risks connected with corruption.	■	23-29	
S03 Percentage of employees trained in the organisation's anticorruption policies and procedures.	■	28	
S04 Actions undertaken in response to incidents of corruption.	■	23-29	

Political contributions (approach to politics/institutions)

S05 Positions on public policy, participation in the development of public policies, and lobbying.	■	30-31	
S06 Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	■	30-31; 162	The activities of the ERG Group do not include loans to political parties.

Anti-collusion measures

S07 Total number of legal proceedings regarding unfair competition, anti-trust, and monopolistic practices and related rulings.	■		No cases were recorded in 2011.
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Compliance

S08 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws or regulations.	■		No fines were recorded in 2011.
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PERFORMANCE INDICATORS ON PRODUCT RESPONSIBILITY

Management and monitoring policies and systems.	■	82-85; 92-102	
EU23 Programmes, including those in partnership with government, to improve or maintain access to electricity and customer support services.	n.a.		ERG does not manage electricity distribution activities.
EU24 Practices to address language, cultural, low-literacy, and disability barriers to accessing and safely using electricity and customer support services.	n.a.		ERG customers are mainly business customers.

	COVERAGE	REFERENCES	COMMENTS
Health and safety of consumers			
PR1 Life-cycle stages in which the health and safety impact of products and services are assessed to promote their improvement and the percentage of significant product and service categories subject to such procedures.	■	82-85; 92-102	The sold products are not subject to life cycles.
PR2 Total number (separated by type) of non-compliance with regulations and voluntary codes concerning HSE impacts.	■		No cases of non-compliance were recorded in 2011.
EU25 Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements, and pending legal cases of diseases	■		There were no injuries to third parties in 2011.
Labelling of products and services			
PR3 Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	■		ERG mainly markets 'loose' products and in compliance with the laws in force through the retail outlets of the ERG Oil Sicilia network.
PR4 Total number (separated by type) of non-compliance with regulations and voluntary codes concerning product and service information and labelling.	■		No cases of non-compliance were recorded in 2011.
PR5 Practices relating to customer satisfaction including results of surveys measuring customer satisfaction.	■	142	No specific customer satisfaction analyses were carried out during the year. Only the opinions of users at renovated motorway service areas were requested.
Marketing communications			
PR6 Programmes for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	■		The company does not adhere to voluntary codes with regard to marketing activities.
PR7 Total number (separated by type) of non-compliance with regulations and voluntary codes concerning marketing activities, including advertising, promotion and sponsorship by type of outcomes.	■		No cases of non-compliance were recorded in 2011.
Respecting privacy			
PR8 Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	■		No complaints were made in 2011.
Compliance			
PR9 Monetary value of significant fines for non-compliance with laws and regulations concerning the supply and use of products and services.	■		No complaints were made in 2011.

	COVERAGE	REFERENCES	COMMENTS
EU26 Percentage of population unserved in licensed distribution or service areas.	n.a.		ERG does not manage electricity distribution activities.
EU27 Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime.	n.a.		ERG does not serve residential customers.
EU28 Power outage frequency.	n.a.		ERG does not manage electricity distribution activities.
EU29 Average power outage duration.	n.a.		ERG does not manage electricity distribution activities.
EU30 Average plant availability factor by energy source and by regulatory regime.	■	46	



Statement GRI Application Level Check

GRI hereby states that **ERG spa** has presented its report "Sustainability report 2011" to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level A.

GRI Application Levels communicate the extent to which the content of the G3.1 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3.1 Guidelines.

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 03 May 2012

A handwritten signature in blue ink, appearing to read "N. Arbex", is written over a faint circular watermark background.

Nelmara Arbex
Deputy Chief Executive
Global Reporting Initiative



The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. www.globalreporting.org

Disclaimer: Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 24 April 2012. GRI explicitly excludes the statement being applied to any later changes to such material.

4 REFINING & MARKETING

*refining
& marketing*

COMPANY PROFILE

Since its establishment the ISAB Refinery has been distinguished by the **advanced technology it uses** that has enabled it to satisfy the growing demand for products with a low environmental impact such as green gasoline, diesel and fuel oils with a low sulphur content. Technological evolution at processing plants has always been focused on **safeguarding environmental aspects**.

The south plants of the refinery went into operation in 1975 with a capacity of 11 million tonnes of crude oil, which was increased to 12 million tonnes in 1997.

The north plants, built during the mid-1950's under the original SINCAT (*Società Industriale Catanese*) name, went into operation around 1960 with a processing capacity of over 17 million tonnes. After various sales, the last of which to AGIP, the ERG Group acquired them in 2002 creating, together with



ISAB

the south plants, an **integrated refinery "super-site"** called the "ISAB Refinery", managed by the subsidiary ERG Raffinerie Mediterranee.

Thanks to the construction of interconnection pipelines in 2006, the south and north plants can be considered a single refinery.

The two original production facilities differ on the basis of the type of conversion and crude oil blend processed. In particular, the south plants, essentially equipped with thermal conversion processes, are focused on the production of average distillates and, with a significant desulphurisation capacity, are able to work prevalently with medium-heavy crude oils that have a high sulphur content. The north plants, equipped with

catalytic conversion, are structured to produce higher quantities of light distillates using a balanced quantity of medium-heavy and light crude oils.



The ISAB Sud pier

Today, the ISAB Refinery transports **90% of raw materials and petroleum products** through three piers, one of which is located in Santa Panagia Bay, approximately 3 km from the south plants. The other two, the “*Superpetroliere*” Pier and the pier for liquids, are located at the north plants inside the port complex in Augusta.

Today the Refinery is subject to **on-going technological evolution** that, through the construction of new plants and the optimisation of existing structures, enables it to respond to the demands of the market, improve the quality of products and guarantee maximum environmental compatibility.

As proof of this, the Refinery has achieved ISO 14001 certification for its

Environmental Management System and OHSAS 18001 for the Management System for Health and Safety in the workplace.

The shareholding structure has undergone a significant transformation compared with 1 December 2008, the start of the joint venture between ERG and LUKOIL: in January 2011 and 2012 ERG exercised its put option on, respectively, 11% and 20% of the share capital, which is currently 80% owned by LUKOIL and 20% owned by ERG.

HEALTH, SAFETY, ENVIRONMENT AND QUALITY

ISAB has long been committed to carrying out its activities via a business culture in which Health, Safety and the Environment are guiding values that safeguard human and industrial heritage.

Guaranteeing the safety of operations, the health of workers and the safeguarding of the environment are the **primary elements of ISAB’s sustainability policy** from an economic/financial, social and environmental point of view. **Risk management and prevention is central** to the success of this policy.

Following the important strategic projects launched in the last two years,

such as the Safety Project and the Sprint Project for the reorganisation of processes, ISAB decided to strengthen the role of its guiding values in its activities, involving the entire company population, the businesses and community. For this reason, while maintaining the guiding values intact, in July 2011 it updated its HSE policy in order to acknowledge the results attained, strengthen its commitment and take account of the recent project to optimise energy consumption.

Health

Also in 2011, ISAB confirmed its commitment to the local communities, particularly as regards **healthcare protection and the general development of a culture** in this area.

In this context, of particular note are the activities connected with the Healthcare Prevention voluntary project in the Priolo Gargallo area, with a series of broad-reaching prevention initiatives regarding emerging pathologies in the area according to the evaluations of the Health Department and the World Health Organisation.

Finally, in accordance with the requirements of the local health authority, ISAB donated equipment for the benefit of a number of healthcare structures in the Province of Syracuse.

Safety

In parallel with the investments made to increase the level of safety for workers and the plants where they work, in 2011 special attention was focused on the Safety Project, with the working groups concentrating their efforts on the “human factor”, a key element in risk management and mitigation.

A broad and gradual process was launched with the aim of reviewing and improving existing procedures and, above all, increasing awareness of them and rigidly applying them.

Activities to improve the safety culture, by raising awareness and commitment levels in all areas of the organisation, also continued.

In addition, **the entire corporate population** has displayed consistency and responsibility in its **commitment** to implementing the safety management tools developed by the working groups set up.

Classroom training programmes and field training have involved company management, managers and all operational staff.

As regards relations with the Regional Technical Committee (RTC), in 2011 proceedings began with regard to the **updating of the Safety Report** (2010 edition) for both the north and south plants. In addition, in 2011 the proceed-

ings regarding the Safety Report (2005 edition) for the south plants were concluded.

Among the works ordered by the RTC Working Group, in 2011 the repairs on the fire prevention network of the north plants, for a total of around 24 km, were completed.

Management systems and certification

Following the inspections carried out by Det Norske Veritas in 2011, the management systems in place were once again **compliant with the UNI**

EN ISO 14001:2004 and BS OHSAS 18001:2007 reference standards.

As well as confirming the seriousness of the company's commitment to making every activity and workplace increasingly safe in respect of the environment, and in terms of sustainability, the external validation of the results attained has also translated into a **competitive advantage** from an economic, authoritative and image-related point of view.

By adopting management systems for the protection of health, safety and the environment as an integral part of



Night view of the ISAB plants

its risk management strategies, ISAB views the compliance with its legal obligations not as the mere fulfilment of its duties but as an **opportunity for growth**.

The immediate results of the application of the management systems are evidenced by data trends regarding undesired events, which underline the improvement in the results achieved.

Environment

At the end of 2011 ISAB was awarded **Integrated Environmental Authorisation (IEA)** by the Italian Ministry of the Environment. As a result of this authorisation during 2012 it will be necessary to carry out a series of activities in order to comply with the prescriptions of the IEA decree. The Integrated Environmental Authorisation replaces all of the ISAB South Plant and ISAB North Plant environmental authorisations and has a term of 6 years.

ENVIRONMENTAL CHARACTERISATION AND THE RECLAMATION OF INDUSTRIAL SITES

In 2009 the relevant authorities signed the **Programme Agreement** which regulates the mechanisms of the reclamation of public areas in the Site of National Interest of Priolo Gargallo.

This agreement involves the possible adhesion, on a voluntary basis, of busi-

nesses in the Site of National Interest of Priolo Gargallo and their consequent economic contribution to expenses.

Relative to the ISAB South Plants site, ISAB adhered to the Programme Agreement in August 2011 via the undersigning of a transaction. This enabled it to obtain approval for the "Project for the Reclamation of the soils and groundwater of the Refinery" ■

ISAB S.R.L. PERFORMANCE DATA AND INDICATORS

ECONOMIC RESULTS*

		2011	2010	2009
Total revenues	EUR million	2,142	1,939	1,411
EBITDA	EUR million	131	140	123
EBIT	EUR million	33	53	45

* Values calculated according to Italian accounting principles.

PROCESSING

		2011	2010	2009
Refinery processing	kt	11,829	13,464	12,373
Refinery processing for third parties	thousands barrels/day	237	269	247

SAFETY

		2011	2010	2009
Total accidents	no.	2	–	3
Frequency index <i>no. accidents per million hours worked</i>		1.12	–	1.58
Severity index <i>no. of total days lost per thousand hours worked</i>		0.10	–	0.12
Frequency index – Third party companies		1.02	1.87	1.21
Severity index – Third party companies		0.02	0.02	0.03
ISO 14001 and OHSAS 18001 certification level	%	100%	100%	100%
HSE training	hours	23,619	23,415	20,836

ENVIRONMENT AND COMMUNITY

		2011	2010	2009
Energy consumption (primary sources)	ktoe	652	819	813
of which Natural Gas	ktoe	169	226	220
Direct CO ₂ emissions	kt	2,467	2,636	2475
Indirect CO ₂ emissions (imported energy)	kt	299	647	⁽¹⁾ 526
CO ₂ refining index	t/processed in kt	101.9	⁽¹⁾ 98.6	95.8
NO _x emissions	t	1,672	1,942	⁽¹⁾ 1,736
SO ₂ emissions	t	5,489	7,358	⁽¹⁾ 6,096
Particulate Emissions	t	157	118	⁽¹⁾ 103
Water withdrawals	millions of m ³	308	269	285
of which seawater	millions of m ³	304	264	281
Water returned to the natural cycle	%	98.5	⁽¹⁾ 97.9	⁽¹⁾ 86.5
Water discharge – Oils	t	23	16	⁽¹⁾ 10
Waste produced	kt	682	568	593
by site reclamation and new constructions	%	96	93	91
sent for recycling	%	3	4	6
non-hazardous	%	3	4	3
Petroleum product leakage	no. events	2	6	13
Petroleum product leakage	m ³	n.d.	615	55

(1) Correction of erroneous data in 2010 Report.

PERSONNEL, ORGANISATION OF WORK

EMPLOYEE ROLE	2011			2010		
	F	M	TOTAL	F	M	TOTAL
Top manager	1	21	22	1	23	24
Middle manager	6	126	132	5	123	128
Clerical staff	35	416	451	40	429	469
Factory staff	–	414	414	–	480	480
Overall total	42	977	1,019	46	1,055	1,101

TYPE OF CONTRACT	2011			2010		
	F	M	TOTAL	F	M	TOTAL
Full time trainee	–	80	80	1	109	110
Fixed-term contract	–	17	17	–	14	14
Fixed-term part time contract	–	–	–	1	–	1
Permanent part time contract	4	–	4	3	–	3
Fixed-term contract	–	–	–	–	1	1
Permanent contract	38	880	918	41	931	972
Overall total	42	977	1,019	46	1,055	1,101

Average number of employees	1,060	1,091
Staff turnover	9.81%	14.21%
Unionisation rate	64.80%	62.30%

COMPANY PROFILE

The company was founded on 1 October 2010 following the merger of ERG Petroli and Total Italia, is 51% owned by ERG S.p.A. and 49% owned by Total S.A., and operates in four business areas: **Refining, Supply and Logistics, Retail, Wholesale and Specialities.**

It is present in the refining sector through Raffineria di Roma, 100%-owned, and Raffineria Sarpom di Trecate (Novara), in which it has a 26% shareholding. With an overall working capacity of around 120,000 barrels/day, it covers 8% of the Italian refining capacity.

The Retail segment, comprising over 3,300 outlets, makes TotalErg the **third biggest operator in the sector**, with sales of around 3,900 million litres and a market share of 12%; in terms of its network of motorway outlets, with its 76 service stations it is the **second biggest company on the market.**

In the wholesale segment TotalErg markets over 1.8 million tonnes of fuels, and sells to both resale companies in the sector (B2B) and directly to consumers

TOTALERG

(B2C) through its subsidiaries Eridis and Restiani.

In the Specialities sector it markets bitumens, lubricants (with its three brands Total, Elf and ERG), LPG (through subsidiaries Totalgaz Italia and Restiani) and special fluids.

MANAGEMENT SYSTEMS AND CERTIFICATION

In line with the integration process, 2011 saw the fine-tuning of the Integrated Health, Safety and Environment Management System which, in accordance with the requisites of Legislative Decree 231/01 and, consistent with the various levels of responsibility identified in the organisation, tangibly expresses the content of the Code of Conduct and the relevant policy.

In particular, **17 guidelines were formalised that identify and describe**

the general operating methods of the four key phases for ongoing improvement: **planning, implementation, control and review.**

The guidelines are applied to TotalErg and all of its business/operations lines and represent a specific reference for subsidiaries and companies in which it has shareholdings, who can use them as a model in accordance with their own governance procedures.

The documents define the guidelines for the drafting or, in the majority of cases, updating of specific procedures and instructions in this area by the individual businesses. In 2012 the necessary activities to plug any gaps that emerge during the first phase of analysis should begin.

At 31 December 2011 the key plants on the TotalErg circuit, the Raffineria di Roma and the annexed Shared Depot (De.Co.) and the depots in Trecate and Savona, were certified in accordance with the ISO 14001 (Environmental Management Systems) and OHSAS 18001 (Workplace Health and Safety Management Systems) international management standards. Other sites were also equipped with management systems, even if not all certified, in accordance with international standards (ISO 14001 and ISSSRS).

Almost all activities and operating sites within the consolidation scope of TotalErg also benefit from ISO 9001 certified Quality Management Systems.

HEALTH AND SAFETY

Thanks to the significant efforts made, the **safety performance in 2011 was more than satisfactory.** The accident indexes were actually an improvement on the targets both at TotalErg and its subsidiaries, also remaining below the European benchmark in the sector (CONCAWE 2010).

In 2011 there was also a fine-tuning of the work to identify responsibilities in the areas of Health, Safety and the Environment, which were also formalised in terms of job description. During the year great focus was placed on the **training programme** on the issues of





The plants at Raffineria di Roma

safety, not only fulfilling legal obligations, but extending it to the prevention and management of emergencies: **600 hours of safety training were provided** at TotalErg alone.

To mark World Safety Day operating leaflets were distributed on the behaviour to adopt in the office and when driving the company car and internal personnel and personnel from the subsidiaries were invited to take part in a competition called "Proposing Safety": during the year 270 employees participated, submitting over 200 proposals.

ENVIRONMENT

In 2011 TotalErg distributed operating leaflets aimed at regulating the management of waste and also launched **a map of the main environmental risks** relating to its fuel distribution network in order to assign intervention priorities.

Efforts to comply with the computer-based waste tracking system (SISTRI) also continued this year, and this included training activities for personnel that may potentially be involved.

As regards Raffineria di Roma, the definitive reclamation project in Fiumicino was launched and the operational safety enhancement project (MISOP) at the Pantano di Grano site was completed.

In June the port authorities of the Port of Rome, together with the refinery, organised an anti-pollution and fire prevention exercise in the Fiumicino roadstead.

QUALITY OF PRODUCTS AND SERVICES

The credibility and reliability of customer relations is based on the **quality of the products and services supplied and the ability to respond promptly**

to their requirements. One example of quality and innovation is Gasolio Excellium, available at over 2,000 outlets on the TotalErg distribution network. Thanks to its specific series of additives, this product prevents the formation of deposits in injection systems, facilitating the complete combustion of the product, its efficient usage and, as a consequence, reduced atmospheric emissions.

The line of actions for improving the quality of products also followed national and EU guidelines on biofuels. In 2011 TotalErg consumed around 190,000 tonnes, above all biodiesel which, blended up to 7% in volume with fossil diesel, contributes to the reduction of greenhouse gas emissions.

In terms of prevention, TotalErg issued and rendered operative specific housekeeping procedures for the correct management of fuel stocks at its operating sites, in order to minimise eventual qualitative non-compliances in marketed products.

At the same time, again in order to satisfy the expectations of its customers, precise monitoring activities were carried out on the quality of marketed products with over **400 inspections in 2011.**

Finally, all bitumens for the road market, produced by the company and its subsidiaries, were granted CE marking. This achievement was facilitated by the application at production sites of already ISO 9001-certified quality management systems.

RENEWABLE ENERGIES

In terms of its sustainability initiatives, TotalErg is highly focused on evaluating and **encouraging the use of energy produced from renewable sources**, particularly photovoltaic energy. In this regard, worthy of mention is the plant developed at the Restiani site in Alessandria which has been 'reckoning with the sun' since August 2011.

Around 65% of its electricity requirements are now covered by the photovoltaic installation on the roof of the internal warehouse. The plant, which has a nominal capacity of 126.9 kWp, is able to produce over 140 MWh in a year, avoiding the emission of around 60 tonnes of greenhouse gases into the atmosphere ■

TOTALERG S.P.A. PERFORMANCE DATA AND INDICATORS

ECONOMIC RESULTS*

		2011	2010
Total revenues	EUR million	7,849	7,317
EBITDA	EUR million	176	145
EBIT	EUR million	110	73

* Values calculated according to Italian accounting principles.

PROCESSING

		2011	2010
Refinery processing	kt	5,179	4,846
Refinery processing	thousands of barrels/day	104	97

SALES

		2011	2010
Total sales	kt	9,926	9,100
of which domestic retail market	kt	3,084	3,282

OUTLETS

		2011	2010
Retail outlets	no.	3,383	3,322
Market share (gasoline + diesel)	%	11.8	12.0
Average retail throughput	m ³ /outlet at period end	1,148	1,247
Proprietary outlets	no.	2,036	2,035
Outlets offering LPG and/or methane	no.	33	n.a.
Directly managed carwashes	no.	77	77
Carwashes with water recycling	no.	45	45

PHOTOVOLTAIC

		2011	2010
Outlets with photovoltaic installations	no.	4	n.a.
Installed power	MWp	0.031	n.a.
Electricity produced	MWh	37	n.a.

Other photovoltaic installations	no.	1	n.a.
Installed power	MWp	0.127	n.a.
Electricity produced	MWh	37	n.a.

ENVIRONMENT AND COMMUNITY

		2011	2010
Waste produced**	kt	12.3	11.4
by site reclamation and new constructions	%	88	59
sent for recycling	%	89	37
non-hazardous	%	83	88

Petroleum product leakage	no. events	3	5
Petroleum product leakage	m ³	2.7	21.5

**Data only referring to proprietary and directly managed plants.

SAFETY

		2011	2010
Total accidents	no.	2	16
Frequency index <i>no. accidents per million hours worked</i>		0.910	6.806
Severity index <i>no. of total days lost per thousand hours worked</i>		0.005	0.226
HSE Training	hours	5,714	7,791

PERSONNEL

	MEN	WOMEN	TOTAL
Top managers	54	3	57
Middle managers	177	43	220
Clerical staff	248	157	405
Factory staff	21	–	21
Total Group	500	203	703

	TOTAL
Fixed-term contract - Full time	26
Permanent contract - Full time	665
Part time	12
Group Total	703

PERFORMANCE DATA AND INDICATORS

RAFFINERIA DI ROMA S.P.A.

PROCESSING

		2011	2010	2009
Refinery processing	kt	3,534	3,298	3,581

ENVIRONMENT AND COMMUNITY

		2011	2010	2009
Energy consumption (primary sources)	ktoe	166.5	157.3	165.4
of which Natural Gas	ktoe	139.5	122.1	124.8

Direct CO ₂ emissions	kt	407	411	457
NO _x emissions	t	342	459	530
SO ₂ emissions	t	1,525	2,043	2,670
Particulate Emissions	t	2	5	3

Water withdrawals	thousands of m ³	1,514	1,715	1,596
Water returned to the natural cycle	%	15	15	16

Waste produced	kt	13,897	1,930	4,487
by site reclamation and new constructions	%	73	–	–
sent for recycling	%	81	31	28
non-hazardous	%	90	26	51

Petroleum product leakage	no. events	6	9	–
Petroleum product leakage	m ³	*135	27.5	–

ISO 14001 and OHSAS 18001 certification level	%	100	100	100
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* Entirely recovered.

SAFETY

		2011	2010	2009
Total accidents	no.	1	2	1
Frequency index <i>no. accidents per million hours worked</i>		2.18	4.25	2.19
Severity index <i>no. of total days lost per thousand hours worked</i>		0.12	0.087	1.315
HSE Training	hours	2,700	2,960	3,544

PERSONNEL

	MEN	WOMEN	TOTAL
Top managers	3	–	3
Middle managers	34	1	35
Clerical staff	121	12	133
Factory staff	92	–	92
Group Total	250	13	263

	TOTAL
Fixed-term contract - Full time	13
Permanent contract - Full time	248
Part time	2
Group Total	263

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ERG has been taking part in the work of CSR Manager Network Italia, a working table covering corporate social responsibility issues, since 2007.



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