



Executive Summary of DGRME Annual Report 2013 Year 2012

Ministry of Economic Development
Department for energy
Directorate-general for mineral and energy resources

Executive Summary of DGRME Annual Report 2013 Year 2012

INDEX

INTRODUCTION.....	2
DIRECTORATE-GENERAL FOR MINERAL AND ENERGY RESOURCES	3
DGRME IN ITALY	4
DGRME ABROAD	5
HYDROCARBONS AND GEO-RESOURCES.....	7
Hydrocarbons Exploration and Production	7
Natural Gas Storage	9
Geothermal resources.....	10
CO2 storage.....	10
ENVIRONMENT AND SAFETY	11

INTRODUCTION

The current National and International context is full of difficulties and uncertainties. The financial crisis affected all western economies and our Country has been strongly impacted. At the same time, the impressive development of several areas in the world is impacting on the environment and on all raw material prices, including energy sources.

Moreover, since Italy is currently strongly dependent on fossil fuels import, it is clear that it is necessary to fully exploit the Country potential in terms of gas and oil reserves, also considering the occupational and economical benefits deriving from the development of energetic activities.

Within this context, the Directorate has a main role for the management - fully respecting the environment and applying the most advanced safety measures - of mining and energetic resources in Italy, in particular of hydrocarbon exploration/production and of gas storage activities.

Pursuing this mission, the Directorate, starting from 2008 - when it was instituted, achieved impressive results: in particular, in 2012, it was registered for the third consecutive year an increase of hydrocarbons production (+2% with respect to 2011), also thanks to specific technical/normative actions. At a national level, in 2012 the Directorate gave support for defining the National Energetic Strategy, which foresees the re-establishment by 2020 of '90s hydrocarbon production level.

Finally, at an international level, the Directorate firstly committed itself in order to create technical groups/roundtables finalized at the optimum exploitation of mining/energetic resources in coordination with neighboring Countries (ex. Malta and Croatia) and at the same time became the main Italian interlocutor of the European Commission for the definition of the Offshore Safety Directive.

Many actions have been undertaken, but the Directorate will do much more in the near future in order to achieve the ambitious objectives stated within the Energy Strategy, promoting, through normative and administrative tools, the sustainable - from an environmental and safety point of view - domestic hydrocarbon production.

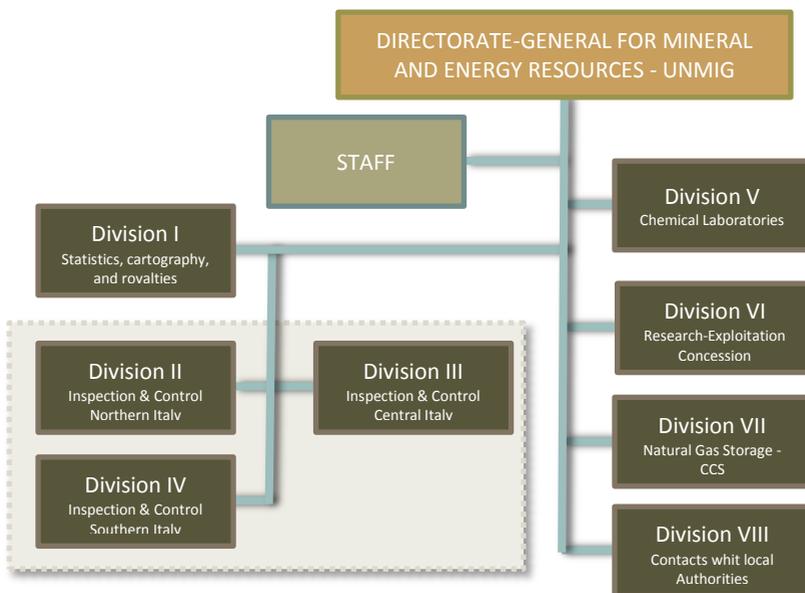
General Director
Franco Terlizzone

DIRECTORATE-GENERAL FOR MINERAL AND ENERGY RESOURCES

The Directorate- General for Mineral and Energy Resources (DGRME) performs the following tasks:

1. scheduling, authorization, management and control of exploration, research, exploitation and storage of mining/energy resources
2. definition of international agreements for research and exploitation of mining/energy resources in international waters
3. development of technologies for capture, transport and storage of carbon dioxide
4. development of technical standards for energy resources production, transport and storage facilities and safety in mining activities.

The activities of the Directorate are focused on supporting the companies, the public sector and the citizens. The structure includes about 70 employees with different professional profiles - administrative/technical/legal - and 8 resources coming from controlled entities, trade associations, universities and scientific institutions.



DGRME IN ITALY

At a national level, in 2012, the DG RME carried out many activities, in particular:

1. active support for the issuance of the document that sets out the principles of the National Energy Strategy (SEN in Italian language), presented on 16 October 2012 by the Minister of Economic Development and submitted for public consultation. The main tasks faced by the Directorate for the development of the SEN document are the following:
 - a. sustainable development of the national production of hydrocarbons (return to the levels of the '90s in 2020)
 - b. development of new natural gas storage (from ~ 15.6 bScm to ~ 25.9 bScm by 2020)
 - c. the modernization of governance systems (e.g. public consultation)
2. constant monitoring of the normative framework with a potential impact on mining activities and on authorization procedures relevant for the Directorate. In particular, in 2012 the following major regulatory changes were implemented:
 - a. Decree Law 1 of 24 January 2012 redistributes the royalties due for the incremental revenues directly on the territories involved in mining activities
 - b. Decree Law 5 of 09 February 2012 states that the controls on environmental limits imposed by environmental authorizations should be carried out by ISPRA (Istituto Superiore per la Protezione e la Ricerca Ambientale – Institute for Environmental Research and Protection) in coordination with the Directorate laboratories
 - c. Decree Law 83 of 22 June 2012 defines:
 - i. an increase of 3% of royalties on oil and gas produced off shore, aimed at intensifying environmental and safety controls referred to offshore activities
 - ii. that it is allowed to continue hydrocarbon exploration and production activities in areas located within 12 nautical miles for concessions and authorization procedures on-going at the date of entry into force of Legislative Decree 128/10
 - iii. the application of simplified authorization procedures for light interventions on hydrocarbon producing plants
 - iv. that in case of delay for the issuance of the 'Intesa' (agreement) by the Regions for the construction of energetic facilities, the PCM (Presidenza del Consiglio dei Ministri – Presidency of Ministry Council) can decide with the participation of involved Regions
 - d. Decree Law 179 of 18 October 2012 states that, in case of delays in authorization processes, the rights on concessions are automatically and temporarily extended until the competent administrations decide.

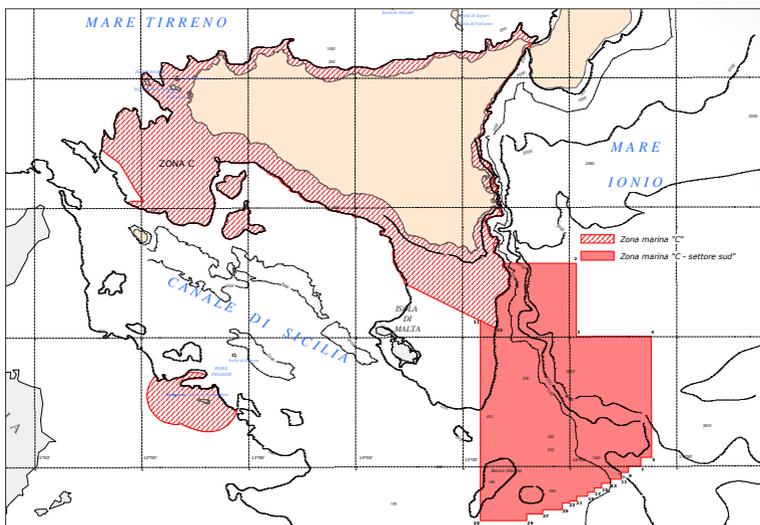
3. for the South Methanization program, in 2012, practical tests have been implemented for 37 interventions, bringing to 515 the total number of such initiatives. For the conclusion of the program (2,000 million euro have been already utilized) it will be necessary to invest 20 million euro more, yet to be funded.
4. on 20 September 2012 a Memorandum of Understanding between the Ministry of Economic Development and the Sicilian Region was signed with the aim of promoting the sustainable development of national hydrocarbon resources by encouraging investments for exploration, production and utilization.

In 2012 the Directorate continued its normal technical and administrative activities related to the management of concessions at a central level and to the monitoring / verification of industrial plants through UNMIG regional offices.

DGRME ABROAD

At an International level, in 2012, the Directorate participated in the following activities, both technical and legislative:

1. within the framework agreement between Italy and Croatia, aimed at guaranteeing the optimum exploitation of “Annamaria” gas field, the Competent Authorities of Italy (the Directorate) and Croatia (Directorate for Mining) worked together for the re-definition of the Technical Agreement signed in 2009 in order to adjust the agreement itself to the recent re-determination of the two Countries production shares
2. the feasibility of the Italy-Malta joint exploration in Southern Ionian Sea and in the Sicily Channel was started-up. After preliminary meetings carried out in 2012, the Italian party will present a technical proposal for the joint exploration. Moreover, in 2013 a specific Commission will be created in order to discuss the relevant legal aspects. Also in order to encourage exploration projects with Malta, through a Ministerial Decree emitted on 27 December 2012, marine zone “C” was extended (areal extension highlighted in red within the map below).



Picture 2 - Zona C

3. further to April 2010 accident of Macondo well - Mexico Gulf - the European Commission adopted in 2011 the scheme of "Regulation proposal of European Parliament and Council on Safety of offshore hydrocarbon exploration and production" ("Offshore regulation"), which has the aim of setting high quality minimum standards for these off-shore activities thus reducing accident probability, mitigating the consequences and contemporarily increasing the protection of marine environment. During 3 different UE Presidency (Poland, Denmark and Cyprus), the Council through its Working Party on Energy (EWP) analyzed the Regulation Proposal and presented several amendments. The Directorate, in 2012 followed the normative evolution through the participation of some of its members to the EWP.

HYDROCARBONS AND GEO-RESOURCES

Hydrocarbons Exploration and Production

As of 31 December 2012, in Italy, 115 exploration concessions (94 on-shore, 21 off-shore) and 200 production concessions (134 on-shore, 66 off-shore) are in place.

In general, the Italian Regions involved at a higher level in onshore hydrocarbon exploration and production activities are Emilia Romagna, Lombardy and Basilicata.

In 2012, activities of drilling and completion have been carried out on 40 wells, which have been drilled for different purposes:

- ❖ Production optimization (work-over) - 18 wells
- ❖ Production - 9 wells
- ❖ Gas storage - 8 wells
- ❖ Exploration - 4 wells
- ❖ Monitoring - 1 well

Moreover it has to be highlighted that in 2012, 5 wells have been closed, while 22 new wells have been drilled.

These data show that Operators activity is currently focused on production optimization of well-known reservoirs more than on the exploration of new areas and resources.

With reference to exploration activities, in 2012, 4 exploration wells have been drilled, only 1 with positive results (gas target - well CASA TIBERI 001 - exploration concession of MONTEMARCIANO located in Ancon Province). With respect to 2011, when no exploration wells have been drilled, it can be noticed an increase on exploration activities.

In 2012, hydrocarbon production in Italy slightly increased with respect to 2011, +2% for oil and +2% for gas. In particular, last ten years have been characterized by a first phase of decreasing production, which reached its minimum in 2009, and by a more recent phase of increasing production, started in 2010 for the oil and in 2011 for the gas: year 2012 confirms this positive trend. With reference to the oil, the increase is mainly due to the revamping of fields located on-shore, more than off-setting the natural off shore reservoir depletion.

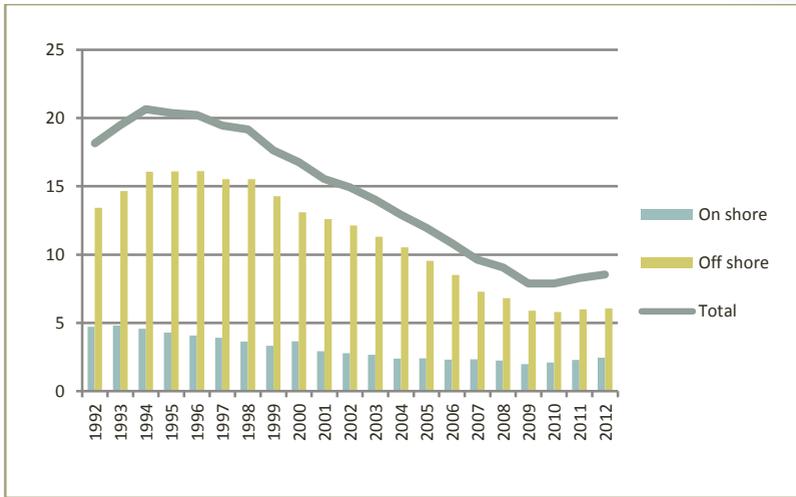


Chart 1 - Gas production [bScm] - Time frame 1992-2012

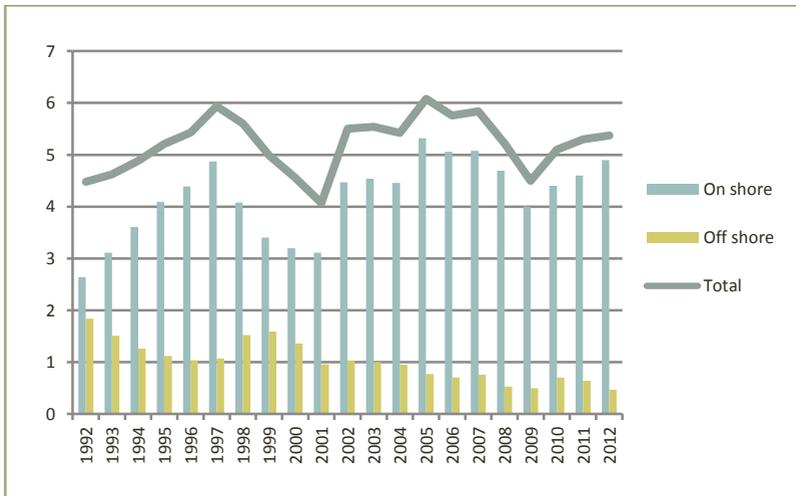


Chart 2 - Oil production [Mtonn] - Time frame 1992-2012

With reference to the valorization of hydrocarbon production rates for 2012, it has been defined through market mechanisms: corresponding royalties will be re-distributed among State, Region, Town halls most likely in 2013 and 2014. Moreover, an amount of royalties of about 334 M€ referred to part of 2010 and 2011 production, have been re-distributed in 2012.

Finally, at 31 December 2012, data on reserves - to be distinguished in proved, probable and possible - show a decrease 4,7% for gas and an increase of 7,5% for oil, excluding 2012 production.

Natural Gas Storage

Currently the operating gas storage fields in Italy are 10, all located in depleted on shore gas reservoir, while storage concessions already in force are 15.

With reference to Thermal Year 2011/2012 the overall working-gas capacity of the gas storage system is 15,620 MSm³ (5,100 MSm³ dedicated to the strategic storage), while the withdrawal capacity is 274.6 MSm³/d.

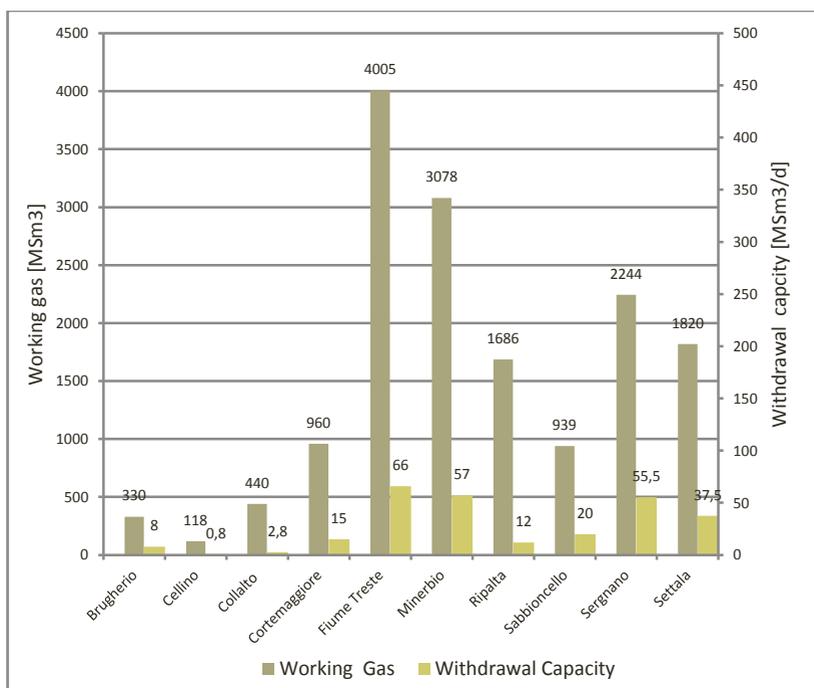


Chart 3 - Working Gas and Withdrawal Capacity for thermal year 2011/2012

Including the cushion-gas, the overall capacity of storage fields is 27,636 MSm³.

Moreover, during 2012, the storage concession “Cugno Le Macine Stoccaggio” was released to the company Geogastock S.p.A.: an increase of storage capacity (approx. 700 MSm³) is expected by 2015 and a possible further increase (approx 1,300 MSm³) is foreseen by 2020.

With reference to the following storage concessions, the construction of new storage plants is currently on-going: “S. Potito e Cotignola Stoccaggio” (W.G. 915 MSm³), “Bordolano Stoccaggio” (W.G. 1,200 MSm³) and “Cornegliano Stoccaggio” (W.G. 1,300 MSm³).

Geothermal resources

In 2012, the Directorate received further requests for approval of pilot projects finalized to the exploitation of geothermal resources, thus saturating the maximum allowed power capacity (50MW).

CO₂ storage

In 2012, some activities have been carried out finalized at elaborating the “Communication Decree”, currently being emitted, which will define contents and modalities of communication to the public of information on CO₂ storage.

Moreover, with reference to the Environmental Strategic Evaluation (VAS in Italian language) relevant for identifying areas where CO₂ storage will be allowed, Environment Ministry and Economic Development Ministry created a technical group finalized at structuring a Preliminary Report to be distributed to competent authorities for consultation. This document, completed in 4Q2012, defines premises and advantages of utilizing CCS technologies and identifies the critical elements of the methodology to be utilized for the identification of areas where CO₂ storage will be forbidden and of those where CO₂ storage will be allowed.

Finally, in 2012, the first request for a CO₂ storage exploration concession has been presented, for off shore area located in the central-northern Adriatic Sea between Pesaro and Senigallia. The request (identified with the name of Sibilla) is currently being evaluated by the Ministry of Economic Development and the Ministry of the Environment and Protection of Land and Sea through VIA (Valutazione di Impatto Ambientale - Environmental Impact Assessment).

ENVIRONMENT AND SAFETY

With reference to hydrocarbon exploration and production activities (excluding Sicily on shore), in 2012, 36 accidents occurred (19 during drilling activities, 15 during production activities and 2 during storage activities), none of them deadly.

With respect to 2011, while in 2012 the safety indicator referred to production activities (number of incidents/produced ktep) remained unchanged, with reference to drilling activities, the safety indicator (number of incidents/drilled depth in meters) increased of about 60%. Therefore, the main safety criticalities will have to be identified by Operators analyzing the management of drilling activities – focusing on manual load handling and equipment managing. For example, it would be worthy to monitor Contractors in a stricter manner in order to verify the effective application of safety procedures on the field.

Finally, with reference to environmental analysis, in 2012 continued the monitoring activity on point source emissions coming from hydrocarbon treatment plants.

Ministry of Economic Development
Department for Energy
Directorate-General for Mineral and Energy Resources
Via Molise, 2 - 00187 Rome Italy
Tel.: (+39) 06-47052859
Fax.: (+39) 06-47887802
e-mail: dgrme.segreteria@mise.gov.it
PEC: ene.rme.segreteria@pec.sviluppoeconomico.gov.it
web: <http://unmig.sviluppoeconomico.gov.it>



Executive Summary of DGRME Annual report 2013 Year 2012

This edition of the Annual Report is designed to
[OMC \(Offshore Mediterranean Conference\) 2013](#)
and printed with the contribution of [Assomineraria](#).