



Ministry of Economic Development

DEPARTMENT FOR COMPETITIVENESS

General Direction for Mining and Energetic
Resources

Annual Report

YEAR 2009

Report 2009

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INTRODUCTION

Also this year, as it was for 2008, the first aim of annual report of the General Direction for Mining and Energetic Resources is to give a report on this year's structure activities according to rules of D.P.R. 28th November 2008, n. 197 as a continuation of UNMIG's annual report, merged into the new General Direction, already published up to the year 2007.

This report is divided into two subjects: HYDROCARBONS AND GEOTHERMIC RESOURCES together with usual data concerning upstream activities in Italy and ENVIRONMENT AND SAFETY.



HYDROCARBONS AND GEOTHERMIC RESOURCES

1. Foreword

Let us remind that General Direction for Mining and Energetic Resources was charged by the Government with tasks of mining field such as Mining National Office for Hydrocarbons and Geothermic (UNMIG), energetic priorities set up, guidelines and development plans, relations with international organizations in mining resources field, research's international agreements settlement and mining resources exploitation in international waters, promotion and assistance for hydrocarbons development interventions and mining resources in third countries, agreements' promotion with Regions and local authorities on national territory to ensure conditions and combined actions in the field of research and exploitation of mining and geothermic resources, CCS technologies, technical rules for energy production, transport and storage plants and mine safety.

Afterwards the 7th May 2009 Ministry Decree, which is "Ministry for Economical Development's not-general directing degree offices" established the eight divisions' tasks which form the General Direction for Mining and Energetic Resources; they are as follows:

DIVISIONS

I Division: Mining National Office for Hydrocarbons and Geothermic Resources (UNMIG) - UNMIG Direction

II Division – Bologna UNMIG Section

III Division – Rome UNMIG Section

IV Division - Naples UNMIG Section

V Division – UNMIG’s Laboratories for tests and analysis in mining and energetic sector

VI Division – Development of hydrocarbons and geothermic resources exploration and exploitation

VII Division – Natural gas storage, CCS

VIII Division – Relationship with Regions, local authorities, international and European Unity’s bodies; Royalties

So the General Direction is divided into 8 Divisions, 5 out of them are aggregated in the Mining National Office for Hydrocarbons and Geothermic Resources (UNMIG), which is entrusted with checking and technical management of hydrocarbons and CCS exploration and exploitation activities including the mining police action. The UNMIG was established in 1957 and was organized as a Mining Office section and it has always been developing by a system peculiar of its own until it merged into the wider General Direction for Mining and Energetic Resources. At present it is formed by a central office, three local offices encharged with activities’ checking and supervision and finally a chemical and mining laboratory.

Besides within the General Direction, the VI Division attends to prospecting and exploring’s permits and exploitation concessions; the VII Division deals with natural gas storage and development of CCS sector; the VIII Division is responsible for relationship with regions and local authorities and international bodies as well and finally is charged with the General Direction’s activities as far as royalties are concerned.

Its territorial competence extends as far as continental Italy, where mining licences issuing is carried out in cooperation with concerned Districts, as well as offshore that is sea zones under national jurisdiction and in which are allowed hydrocarbons upstream activities.

In Sicily District hydrocarbons exploration and exploitation is under URIG’s authority (District Office for Hydrocarbons and Geothermy). Competent structure for Sardinia Island is Industry Council Department for Upstream Activities Service.

Technical-administrative activity for mining titles issuing concerning hydrocarbons prospection, research, exploitation and storage is supported by Hydrocarbons and Mining Resources Board (CIRM). This Board was established by the D.P.R. of 14th May 2007, n. 78 and it is a technical advisory authority on permits and concessions issuing (Cirm A), activities safety (Cirm B) and royalties (Cirm C). During year 2009 CIRM met eight times, five of which for “A” section checking 31 applications for mining titles.

A renewed attention was paid to office technical-administrative activity promotion and mostly internet website informations (<http://unmig.sviluppoeconomico.gov.it>). The website, which is constantly updated, besides supplying data about current administrative actions, gives a general data amount such as hydrocarbons production, royalties paid by companies to the Government, Regions and municipalities, seismic acquisition, wells and oil rigs list, a space for private citizen and sector ruling as well.

In comparison with last year in the present report some pages have been added about "Regional monitoring" in order to supply a quick glance on the most outstanding regional and local data (production, titles, and plans) and their link with specific situations. "Sea monitoring" carries out too the same goal within the seven Italian marine zones on which can take place hydrocarbons exploration and exploitation.

Furthermore in the website was also added last year "National Geothermic Resources List" already provided for act n. 896/86 and carried out in 1988 year by ENEL, ENI-AGIP, CNR and ENEA under the Ministry for Economic Development's coordination. The plan is based on an amount of regional reports with their specific diagrams coming from geothermic sources and wells databases. In 1994 the UNMIG got some updated information about national geothermic potentiality and some Italian areas as well. Thanks to an agreement within the UNMIG and the CNR Geothermic Resources and Geothermic Sciences Institute the data have been converted into electronic format available on-line, thus forestalling the D.Lgs. 22/2010 forecasts. Furthermore in the website is published the Official Bulletin of Hydrocarbons and Geothermic Resources, which reports every month mining titles, permit applications and sent in concessions' news. Finally during the year 2009 some introductory and explanatory pages in Russian and Arabic languages were added besides the already present versions in English and Spanish; French version too is coming soon. At present the UNMIG website has 5.500 accesses every month with a total amount of about 75.000 examined pages.

By coming into force of 23rd July 2009, n. 99 Act, called "Development Act", in accordance with General Direction tasks on the one hand was modified the and on the other hand was provided a proxy for the Act n. 896/1986's reform about geothermic resources rules. In detail Act n. 239/2004's modifications are directed towards overcoming some problems already existing during its past application and parting the exploring authorizing step from that pertaining drills and procedure simplification. Subsequent rules have been referred to "Regulation pattern" updating at which the General Direction has worked hard for last four months of the year. As to Act n. 896/1986's reform it was about procedure simplification for low enthalpy geothermic resources and competitive system for mining titles concession. The General Direction set up a ruling draft afterwards passed during the Council of Ministers on 22nd December 2009 acting together with those Regions which have an exclusive onshore authority.

2. Hydrocarbons exploring activities

Exploration and exploitation drilling activities

During 2009 year were carried out three drills for exploring aim all of them onshore for an amount of about 5.600 bored meters with a considerable cut in comparison with last year (60%). Besides were perforated 49 wells for exploitation aim out of which 22 for CCS storage for a total amount of about 75.000 meters. In the year 2009 too there has been a relevant percentage of drilled wells for storage activities out of total (42%).

Exploration and finds

There were no finds during the year 2009 owing to a few exploring drills and mining risk due to exploring activity, whereas after exploring step does follow anyway a find.

Mining titles

On 31st December 2009 were in force 97 exploration permits (out of them 72 onshore and 25 offshore) for an amount of about 36.347 km² (out of which 24.617 onshore and 11.730 offshore) and 198 exploitation concessions (out of which 132 onshore and 66 offshore) for a total amount of about 18.145 km² (out of which 9.205 onshore and 8.940 offshore).

It is important to remind that a mining title area is fixed according to rules in force (meridian and parallel arches about 1') which is far larger than area really occupied by plants (well areas, plants and processing facilities). Mining title areas non occupied by such plants however can be used for all usual human activities. During the year 2009 seven new titles have been conferred: 6 exploration permits onshore and 1 exploitation concession offshore.

3. Hydrocarbons exploitation activities – Royalties

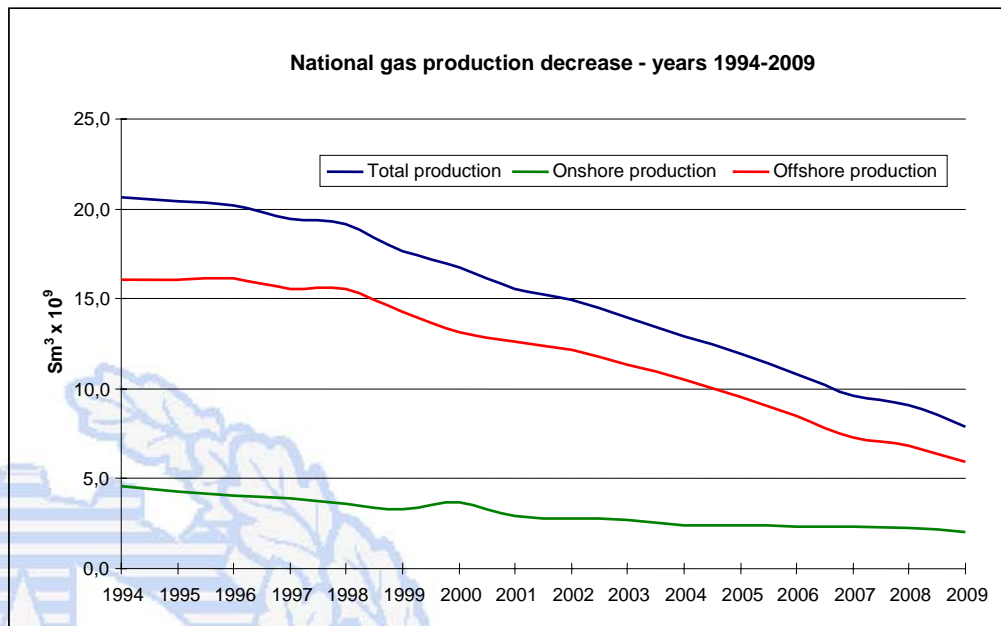
Production

In the year 2009 there was a hydrocarbons production decrease at about -13% both for oil and gas. Such a decrease is closely connected to growing exhaustion of old national wells in a state of advanced exploitation not yet replaced with new fields.

Gas production

In the year 2009 natural gas production was 7,9 billion Sm³ (-12,8% in comparison with 2008), thus it proves present production decrease which has been going on since 1994, when it reached its summit, of 20,6 billion Sm³. As quoted above it is a question of

natural producing decrease of old fields not replaced with new resources.



The diagram points out to offshore fields exhaustion according to these fields' subsidy to national production which is still at an average of 75% with a relevant role of "A" area (about 50%). Onshore production comes from Southern Italy for an average of nearly 63%.

Oil production

In the year 2009 oil production was of 4,5 million tons with a decrease of nearly 12,8% in comparison with last year. 82% of national production comes from onshore fields in Basilicata and Sicily Districts and nearly 12% from offshore fields.

Reserves rating

Listed table data show a decreasing trend of renewable reserves compared with last years even as far as reserves' rating is concerned. The relation between gas renewable reserves and annual production places at nearly 11,6 years. As for listed fields no new finds or relevant reassessments took place: by a 7,9 billion Sm³, reserves now are reduced of nearly 7 billion Sm³ (from 99 to 92 Sm³). Gas reserves are chiefly offshore (~66%) and particularly "A" area (~42%).

As far as oil reserves are concerned, variation compared with last year is less evident. Data about fields location are relevant: nearly 92,8% out of national whole amount are onshore, mainly in Southern Italy (84,5%), whereas actual average of offshore fields reaches 7,2%.

Royalties

As regards liquid hydrocarbons compared with an equivalent last year's production, there is a growing tax revenue linked with a favourable trend of crude oil price. As for gaseous hydrocarbons increasing value of product near to Virtual Exchange Point (PSV) provided by D.L. 31.1.2007, n. 40 reduced tax revenues compared with amounts got by Qe value (*energetic share for gas raw materials cost*).

4. Gas storage

Gas storage in Italy is at present carried out in facilities of exhausted or next to exhaustion fields out of production. Italian fields' natural gas storage capacity (working gas and strategic storage) during the year 2009 reached about 14.300 Mm³ including strategic storage at present at 5,1 Mm³. System distribution summit is equivalent to 296 Mm³/g; in the attached diagrams storage capacity progress in 2004-2009 period are listed.

During 2009 year has been conferred a storage concession called "S. Potito e Cotignola" in Ravenna District, which will increase storage capacity of nearly 580 Mm³ within the year 2013.

In order to increase a higher safety level for Italian gas system up to 14 billion net of strategic storage took place a straight policy for Working Gas value rise. In particular competition procedures for Bagnolo Mella's field assignment were carried out; assignment concessions for Piadena, Romanengo and S. Benedetto are still in progress. Settala's field experimental step was completed and started environmental effect evaluation (VIA) for exploitation facility. During the year 2009 went on the overpressure experimental step for Sergnano's field and started the Ripalta's one. At present there are ten operating storage fields, all of them near by exhausted gas fields and concessions in force are 13.

5. CO2 storage (CCS)

During 2009 year started a joint action between the Ministry of Economical Development and the Ministry of Environment and Territory and Sea Protection – General Directory for sustainable development, climate and energy, to put into force the European Community Act 2009/31 about carbon dioxide geological storage. The team at present still working at during the year 2009 devised a Legislative Decree first draft, while UE 2009 Act is shortly coming to set up such an Act.

6. Geothermic resources

By D. Lgs. 31.3.1998, n. 112 Regions were appointed to administrative and checking tasks on exploration permits and exploitation concessions

of geothermic resources onshore. As far as sector statistic data are concerned it is noteworthy to point out activities development in Regione Toscana, whereas it can be considered the most outstanding element in Italy with regard to electric energy got from geothermic source with eight exploitation concessions in Grosseto, Pisa and Siena districts. Electric energy monthly production comes to nearly 400.000 MWh with more than seven hundred workers (*Regione Toscana Source*).

7. Southern Italy Methane Pipeline System

This sector arose in the early eighties owing to continuous oil political crisis which drove the Italian Government to strengthen methane pipeline system in Southern Italy (gas distribution system was mostly concentrated in Northern Italy) in order to lower oil products dependence.

National Energetic Plans (P.E.N.) directives in 1978-1980 years were put into force by 28.11.1980, n. 784 Act, which provided contributing concessions to carry out methane pipeline system as well as financial and technological aids for municipalities and involved bodies and associations.

The previous "Cassa per il Mezzogiorno" (i.e. Southern Italy Development Fund, a body established in the early fifties to support and foster Southern Italy's development) gave technical rules for such allowances and after its dissolution it was replaced by the Ministry of Industry (today Ministry of the Economical Development) empowered to carry out that plan.

The general plan for Southern Italy's methane pipeline system is still in progress. It was put into force by CIPE (an administrative economical body) by 11th February 1988 resolution, which had to be carried out in a three-year period shortly followed by a two-year one.

Between first operating step and the general plan up to 31.12.2009 were carried out 1865 financed actions for as many municipalities, out of which 660 actions on the basis of contributions provided by 7th august 1997, n. 266 Act to which has been attending now the Ministry of Economical Development.

Government administration's total expense comes to an amount of nearly two billion euro.

This programme will be fully activated by last methane gas pipeline system's 24 plans regarding as many Southern Italy municipalities, which did not receive yet law profits owing to funds lack that has been affecting this sector since the year 2005.

Programme's full achievement will take about 40 million euro most likely available by next financial acts.

During the year 2009 have been planned new financial benefits (they are 7 drawing on policies attained in the meantime as testing actions provided by 266/97 Act and 9 drawing on Regione Calabria's funds for methane gas pipeline system in its municipalities) and were accomplished 65 actions coming to a total amount of 310 achieved actions. During year 2009 went on project variations approval for 92 municipalities belonging to Calabria District's areas that is CL01, CL02, CL05, CL08 and CL22.

ENVIRONMENT AND SAFETY

A. Accidents

During hydrocarbons exploration and exploitation activities in the year 2009 there were 51 accidents no one of them with fatal consequences: 9 out of them are listed as serious ones (danger listed over 30 days) and 42 not serious.

Those data show a positive trend over the previous year when there were 65 accidents no one of them mortal, 29 serious and 36 not serious.

	1995	2008	2009	$\Delta\%$ 2009/1995	$\Delta\%$ 2009/2008
gas (billion of Smc)	20,4	9,1	7,9	-61%	-13%
olio (million of t)	5,2	5,2	4,5	-13%	-13%
<i>total accidents</i>	211	65	51	-76%	-22%
Only drilling	1995	2008	2009	$\Delta\%$ 2009/1995	$\Delta\%$ 2009/2008
<i>drilled meters</i>	137.565	70.080	80.521	-41%	15%
<i>accidents in drilling activities</i>	113	25	24	-79%	-4%
<i>scaled index drill accidents</i>	0,0008	0,0004	0,0003	-64%	-16%

Data enlisted in the table report the true situation of production and drill activities during the examined period and they show that in comparison with a decrease of 13% of hydrocarbons production there was a lower of 22% of total accidents, while in comparison of a growth of 15% of drilled meters in one year (that is an exploiting drill and not a drilling one, in particular in natural gas storage) there was a decrease of 4% of accidents during drill activities.

Accidents data in the year 2009 were compared with those of the year 1995, in which took place the upstream peak activities; in the following year became effective the D. Lgs. 624/96. It is noteworthy that in comparison with a decrease of production and drill activities there was a decrease of 76% of accidents, while for the only drilling reduction compared with bored meters is at -64%. As far as activity percentage effect is concerned it is to be considered drill activity decrease in the years after 1995.

B. Chemical and environmental researches

The UNMIG – V Division “Analysis and test laboratories for mining and energetic sector” has is tasked to carry out chemical and environmental surveys and assistant supply to Government Administrations or private bodies operating in mining-energetic sector.

During the year 2009 went on mining substances samples authentication in mining resources field in order to enlist them in classified categories set up by Government rules and concerned Districts as well.

Rocks and minerals samples from Lazio and Campania Districts have been analyzed and registered, mostly silicone-feldspathic and limestone ones with a high purity rank classified by Lazio District as "rare material".

In chemical and environmental field were drawn samples, studies and analysis to ensure mining operators' health even to protect soil, water and air in the areas of mining exploration and exploitation.

Chemical and physical tests were done on soil, strata and source waters samples taken in mining concession neighbouring areas for rock salt "Timpa del Salto" in Belvedere Spinello municipal district.

As far as energetic field is concerned during the year 2009 natural gas composition measuring has carried out in the storage plant of "Fiume Trieste" concession.

Finally the UNMIG achieved some mining-petrographic-archaeometric tests and analysis on behalf of Archaeological Monuments Office of Rome on account of some archaeological discoveries during Largo S. Susanna Palace's restoration, which are the laboratories historical headquarters.

L'attività in sintesi:

	Solid samples for analysis issuing mining concessions	Water analysis for environmental control	Liquid samples analysis for environmental suitability (heavy metals)	Physical-chemical analysis of archaeological finds	Environmental Analysis (i.e. determination of asbestos fibers, NOx etc.)	Technical advices	Total
Number of samples	22	39	2	35	4	1	103
Number of determinations	302	546	64	210	22		1144
Number of sampling campaigns		2	1	4	2		9
Number of analysis reports	2	2	2	3	4	1	14

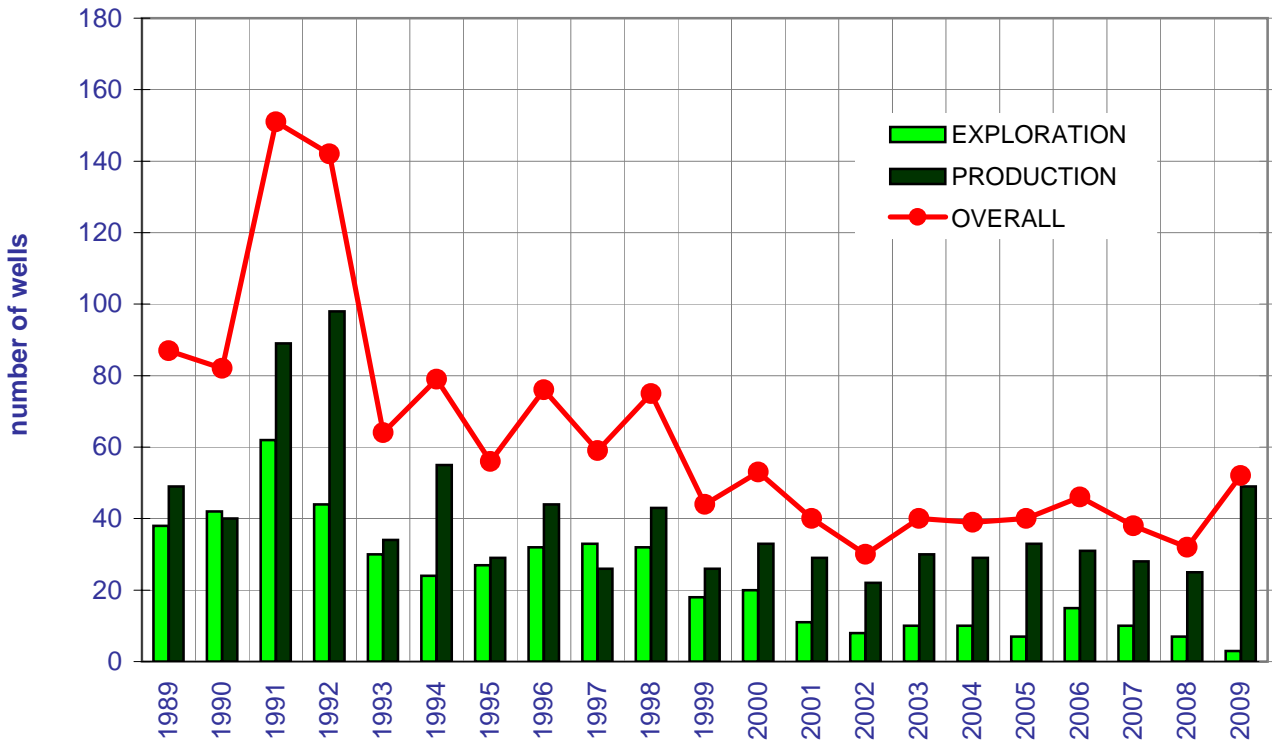
C. Explosives

Among Government's tasks there is the explosives classification, check and control and exploding substances in general, particularly those for mining industry and quarry too. On this matter the Direction publishes every year an updated list of exploding substances and accessories fit for mining sector according to 21st April 1979 Ministry Decree. The aforesaid list contains exploding substances provided by the VIII title of D.P.R. 9th April 1959, n. 128 following to tests carried out by the Government on the base of 21st April 1979 Ministry Decree. Such products are enlisted after the payment of an annual tax by the producer or an authorized representative of his or an importer as provided by the art. 32 of 12th December 2002, n. 273 Act. List's last update regarding 2009 year was approved by 16th June 2010 Directory Decree and published in the Direction website.

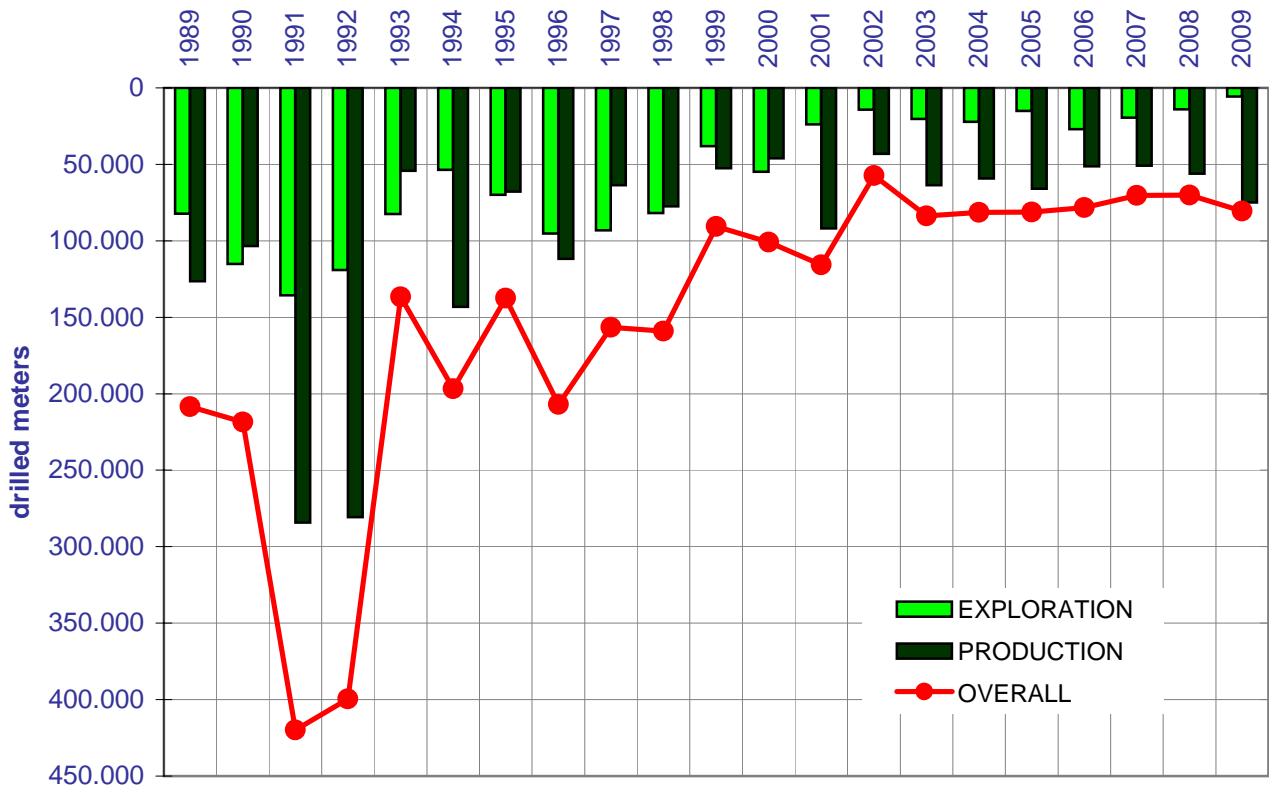
Drilling activities - years 1989-2009

YEAR	EXPLORATION							PRODUCTION & OTHER PURPOSES							OVERALL		
	ONSHORE		OFFSHORE		TOTAL			ONSHORE		OFFSHORE		TOTAL			Number of wells	Meters drilled	average wells depth
	Numb of wells	Meters drilled	Numb of wells	Meters drilled	Numb of wells	Meters drilled	average wells depth	Numb of wells	Meters drilled	Numb of wells	Meters drilled	average wells depth					
1989	29	58.586	9	23.600	38	82.186	2.163	17	50.301	32	76.074	49	126.375	2.579	87	208.561	2.397
1990	28	78.179	14	36.989	42	115.168	2.742	16	42.755	24	60.688	40	103.443	2.586	82	218.611	2.666
1991	36	83.547	26	52.094	62	135.641	2.188	35	97.161	54	187.105	89	284.266	3.194	151	419.907	2.781
1992	29	79.363	15	39.718	44	119.081	2.706	25	57.642	73	222.934	98	280.576	2.863	142	399.657	2.814
1993	24	72.426	6	10.123	30	82.549	2.752	13	16.770	21	37.414	34	54.184	1.594	64	136.733	2.136
1994	14	30.142	10	23.467	24	53.609	2.234	9	14.447	46	128.733	55	143.180	2.603	79	196.789	2.491
1995	19	55.017	8	14.793	27	69.810	2.586	19	41.380	10	26.375	29	67.755	2.336	56	137.565	2.457
1996	22	67.664	10	27.550	32	95.214	2.975	17	23.920	27	87.911	44	111.831	2.542	76	207.045	2.724
1997	22	62.800	11	30.266	33	93.066	2.820	16	34.259	10	29.285	26	63.544	2.444	59	156.610	2.654
1998	23	62.962	9	18.794	32	81.756	2.555	26	35.912	17	41.448	43	77.360	1.799	75	159.116	2.122
1999	12	25.763	6	12.374	18	38.137	2.119	14	24.476	12	28.086	26	52.562	2.022	44	90.699	2.061
2000	14	35.721	6	19.065	20	54.786	2.739	14	18.949	19	27.058	33	46.007	1.394	53	100.793	1.902
2001	9	21.610	2	2.325	11	23.935	2.176	14	52.781	15	39.086	29	91.867	3.168	40	115.802	2.895
2002	3	3.016	5	11.200	8	14.216	1.777	15	23.506	7	19.699	22	43.205	1.964	30	57.421	1.914
2003	5	11.576	5	8.658	10	20.234	2.023	9	35.182	21	28.380	30	63.562	2.119	40	83.796	2.095
2004	10	22.223	0	0	10	22.223	2.222	7	18.105	22	41.189	29	59.294	2.045	39	81.517	2.090
2005	7	15.085	0	0	7	15.085	2.155	9	16.632	24	49.399	33	66.031	2.001	40	81.116	2.028
2006	12	17.906	3	9.139	15	27.045	1.803	14	21.597	17	29.714	31	51.311	1.655	46	78.356	1.703
2007	9	15.925	1	3.517	10	19.442	1.944	13	17.886	15	33.027	28	50.913	1.818	38	70.355	1.851
2008	4	7.274	3	6.673	7	13.947	1.992	18	41.803	7	14.330	25	56.133	2.245	32	70.080	2.190
2009	3	5.627	0	0	3	5.627	1.876	29	37.124	20	37.770	49	74.894	1.528	52	80.521	1.548

NUMBER OF DRILLED WELLS: YEARS 1989-2009



DRILLED METERS: YEARS 1989-2009



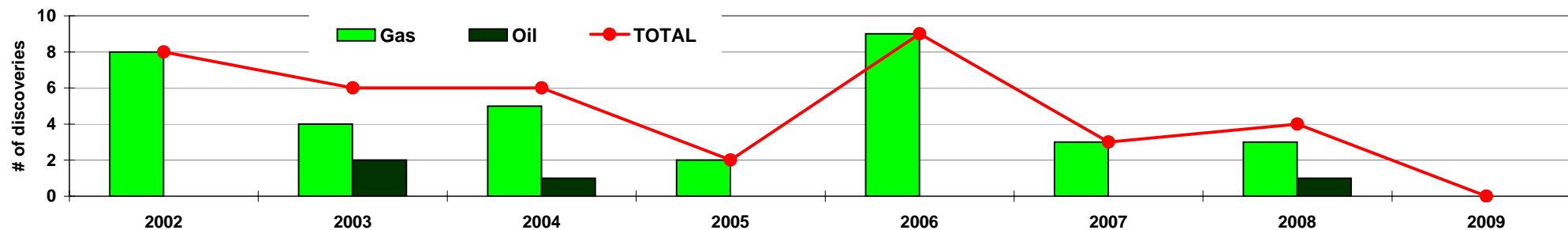
DISCOVERIES YEARS 2002-2009

☼ Gas

● Olio

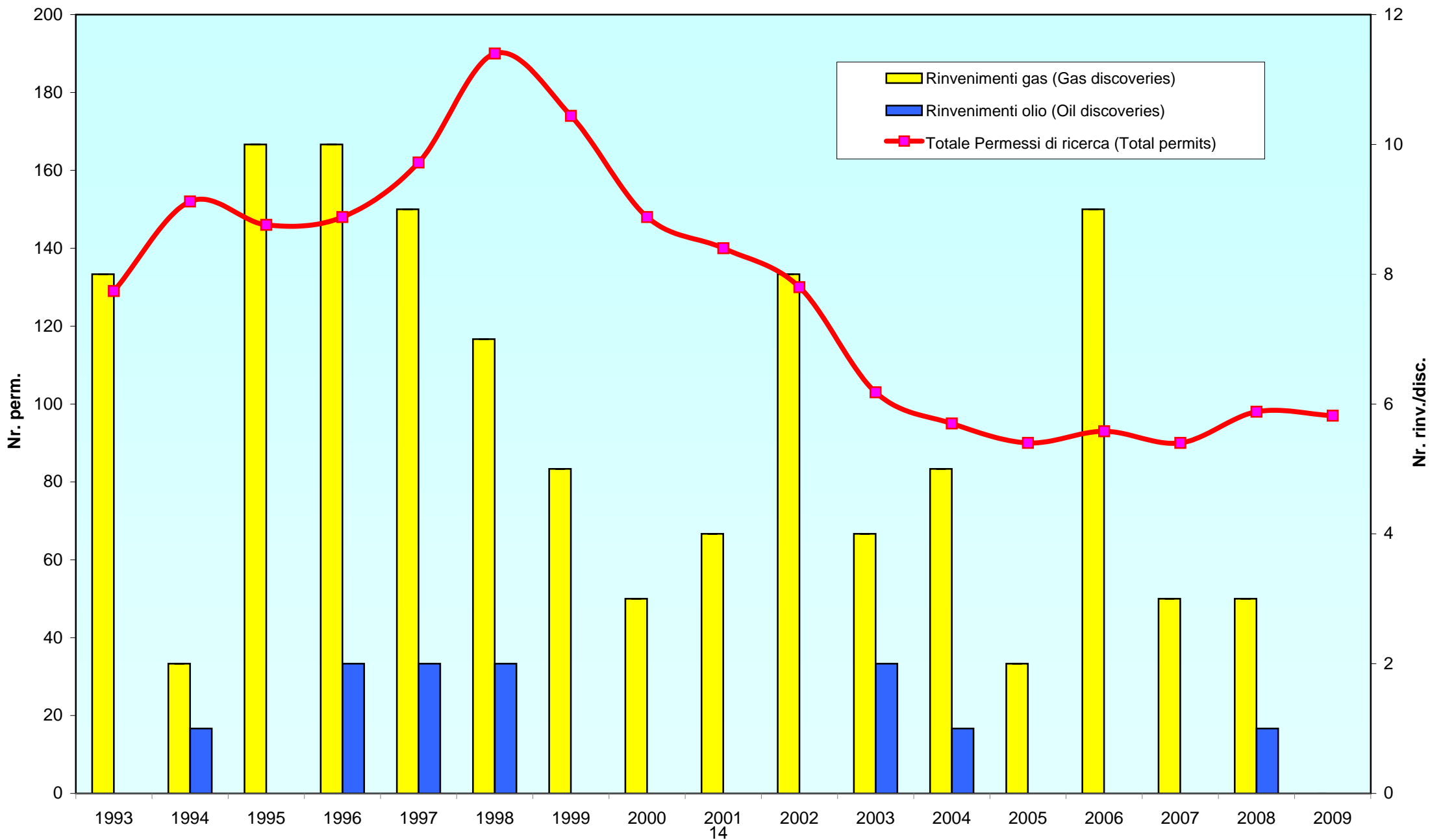
	2002	2003	2004	2005	2006	2007	2008	2009
ONSHORE	<ul style="list-style-type: none"> ☼ Agosta 1dir (FE) ☼ Fonte Filippo 1 dir (CH) ☼ Muzza 4dirA (MO) ☼ San Pietro SW 1 (AN) 	<ul style="list-style-type: none"> ● Agri 1 (PZ) ● Agri 1orA (PZ) ☼ Capparuccia 1dir (AP) 	<ul style="list-style-type: none"> ☼ Abbadesse 001 DIR (RA) ☼ Civita 001 DIR (FG) ☼ Monte dell'Aquila 001 DIR (CT) ☼ Monte Guzzo 001 DIR ☼ Santa Maddalena 001 DIR (BO) ● Tesauro 001 DIR (RG) 	<ul style="list-style-type: none"> ☼ Vitalba 001 (CR) ☼ Mezzocolle 001 DIR (BO) 	<ul style="list-style-type: none"> ☼ Codogno 001 DIR ☼ Colle Sciarra 001 DIR A ☼ Filici 001 DIR A ☼ Fonte Filippo Sud Est 001 ☼ Longanesi 001 ☼ Ripalta 61 OR ☼ Vitalba 001 DIR 	<ul style="list-style-type: none"> ☼ Colle Sciarra 001 DIR B (PE) ☼ Monte Pallano 001 DIR (CH) ☼ Monte Pallano 002 DIR (CH) 	<ul style="list-style-type: none"> ☼ Monte della Crescia 001 Dir(AN) 	

OFFSHORE	A Zone		<ul style="list-style-type: none"> ☼ Annamaria 2 ☼ Armida 1dirA 					
	B Zone	<ul style="list-style-type: none"> ☼ Calipso 3dirA ☼ Calipso 4dirA ☼ Didone 2 					<ul style="list-style-type: none"> ● Ombrina Mare 002 Dir 	
	F Zone					☼ BENEDETTA 001 DIR		
	G Zone	☼ Panda 1	☼ Panda Ovest 1			☼ ARGO 001		<ul style="list-style-type: none"> ☼ Cassiopea 001 DIR ☼ Argo 002



Andamento Permessi di ricerca e rinvenimenti - Anni 1993 - 2009

(Exploration permits amount and discoveries trend - years 1993-2009)



Mining licenses for hydrocarbons

Years 1989 - 2009

EXPLORATION PERMITS

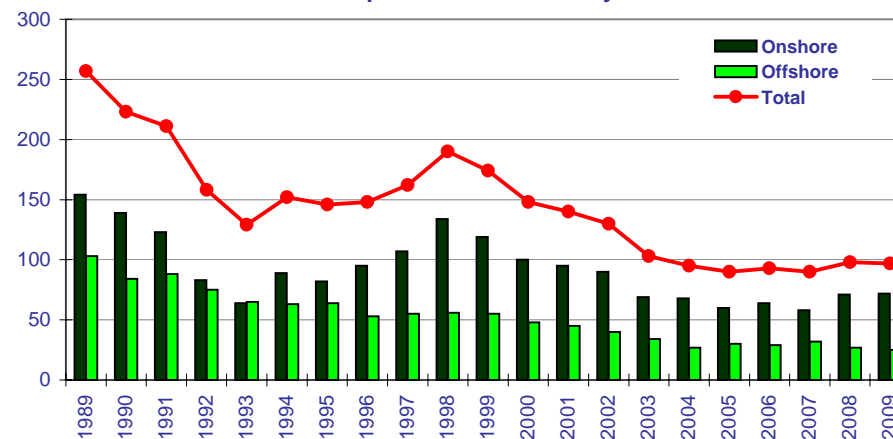
	Onshore	Offshore	Total
1989	154	103	257
1990	139	84	223
1991	123	88	211
1992	83	75	158
1993	64	65	129
1994	89	63	152
1995	82	64	146
1996	95	53	148
1997	107	55	162
1998	134	56	190
1999	119	55	174
2000	100	48	148
2001	95	45	140
2002	90	40	130
2003	69	34	103
2004	68	27	95
2005	60	30	90
2006	64	29	93
2007	58	32	90
2008	71	27	98
2009	72	25	97

PRODUCTION CONCESSIONS

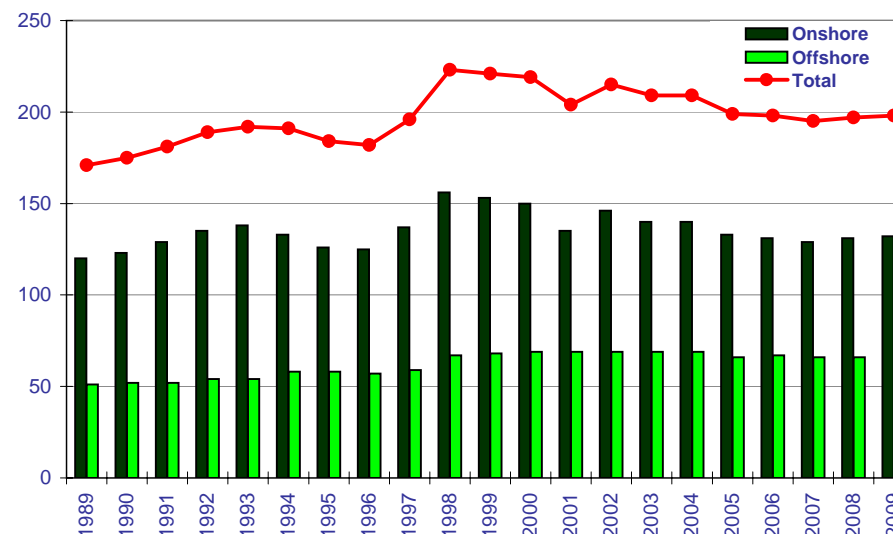
	Onshore	Offshore	Total
1989	120	51	171
1990	123	52	175
1991	129	52	181
1992	135	54	189
1993	138	54	192
1994	133	58	191
1995	126	58	184
1996	125	57	182
1997	137	59	196
1998	156	67	223
1999	153	68	221
2000	150	69	219
2001	135	69	204
2002	146	69	215
2003	140	69	209
2004	140	69	209
2005	133	66	199
2006	131	67	198
2007	129	66	195
2008	131	66	197
2009	132	66	198

Total
428
398
392
347
321
343
330
330
358
413
395
367
344
345
312
304
289
291
285
295
295

Number of Exploration Licenses - years 1989-2009



Number of Production Licenses - years 1989-2009



Onshore licenses

Data till December 31st 2009

REGIONS	EXPLORATION		PRODUCTION		TOTAL
	Number (-)	Area (Km ²)	Number (-)	Area (Km ²)	Tot. area (km ²)
VALLE D'AOSTA	0	0	0	0	0,00
PIEMONTE	3	1.343,86	1	77,71	1.421,57
LIGURIA	0	0,00	0	0,00	0,00
LOMBARDIA	7	2.536,11	13	988,15	3.524,26
TRENTINO-ALTO ADIGE	0	0,00	0	0,00	0,00
VENETO	0	0,30	1	164,32	164,62
FRIULI-VENEZIA GIULIA	0	0,00	0	0,00	0,00
EMILIA-ROMAGNA	24	7.395,92	35	1.597,15	8.993,07
ITALIA SETTENTRIONALE	34	11.276,19	50	2.827,33	14.103,52
TOSCANA	1	246,89	2	307,84	554,73
MARCHE	5	1.221,19	18	1.134,86	2.356,05
UMBRIA	0	0,00	0	0,00	0,00
LAZIO	5	2.835,35	1	41,14	2.876,49
ABRUZZO	10	3.239,02	6	491,20	3.730,22
MOLISE	0	102,34	4	336,19	438,53
ITALIA CENTRALE	21	7.644,79	31	2.311,23	9.956,02
CAMPANIA	0	73,97	0	0,00	73,97
PUGLIA	3	2.070,15	14	1.253,31	3.323,46
BASILICATA	10	1.305,76	21	2.120,89	3.426,65
CALABRIA	0	0,00	2	103,43	103,43
ITALIA MERIDIONALE	13	3.449,88	37	3.477,63	6.927,51
SICILIA	4	2.246,35	14	588,87	2.835,22
SARDEGNA	0	0,00	0	0,00	0,00
ITALIA INSULARE	4	2.246,35	14	588,87	2.835,22
TOTALE	72	24.617,21	132	9.205,06	33.822,27

N.B.

In case of licenses extending over two or more zones, the surface shares are attributed to the zones they belong to, while the mining unit is assigned to the zone including the largest surface share.

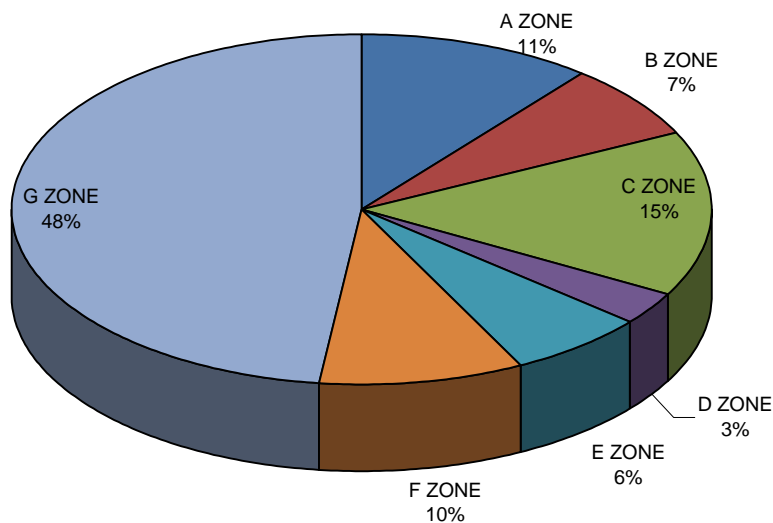
Mining licence area is far superior than that one actually taken up by plants (well areas, treatment stations and plants). Mining licence not pertaining areas not taken up by the aforesaid plants nevertheless can be used for all usual human activities.

Offshore licenses

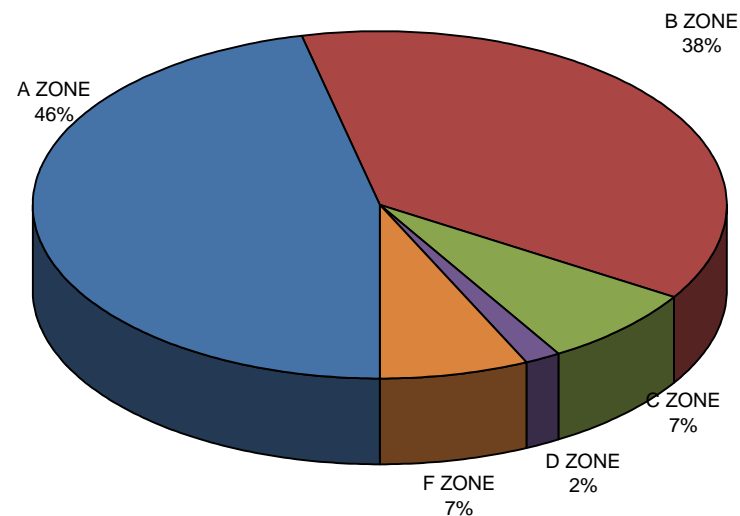
Data till December 31st 2009

SEA ZONES	EXPLORATION LICENSES		PRODUCTION LICENSES		TOTAL AREA (Km ²)
	Number of permits	Area (Km ²)	Number of concessions	Area (Km ²)	
A ZONE	7	1.257,64	38	4.143,35	5.400,99
B ZONE	3	827,23	19	3.365,13	4.192,36
C ZONE	3	1.805,73	3	659,51	2.465,24
D ZONE	0	357,81	3	153,41	511,22
E ZONE	1	724,37	0	0,00	724,37
F ZONE	2	1.111,33	3	618,67	1.730,00
G ZONE	9	5.646,32	0	0,00	5.646,32
TOTAL	25	11.730,43	66	8.940,07	20.670,50

Offshore exploration licenses: areas



Offshore production licenses: areas

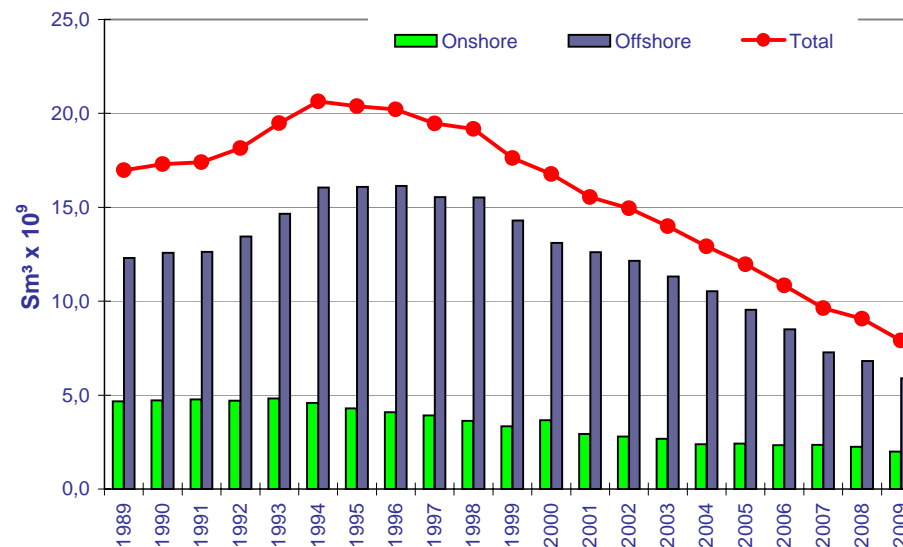


Hydrocarbons production

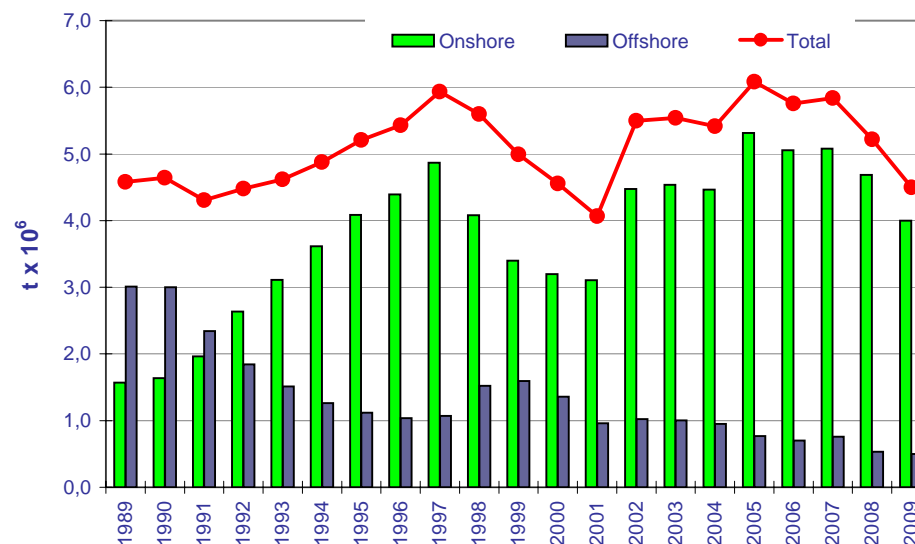
Years 1989 - 2009

YEAR	GAS (Sm ³ x 10 ⁹)			OIL (t x 10 ⁶)			GASOLINE (t x 10 ³)		
	Onshore	Offsh.	Total	Onshore	Offsh.	Total	Onshore	Offsh.	Total
1989	4,7	12,3	17,0	1,6	3,0	4,6	19,0	7,0	26,0
1990	4,7	12,6	17,3	1,6	3,0	4,6	19,0	8,0	27,0
1991	4,8	12,6	17,4	2,0	2,3	4,3	17,0	8,0	25,0
1992	4,7	13,4	18,2	2,6	1,8	4,5	16,0	6,0	22,0
1993	4,8	14,7	19,5	3,1	1,5	4,6	13,0	7,0	20,0
1994	4,6	16,1	20,6	3,6	1,3	4,9	12,0	6,0	18,0
1995	4,3	16,1	20,4	4,1	1,1	5,2	22,0	6,0	28,0
1996	4,1	16,1	20,2	4,4	1,0	5,4	17,0	5,0	22,0
1997	3,9	15,5	19,5	4,9	1,1	5,9	17,0	5,0	22,0
1998	3,6	15,5	19,2	4,1	1,5	5,6	18,0	4,0	22,0
1999	3,3	14,3	17,6	3,4	1,6	5,0	17,0	5,0	22,0
2000	3,7	13,1	16,8	3,2	1,4	4,6	25,0	6,0	31,0
2001	2,9	12,6	15,5	3,1	1,0	4,1	23,0	8,0	31,0
2002	2,8	12,1	14,9	4,5	1,0	5,5	22,0	11,0	33,0
2003	2,7	11,3	14,0	4,5	1,0	5,5	24,7	5,6	30,3
2004	2,4	10,5	12,9	4,5	1,0	5,4	23,0	6,0	29,0
2005	2,4	9,5	12,0	5,3	0,8	6,1	22,6	4,0	26,6
2006	2,3	8,5	10,8	5,1	0,7	5,8	20,9	3,0	23,9
2007	2,4	7,3	9,6	5,1	0,8	5,8	20,2	1,4	21,5
2008	2,3	6,8	9,1	4,7	0,5	5,2	22,3	0,7	23,0
2009	2,0	5,9	7,9	4,0	0,5	4,5	22,0	0,3	22,3

Gas production: years 1989 - 2009



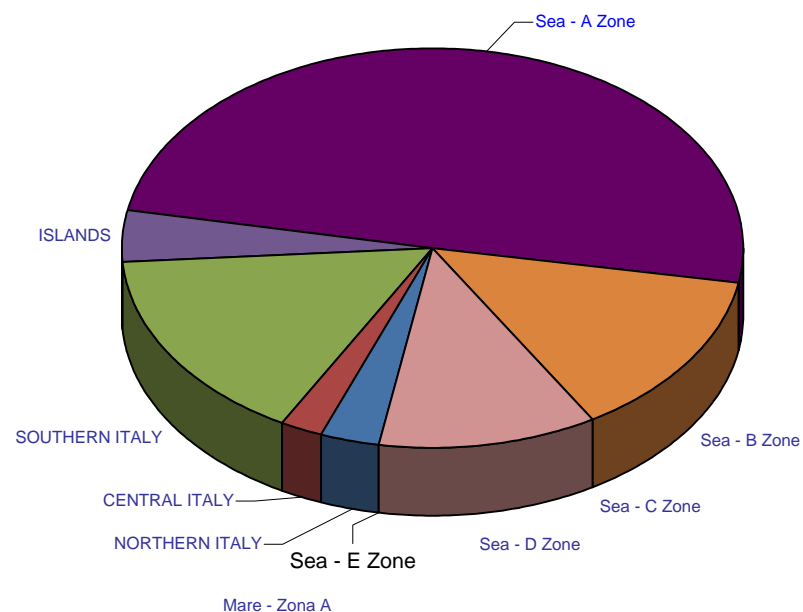
Oil production: years 1989 - 2009



Gas production years 2007-2008-2009

GAS (Millions of Sm³)				
Region / Sea zone	Year 2009	Year 2008	Year 2007	Variation % 2009/2008
VALLE D'AOSTA	0,0	0,0	0,0	-
PIEMONTE	45,9	21,3	17,1	115,9%
LIGURIA	0,0	0,0	0,0	-
LOMBARDIA	25,1	30,6	32,7	-18,3%
TRENTINO-ALTO ADIGE	0,0	0,0	0,0	-
VENETO	3,3	3,4	0,9	-2,1%
FRIULI-VENEZIA GIULIA	0,0	0,0	0,0	-
EMILIA-ROMAGNA	157,8	190,1	217,1	-17,0%
NORTHERN ITALY	232,1	245,4	267,7	-5,4%
TOSCANA	1,3	1,4	1,4	-9,2%
MARCHE	66,0	57,8	58,2	14,3%
UMBRIA	0,0	0,0	0,0	-
LAZIO	0,0	0,0	0,0	-
ABRUZZO	26,6	35,9	43,7	-25,9%
MOLISE	81,8	84,8	89,0	-3,5%
CENTRAL ITALY	175,8	179,9	192,3	-2,3%
CAMPANIA	0,0	0,0	0,0	-
PUGLIA	333,4	397,9	376,3	-16,2%
BASILICATA	914,0	1080,0	1210,0	-15,4%
CALABRIA	9,8	11,9	18,8	-17,8%
SOUTHERN ITALY	1257,1	1489,8	1605,2	-15,6%
SICILIA	325,2	340,5	285,6	-4,5%
SARDEGNA	0,0	0,0	0,0	-
ISLANDS	325,2	340,5	285,6	-4,5%
TOTAL ONSHORE	1990,2	2255,6	2350,8	-11,8%
Sea - A Zone	3939,3	4700,4	5166,5	-16,2%
Sea - B Zone	1083,8	1233,7	1096,4	-12,2%
Sea - C Zone	4,2	3,7	4,4	14,3%
Sea - D Zone	891,6	877,0	1016,2	1,7%
Sea - E Zone	0,0	0,0	0,0	-
TOTAL OFFSHORE	5918,9	6814,8	7283,6	-13,1%
TOTAL	7909,1	9070,4	9634,3	-12,8%

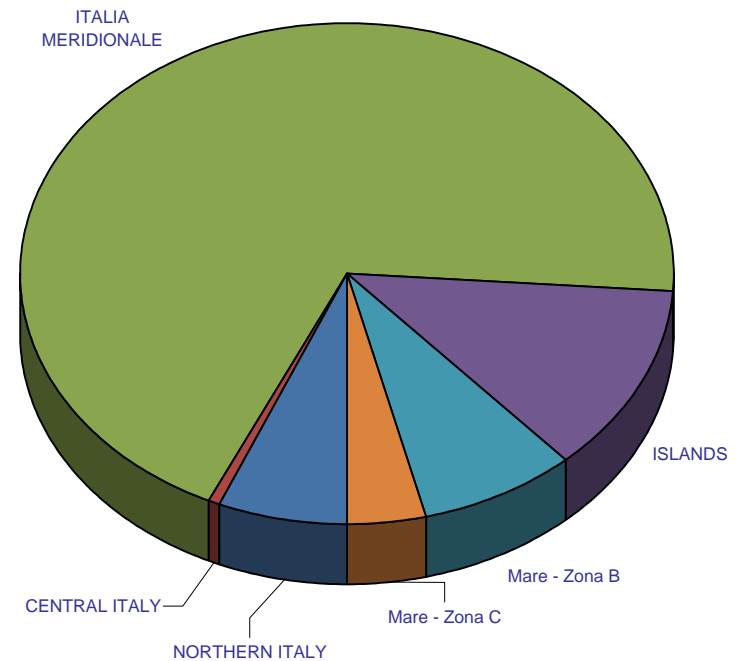
Gas production in Italy - year 2009



Oil production years 2007-2008-2009

OIL (thousands of metric tons)				
Region / Sea zone	Year 2009	Year 2008	Year 2007	Variazione % 2009/2008
VALLE D'AOSTA	0,0	0,0	0,0	-
PIEMONTE	263,4	165,1	108,1	59,5%
LIGURIA	0,0	0,0	0,0	-
LOMBARDIA	0,0	0,0	0,0	-
TRENTINO-ALTO ADIGE	0,0	0,0	0,0	-
VENETO	0,0	0,0	0,0	-
FRIULI-VENEZIA GIULIA	0,0	0,0	0,0	-
EMILIA-ROMAGNA	28,9	34,0	35,0	-15,0%
NORTHERN ITALY	292,3	199,1	143,1	46,8%
TOSCANA	0,0	0,0	0,0	-
MARCHE	0,0	0,0	0,0	-
UMBRIA	0,0	0,0	0,0	-
LAZIO	0,2	0,2	0,2	-
ABRUZZO	0,0	0,0	0,0	-
MOLISE	20,8	26,1	26,1	-20,2%
CENTRAL ITALY	21,0	26,3	26,4	-20,0%
CAMPANIA	0,0	0,0	0,0	-
PUGLIA	0,0	0,0	0,0	-
BASILICATA	3155,5	3930,4	4360,8	-19,7%
CALABRIA	0,0	0,0	0,0	-
SOUTHERN ITALY	3155,5	3930,4	4360,8	-19,7%
SICILIA	556,1	530,0	543,7	4,9%
SARDEGNA	0,0	0,0	0,0	-
ISLANDS	556,1	530,0	543,7	4,9%
TOTAL ONSHORE	4024,9	4685,7	5073,9	-14,1%
Mare - Zona A	0,0	0,0	0,0	-
Mare - Zona B	353,8	376,7	467,3	-6,1%
Mare - Zona C	172,1	157,3	296,7	9,4%
Mare - Zona D	0,0	0,0	0,0	-
Mare - Zona F	0,0	0,0	0,0	-
TOTAL OFFSHORE	525,9	534,0	764,0	-1,5%
TOTAL	4550,8	5219,8	5837,9	-12,8%

Oil production in Italy - year 2009



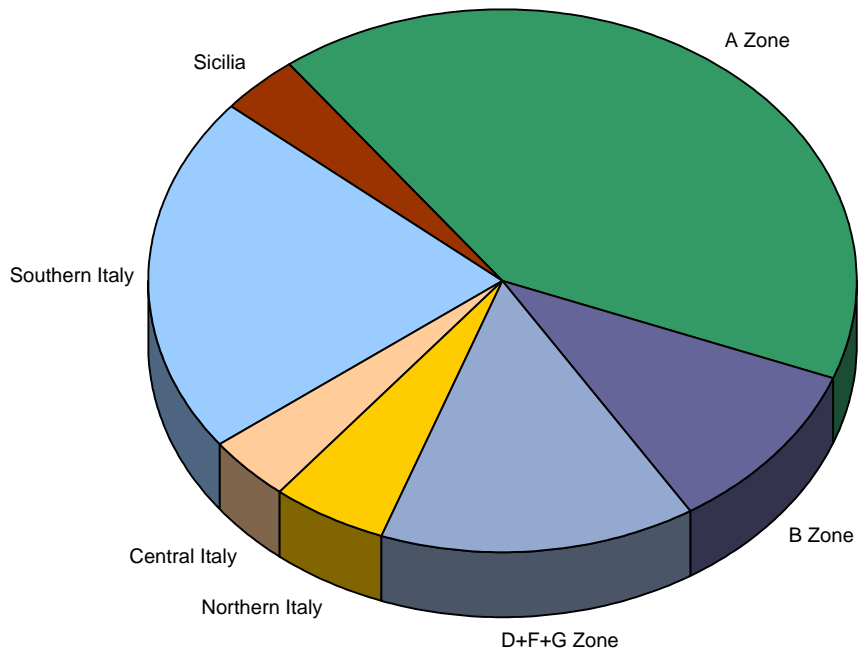
Reserves till December 31st 2009

GAS (Millions of Sm ³)					
	PROVEN	PROBABLE	POSSIBLE	RECOVERABLE	%
Northern Italy	2.745	3.443	1.503	4.767	5,2
Central Italy	1.604	3.076	2.536	3.649	4,0
Southern Italy	14.139	7.623	8.957	19.742	21,4
Sicilia	2.809	942	85	3.297	3,6
Total onshore	21.297	15.085	13.080	31.455	34,1
A Zone	29.597	14.130	6.840	38.030	41,2
B Zone	6.759	5.418	638	9.595	10,4
D+F+G Zone	5.922	13.531	2.707	13.229	14,3
Total offshore	42.278	33.079	10.184	60.854	65,9
Total Italy	63.574	48.163	23.265	92.309	100,0

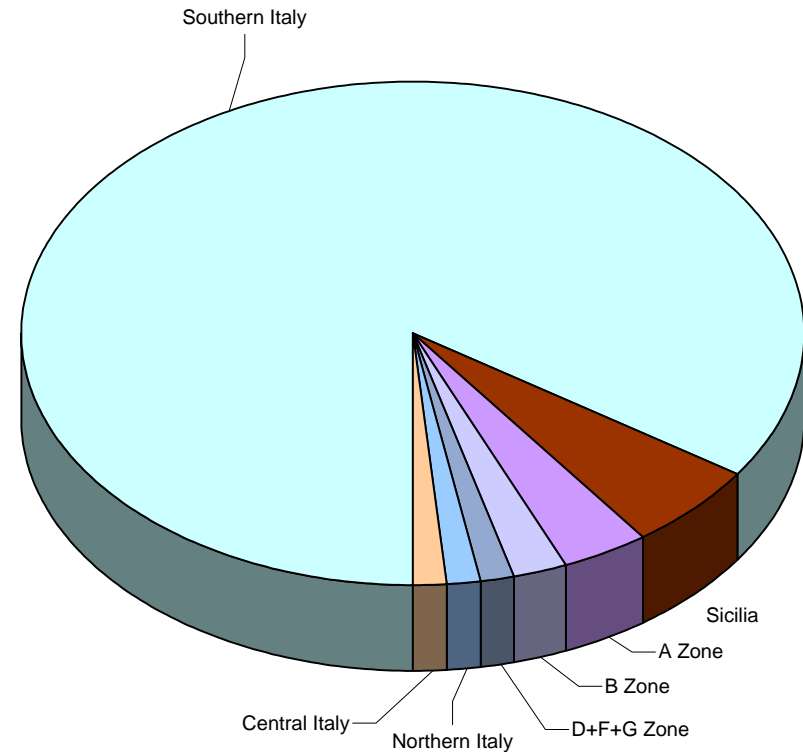
OIL (thousands of metri tons)					
	PROVEN	PROBABLE	POSSIBLE	RECOVERABLE	%
Northern Italy	1.511	753	164	1.920	1,5
Central Italy	90	2.564	813	1.535	1,2
Southern Italy	55.021	65.891	99.789	107.924	84,5
Sicilia	5.551	2.702	980	7.098	5,6
Total onshore	62.173	71.911	101.745	118.477	92,8
A Zone	3.696	1.678	0	4.535	3,6
B Zone	2.834	116	472	2.987	2,3
D+F+G Zone	1.055	1.295	0	1.703	1,3
Total offshore	7.585	3.090	472	9.224	7,2
Total Italy	69.758	75.000	102.217	127.702	100,0

N.B. The Recoverable Reserves are calculated as follows: Proven + 50% Probable + 20% Possible.
At the beginning of the exploitation of a reservoir, uncertainty is bigger. Reserves estimation is updated during the exploitation without a precise scheduling.

Recoverable Gas Reserves

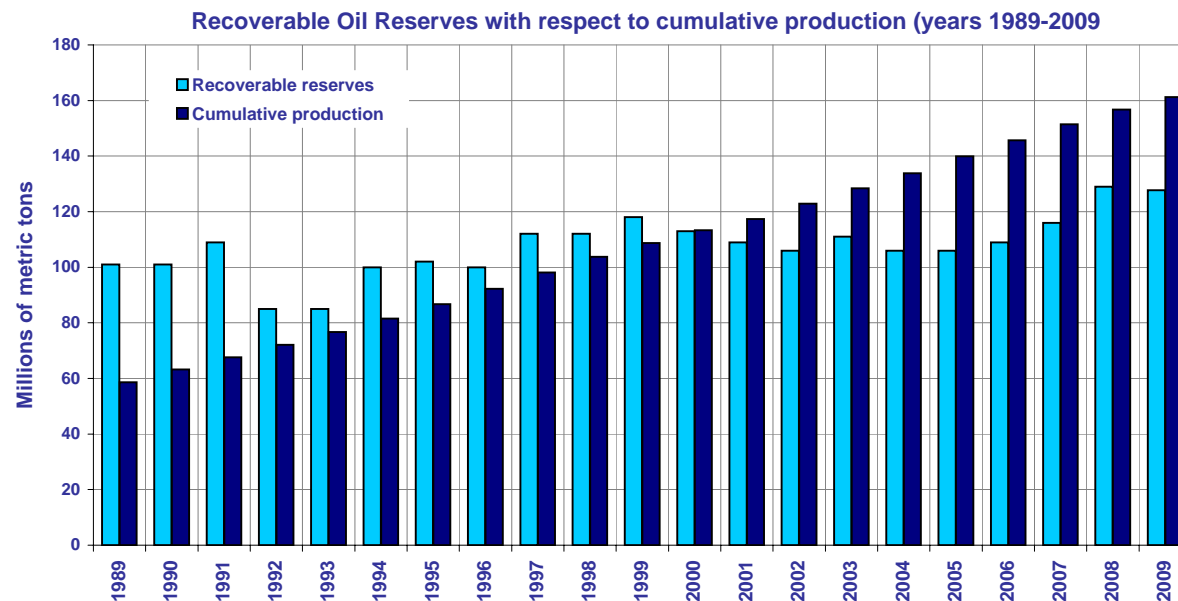
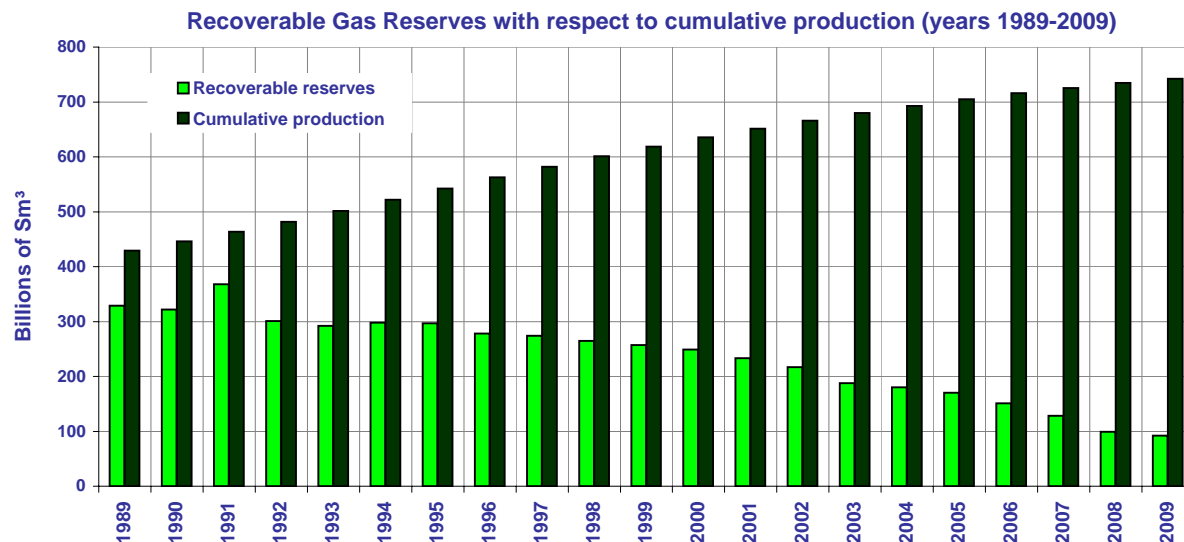


Recoverable Oil reserves

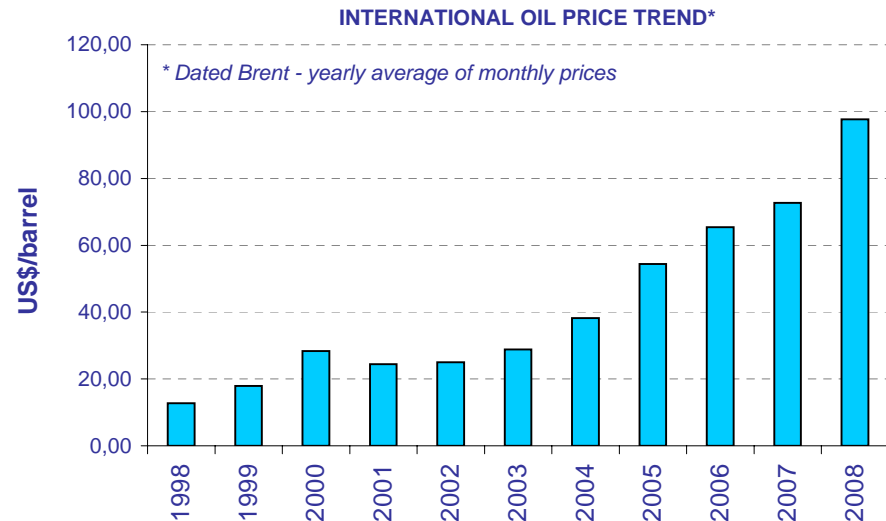
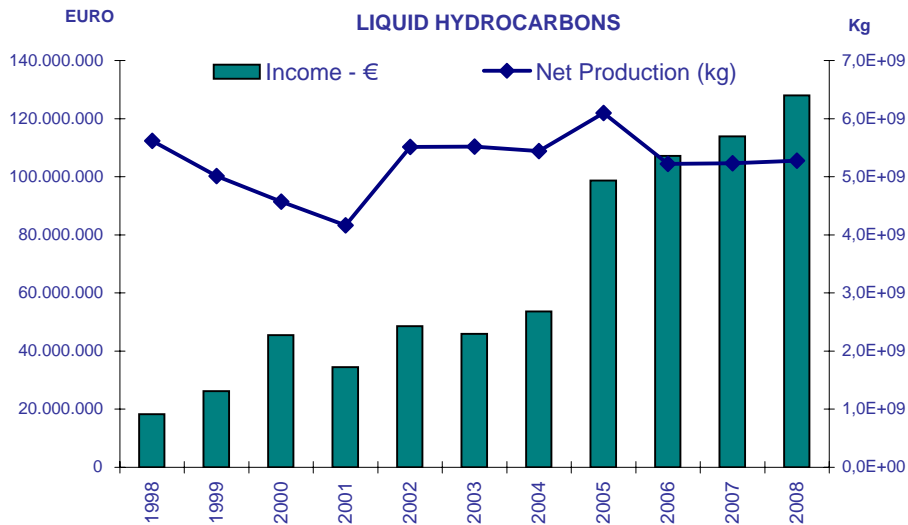
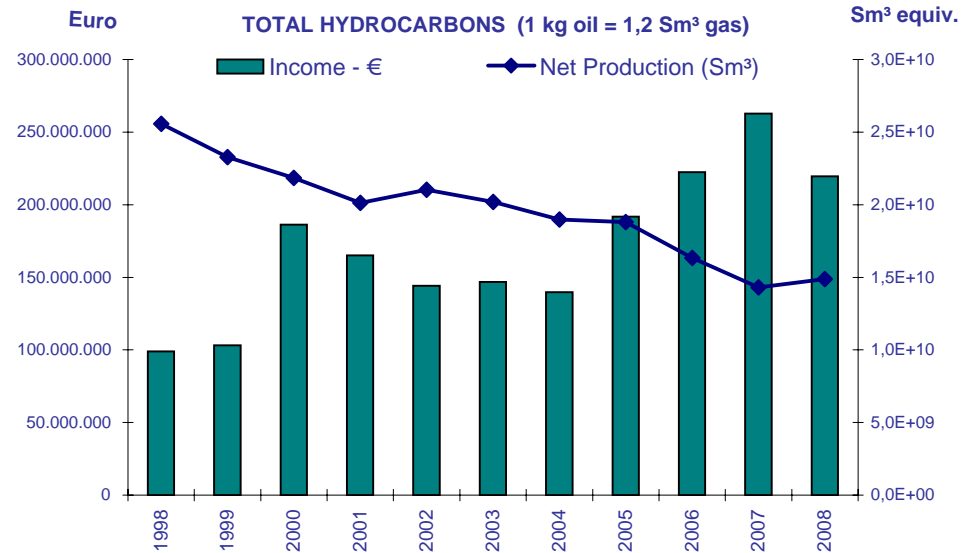
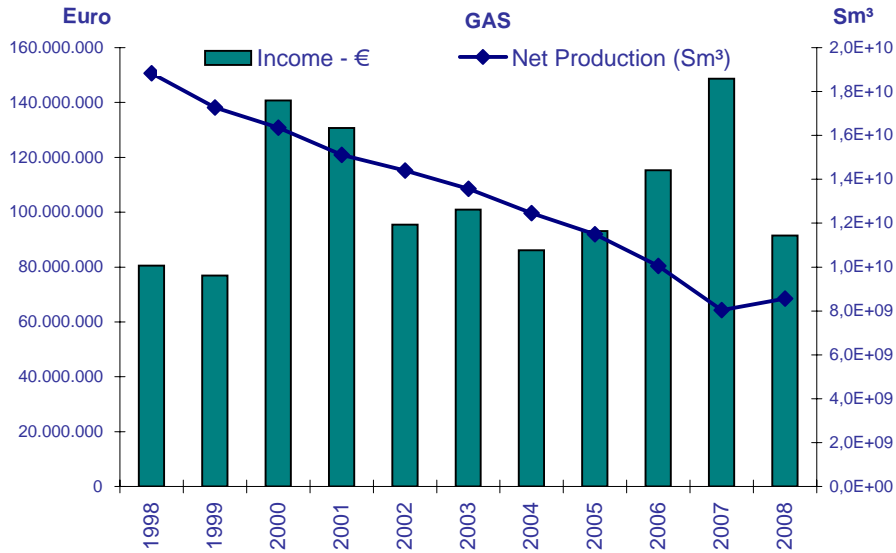


Recoverable Reserves with respect to cumulative production years 1989-2009

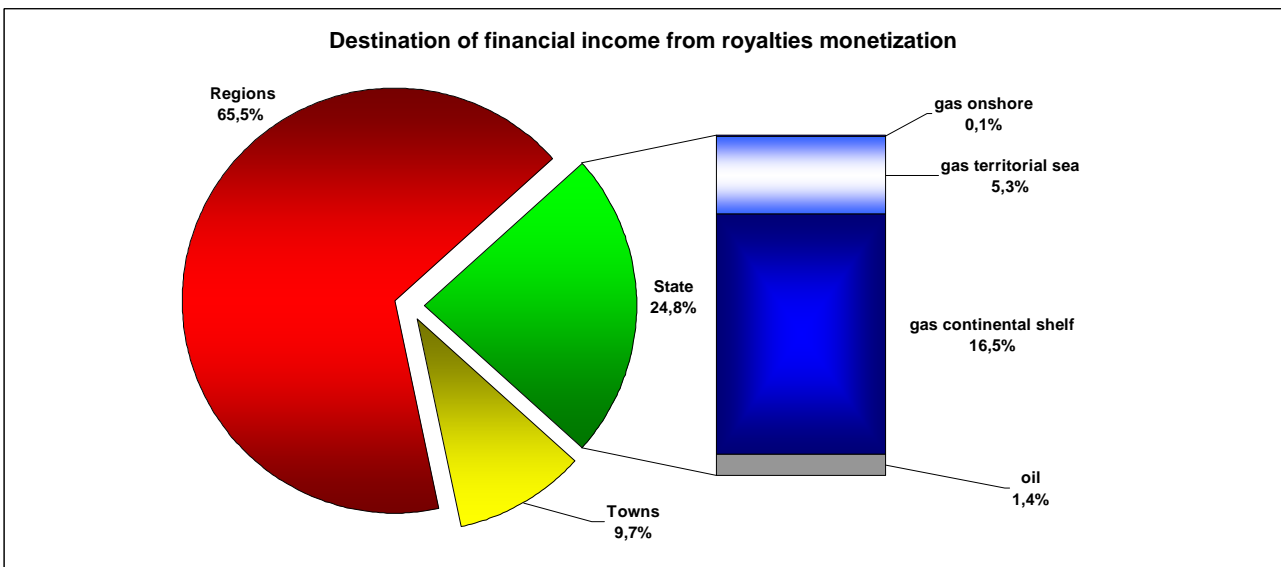
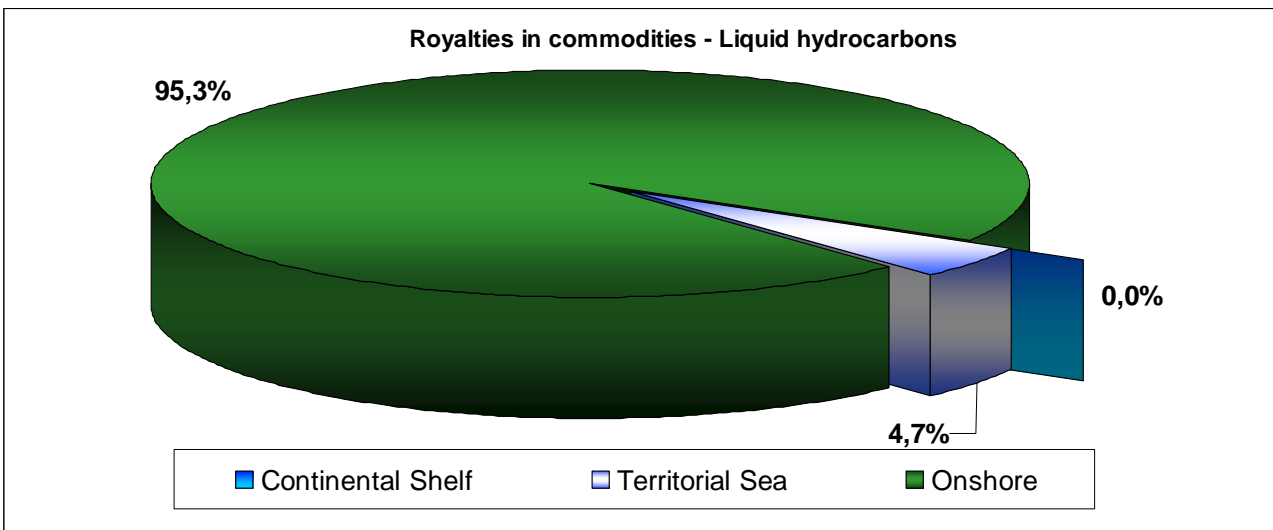
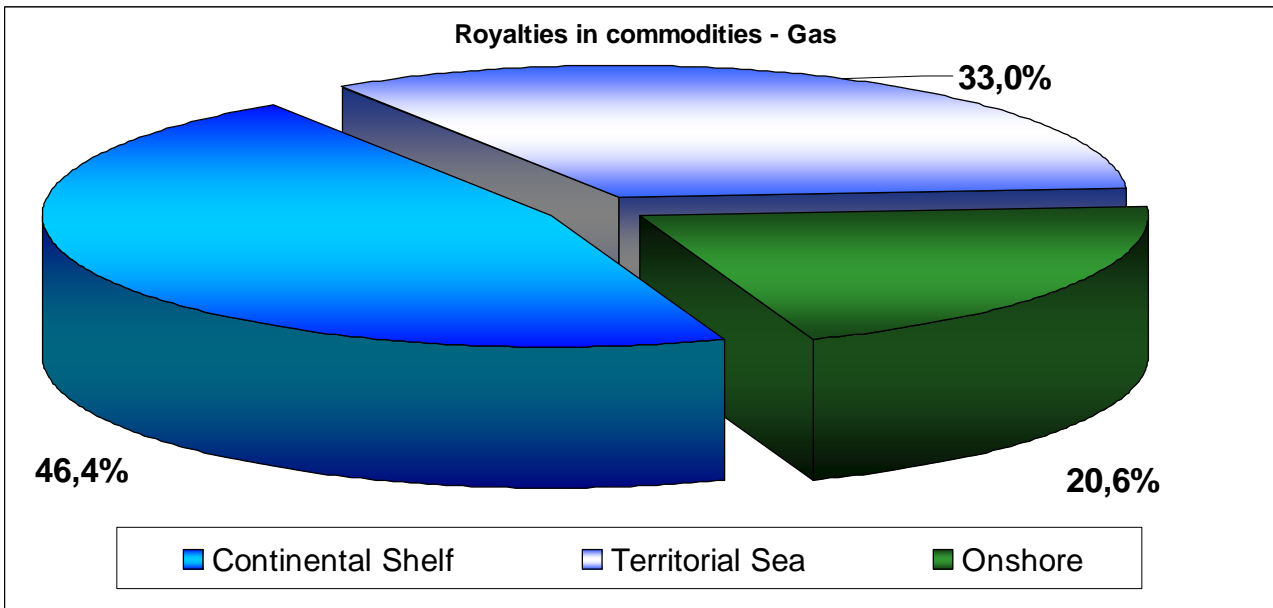
YEAR	GAS (Billions of Sm ³)		OLIO (Milioni di Tonnellate)	
	Recoverable reserves	Cumulative production	Recoverable reserves	Cumulative production
1989	329	429	101	59
1990	322	446	101	63
1991	368	464	109	68
1992	301	482	85	72
1993	292	501	85	77
1994	298	522	100	82
1995	297	542	102	87
1996	278	563	100	92
1997	274	582	112	98
1998	265	601	112	104
1999	257	619	118	109
2000	249	636	113	113
2001	233	651	109	117
2002	217	666	106	123
2003	188	680	111	128
2004	180	693	106	134
2005	170	705	106	140
2006	151	716	109	146
2007	128	725	116	151
2008	99	734	129	157
2009	92	742	128	161



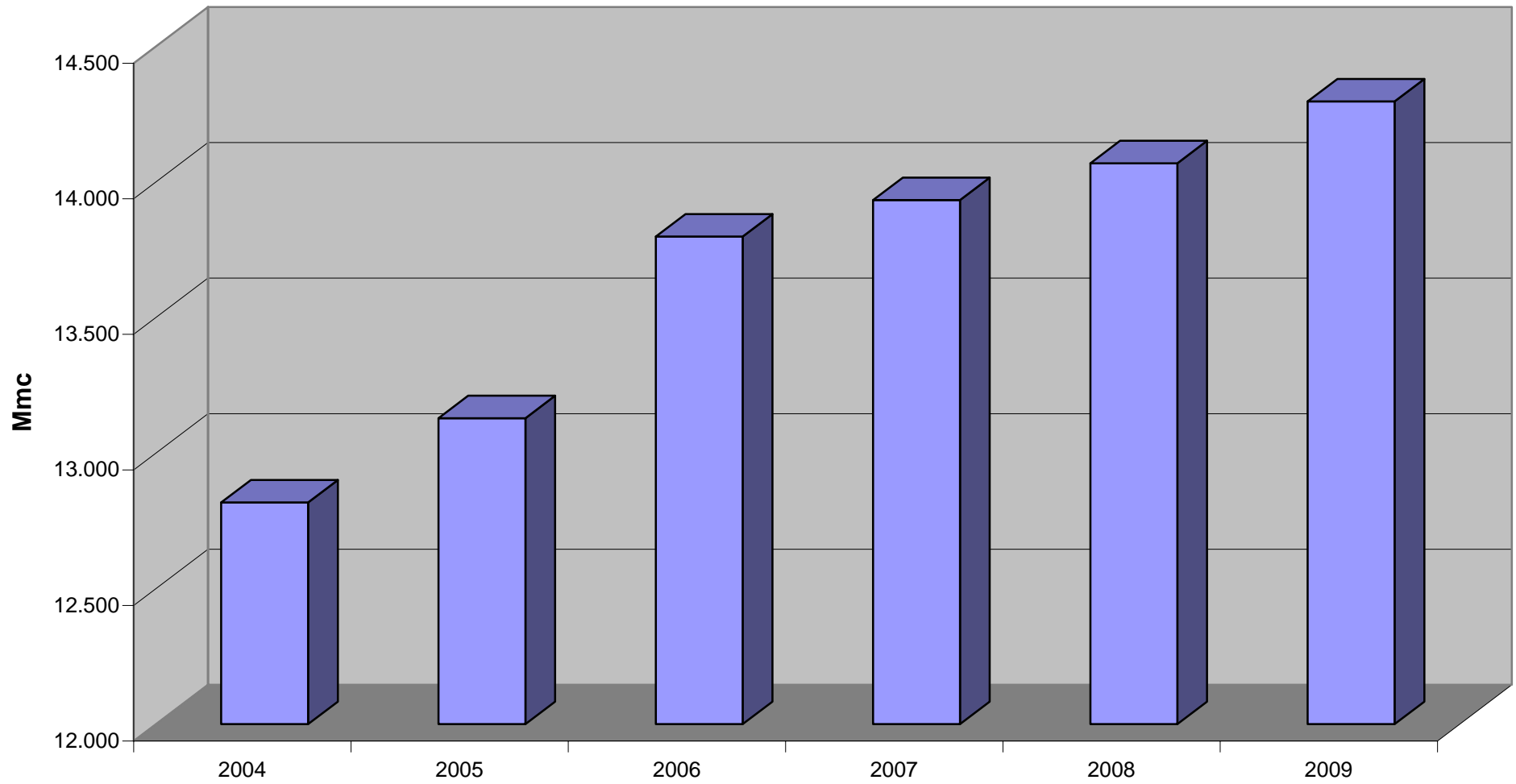
ROYALTIES - hystorical data series: years 1998 - 2008

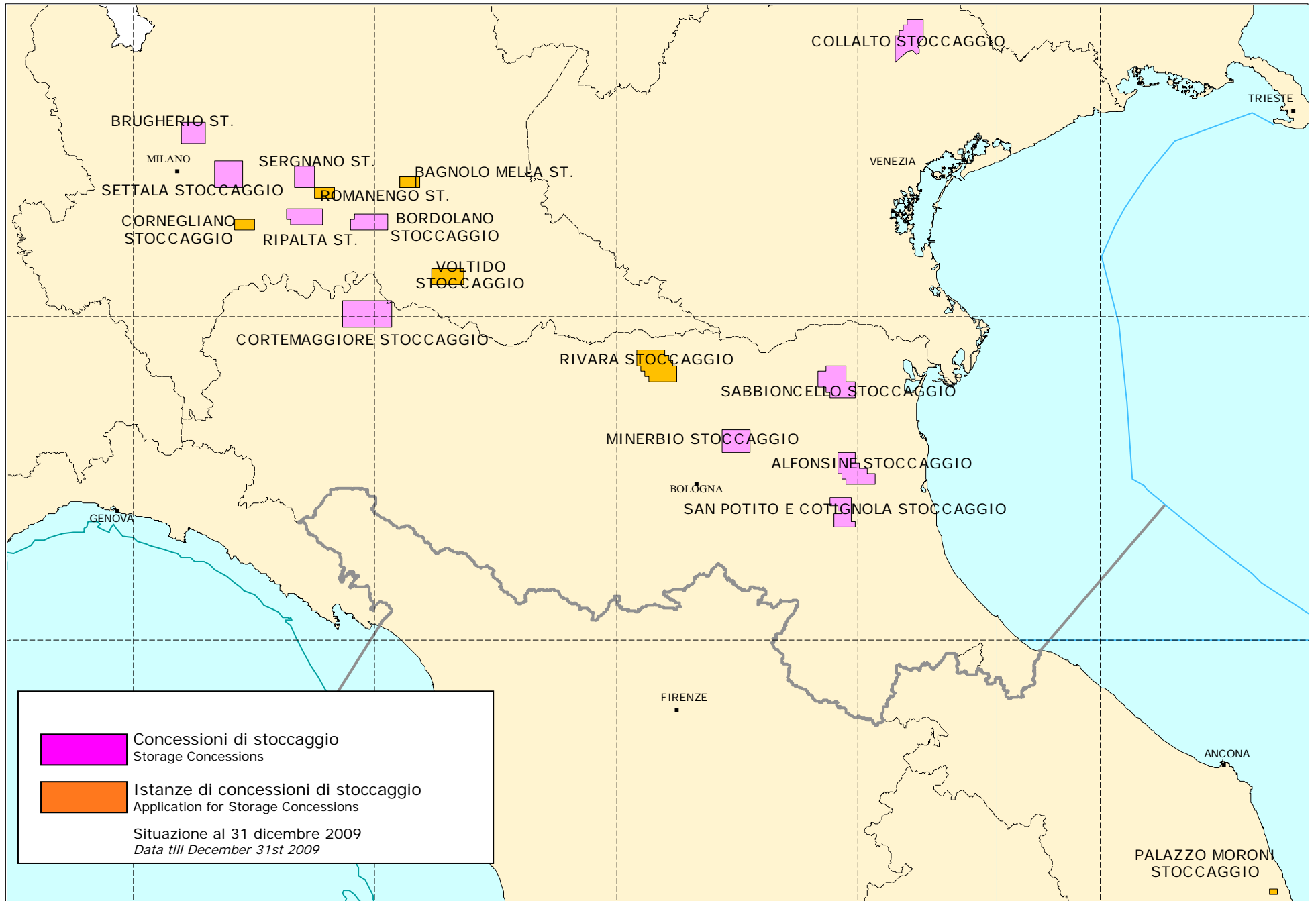


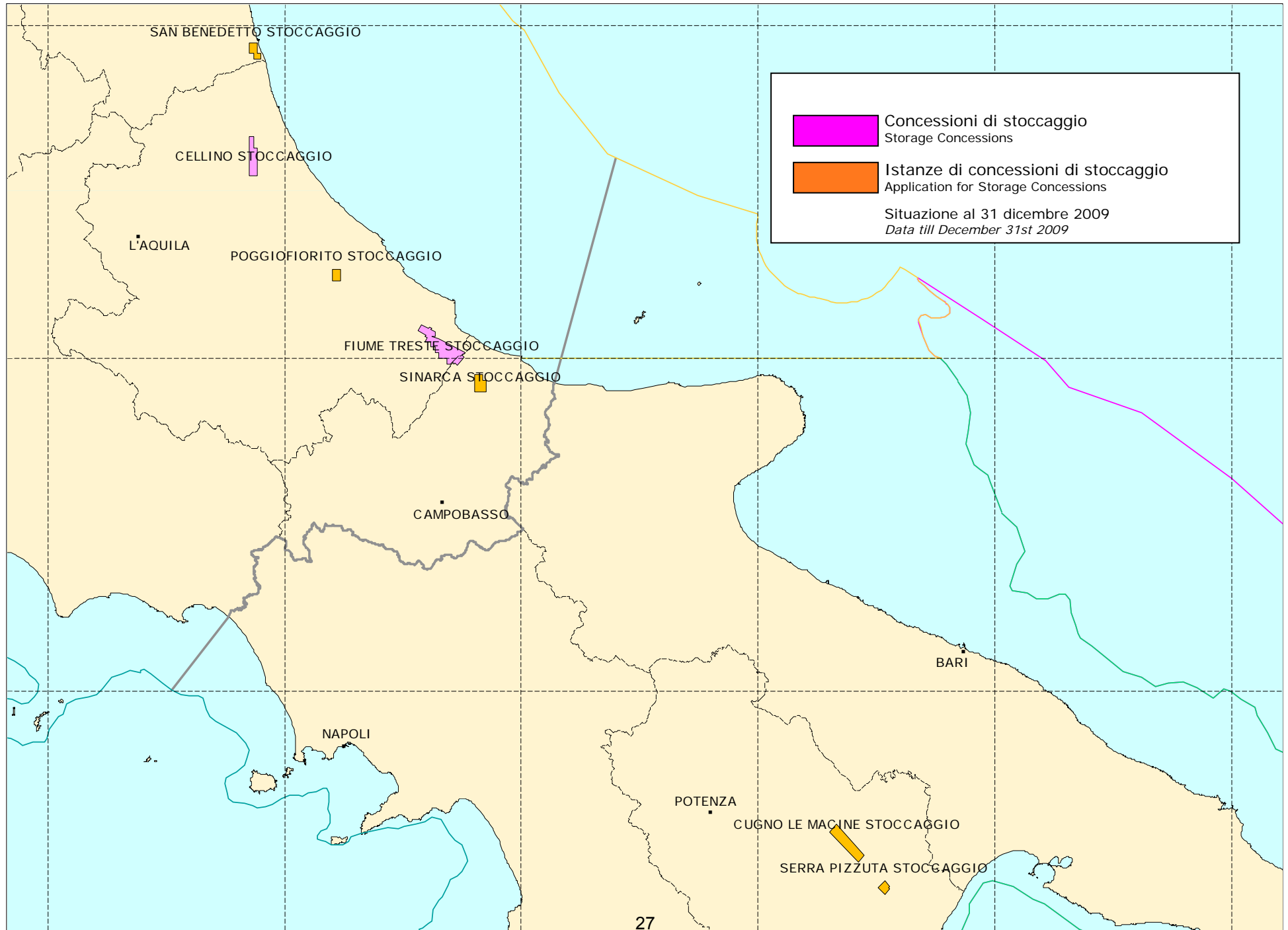
ROYALTIES YEAR 2008



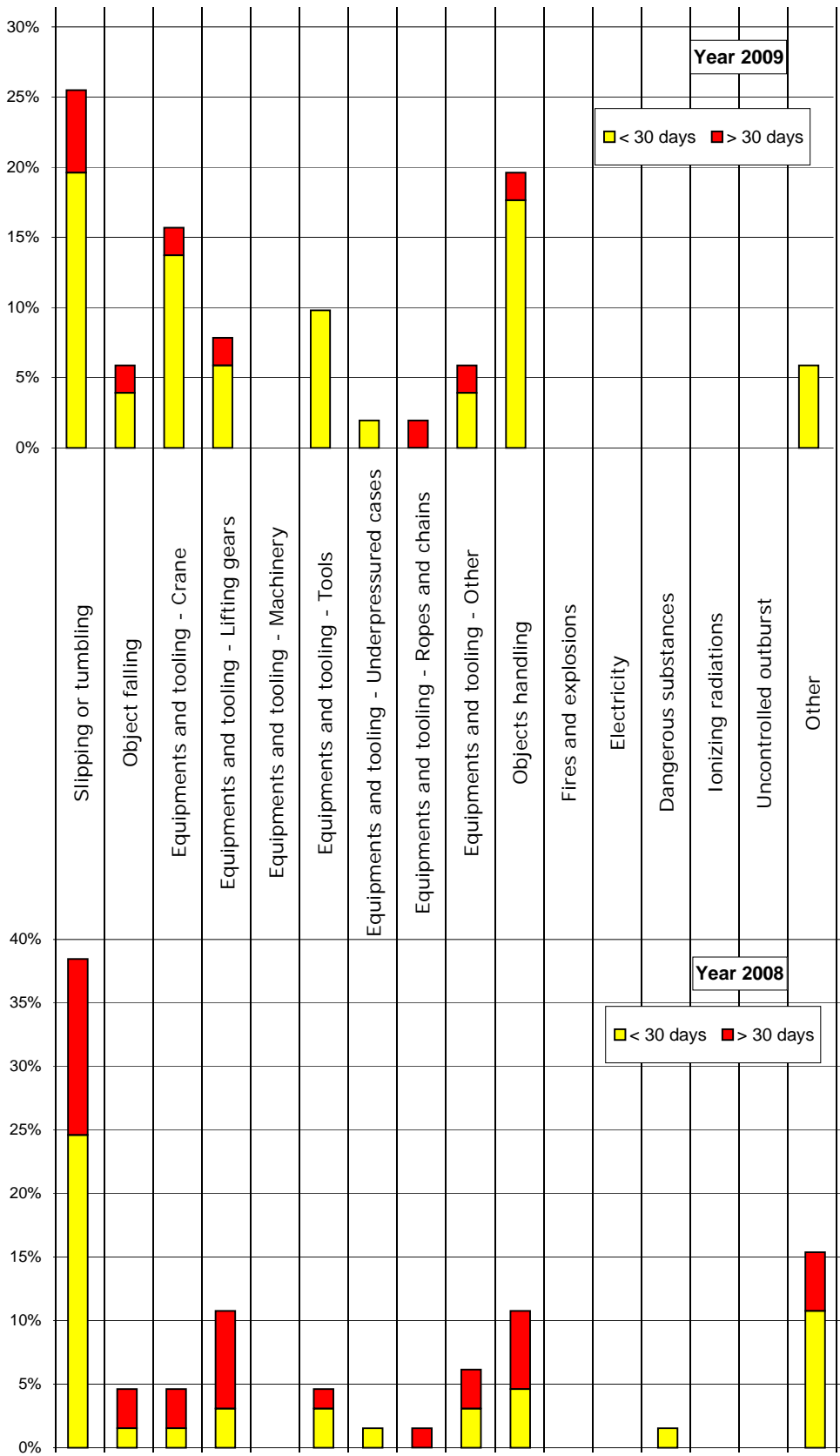
**Capacità di stoccaggio
anni 2004-2009**
(Storage capacity years 2004-2009)



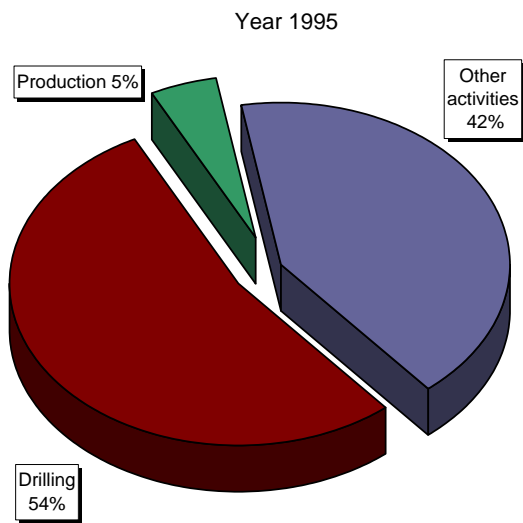
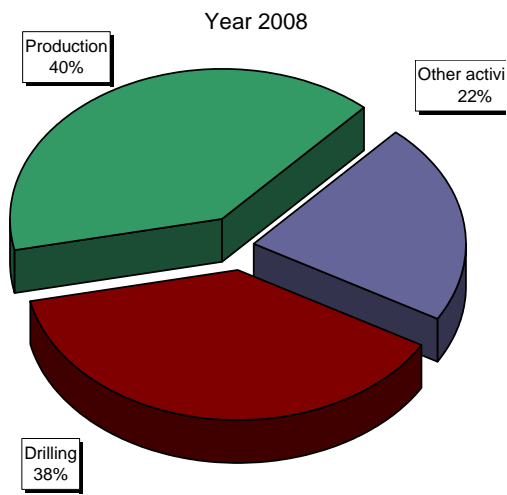
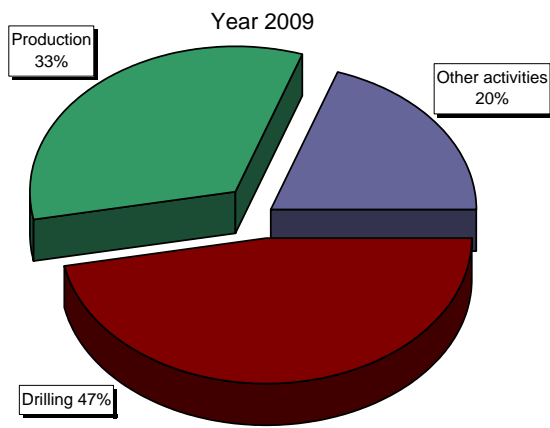




Percentage effect owing to accident



Activity percentage effect





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