



# Eni in Egypt

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## Eni's Milestones

**1955**

Eni's subsidiary leoc makes the first oil discovery, the Belayim onshore field in the Sinai region, in the Gulf of Suez

**1957**

Further positive results from exploration lead to establishing the company COPE (now Petrobel), with the participation of leoc and the State petroleum agency (now EGPC).

With this innovative agreement, for the first time the producer Country shares the management and the control of operations

**1961**

Another success for Eni with the discovery of the first Egyptian offshore field, Belayim Marine, which today is still the Country's largest oil reservoir

**1967**

Discovery of the first natural gas field in Egypt in the Nile Delta, with reserves of over 80 billion cubic meters

**1981**

Acquisition of Meleiha Concession in the Western Desert. The company Agiba Petroleum is set up in order to further develop the activities in the Concession

**1983**

Discovery of the Port Fouad gas field in the offshore of the Nile Delta facing Port Said. leoc subsequently discovers many other gas fields in the Mediterranean offshore

**1987**

Further acquisition of exploration permits in the Western Desert, which will become another major source of oil

**1988**

Introduction of the "gas clause" in the Production Sharing Agreements (PSAs), aimed

at enhancing the exploration of natural gas resources and the development of the fields discovered. The clause gives EGPC the opportunity to develop the domestic market and to start export projects

**1993**

Extension of the Petrobel leases (Sinai and Abu Madi) until 2020

**2001**

Intersinai gas pipeline. The gas from Nile Delta's Petrobel fields is delivered to the Sinai region, thus favoring its growth and further export to Jordan

**2004**

Start-up of operations of Damietta LNG plant, constructed and run by SEGAS (Eni 40%). The plant processes gas from the Nile Delta fields and LNG is shipped mainly to Spain. Start-up of a United Gas Derivatives Co.'s plant (Eni 33.3%) in Port Said, for LPG propane production and condensate extraction from rich gas. LPG and condensates are utilized in the local market

**2005**

leoc maintains a leading position in gas exploration

by acquiring new exploration blocks

**2006**

leoc signs a Framework Agreement to construct the second liquefaction train in Damietta together with its partners

**2008**

leoc achieves its record production of 624,000 boe/day of which 542,000 boe/day operated by 50% owned companies Petrobel and Agiba.

Sanapl and Jasmine oil fields discovery in Meleiha Concession in February and April respectively

**2009**

Thekah, Fayrouz and North Bardawil gas fields are put on stream contributing to Egypt production with ca. 25,000 boe/day. Extension of the Petrobel leases (Sinai and Abu Madi) until 2030. Jasmine East oil field discovery in Meleiha Concession in January

**2010**

The year 2010 witnesses the achievement of Temsah Concession Area production development by the addition of Tuna field production in July 2010 where total rate of Temsah Concession production exceed 800 MMscfd by December 2010. For Ras el Bar Concession the production from (Ha'py field) new gas starts in December 2010 with rate of 100 MMscfd Arcadia and Jana oil fields discovery in Meleiha Concession in July and December 2010 respectively



**2011**

In 2011, Denise B field started its production in July and the total production of Temsah Concession exceeded 1.1 Bscf/d by December 2011. Aman South West oil field discovery in Meleiha Concession in March

**2012**

New production in Ras El Bar Concession (Seth field) in June 2012. Emry Deep oil field, Aman South and Nada West oil field discovery in Meleiha Concession respectively in January, March and May

**2013**

Finalised the full field development plan of the Emry Deep oil field with a peak oil rate of 27,000 bopd. Rosa North, Aman Deep, Aman Dome and Jasmine South East oil fields discovery in Meleiha Concession in February, June, August and December 2013 respectively. Qattara Rim and Qattara North oil fields discovery in East Kanayis Concession in September and October respectively

**2014**

The first of the five development wells of the Deka gas project was put online in August 2014. Completion of the full field development plan was achieved by May 2015 with an average rate of about 180 MMscfd. leoc Production BV acquired four new exploration licenses in the deep offshore waters of the Mediterranean Sea (Shorouk Offshore, North Leil Offshore and Karawan Offshore) and in the Western Desert (South West Meleiha). Dorra North Gas field discovery in Meleiha Concession in October. Finalised the full field development plan of Emry Deep oil field with a peak oil rate of 32,700 bopd

**2015**

A year of achievement for Eni in Egypt. In Meleiha Concession located in the Western Desert, Meleiha West Deep oil and gas field, was discovered in January. In the same month the Investment Summit was held in Sharm El-Sheikh and a Heads of Agreement was signed worth \$5 billion (100%) over the next years. The said investment are relevant to concessions in the Mediterranean, the Western Desert, the Nile Delta and Sinai. Accordingly Eni signed in November three amendments for the concessions of "Sinai 12 and Abu Madi", "North Port Said" and "Baltim" and one new Concession Agreement, "Ashrafi". In April a record level of production of 70 thousand barrels of oil per day was reached in the Western Desert.

In July, leoc through Petrobel has announced the discovery of the Nooros field located in the Abu Madi West development lease in the Nile Delta which is estimated to contain about 530 bcf of gas in place, beside to associate condensates.

In August, the discovery of Zohr was announced, in Shorouk Concession Agreement, where leoc Production BV is the 100% Contractor with EGAS, following the successful drilling of Zohr-1 well. The Zohr discovery is considered the largest in the Mediterranean. The supergiant gas field holds a potential of 30 tcf of natural gas. As a result of the competitive 2014 EGAS bid round, leoc has been awarded with two new exploration blocks located in the Egyptian offshore of the Mediterranean Sea, North El Hammad and North Ras El Esh waiting for ratification

## Our Activities

Eni's activities in Egypt have been marked by a number of successes, resulting in major energy projects that have fostered the Country's economic development.

Egypt is one of the most important Countries in the Middle East, and has always played a strategic role as a bridge between Europe, Asia and Africa. Today Eni is one of the leading international players in the Country, thanks to a long-standing and fruitful collaboration with the Egyptian institutions.

Eni has started operating in Egypt since 1954 with the acquisition of shares of the company leoc, which became fully owned in 1961.

This stemmed from the effective understanding between Enrico Mattei, first Eni's President, and Gamal Abdel-Nasser, President of the Republic of Egypt. The encounter between Eni and Egypt came at a time when modern oil exploration had just started and called for efforts and a strong commitment to assess the Country's potential.

Natural gas is Egypt's big challenge for the new millennium, being an invaluable resource for the economic development of the Country and for exports. Moreover, it gives Eni a great opportunity to implement integrated projects that encompass the entire gas value chain.

### Main Operations

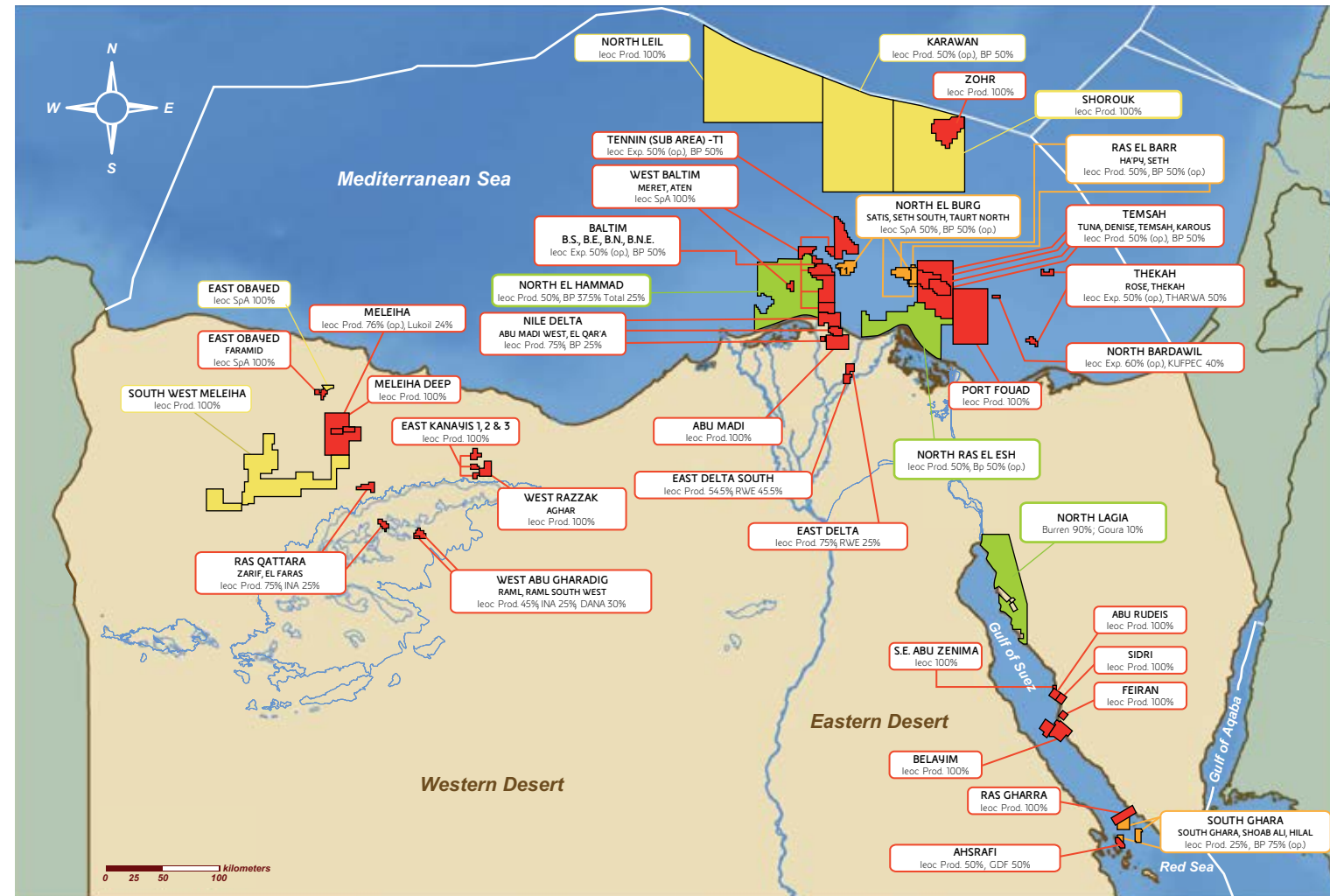
Eni has been working successfully in oil and gas exploration and production through its branches in Egypt, leoc Exploration BV, leoc Production BV, and leoc SpA, and operating through its joint operating companies Petrobel and Agiba.

leoc performs exploration directly and coordinates development and production operations through operating companies jointly set up with the Egyptian General Petroleum Corporation (EGPC) and Egyptian Natural Gas Holding Company (EGAS). Shares of said operating companies are held equally by EGPC or EGAS (50%) and leoc and its partners of international oil companies, if any (collectively 50%).

leoc holds 57 licenses (49 of which are operated), for a total acreage of 9,668 square kilometers. These licenses are distributed in the Country's three main hydrocarbon provinces: the Gulf of Suez/Red Sea, the Nile Delta/Mediterranean offshore and the Western Desert. Today leoc is the leading producer in Egypt, accounting for about



## leoc Activity Map



28% of the gross annual hydrocarbon production in the Country, more specifically, 23% of liquids and 34% of gas. Eni's companies operate 402,000 boe/day.

Eni's objectives are on the one hand to significantly contribute to a substantial increase in gas reserves in the Mediterranean which will contribute to meeting both the domestic demand and export opportunities.

On the other hand to find reserve which will help managing the declining oil production both in the Gulf of Suez and in the Western Desert.

### Gulf of Suez - Abu Rudeis

leoc's most important oil production operations are at Abu Rudeis, in the Gulf of Suez. The Petreco Oil Center has a 260,000 barrels/day

treatment capacity, and gathers some 85,000 barrels/day of oil from onshore and offshore fields - Belayim Marine, Belayim Land, Abu Rudeis, Sinai and Ras Garra - all operated by Petrobel. Petreco are connected to the Feiran tank farm and marine terminal, with a storage capacity of 2 million barrels.

Agiba Petroleum, the other leoc operating company, produces about 2,425 barrels/day of oil from the Ashrafi offshore oil field in the Gulf of Suez.

### Western Desert - Meleiha

Agiba Petroleum, the other leoc operating company, mainly operates in the Western Desert area producing about 58,180 barrels/day of oil, 42,870 barrels/day from Meleiha (of which 10,750 barrels/day from Emry Deep field and 15,310 barrels/day from several other fields in the Western Desert).



## Nile Delta - Abu Madi Mediterranean Offshore

The Nile Delta region is Egypt's most prolific gas basin. In 1967 leoc discovered the first gas field in the country, Abu Madi, one of the largest in Egypt.

Over the years, other significant gas discoveries have been made and put on production by Eni: the onshore East Delta and El Qar'a, as well as the offshore Port Fouad, Darfeel, Barboni, Anshuga, Baltim East, Baltim North, El Temsah, Tuna, Denise and Denise South fields.

Moreover, in other licenses, leoc shares with BP the offshore discoveries of Ha'py, Ha'py 9, Seth, Akhen and Taurt in the Ras El Barr Concession as well as the important discovery of Satis in North El Burg Concession that is opening the high-potential Oligocene play in the Mediterranean and Seth South and Taurt North.

At the end of 2015 total gas production from the North Port Said, Temsah and Baltim Concessions reached around 20 million cubic meters/day. Moreover, Thekah and North Bardawil fields produced 0.8 million cubic meters/day.

## Gas Industry Development

Eni has always believed in the potential of the Egyptian gas and has actively promoted the use of this energy source for industrial development and electricity generation. Thanks to the farsighted policy adopted by the Egyptian government since the late 80's the country has become one of the Mediterranean's biggest gas producers.

As well as meeting a growing domestic demand Egypt has also supported major gas export projects to meet world gas demand through LNG (Liquefied Natural Gas).

Eni holds a 50% stake in Union Fenosa Gas that which through its Egyptian affiliate, the Spanish Egyptian Gas Company - SEGAS,

has constructed and operates the LNG plant within the port area of Damietta.

The Damietta plant has a design capacity of around 5 million tons of LNG per year. The plant produced the first LNG in December 2004 and loaded the first cargo in January 2005. The Damietta LNG plant has been the first ever in Egypt, thus allowing the country to join the club of LNG exporting countries.

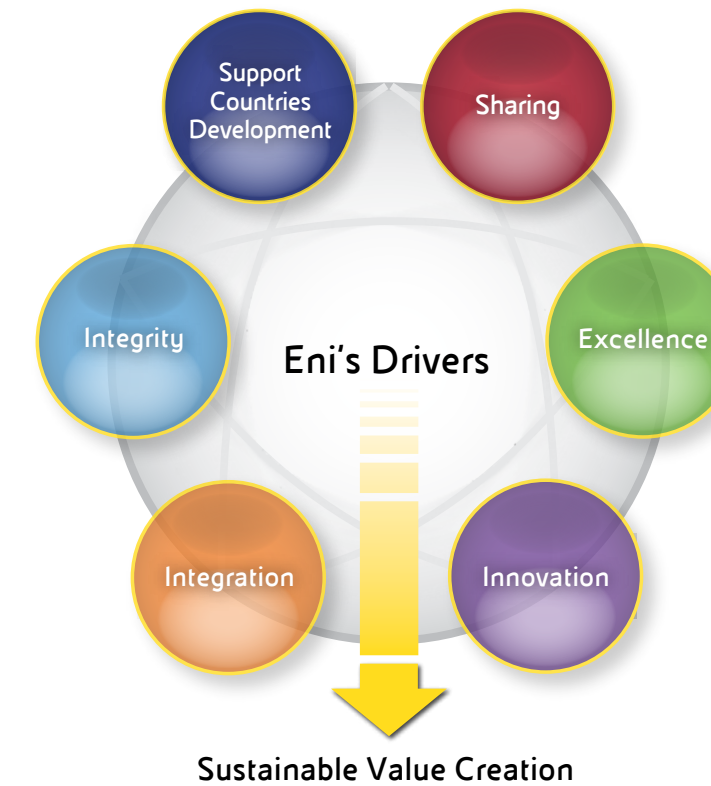
Through Eni International BV, Eni also holds a 33.33% stake in United Gas Derivatives Co. that has constructed an NGL (Natural Gas Liquids) extraction plant near El Gamil Petrobel production facility. The plant started its operations in September 2004, with a treatment capacity of 12.0 billion cubic meter/year and is capable of producing yearly 300,000 tons of LPG (Liquefied Petroleum Gas), 370,000 tons of propane and 1.2 million barrels of condensates.

Finally, Eni has a 40% participating interest in Gastec that is active in the Compressed Natural Gas business for vehicles.



## Sustainability

Eni has been operating in Egypt since 1955, in compliance with the requirements of local regulations and international conventions and standards, pursuing growth while contributing to Egypt's sustainable development. During its operations, Eni has confirmed its commitment towards the protection of the health and safety of its employees, contractors and local communities, and the environment.



## HSE Policy and Management System

The Health, Safety and Environment vision and goals of leoc are stated within the HSE Policy, following the Eni HQ requirements. A specific HSE Management System is in place addressing all the Eni expectations set out in the Eni HSE Management System Guideline, aimed at guaranteeing our HSE responsibility, setting HSE Strategic Objectives through the implementation of the Annual HSE plan.

The leoc HSE Integrated Management System (HSE IMS) is regularly updated and reviewed to ensure alignment with the local legislation, Eni HSE requirements and assure continuous improvement of its HSE performance across all processes and operations.

The leoc HSE IMS is subject to continuous reviews and audits and is maintained in compliance with the ISO 14001 and OHSAS 18001 international standards.

The HSE Performance of leoc and operating companies is strictly monitored by means of HSE Key Performance Indicators - KPI, and any deviation from the set targets is promptly dealt with to ensure achievement of objectives.

## Safety

Protecting the safety of the workforce is fundamental to leoc business. In view of the high percentage of injuries affecting hands in oil&gas industry, Eni has launched specific campaign on Hands Working Safety. leoc has adopted this campaign and rolled it out in Egypt at all sites and operating companies for more than 500 workers. Also, Eni has realized that lifting and handling loads activities are one of the main causes of work related injuries, therefore the company adopted 'No Crushing Project - Loads Lifting and Handling' aiming at raising the awareness of its workers and enhancing their perception for the inherent risks. leoc carried out a comprehensive training and awareness campaign to all

company and contractors workers involved in lifting operations in all operating sites. Among its efforts towards creating a stronger safety culture, leoc has rolled out the "Eni in safety" program at its operating companies focusing on local managers and supervisors focused on communication and training of safety. Relevant workshops have been delivered to managers at all levels within Petrobel and Agiba with the aim of strengthening the culture of safety and spread its values throughout the organization.

Road Traffic Safety (RTS) is a global concern, it is estimated that around 1.3 million people killed and 20 million are injured on roads around the world each year, and that this level is rising. The socio-economic and health impacts are substantial. leoc has always paid due attention to this area of concern. In this regard, leoc has revised and upgraded its management systems aiming at achieving full compliance with ISO 39001:2012 for Road Traffic Safety Management System. leoc believes that complying

with these standard requirements is a good policy to help the organization to reduce and lately eliminate the incidence and the risks of death and serious injuries linked to road traffic accidents. In continuation of previous years efforts in preventing road accident, leoc continues to systematic delivery of Defensive Driving Training to all the company's vehicle users and their family member. Also the company is in the process of updating its In Vehicle Monitoring Systems (IVMS) to be real time monitoring system and to be installed in all company and contractors vehicles.

In view of improving the competencies of employees participating in emergency roles, and in order to fully comply with Eni Emergency Response Competencies Assurance Practices and industry best practices, leoc will provide Emergency Response Specific trainings to 60 persons during 2015, on Incident Command System (ICS) series courses and International Maritime Organization (IMO) different Models.



## Environment

As part of our commitment towards continuous improvement of its HSE performance and the protection of the environment, leoc has started two new environmental initiatives in 2015 to be implemented at both Petrobel and Agiba operating companies. The first initiative is to carry out an environmental monitoring survey at each of Petreco Plant in Abu Rudeis and at Meleiha Plant in the Western Desert for measuring and quantifying the fugitive emissions from the numerous emissions sources at the plants. The survey will be followed by the preparation of a Plan for Reduction of Fugitive Emissions which when implemented will also result in a reduction in production losses. The monitoring activities were completed in November 2015.

The second initiative was to carry out site-level Biodiversity and Ecosystem Services (BES) Assessments at selected operating sites (referred to as "assessment units").

This assessment shall be carried out by applying Eni best practice for the integration of BES considerations into projects at the operational production (OPS) phase.

The initial activities carried out in 2015 involved the collection/ collation of secondary and GIS data pertaining to the main areas of interest within the Nile Delta and the development of a high level BES assessment report on selected assessment units where leoc/Eni operations are ongoing.

This will be followed by onsite field surveys at the Nile Delta for developing a detailed site-level assessment and consequently developing an BES action plan for mitigation of impacts.

Other ongoing environmental projects that have started in previous years and are continued to be implemented in Agiba include: produced water disposal through re-injection that is carried out at Meleiha and other fields in the Western Desert, and the completion

of the first and second phases of the project at Meleiha for Gas Power Generation Upgrade in 2012 and 2014 respectively, and activities shall continue with the implementation of the third phase of the project.

As for Petrobel, the treatment of contaminated soil at Abu Rudeis was carried out through the bioremediation project where the treatment of 400,000 tons has been successfully achieved over the previous years.

In 2015, the treatment of contaminated soil has continued in addition to the treatment of Oil Based Mud Cuttings, but through the operation of a Thermal Treatment Plant installed and available on site.

Finally, the Belayim Wastewater reinjection system has been implemented since 2011 at Abu Rudeis and is still in operation.



# Eni at a Glance

Eni is an integrated energy company, engaged in oil and natural gas exploration, field development and production, as well as in the supply, trading and shipping of natural gas, LNG, electricity and fuels.

Through refineries, Eni processes crude oil and other oil-based feedstock to produce fuels and lubricants that are supplied to wholesalers or through retail networks or distributors.

Eni's strategies, resource allocation processes and conduct of day-to-day operations underpin the delivery of sustainable value to all of our stakeholders, respecting the countries where the company operates and the people who work for and with Eni.

Integrity in business management, support to the Countries' development, operational excellence in conducting operations, innovation in developing competitive solutions, sharing Eni's people know-how and skills, integration of financial and non-financial issues in the company's plans and processes drive Eni in creating sustainable value. These elements lead to wise investment choices, prevention of risks and the achievement of strategic objectives in the short, medium and long term.

In 2015, Eni confirmed its presence in the Dow Jones Sustainability indices and in the FTSE4Good Sustainability index in the June half-yearly review.

## Main Figures for 2015

- Adjusted operating profit: € 334 mln
- Cash flow from operations: € 12.2 bln
- Dividends paid per share: € 0.8
- Leverage: 0.31
- Estimated net proved hydrocarbon reserves: 6.89 bln boe
- Hydrocarbon production: 1,760 kboe/d
- Worldwide gas sales: 90.88 bcm
- Retail oil products sales in Europe: 8.89 mmt tonnes
- Electricity sales: 34.88 TWh
- Service stations in Europe: 5,846



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