## eni's upstream model - the key to business development

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## Speaker:

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## **Claudio Descalzi**

Good afternoon ladies and gentlemen, and welcome to our presentation on eni's upstream model.

This is the first time we have hosted an event in collaboration with the Global Compact Lead initiative and UNPRI signatories.

This format gives us the opportunity to talk about an important and specific side of our approach – the eni model, and how we integrate it with the financial and industrial aspects to our activities to create new growth opportunities.

Before moving to the core topic, let me give you a brief introduction to eni.

eni is the 6th largest integrated energy company in the world by market value, operating in the sectors of oil and gas exploration & production, international gas marketing, power generation, refining and marketing, chemicals and engineering and construction.

e&p is the largest and fastest growing fastest-part of eni. We now work in more than 40 countries around the world, of which 15 have been added in the past 8 years. Africa is and will continue to be one of our core regions.

In terms of results, e&p will contribute more than 90% of eni's EBIT over the next four years.

What we will show you today is our distinctive eni model, and how it is an integral part of every stage of our business activities.

The eni model is founded upon three strong pillars:

• The first is our capability in being local. This means working side by side with our host countries and communities to reach mutually beneficial objectives. Our unique model of integration with host countries is the key to consolidating, protecting and expanding our presence there over time.

• The second is the way we maintain and develop in-house competences. These have supported exceptional performances in exploration and in reservoir management and production growth.

• And third is the way we manage and mitigate the possible risks all along our activity, starting from asset selection. It characterizes every aspect of our business, comprising the way we design, develop and run projects.

Let's look at each of these in turn...

...starting from "being local".

To be local means to fly a double flag: that of the host country, with its opportunities, challenges and development aspirations, and that of an IOC, with the managerial and technological expertise, and the standards of a major company.

We started applying this model, with great success, right from the outset in Africa. Here we are the leading IOC in terms of geographical footprint, production and reserves. And we are continuing to apply this approach worldwide, through a continuous improvement process.

In Africa, we have production operations in 7 countries, and exploration and development projects in 14.

And in terms of equity production last year we produced almost 1M barrels per day – more than any other international oil company.

Our presence in Africa for more than 60 years has given us a number of upsides, particularly from a cultural point of view, as well as synergies in terms of scale and access to low-risk/high value projects.

This strong presence will continue well beyond the next decade, thanks to our core hubs in North and Sub-Saharan Africa, and our major new discoveries in Mozambique.

Let's look at some aspects of our model of cooperation in more depth.

Being a true local company means first of all having local staff, and in Africa, 75% of our people are from the host countries. They work in all levels of the organization, both operational and managerial.

We have a strong focus on developing local staff into management positions. To do this, we invest heavily in training and in 2012 alone we delivered more than 830,000 hours of training for our international staff.

Training and support, but also compliance and quality control are the pillars of our approach to local content in procurement.

In 2012 we created opportunities through our projects for almost 7,000 local suppliers in Africa and Asia, for a total amount of nearly 10 billion euro. We selected suppliers and awarded contracts through our robust procurement processes, with strict control on compliance and full respect of international standards.

Being local, in terms of people and suppliers, is an ongoing process, and one which we wish to continue to improve day by day.

In Africa we have been the only IOC to take a unique and radical decision: to use produced gas for domestic market, and not to export it, thus providing the local population with access to electricity.

These investments, which are outside of our core business and do not share its returns, are a tangible proof of our commitment to our host countries. This demonstrates that we are investors in the long-term future of the country, and that we align our business risks with their priorities.

In Nigeria and Congo, we invested a total of more than 300 million USD (eni share) in power generation projects, building about 700 MW of capacity in Nigeria and 300 MW in Congo, and invested more than 500 million USD in networks and in distribution.

Today, our power stations in these countries account for 20% and 60% of domestic electricity production respectively, with a massive reduction of gas flaring in both countries.

We started similar initiatives in other countries where we are developing upstream projects: we have an MOU including a power generation project in Angola, and are studying local power generation in Mozambique as well.

Through our "access to energy" programme, together with a focus on LNG development and gas reinjection, we are constantly reducing the amount of gas which is flared.

In 2012 we reduced overall flared gas by 50% compared to 2007, and reached the lowest ever level of 28.5 tonnes of oil equivalent of gas flared per thousand barrels.

One of the main drivers of our progress is Nigeria. Here, we currently convert 92% of gas that would otherwise be flared into a total of 700MW of electricity. This is achieved in part through the 480 MW power plant in Okpai, the first ever combined cycle power plant fed with associated gas in Africa, and the rest is transformed in many other smaller plants.

Zero flaring in the land area is expected to be achieved by 2016, supported by projects such as the Ebocha and Ob/Ob gas compression plants completed in 2011 and IDU flaring down completed last October. There are also a number of planned projects at other treatment plants, such as the Ogbainbiri gas gathering project in 2013, and Akri and Obama in 2014-2015.

Other important flaring-down initiatives are in progress in Congo and Libya.

The investment required to complete these projects, and exploit the associated gas in upcoming projects, is more than 4 billion USD in the 2012-2015 period and our objective is to reach zero flaring by 2017.

The eni model on one side protects stakeholders and shareholders, and on the other side preserves investments and grows production.

In Africa, production growth has been around 5% a year since the turn of the century, and is expected to be around 3% over the next decade.

Our growth will come from major start start ups in our legacy countries, including Algeria, Nigeria, Congo, Ghana and Angola, – and in the medium term from our new 80tcf gas discovery in Mozambique.

And now a closer look at our second distinctive characteristic – the way we build and deploy the skills and competences of our people.

First of all, we are strongly focused on our own key technologies and on maintaining competences in house. In exploration, this means centralizing the process of technical decision making, which leads to concentrating attention on the best prospects on a worldwide basis, and increasing efficiency of the overall process.

Turning to development, oil companies recently have not been very successful at delivering new projects on time and on budget.

Such problems have many causes, but are partly rooted in the industry's past, when many of the competencies were almost lost due to an over reliance on outsourcing.

For the big challenges of the future – that is spending about euro 40 billion in development projects over the next four years, bringing on line more than 700 kboed of new production in 2016 – we are well positioned. Our projects have low execution risk, we are already covered by our solid internal base of competences and we are strengthening engineering and project management.

In terms of asset management – meaning the way we operate facilities and optimize the reservoirs for the long term – we rely on two strong central functions, Production & Maintenance and Reservoir Management, that challenge and validate the approach coming from operating units.

Our competences and skills have delivered excellent results to our stakeholders and shareholders.

Through our exploration, we have discovered over the past five years around 7.5 billion boe of new resource, more than double our cumulated production of 3.2 bn boe in the same period. The Unit Exploration Cost of 1.2 USD per boe over this period sets the foundations for industry leading growth.

Turning to Development, we are mainly on time and on budget with our major start ups and we will deliver 700 thousand barrels per day of new production by the end of the four year plan.

Lastly, in terms of operational efficiency, our results are outstanding.

Average efficiency in our operated fields was above 97% in 2012, compared to around 90% on the non operated fields in our portfolio. This is the result of a distinctive approach to maintenance and area from which we have never outsourced our competences.

Let's now turn to the third distinctive element of the way we do business: how we mitigate operational risk. This means the strategies, procedures and investments we undertake to minimize the risk of accidents to people and the environment, and mitigate the impacts of our activities.

As the Macondo accident showed operational showed, risk poses the biggest potential threat to upstream activities, in environmental, financial and reputational terms. Because of this, we are committed to maintaining our industry leading results on operational safety and, in particular, blow outs.

For us, this process starts from the assets which we select.

We have been focusing on assets which have low execution risks. As a result of this strategy, 90% of our production today comes from fields which are onshore or in conventional waters (less than 450m depth). Our exposure to deep water will grow over deep-the next four years, to around 15% of total production.

Our exposure to HP/HT wells, which have the highest operational risks, is extremely low and represents less than 3% of the total operated wells to be drilled in the next four years.

In order to have a strong grip on operations and contain risks, we are targeting an increase in operatorship, allowing us to leverage on our know-how and competences – for instance in proprietary technologies for drilling and safety standards.

By 2016 we will operate over 70% of our equity production.

Let's have a look at our strategy to prevent major drilling incidents.

It is based on strong competences to improve processes, distinctive technologies and performance based contract strategy.

On safety of well operations, we centralized control of all critical wells such as high pressure high temperature, which are monitored by the headquarters in real time.

On technologies, we developed a proprietary and distinctive portfolio which allows us to achieve higher standards of safety and well performance. The Extreme Lean Profile concept, for instance, allows for faster drilling, increased safety because of better cement jobs and lower environmental impact due to fewer cuttings.

We are also working to improve HSE performances of our suppliers, introducing a new HSE incentive scheme in contracts, promoting those contractors with outstanding HSE behaviors measured through dedicated KPIs.

As well as preventing blowouts, we are prepared for managing any accidents.

For example, we are working on two breakthrough technologies to deal with offshore spills.

The first is the Containment of Undersea Blow out Event – CUBE<sup>™</sup> device. It is designed to contain and capture spills caused by any subsea blowout when a capping system is not a viable solution.

The core technology is based on a proprietary patented separation. The CUBE validation was successfully completed, and we are now working on concept selection for installation and deployment.

We have also developed a robotic system called CLEAN SEA capable of carrying out asset integrity and environmental monitoring tasks around installations by means of an Autonomous Underwater Vehicle (AUV). The first phase of field tests was successfully completed in Norway last year.

The double flag means also protecting the environment which hosts us, in terms of biodiversity and ecosystem. To reach ecosystem, this target we use the best technologies, from concept selection to decommissioning, and we also maintain the asset with a focus on its integrity.

Let me now give you an example of what we are doing in the Barents Sea the emergency response plan for the Goliat project (Norway). Clearly, all our efforts are focused on preventing spills, but we have a strong remediation plan for the worst case events.

Goliat's environment is particularly sensitive as it is very close to the coast, in a sea which is rich in fauna and where there is limited visibility during the winter. Given this context, we worked on detection and monitoring of possible spills, with radar and infra red coverage systems on stand by vessels, sensors on subsea templates and a satellite based monitoring system.

We have also focused on effective recovery systems, with offshore and coastal barriers.

And additionally, a Beach Emergency operation group has been set up to provide a quick response. For this we recruited a large number of local fishing crews and vessels, which are trained to participate in the emergency response and all have the necessary materials available for deployment in their home ports.

To minimize environmental impact, the Goliat FPSO will be powered by electricity supplied from the shore via a subsea cable which will reduce CO2 emissions by 50% compared to a traditional offshore power generation solution.

Let me now take you through another example of how we work in very sensitive and fragile environments how we respond to the localized phenomenon of bunkering in the more than 3,000 km network of pipelines and flowlines used for oil transport in the Niger Delta.

Sabotage in the recent past, and bunkering today, are country specific problems, with no equivalent in any other part of the world.

Total losses due to sabotage and bunkering for the NAOC JVs, at 100%, accounted for more than 138 kbopd of production as an average in 2012.

Here we can see some examples of bunkering, and how it has such a disastrous environmental impact. Oil stolen from our pipelines is either sent offshore on barges, loaded onto larger ships, and exported illegally or alternatively, it is processed in small, rudimentary refineries along the creeks of the swamp area. Here, the crude is distilled and a small fraction of the lighter products that can be sold locally is skimmed off. The heavier fractions are disposed of directly in the environment, causing dramatic environmental damage, as you can see in these recent pictures.

The most radical way to stop spills is to shut in the production, as the environmental situation is no longer sustainable.

This is what we have done, shutting down production of our Swamp area. And we did this because the environment is our priority.

The temporary stoppage will be used first to check the integrity of our network, and second to try, with the help of the authorities, to eliminate bunkering points along our pipelines.

To fight this phenomenon we are not only collaborating with the authorities, but we are also working closely with the communities, who are the first victims of this disaster.

It is clear that our capacity to react to this phenomenon is limited, due to its dimensions and the fact that it is a high-risk criminal activity, which requires the action of the police and military to eradicate it.

To avoid damage to our pipelines, we are tackling this problem in a number of ways.

We are applying and testing new technologies:

• Fiber optic cables, to detect intrusions through pressure monitoring.

• Pressure monitoring based on high-frequency transient analysis, that we applied successfully last year to the Clough Creek – Tebidaba pipeline.

• Injecting plugging agents into the pipeline flow, to seal bunkering holes.

In parallel, we continue working to ensure asset integrity.

We are committed to best-in-class standards, in Nigeria and all the countries we operate in.

For example, NAOC is independently re-certified to ISO 14001 and OHSAS 18001. In Nigeria, we will spend \$200m in the next 3 years in asset integrity on top of the \$200m already spent between 2007 and 2011. Our management's variable compensation is linked to asset integrity and spill containment.

Last but not least, we focus on effective remediation and clean-up, the results of which are tested with soil samples and certified by the appropriate regulatory bodies using international standards.

And now let's look at some of the metrics on operational safety.

The first is safety of our employees and our contractors, which has been improving significantly. This is the result of training, promotion of people's awareness, and strict processes and procedures.

Coming to the most important and critical exposure of our activity, drilling, we have an industry-leading performance in preventing blowouts. We have had no blow-outs in the last nine years and over a longer period, we have recorded 0.3 blowouts per thousand wells, much better than the industry average.

And a third point: as a result of technology, asset integrity, efficient procedures and the quality of our assets, our operating costs are amongst the lowest in the industry and will remain so in the future.

Before opening the floor to Q&A, I would like to recap the essential messages relating to our approach and the impact on our results.

Our eni model is based on full integration with local stakeholders, on the continuous improvement of our competences and technologies and on the strict management of risks.

This will allow us to grow and generate positive results in the short, medium and long term.

And this means that over the next four years we will be able to:

• continue extraordinary exploration success, with 1bn boe of discoveries a year on average;

• accelerate the conversion of resources into reserves, with an average RRR of 130% and grow overall production by above 4% a year on average, at our 90 \$/b scenario;

• and increase unit cash-flows and deliver top project returns.

Thank you for your attention.

Now, we will be pleased to answer your questions. My colleagues participating in today's call are Gianni De Ghetto, head of HSE for e&p; Franco Magnani, CFO of e&p; and Massimo Mantovani, eni's legal general counsel.