ESG Presentation
Developing sustainable energy: Eni’s Integrated Model

Paris, 30 September 2016
Two main challenges for the future

**Maximising access to energy**

- 1.3 billion people without access to electricity
- 2.7 billion cooking with biomass

**Fighting climate change**

- 2°C Carbon Budget: 2,900 Gton CO₂
- Under INDCs, carbon budget will be exhausted within 2040
Eni integrated model

**STRATEGIC GOAL**

*Long term value creation for stakeholders*

- **Financial robustness**
- **Social & environmental sustainability**

**Key Pillars**

- Risk management
- Competences & Innovation
- Compliance

**Levers**

- Co-operation model
- Operating model
- Path to decarbonization
Eni governance on risks and compliance

**Enhanced Governance on Risks & Compliance**

- **Board**
  - Control and Risk Committee/Board of Auditors
  - Chairman
  - CEO
- **Risk Committee**
- **Compliance Committee**
  - Integrated Risk Management
  - Integrated Compliance

**1st line**
- "Line" managers – risk owners

**2nd line**
- Risk & Control functions

**3rd line**
- Internal Audit

**Eni Top Risks**

- Approximately 20 top risks out of around 150 risks identified
- Nearly 80 indicators for top risks quarterly monitoring

**Strategic Risks**
- Price scenario, Climate change, Stakeholder’s relationship

**External Risks**
- Country political & social instability
- Credit & Financial risk
- Regulatory evolution – HSE and gas & power

**Operational Risks**
- Blow out/accidents
- Investigations and legal proceedings
- Cyber Security and other process risks
Eni acknowledges the need to limit the temperature increase below 2°C

<table>
<thead>
<tr>
<th>carbon footprint reduction</th>
<th>low carbon portfolio</th>
<th>commitment on renewables</th>
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<tbody>
<tr>
<td><strong>Reduction of GHG emissions:</strong></td>
<td><strong>large share of natural gas reserves</strong></td>
<td><strong>Energy Solutions Department</strong></td>
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<tr>
<td>• Reduction of routine flaring</td>
<td><strong>portfolio resilience at 450 ppm scenario</strong></td>
<td><strong>Green conversion of downstream assets:</strong> green refinery and biofuels</td>
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<tr>
<td>• Minimise fugitive methane emissions</td>
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<td><strong>Research focus on energy mix diversification and green businesses</strong></td>
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<tr>
<td>• Energy efficiency</td>
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<td><strong>Carbon pricing policies</strong></td>
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<tr>
<td>• Public advocacy for carbon pricing</td>
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<tr>
<td>• Internal carbon pricing sensitivity</td>
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International engagement for joint action
Portfolio resilience is enhanced by gas and cost competitiveness

- New projects 2P res | Bep $/boe
  - Deep water: $30
  - Shallow water: $15
  - Onshore: $30
  - Avg 27 $/boe

- Oil price scenario | $/bbl
  - Brent Eni: Yellow line
  - IEA 450 scenario: Red line

- Eni oil price scenario is lower than the IEA 2°C assumptions
- Eni applies carbon pricing sensitivity $40/ton in real terms

- No risk of stranded assets
COOPERATION & DEVELOPMENT
Long-term value creation - our flagship model

CREATING A LONG TERM PARTNERSHIP
FULL PARTNERSHIP
Transfer of KNOW HOW
UNINTERRUPTED PRESENCE

BEING LOCAL
PRODUCTION FOR DOMESTIC MARKET
ACCESS TO ELECTRICITY
ENERGY MIX
ECONOMIC DIVERSIFICATION
LOCAL DEVELOPMENT
HEALTH AND EDUCATION
Providing energy to foster development

**Power generation**
- 4 gas power plants supplying:
  - 60% of power in Congo
  - 20% in Nigeria
- Off-grid power in Congo and Nigeria

**Access to energy for 18 million people**

**Gas to local markets**
- 43 bcm of production to domestic markets
- In 10 countries 100% of production sold locally

= existing gas power plan
= new power generation projects
= 100% gas production to local market/primary suppliers
= 100% future gas production to local market/primary suppliers
Development projects for local communities

- **Economic diversification**: ≈ 550,000 people involved in agricultural projects mainly in Congo, Tunisia and Nigeria
- **Health care**: ≈ 900,000 patients examined, more than 1 mln vaccinations mainly in Angola, Congo and Pakistan
- **Access to water**: ≈ 130,000 people reached mainly in Congo, Kazakhstan, Mozambique and Nigeria
- **Education**: ≈ 90,000 students reached mainly in Kazakhstan, Italy, Mozambique and Nigeria
- **Infrastructure**: ≈ 500,000 beneficiaries of transportation projects reached mainly in Kazakhstan and Nigeria

2010-2019
Investments for ≈1 Bln €*

*including off-grid projects
Empowering local workforce

66% of 2015 total procurement spent on local suppliers

In the last 5 years, local employment* increased by 21%

* Direct Managed workforce – Consolidated and Unconsolidated Subsidiaries (excluding Italy)
OPERATING MODEL
Continuous improvement on environmental impact

**Safety**
- Eni top performer since 2013
- 2015 vs 2014: -37% TRIR

**Flaring Down**
- Target: Zero routine flaring by 2025
- Volume of flared gas: -73% from 2007

**Upstream Methane Emissions**
- Target: -80% reduction by 2025
- -47% reduction from 2007

**Reinjection of Produced Water**
- Target: 64% reinjected by 2019
- 56% reinjection of produced water in 2015
Eni’s unique exploration track record and model

**Cumulative discovered resources | bln boe**

- Yearly additions
- Cumulative

<table>
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<tr>
<th>Year</th>
<th>Discoveries</th>
<th>Cumulative</th>
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<td>2008</td>
<td>1.4</td>
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<tr>
<td>2010</td>
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<td>4.1</td>
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<tr>
<td>2015</td>
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<td>5.1</td>
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**Discoveries vs production 2008-15 | bln boe**

- Discoveries 2008-15
- Discoveries / production ratio

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<th>Discoveries</th>
<th>Production</th>
<th>Ratio</th>
</tr>
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<tr>
<td>2008</td>
<td>2.4</td>
<td>1.0</td>
<td>2.4</td>
</tr>
<tr>
<td>2009</td>
<td>0.4</td>
<td>0.2</td>
<td>2.0</td>
</tr>
<tr>
<td>2010</td>
<td>0.3</td>
<td>0.4</td>
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<tr>
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<td>1.0</td>
</tr>
<tr>
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<td>0.4</td>
<td>0.5</td>
<td>0.8</td>
</tr>
<tr>
<td>2013</td>
<td>0.2</td>
<td>0.8</td>
<td>0.25</td>
</tr>
<tr>
<td>2014</td>
<td>1.0</td>
<td>1.0</td>
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Peers* average: 0.3x

*peers = BP, CVX, RDS, REP, TOT, XOM
Exploration risk evaluation

Petroleum System Modelling

- Basin Geometry
- Temperature & Pressure
- Source Rock Geochemistry
- Generation & Expulsion
- Migration & Trapping
- Exploration Risk Evaluation

HC Migration Paths

Gas filling probability map

Histogram of filling probability

Green Data Center

7,700 physical and virtual servers
4.5 Petaflop of computation capacity
Workflows: faster time-to-market from reserves to resources

- **Strong interfunctional integration** from exploration to start-up
- **Working in parallel rather than sequentially**
- **Risk reduction** through reservoir uncertainties quantification
- **3D reservoir models** developed during exploration stages
Our development model

Phaseable development

Design-to-cost approach

Strict control on execution

Integration with commissioning and operations

A simpler and manageable operating model
Marine XII and Nooros: examples of our integrated approach

**Marine XII**
- Dev/Prod areas
- Exploration area

**Equity production (kboed)**
- Nenè: 78
- Marine XII: 150

**Nooros**
- W. Abu Madi
- Nooros-1

Equity production (kboed)
- July 2015: 70 kboed
- Sept 2015: start-up
- July 2016: discovery
- Oct 2016: 130 kboed
Minimising our operational risks

Competences
- Training
- Know how
- Safety culture

Processes
- Organization model
- Best Practices & Procedure
- Rig Inspections
- MSG Operations
- Real Time Monitoring

OPERATIONAL RISKS

Technologies

Automatic Drilling
- x-ip
- e-dwdc
- e-nbd
- e-wise
- ENI Rapid Cube
- Eni Dual ROV Killing System

Processes
- Casing valve
- Downhole Isolation Packer
- New Wellhead Safety Valve

Additional Well Barriers

50 patents to enhance safety and performance
Focus: our Arctic operations

**Our policy**

- Offshore production activity limited to all-year-round ice-free conditions

**Safety for people**
- Protecting Arctic environment
- Technologies and competencies
- Oil Spill Prevention
- Working together with local communities

**Our drivers**

- **Weather base Design**: FPSO design and operation limits defined to tolerate extreme weather conditions
- **Emission reduction**: FPSO powered from shore and associated gas re-injection
- **Oil Spill Detection & Response**: Intervention capability increased by novel technology (i.e. Stand by vessel Esvagt Aurora provided with the best technologies for oil detection and spill response)

**Specific risk mitigations: Goliat**

Setting the standards for offshore Arctic production
PATH TO DECARBONISATION
The role of gas in the energy transition process

### IEA scenario

- **2015**: 50% Other, 29% O&G, 18% Coal, 4% Wind & Solar
- **2030**: 26% Other, 20% O&G, 18% Coal, 1% Wind & Solar

### Role of gas

#### Environmental impact
- **Gas**: ✓
- **Coal**: ✗ ✗
- **Oil**: ✗
- **Wind & Solar**: ✓ ✓

#### Emissions
- **Gas**: 
- **Coal**: ✗ ✗
- **Oil**: ✗
- **Wind & Solar**: ✓ ✓

#### Costs
- **Gas**: ✓ ✓ ✓ ✓
- **Coal**: ✓ ✓ ✓ ✓
- **Oil**: ✓ ✓ ✓ ✓
- **Wind & Solar**: ✓

#### Reliability
- **Gas**: ✓ ✓ ✓ ✓
- **Coal**: ✓ ✓ ✓ ✓
- **Oil**: ✓ ✓ ✓ ✓
- **Wind & Solar**: ✓

#### Security of supply
- **Gas**: ✓
- **Coal**: 
- **Oil**: 
- **Wind & Solar**: ✓ ✓ ✓ ✓
GHG reduction targets

**Flaring down**
- Main projects: Nigeria, Congo, Libya
- GHG reductions: -5 Mton CO₂

**Methane fugitives**
- Monitoring/control campaigns in 50 sites
- GHG reductions: -2 Mton CO₂

**Energy efficiency**
- Initiatives in existing sites & new plants
- GHG reductions: -2 Mton CO₂

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**GHG emissions | tCO₂ eq/toe**

- **2006**: 0.30
- **2010**: 0.25
- **2014**: 0.20
- **2025**: 0.15

-2%/y
-3.5%/y
-4%/y

**GHG intensity reduction**
2025 vs 2014: -43%
Energy Solutions business model

Competitive skills

Global presence and large portfolio of industrial assets
Know-how in managing complex and hybrid projects
Excellence in R&D
Multiple and flexible financial levers

Brownfields
asset transition

Greenfields
new cooperation model
Energy Solutions: map of activities

**Ongoing Projects**

- **220 MWp** of capacity installed in Italy by 2022
  Reclaim and convert existing industrial areas in Italy implementing large-scale renewables energy plants

- **160 MWp** of capacity installed abroad by 2018
  Integrating renewable with oil & gas assets

- **6 FIDs** planned by end 2016 for fast-track development in Egypt, Algeria and selected Italian sites, for a **total capacity** of about **150 MWp**

- On average **0.3 Mtons/y of CO₂ emissions avoided** for 20 years

**TARGET:**

maximize the use of **renewables** to meet the **energy needs of our facilities** and reduce **CO₂ emissions**
Eni’s new mission

We are an energy company

We are working to build a future where everyone can access energy efficiently and sustainably.

Our work is based on passion and innovation, on our unique strengths and skills, on the quality of our people and in recognising that diversity across all aspects of our operations and organisation is something to be cherished.

We believe in the value of long term partnerships with the countries and communities where we operate.