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The milestones of the Integral ecology for a human Economy

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What a company working in the energy sector can do?

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Summary

- We need to promote a “Human economy”, based on an integral development model, that looks at all the economic, social and environmental dimensions. In dealing with that, we have ahead crucial challenges: the increasing social and economic gaps, between and within countries, and the climate change issue.
- The energy sector can provide an active contribution to tackle these challenges, in particular energy companies; they have competences and technologies.
- In doing this, they can pursue complementary solutions:
 1. developing natural resources sustainably, enhancing existing assets through energy efficiency and CCS
 2. developing renewables
 3. following a bio and circular approach.

To keep feeding this evolution, they need to continue investing in research and innovation.

- To support a just evolution, energy companies have to consider different potentials and constraints of developed and developing countries.
- Moreover, they can expand the scope of their impact, contributing also to economic diversification and looking at fundamental needs of local people, from access to health to education and professional training.
- Eni’s business model represents an example of this integral approach, combining economic sustainability, with social and environmental one.
Leveraging the competences and technologies we are pursuing an ambitious long-term strategy, based on concrete projects (ex: bio-refineries conversion, CCS, Waste to Product technologies).
- This is how Eni can contribute to long-term value generation.
- But, we cannot move alone. We need to work as a system where all the actors must play their role: the private sector, institutions and governments and the civil society. Public-private partnerships are key to catalyze growth and sustainability.
- We must endorse this path all together, and be credible and pragmatic in our actions.

Your Eminence, Your Excellency, Professors, colleagues, Ladies and Gentlemen,

it is a great honour to be here today, to talk about **the need to promote a “human economy”**.

Human economy means an economy based on **an integral development model**, that looks at **all the relevant dimensions**: the economic, the social and the environmental one.

In dealing with that, as global society, **we have ahead huge challenges**:

1. From a social and economic point of view, **we need to face increasing gaps**, between and within Countries, in terms of **prosperity, living conditions, access to energy and infrastructures**;
2. From an environmental point of view, we need to address the more and more crucial issue of **climate change**.

1. Referring to **increasing gaps**, they are evident just **looking at population and GDP data**, that show how:

- OECD countries, that represent only **17%** of global population, contribute to **60%** of global GDP.
- While on the other side, Africa, with the **17%** of the world’s population, only account for **3%** of global GDP.

The figures related to access to energy are even more impressive.

Today we still have around **800 million people in the world without access to electricity**, mainly in sub-Saharan Africa. African per capita energy demand (*0,66 Tonnes of oil equivalent*) is indeed among the lowest in the world, almost **one tenth** of USA’s. This, despite Africa has more oil and gas reserves than the US, and a huge renewable potential.

2. Considering climate change, we have a main target to achieve, as agreed at the COP21: to keep **global temperature rise well below 2 degrees Celsius**.

In order to contain the temperature increase, the amount of global emissions we can issue into the **atmosphere is limited and should not reach 2.9 Tera tons of CO₂**, that represents our carbon budget.

Anything over this threshold will cause irreversible damage to the environment.

However, according to international agencies **we have already exhausted more than 75%** of this budget.

Notwithstanding this extreme situation, to date, the commitments made by various governments are neither consistent nor sufficient or homogeneous amongst all the Countries.

In this context, the energy sector can provide an active contribution. Indeed:

- **energy** it is **at the basis of any form of development**;
- accounting at the same time **for 33 Gton of CO₂** per year.

In particular, energy companies have **competences and technologies to:**

- contribute to provide **clean, efficient and affordable energy;**
- while **mitigating their carbon footprint;** and
- doing their part for a **long-term value creation** that looks beyond the pure energy supply.

In doing that, **there is no a single solution but complementary ones,** that can be pursued:

- First, **developing natural resources sustainably, leveraging existing assets** through:
 - **energy efficiency** and
 - **Carbon Capture and Storage systems.**
- Secondly, **developing renewable energy sources;** and
- **Third, following a bio and circular approach** to transform biomasses and organic and inorganic waste into new energy products, also extending the lifetime of existing facilities. This is the case for example of the **conversion of traditional refineries into bio-refineries.**

This integrated approach makes the transformation easier to achieve, because it **reduces the amount of capital needed** to transform the industry and it allows at the same time to **provide decarbonized products to the final customers.**

To keep feeding this evolution, energy companies need to **invest effectively in research and innovation,** with the aim of accelerating the **industrial implementation of technologies.**

Anyway, by providing their contribution to support a fair, just and shared evolution, energy companies have to consider different potentials and constraints of **two different parts of the world** that are progressing at different speeds:

- In **developed Countries** (*today accounting for around 60% of CO2 emissions, if we consider OECD+China*), they have to promote a **model** based on the deployment of zero/low carbon technologies, optimized energy consumption and circular economy;
- In **developing ones,** they have to favor the **access to affordable and reliable energy, leveraging local resources,** as gas and renewables, and investing in the construction of the relevant infrastructures.

Moreover, **energy companies can expand the scope of their impact** in the Countries where they operate, **contributing also to economic diversification** and **looking at fundamental needs of local people,** from **access to water and health services** to **education** and **professional training.**

Eni's business model represents an example of this multi-dimensional and integral approach.

Through a **strong presence along the whole value chain,** Eni wants to contribute, directly or indirectly, to achieve Sustainable Development Goals of the UN 2030 Agenda.

This implies a **business model** that **combines economic sustainability, with social and environmental one**, and moves **along 3 directives**:

1. **operational excellence**;
2. **carbon neutrality in the long term**;
3. **alliances for development**, to address the valorization of resources of producing Countries, but also to promote a wide range of community initiatives.

Leveraging the **competences and technologies** developed in the last years, we are pursuing an **ambitious long-term strategy**, based on concrete projects and solutions we have already experienced.

Just to give you some examples of **concrete projects**:

- in order to enhance sustainable mobility, we have **already converted** two of our traditional refineries into **biorefineries** based on our proprietary technology, with a total capacity of **around 1 Mton/y**;
- talking about the process of **carbon capture and storage**, we have **identified a huge storage potential** in Italy, in the **Adriatic Sea**, for about 500 million tons of CO₂, at a very low cost.
This is a major opportunity not only for Italy but also for neighbouring countries.
- furthermore, our **Waste to Product** technologies, that will enable Eni to valorise **organic and inorganic wastes**. This is the case of our **Waste to Fuel**, that we will leverage to treat in the first phase 600 kton/y of organic fraction of municipal waste, produced by 6 million people, to obtain biofuel and water suitable for industrial and agricultural utilization.

Moving in this direction, we want to be **leader in the energy transition** by providing **to our customers green, bio and blue products** - the last one capturing and storing the CO₂.

This is how Eni can contribute to **long-term value generation**.

But, to be effective in these actions, we cannot move alone.

The unprecedented challenges we are facing ask us to **work as a system** in which **all the actors must play their role, complementing each other**:

- the **private sector**, as we have seen, thanks to its skills, technologies and investments must promote a sustainable development, which balances business, environmental and socio-economic growth in the long term;
- **institutions and governments** should **implement policies** that **support investments** and properly **address its actions** to **enhance the public good**;
- the **civil society** is called to adopt an individual behavior that aims at an optimized consumption model.

Public-private partnerships with internationally recognized organizations, such as the **United Nations agencies**, are key elements to catalyze growth and sustainability.

We must endorse this path all together, and be credible and pragmatic in our actions.

This is particularly true today, with the **pandemic** that hit the world **that has forced us to face human limits and left uncovered our vulnerability.**

These circumstances made us understand even better that **we must work to support a sustainable and integral development.**

As representative of the energy sector, I feel the urgency to move in this direction.