

The future of energy – towards a sustainable development

The European House – Ambrosetti, Rome, 20 September 2016

A vertical blue graphic on the left side of the slide, featuring white line art that depicts a building's structural framework and a stylized OPEC logo at the bottom.

Opening session Setting the Context: The Future of Energy

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Some shared history of OPEC and ENI



- ENI was the vision of Enrico Mattei (in the 1950s)
 - Negotiated important oil concessions in the Middle East
 - Trade agreement with the then Soviet Union
 - Tried to break the then oil market dominance of the ‘Seven Sisters’
- OPEC was formed in Baghdad (1960) by five oil producing countries
 - Commitment to safeguard their national interests
 - Ensure order and stability in the international oil market
 - The main catalyst for its birth was when the ‘Seven Sisters’, unilaterally reduced the posted prices of the crude they supplied

The future of energy



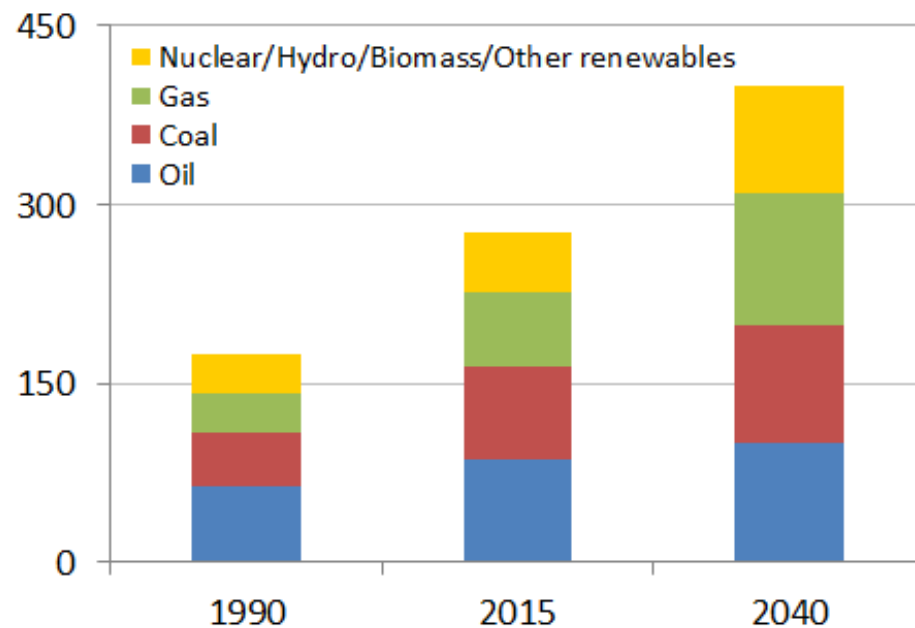
- The global economy is estimated to more than double by 2040
- World population is projected to reach around nine billion by 2040
- Billions of people still have no access to modern energy services
- Global energy demand set to increase by almost 50% by 2040
- Last year's COP 21 agreement

- **The basis challenge is twofold:**
 - How can we ensure there is enough supply to meet demand?
 - How can this growth be achieved in a sustainable way, balancing the needs of people in relation to their social welfare, the economy and the environment?

The expected global energy mix



World primary energy demand (1990–2040, mboe/d)



- All forms of energy will be needed
- Renewables will continue to expand significantly
- Non-fossil fuel energy is expected to make up around 22% of the global energy mix by 2040
- Oil and gas will still supply around 53% of the world's energy needs by 2040



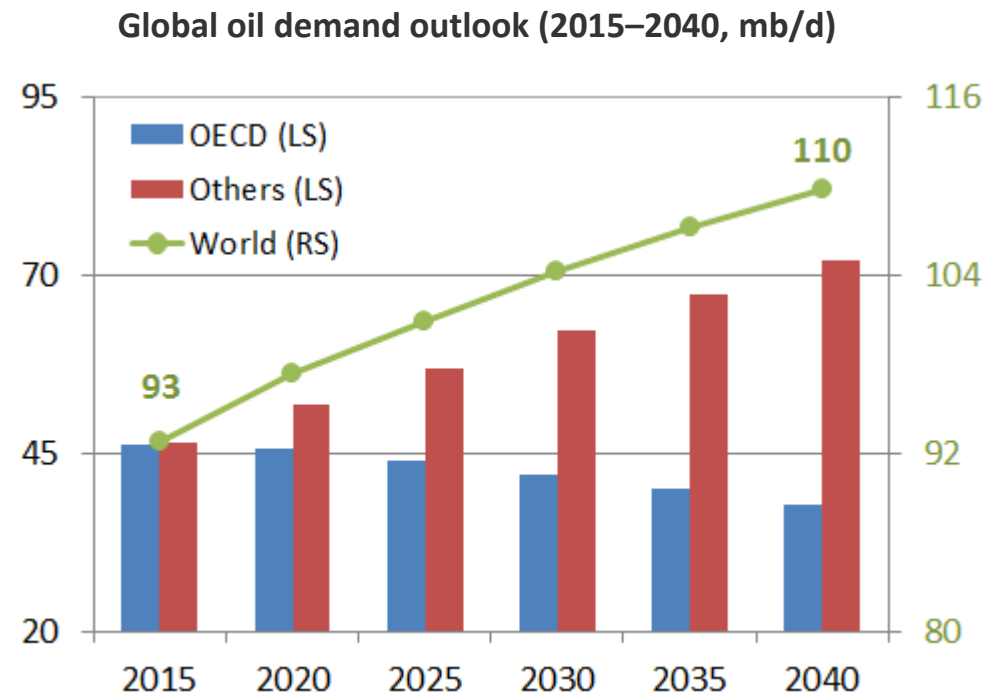
Petroleum: past, present and future

- Oil and gas have been an essential part of our past:
 - They have positively impacted the lives of billions providing heat, light, mobility
 - Created and sustained economic growth and prosperity
- Oil and gas will be vital to many more billions of people in the years ahead
- There are environmental issues regarding the emissions
 - It is a challenge that can be overcome
 - Solutions can be found in technologies that reduce, ultimately eliminate emissions
- At OPEC, we recognize the importance of continually looking to advance the environmental credentials of oil, both in production and use
 - Carbon capture and storage (with EOR)
 - Coordinated action with the industry (R&D platforms)

Oil will remain a fuel of choice



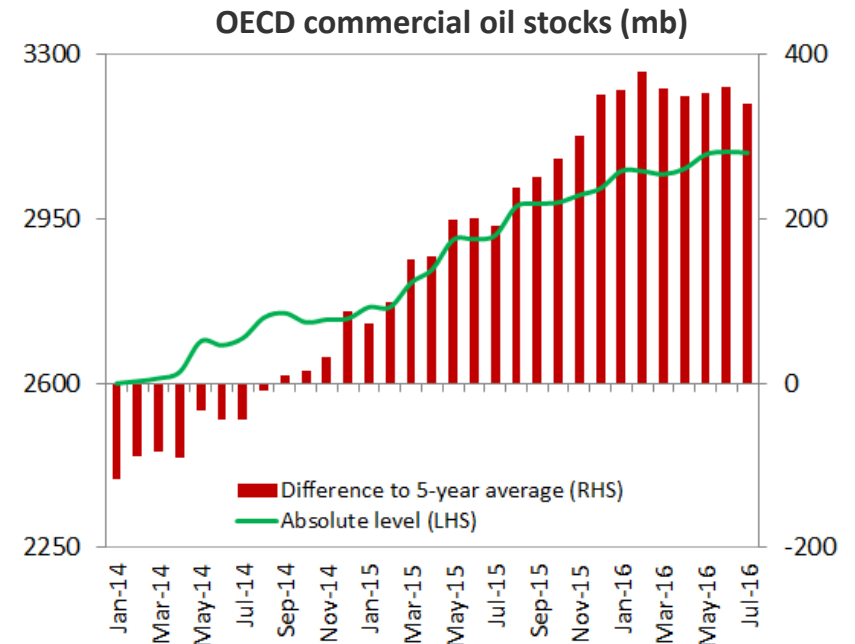
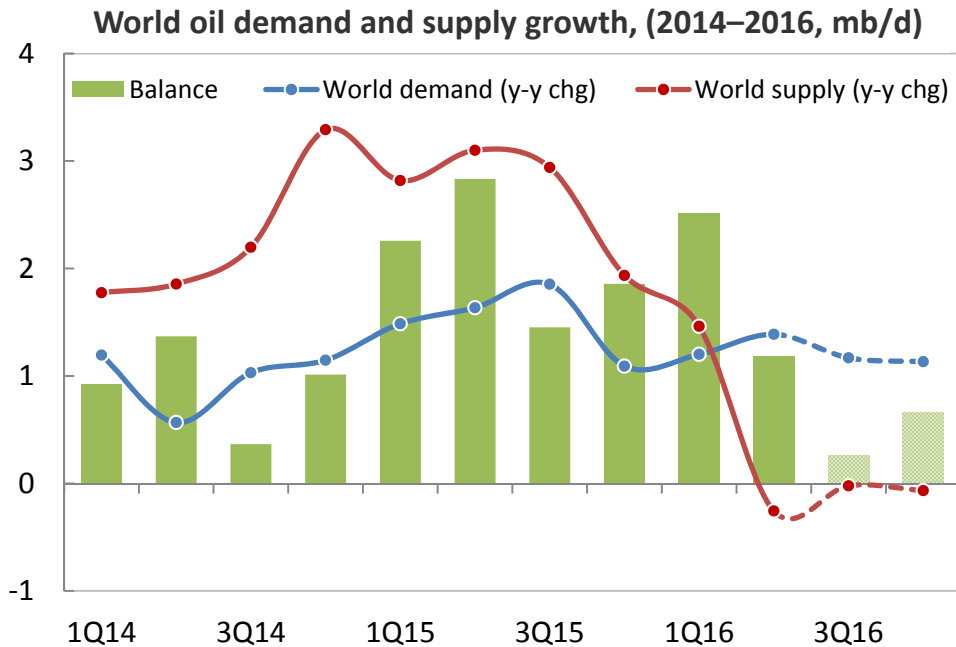
- Oil demand increases by around 17 mb/d between now and 2040
- Oil-related investment requirements are estimated to be around \$10 trillion over the period to 2040
- Today, we are witnessing significant investment cuts and fewer oil discoveries – major concerns
- To reverse the declines, oil prices have to go up from the recent low levels



Realigning global oil demand and supply



- Oil market gradually rebalancing, as supply and demand realign
- But there remains a large OECD stock overhang of around 340 mb at end-July 2016





Cooperation and dialogue are vital

- Dialogue and cooperation should not only take place in times of instability, but also when the market is stable and balanced
- It is important for all stakeholders to find common ground, and look for shared solutions, where and when appropriate
- Over the years OPEC has pushed many forms of energy cooperation, including:
 - Dialogues with the EU, Russia, China, and India
 - Symposia and workshops with the IEF and the IEA
 - Various initiatives with the G20
 - Meetings with other industry stakeholders

Delivering a sustainable energy future for all



- Need for clarity and predictability given the long-term nature of the industry
- The key is stability to allow for:
 - Investments and output expansion to flourish
 - Economies around the world to grow
 - Access to modern energy services for those currently without
 - Fair return for producers from the exploitation of their exhaustible natural resources
- Stability is the key to a sustainable global energy future for us all

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Thank you



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