



The Future of climate change negotiations, Challenges and Opportunities for OPEC

Presented by:

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Outline of Presentation

- Background: Climate Change Negotiations

- OPEC's Context in CCN

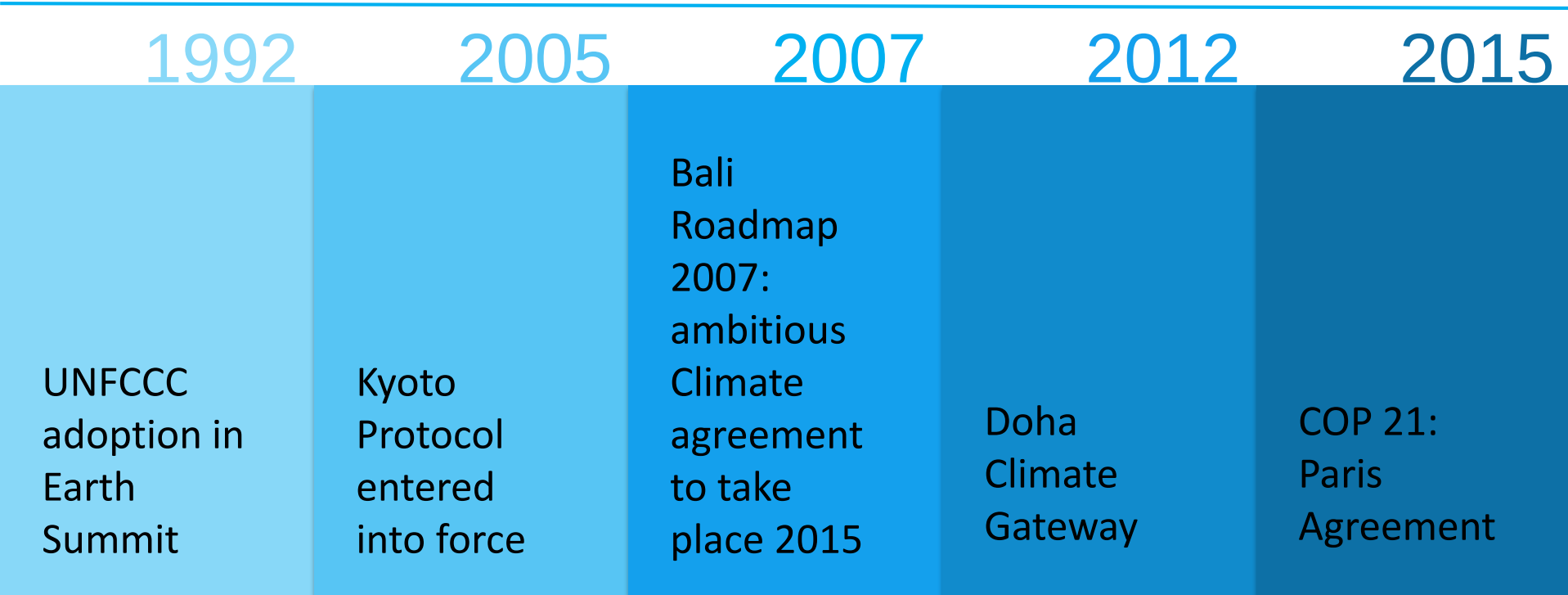
- Analysis :

 - Challenges for OPEC in CCN

 - Opportunities for OPEC in CCN

- Conclusions

Climate Change Negotiations



Climate Change Negotiations

- Where is OPEC situated now in the Climate Change Negotiations?
 - Signatories, all members : UNFCCC
 - Signatories and Ratification by (some) members : Paris Agreement
 - Paris Agreement is legally binding

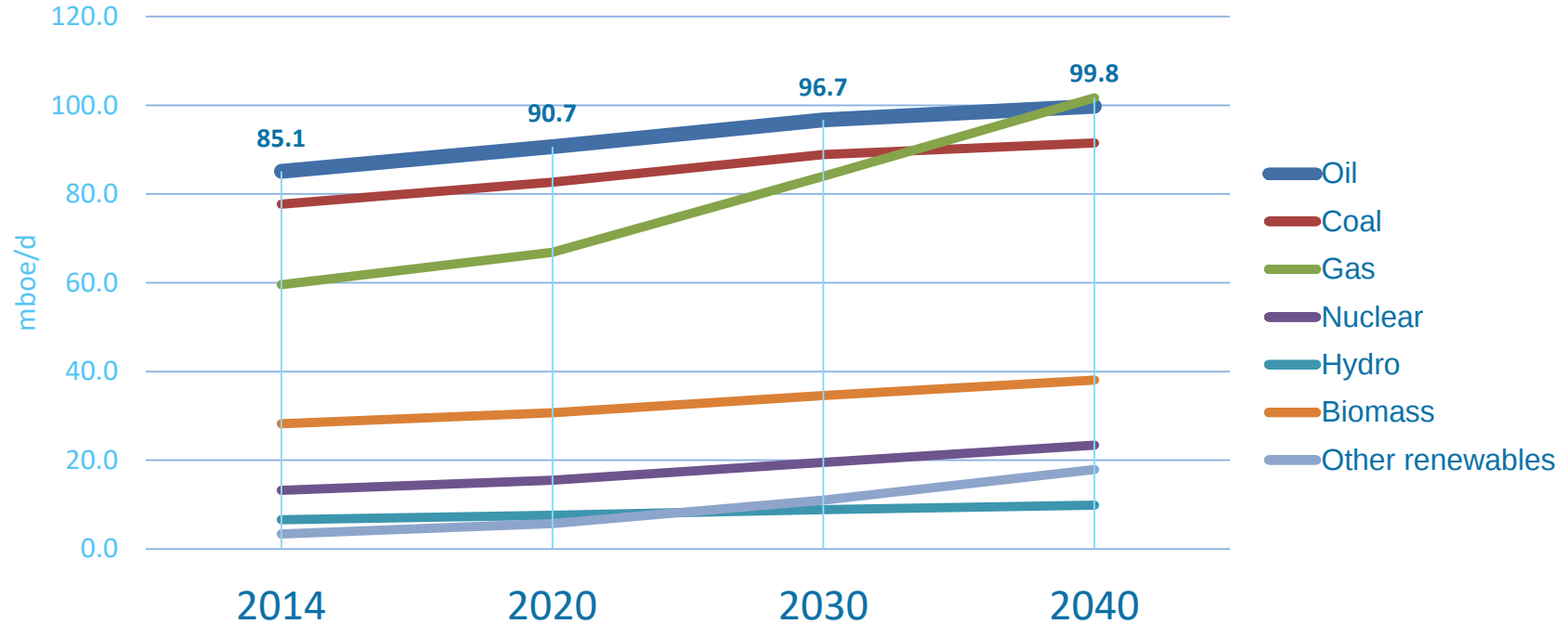
How do these efforts impact OPEC in the future?

We shall analyze this with the Challenges and Opportunities for OPEC in Climate Change Negotiations.

OPEC's Context in CCN

1. OPEC's MCs are developing countries, whose developing agendas are the foremost important priority;
2. OPEC's MCs are gifted by abundant oil reserves, and most of OPEC's MCs are dependent upon oil production and export;
3. World's energy demand for fossil fuels is still strong for the next two decades (WOO, 2016)

World primary energy demand by fuel type



OPEC's Context in CCN

4. OPEC needs to balance the need for environmental protection advocated in CCN and interests of OPEC's MCs.



Challenges for OPEC:

1. Paris Agreement's Purpose (ART 2 para 1(a)):

Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;

- There is an estimate that the Middle East will lose about 35 percent of its oil export revenue by 2050 if the atmospheric concentration of CO₂ is to be stabilized at 450 ppm, (van Vuuren et al. (2003)).
- Does OPEC need to reduce oil production?

Challenges for OPEC:

2. A long-term emissions goal

- The Agreement may be most remembered for its long-term goal to phase out greenhouse gas emissions, which suggests a turning point in the use of fossil fuels.
- OPEC needs to diversify its production to unconventional energy sources, if the organization were to survive this long-term emissions goal.

3. Raising ambition in the short term

- Almost all countries (189 to date, out of 195 countries in all) have pledged to take climate action after 2020, either in 2025 or 2030.
- OPEC can still be benefiting from this climate regime in a short term, but in a longer term, OPEC needs to bring more options to its member countries.



Challenges for OPEC:

4. Energy and Environmental Policies

- Most countries are striving towards fuel efficiency improvement, and alternative fuel vehicles
- Sustainable Development Goals which introduce energy efficiency and increased use of renewable resources by 2030 as global target improvement.
- Evolving efforts in Oil production and standards:
 - Upstream: exploitation of unconventional sources of oil and gas (tight oil, shale gas, and deep-water drilling) which increased production, but also environmental risks;
 - Downstream: stricter fuel standards (sulphur content, octane/cetane, sustainable criteria on biofuels, etc)
- At the international level, UNFCCC and UNGA encourage other international bodies, such as IMF and WTO to strengthen their environmental policies.



Challenges for OPEC:

5. NDCs:

- will likely lead to reduced energy demand and a further shift in the energy mix towards renewable energy,
- Achievement of these targets will effect the future energy mix, demand for fossil fuel will decrease, alternative fuel will increase
- However, if the substitution by alternative energy is mostly dedicated to electricity generation, most of the reduction will be on gas and coal, rather than oil.

Challenges for OPEC:

6. CBDR RC

- The Paris Agreement has swifited the differentiation between the rich and the poor, from a rigid one in Kyoto Protocol, into a more flexible sharing of responsibilities (Article 2.2). The Agreement gives responsibilities to Parties to ambitiously reaching the goals of the Agreement (Art.2: Purpose, and Art 3: 'All Parties are to undertake and communicate ambitious efforts').
- Members of OPEC are in diverse stages of development, and they need this flexibility to be clearer in terms of carbon emission quotas. Mostly OPEC MCs are low/middle income developing countries, but there are MCs are higher income developing countries: UEA, Kuwait, Qatar, and Saudi Arabia.
- Those MCs have already reached 'a later stage' of developing countries, those of whom has to abide to the 'RC' criteria.



Challenges for OPEC:

7. Uncertainties

- on the price for oil and energy
 - Creating economic hardship and uncertainty for OPEC members
 - And hampering economic growth for developing countries
- on protecting MCs interests in climate change negotiation
 - MCs have to secure their position in climate change negotiation individually and as a group
 - OPEC can provide assistance for MC in terms of data, plans, and strategy needed.
- Donald Trump??



Opportunities for OPEC

1. Comparative advantages of Oil

- **Conventional oil is still superior in terms of liquid fuel production**, at least for the next decade or two, because the fact that the extraction of conventional oil is still cheaper than other other alternative liquid substitutes (Johansson, Azar, Lindgren and Persson, 2013)
- The cheapest liquid substitutes for conventional oil products are fuels derived from extra heavy oils, tar sand, coal, natural gas, oil shale, sugar cane and ligno-cellulosic biomass. **All these fuels, except biomass-based fuels and natural gas, have higher net carbon energy ratio in their primary form conventional oil**, and in general, producing liquid fuels from them is energy intensive (Brandt & Farrell, 2007).



Opportunities for OPEC

2. Carbon Trading

- The Paris Agreement indicated that countries can choose to “cooperate” in meeting their national emissions targets (NDCs), by trading emissions rights (Articles 6.2 and 6.3).
- If a polluter (country) produce lower than its emissions cap, it might generate a carbon credit, which it can then sell to another polluter country struggling to meet its cap. **This approach may encourages countries and regions to link existing national and regional carbon markets.** Accounting of trade in carbon credits between capped schemes should be relatively straightforward.
- There are also other effort such as REDD+.
- OPEC may have a role in assisting its member countries in these approaches.

Opportunities for OPEC

3. CBDR RC

- CBDR RC acknowledges the different capabilities and differing responsibilities of individual countries in addressing climate change.
- CBDR-RC remains a sticking point, as does the role of equity (historic versus current responsibility for climate change), the role of Annexes, and the role each country should play in in UNFCCC climate negotiations.
- All OPEC members can benefit from CBDR RC, even the more ‘advanced developing member countries’, as a group in OPEC.



Opportunities for OPEC

4. Mitigation effort: Carbon Capture Storage (CCS)

- One step toward reducing CO₂ emissions is to capture the CO₂ generated during combustion and store it in a suitable place.
- This process of carbon capture and storage (CCS) has the potential to reduce future world emissions from energy by 20%
- CCS is already operating in trials, with 3 megatons of CO₂ (Mt CO₂) per year from power plants or natural gas cleanup being captured and stored.
- A discourse on CCS, but if this method works as good as it is advertized, and it can change black fuel into green energy, the acceleration and scale-up of CCS is required,

Conclusion: Future of OPEC in CCN

- With the many challenges of CCN on OPEC, there is a need to better define the roles of OPEC in the CCN, OPEC can not stand on the sidelines anymore in CCN.
- Once OPEC is clear in its roles in CCN, OPEC then has to define strategies to 'deliver' MC's aspiration and interest in CCN
- OPEC has to find a balance between SD in CCN, with the need to develop economic growth in its MCs.
- Opportunities for OPEC, especially in conventional oil, are short termed, so timing is an essential factor that has to be accounted for when forming OPEC's CCN Strategy.
- OPEC has to be able to become the 'hub' between MCs and respective international organizations, not only UNFCCC and the UN, but also WTO, WB, and IMF.



Thank You.