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**Economic and Social Commission for Western Asia (ESCWA)**

## **Report**

### **1st MENA Energy Economics Conference at the American University of Beirut: “Oil price dynamics and energy transitions in the Middle East and North Africa: Economic implications and structural reforms” Beirut, Lebanon, 6-7 December 2018**

#### **Summary**

There is widespread consensus that the low oil price environment has had negative effects on the economies of MENA countries, especially the oil exporters. Even net oil importers have been adversely affected via spillovers from neighboring oil-exporting countries. Given that many MENA countries hold massive hydrocarbon reserves and are highly reliant on oil revenues, oil prices are of utmost relevance to the region. As the world transitions to cleaner, more sustainable energy systems, the MENA countries are also experiencing major changes in their own energy markets--triggered by the need to diversify the energy mix and in some cases to augment the share of exported oil--that will impact their development, industrialization strategies, and energy policies.

The conference highlighted the energy transition that the world is facing and the integral role the Arab region plays as one of the largest exporters of oil. The oil price dynamics threaten the global demand for oil and its price on the international market. The Arab region is highly dependent on fossil fuels, whether for economic, financial or end-use purposes. The drop-in prices of oil on the international market and the fear of not seeing a peak-oil demand sets threat on the social and economic welfare of the region. This opens an opportunity for the region to adopt a more sustainable energy structure and policy reform to increase the share of renewables in the energy mix, increase energy access, and energy efficiency.

The conference demonstrates possible modes of action for policy changes in the power sector and the oil market whether for oil exporting or importing countries in the region. Whether through financing small and medium-sized enterprises in the power sector, or carefully removing subsidies on energy prices, the presented reforms are in ordered to ensure the region a more sustainable and economic growth. The conference also presents and assesses new technology that has been and can be adopted that are proved to be guiding the path for more sustainable development in the foreseeable future.

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## INTRODUCTION

The United Nations Economic and Social Commission for Western Asia (ESCWA) co-organized the *1<sup>st</sup> MENA Energy Economics Conference* in partnership with The Institute of Financial Economics at the American University of Beirut and the Oxford Institute for Energy Studies to discuss the effects, challenges and opportunities arising from oil price fluctuations, the changing energy structure on the economies, financial markets, energy and environmental policies and the energy transition in MENA countries. The Conference was held on 6 - 7 December 2018 at the American University of Beirut, Lebanon.

The conference aimed to bring together academics, policymakers, and practitioners to discuss the opportunities and challenges of the oil price fluctuations and the changing energy structure in MENA countries to come up with key policy recommendations that can help mitigate negative impacts and ensure a smooth energy transition.

The theme of the conference is “Oil price dynamics and energy transitions in the Middle East and North Africa: Economic implications and structural reforms” and will focus on:

- a- Oil prices and the macroeconomy: GDP growth, financial markets, trade
- b- Energy and environmental policies: subsidies, taxes, renewable energy, climate change mitigation and adaptation
- c- Energy transition: energy mix, new oil discoveries, nuclear energy, new technologies, national strategies

Outcomes emanating from the *1st MENA Energy Economics Conference* will support the fulfilment of recommendation (e) from the 11<sup>th</sup> Session of the Committee on Energy calling on ESCWA to prepare reports on development in global and regional energy markets.

## II. MAIN TOPICS OF DISCUSSIONS

Presentations and discussions are summarized in the following sections and are organized in accordance with the meeting agenda.

### A. PANEL 1: OIL PRICE DYNAMICS AND THE TRANSITION OF THE ENERGY SYSTEMS: IMPLICATIONS FOR THE ARAB COUNTRIES

1. The first session introduced the global transition away from fossil fuels and the forecasted drop in international oil prices, as this challenges the oil exporting Arab countries in their ability to monetize their large oil reserve base.
2. With the ongoing increase in energy demand in the region’s developing countries, the discussions highlighted the importance of diversifying the energy mix, by increasing the use of renewable energy (RE) and enhancing technology and energy efficiency (EE), which are the key pillars towards sustainable energy and sustainable development and present opportunities for policy reform throughout this transition.
3. A key element still missing in the Arab region is collaboration and cooperation towards research and development to optimize oil and gas extraction and technologies such as carbon capture storage and utilisation (CCUS). The importance of being proactive in introducing carbon capture technology and being a leader in this policy change is that middle eastern oil is the least expensive to extract, so this cost will affect the Arab region the least in the world. This will extend peak demand for oil, preserve

high oil prices and ensure a clean carbon economy while keeping oil and gas a primary clean energy resource.

4. Advice has been given to OPEC to create a Policy that is based on balancing the market in terms of supply and demand and maintaining spare oil capacity to stabilize the prices while also investing in low-cost oil and technology.
5. The panel also highlighted the importance of rationalization of oil prices as an energy commodity to be affordable, reliable, and sustainable when it comes to energy access, as well as policy reforms that motivate governments in the region to invest the profit generated from oil exports in emerging technologies, rather than in recurrent government expenditures. Governments should reconsider the subsidized prices of energy as the price of primary energy is lower than the cost of production in some places. Governments can introduce income taxes that are feasible and politically acceptable with proper communication. The panel also stated the importance of investing in downstream industries such as the petrochemical industry which will help countries adopt an industrial policy that adds socioeconomic value, as it creates jobs, revenues, and investments in R&D.

#### B. PANEL 2: PATHWAYS TO ACHIEVE SUSTAINABLE ENERGY SYSTEMS: CHALLENGES AND OPPORTUNITY FOR THE ARAB COUNTRIES

6. In this session, the pathways to achieve sustainable energy in the Arab region were highlighted, as well as the present challenges facing the Arab countries.
7. Financing the energy sector is a major challenge facing all of the Arab countries as they battle fiscal pressures crucial during this transition period. One of the key recommendations is creating an investment enabling environment that gives access to soft loans that can create small and medium-sized enterprises in the energy sector.
8. The diversification of the energy mix with renewable sources and the adoption of energy efficiency policies are also threatened due to the lack of financial motivation. Without reforms, inefficiencies and inequitable consumption will keep affecting industries and the lack of investment in RE and EE will persist.
9. When it comes to energy efficiency at the level of the consumer, the main challenge is the behavioral measure that is to be taken, as the challenge is cultural. The solution to that is effective communication, continuous awareness raising and public discourse in the region towards sustainability.
10. When it comes to RE, improved grid stability is essential to reaching set targets of diversifying the energy mix. Stabilizing the electrification grid requires upgrading infrastructure for better power generation and transmission. However, another proposed solution was to create a regional interconnection between neighboring countries that have a shift in the peak demand such as Jordan, Lebanon, and Egypt. This will stabilize the transmission and will evidently make room for a larger share of REs in the energy mix. Since renewable energy is setting lower prices even with the incentives for fossil fuels, the traditional way of competition needs a change and thinking of the complementarity of the sources is vital in this transition period.
11. The highly subsidized fossil fuel prices in the region are creating a threat for a more sustainable power sector in the future. The electricity sector is vulnerable by the weak stream of revenues which is mainly due to low tariffs and in some cases below the cost of production. Recommendations to reform policy by the removal of energy subsidies are believed to have a positive effect on the economy.

12. The participation of the private sector and the creation of private-public partnerships (PPP) to back up projects in the energy sector is very important in this transition. However, some persistent obstacles hinder to the international financial institutions (IFIs)'s participation. Nevertheless, trust can be created through transparency, governance, regulation of energy supply industries, ensuring lower tariff increases while improving access and quality. A good example is to make clear and bankable power purchase agreement contracts (PPA) and the creation of RE independent power producers (IPP) in the form of PPP.

### C. RESEARCH PAPER SESSIONS

13. Economic diversification has been a key developmental goal that is essential for economic security and sustainability in the Arab world. Challenges that oil-dependent economies face include the volatile price fluctuations and the capital-intensive nature of the industry that does not create enough jobs. Oil markets will become increasingly competitive with profit margins declining.  
The diversification process requires policy structural reformation, optimization of energy resources, and taking part in the renewable revolution. One of the research papers showed that good institutional governance has a positive influence on resource management, sustainable economic growth, and diversifying economic activity, while poor institutional quality is associated with the tendency for resource dependence, corruption, and dampened economic growth.
14. Another research paper highlighted the EIA's (Energy Information Administration) expectation that by the year 2040, fossil fuels will remain the dominant energy resource and that the renewable energy is forecasted to increase by 2.8% annually while world energy consumption is expected to increase about 28% mostly in non-OECD countries.
15. Higher oil prices affect the Middle East and North Africa's region in different ways depending on whether the country is an oil exporter or importer. A drop-in oil price would open the opportunity for oil exporting countries to undertake energy policy reforms and increase the share of renewables in their energy mix, institutional reform, and potential for private investment.
16. One of the research papers presented a study of the assessment of a PV-Diesel system that was conducted to measure social, economic, and environmental costs in Lebanon, Iraq, and Palestine. The life-cycle assessment, financial appraisal, and economic cost-benefit assessment deemed the technology to be sustainable. In addition, policy recommendations by the World Bank for the removal of electricity subsidies have shown no negative economic costs and revealed an overall increase in real GDP of 1.6 percent.
17. Another study showed that a change in gasoline prices naturally affects the automobile sector and drives consumers towards more fuel-efficient vehicles in automobile producing countries. However, a study on Lebanon (a non-producer of automobiles), concluded that a change in gasoline prices showed insignificant changes in consumer preference.

18. A study presented concluded that electric vehicles do not create a genuine threat to oil demand as the additional energy needed for electric vehicles will delay the phasing out of oil from the power sector, but electric vehicle production is restrained by oil prices.

## **ORGANIZATION OF WORK**

### **A. VENUE AND DATE**

The 1st MENA Energy Economics Conference at the American University of Beirut: “Oil price dynamics and energy transitions in the Middle East and North Africa: Economic implications and structural reforms” was held at the American University of Beirut, in Beirut, Lebanon, on the 6–7 December 2018

### **B. OPENING**

The meeting was formally opened by Dr. Leila Dagher, Associate Professor of Economics and Director of Institute of Financial Economics at the American University of Beirut.

### **C. PARTICIPANTS**

The conference was attended by 68 participants and academics from American, European and Arab based universities, policymakers, practitioners, government representatives, financial institutions, research and technology institutions, international organizations, university students and professors/lecturers, young researchers and NGOs.

### **D. AGENDA**

19. Presentations and discussions were made over two panels and four research paper sessions. The agenda of the meeting are summarized below:

Opening Session and Introduction

Oil Price Dynamics and the Transition of the Energy Systems: Implications for the Arab Countries

Pathways to Achieve Sustainable Energy Systems: Challenges and Opportunity for the Arab Countries

Research Paper Session I: Energy and the Macroeconomy

Research Paper Session II: Energy, the Macroeconomy and Financial Markets

Research Paper Session III: Diversification and Transition

Research Paper Session IV: Alternative Sources of Energy

Closing Session

### **E. EVALUATION**

An evaluation questionnaire was distributed to participants to assess the relevance, effectiveness, and impact of the meeting. The feedback received from 46 participants was positive with most of them agreed or strongly agreed that this meeting met their expectations (81% - 36/46) and achieved its purpose (90% - 40/46). Almost 80% of the participants agreed that the two panel discussions and research paper sessions were relevant, useful for their work and provided a forum for information exchange while only 4 disagreed. Almost 90% agreed that the event was well organized.

Some of the attendees suggested that it would be more efficient to distribute the evaluation papers on each day since some people do not attend all of the sessions and the highest turnout is on the first day. Others proposed to have a conference on governance and institutional framework for energy transition in the region and have separate panels for the energy exporters vs. importers. Another suggestion was to have similar professional events in a periodical manner.

## ANNEX

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