# MINISTRY OF ENERGY AND WATER GENERAL DIRECTORATE OF OIL



GENERAL DIRECTOR ENG. AURORE FEGHALY, representing The Ministry of Energy and Water at the Regional Workshop of ESCWA for the session 11 of Energy Committee.

Dear Participants ...

# **Topics of the Presentation:**



- 1- Plans put forth by the National Committee.
- 2- Electricity situation in Lebanon
- 3-Energy Bill
- 4- The green initiative
- 5-The United Nations and Arab World Agreements on Climate Change.
- 6- Implementing of Renewable Energy by the General Directorate of Oil
- 7-Support from International Aid Organizations for Renewable Energy Sources
- 8-Laws of soft loans for renewable energy
- 9- Conclusion

# 1- Plans put forth by the National Committee:

- The National Committee provided two plans:
- ✓ National Energy Efficiency Plan(NEE):2011-2015 & 2016-2020
  - 14 executive initiatives to develop renewable energy efficiency topics.
- ✓ National Renewable Energy Plan(NRE): :2016-2020.
- The General Directorate of Oil:
- ✓ Is an effective partner with the National Committee in the placement of the NEE & NRE plans.
- ✓ Has formulated some basic themes regarding the two plans.

# 2- Electricity situation in Lebanon

- The electricity grid in Lebanon covers 99% of the territory including the most remote rural areas unlike other developing countries where there is a reliance on renewable energy as sole means of electricity production.
- The lack of sufficient Electricity Generation in Lebanon has forced the entry of the private sector (Generators) to meet the needs of the country.
- An adequate solution to provide electricity to rural areas would be a combination of electricity distributed on the grid alongside electricity generated by renewable energy technology such as solar, wind, hydro....



# 3-Energy Bill:

#### The General Directorate of Oil:

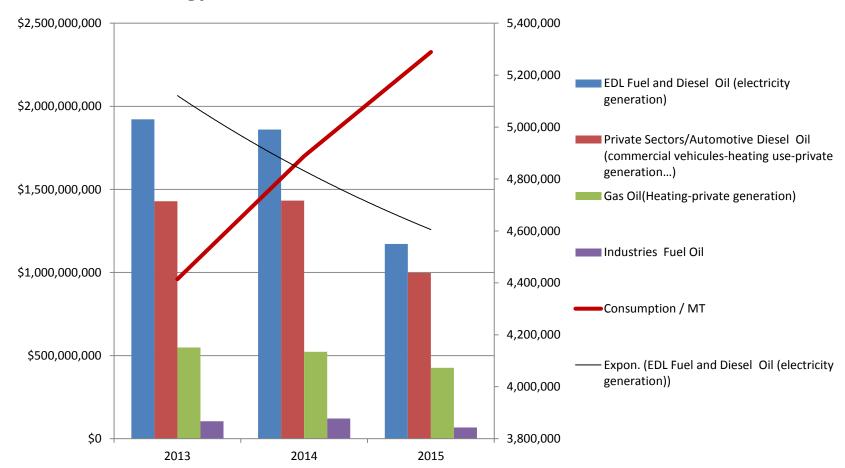
- Insures the supply of Hydrocarbon to the local market
- Manage the supply of Gas Oil and Fuel Oil to EDL
- Regulates the downstream sector in the public and private institutions
- Participated along with LCEC to generate the NEE & NRE plans



### 3-Energy Bill Chart:

 Excluding gasoline cost and LPG cost which are not used for Electricity Generation.

## **Energy Bill Chart 2013-2015**





#### 4- The green initiative :

#### The General Directorate of Oil:

 Has enhanced the specifications of Petroleum Products as per international standards requirements by decreasing the sulfur content from 350ppm to 10ppm for Diesel Oil and sulfur content of gasoline from 500ppm to 10 ppm.



# 5-The United Nations and Arab World Agreements on Climate Change:

#### UN Track:

The Paris and Marrakech Agreements, both signed in 2016 within the framework of the United Nations Convention on Climate Change consist of:

- ✓ dealing with greenhouse gases emissions mitigation.
- ✓ Adoption and financing to come in the year 2020,in order to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future.
- ✓ Reiterating that the world path is to adopt renewable energy.
- Arab Track:
- ✓ The Arab Countries support the same path.
- ✓ Additionally they support the Strategy of the Renewable Energy that consists of allocating a higher % of energy requirements for renewable energy.
- <u>Lebanon</u> has committed to having 12% of its energy renewable by2020, to be increased over time.
- <u>Lebanon</u> is moving forward to develop this sector.

# 6- Implementing of Renewable Energy by the General Directorate of Oil:

- The Ministry of Energy and Water has launched and undertaken several projects to respond to Governmental decrees alongside with other entities such as LCEC.
- Financial resources have been diverted from subsidizing gas oil to supporting the initiative included in Council of Ministers Decree No.30/2012, which was directly tasked to the General Directorate of Oil to oversee financially:

Three axes were adopted:

ITEM	Support/\$	Quantity to be installed	Remarks	Status
Axe1:household lighting for saving energy	7 M	3 M lamps	Completed	<ul> <li>more than 76 million \$ saved yearly.</li> <li>the power demand decreased to 163MW</li> <li>Increase of the demand of saving lamps</li> </ul>
Axe2:Public lighting on the roads		1500 lamps	Completed	<ul> <li>292 Municipalities profited</li> <li>Annual decreasing in electricity bill</li> </ul>
Axe 3:Solar Heaters	1.5M	13000 devices	In progress	Ministry donation/200/\$ on each loan

# 7-Support from International Aid Organizations for Renewable Energy Sources



- In this regard, the General Directorate of Oil and with the collaboration of ESCWA as a Consultant is preparing a "Techno-Economic Feasibility Study for:
- 1- Studying the possibility of using Photo-Voltaic Systems in powering gas stations with Renewable Energy in Lebanon .
- 2- Raising awareness to the public that Gas Stations are adopting the Solar Energy System .
- 3- Seeking donors to secure funding for soft loans and grants in order to assist owners of gas stations in implementing renewable energy specific technology.

## 8-Laws of soft loans for renewable energy:



- A law was passed by the Government of Lebanon under No.32 dated 24/11/2015 regarding soft loans for an amount of 50M Euro provided by the "European Bank of Investment" to financially support the transition from conventional electricity generation to renewable energy.
- Moreover a draft law was prepared along with "L'Agence
  Française de Développement (AFD) " on soft loans for an amount
  of /30/M Euro ,awaiting approval at the first session of Parliament .

#### **8- Conclusion:**



- Lebanon requires further cooperation from the UNFCCC and other supports agencies.
- Adapting to the adverse impacts of climate change is a priority for Lebanon.
- The climate change challenge cannot be faced by any country alone no matter what resources it may possess.
- Lebanon, currently suffering from enormous underfunding, needs international donors to enhance the scientific learning, technology advancement, and further research and development at a national level.



# THANK YOU