

**KEYNOTE SPEECH AT THE AMERICAN  
UNIVERSITY OF BEIRUT, April 27th - 2012**

**THE PETROLEUM CHALLENGE IN A  
WIDE ENERGY PERSPECTIVE**

**By  
Farouk Al-Kasim**

Petroteam a.s

1

**LIST OF CONTENTS**

*MY PRESENTATION IS IN THREE PARTS:*

- 1. GLOBAL ENERGY CHALLENGES*
- 2. CHALLENGES TO PETROLEUM  
PRODUCING COUNTRIES*
- 3. CHALLENGES TO LEBANON*

Petroteam a.s

2

# PART - ONE

## GLOBAL ENERGY CHALLENGES

Petroteam a.s

3

## HUMAN PROGRESS AND ENERGY

*The spectacular progress made by mankind in the last two and a half centuries has been largely fuelled by:*

***CHEAP AND EASILY ACCESSIBLE ENERGY.***

Petroteam a.s

4

## THE ECONOMIC GROWTH CHALLENGE

- ❑ *From the middle of the 18th Century it was **COAL** that fuelled the **Industrial revolution**.*
- ❑ *From the middle of the 19th Century **OIL** took over and fuelled the **Technological Revolution***
- ❑ *During the seventies in the last century, **GAS** was expected to gradually replace oil. So far it has not quite done that, but shale-gas may help achieve this transfer.*
- ❑ *The burning question is what will fuel human progress in the second half of this century and beyond???*
- ❑ *We don't know the answer. In the meantime, let us have a look at some of the more important challenges on energy.*

## THE ECONOMIC GROWTH CHALLENGE

- ❑ *All countries desire growth. India and China have already shown the way. Many developing countries will surely try to follow suit.*
- ❑ *But growth cannot be achieved without energy.*
- ❑ *We also know that slowing down growth on a global scale is not a very easy or wise solution.*
- ❑ *We fear that stagnation in the world economy can easily destabilise world peace.*
- ❑ *The demand for energy will therefore accelerate.*

## THE RESOURCE SUPPLY CHALLENGE

- ❑ *In the next few decades, oil will continue to play an important role in the energy supply.*
- ❑ *Growth in conventional oil reserves has already fallen short of the predicted growth in energy demand.*
- ❑ *Supplies of Gas, coal and other fossil fuels will have to rise in order to cope with the rise in future energy demand.*
- ❑ *Fossil fuels are still considered harmful to the environment.*
- ❑ *And yet, we note regrettably that we are slow to act:*
  - ✓ *Alternative energy sources are not yet developed sufficiently, and*
  - ✓ *Our utilisation of energy is far from efficient. There is still a lot of energy to save.*

Petroteam a.s

7

## THE TECHNOLOGY CHALLENGE

- ❑ *In order to discover, develop and produce more oil and gas we need much sharper and smarter technology.*
- ❑ *We must be able to locate the remaining resources more accurately. We must also drastically minimize the geological risk by doubling our geological understanding.*
- ❑ *We need to maximise oil recovery. This challenge is time-critical. We are producing the last giant fields right now. We can increase world's reserves by 25% if we act now and if we are determined to develop the right technology.*
- ❑ *Our objective must resolutely be to achieve efficiency in exploration, development and the way we use fuels. I fear there is a long way to go before we get there.*

Petroteam a.s

8

## THE ENERGY COST CHALLENGE

- ❑ *The remaining oil and gas resources will be less accessible. They will be technologically more demanding to discover and produce.*
- ❑ *The **cost of a barrel of oil** in the future is going to be a great deal higher than today's average cost.*
- ❑ *Moreover, reducing the harmful effects of **fossil fuels** on the environment will certainly add to the unit cost.*
- ❑ *Unless we are very lucky, future **alternative sources** of energy will most likely cost much more than fossil fuels.*
- ❑ *We may then conclude that the **cost of energy** is bound to increase in the future.*

Petroteam a.s

9

## THE ENERGY PRICE CHALLENGE

- ❑ *A transition period of some decades seems inevitable before we can wean ourselves from oil and gas.*
- ❑ *The high cost of converting to alternative energy sources worldwide is a serious obstacle to replacing petroleum and fossil fuels.*
- ❑ *As long as the price of fossil fuel is low, there will not be sufficient incentive to*
  - a) Develop alternative energy sources.*
  - b) Embark on large scale energy saving measures*
- ❑ *Higher energy prices are therefore necessary.*
- ❑ *And yet, there are many nations that can not afford energy even at today's prices*
- ❑ *You may then reflect over the following **facts**:*
  - *One litre of bottled mineral water in Oslo cafes costs **US\$ 12.00**.*
  - *One litre of Petrol in Oslo costs around **US\$ 2.50***

Petroteam a.s

10

## PART - TWO

### CHALLENGES TO PETROLEUM PRODUCING COUNTRIES

Petroteam a.s

11

### THE BASIS FOR PETROLEUM GOVERNANCE

- ❑ *International Law gives the host countries the right to exploit the natural resources within their areas of jurisdiction.*
- ❑ *Petroleum should be exploited to create lasting benefits to the citizens of the host country.*
- ❑ *In return, the international community expects reasonable access to petroleum on fair commercial terms.*
- ❑ *For many countries, petroleum represents the last hope for lifting the country out of poverty. If governed correctly, the petroleum sector can be a powerful stimulus to productivity and welfare.*
- ❑ *Unfortunately however, many petroleum producing countries, particularly the larger producers, are instead being ravaged by the **OIL CURSE.***

Petroteam a.s

12

## THE CALAMITY OF MALPRACTICES

- ❑ *Under the vicious grip of the OIL CURSE, petroleum producing countries suffer from any or all of the following calamities:*
  - a) *The national economy becomes entirely dependent on oil.*
  - b) *Other sectors of the economy can not survive (THE DUTCH DISEASE).*
  - c) *Corruption suffocates productivity and destroys ethics.*
  - d) *Efficiency in petroleum extraction falls well below best practices.*
  - e) *Democratic practices in the country deteriorate and disappear.*
- ❑ *Worse still: the perils of the oil curse are difficult to reverse.*
- ❑ *I firmly believe that eliminating malpractices from petroleum governance should be a global priority. Why? Because in addition to the above, they reduce oil recoveries and hence substantially reduce world oil reserves.*

## THE GAME AND THE PLAYERS

- ❑ *Host countries should seek efficiency both in exploration and production. This is best achieved through licensing to commercial oil companies if this achieved and pursued in the right way.*
- ❑ *We must recognize however that the objectives of the State and those of commercial companies are not exactly identical:*
  - ☞ *Host-countries look for the long term benefits, whereas*
  - ☞ *oil companies naturally prefer quick returns on investment.*
- ❑ *Good governance should aim at reconciling these two objectives through constructive dialogue based on professionalism and mutual respect of each other's objectives.*
- ❑ *Competence and capacity in government institutions are therefore vital for upholding good governance. They are also pre-requisites for achieving win-win solutions such as improved oil recovery.*

## PART - THREE

### CHALLENGES TO LEBANON

### STILL A LONG WAY TO GO

THE QUESTION WHICH IS HIGHLY RELEVANT FOR LEBANON IS: **HOW DO WE ENSURE GOOD GOVERNANCE AND HENCE AVOID THE OIL CURSE?**

*Allow me to congratulate Lebanon on having established a good basis for governance ahead of the first round.*

*Lebanon can be proud of having established:*

- a) Petroleum policy*
- b) Legislation*
- c) Model contract*

*And hopefully, the Petroleum Authority is around the corner.*

**HOWEVER, THERE IS STILL A LONG WAY TO GO.**



## TOPICS COVERED

*I like to share with you some of the lessons learned by other nations. I will confine my comments to the following few pillars of petroleum governance:*

- **POLICY**
- **INSTITUTIONAL COMPETENCE AND CAPACITY**
- **THE PACE OF OPERATIONS**
- **EXPECTATION MANAGEMENT**
- **LOCAL CONENT**
- **SUSTAINABLE INDUSTRIALISATION POSSIBILITIES**
- **REVENUE MANAGEMENT**

## THE POLICY CHALLENGE

- ❑ *Other nations have learned that upholding a broad agreement on **fundamental policy** is vital for ensuring **good governance** of the sector as well as mitigating the **OIL CURSE**.*
- ❑ *Lebanon has made an excellent start and should endeavour to maintain the current consensus on petroleum policy.*
- ❑ *As a follow-up on policy, strategies and plans will naturally be developed and implemented. These will of course be guided by events and results and will complement and implement the policy principles.*
- ❑ *The fundamental principles of policy must under all circumstances be upheld and cherished.*

## INSTITUTIONAL COMPETENCE AND CAPACITY

- ❑ *According to the petroleum law, the **Petroleum Authority** is the nucleus for governance in the petroleum sector. Its establishment and expedient development is a first priority for good governance.*
- ❑ *Diligence in monitoring the impact of petroleum operations on the environment, health and safety (HSE) as well as on other livelihoods is a high priority. Critical bench marks may have to be established that would trigger corrective actions in time.*
- ❑ *Co-ordination with other government administration, services and regulatory functions is paramount.*
- ❑ *Correct tax collection is of course a basic requirement. This entails accurate and reliable measurement of produced petroleum, the accurate calculation of price and not least ensuring that auditing of cost recovery claims to ensure that they are correct and justified .*

## THE PACE OF OPERATIONS

- ❑ *A slow pace in operations at the start will help mitigate the **OIL CURSE** and enforce good governance. A gradual ramp-up in petroleum revenue will help mitigate damages to other sectors of the economy.*
- ❑ *Great water depths and the likelihood for gas may favour large scale field development. This consideration must however be carefully weighed against the desirability to proceed gradually in developing the infrastructure and in mastering petroleum revenue management.*
- ❑ *The scale and the speed of operations are best regulated by the scope and frequency of license rounds. Gradual licensing is advisable. Avoid putting all your eggs in one basket. Also avoid over-burdening institutional economic capacity. Give the economy a chance to adjust.*
- ❑ *The petroleum resource and reserves base must be assessed on continual basis to provide the basis for designing the next rounds. Competence to deal with this aspect must be given high priority.*

## EXPECTATION MANAGEMENT

- ❑ *Right now a gas discovery is only a possibility, a mere hope. It is impossible to predict what, how, if and when petroleum will be discovered. This however is no excuse for not getting ready to meet the challenges when they arise.*
- ❑ *Because of the great water depths only giant discoveries are likely to be of commercial interest. This is particularly true for gas.*
- ❑ *Exaggerated expectations will put the national economy and the democratic process under enormous pressures. Government must therefore inform the public of all aspects of the truth. Information must be accurate and balanced with both risks and rewards well explained. A realistic timeline for what may happen is essential to share with the public.*
- ❑ *The competent government institutions must inform the public of the facts and their limitations. The rationale for petroleum policy must be explained asking the public for support in its implementation.*

Petroteam a.s

21

## LOCAL CONTENT AND NATIONAL PARTICIPATION

- ❑ *The right scope and manner of **Local Content** and of **National Participation** in the petroleum sector can only be decided when the reserves are known. Only then would it be possible to judge the important prerequisite of sustainability.*
- ❑ *Offshore exploration is highly specialised and does not provide a stable basis for developing a substantial local content.*
- ❑ *Moreover, field development in deep water is technologically demanding. Local content may cover supporting services only.*
- ❑ *The basis for local content will be wider and more sustainable in the operations phase. In addition to the steady need for supply services, maintenance operations should ideally be performed by specially trained local personnel.*
- ❑ *Opportunities for petroleum goods and services in the region may help enhance the sustainability of local expertise and services beyond the lifetime of the national petroleum sector.*

Petroteam a.s

22

## SUSTAINABLE INDUSTRIALISATION

- ❑ *Should commercial gas become a reality, export will most likely be the basis for commerciality. New infrastructures are very costly.*
- ❑ *Lebanon may wish to ensure its own requirements for energy for as many decades as possible. The nation may then wish to develop a strategy for how domestic gas may be utilised.*
- ❑ *In addition, Lebanon may wish to look into the industrial opportunities gas can offer to the nation. Economists insist that gas based industries are globally controlled and are thus difficult to enter.*
- ❑ *The kind of industries that can be considered are those that can:*
  - *Withstand a high gas price*
  - *Bring in revenues in hard currencies .*
  - *Can be maintained for a very long time.*
  - *Can create synergies with vital national industries.*

## REVENUE MANAGEMENT

### Offshore Petroleum Resources Law.

#### Article 3: Principles for the Management of Petroleum:

- 2) *The net proceeds collected or received by Government arising out of Petroleum Activities or Petroleum Rights shall be placed in a **sovereign fund**.*
- 3) *The statute regulating the Fund, the rules for its specific management, the principles of investment and use of proceeds shall be regulated by a separate law, based on clear and transparent principles for investment and use of proceeds that will keep the capital and part of the proceeds in an **investment fund for future generations**, leaving the other part to be spent according to standards that will guarantee the rights of the State and **avoid serious, short or long-term negative economic consequences to the national economy**.*

## REVENUE MANAGEMENT

### WHAT CAN WE LEARN FROM OTHER NATIONS ??

#### 1. On Managing the Impact on Other Activities we learn:

- ❑ Petroleum revenues should be phased gradually into the economy at a rate that will not threaten other sectors of the economy. In other words capacity constraints in the system must not be exceeded.
- ❑ Revenue management should be fully integrated into the economic and social planning. Mechanisms for triggering corrective timely actions must be established.
- ❑ Transparency and **Accountability** must be part of the governance system to provide checks and balances on how revenue is utilised.

#### 2. On Revenue Stabilisation we learn that:

- ❑ A **Saving Fund** can provide a safety-net against low oil/gas price periods. The Fund can at the same time be available for future generations.

## REVENUE MANAGEMENT (Continued)

#### 3. On creating Lasting Benefit we learn that:

- ❑ A **Development Fund** can invest locally in economic and social development provided it :
  - a) Refrains from sudden investment that may trigger the Dutch Disease and
  - b) Invests only in projects of **sustainable development** for the whole nation.
- ❑ Strict criteria need to be established for qualifying that projects will yield lasting benefit to the society as a whole. Examples of **sustainable development** include investment in competence, research, infrastructure, health, environmental protection, operational efficiency, project management etc.
- ❑ The optimal sequencing of projects is essential in development programmes. Efficiency is vital. Synergy effects should be encouraged.
- ❑ Improving the general business/investment environment should be a high priority.
- ❑ Subsidies should be avoided as these lead to anomalous growth.

**HAVING SAID ALL THE ABOVE  
WE MUST REMIND OURSELVES  
THAT WE HAVE NOT MADE A DISCOVERY YET!  
AND WE STILL HAVE A LONG WAY TO GO**

Petroteam a.s

Petroteam a.s

27

**GOOD LUCK  
AND  
THANK YOU  
FOR YOUR ATTENTION**

Petroteam a.s