

**THE NUCLEAR PROJECTS IN
THE ARAB COUNTRIES
AND
THE NUCLEAR FUEL SUPPLIES**

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The Nuclear Option for Electricity Generation

- Need for energy
- Political decision
- Investment
- Public Acceptance



The Nuclear Option for Electricity Generation

- Potential sites for NPP
- The IAEA 19 milestones including:
 - Law and regulations
 - Regulatory body
 - Human resources



International commitments

- NPT
- IAEA safeguard
- Nuclear safety
-

VOLONTARY

- additional protocol
- 123 Agreement(with USA)



Economy

- Oil production policy
- Renewable energy competitiveness
 - price
 - national grid structure
- Energy policy



LAS summit (Riyadh March 2007)

- Promotion of the peaceful applications of atomic Energy
(similar GCC resolutions-dec. 2006)
- Arab Strategy up to 2020
- Joint Arab Programs



The Arab Strategy for peaceful applications of atomic energy

- drafted by the AAEA (with the full support of the S.G. of LAS)
- Adopted by The G.C. of The AAEA (Beirut-Dec. 2008)
- Adopted by the LAS summit (Doha- March 2009)





الهيئة
العربية
للطاقة
الذرية

الإستراتيجية العربية
للاستخدامات السلمية
للطاقة الذرية
حتى العام 2020

اعتمدت بقرار المجلس التنفيذي (ق.م.ت. مرقم 8/د.ع. 42/بيروت: 18-20/12/2008)
المفوض من المؤتمر العام (ق.م.ع. مرقم 14/د.ع. 20/بيروت: 2-3/8/2008)

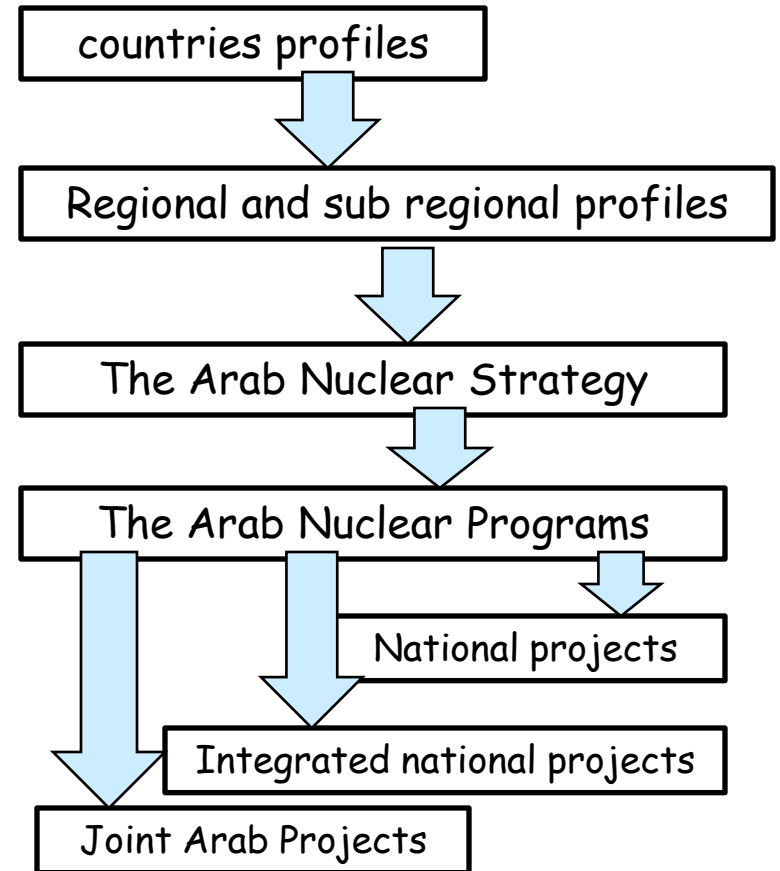
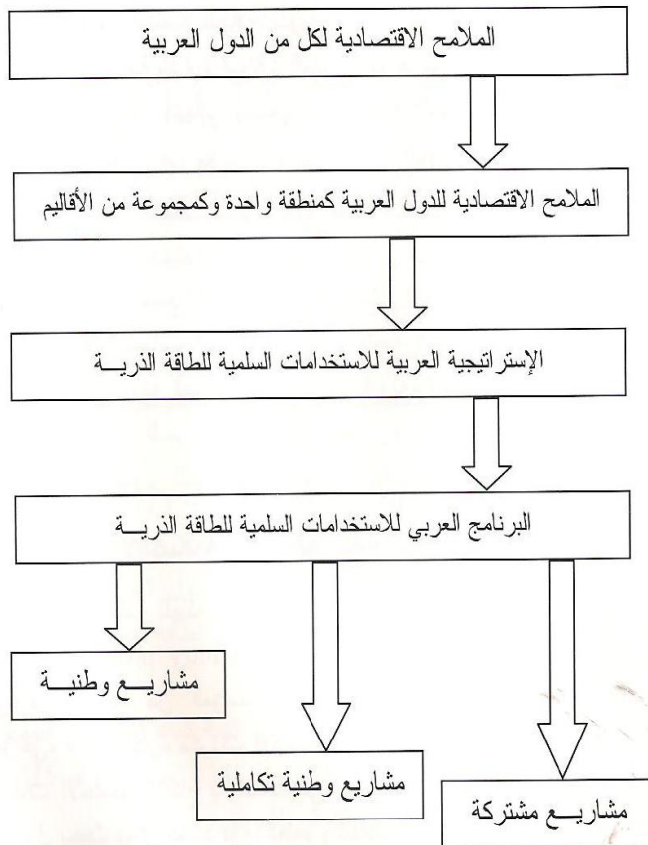
تونس 2008

الذرة في
خدمة الإنسان

The Arab
Strategy for
peaceful
applications of
atomic
energy.

AAEA - 2008





NPP:

I- National Projects

- UAE
 - National Atomic Energy Commission
 - Nuclear Law
 - National Regulatory body
 - Site selection
 - Building contract (BOO)



NPP:

I- National Projects

- Jordan
 - National Atomic Commission
 - Nuclear Law
 - National Regulatory body
 - Site selection



NPP:

I- National Projects

- Egypt
 - National Atomic Energy Commission **and**
 - National power plant commission
 - Nuclear Law
 - **Site selection (field work)**



NPP: I- National Projects

- Morocco ;Algeria ;
- Tunisia; Libya
- KSA; Kuwait
- Qatar; Bahrain



II-Integrated Projects

- With the interconnection of the electrical grid, all the Arab countries may take profit from any national NPP



Joint projects

- When site selection is difficult
- When potential site is costly
- When co investment is needed
- When technical cooperation is needed (Human resources, industries...)



Joint projects

- 1- NPP owned by 2 MS or more:
 - Syria –Lebanon
 - KSA- Jordan
 - ...



Joint projects

2-Human resources development

- AAEA
- AAEA + Universities



Joint projects

3- Technical department within the AAEA

- In order to reduce:
 - the need in manpower
 - and the electricity cost
- Establishment, within the AAEA of a **Technical department able to provide the regulatory bodies in the member states with the following services:**



Joint projects

- N. Power plants inspection
- Preliminary technical assessment for licensing
- Any technical work requested by any National Regulatory body in the member states



Joint projects

Any technical report produced by the department is confidential and must be sent to the concerned National regulatory body which stay the only regulatory authority in the M.S.



Nuclear Fuel Initiatives

- Some Arab countries support:
 - IAEA fuel Bank initiative
 - USA initiative : GNEP
(IFNEC)
 - Russian center for enriched Uranium
 - Russian fuel bank adopted by the IAEA board



Joint projects

4-Arab Natural Uranium Fund (ANUF)

Natural uranium reserve
(yellow cake)

Owned by:

some LAS Member states

(or by private company)



Joint projects

- A N U F (Cont...)
 - Good Investment
 - Available technology on the market
 - Accepted by the International community
 - Gives more guarantee (for Nuclear Fuel supply) through Swap



Joint project

- Arab Natural Uranium Fund (ANUF)

- Mines in some Member States
- Phosphates (technology of Uranium separation is available)



Thank you



Nuclear Energy conference Tunis 23-25/06/2010 Mahmoud Nasreddine