



**Ministry of Mines  
and Energy (MoME)**



**Kingdom of  
Cambodia**

## **2014 INPRO DIALOGUE FORUM 8TH**

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Department of Technique Energy and Atomic Energy Affair**



# Background – Cambodia

- 06-02-1958 : Became a member state of the International Atomic Energy Agency (IAEA).
- 26-Mar- 2003 : withdrew its membership from the IAEA .
- 2005 : Established Office of Atomic Energy Technology.
- 2007 : Established National Authority for Prohibition of Chemical Weapons under Ministry of National Defense.
- 23 -Nov- 2009 : reinstated its membership to the Agency.
- 2009 : Established Technical Team Work on National Inventory to study on Radioactive Sources.
- 2009: Established committee for National Cooperation of Regulatory framework.
- 2011 : Established Chemical, Biological, Radiological, and Nuclear (CBRN) Team.

# Electricity Production In Cambodia

## □ Current Sources of Electricity Production:

- Hydro
- Fossil Fuel
- Biomass (Minor).
- Solar Energy (Minor).
- Import from neighbor countries such as Vietnam, Thailand.

□ Cambodia has NO , yet the nuclear facilities such nuclear power reactors, research institute for reactors, and fuel cycle facilities.

But, Radioactive sources are being used for Medical (oncology), Industrial (gauges) and Agricultural purposes only.

## Technical Energy and Atomic Energy Affair Department

- ❑ Cambodia has NOT established a Regulatory Body. MoME has relevant responsibilities to promote Radiation/Nuclear Safety and Security of Radioactive Sources.
  
- ❑ Atomic Energy Technology Office was established in 2005 under the Energy Development Department of the MoME, now, MoME has established new department named Technical Energy and Atomic Energy Affair Department in 2013, :
  - To draft a comprehensive that meets international and IAEA standards.
  - To coordinate with national and international institutions for development of policy, strategy and planning for Radioactive Sources and Nuclear Materials in Cambodia.
  - To relate with national and international organizations for technical assistance in making policy, strategy and planning for short-, medium- and long-term human resources development.
  - To review and evaluate IAEA safety drafts.
  - To facilitate ratification of relevant conventions and agreements.

# Activities of Atomic Energy Technology Office

## On-going Activities:

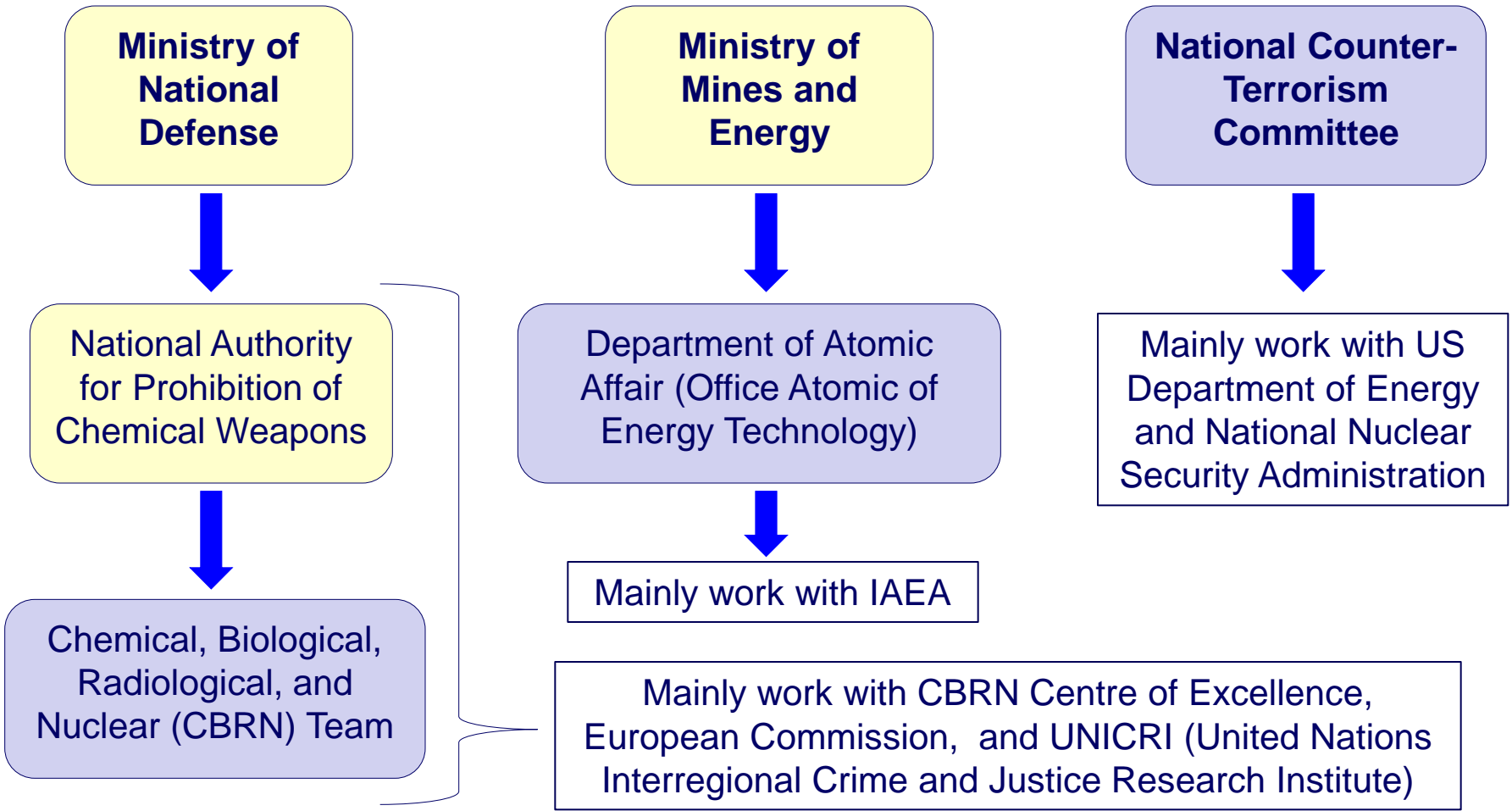
- ❑ Establishing National Radiation Safety Infrastructure
- ❑ Drafting a comprehensive nuclear law
  - The first-cut of the draft has been completed and is being reviewed internally, it will be sent to other concerned ministries for comments, and then will be reviewed by IAEA before finalization
- ❑ Facilitating ratification of Convention on Assistance in the Case of a Nuclear Accident or a Radiological Emergency
- ❑ Facilitating ratification of Convention on Supplementary Compensation for Nuclear Damage
- ❑ Facilitating ratification of the Regional Cooperative Agreement

# Activities of Atomic Energy Technology Office (con't)

## Past Activities:

- ❑ 2006: Cambodia ratified Convention on Physical Protection of Nuclear Material
- ❑ 2009: Cambodia rejoined as a member state of IAEA
- ❑ 2011: IAEA Technical Support Agreement
- ❑ 2011: IAEA Country Programme Framework (CPF) – to define priority development needs and interests to be supported through technical cooperation activities
- ❑ 2012: Cambodia ratified Convention on Early Notification of a Nuclear Accident
- ❑ 2012: Cambodia ratified Convention on Nuclear Safety

# General Structure in Cambodia



# Chemical, Biological, Radiological, and Nuclear (CBRN) Team

- To strengthen radiological and nuclear security on a national level, in May 2011 the CBRN team was established under National Authority for Prohibition of Chemical Weapons.
- The CBRN Team has the following duties :
  - ❑ Evaluate CBRN needs and organize CBRN incident respond
  - ❑ Research and study on CBRN consequence
  - ❑ Coordination and cooperation with national and international institutions to prevent CBRN use
  - ❑ Strengthen to communicate with CBRN Centre of Excellence



# National Counter-Terrorism Committee

- Prevent and combat illicit trafficking, importing and exporting of nuclear and radioactive materials
- Will involve in the establishment of a central storage facility for radioactive materials not in use, orphan sources and seized materials.
- Act as first responders
- Cooperate with relevant ministries and institutes to response to nuclear accident or radiological emergency

# Governmental and Legal Framework for Nuclear Safety

Has set up a committee for National Cooperation of Regulatory framework in 2009.

## □ Legislative Framework:

- Law on Punishment of Terrorism, in 1992
- Law on Management and Control of Weapons, Explosives and Ammunitions, in 2005
- Law on Counter-Terrorism, in 2007
- Law on the Prohibition of Chemical, Nuclear, Biological, and Radioactive Weapons, in 2009

□ In 2009, MIME has established a National Technical Working Group for National inventory of radioactive sources and X-rays equipment in Cambodia. which comprises of representatives from all concerned ministries, Such as Ministry of Health, Agriculture, Industry, Customs Office, Foreign Affairs and International Cooperation, Justice and Environment.

# Expectations

- ❑ Finalize nuclear law draft with the help from IAEA legal department
- ❑ Pass the nuclear law
- ❑ Establish a Regulatory Body
- ❑ Enhance regional and international cooperation:
  - consider joining relevant conventions, e.g. Convention in the Case of a Nuclear Accident or Radiological Emergency, Amendment to the Convention on Physical Protection of Nuclear Material

# Expectations (con't)

- ❑ Establish regulatory infrastructure: Develop a long-term action plan to establish and implement a sustainable regulatory system in accordance with International Safety Standards.
- ❑ Establish regulatory requirements for radiation safety and security of radioactive sources in regulations and guides.
- ❑ Establish a system for authorization and enforcement.

# Conclusions

Since has reinstated in 2009 as member for IAEA up to now, Cambodia has no yet joined INPRO International project on Innovative Nuclear Reactors and Fuel Cycles.

This is the first time for Cambodia to understand(meeting) about INPRO project.

Cambodia has a department under Ministry of Mines and Energy to work with IAEA.

Cambodia has its expectation for long terms action plan Nuclear.

Thus, Cambodia will get advantages from INPRO international Project on Innovative Nuclear and Fuel Cycles.

# Recommendation

- ❑ IAEA should support Cambodian Government to understanding on INPRO action plan 2014-2015 and more future plans.
- ❑ IAEA should recommend to Cambodian Government about advantage of INPRO International Project on Innovative Nuclear Reactors and Fuel Cycles.



**Thanks for your attention !**

