The Abdus Salam
International Centre for Theoretical Physics

United Nations
Educational, Scientific and
Cultural Organization

IAEA
International Atomic Energy Agency

2257-7

Joint ICTP-IAEA School of Nuclear Energy Management

8 - 26 August 2011

Programme Overview, Logistics, Group Projects Introduction

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IAEA
Atoms for Peace: The First Half Century
1957–2007

IAEA-ICTP School of Nuclear Energy Management

Trieste, Italy 08-26 August 2011

Overview

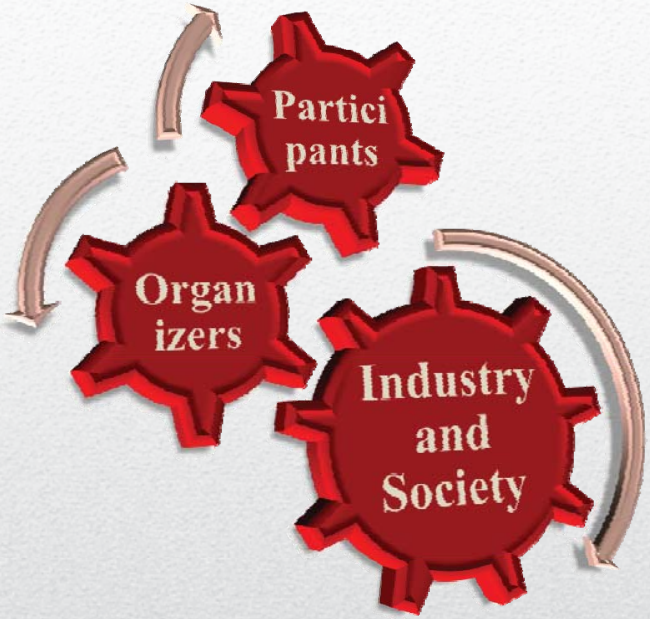
Tatiana Karseka, IAEA

Yanko Yanev

Tatiana Karseka

Ave Lusenti

We are there for you!

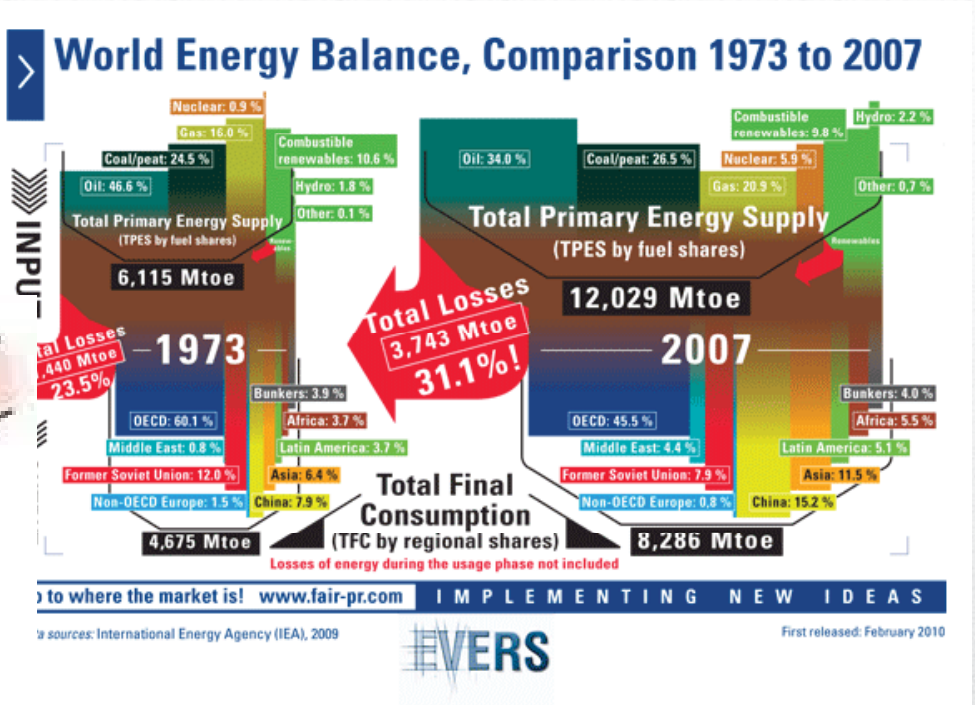


Who benefits from the School?

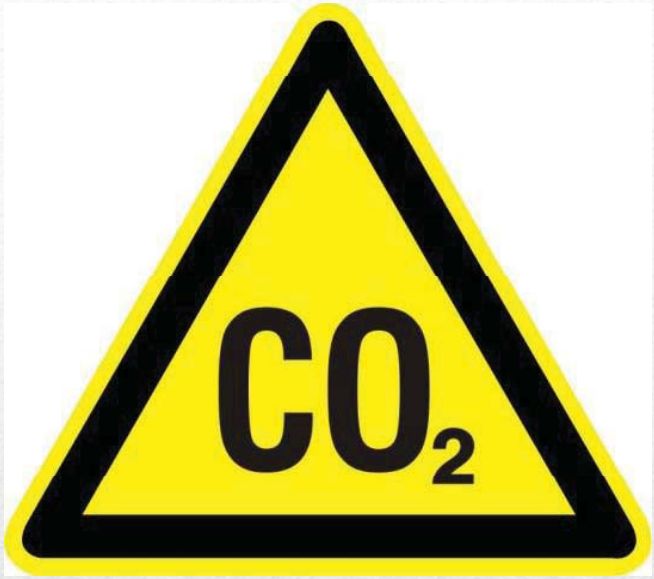
Purpose of the School

- **building future leadership to manage nuclear energy programmes**

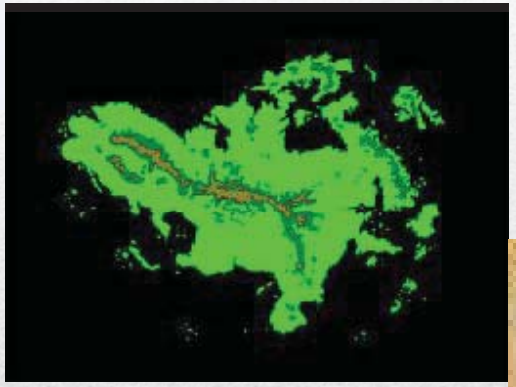
through introducing to the following subjects:



1. World Energy Balance, Nuclear Power and Nuclear Power Economics

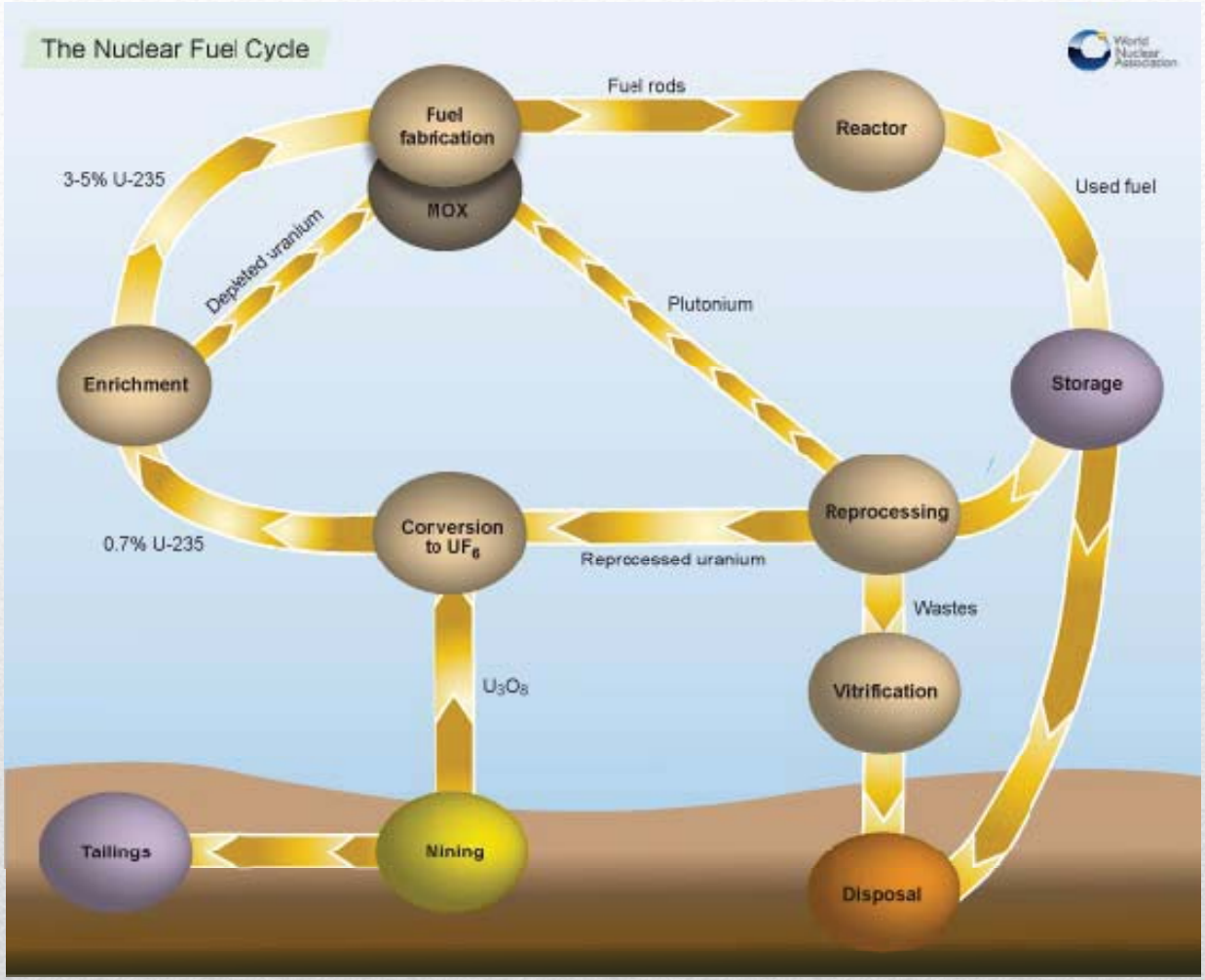


2. Climate Change and Nuclear Power



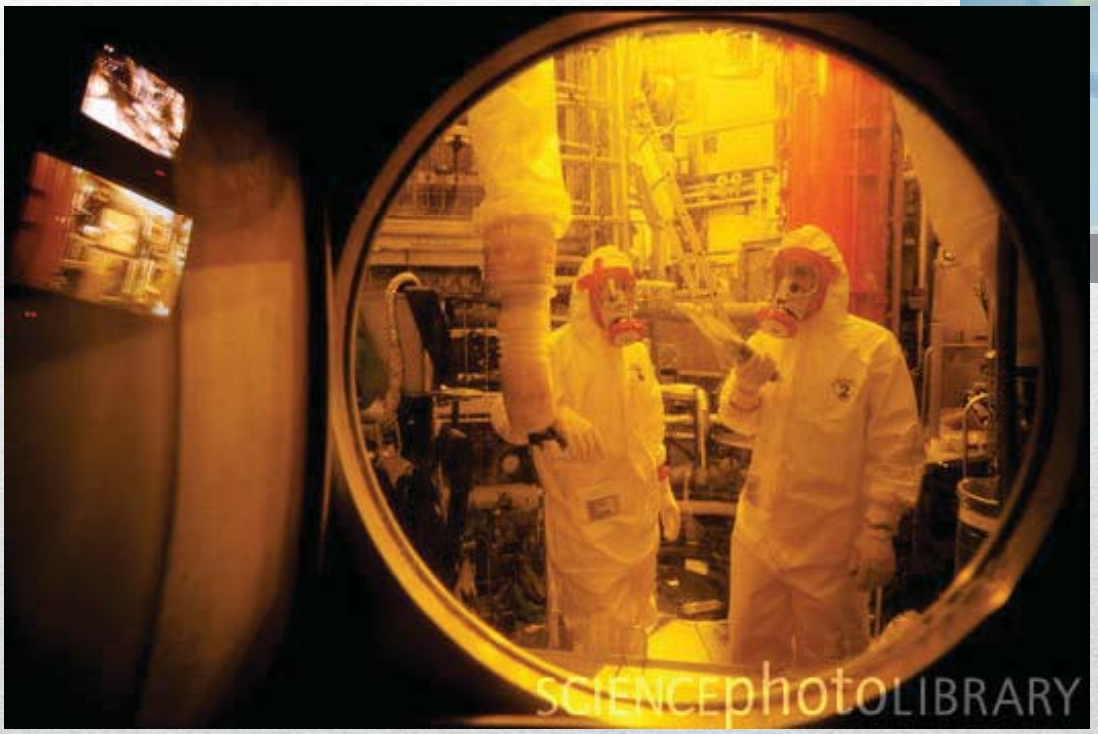
3. Nuclear Applications Fundamentals

4. National Nuclear Industry from planning to decommissioning



5. Nuclear Fuel Cycle and Waste Management

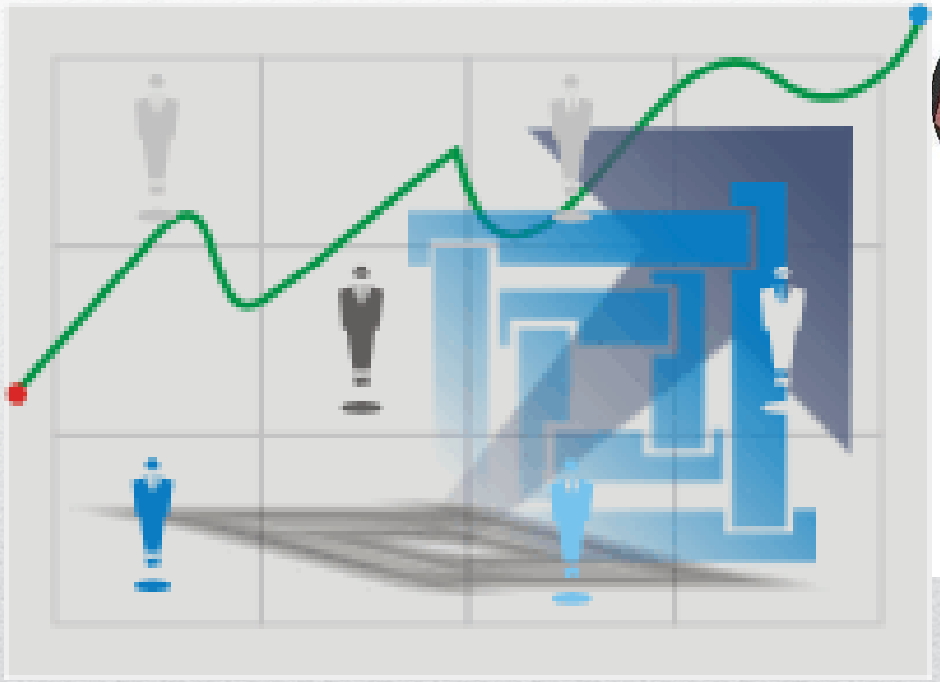
6. Nuclear Law

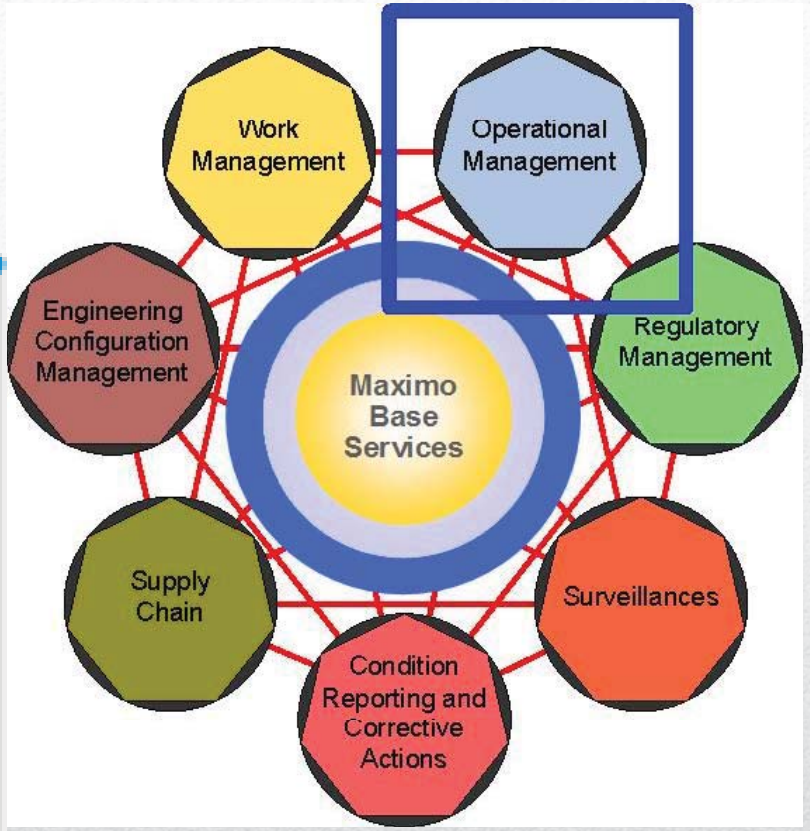


7. Nuclear Safety for operation

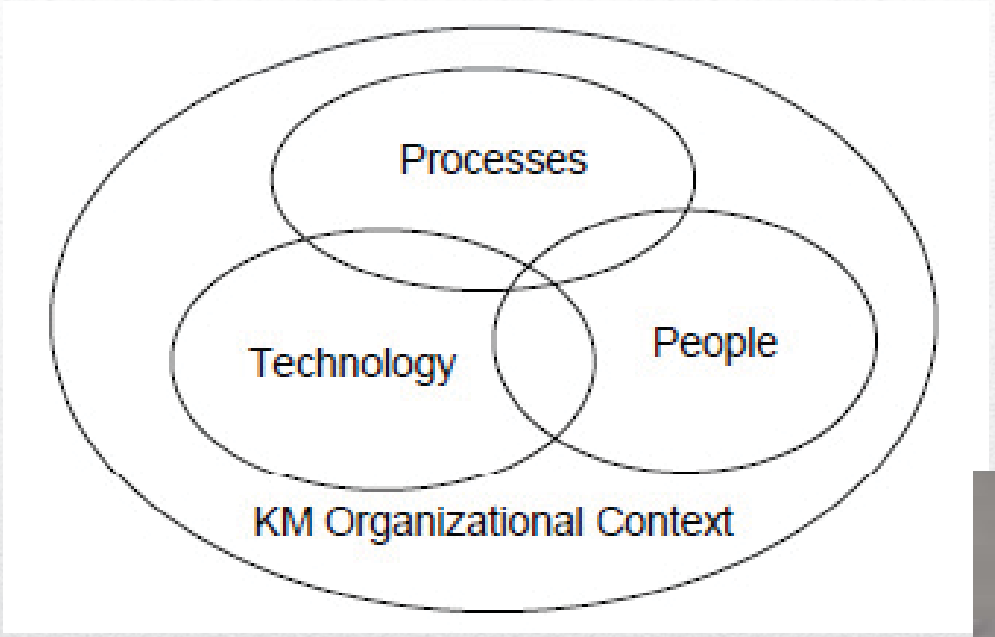
8. Nuclear Safeguards

9. Nuclear Security





10. Leadership and Management in Nuclear



11. Nuclear Knowledge Management

12. Human Resource Development

13. Communication, Public Acceptance and Nuclear Sociology

Methods of Teaching and Learning

- Lecturing
- Question and answer sessions
- Seminars and exercises
- Video sessions
- Group projects
- Technical tours

Technical Tours

13 August	IJCT (the Nuclear Training Centre "Milan Copic“), Jozef Stefan Institute, Ljubljana, Slovenia
20 August	Krsko Nuclear Power Plant, Krsko, Slovenia
26 August	ELETTRA Laboratory, Science Park, Trieste Italy

A copy of your passport to Tatiana, TODAY

Evaluation (Certificate)

- Active participation in discussions, case studies and question and answer sessions – **20%**
- Group projects – **30%**
- Final Examination – **50%**

Students' contribution towards the process

- Feedback (programme sheet, platform (lms.iaea-nkm.org, mailing group)
- Timing of the lectures (5 min, End)
- Group activities
- Individual and podium discussions
- Photos and videos!!!
- Post event word of mouth propaganda

7 Areas for deeper investigation:

1. Energy Planning
2. Legal Framework
3. Safeguards and Security
4. Fuel Cycle and Waste Management
5. Safety Issues
6. Human Resource
7. Communication and Outreach

- **Sheet in your folder (to be submitted by Midnight)!!!**

Group Projects

Mentors to support you (when ever you need):

- Yanko Yanev (5, 7) - present 1st and 3rd week
- Mark Howels (1) - present 1st week
- Nandu Janardhanan - present 1st week
- Andrey Kosilov (6) - present 2nd week
- Brian Molloy (6,7) – present 2 days only
- Anthony Wetheral (2) – present one day only
- Ryoichi Komiyama – present 1st, 2nd and 3rd
- Miroslav Gregoric (3) – present 2nd and 3rd week
- Dominique Delattre (5) – present 1 day only
- Paul Degnan (4) - present 1 day only

You are not left alone!

Group Projects

- Collective work during the whole school (‘Work on the projects’ slots integrated into the schedule)
- Group presentation at the last day (30 min for presenting, 15 min for questions)

Final Test

- Consists of 60-70 multiple choice questions
- Lasts for 2 hours
- Computer based
- Covers all the subject areas

- Is based mainly on the presentation materials and main reference material (which was mentioned by the presenter)

Graduation Ceremony
Gala dinner

Fairy well!

Let us have the best school ever!

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Group Projects

1. To conduct an analysis of **energy, environment and economy** needs and propose a plan of the costs and investments needed for launching or re-launching a nuclear program. One should summarize resources needed for this initiative and describe the timeframe for the planning and implementation phase.

1. HOWELLS, Mark Idwal <M.Howells@iaea.org>

2. To provide a comprehensive investigation on the **legal framework for nuclear safety, security and safeguards** of a given country. Roles, responsibilities and accountabilities have to be worked out

2. WETHERALL, Anthony

A.C.Wetherall@iaea.org

- 3. To develop a proposal for the national nuclear security regime and a safeguards (SG) programme. Training and application should be discussed. International context has to be addressed.

3. GREGORIC, Miroslav

m.gregoric@gmail.com

4. To discuss and suggest an adequate **nuclear fuel cycle policy**; to develop a waste management policy for the country.

4. DEGNAN, Paul Joseph

P.Degnan@iaea.org

5. To propose a systematic approach to ensure **safe operation** of nuclear facilities. Safety culture should be primarily addressed.

- To study the country profile against the presentation on the safety standards and the safety infrastructure (including GSR Part 1 and DS424) and propose what would be the next infrastructural improvement to be made in these countries.

5. ELATTRE, Dominique

D.Delattre@iaea.org

6. To develop a national **human resource** management strategy and draft a Workforce Plan for ensuring competent personnel for all elements of the national nuclear infrastructure, including the key stakeholder organisations and Education and training infrastructure requirements Knowledge Management aspects have to be addressed. Time frame for the plan has to be investigated and proposed.

6. MOLLOY, Brian R. B.Molloy@iaea.org and KOSILOV, Andrey A.Kosilov@iaea.org

- **Communicating nuclear related initiatives** to the public – to propose a comprehensive strategy for stakeholder involvement and outreach. This should include the identification and grouping of major stakeholders and the development of a comprehensive set of proposals (actions which have to be done to reach the desired state of knowledge in society). Students are asked to propose communication and outreach initiatives, to identify whose responsibilities these shall be and to estimate a time frame for the activities. Legal and ethical aspects of communication and outreach have to be considered in defining the initiatives.

MOLLOY, Brian R.

B.Molloy@iaea.org

- New comer Country
- Country with a nuclear power

2 Country Profiles