

The Global Nuclear Safety and
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Education Capability Assessment and Planning (ECAP)

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IAEA

International Atomic Energy Agency

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Common Challenges for **Sustainable Nuclear Education**

1. **a shortage of qualified and experienced personnel** in various fields of nuclear applications
2. **mismatches and gaps exists** between specialties of graduates and actual labor market requirements
3. **a need for appropriate national policy** development and a programme framework for establishing and realizing appropriate funding priorities
4. **strengthening the alignment and coordination** of the roles of key stakeholders such as different ministries, government departments and agencies for understanding and promoting the contribution of nuclear science and engineering towards **sustainable** socio-economic development

Supporting the Agency's Mandate...



Article II:

*“The Agency shall seek to accelerate and enlarge the contribution of atomic energy to **peace, health and prosperity** throughout the world...”*

What is Needed?

Strategic Stakeholder Engagement

- Facilitating a systematic and integrated national approach to strategically enhance and continuously improve **government - education -industry** interaction and coordination necessary for achieving focused, impactful and sustainable **national nuclear education programmes**.
- **Target Audience:** Although our approach may apply to all member states, it has been developed with a focus on assisting developing countries looking to leverage nuclear education in a sustainable way.

Draft NE Series Publication on ECAP

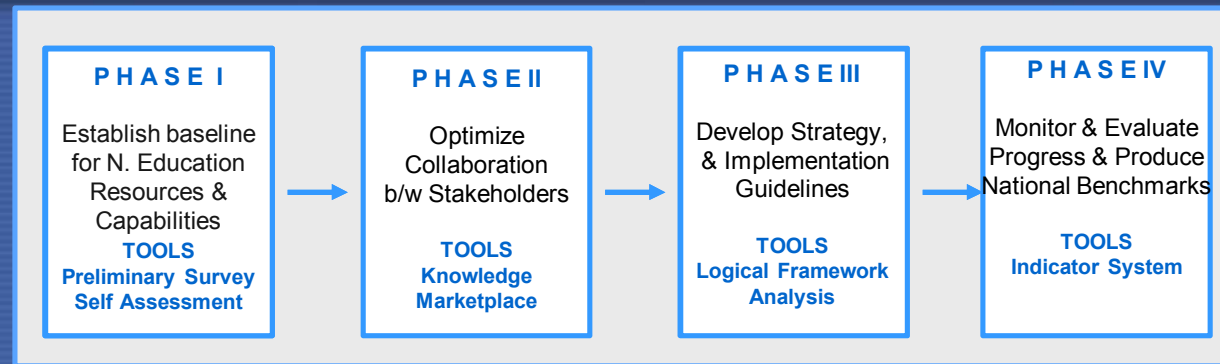
The ECAP methodology aims to provide a process for developing countries to establish **sustainable nuclear education**, including a framework for assessing and planning national nuclear education capability.

Objectives

- a) To provide a **framework and guidance** for the planning and assessment of sustainable national nuclear science and technology educational programmes
- b) To foster the establishment of **institutional coordination** for nuclear education, science and technology at national level to leverage resources and build capability
- c) To support development of an **indicator system**, involving government, education and industry stakeholders, for the planning and monitoring of national nuclear education programmes, policies and strategic plans that provides information on their current status and future sustainability

FRAMEWORK AND GUIDANCE

Stepwise Process for ECAP



ECAP Process (2-4 years)



Achieving national leadership on and ownership of the ECAP process



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Collaborative Process



Facilitate discussion with senior representatives of relevant government, education and industry stakeholders

Conducting ECAP assessments, formulating policy outline and developing national action plans to leverage nuclear education in a sustainable way



Stakeholder Engagement

INSTITUTIONAL COORDINATION

Examples of stakeholders

Government

- Atomic Energy Commission (AEC)
- Nuclear Regulatory Authority (NRA)
- National Nuclear Institutions (NNIs)
- Relevant Ministries

Education

- Academia
- R&D institutions and Nuclear Labs
- Colleges and Technical Schools
- Training organizations

Industry

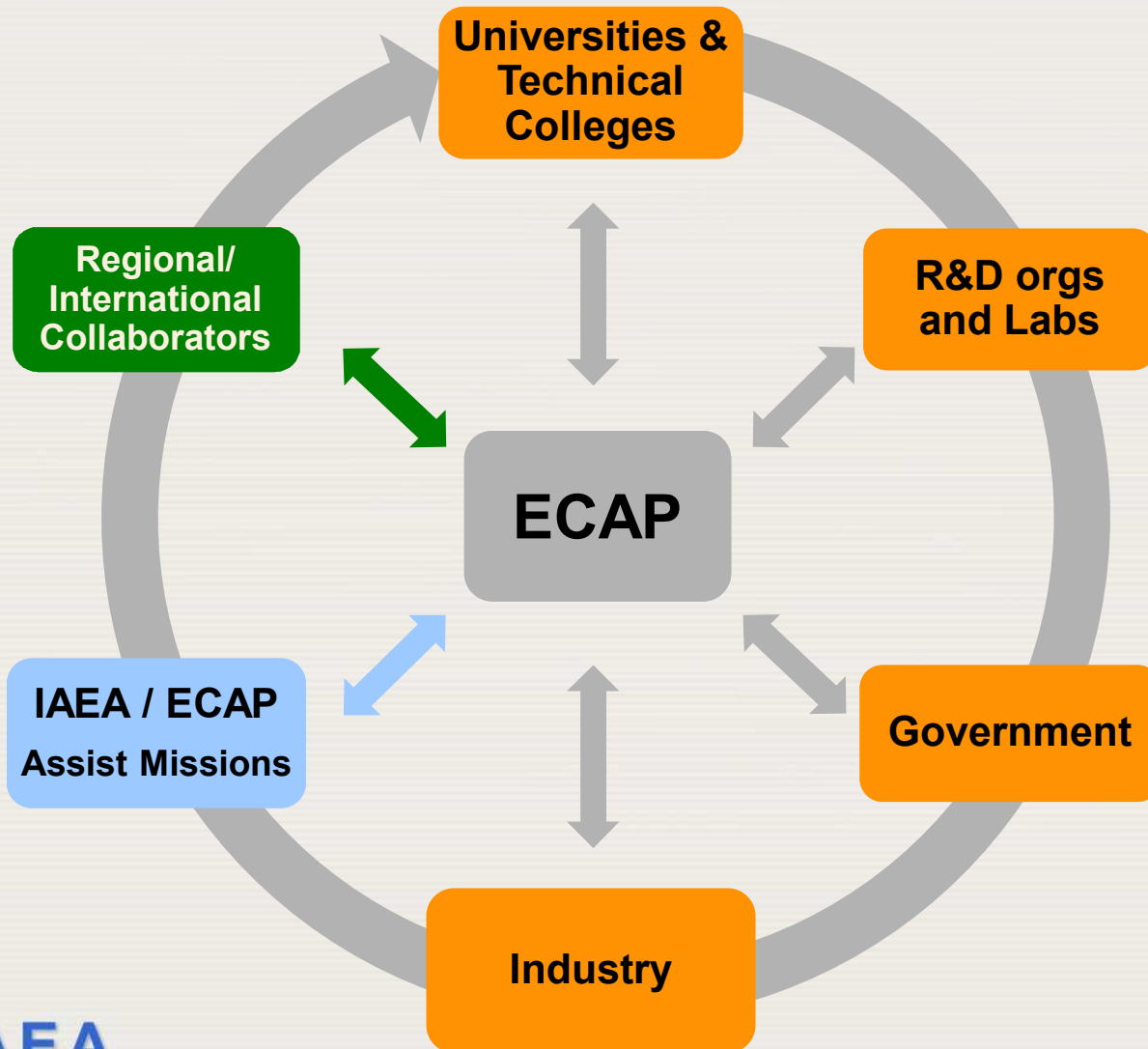
- Representatives of industries
- National Planning Commissions and/or
- National Manpower Boards
- Nuclear Professional Associations

Collaborators

- International orgs/ NGOs
- Regional stakeholders, others



Strategic Stakeholder Engagement



INDICATORS AND BENCHMARKS

Nuclear Education Sustainability Considerations



Progress and Upcoming Milestones

NKM PROGRAMME ON ECAP

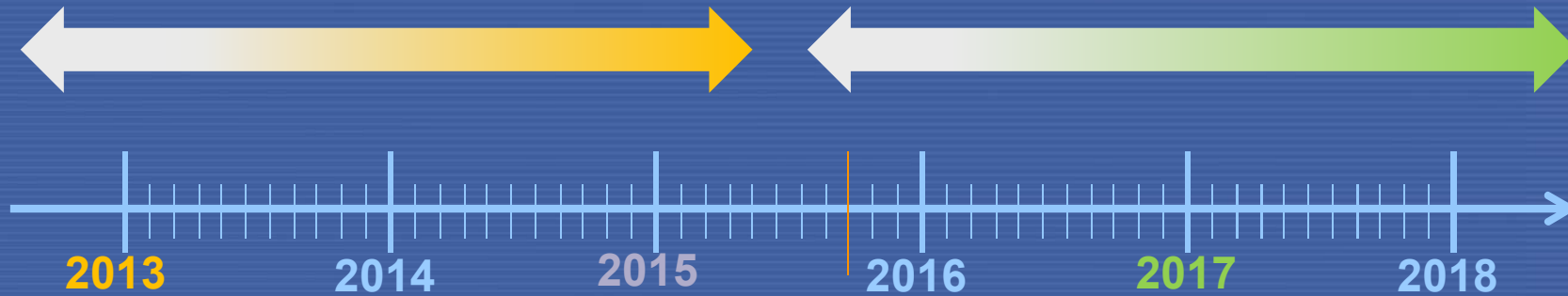
NKM Progress and Upcoming Milestones

ECAP DESIGN AND CONCEPTUALIZATION

- Need to strengthen N. Edu. alignment and coordination
- Document Proposal for ECAP

SUSTAINABLE NUCLEAR EDUCATION

- HR-Knowledge Development Networks
- University Collaboration and innovation



ECAP PILOTING AND IMPLEMENTATION

- ECAP Methodological report (NE Series Report)
- ECAP Assist Missions (South Africa, Saudi Arabia, Tanzania,...)
- Piloting experiences (2nd AFRA-NEST GA, Lusaka, Zambia)

Request your ECAP Assist Visit !



THANK YOU

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