



AREVA



AREVA Training Solutions

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AREVA Training Department
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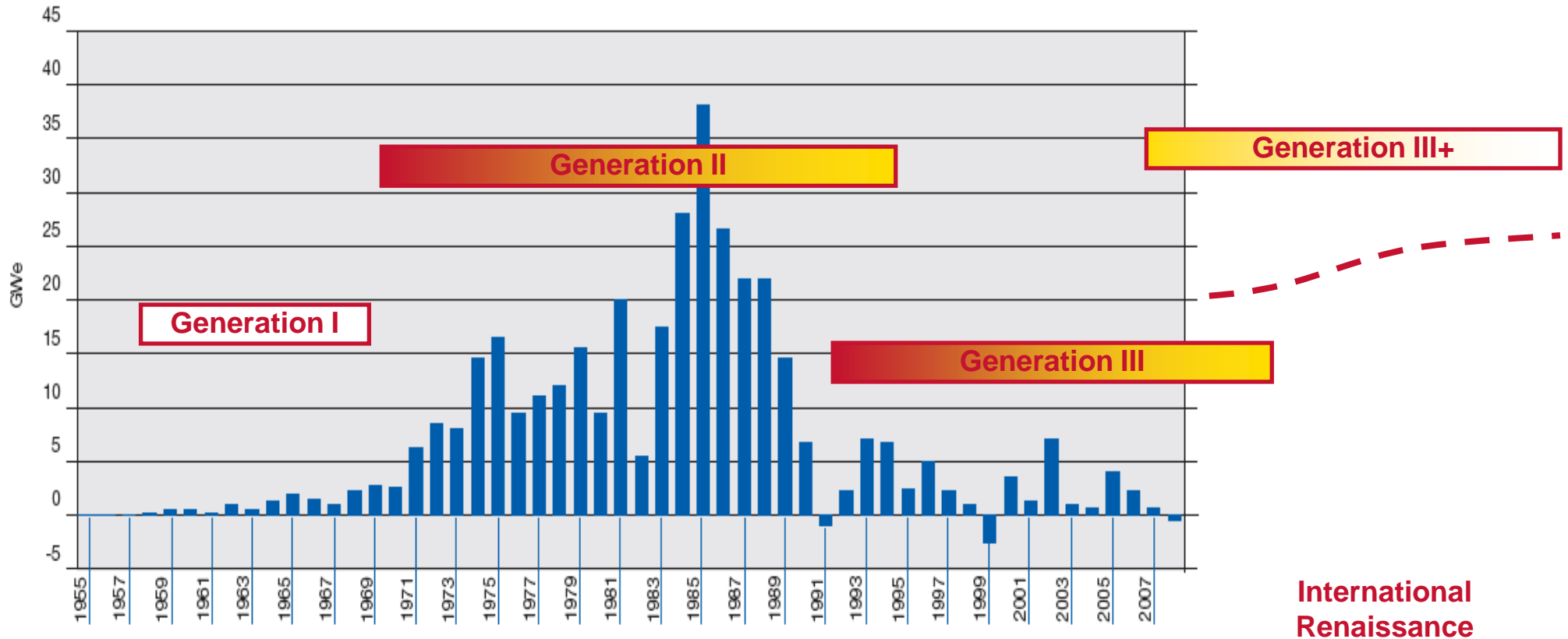
Topics



- ▶ **The new context of nuclear industry**
- ▶ **AREVA Training Expertise**
- ▶ **AREVA Training Solutions**
- ▶ **Conclusion**

Reactor generations

Safely operate 440+ reactors worldwide and prepare for new builds



International
Renaissance

The Fukushima accident

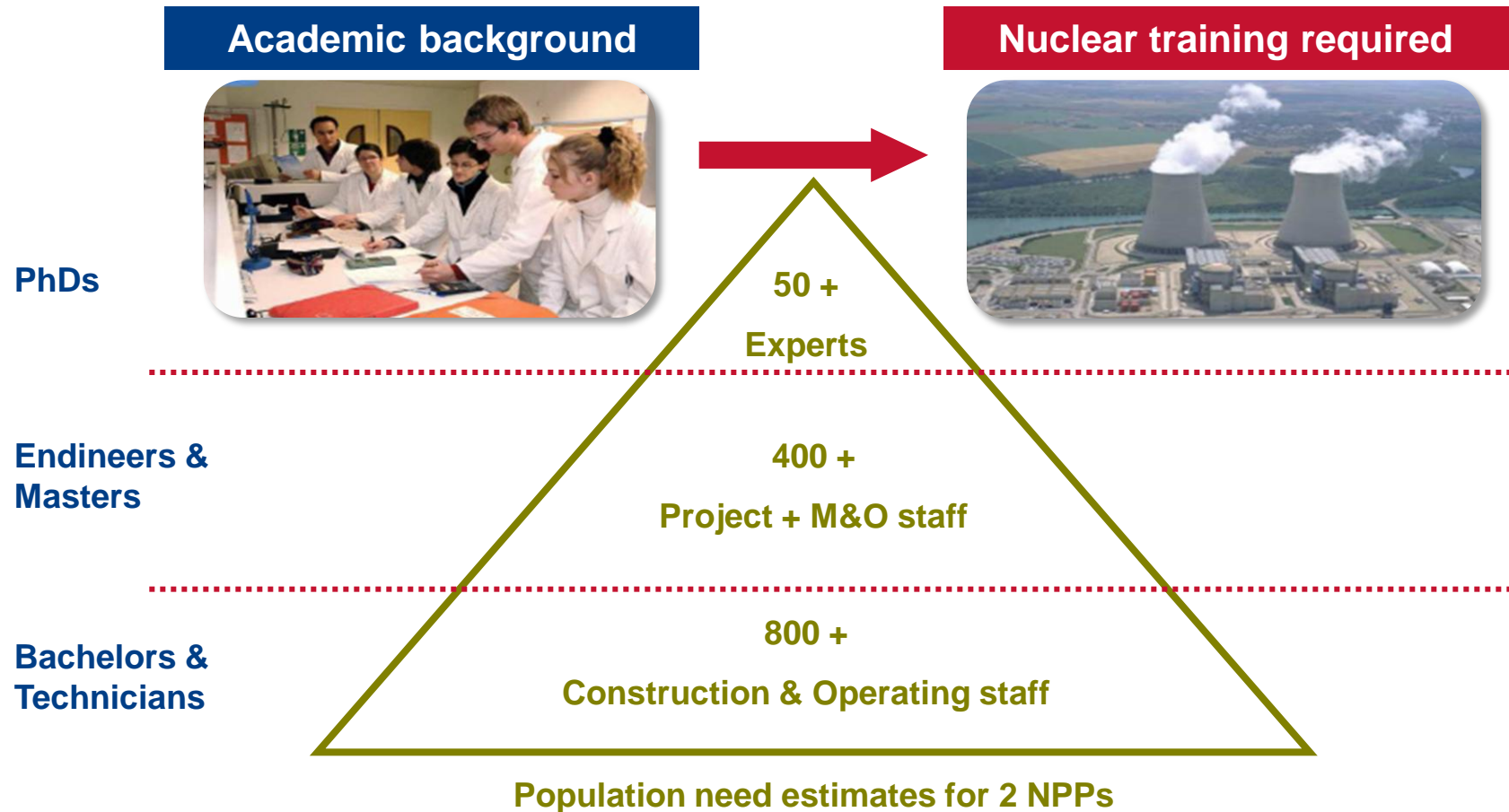


Now we are still in crisis management where TEPCO with the support of AREVA and many others is recovering from the accident.

In the longer term we must expect and prepare for new requirements in Nuclear Training

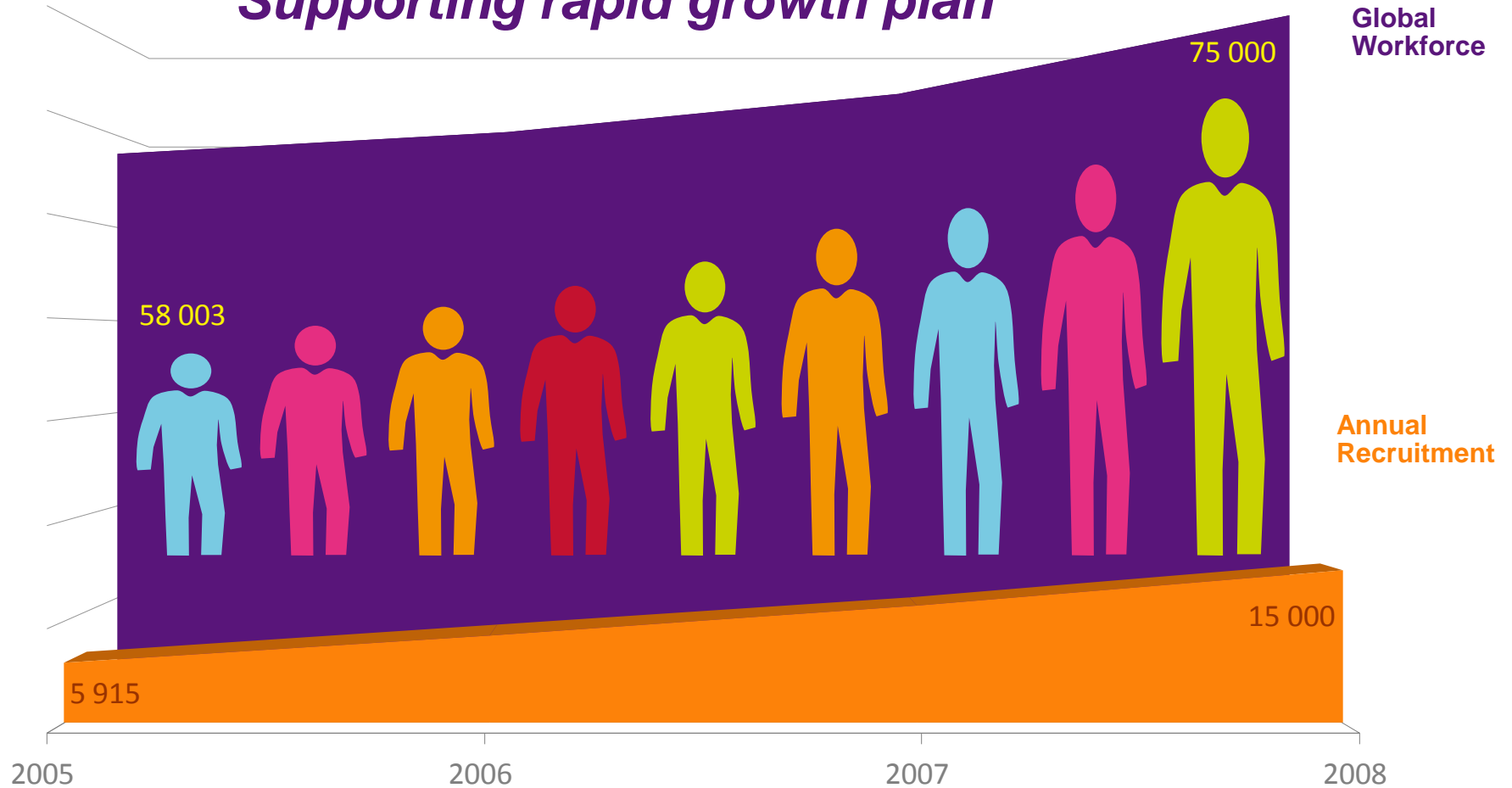
Educate nuclear engineers, experts and technicians

Typical flow from Academics to Nuclear



AREVA Training Expertise

Supporting rapid growth plan



>> Develop new hires, grow collective talents

AREVA Training Expertise

PARTNERSHIP WITH UNIVERSITIES

- ▶ Major institutions (Universities, INSTN in France, etc) provide education at various levels for the nuclear industry workforce
- ▶ AREVA is involved in :
 - ◆ Program design
 - ◆ Contributing lecturers
 - ◆ Piloting internships
- ▶ As project moves into the industrial phases:
 - ◆ AREVA's contribution in training increases with the technology content
 - ◆ AREVA is involved in suppliers training with courses on nuclear quality requirements
 - ◆ At this stage, AREVA maintains a strong partnership with Universities

Academic background



PhDs

Engineers &
Masters

Bachelors &
Technicians

we bring an industrial point of view

AREVA Training Expertise

- ▶ Offered to its partners and customers worldwide:
 - ◆ Government bodies
 - ◆ Technical Support Organizations (IRSN, TÜV, etc)
 - ◆ Engineering & manufacturing companies (design & construction, decommissioning)
 - ◆ Power Utilities (operation, maintenance)
 - ◆ Uranium Cycle Plants (operation, maintenance)

- ▶ Encompassing the entire range of nuclear activities with:
 - ◆ Management & Leadership
 - ◆ Scientific & Technical,
 - ◆ Design, Operation and Maintenance of nuclear facilities

AREVA Training Expertise

▶ A variety of teaching tools:

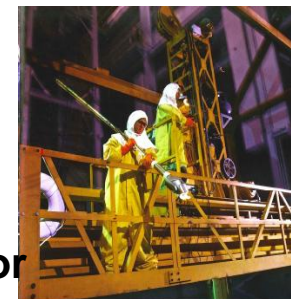
- ◆ e-learning
- ◆ Learning Tours and visits to operating nuclear facilities
- ◆ Training courses with instructors
- ◆ High-level conferences

▶ Some exceptional training facilities:

- ◆ Simulator training
- ◆ Experimental reactor training
- ◆ **Reactor commissioning:
both a driver
and a training facility**



Study Simulator



Fuel Training Pool



Olkiluoto 3



Flamanville 3

Taishan 1&2



AREVA Training Expertise

- ◆ 12 Training Centers in France, Germany and the USA
- ◆ Over 500 training programs
- ◆ More than 100 full-time instructors : technical experts & expert trainers
- ◆ High-capacity training facilities equipped with the latest technologies.
- ◆ Open to AREVA customers and partners

FRANCE



AIX-EN-PROVENCE

AREVA University - International Campus
385, avenue Augustin Fresnel
13857 Aix-en-Provence Cedex 3

UNITED STATES



LYNCHBURG

AREVA NP Training Center
1300 Old Graves Mill Road
Lynchburg VA, 24501

GERMANY



FRANKFURT

AREVA NP Training Center
Kaiserleistrasse 29
63067 Offenbach

AREVA Training Expertise



- ▶ **Created at the March 2010 Conference in Paris: France ready to share its civilian nuclear expertise with new comer countries**
- ▶ **Missions:**
 - ◆ **Present the French nuclear training offer and strengthen its international visibility**
 - ◆ **By the entry point to both academic and professional trainings**
 - ◆ **Establish a center of excellence for a sustainable nuclear energy**
 - ◆ **Build and maintain a global picture of French trainings – some of them in English**

AREVA Training Expertise



enela

= European Nuclear Energy Leadership Academy

An initiative of:



With the support of the European Commission

- ▶ Graduates
- ▶ High potential professionals
- ▶ Policy Makers, Opinion Formers, stakeholders

www.enela.eu

AREVA Training Solutions : Global overview

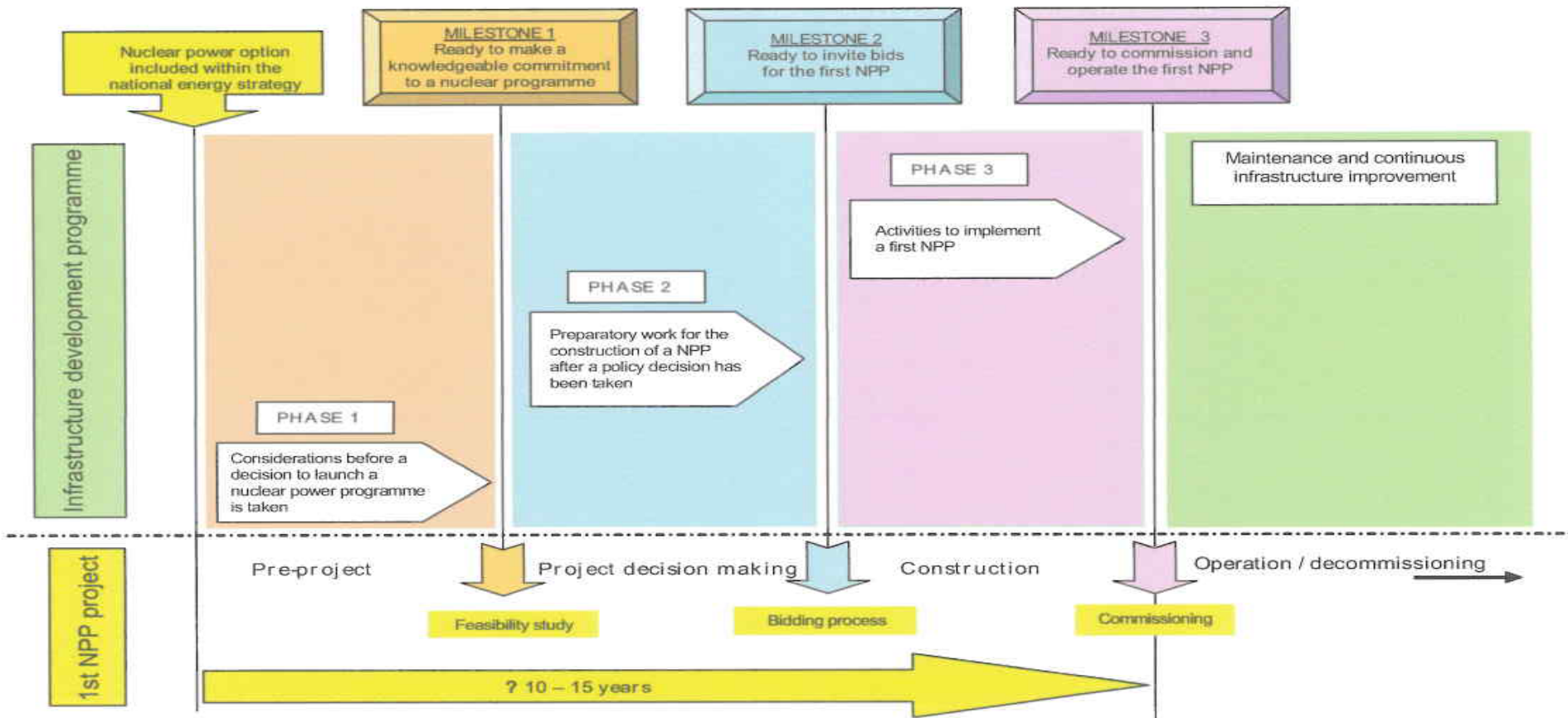
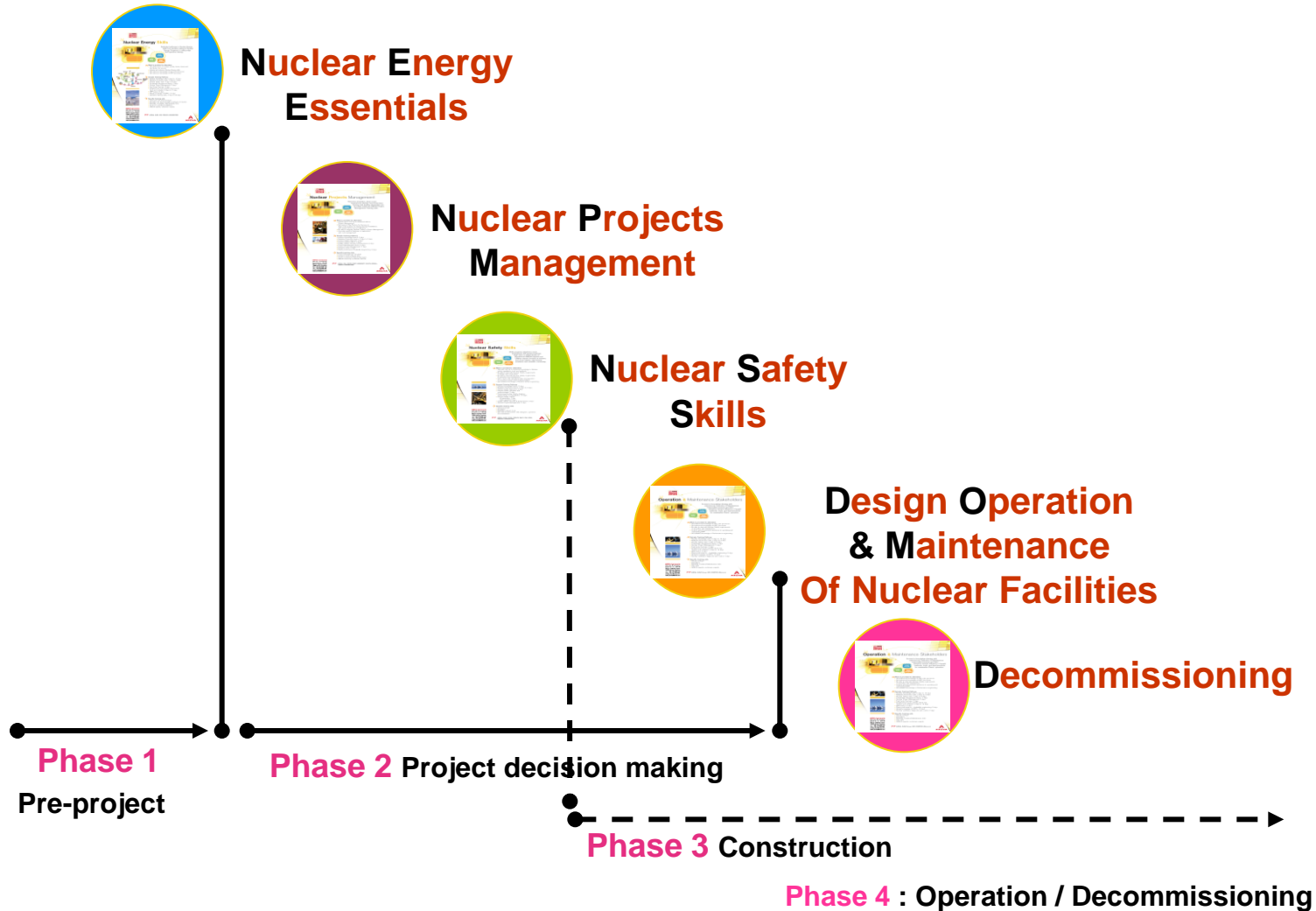


FIG. 1. Infrastructure development programme.

(Source I.A.E.A.)

AREVA Training solutions adapted to meet Customer needs



Training Expertise Services

AREVA Training Solutions

- ▶ Learning Expedition for Polish University Professors 6 week training seminar
 - Classroom training
 - Technical sites visits
 - Benchmark & network with French Education network
- ▶ Extended content
 - Nuclear energy sciences
 - Fuel cycle industry installations
 - Nuclear Power Plants construction and operation
 - Communication, Public Acceptance, funding nuclear energy
- ▶ Cooperation between France and Poland. Partnership between all French nuclear energy stakeholders.



Conclusion



AREVA Training Solutions are based on the knowledge and experience developed for our own training needs