



THE NUCLEAR TRAINEES PROGRAM: A STRONG ENGIE BANNER

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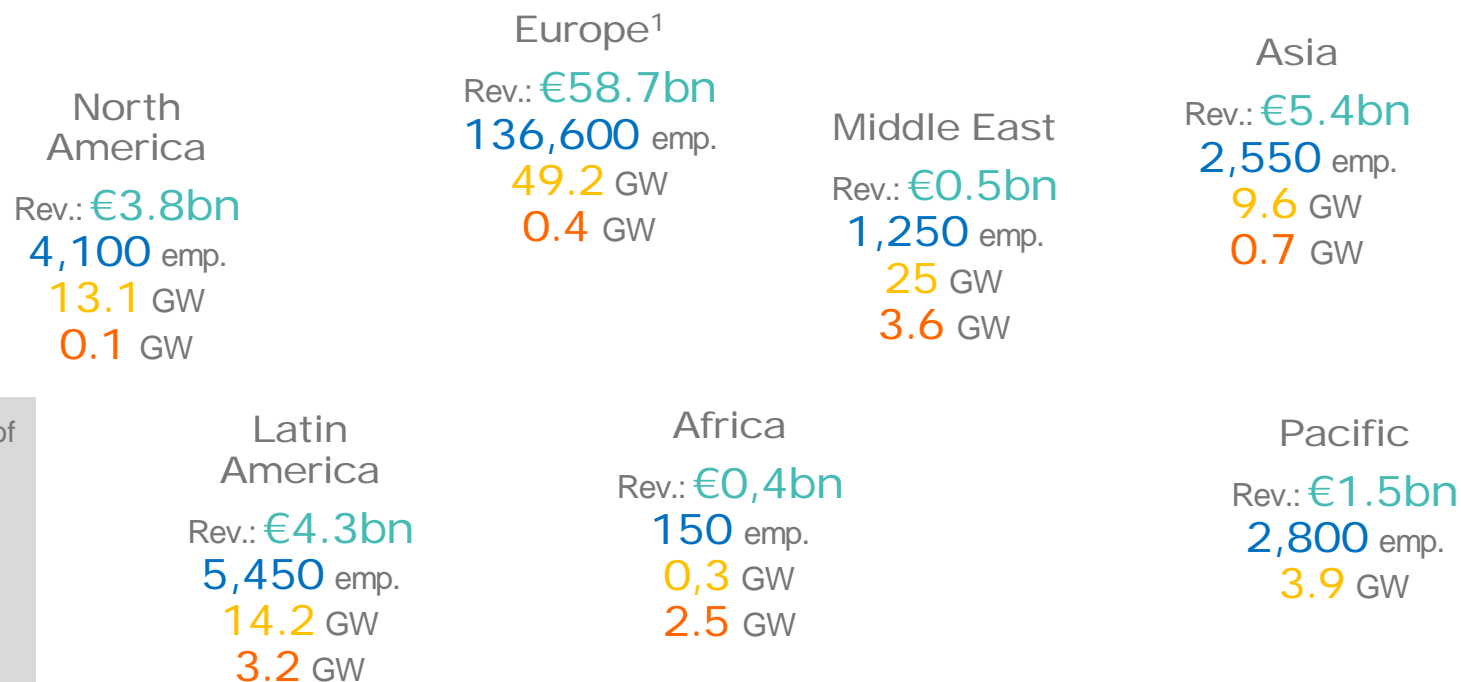
Revenues, workforce and capacity by region*

€74,7 billion
in 2014 revenues

152,900
employees

115.3 gigawatts
of installed power capacity

10.5 gigawatts
under construction



€6-7 billion of
net investment per
year over 2014-
2016.

Operations in 70
countries.

900 researchers
and experts at 11
R&D centers.

* Including 100% of capacity of assets held by the Group
at December 31, 2014, regardless of the actual holding rate.

(1) Inc. Turkey.

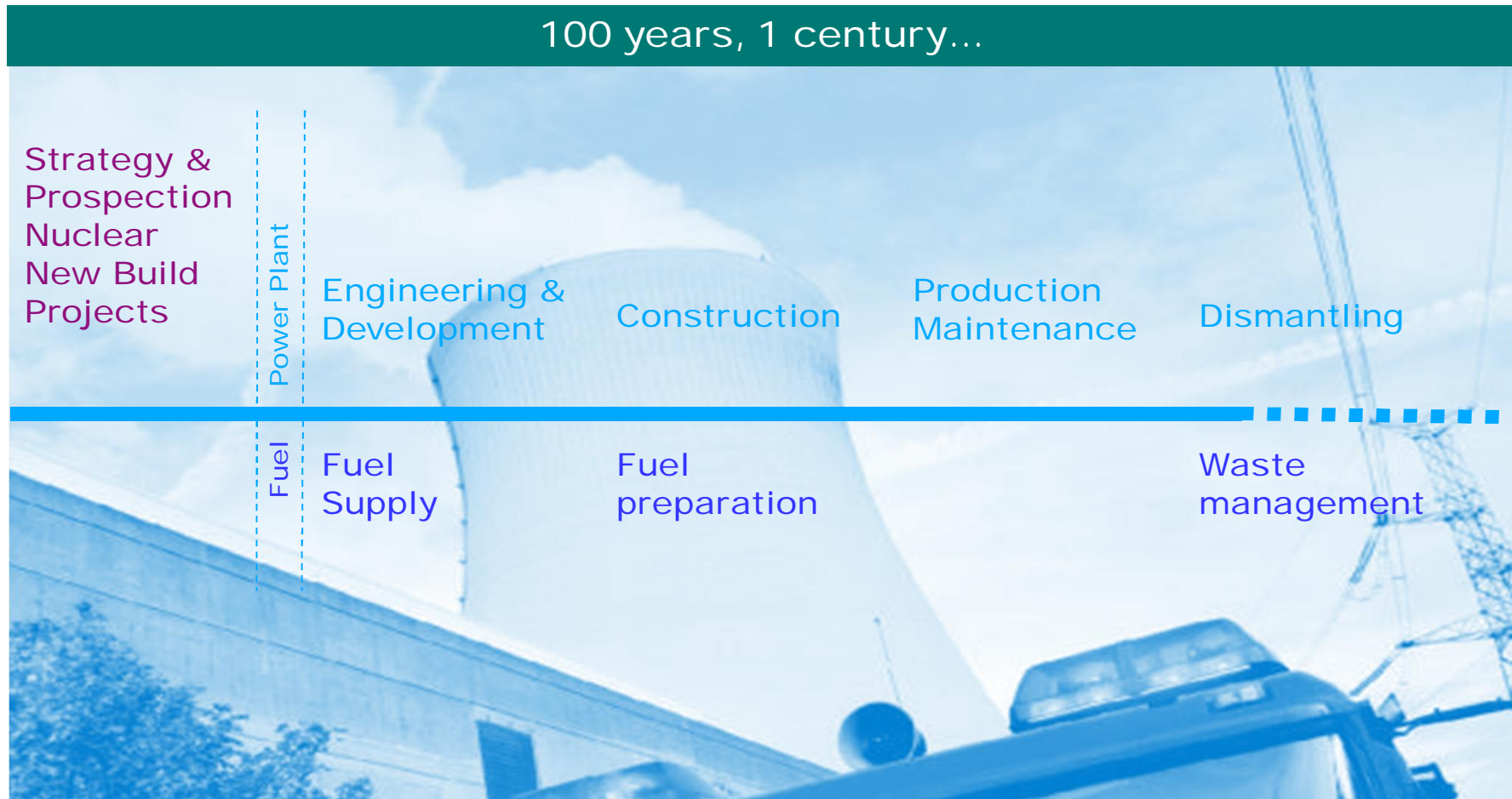
Presentation of the ENGIE group

- 11 entities of the ENGIE group are active in nuclear



- ENGIE recruits around 70 graduate engineers/year

Mastering the whole nuclear value chain



Historical Context

Nuclear Education in Belgium

- High schools : Hasselt - ISIB
- Universities : Gent – ULB/VUB
- Master after master BNEN

Nuclear entities ENGIE

War for talent: challenges to attract and keep young people in nuclear business

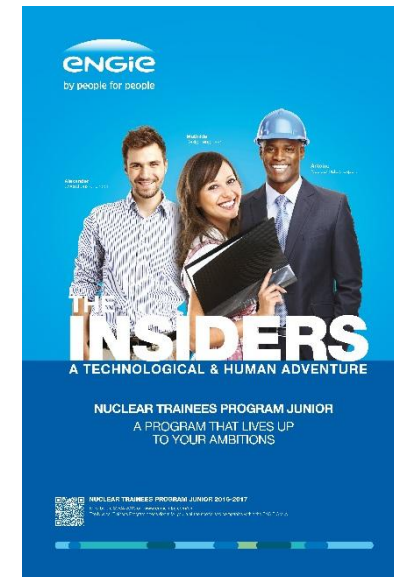
Unbalanced age pyramid in the NPP

→ **NTP = complementary education in ENGIE for graduates in Engineering without a nuclear speciality**

Nuclear Trainees Program – Juniors

RECRUITMENT AND TRAINING

- 10 Tracks - **More than 670 engineers recruited and trained in 10 years**
- Objectives
 - **Anticipate needs** for junior engineers
 - Training to become nuclear « **generalists** » (with a strong technical nuclear grounding)
 - Improve **technical and behavioral skills**
 - Give a **general view** and a discovery of all the aspects of the nuclear activities of the ENGIE Group
 - Improve **synergies** between the nuclear entities of ENGIE
 - Build a strong **network**
 - Share best **practices**
 - Develop **mobility**



10 years Nuclear Trainees Programs (NTP)

- NTP - Junior (tr. 10)** → Nuclear Trainees Program for **junior** engineers (670)
- NTP - Major (tr. 10)** → Nuclear Trainees Program for **experienced** engineers (115)
- NTP - Support (tr. 9)** → Nuclear Trainees Program for **support** services (110)
- NTP - Generation (tr. 4)** → Nuclear Trainees Program for **operation** engineers (35)
- NTP - Technicians** → Nuclear Trainees Program for **technicians** (Pilot Q1 2016)



NTP – JUNIOR : Principles

- Around **410 hours** of training, company visits, seminars, ...
 - Training facilitated **by specialised professionals**
 - Trainings in **English**
 - **Mixed groups** (nationality, entity, job)
 - On **several sites** in Belgium & France
- The trainees are **employed by** a nuclear **entity**



Technical program

- 7 weeks: courses
 - Health & safety - Radioprotection (legal requirement for accessing nuclear sites)
 - Nuclear fundamentals (2 weeks) reactor physics, Thermal-hydraulics, Material issues, ...
 - PWR simulator
 - Nuclear safety
 - Fuel cycle, waste and decommissioning
 - Maintenance

Technical program

- Visits
 - Belgoprocess
 - Underground laboratory (HADES)
 - Hot labs
 - Tihange NPP
 - Exercise in training workshops
 - Exercise on BR-1

Exams

- Database of questions
 - MCQ
 - Qualified ← test screening & analysis + trainees feedbacks
 - Continuous maintenance → consistency with matter
 - Tests = MCQ + certainty degree
 - Pre-test
 - Short test after courses
 - Final exam => certificate
- Accreditation from BSA according to SAR requirement

Facilitators

- From companies working in the nuclear sector
- Research center (SCK.CEN)
- Chosen according to two main criteria:
 - Excellent pedagogical skills
 - Excellent Technical knowledge
- Feedback from the trainees

Non-technical program

Non-technical skills

- Personal development
- Leadership and Team Management module
- Presentation skills module

Creation and reinforcing of the networking

- Boarding day
- Global meetings
- Final meeting

Networking

- Group of friends from different horizons inside (and outside) ENGIE
- Alumni

HOW?

- Mixed groups
- Residential weeks
- Web communities



NTP – JUNIOR : CHARTER

- Mutual commitment
- Behaviour during modules and events
- **Validated certificate** with mention of individual results
- **Trainings & all related activities are**
 - MANDATORY
 - Have **priority on all other activities**

CHARTER of the NUCLEAR TRAINEES PROGRAM for Junior Engineers

Brussels, August 2015

The development of the ENGIE Group and of its subsidiaries depends above all on the worth of its employees and the quality of their work.

Accordingly, the Group offers its employees a safe and pleasant work environment, in which they are able to feel recognised and respected. The Group also aims to provide opportunities both for personal and for career development.

In the framework of this commitment, the ENGIE Group offers to its employees the Nuclear Trainees Program (NTP-J). It consists of theoretical training modules as well as practical training modules.

All the training modules are mandatory and have priority on all other activities.

As an employee of ENGIE and as NTP-J trainee, you will:

- follow the program for its entire duration, visits and to participate to events organised;
- arrive on time to training and attend class generally from Monday 8.30 AM to Friday 5.00 PM;
- participate and make collective/individual hours;
- respect the internal rules of the hosting firm and to have at all times an adequate behaviour;
- behave courteously with all stakeholders;
- comply at all times with laws and regulations.

Thanks to the NTP-J, you will improve your nuclear technical skills but also behavioural and job-related skills. In addition, the program will enable you to build up an extensive network of contacts among players in the nuclear field inside and outside the Group.

Given the scope of the training, the value of its content and the image of the Group that it promotes, the Group expects you to show commitment, motivation and punctuality, both in the training modules and at events organised in connection with the program.

Finally, keep in mind that the results of the technical evaluation made during your one year Traineeship will be taken into account in the annual assessment of your personal objectives.

Jan Martens
Member of the Executive Committee, in charge of Nuclear Development

As junior engineer participating in the Nuclear Trainees Program "Track 10", I acknowledge reception of this charter and commit myself to respect it.

ENGIE Nuclear Trainee (Name): _____

Date: _____

Signature: _____

ENGIE

Conclusion

- High level program widely recognised in ENGIE and outside the group
- Attractive as well for entities as for applying graduates (94% retention)
- Efficient tool for replacing retiring nuclear workforce
- Challenging program for participants
- Strong network cross entities



