

# Encouraging careers in nuclear: The UK's strategy for a sustainable nuclear workforce

By Oleksandra Gudkova



Workers at Sellafield  
(Photo: NDA)

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— *Beccy Pleasant, Head of Skill and Talent, NDA*

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In order to address the widening skills gap caused by the retirement of an ageing workforce in the nuclear industry, the United Kingdom is devising strategies to develop the skills of its young people and encourage them to pursue careers in this sector.

“The United Kingdom is experiencing a nuclear renaissance,” said Lynne Matthews, Education and Skills Strategy Manager at EDF Energy. “In order to build, operate and decommission current and future stations, we need to ensure we have the skills needed.”

One of the ways of addressing this gap, Matthews added, is to support public understanding and acceptance of nuclear through programmes and activities and inspire the young to choose careers in this industry.

## Nuclear for children

The Pod is an education programme promoted by EDF Energy, the largest producer of low-carbon electricity in the UK. The programme provides free resources for teaching children and adolescents aged between 4 and 14 years about topics in energy, waste, water, transport, biodiversity and climate change.

EDF Energy developed the Pod in 2008 to help meet its goal of engaging 2.5 million children by 2012 in education programmes

about the sustainable use of energy. Today, it has more than 22 000 registered schools, with more than 10 million children and 32 000 teachers registered in the programme. More than 200 schools from 54 other countries have also joined.

“The Pod provides ideas for teachers to use in the classroom, such as games and competitions. This interactive approach helps students have fun while learning about sustainable development and energy saving, Matthews explained.

“We are starting with primary schools and working all the way to university level. We also have nuclear site tours to help dispel any myths about nuclear. We want to encourage openness, transparency and trust.”

Within the scope of its educational activities, EDF Energy also provides opportunities for young people to enrol in training workshops and graduate and post-graduate programmes. These opportunities give students the chance to develop their academic qualifications while gaining field experience. They also equip them with the skills necessary to build a successful career in the nuclear industry.

## Focused national strategies

Other activities are being carried out on the national level. The United Kingdom’s

Nuclear Skills Strategy Group (NSSG) was established to coordinate the efforts of all the major nuclear players in the sector. It has developed a clear action plan of collaborative initiatives which address the attraction, development and mobilization of a nuclear workforce. Each of these initiatives is sponsored by organizations within the sector, with Government agencies also playing a role.

Feeding into the NSSG Strategic Plan is the National Decommissioning Authority's (NDA) People Strategy, which is designed to ensure that the UK's decommissioning sector has the skills and capability to deliver its mission.

"This strategy covers a range of aspects, from attracting young people into the industry through targeted skills interventions at schools and developing fit-for-purpose apprenticeship programmes, right through to the development and redeployment of skills to ensure that they stay within the sector," said Beccy Pleasant, Head of Skill and Talent at the NDA.

Another programme has been developed by Sellafield, the country's fuel reprocessing and nuclear decommissioning site. "It offers nuclear degree apprenticeships for young people who are looking for an alternative to going to university," Pleasant said. "This is just a selection of the work being developed by the NDA to ensure the ongoing availability of a talented workforce for decommissioning."

## WOMEN IN NUCLEAR

### Helena Zhivitskaya

**Vice-Rector, Belarusian State University of Informatics and Radioelectronics, Scientific Secretary of the Regional Network for Education and Training in Nuclear Technology STAR-NET**



With more than 15 years of managerial experience, Dr. Zhivitskaya oversees quality control and development of educational curricula, including the 'Instrumentation and Control Systems for Nuclear Power Plant' degree programme, among others. She is a core contributor to the 'Belarus educational programme for Nuclear Energy 2008-2020'. She is also the author of more than 170 scientific

works and publications, including four monographs and 11 textbooks. She is one of the initiators and leaders of the creation and operation of the Regional Network for Education and Training in Nuclear Technology STAR-NET.

*"Safe development of nuclear energy is key to solving the energy problems facing society. In the era of globalization and fast-paced development, a new generation of nuclear technology professionals must continuously develop their knowledge, creativity and propensity for innovation. Increasing public awareness of the immense benefits of nuclear energy, and therefore improving its image amongst non-professionals, is crucial to attract highly qualified personnel."*

## An IAEA curriculum for nuclear science

A career in nuclear can be made more attractive thanks to the Compendium, an IAEA tool that aims to increase awareness and appreciation of nuclear science among young people.

The Compendium, which is being tested by the IAEA and education experts from several countries, devises unique teaching strategies and materials to introduce science and technology in education systems.

Prepared under an IAEA technical cooperation project, the Compendium was developed with technical input from experts in Australia, Finland, India, Israel, Japan, the Republic of Korea, the United Kingdom and the United States. The projects involved putting together a collection of extracurricular programmes and activities for secondary school teachers and students aimed at increasing curiosity, awareness and knowledge among students.

The Compendium proposes nuclear topics for secondary education, while the modular nature of the materials allows teachers and students to choose activities that meet their specific needs.

The Compendium was launched in 2015 as a pilot in Indonesia, Malaysia, Philippines and the United Arab Emirates, with prospects of applying it in more countries, including Jordan, Sri Lanka and Thailand, at their request.