

Skills Viewpoint:

Claire Gallery-Strong

'Nuclear Decommissioning Age is here.'





This is one of my treasures. A glimpse into the lives of people in the United Kingdom in the post World War II era. Articles on human hardship sit alongside the story of the decade - 'Nuclear age is here'. It really brings it home to me the climate that the scientists of these decades were working in - a race to bring the UK to the world stage and hold its own in the nuclear age of atomic bombs.



Claire Gallery-Strong

Head of Integrated Waste Management Programme

Nuclear Decommissioning Authority

Views all my own

So today, nearly 65 years later, we are grappling with the challenges from this early post war work. Perhaps we should seek to title a new headline for us - the Nuclear Decommissioning Age is here. We are entering into a new world stage as nuclear reactors around the world are coming to their life ends whilst countries such as China and India have embarked on ambitious programmes to secure their nuclear energy supplies. It is time for us to think differently, no longer around decommissioning at the back end of the nuclear process. Decommissioning and waste is in itself a significant industry.

We could never have imagined the skills we would need for waste and decommissioning management when facilities were first being designed and built. In fact, many of the jobs that are core to our sector today were not in existence when these facilities were being built. Trades have been displaced and new professions and ways of working have risen.

So here it is, my views on the skills we need in the integrated waste management sector moving forward. A futuristic look at skills needs.

Top Skill #1 **Sustainability**

Who would have imagined that the global challenge for circular economies and net carbon zero would put lower Carbon cement as one of the top ten emerging global technologies in 2020. Use of cementitious powders for radioactive waste disposal for immobilisation and as an engineered barrier is established industry practice. As we move forward to address the global carbon challenge, emphasis on sustainability and how we embed thinking into our decision making process will have to shift. Examining new capabilities such as lower carbon cements (one of the World Economic forums top 10

2020 technologies) which helps to combat climate change will need to become standard practice. Its an opportunity to attract new talent and encourage future professionals to see waste management as a career of choice- a career where they can make a difference.

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Top Skill #2 **Data and Artificial Intelligence (AI)**

Imagine a technology which goes beyond virtual and augmented reality. Where physical and digital worlds are merged. This is the next big breakthrough- Spatial Computing. The benefits that can be brought to decommissioning by applying digital thinking to the existing challenges. We are already moving to adopt digital twins and cloud based approaches. It is time now to invest in the digital skills for this



field, bring application of technologies into our skills set and actively create a platform for this skill to be part of how we do our business.

Top Skill #3

Skill group – Critical thinking, problem solving and agility

Time to move away from the focus on trades and professions and think broader around the skill set most important to deal with the nuclear decommissioning challenge. At the forefront of the decommissioning wave is the time to capture the learning and create and hone the skills for the future. Focussing on the 'what' skills rather than the 'how' skills will change. Let's start now with thinking about what sort of thought processes we need, not just the focus on the 'hands on' skills.

It is my ambition to make waste a profession of choice. A career which is exciting and attractive. When I look forward at the possible future skills needs, it has a sense of vibrancy, lets think differently and look at how we can broaden so we adapt and utilise new skills, new people and create waste professionals who pioneer our sector into a Nuclear Decommissioning Age. 

About Claire:

Claire Gallery-Strong has developed her career working across a variety of sectors including pharma, environmental and nuclear. Currently she is Head of Programme for Integrated Waste Management at the Nuclear Decommissioning Authority.

Graduating from NUI Galway, Ireland, she moved to the UK to develop in the field of chemistry. Following an interest in analytical sciences, she studied an MSc at Kings College London.

Recognising the need to continue to grow and develop, she has recently completed an MBA at Henley Business School. Her nuclear experience spans roles from nuclear operations, project, programme and portfolio management through to developing radioactive waste strategies. She has developed her leadership capabilities directing engineering and science programmes.

She has worked across two nuclear licenses sites and developed a track record of delivery in the field of waste and decommissioning.

In her volunteering capacity she regenerated the Young Generation Network in 2000 and built a sustainability plan to enable a thriving network. For her significant growth of the YGN, she was awarded a lifetime achievement recognition by BNES (now the Nuclear Institute). She has recently been recognised for her contribution to the field of science and engineering through an appointment as Trustee for the Royal Society of Chemistry.