

Anticipating and preparing for a changing landscape

The sessions under this theme will look farther ahead, anticipating how the future landscape may look in the decades ahead, and considering how safeguards may need to adapt and continue to evolve. Topics on interest include:

- Future operating environment in 2050; scenarios for how the nuclear landscape may evolve in the next fifty years, in terms of stakeholders, technology, trade and the policy environment
- The most impactful drivers of change; the future of nuclear energy in meeting global energy demand, new types of nuclear fuel cycles and facilities (e.g. advanced reactors and SMRs), and nuclear industry operating models
- Transformative technological advancements such as artificial intelligence (e.g. smart devices), automation (autonomous vehicles) and ubiquitous robotics, all with significant impact on societies
- Possible risks arising from the non-nuclear technologies (e.g. additive manufacturing, quantum computing, the dark web)
- Implications for safeguards concepts, approaches, technologies and competencies.