

SDG Perspective

Partnerships for the goals (SDG17)

UK Perspective

Nuclear promotes progress towards the achievement of the 17 UN Sustainable Development Goals more than any other energy technology. The UK has long been a leader in the global debate about climate policy. Part of its large international development aid programme is aimed at helping poorer nations accelerate their transition away from fossil fuel dependence.

Due in part to its pioneering role in the nuclear energy industry, the UK is well poised to nurture partnerships with governments, civil society organisations, trade unions, and educational and research institutes as well as the UN and other international bodies such as the Commonwealth.

The huge job creation impact of new nuclear construction makes the industry a natural partner for developing countries emerging from the Covid-driven economic slump. The attractive employment opportunities for women in nuclear address SDG 5, while the quality of the jobs promotes SDGs 3 and 10.

Particularly exciting new partnerships will be created in countries where investment in new nuclear plants is being made for the first time. These include Bangladesh, Egypt, Turkey and Poland. By making the construction of new nuclear plants part of their post-Covid recovery strategies these countries can ensure that sustainability is a foremost priority.

The success of this approach will be enormously helped by partnerships for the SDGs. In addition to the types of partnership already mentioned, cooperation between national regulators can lead to more harmonization of safety standards and more secure international supply chains. Recognition that providing all communities with affordable clean energy needs both nuclear and renewable energy could give rise to other productive global partnerships as well.

European Perspective

Many European countries have been using nuclear energy since the early years of its development; some have become international players in the nuclear industry, having a strong nuclear R&D infrastructure and skilled workforce. Virtually all European countries have at least developed the nuclear competencies required to perform nuclear R&D and maintain regulatory compliance. This nuclear infrastructure and strong knowledge base is a product of collaboration among European countries that was normalized in the 1990s when new plant construction was less common and an interest from other countries in new projects was typical.

On nuclear R&D, various EURATOM framework programs allowed for a more consent-driven and coordinated approach among European nuclear R&D (including the European Joint Research Centers). This was strengthened even further with the Sustainable Nuclear Energy Technology Platform (SNETP) that convenes almost all nuclear actors within Europe to develop shared goals for nuclear development.

The continuous need for a skilled nuclear workforce and to attract young professionals to the field, coupled with an observed reduction in the output of talent from nuclear educational programs, led to the creation of the European Nuclear Education Network (ENEN). ENEN provides a model for other regions in the world to undertake similar approaches.

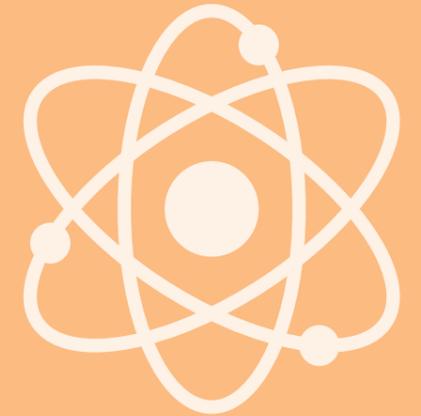
European nuclear actors and the European Union (via various mechanisms such as EU DEVCO) are pursuing international collaboration regarding the safe use of nuclear energy as well as action on sustainable development and the affordable use of nuclear energy in diverse regions around the world.

US Perspective

Rapidly developing countries typically face high population growth, leading to a high rate of increase in electricity demand. While addressing climate change is important, developing countries cannot afford to risk hindering economic growth, and so rely on heavy carbon-emitting energy. However, developed countries like the United States have a unique opportunity to change this.

With the highest Gross Domestic Product in the world, the U.S. has the ability to invest financial resources in emerging nuclear technologies with the expectation that they can be used to provide clean and reliable power to developing countries. Currently, the U.S. Nuclear Regulatory Commission (NRC) has 45 bilateral agreements with other countries that are used to share technical and regulatory information to primarily developing countries with smaller or nascent commercial programs. Although the NRC is considered a leader in the global nuclear community, a lack of nuclear innovation has allowed the U.S. to fall behind other countries in nuclear energy leadership.

According to the International Atomic Energy Agency, a “solid group” of about a dozen countries are expected to be in prime positions to build their first nuclear reactor in the coming decade, around the same time advanced reactors are expected to be ready for commercialization. Countries like Egypt and Belarus have already taken the initiative to join the IAEA and begin their nuclear energy programs. As member states, they will have access to support from the global nuclear energy community, including from the NRC, in order to develop advanced nuclear programs that can safely, effectively, and sustainably help eliminate poverty and hunger.



Infrastructure and Transport Perspective

Participating in a virtual panel discussion on ‘Partnership for the Goals’ at the World Health Summit (WHS) in Berlin, IAEA Director General Mr Rafael Mariano Grossi said there is a clear need for United Nations agencies, research organizations and civil society groups to organize more closely around common issues to take collective action toward achieving the 17 United Nations Sustainable Development Goals (SDGs).

And it is the IAEA that is making significant contributions to these goals through the promotion of nuclear technology in green power generation, pharmacy, and food production.

Since the early days of nuclear power, the nuclear industry has recognised the importance of developing lasting partnerships with governments, NGO’s, educational institutes, and many UN bodies such as the IAEA.

It is out of these co-operations that many of the cornerstone principles of nuclear transport were formed; principles that protect workers, the population, and the environment during the transport and subsequent safe use of nuclear material.

As more countries embrace nuclear energy to meet their climate goals the lessons learned and experience gained, from those nations that adopted this technology first, will give valuable insight towards a safe and successful program.

New technology will also figure prominently in future legislation. SMR production may include the fuelling and sealing of reactors, as part of the construction process, prior to transporting the SMR to the chosen site of operation. Similarly, at the end of its operating life, the SMR may need transporting to a decommissioning facility with spent fuel still inside.

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