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What is the UNEP and how does it work?

The United Nations Environment Programme is responsible for the coordination of the UN's responses to environmental issues. Its jurisdiction ranges from climate change related problems to the development of green economies to the management of marine and terrestrial ecosystems. It is currently based in Nairobi, Kenya. As climate change becomes an increasingly controversial and hotly debated issue, whether responsibility for it lies among the already developed Western nations or the current global emitters, the UNEP will become an increasingly important UN forum. More information can be found in the guidance documents available on the WESMUN website.

Background

After the 1986 Chernobyl disaster, public fear of nuclear power led to a near halt in reactor construction, with several countries opting to phase out nuclear energy entirely. However, growing energy demands, concerns over greenhouse gas emissions, and fluctuating fossil fuel prices reignited interest in nuclear power, leading to predictions of a nuclear renaissance.

As of 2004, the United States was the largest producer of nuclear energy, contributing 28% of global capacity, followed by France (18%) and Japan (12%). By 2007, 31 countries were operating nuclear power plants. In September 2008, the International Atomic Energy Agency (IAEA) projected that nuclear power would maintain a 12.4% to 14.4% share of global electricity production through 2030.

Following the Fukushima disaster in 2011, global nuclear energy production declined. By 2013, the IAEA reported 390 operational nuclear reactors worldwide, more than 10% fewer than before Fukushima and the same number as in 1986. Despite these setbacks, Asia emerged as the key growth market for nuclear energy, driven by rising energy demands in the region. As of 2014, 63% of all nuclear reactors under construction globally were located in Asia, although energy policies in countries like Japan and South Korea remained uncertain.

Current situation

In recent years, global interest in nuclear energy has seen a resurgence, with its role in combating climate change and ensuring energy security being key drivers. As of 2024, over 60 nuclear reactors are under construction worldwide, with most located

in Asia, which continues to dominate the growth of nuclear power. Countries like China and India are leading the expansion, while Southeast Asia explores potential nuclear projects to meet rising energy demands.

Europe remains divided on nuclear energy. While some countries, such as France and Finland, are investing in new reactors and advanced technologies, others, like Germany, have phased out nuclear power due to public opposition and safety concerns. The European Union is increasingly focusing on nuclear power as part of its strategy to achieve net-zero emissions, with small modular reactors (SMRs) gaining attention as a more flexible and cost-effective option.

In Africa, interest in nuclear energy is growing, with several nations exploring its potential to address energy poverty and support industrialisation. South Africa currently operates the continent's only nuclear power plant, but countries such as Egypt, Ghana, and Nigeria have signed agreements to develop their nuclear programs, often with international partnerships.

North and South America have seen mixed trends. In the United States, aging reactors and competition from cheaper renewable energy sources have limited growth, although there is renewed interest in advanced nuclear technologies. Latin America, meanwhile, has shown steady but modest progress, with countries like Brazil and Argentina maintaining their existing nuclear capacities while exploring opportunities for expansion.

Globally, the Middle East is emerging as a new player in nuclear energy, with countries like the United Arab Emirates and Saudi Arabia investing heavily in nuclear projects. These nations view nuclear power as a means to diversify their energy mix and reduce reliance on fossil fuels, aligning with long-term sustainability goals.

Despite regional variations, nuclear energy now accounts for approximately 10% of global electricity production. Its role in reducing greenhouse gas emissions has gained renewed recognition, but challenges remain. High construction costs, lengthy project timelines, and public opposition continue to pose significant hurdles. As nations seek to meet growing energy demands while achieving climate targets, the global nuclear energy sector will likely rely on technological advancements, international collaboration, and supportive policies to sustain its growth. Another key question remains how to ensure safety; how can delegates prevent the calamities of Chernobyl and Fukushima repeating in the future, particularly against the backdrop of nuclear proliferation and the risk of nuclear terrorism?