

ENERGY AND SUSTAINABLE DEVELOPMENT

None of the eight Millennium Development Goals (MDGs) adopted by the United Nations in 2000 directly addressed energy, although for nearly all of them — from eradicating poverty and hunger to improving education and health — progress has depended on greater access to modern energy. Thirteen years later, energy is being given more attention. The target date for the MDGs is 2015, and in 2012 the UN began deliberations to develop sustainable development goals to guide support for sustainable development beyond 2015. *The Future We Want*, the outcome document of the 2012 United Nations Conference on Sustainable Development (also known as Rio+20) gives energy a central role: “We recognize the critical role that energy plays in the development process, as access to sustainable modern energy services contributes to poverty eradication, saves lives, improves health and helps provide for basic human needs.”

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In its Report, *Our Common Future*, published in 1987, the Brundtland Commission⁴ defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs,” and that has remained the fundamental definition ever since.

Nuclear power’s role in sustainable development was thoroughly debated at the ninth session of the UN Commission on Sustainable Development in 2001. While national views differed regarding nuclear power’s role in sustainable development strategies, there was unanimous agreement that the choice of nuclear energy rested with countries.

Those who conclude that nuclear power is inconsistent with sustainable development emphasize the risks of nuclear accidents and the fact that there is not yet an operating final repository for high-level nuclear waste.

Those who consider nuclear power an important part of sustainable development

emphasize that the Brundtland Commission’s definition of sustainable development focuses on growing assets and opening options — not foreclosing them. Nuclear power broadens the resource base by putting uranium to productive use. It reduces harmful emissions and expands the supply of electricity. Nuclear power increases the world’s stock of technological and human capital. And finally, nuclear power is ahead of other energy technologies in ‘internalizing’ all external costs, from safety to waste disposal to decommissioning. ‘Internalizing’ costs means that the costs of all of these activities are largely already included in the price we pay for nuclear electricity. Were the environmental costs arising from the use of fossil fuels ‘internalized’ in the price paid for them, the price we would pay for the electricity produced using fossil fuels would be considerably higher.

National governments need to compare the relative benefits and there needs to be public discussion on the subject.

The first task of sustainable development is often defined as bringing energy, particularly electricity, to the fifth of the world’s population without it. For the rural poor, much is being done to make full use of renewable energy technologies that operate in remote areas not connected to electricity grids, says IAEA energy planning expert Alan McDonald. “For the urban poor and the needs of growing megacities, the mix needs to include large centralized power generation to match large centralized power demand. Nuclear power plants provide large amounts of steady power to help meet such demand. Moreover, as countries extend their electricity grids to ‘connect the unconnected’ and expand electricity access, the benefits of large sources of steady power will become increasingly widespread”, McDonald explains.

⁴The World Commission on Environment and Development was established by 1983 United Nations General Assembly resolution 38/161 to propose long-term environmental strategies for achieving sustainable development. United Nations Secretary General, Perez de Cuellar, requested the Norwegian Prime Minister, Gro Harlem Brundtland, to chair the World Commission on Environment and Development, often referred to as the ‘Brundtland Commission’.