

The implications of nuclear energy

Source: CVCE. European Navigator. Étienne Deschamps.

Copyright: (c) CVCE.EU by UNI.LU

All rights of reproduction, of public communication, of adaptation, of distribution or of dissemination via Internet, internal network or any other means are strictly reserved in all countries.

Consult the legal notice and the terms and conditions of use regarding this site.

URL: http://www.cvce.eu/obj/the_implications_of_nuclear_energy-en-aa063985-c495-4b7e-a5d1-3f9f4cbc36e4.html

Last updated: 08/07/2016



The implications of nuclear energy

In the mid-1950s, nuclear energy enjoyed widespread support. Many scientists and political leaders highlighted the new promise that peaceful use of the atom seemed to hold. Nuclear energy was seen as a key factor in strategic and economic terms. After being considered for a long time as an instrument for achieving military ends, nuclear energy was increasingly emerging as an alternative energy source for civilian use. This explains why, shortly after the death of Stalin, the US Government, convinced that the Soviet Union had made up lost time in nuclear development, decided to carry out a partial declassification of information and open the way for the development of industrial applications of nuclear energy in the United States and the free world. On 8 December 1953, President Dwight D. Eisenhower announced his 'Atoms for Peace' programme to the United Nations General Assembly. In particular, this programme set out to make reactors and fissile material available to other nations. Four years later, this led to the establishment in Vienna of the International Atomic Energy Agency (IAEA), under the aegis of the UN. In August 1954, the MacMahon Act was amended to enable atomic secrets to be shared. A privately owned nuclear industry could thus develop in the United States, with scope for selling patents, reactors and enriched uranium abroad. Finally, rounding off this process, an international scientific conference was held in Geneva in 1955 to address the peaceful applications of nuclear power. Henceforth, it was to be a key international issue.

Europe was equally enthusiastic about nuclear energy. The period of economic growth sustained by post-war reconstruction resulted in increased energy consumption, but conventional sources such as coal, or even oil, were unable to cope with demand. In 1953, the leading Western European nations set up the European Organisation for Nuclear Research, subsequently referred to by its French acronym CERN, for exclusively scientific ends focusing on fundamental research. The following year, the Organisation for European Economic Cooperation (OEEC) instructed Louis Armand, the Chairman of French Railways (SNCF) and Director of Industrial Applications at France's Atomic Energy Commission (CEA), to draw up a report on the energy difficulties facing Europe. In the meantime, the Common Assembly of the European Coal and Steel Community (ECSC) had entrusted Pierre Wigny, the former Belgian Minister for the Colonies, with the drafting of a preliminary report on energy trends in countries belonging to the Community. Two years later, the Belgian Ministry of Economic Affairs published a report on 'The energy problem in Belgium. Supply and demand for the 1955–75 period'. The report concluded that coke production would prove increasingly unable to meet the country's requirements and highlighted the future role of oil, nuclear energy and hydroelectric power stations. Research continued apace, fuelling a succession of reports. But they all confirmed the energy-related challenges facing Europe and the importance of nuclear energy. The threat of an energy deficit would leave Europe increasingly dependent on its suppliers, in particular the United States and the Middle East. In turn, this would cause political and monetary difficulties, given the balance of payments deficit. The Suez Crisis in 1956 only served to underline the need to secure Western Europe's energy supplies. In conclusion, only nuclear energy seemed able to meet the growing demand for electricity, which, according to the experts, would increase threefold between 1955 and 1975. It was imperative that Europe should encourage the production of large amounts of low-cost nuclear-powered electricity.