

Sweden

1. Location and capability of nuclear facilities

Sweden's nuclear industry

Sweden has had twelve nuclear power reactors providing about half its electricity. The first nuclear power was generated in 1972. Six reactors entered commercial service in the 1970s and six in the 1980s. The reactors are at four sites around the southern coast.

Nuclear Electricity Generation 2002- 65574 GWh(e)

Uranium required 2003 for nuclear power reactors- 1536 tons

<http://www.world-nuclear.org/info/reactorsprint.htm>

Research Reactors

Operational – 2 (R-2 and R2-0)

Shut Down –1 (R-1)

Decommissioned –1 (Kritz)

Under Construction - 0

Planned - 0

Nuclear Power Reactors

Operational –11 (Barsebeck-2; Forsmark 1, 2 , and 3; Oskarshamn 1, 2, and 3; Ringhals 1, 2, 3, and 4)

Shut down –2 (Agesta and Barsebeck-1)

Uranium Mines (formerly)

The former AB Atomenergi uranium mill at Ranstad is now operated by Ranstad Mineral AB to recover residual uranium from various kinds of wastes from the nuclear fuel industry.

<http://www.antenna.nl/wise/uranium/uoer.html#SE>

2. Fissile Material Holdings

Plutonium Discharges: 36 tons

<http://www.isis-online.org/publications/puwatch/puwatch2000.html>

Waste Disposal

An underground repository for low and intermediate level waste has been operating near the Forsmark nuclear power plant since 1988. This repository consists of four rock caverns for different types of wastes, and a rock silo for the most active components of ILW.

Spent fuel is shipped by sea to the interim store situated by the reactor site at Oskarshamn.

The Swedish Nuclear Fuel and Waste Management Company (SKB) has been investigating potential sites for a final repository. The locations considered are Östhammar or Oskarshamn. According to the SKB plans, a repository should be operational by the year 2015.

http://www.enviros.com/vrepository/not_subscribed/country/sweden/index.cfm

http://www.world-nuclear.org/info/printable_information_papers/inf42print.htm

3. Nuclear Activities

Nuclear Research Centers

Äspö Hard Rock Facility

Äspö Modelling Task Force

KTH Dept of Nuclear Power Safety

NFL - Neutronforskningslaboratoriet i Studsvik

NUTEK - National Board for Industrial & Technical Development

Resursförmedlingen Norden

SLU Department of Radioecology

SKC - Svenskt kärntekniskt centrum / Swedish Centre for Nuclear Technology

TFR - Teknikvetenskapliga Forskningsrådet

Nuclear Cooperation

The Swedish Nuclear Fuel and Waste Management Company (SKB) has a broad network of international contacts and is party to formal collaboration agreements with the following organizations: Euratom (EU), TVO/IVO (Finland), CEA/ANDRA (France), JNFL (Japan), AECL (Canada), Nagra (Switzerland), and USDOE (USA).

The following organizations have signed participation agreements in the Äspö Hard Rock Laboratory project: Atomic Energy of Canada Limited (AECL), Power Reactor & Nuclear Fuel Development Corporation (PNC) and Central Research Institute of Electric Power Industry (CRIEPI) of Japan, ANDRA of France, TVO of Finland, NIREX of UK, and Nagra of Switzerland.

<http://www-pub.iaea.org/MTCD/publications/PDF/cnpp2002/Documents/Documents/Sweden%202002.pdf>

4. International Nonproliferation Efforts

Treaties Signed and Ratified, date of deposit

APM Convention (Mine-Ban Convention), 30 November 1998

Biological Weapons Convention, 5 February 1976

Certain Conventional Weapons Convention, 7 July 1982

Comprehensive Test Ban Treaty, 2 December 1998

Chemical Weapons Convention, 17 June 1993

Nuclear Non-Proliferation Treaty, 9 January 1970

Open Skies Treaty, 28 June 2002

Outer Space Treaty, 11 October 1967

Partial Test Ban Treaty, 9 December 1963

Sea Bed Treaty, 28 April 1972

Sweden signed the Additional Protocol, 22 September 1998.

Multilateral Groups

Conference on Disarmament

Hague Code of Conduct against Ballistic Missile Proliferation

5. Positions Taken in International Fora on Various Issues of Nuclear Disarmament

Nuclear proliferation: "North Korea has withdrawn from the Nuclear Non-proliferation Treaty and remains unclear about its intentions. The nuclear program in Iran, the possession of nuclear weapons by India and Pakistan, and Israel's refusal to sign the NPT continue to cause concern. In several countries nuclear weapons are accorded a growing importance in military doctrines. Discussions in the United States about the creation of a new generation of smaller nuclear arms are worrying. Such weapons would not contribute to a safer world, but risk lowering the threshold for the use of nuclear weapons." - **Mr. Jan O. Karlsson, Acting Minister for Foreign Affairs and Minister for Development Cooperation, Migration and Asylum Policy of Sweden at the 58th Session of the General Assembly, September 25, 2003.**

Compliance: "The threats from weapons of mass destruction can only be met by multilateral efforts. The negative arms spiral must be reversed. The Non-Proliferation Treaty must be universally complied with. Sweden continues to work for this goal, together with its partners in the New Agenda Coalition. [...] The UN has a vital role in the enforcement of existing Weapons of Mass Destruction regimes. It is crucial that the UNMOVIC expertise is retained. [...] The European Union has developed a common policy on weapons of mass destruction, and has decided to become more actively engaged in this field. [...] We need new ideas on disarmament and non-proliferation, and on how to strengthen existing regimes." - **Mr. Jan O. Karlsson, Acting Minister for Foreign Affairs and Minister for Development Cooperation, Migration and Asylum Policy of Sweden at the 58th Session of the General Assembly, September 25, 2003.**

CTBT: "The Treaty [CTBT] is now an important part of the multilateral disarmament and non-proliferation regime. But its continued failure to enter into force carries a great risk of undermining that very same regime. [...] My own has initiated an independent international commission on disarmament and non-proliferation of weapons of mass destruction, to be chaired by Dr. Hans Blix. We hope that this group will give new energy to the international work against weapons of mass destruction, new impulses to the international debate and new recommendations on what we can do together." - **Hans Dahlgren, Sweden State Secretary at the Conference on Facilitating the Entry into Force of the Comprehensive Nuclear-Test-Ban Treaty, 3 September 2003.**