

# Hungary

## 1. Location and capability of nuclear facilities

Hungary's main energy resources are coal and lignite. Hungary is also a producer of crude oil and natural gas. Today, nuclear energy comprises more than a third of its total energy production. It has four nuclear power reactors, the first of which began operating in 1982.

There are no nuclear power plant suppliers in Hungary, the main components of the Paks nuclear power plant were made abroad, in Russia and the Czech Republic.

<http://www-pub.iaea.org/MTCD/publications/PDF/cnpp2003/index.htm>

<http://www.world-nuclear.org/info/reactors.html>

<http://www.uic.com.au/nip92.htm>

### **Power Reactors**

Operational: 4

Shut down: 0

Decommissioned: 0

Planned: 0

<http://www.iaea.or.at/programmes/a2/>

### **Research Reactors**

Operational: 2

Shut down: 0

Decommissioned: 1

Planned: 0

<http://www.iaea.or.at/worldatom/rrdb/>

### **Uranium Mines**

Pécs Mecsek (Baranva province) - closed

Hungary has some uranium reserves, but no present production. All fuel supply is contracted from Russia, though arrangements are in place to allow the use of BNFL fuel.

<http://www.uic.com.au/nip92.htm>

## 2. Fissile Material Holdings

**Separated Civil Plutonium-** 7.5 tons (end 2003)

[http://www.isis-online.org/global\\_stocks/end2003/plutonium\\_watch2005.pdf](http://www.isis-online.org/global_stocks/end2003/plutonium_watch2005.pdf)

### **Radioactive waste disposal**

*Low- and intermediate-level waste:* Low- and intermediate-level waste from the Pécs plant is stored in an Interim Storage Facility for five years and then transferred to dry storage there. A low-level waste repository operates at Puspökszilagy for institutional (non-nuclear) radioactive wastes. An underground repository site was built near the village of Bátaapáti in 2005.

*High-level waste:* Due to interim storage facilities, the government decided that there is no immediate need to establish a high-level waste repository before the middle of the century. However, exploratory work has been done in a clay stone formation and, based on existing data, a country-wide screening took place looking for potential sites. The long-term policy of high-level waste management is now in preparation. <http://www.nea.fr/html/rwm/rf/hungary.pdf>; <http://www.golder.com/default.asp?LID=1&PID=653>

## 3. Nuclear Activities

### **Research Programs**

KFKI AEKI: Atomic Energy Research Institute of the Hungarian Academy of Sciences

MTAKK: Chemical Research Center

Fodor Jozef National Public Health Center

Frederic Joliot-Curie National Research Institute for Radiobiology and Radiohygiene

VEIKI: Institute for Electrical Power Research

Institute for Isotope and Surface Chemistry of the Hungarian Academy of Sciences

IKI: Institute of Isotope & Surface Chemistry -

Institute of Nuclear Research - Debrecen  
Institute of Nuclear Techniques  
MTA; Magyar Tudomá Akadé of the Hungarian Academy of Sciences  
Research Institute for Particle & Nuclear Physics  
AKKL: Research Laboratory of Materials & Environmental Chemistry  
<http://www.radwaste.org/research.htm>

### **Nuclear Cooperation**

*US/European Commission:* Provided funding (US\$7 million) for a four year safety project at the Paks nuclear power plant.

*Canada, France, Romania, UK, US:* Hungarian Atomic Energy Authority maintains mutual information exchange agreements with counterpart organizations in Canada, France, Romania, UK, and US.  
<http://www-pub.iaea.org/MTCD/publications/PDF/cnpp2003/index.htm>

*Russia:* Hungary imports 80% of its gas consumption each year solely from Russia. Some spent fuel is sent to Russia for reprocessing. <http://www.uic.com.au/nip92.htm>

*Australia:* In 2006, Australian based Whildhorse Energy Ltd. sought out uranium exploration at Pécs and several other locations.

*IAEA:* The Hungarian Atomic Energy Authority is an authorised counterpart of International Atomic Energy Agency (IAEA) and of the OECD Nuclear Energy Agency (NEA) and co-ordinates the Hungarian participation in their activities.

## **4. International Nonproliferation Efforts**

### **Treaties Signed and Ratified, date of deposit**

Antarctic Treaty, 27 January 1984  
APM Convention 6 April 1998  
Biological Weapons Convention 27 December 1972  
Certain Conventional Weapons Convention 14 June 1982  
Chemical Weapons Convention 31 October 1996  
Comprehensive Nuclear Test-Ban Treaty, 13 July 1999  
Convention on the Physical Protection of Nuclear Material, 4 May 1984  
Nuclear Non-Proliferation Treaty, 27 May 1969  
Outer Space Treaty, 26 June 1967  
Seabed Arms Control Treaty, 13 August 1971  
Vienna Convention on Civil Liability for Nuclear Damage, October 1989  
[http://www.iaea.org/Publications/Documents/Conventions/liability\\_status.pdf](http://www.iaea.org/Publications/Documents/Conventions/liability_status.pdf)

Hungary ratified the IAEA Additional Protocol 4 April 2000.

### **Multilateral Groups**

Australia Group  
Conference on Disarmament  
Hague Code of Conduct against Ballistic Missile Proliferation  
Missile Technology Control Regime  
Nuclear Suppliers Group  
Wassenaar Arrangement  
Zangger Committee

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

*Compliance:* "The proliferation of weapons of mass destruction and their delivery systems constitutes a major threat to international peace and security. The most important challenge faced by the international community in this context is non-compliance with the Nuclear Non-proliferation Treaty (NPT). My Government sincerely hopes that the next NPT review cycle will ultimately bring tangible results, and urges all nations to make genuine contributions to that effect." - **Statement by H.E. Ms. Kinga GNCZ, Minister of Foreign Affairs in the General Debate of the 61st Session of the General Assembly, New York, 25 September 2006.**

<http://www.reachingcriticalwill.org/political/1com/1com06/disarminde06.html#hungary>