Australia

1. Location and capability of nuclear facilities

Australia is one of the only developed countries not using electricity from nuclear energy. Australia's abundance of cheap coal, conveniently located in population centers, has ruled nuclear energy out of contention on economic grounds. However, concern about global warming due to the carbon dioxide emissions from burning fossil fuels has put nuclear energy on Australia's agenda.

In December 2006, the report of the Prime Minister's expert taskforce considering nuclear power was released. It stated that in the context of meeting increased energy needs while reducing greenhouse gas emissions "if we are to have a sensible response we have to include nuclear power". This report indicated that the first nuclear plants could be running in 15 years, and looking beyond that, 25 reactors at coastal sites might be supplying one third of Australia's (doubled) electricity demand by 2050.
http://www.uic.com.au/nip44.htm; and PM & Cabinet 2006, Uranium Mining, Processing and Nuclear Energy - Opportunities for Australia? (Switowski report) http://www.uic.com.au/nip44.htm

Research Reactors
Operational: 1 (OPAL)
Decommissioned: 1 (CF)
Shut Down: 2 (MOATA and HIFAR)
http://www.ansto.gov.au/natfac/hifar.html; http://www.iaea.or.at/worldatom/rrdb/
http://www.arpansa.gov.au/is_waste.htm; http://www.uic.com.au/nip55.htm

Uranium Mines
Uranium ores have been known in Australia since the 1890's, and following requests from British and US governments, systematic exploration for uranium began in 1944. During that time uranium was sold primarily for weapons programs.

The development of civil nuclear power stimulated a second wave of exploration activity in the late 1960s, and most of Australia's major ore bodies were discovered as a result. This phase was marked by the involvement of major companies with large budgets and using advanced exploration techniques and equipment. http://www.uic.com.au/explor.htm

Australia's uranium is sold only for electrical power generation purposes. It is supplied under arrangements which ensure that none finds its way to countries such as Iraq or North Korea or into nuclear weapons. It exports uranium to 11 countries including the US, Japan, South Korea, and several European states. Australia is a preferred uranium supplier to the world, especially in the East Asian markets. Australia's uranium reserves are the world's largest, with 28% of the world's total. Production and exports have recently averaged 9500 tons of uranium oxide (8055 tU) per year. With 19% of the world production, Australia is the second largest producer of uranium from mines though only three mines are currently operating.

Operating
Ranger (Northern Territories)
Olympic Dam (South Australia)
Beverley (South Australia)

Cleared to start construction
Honeymoon (South Australia)

Former mines
Radium Hill (Olary Province)
Rum Jungle (Northern Territories)

Mary Kathleen (Queensland)
Moline (Northern Territories)
Rockhole (Northern Territories)

2. Fissile Material Holdings

Highly Enriched Uranium: 0.35 tons (end of 2003)
Supplier- US and UK
http://www.isis-online.org/global_stocks/end2003/civil_heu_watch2005.pdf

Radioactive Waste Disposal
Each state and territory is responsible for the management of radioactive waste generated by government agencies, individuals and organisations within their jurisdiction. Australia only produces low and intermediate level radioactive waste; whereas the government has made it clear that they reject any proposal to import high level radioactive waste from overseas to store in Australia.
http://www.world-nuclear.org/waste/report2002/chapter2.htm#lowwaste

3. Nuclear Activities

Research Centers
ANSTO - Australian Nuclear Science & Technology Organization
ARL - Australian Radiation Laboratory
Australian Synchrotron
CSIRO - Commonwealth Scientific & Industrial Research Organization.
http://www.radwaste.org/research.htm

Nuclear Cooperation
Australia has 19 bilateral safeguards Agreements covering 36 countries. It exports uranium to the US, Japan, South Korea, and the European Union (Spain. France, UK, Sweden, Germany, Belgium and Finland. The Australian Nuclear Science & Technology Organization (ANSTO) is a member of the World Nuclear Association, a forum for nuclear cooperation on technical, commercial and policy matters.
http://www.dfat.gov.au/security/nuclear_safeguards.html

China: China requires imported uranium to achieve its target of quadrupling its nuclear energy output by 2020. The Australia-China Nuclear Transfer Agreement and the Nuclear Co-operation Agreement was revised when Wen Jiabao, the Chinese premier, visited Canberra in April 2006. Accordingly, the legal framework for Australian uranium producers to commence exports to China is to be in place as of April 2007. The deal allows Canberra to cancel uranium exports if Beijing violates any provisions in the pact.
http://www.worldpress.org/Asia/2327.cfm#down

India: India made a formal request in March 2006 to buy Australian uranium but negotiations are still under way. Australia is considering shifting its policy, which bans selling uranium to countries that have not signed the nuclear non-proliferation treaty, to take advantage of India's anticipated increasing demand for uranium. http://www.nzherald.co.nz/section/2/story.cfm?c_id=2&objectid=10371426

IAEA: ANSTO signed an agreement in May 2002 with the IAEA to accredit the Australian organization with IAEA's Network of Analytical Laboratories. http://www.foreignminister.gov.au/releases/2002/fa065j_02.html

Argentina: A Nuclear Cooperation and Safeguards Agreement was signed in 2001 (entered into force January 2005) covering cooperation on research reactors, nuclear medicine, fuel and radioactive wastes, nuclear safety and regulation, and technology for safeguards and physical protection.

ANSTO and the Argentine company INVAP signed a contract in 2000 for the construction of a replacement research reactor at Lucas Heights in Sydney. http://www.ansto.gov.au/info/press/2000_09.html

Pacific: Australia cooperates closely with the Pacific Nuclear Association. It hosted the 15th Pacific

Basin Nuclear Conference in Sidney 2006. http://www.nuclearaustralia.org.au

US: The Federal Government has signed a 10-year deal with the United States in January 2001to allow Australia to send spent nuclear fuel rods from Sydney's Lucas Heights reactor to the US to be stored by American authorities.

4. International Nonproliferation Efforts

Treaties Signed and Ratified
Antarctic Treaty, 23 June 1961
APM Convention, 14 January 1999
Biological Weapons Convention, 5 October 1977
Certain Conventional Weapons Convention, 29 September 1983
Chemical Weapons Convention, 6 May 1994
Comprehensive Nuclear Test Ban Treaty, 9 July 1998
Convention the Physical Protection of Nuclear Material, 22 September 1987
Nuclear Non-Proliferation Treaty, 23 January 1973
Outer Space Treaty, 10 October 1967
Seabed Treaty, 23 January 1973
Treaty of Rarotonga, 11 December 1986
Australia ratified the IAEA Additional Protocol 12 December 1997.

Multilateral Groups
Australia Group
Conference on Disarmament
Hague Code of Conduct on Missiles
Missile Technology Control Regime
Nuclear Suppliers Group
Proliferation Security Initiative
Wassenaar Arrangement
Zangger Committee

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

Fissile Material Cut-Off Treaty: "We have been one of the vast majority of delegations that has shown flexibility in supporting the various proposals for a program of work put forward during this period. It is a great regret that the CD has not begun negotiation of a Fissile Material Cut-off Treaty. This negotiation is long overdue. States have a good understanding of the key issues after years of examination. An FMCT would make a vital contribution to nuclear disarmament and non-proliferation. Australia believes a most effective FMCT would include appropriate measures to verify parties' compliance with their obligations. But the priority should be to start FMCT negotiations. Detailed aspects of the treaty, including the nature of any verification regime, should be left to that negotiation." - **Statement by Ambassador Michael Smith to the Conference on Disarmament, Geneva, 2 February 2006.**
http://www.reachingcriticalwill.org/political/cd/speeches06/2FebAustralia.html

Comprehensive Nuclear Test Ban Treaty: "September marked the tenth anniversary of the adoption of the Comprehensive Nuclear Test-Ban Treaty- a treaty that would rid the world of nuclear weapons testing forever. Last year's vote in this committee demonstrated that an overwhelming number of countries regard the CTBT as a vital contribution to disarmament and nonproliferation. Through our role as CTBT Article XIV Coordinator, Australia is actively promoting the Treaty's entry into force. Australia will reintroduce the CTBT resolution into First Committee this year." **- Statement by Bruce Baird MP to the General Assembly First Committee on Disarmament, New York, 3 October 2006**.
http://www.reachingcriticalwill.org/political/1com/1com06/statements/Australiaoct3.pdf