

Did you know



A tennis ball size quantity of nuclear fuel commonly used in commercial nuclear plants can power the average daily needs in the U.S. of 200,000 homes.

It would take 31 boxcars of coal, at 100 tons per boxcar, to generate the same 250 MWe of power.



Did you know



Reducing the threat of nuclear weapon proliferation

Argonne's Reduced Enrichment for Research and Test Reactors (RERTR) program, initiated in 1978, has long utilized our nuclear expertise to convert research & test reactors using high-enriched uranium (HEU) to low enriched uranium (LEU) fuel – a material that cannot be diverted for direct use in nuclear weapons.

63 reactors in 32 countries from Argentina to Uzbekistan have been converted; 66 additional reactors are prime candidates.

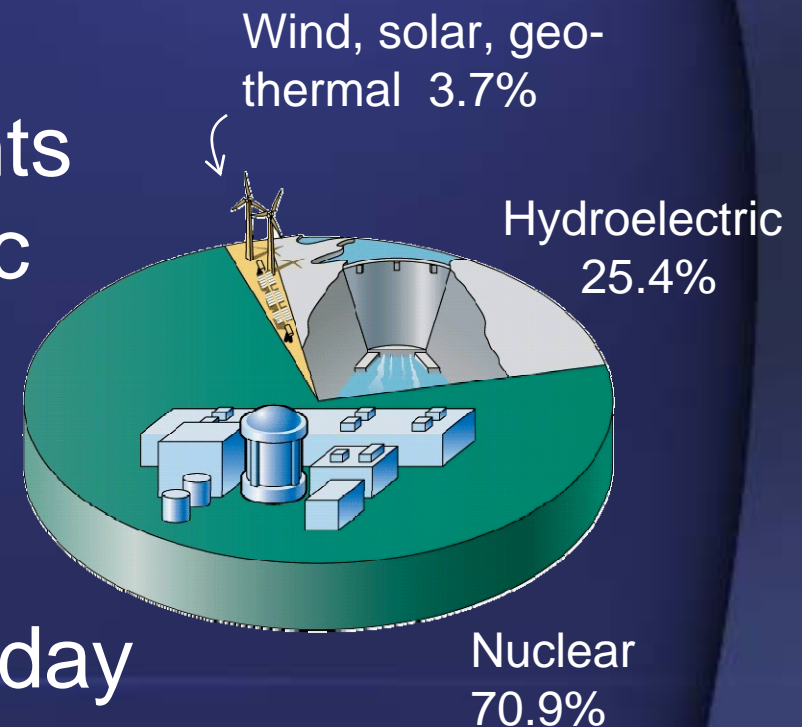
RERTR is a key element of the nation's efforts to reduce the spread of nuclear weapons worldwide.

Did you know



Zero carbon emissions

Nuclear power accounts for 20% of U.S. electric power generation, but 70% of the carbon-free portion of electricity we use today

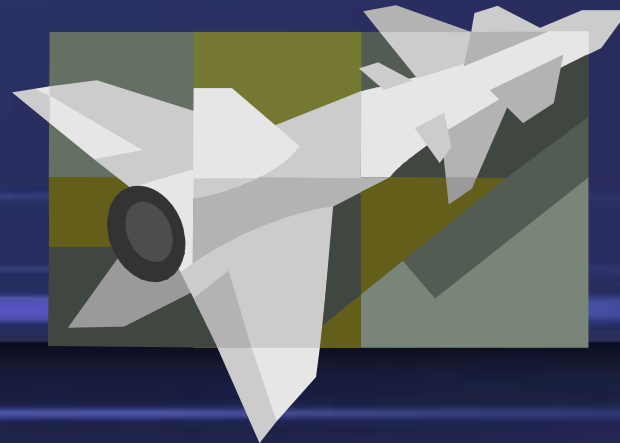


Did you know



Megatons to megawatts

About 10% of America's electricity comes from dismantled Soviet nuclear warheads! The U.S.-Russian *megatons to megawatts* program has recycled 352 tons of highly enriched uranium, the equivalent of over 14,000 warheads eliminated...





Did you know



Illinois, the birthplace of nuclear energy, gets more of its electricity from nuclear plants than any other state, about 51% (versus 20% nationally).

However, if you live in Chicagoland, it's closer to 80-90% nuclear!

Did you know



Hydrogen economy

Hydrogen is a clean, efficient energy source that can reduce our dependence on foreign oil and significantly reduce pollution and global climate impacts. Future advanced nuclear reactors can provide the energy for a large-scale, emission-free, domestic hydrogen production capability.

Argonne is playing a key role in developing advanced reactor and hydrogen generation technologies needed to support the vision of a hydrogen economy.



Did you know



Argonne's nuclear energy roots

Nobel laureate Enrico Fermi, Argonne's founding director, led the University of Chicago team that demonstrated the first controlled nuclear chain reaction in 1942.


Argonne became the first national lab in 1946 with the mission to develop peaceful uses of the atom.

Today, our research is the basis for reactors in operation worldwide, and we continue advancing technologies reliable, sustainable free energy for our

to play a key role needed to ensure a supply of carbon-future needs.

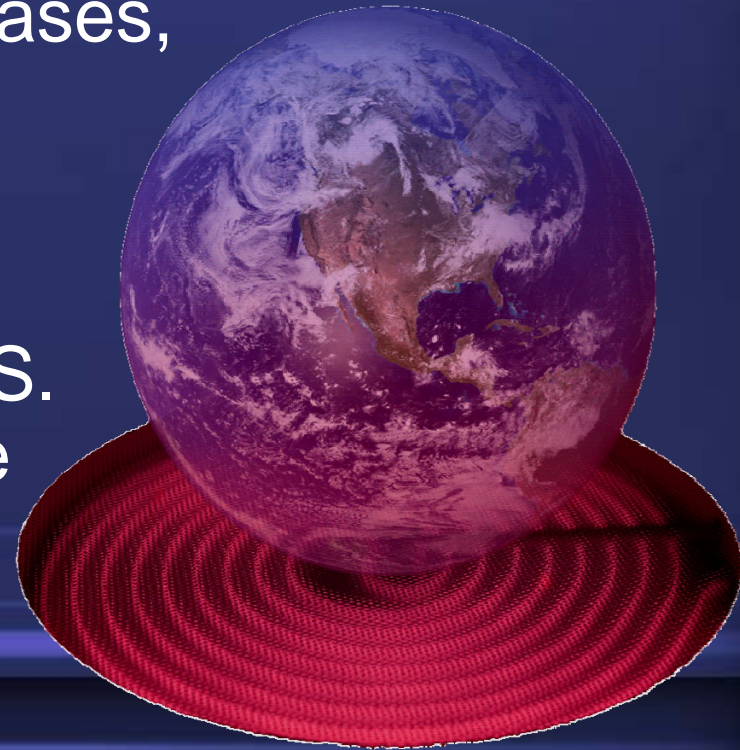


Tomorrow's clean cars will increasingly be powered by electricity, or even hydrogen – both which may come from future nuclear plants..

Did you know


Nuclear energy is the only large-scale electrical generating technology that does not emit greenhouse gases, which contribute to climate change.

Through the use of nuclear energy, the U.S. has avoided over three billion tons of air emissions since 1970.




Did you know



The U.S. has 104 operating nuclear plants that efficiently provide one-fifth of the nation's electricity. These plants do not emit greenhouse gases, operate year-round in all weather conditions, and produce the least expensive power on the grid today (other than hydroelectric).



Did you know



Over the last 15 years, the U.S. utilities have become the best operators of nuclear plants in the world.

U.S. nuclear power plants work at about 92% efficiency, up from 65% in 1990 and 56% in 1980.

This makes the U.S. the performance leader, with 12 of the world's top 25 reactors achieving over 98%.

Although no new nuclear plants have been built in the U.S. since 1979, this efficiency improvement is the equivalent of adding 38 new reactors since 1980...



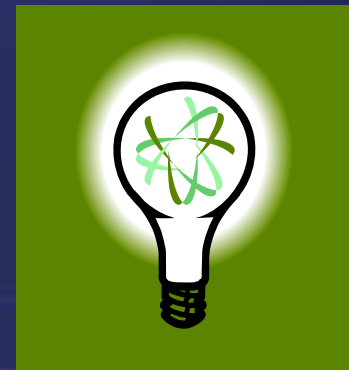
Did you know



Future of energy

“Fast” reactors in conjunction with fuel recycling technologies can reduce the cost and duration of storing and managing nuclear waste significantly, while extracting 100 times more energy from the same amount of uranium.

These new technologies, substantially developed by Argonne, also enhance safety and nonproliferation, and ensure a reliable, sustainable energy supply for the future.



Did you know



Less radiation is emitted from a nuclear plant than from the stack of a coal plant! This is because coal contains naturally occurring radioactive materials – mainly, uranium and thorium.

However, the radiation exposure received near a coal plant is still a 100 times less than natural background levels..




Did you know



While the U.S. has more operating nuclear plants (104) than any other country in the world, generating 20% of our electricity, other countries get a larger fraction of their power from nuclear.

Among the highest is France, which gets 80% of its electric power from nuclear.



Did you know


In 2006 in the Chicagoland area, 92% of the electricity provided by ComEd was from nuclear energy. The other 8% generated nearly all the waste.

	ComEd*	Midwest Average
Coal	4%	70%
Nuclear	92%	24%
Emissions and Waste per 1000 KWh		
CO₂	72.2 lbs	1,574 lbs
NO_x	0.14 lbs	5.3 lbs
SO₂	0.14 lbs	14 lbs
Nuclear Waste	0.006 lbs	

Source: ComEd's Environmental Disclosure Statement for the 12-month period ending September 30, 2006.

*Figures in this column apply only to communities supplied by ComEd.

Did you know



The amount of nuclear waste generated to produce 1000 KWhrs of electricity, the typical monthly usage of a U.S. household, is about 0.006 pounds – the weight of a penny...

