

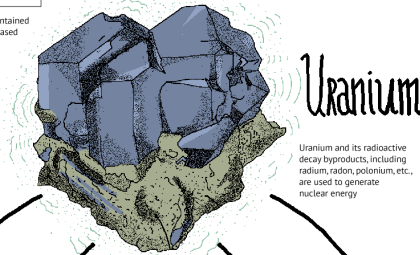
The development and prospects for the global nuclear power industry

Increases in annual worldwide energy consumption are forcing all countries to expand their power-generating facilities, including nuclear power plants



What is nuclear energy and how it is used

Atomic (nuclear) energy is contained inside atomic nuclei and released in nuclear reactions and radioactive decay



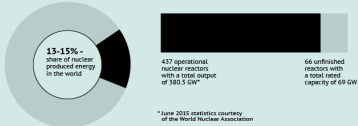
Uranium and its radioactive decay byproducts, including radium, radon, polonium, etc., are used to generate nuclear energy

Peaceful uses of nuclear energy



NUCLEAR POWER INDUSTRY AND NUCLEAR POWER PLANTS

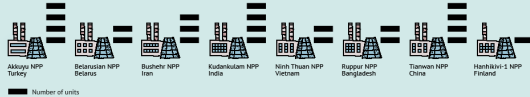
The nuclear power industry generates electricity at nuclear power plants



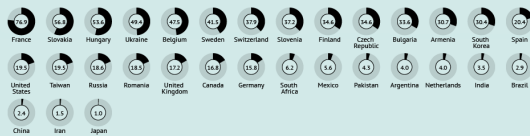
REACTOR TYPES



CONSTRUCTION OF NUCLEAR POWER PLANTS (NPP) WITH RUSSIAN ASSISTANCE



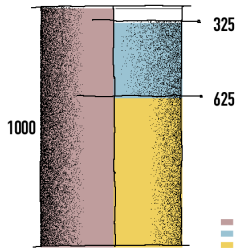
SHARE OF ELECTRICITY GENERATED BY NUCLEAR POWER BY COUNTRY, % (2014 STATISTICS)



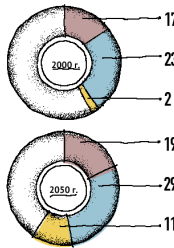
Global nuclear power industry development

ANNUAL INCREASE IN GLOBAL POWER CONSUMPTION - 2.1%

Projected capacity by 2050, GW

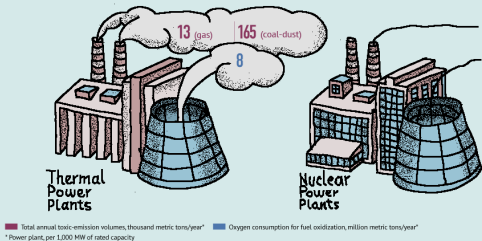


NUCLEAR POWER INDUSTRY SHARE, %



ENVIRONMENTAL SAFETY IN THE NUCLEAR POWER INDUSTRY

The more common use of non-carbon and renewable energy sources, including nuclear energy, can help fight global warming



Nuclear power plants are equipped with forced air/exhaust ventilation systems and filters for radiation safety, and water that cools turbine condensers is drained into cooling pools or pumped into water-cooling towers that cool large amounts of water using directed air flow

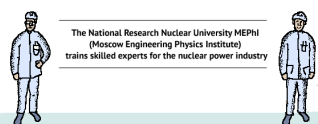
Nuclear power plant safety (Russian experience)

All Russian nuclear power plants are reliable. Not a single major incident has been recorded in the past 16 years



The high safety of Russian nuclear power plants is guaranteed by:

- self-protected reactor units
- several safety/security barriers
- multiple-redundancy safety/security channels
- active safety/security systems requiring human intervention and a power source
- passive safety/security systems requiring no human intervention and no power source



The National Research Nuclear University MEPhI (Moscow Engineering Physics Institute) trains skilled experts for the nuclear power industry

