

Should we or should we not use nuclear power? Here are the Pros and Cons:

Pros:

- An important role in reducing the use of fossil fuels in the US
- Sustainable
- The nuclear power industry is already in development
- If the electricity demand increases as projected (up 30% by 2035) then by 2035 more than half of the nation's coal plants and 40% of the nation's nuclear capacity will be retired unless there are operation extensions.
- Natural gas seems inexpensive, but as the need for it becomes greater, the price will rise
- Natural Gas prices are vulnerable to price changes
- Solar and wind are a key part of lower emissions, but its reliance on nature it what causes it to be unreliable.
- In today's society, nuclear is the only available, proven and affordable large-power and near-zero carbon emission electricity
- It can be affordable although the numbers to be approved and built are intimidating
- Any risks are manageable as long as the best practices are continued throughout the entire nuclear power industry, as well as working to improve the controls
- For solar or wind to be used as a resource, new power lines would have to be built. But if nuclear power was to be used, you are able to use the pre-existing power lines.
- The International Atomic Energy Agency, Board of Governors and the Nuclear Suppliers Group will be holding all states with plants to the Additional Protocol, allowing access to more information as well as inspection rights.
- With increased funding to IAEA will help with the growth of the nuclear power plants (and allow better management of them)
- Nuclear Power does not rely on fossils, which can make it a reliable resource for the US
- The US would have the able to have a reliable resource for energy for at least the end of the century, and quite possibly for some time after
- Wind and solar to make up the emissions for the US: ambitious but possible
- Wind and solar power are criticized as being too intermittent and unreliable
- 104 Nuclear reactors already exist

Cons:

- Natural gas is a relatively low-carbon-emission fossil fuel
- Solar and wind have potential to meet all of the world's energy needs
- In order to keep up with the US's energy needs, 28 new 1,00 megawatt reactors would have to be built by 2035 (with the retirement of exists power plants)
- Nuclear plants pose a substantial amount of risks, of which there is no completely safe power plant.
- Nuclear capacity will not grow unless governments and industries make nuclear power plants more affordable
- The cost of nuclear power is currently extremely high
- There are the risks of disaster as well as environmental harm
- The current total power requirements of the US could theoretically be supplied by solar

power plants covering about 36,000 square kilometers of land in the southwest. This area is about an eighth the size of Nevada

- Wind energy could produce about nine times the current US electricity generation
- Wind and Solar already make up a small proportion of US energy suppliers
- Wind and Solar can expand quickly
- The cost of a nuclear reactor is often extremely expensive, about \$8 billion to \$10 billion (for just one reactor)
- Seen as a risk by Wall Street, who refuses to fund nuclear power plant developments
- Construction of plants often run into problems of cost overruns and cancellations
- The last reactor to come online was completed in 1996 and took 23 years to build
- Wind is generally cheaper than nuclear
- Current price estimates for nuclear energy ignore important hidden costs
- The nuclear industry would have to set aside about \$11 billion in case of any accidents, which is estimated from the previous damages of the most severe accidents
- To make a dent in CO2 emissions, 2,000-3,000 reactors would have to be built worldwide by 2050
- This want for nuclear power and a source of energy may cause other countries to look into using the energy in weapons as well, making it difficult to manage nuclear warfare
- Each 1,000-megawatt plant generates about 30 nuclear bombs' worth of plutonium each year
- There is still no long-term safe disposal of nuclear waste
- The nuclear industry completely relies on the government, without the funding the industry would die out relatively quickly



This cartoon is against nuclear power plants. There is a plant in the picture, and someone who works for the company is scared to even get remotely close to it. He is even writing how it is the “safest source of energy” but even he does not want to back it up.

Picture source: [here](#)



This cartoon shows an oil rig in the ocean, with the oil spilling out. The oil takes the form of the words “time to try nuclear again?” This cartoon is against oil, due to the trouble that it causes the environment, having it be in the ocean.

Picture source: [here](#)