

Gleichzeitig entstand mit dem Trinkwasserversorgungsnetz ein Löschwassernetz mit den entsprechenden Notpfosten, um im Brandfall nicht Wasser herschaffen zu müssen, sondern es großflächig dauerhaft zur Verfügung zu haben. Weiter war die Schaffung von Freibrunnen sowie Wasch- und Badeanstalten ein geeigneter Weg, zumindest die Mittel für eine annähernd kostenlose Körperreinigung mit fließendem Wasser zur Verfügung zu stellen. Der steuerfinanzierte Bau der Wasserversorgung war für die Bevölkerung zwar insofern „kostenlos“, der hauseigene Wasseranschluss ans Netz aber noch recht teuer, so dass die ärmeren Bewohner noch immer nicht in den Genuss des eigenen fließenden Wassers kamen.

Im Moment ist die Bereitstellung von sauberem, gutartigem Wasser von großer hygienischer Bedeutung, da es Menschen vor verschiedenen epidemischen Krankheiten schützt (die durch Wasser übertragen werden). Die Versorgung der ausreichenden Menge des Wassers in die Ansiedlungen lässt zu, das allgemeine Niveau ihrer Verbesserung zu heben. Um die Bedürfnisse der modernen Großstädte im Wasser benötigt eine riesige Menge, gemessen in Millionen Kubikmeter pro Tag. Diese Aufgabe erfordert zusammen mit der Bereitstellung von hohen hygienischen Qualitäten des Trinkwassers eine sorgfältige Auswahl natürlicher Quellen, ihren Schutz vor Verschmutzung und eine ordnungsgemäße Reinigung des Wassers in den Wasserwerken [2].

Bis heute hat das System der Wasserversorgung und Abwasserentsorgung einen großen Sprung in der Entwicklung gemacht und bietet der modernen Menschheit Komfort und Bequemlichkeit des Lebens. In jedem Haus sind diese Attribute der Zivilisation nicht nur nützlich, sondern lebenswichtig.

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## **DISADVANTAGES OF NUCLEAR ENERGY НЕДОСТАТКИ ЯДЕРНОЙ ЭНЕРГЕТИКИ**

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Nuclear energy has many disadvantages as well with advantages. It is essential to comprehend the disadvantages as well to garner an overall outlook of Nuclear Energy.

Enumerating some of the Nuclear Energy disadvantages are:

Toxic Radioactive waste. The radioactive waste coming from Nuclear power plants is a great caution and peril to the environment. The catastrophic effects of Chernobyl disaster still linger in the minds of people. As per the records, 30, 000 people died in the Chernobyl disaster, and over 2.5 million Ukrainians are still dealing with the health tribulations associated with the nuclear waste [2].

Radioactive waste is generated which implies any material be it solid, liquid or gas that consists of a radioactive nuclear substance and the operators of the nuclear plant have ascertained that it is a waste product. A material is considered as waste after it has spent more than 3 years in the reactor producing heat and electricity. This waste comes from nuclear reactors and needs to be disposed of or stored safely [2].

Incurs heavy initial capital costs. Nuclear Energy entails immense investment to set up a nuclear power station. Constructing a nuclear power plant requires enormous capital outlay [1].

Threat to aquatic marine life owing to Eutrophication. Eutrophication is mainly extensive enrichment of the lake and other water bodies by nutrients, mostly due to runoff from land. The process eventually leads to dense growth of plant life leading to death of marine life due to paucity of Oxygen. Radioactive waste can cause this problem. According to scientists, radioactive wastes take about 10, 000 years to neutralize [2].

Hazardous implications on human lives. Dating back to the shattering consequences of the Hiroshima and Nagasaki nuclear bombs during the second world war. Children were and are still born with several malfunctions. This might pave way for a safe haven for terrorists [1].

Nuclear energy is certainly not renewable energy source. It is to be noted that the raw material required is Uranium. Uranium is mined due too it death of availability in many countries. Therefore it is hazardous and non- replenishment [1].

Nuclear weapons can destroy humanity. It has given the power to produce more weapons than to produce things that can make the world a better place to live in [1].

Building a nuclear power plant can be discouraging for stakeholders. Conventional reactor designs are considering multi-billion-dollar infrastructure

projects. High capital costs, licensing and regulation approvals, coupled with long lead times and construction delays, have also deterred public interest [2].

Challenging market conditions have left the nuclear industry struggling to compete. Strict regulations on maintenance, staffing levels, operator training, and plant inspections have become a financial burden for the industry [2].

Stringent licenses and guidelines should be laid to determine the permission to construct nuclear power plant. They are hot targets for militants and terrorist organizations. Security is a major concern here. A little lax in security can prove to be lethal and brutal for humans and even for this planet [3].

To alleviate future disasters, the World Association of Nuclear Operators (WANO) was set up that is geared towards safe and reliable operation of nuclear power plants by conducting independent peer reviews for every new nuclear power plant operating across the world [3]

Thus, humanity needs to try to switch to cheaper, in the future, and environmentally friendly energy, which is provided by renewable energy sources.

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## **WIND POWER INDUSTRY ВЕТРОЭНЕРГЕТИКА**

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The world does not stand still. Progress does not stand still and in most cases negatively affects the environment. Consider such a source of renewable energy as wind power.

At present wind energy is one of the most dynamically developing and forward-oriented types of renewable energy sources and an important area approach to energy efficiency [3].