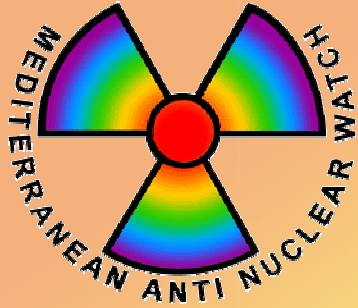
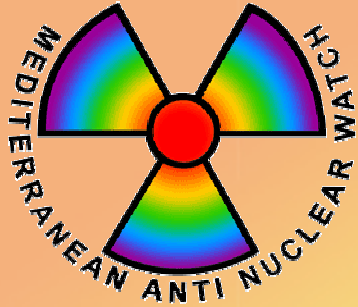


**Nuclear Energy. It is not a solution, it is a problem**



**The Mediterranean Antinuclear Watch (MANW) is a non - profit, non - governmental organisation. It was established in 2005 by the Technical Chamber of Greece and other agencies and its primary aim is to generate awareness as to the threats that the so - called “peaceful use” of nuclear energy as well as the production and proliferation of nuclear weapons pose.**



## **Nuclear energy renaissance**

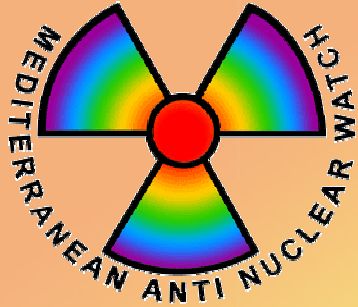
Twenty two years after the accident in Chernobyl NPP.

Energy production and energy consumption are two issues on which the public is intentionally misinformed.

The nuclear industry is powerful in technologically advanced countries like France, Canada, the USA.

Expansion of investment and profit maximisation are its goals.

The 1990 oil crisis (Gulf war), the Hurricane Katrina, the 2006 gas crisis, the steady peak-oil warning by the IEA and the threat of the climate change, used to force people to believe that nuclear energy is the best and perhaps the only answer.



## **Nuclear energy: Safe and “green”?**

### **Safety first**

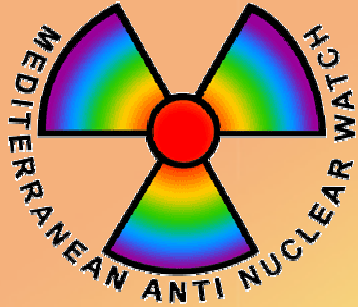
*Always a possibility of accident*

*Even the strictest regulations are not always successful*

*Geopolitical conditions in our area makes nuclear too riskfull*

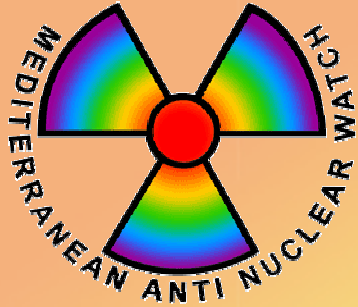
### **Investment and operation cost: Too high**

### **Friendly to the environment: Is it really?**

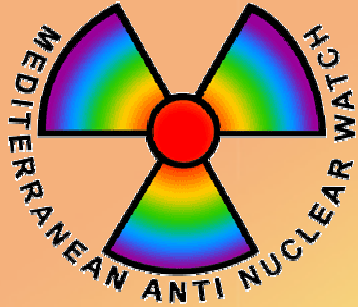


## Friendly to the environment: Is it really?

- Uranium mining destroys the landscape and contaminates soil, air and water in the mining areas
  - Uranium is a rather rare element and it will be exhausted in the foreseeable future.
  - Spent fuel is dangerous for the environment (and humans) and cannot be neglected for millions of years.
  - Power plants have a 30 years operational life
  - Nuclear reactors emit to the environment significant quantities of heat, contributing to the greenhouse effect.
  - New Generation reactors to achieve the reuse of spent fuel.
- Fusion technology does generate radioactive waste, too.
- Any reactor can be used for the production of fissile material for nuclear bombs.



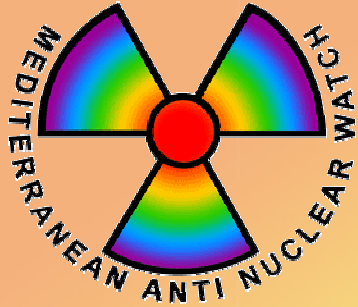
**Sustainability. Energy policy is now at a crossroad where it has to decide whether nuclear energy could be part of a sustainable energy future. Since there is not much time to develop new technical solutions, global warming can be more efficiently tackled with the use of safe and cheap solutions, namely improving efficiency and use of renewable energy resources.**



## **Nuclear power and nuclear weapons**

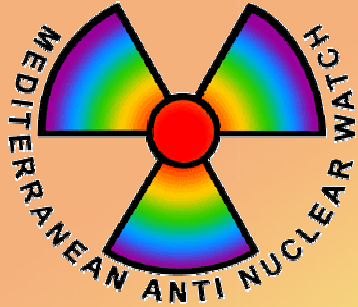
“Peaceful” use of nuclear power is a misleading term. Civil nuclear materials and facilities can be used in support of nuclear weapons programmes in many ways:

- \* Production of plutonium in reactors followed by separation of plutonium from irradiated material in reprocessing facilities.
- \* Production of radionuclides other than plutonium
- \* Diversion of fresh highly enriched uranium (HEU) research reactor fuel or extraction of HEU from spent fuel.
- \* Nuclear weapons –related research.
- \* Development of expertise.

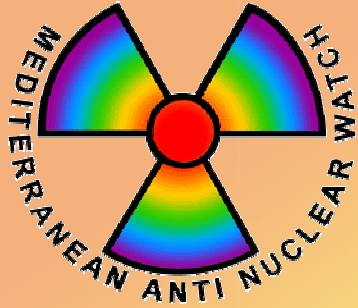


**Power reactors have been responsible for the production of a vast quantity of weapons – usable plutonium. A typical power reactor (1000 MWe) produces about 300 kg of plutonium each year. Total global production of plutonium in power reactors is about 70 tonnes per year. As of the end of 2003, power reactors had produced an estimated 1600 tonnes of plutonium. This quantity is sufficient for 160 000 weapons similar to that dropped in Nagasaki in 1945.**



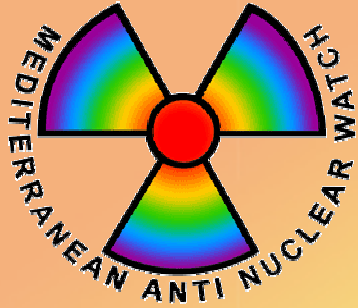


**The nuclear industry and its supporters claim that reprocessing is a “sensitive” nuclear technology but power reactors are not. In reality they are different facets of the same problem. Reprocessing poses no proliferation risk in the absence of reactor – irradiated nuclear materials. Reactors pose no proliferation risk in the absence of a reprocessing facility to separate fissile material from irradiated materials. Put reactors and reprocessing together, and you are well on the way to a nuclear weapons capability.**

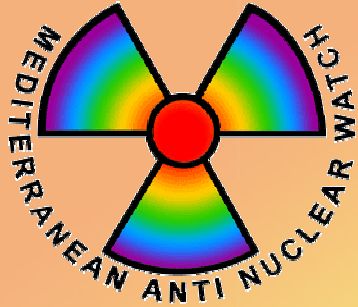


**Fusion is supposed to be the answer for the future. The first results of that attempt will come well after 2050. So it is not a solution for the urgent problems of today. Also, it is an extremely complicated and expensive technology.**

**As we have already mentioned fusion, too, creates nuclear waste and can lead to the production of nuclear weapons.**



**The Mediterranean Antinuclear Watch believes that nuclear energy creates more problems than it solves. It is not a reliable, peaceful and sustainable resource. Above all it is not safe and in case of an accident its impact is very and far-reaching. Nuclear energy is associated to the research and development of nuclear weapons, which is a blind alley for the entire humanity.**



**A dramatic reduction of energy demand is the prerequisite for sustainable energy supply in the future: thermal insulation of buildings and efficient use of energy for heating, lightning and of course transport. However, this presupposes a clear political decision for efficiency. In order to prevent the worst effects of climate change, policy must act independently from the short – term interests of companies selling energy or energy consuming goods. What should be established is a reliable sustainable energy system, satisfying energy needs, based on renewables.**