Abstract Template

Abstract Title: The Strategic Challenge of Nuclear as for Sustainable purposes

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Abstract (not more than 300 words)

The Strategies of Energy source and the future energy demand are discussed. Global energy demand at the end of next decades requires the search for energy sources that most be a sustainable and or a renewable.Among these sources Nuclear Energy proved to be the must promising candidate. The major features of the developed Nuclear Technology gives the Nuclear Energy a fantastic support to be classified as a sustainable Energy. The following explain why:-

1-Sustainability of energy sources required a compromise between the needs of current generation and the future generation; i.e long life supplied.
2-Energy demands must be always a results of a friendly sources; the must fulfil the United Nation Framework Convention on Claimant Changes (UNFCCC) and the protocols issued for.
3-Many Technological aspects, a round the world, has been progressed to reduce the limitation of using Nuclear Energy. Among these are;
a-Materials and Reactor Technologies gain very high standard R& D with high percentage of safety Regulations. More promising results are expected in the future;

b-Concern a bout the raising level of greenhouse gases (GHG) gives support to the used of Nuclear Energy where electricity can be produces with almost nil GHG;

c-The long lasting reserve of Nuclear Fuel are estimated to be available for 250 years. Recycling of the Uranium and Plutonium, however , could extend the fuel supply to up to 10000 years of consumption.In addition research on extracting Uranium from sea water shows promise of virtually inexhaustible future supply; a renewable Nuclear Energy

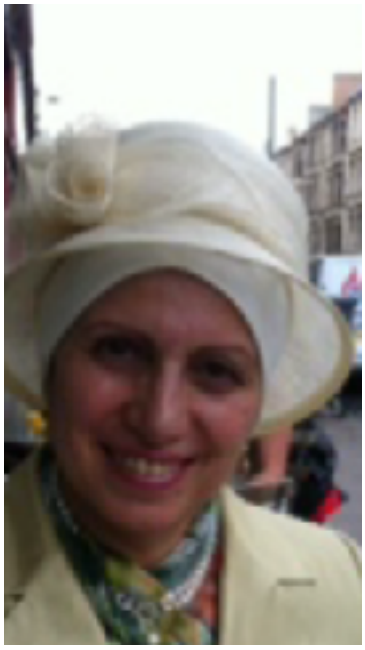
4-Comparison between the Energy gained and the area required of the different power plants encourage the use of Nuclear Energy power plants.

5-The storage of Fossil fuels and the waste disposal are in the favour of using Nuclear fuels.

6-Research continues to be performed to make the entire commercial nuclear industry more resistant to diversion of materials that could potentially be used for the production of nuclear weapons. This includes also the development of advanced techniques for the early detection of any violation of the Non-Proliferation Treaty.Fast reactors with on-site recycling of the used fuel (also referred to as 'integral fast reactors', IFR) could in the future make a major contribution towards reducing the risk of diversion of weapons-grade material for a number of reasons, including (a) no need for transportation of the used fuel outside the reactor site, (b) the plutonium and other actinides remain mixed in a form that cannot be used for nuclear weapons, and finally (c) strong reduction (or elimination) of the need for uranium enrichment facilities

Professional Biography (100-150 words)

Dr Widad Hatam (Ph.D) in Nuclear Technology, Chairman of Researchers, worked since 2006 till January 2018 as SG Nuclear Inspector. Coordinated inspections and design information verification in different countries. Lead inspection teams for complex inspections and completed the reports in a timely manner.
Performed successfully higher management assignments through leading state evaluation groups for ascend countries.
With regards to my old experience I have excellent experience in different parts of fuel cycles R&D activities. Number of employees been supervised by me more than 3000. In addition I worked in the field of science and security in Kings Collage London- War Study Department for one year.
Supervised two Phd and 3 Msc in the field of advanced Material Science Baghdad and Technology university's in Iraq.



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