

Energy Watch Group c/o DWR eco GmbH Hans-Josef Fell

Albrechtstraße 22 10117 Berlin

Tel. +49 30 609819500 Fax: +49 30 609819509 E-Mail: office@energywatchgroup.org

Berlin, 29. September 16

## Nuclear Disarmament Only Works If the Age of Nuclear Energy Comes to an End

Energy Watch Group, Albrechtstr. 22, 10117 Berlin

Renewable energy sources generate power at a lower cost than nuclear power plants. Therefore, there is no longer an economic justification to continue with the expansion of nuclear energy. Consequently, funding for states planning further development of nuclear power is redundant. States which continue developing nuclear energy technologies although it does not make any sense economically, seem to aim at a different objective: The development of nuclear weapon programmes.

With renewable energies, the first step towards nuclear weapons, i.e. nuclear power, is banned. For this reason, PNND should present a proposal to the UN in order to stop new plans for nuclear power plants and to decommission existing plants.

Renewable energies generate power at a lower cost than nuclear power plants. So why are some states still holding on to nuclear energy?

Current developments suggest that nuclear energy is not the main reason to develop nuclear technologies. Rather, it is about the development of nuclear weapons.

<sup>&</sup>lt;sup>1</sup> LAZARD, 11/2015, <a href="https://www.lazard.com/media/2390/lazards-levelized-cost-of-energy-analysis-90.pdf">https://www.lazard.com/media/2390/lazards-levelized-cost-of-energy-analysis-90.pdf</a>, p.2.



## **Past developments:**

There has never been a "peaceful use" of nuclear energy. US President Dwight Eisenhower delivered a speech entitled "Atoms for Peace" to the UN General Assembly in New York City in 1952. The UN then launched the "Atoms for Peace" programme which shared equipment and information throughout the world. Nuclear reactors in Pakistan, India, Great Britain, France and Russia were built within the programme. This was the only way to develop nuclear weapons in these states.

## **Current developments:**

- **Iran:** Despite agreements with the international community doubts remain about nuclear disarmament. These are based on:
  - 1. The Russian delivery of anti-aircraft-missiles to Iran. The official reason given is that Iran wants to protect nuclear power plants.<sup>3</sup>
  - 2. The Iranian announcement that the country is going to build two new nuclear reactors with Russian technology and funding.<sup>4</sup>

What is Iran's motivation to expand nuclear facilities, since renewables are cheaper?

- **North Korea:** It is common knowledge that North Korea works on evolving nuclear technologies and aims to develop nuclear weapons.
  - **Turkey:** Turkish efforts for nuclear weapons are not verifiable, but they seem likely, since Turkey has an expensive nuclear reactor programme.
  - **Great Britain**: The nuclear power plant "Hinkley Point" has been authorized by the British government, despite numerous ongoing investigations which prove that the project will not pay off economically.<sup>5</sup> Given the expense of nuclear energy in the UK compared to renewable alternatives it must be asked what the underlying motivation for this decision is?<sup>6</sup> Dr. Phil Johnstone would be the right partner to discuss this issue with.<sup>7</sup> He is an expert not only in relation to Hinkley Point but also with regards to the connections between nuclear energy and nuclear weapons in general.
  - New research and development on Thorium reactors: Small-scale chemical reprocessing of irradiated thorium can create the isotope uranium 233 that could be used in nuclear weapons, raising proliferation concerns. The thorium does not need to be part of a nuclear-fuel assembly and the increasing volume of separated uranium 233 could never be controlled. Small modular reactors, such as high-temperature gas-cooled reactors that use solid thorium-based fuels, are actually being pursued in different countries, but there is no economic sense for that.8

 $\underline{https://web.archive.org/web/20070524054513/http://www.eisenhower.archives.gov/atoms.htm.}$ 

https://www.theguardian.com/science/political-science/2015/aug/07/shining-a-light-on-britains-nuclear-state.

 $\underline{http://www.sussex.ac.uk/spru/newsandevents/2016/publications/submarines}.$ 

https://www.researchgate.net/publication/233880587 Nuclear\_energy\_Thorium\_fuel\_has\_risks.

<sup>&</sup>lt;sup>2</sup> web.archive, 05/2007,

<sup>&</sup>lt;sup>3</sup> The Diplomat, 08/2016, <a href="http://thediplomat.com/2016/08/iran-deploys-new-russian-air-defense-system-around-nuclear-site/">http://thediplomat.com/2016/08/iran-deploys-new-russian-air-defense-system-around-nuclear-site/</a>.

<sup>&</sup>lt;sup>4</sup> Reuters, 09/2016, http://www.reuters.com/article/us-iran-russia-nuclearpower-idUSKCN11G0EB

<sup>&</sup>lt;sup>5</sup> Intelligent Land Investments (Renewable Energy), 08/2016, <a href="http://ilienergy.com/2016/08/wind-and-solar-projected-to-be-cheaper-than-nuclear/">http://ilienergy.com/2016/08/wind-and-solar-projected-to-be-cheaper-than-nuclear/</a>.

<sup>&</sup>lt;sup>6</sup> Phil Johnstone and Andy Stirling, The Guardian, 08/2015,

<sup>&</sup>lt;sup>7</sup> University of Sussex, 09/16,

<sup>&</sup>lt;sup>8</sup> Ashley, Parks, Nuttall, Boxall and Grimes, Nature, 12/2012,



The questions are easy to answer: It is the aim for nuclear weapons.

So again it is proved: A world without nuclear weapons is only possible in a world without nuclear energy.

PNND espouse nuclear disarmament. For this reason, they have to support the elimination of nuclear energy, too. At the UN, PNND must actively promote the shutdown of nuclear power plants and the construction of new plants.

## The UN should pursue the following strategy:

Renewable energy sources became more affordable than nuclear energy over the past decades.

For example: Unfortunately, the UN did not take up a proposal for renewable energy in North Korea in 2007, despite of South Korea having responded positively in the media. Today, the electricity generation from renewable energy sources provide power supply at a high economic and technological level.<sup>9</sup>

All states which decide to stop their nuclear programme should receive an alternative programme from UN including the opening of renewable energy sources to secure their energy supply. Thus, target nations will be able to recognise that focussing on nuclear development programmes cause financial disasters. Renewable energy sources on the other hand deliver sustainable, economic and secure energy supply. Calculations have already been carried out and are available, for example for India. 10

Berlin, September 29, 2016

Ham - Josef Jen

Hans-Josef Fell

President Energy Watch Group

Member of German Parliament (1998-2013)

 $<sup>^9</sup>$  Fell, 2007,  $\underline{\text{http://www.hans-josef-fell.de/content/index.php/dokumente/weitere-themenbereiche/208-ee-programm-nordkorea-deutsch/file}.$ 

<sup>&</sup>lt;sup>10</sup> Breyer, Fell, 2016 (https://www.researchgate.net/publication/308647383\_Sustainable\_and\_Low-Cost\_Energy\_System\_for\_India\_without\_Nuclear\_and\_Coal\_Base\_Load