R10 Resolution on nuclear

Proposer:	Vihreät Nuoret
Agenda item:	6. Resolutions

Motion text

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1 Resolution on nuclear

30.7% of total EU's CO2 emissions is made by energy supply (Statista, 2024). A
clear, realistic and ambitious energy policy is needed to achieve the goal of
decarbonizing the whole industry. Our current policy lacks the realism part when
considering nuclear power – which no matter the downsides plays a major role of
carbon neutral electricity production in our member countries.

8 1 – Reality with nuclear phase-out and fossil fuel usage

The current text considering nuclear power does not coincide with the realities
in EU countries with nuclear electricity production. Even with massive
investments into renewable energy sources, massive amounts of fossil fuel
production is needed (Bdew, 2024). The lost nuclear electricity production was
largely replaced by coal (Jarvis et al., 2022).

The main issue is that while nuclear energy provides stable electricity 14 production, most renewable sources are weather dependent by nature (Brunner et 15 al., 2020). Additional flexible energy demand is filled with fossil fuels 16 because we don't yet have the technologies for additional carbon neutral 17 flexible energy production (Zöphel et al., 2018). The issue is not just 18 19 political or economic, hence needing viable policies. Positioning ourselves to advocate for phase-out of all nuclear energy - no matter how modern and safe 20 those powerplants are - will ultimately lead to dependency on fossil fuels, 21 22 whether we want it or not. The stance on nuclear power being dirty and dangerous 23 is outdated and lacks the proper understanding of scales considering the global 24 climate catastrophe.

25 **2 – Emerging nuclear technology**

The current text doesn't mention emerging nuclear technologies, which are 26 generally known as Small Modular Reactor Technology Developments. These 27 technologies are fission reactors aiming for modular development, improvements 28 in nuclear safety with passive safety elements (f. ex. lower pressure ranges and 29 natural conduction circling) as well as other nuclear fuel such as thorium 30 (IAEA, 2020). The possible usages of these new reactors tackle the issues of 31 32 decarbonizing district heating and industrial steam processes, hence widening 33 the potential usages of nuclear energy from electricity production to sectors 34 which are harder to decarbonize with renewables. However, the current text notes 35 that nuclear fusion "will be unable to provide a concrete response in time to 36 solve the climate crisis". While the point is true, fusion technologies are just 37 part of all nuclear technologies developed at the moment. Fusion is not relevant 38 to address in the platform, but Small Modular Reactor Technologies should be 39 addressed.

40 **3 – Nuclear safety**

41 Historically the global Green movement has opposed nuclear power. Major nuclear disasters (Three Miles Island and Chernobyl) as well as thousands of nuclear 42 43 tests and handling of nuclear waste were large issues in the latter part of the 44 20th century. However, the lessons learned from the disasters, accidents and problems regarding nuclear waste has made nuclear energy one of the most 45 46 reliable production methods in the world (Statista, 2022). While large 47 environmental catastrophes and loss of life as a result of a nuclear accident is 48 technically possible, so is one from a structural failure of a dam. Nuclear 49 power is in the same level of deaths per unit of electricity production as wind 50 and solar power and unsurprisingly coal and oil are at the top (OWID, 2018).

No electricity production method is perfect. Modern powerplants regulated by 51 national nuclear safety authorities in Europe are safe and regulated. We should 52 focus our safety concerns on the ends of the uranium lifecycle. The mining of 53 uranium doesn't create considerable radiation risks, but it has the risks 54 involved with all mining. Hence, we ought to have more regulation on the mining 55 practices in EU and to regulate the import of uranium from countries with poor 56 mining safety practices or human rights violations. The recycling and deposition 57 58 of used nuclear fuel is another problem with both radiation risks and questions 59 about the morality of long-term deposition of the fuel. The conversation around 60 these topics and the wider nuclear safety is an important one, but it shouldn't 61 be influenced by scare tactics or historical sentiments.

62 Sources:

⁶³ Bdew. (2024) Die Energieversorgung 2023 - Jahresbericht

⁶⁴ Brunner, C. Deac, G. Braun, S. Zöphel, C. (2020) The future need for flexibility

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Zöphel, C. Schreiber, S. Muller, T. Möst, D. (2018) Which Flexibility Options
Facilitate the Integration of Intermittent Renewable Energy Sources in
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Proposal for the new text

The following text is based on the new EC amendment proposal. Our additions are bolded.

Nuclear energy (see Glossary 111) cannot be built in time to use it as a climate crisis solution. Nuclear energy, just like any energy source, has drawbacks, including but not limited to the exploitation of workers in the extraction of uranium (see Glossary 181), the long-term disposal of nuclear waste, huge consequences of potential accidents, the long time it takes to build and the increasingly expensive costs to build nuclear power plants.

Currently operating powerplants should continue to operate and produce 90 electricity as long as national nuclear safety authorities deem the powerplants 91 safe and reliable. The modernization efforts and continuous safety improvements 92 93 overseen by the nuclear safety authorities are crucial for the usage of nuclear energy. The learnings from Three Mile Island, Chernobyl and Fukushima nuclear 94 disasters must influence the improvements of nuclear safety systems and accident 95 96 mitigation plans. While serious nuclear accidents are few and far between, the number of lives the production of fossil fuels and electricity claims yearly are 97 in the millions. 98

All nuclear safety deviations must be reported to the general public even if they don't meet the criteria for International Nuclear Event Scale (INES) anomalies or incidents. National laws considering all usages of radiation have to demand nuclear powerplant operators, enrichment operators, nuclear waste operators and nuclear fuel transportation operators to be fully transparent about the safety deviations.

FYEG prioritizes renewable energy sources over nuclear and fossil fuels. FYEG demands that renewable energy development must not endanger biodiversity and must reduce reliance on rare earth minerals that often are mined in exploitative practices. Possible phaseout of nuclear powerplants must be reliant on renewable energy and must not increase the reliance on fossil fuels even in the short run.

Small modular nuclear reactor technology may be developed and used for district heating purposes as well as electricity production in remote areas. Communityowned small reactors are a viable option to decarbonize district heating where renewables are not scalable to fit the demand due to Arctic conditions or lack of electricity infrastructure. Eventually we want to stop using the small modular nuclear reactors as well, when the renewable production methods are reliable enough to carry the whole electricity infrastructure.

The development of renewable energy limits the dependence on fossil fuels and uranium from Russia and other authoritarian states. The end goal of FYEG energy policy is a decentralized and community-owned and operated renewable energy system.

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Reason

We made this resolution to reflect the conversation of the last GA and bring forward our side on this topic.