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Nuclear Monitor

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Climate Diversion: the bad choice of the nuclear revival, Greenpeace France

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Nuclear News

- World Nuclear Power Status
- Human Chain with the Red Card Against Nuclear Power, March 12 2024
- We're running out of time': Program for Arizonans exposed to radiation set to expire in June

Climate Diversion: the bad choice of the nuclear revival

Greenpeace France

Greenpeace France wrote a comparative analysis of the impact on the reduction of greenhouse gas emissions of three investment scenarios: renewable energies, energy savings and the construction of six EPR 2 nuclear reactors. The NM received permission to publish this analysis.¹

Summary

To respect the Paris Agreement and put ourselves on a climate warming trajectory limited to a maximum of +1.5°C, 80% of the greenhouse gas emissions reductions must be achieved in France within the next 12 years². Because of construction deadlines of at least 15 years, the construction recovery program of new nuclear reactors would have no impact on decarbonization the energy mix in the short and medium term. Greenpeace compared the potential impact on decarbonizing the energy mix of six EPR 2 reactors by 2050 with the impact corresponding to financial investments of the same order of magnitude in energy saving in houses or in the construction of renewable energy infrastructures with a mix of wind power/photovoltaic. The results are positive. By investing 85 billion euros of government subsidies in energy savings by 2033, it would be possible to avoid six times more cumulative CO2 emissions by 2050 than with the construction program of six EPR 2.

¹Greenpeace France, Diversion climatique : le mauvais choix de la relance du nucléaire , Septembre 2023
<https://www.greenpeace.fr/diversion-climatique-le-mauvais-choix-de-la-relance-du-nucleaire>

² Greenpeace France, Commit France to a climate trajectory +1.5°C - What climate targets should France adopt to be on a trajectory compatible with global warming limited to +1.5°C?, July 2023
<https://cdn.greenpeace.fr/site/uploads/2023/07/Engager-la-France-sur-une-trajectoire-climatique-1.5%C2%BOC-1.pdf>

This would also make it possible to lift almost 12 million people out of energy poverty in a decade. By investing 52 billion euros in a mix of onshore wind infrastructure/photovoltaic panels on large roofs³ it would be possible to avoid four times more CO2 emissions than by investing the same amount in the construction of six EPR 2 by 2050, while electricity production triples. Far from being a wise choice for the climate, nuclear energy is the slowest option and has the least impact on decarbonizing the energy mix in the short, medium and long term.

Introduction

Decarbonization has to happen now, not in 20 years. IPCC scientists keep repeating it, and the increasing number of extreme climatic events is unequivocal: decarbonization our societies must happen now and without waiting for possible distant technological solutions.

Greenpeace published a note in July 2023 illustrating the need for France to achieve in the next 12 years⁴ 80% of the reductions in greenhouse gas emissions which are necessary for achieving carbon neutrality, in order to respect the 1.5°C trajectory of the Paris Agreement. It is urgent to decarbonize our energy mix, which currently consists of two-third fossil fuels. Because it is indeed the

³ Mix 60% onshore wind and 40% photovoltaic on large roofs

⁴ Greenpeace France, Commit France to a climate trajectory +1.5°C - What climate targets should France adopt to be on a trajectory compatible with global warming limited to +1.5°C?, July 2023

<https://cdn.greenpeace.fr/site/uploads/2023/07/Engager-la-France-sur-une-trajectoire-climatique-1.5%C2%BOC-1.pdf>



trajectory, and therefore the rate of reduction of greenhouse gas emissions, that matters. Once emitted, greenhouse gases have a lifespan of several decades in the atmosphere and continue to warm for a long time. The challenge is therefore to avoid their accumulation today, and not to continue on a trajectory of massive CO₂ emissions by making plans to drastically reduce emissions in 20 or 30 years, based on a hypothetical scheme for the construction and start-up of reactors of a new model of reactors, the EPR 2.

While the government and EDF want to invest billions of euros in new nuclear power to build six EPR 2 model reactors, Greenpeace has compared the difference in impact on the decarbonization of the energy mix of a financial investment of the same order of magnitude, in three different scenarios: the installation of renewable energies composed of a mix of wind power/photovoltaic, the efficient energy saving of houses and the relaunch of nuclear power with the construction of six EPR 2 model reactors.

Variables such as construction times and costs of the six program EPR 2 that we use as a reference in our calculations are those announced by the government at this stage. This estimate, calculated at about 52 billion euros, or about 17 billion euros per pair of reactors, for a start of the first EPR 2 reactor in 2037 and every two years thereafter, does not take into account financing costs and will therefore necessarily be revalued upwards. Furthermore, it seems far too optimistic given the feedback from the industrial fiasco of the EPR model, where deadlines and location costs are systematically extended and multiplied, both in France and around the world. To date, the construction site of the Flamanville EPR has been delayed for twelve years and the costs have increased six-fold to more than 20 billion euros (financial costs included), compared to the initially planned 3.3 billion euros. Although the costs and deadlines put forward by the government and EDF seem largely undervalued, these are not

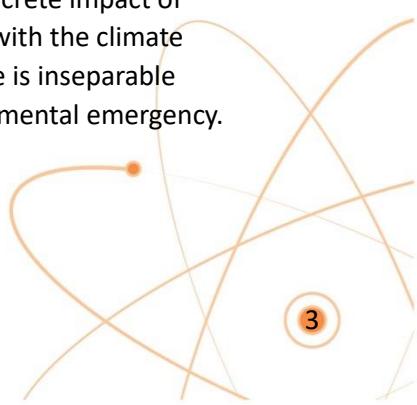
the subject of this report to discuss. We therefore took the government figures as reference for the calculations presented here.

The costs of efficient energy renovations of housing and the mix of wind and solar infrastructure are based on public data whose sources are documented and the reasoning is detailed in the appendix to this document.

To carry out our calculations, we used conservative assumptions taking into account the most unfavorable factors for the development of onshore wind power and photovoltaics on roofs, and the most favorable scenario for development new nuclear power. These calculations therefore reflect a much lower trend than what reality could be. However, the results of this study are positive.

The first part of this report will focus on comparing the difference in impact on the decarbonization of the energy mix between the financial investment necessary for construction of six EPR 2 reactors and an investment of the same order of size in a 60% wind / 40% photovoltaic mix. A calculation spreadsheet is provided to carry out simulations of different scenarios depending on modification of variables (date of commissioning of nuclear reactors, costs...).

The second part will focus on calculating the investments needed for the efficient energy saving of houses in France, which would allow almost 12 million people to escape energy poverty within a decade. This includes evaluating the annual savings in electricity consumption and tons of CO₂ emissions that would be avoided thanks to these renovations, and comparing the benefits associated with investing the same amount in a construction program for six EPR . The aim of this report is to enrich the debate on France's future energy policy by evaluating the concrete impact of different measures to deal with the climate crisis, which for Greenpeace is inseparable from the social and environmental emergency.



Chapter 1: Onshore wind power and photovoltaic reduce CO2 emissions much faster than nuclear

Taking into account design, construction and commissioning of hypothetical new EPR 2 nuclear reactors in France, at best before 2037 contribution to the decarbonization of the energy mix cannot be expected thanks to new nuclear. The impact of nuclear power on reducing CO2 emissions will be zero over the next 15 years, which is crucial for achieving the trajectory set under the Paris Agreement.

Onshore wind power and photovoltaics are technically, economically and operationally mature and can deliver deadlines, construction and commissioning times already much shorter than before. The law of March 10, 2023 on the acceleration of renewable energies aims to further reduce delays, with a view to massification, helped in this by the reduction in the cost of these technologies (85% reduction in LCOE cost⁵ of solar energy⁶ and around 50% for wind energy⁷ during the last decade⁸). Between 2010 and 2022, global electricity production increased by 1793 TWh for wind power and 1258 TWh for photovoltaics while it decreased of 76 TWh for nuclear power⁹. Thus, global electricity production of renewables far exceeds that of nuclear power. It stands out as the fastest and

cheapest way to produce low-carbon energy in the world.

Presentation of the study and method

Greenpeace questioned the amount of greenhouse gas emissions that would be avoided by 2050 for the same level of investment, by comparing a construction program for six EPR 2s as announced by the government and EDF, and the construction of a combination of onshore wind parks and photovoltaic (PV) systems on large roofs, the two fastest technologies to implement in a context of security of supply tensions. The method and reasoning of our study are detailed in Appendix 1.¹⁰.

The spreadsheet tool developed for this study allows for variation of a certain number of parameters in order to shed light on the results of the central scenario through sensitivity analyses. It is available in appendix 2¹¹. In particular, the calculations are based on the hypothesis of future evolution of the average carbon content of the European electricity mix, which allows to evaluate the avoided emissions based on the year of commissioning of nuclear or renewable means of production.

⁵ The LCOE (Levelized cost of energy) represents all the costs of electricity production assets throughout their lifespan. Expressed in EUR/MWh, it is used to compare the cost of electricity production between different technologies

⁶ International renewable energy agency, Renewable power generation Costs in 2022, Table H.1 Total installed cost, capacity factor and LCOE trends by technology, 2010 and 2022, p. 15
<https://www.irena.org/Publications/2023/Aug/Renewable-power-generation-costs-in-2022>

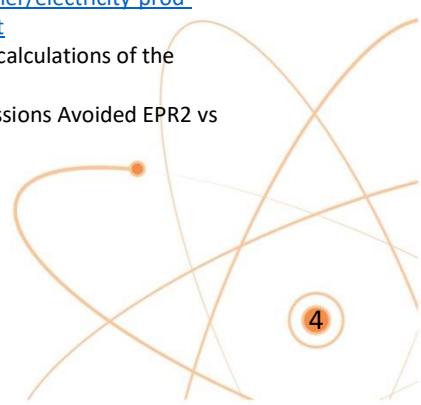
⁷ AR6 IPCC report, Climate Change 2022 Mitigation of climate change, Summary for Policymakers, Working Group III contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, Figure SPM.3 | Unit cost reductions and use in some rapidly changing mitigation technologies, p. 15
https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_SummaryForPolicymakers.pdf

⁸ According to WNISR 2022, "The levelized cost of energy (LCOE) analysis of the American bank Lazard shows that between 2009 and 2021, the costs of commercial solar fell by 90% and those of wind by 72%. when at the same time, those of new nuclear power suffered an increase of 36%", see Mycle Schneider, The world nuclear industry status report 2022, summary in French, Chapter "Nuclear versus renewables", p. 31

⁹ Our world in data, graph Electricity production by source, world
<https://ourworldindata.org/grapher/electricity-production-stacked?time=2010..latest>

¹⁰ Appendix 1: Methodology and calculations of the different scenarios

¹¹ Appendix 2: Calculation of Emissions Avoided EPR2 vs PV + wind



Results

The investment of 52 billion euros in the construction of six EPR 2s with a commissioning of the first two in 2037 and 2039, and then every two years, as announced in the “standard” scenario presented by the government and EDF, would allow to achieve cumulative emissions of 24 million tons of CO₂ by 2050, for a cumulative electricity production of 530 TWh.

The same amount of investment intended for the construction of infrastructure of renewable energy, consisting of a mix of 60% wind energy and 40% photovoltaic panels would make it possible to avoid cumulative emissions of 102 million tons of CO₂ by 2050 for a cumulative electricity production of 1538 TWh (see appendix 2).

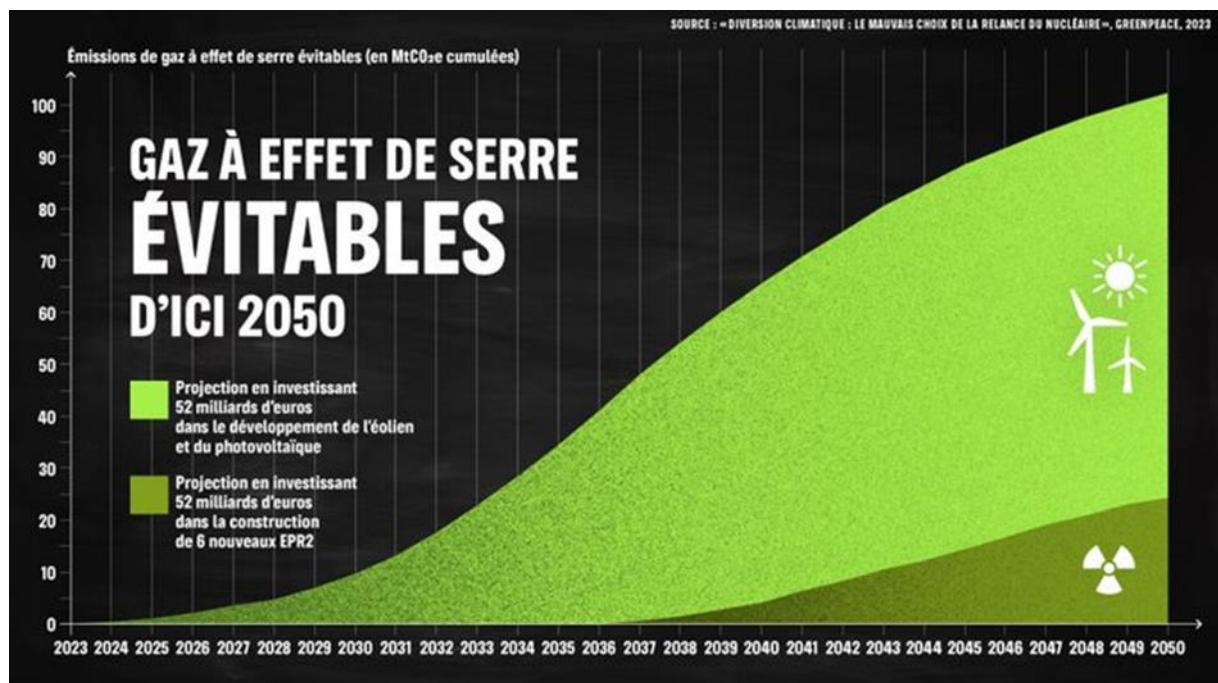


Figure 1: Avoidable greenhouse gas emissions by 2050 by comparing the investment of the same amount in the development of a wind/photovoltaic mix or in a construction program for 6 EPR 2 nuclear reactors.

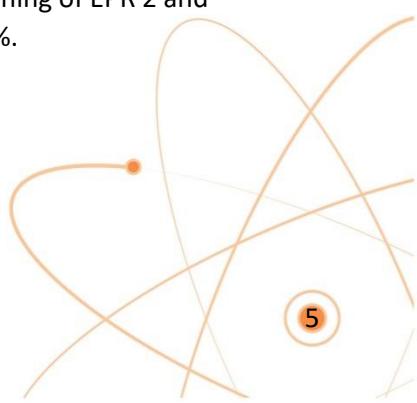
Sensitivity analysis

The spreadsheet tool (in appendix 2) allows one to vary the following parameters:

- investment costs and load factors for the three sectors (nuclear, onshore wind and PV)
- the emissions objectives of the European mix for 2030 and 2050
- the wind/PV ratio
- the date of commissioning of the first EPR 2

The results of different variations that we applied are available in a table in appendix 1. The most sensitive parameter is the offset of the commissioning date of the first EPR 2, followed by the increase in CAPEX¹². The combination of the two gives spectacular results, with for example a doubling of the ratio avoidance of GHG emissions to the advantage of renewable energies for a two-year delay in the commissioning of EPR 2 and an increase in CAPEX by 35%.

¹² See glossary



Note: these calculations follow a simplified methodology compared to reality and do not take into account - among others - the following elements: the cumulative effect of greenhouse gas emissions avoided, financing rates, costs of functioning¹³, costs associated with network management or compensation of the variability of renewables.

Conclusion

Even in the most favorable scenario for new nuclear power (in respect to costs and commissioning times, optimistic load factor, lower cost reduction renewable energies and calculations excluding the cumulative effect of GHG emissions, operating and financing costs are both largely favorable to renewable energies), for an equal investment amount, the installation renewable energy infrastructure composed of a mix of 60% wind and 40% of photovoltaic panels would avoid four times more emissions cumulative CO2 emissions by 2050 than the construction of six EPR 2, while producing three times more electricity cumulatively over the entire period.

The ratio of the positive impact of the wind/PV mix compared to the six EPR 2 on the CO2 emissions avoided could be doubled in the event of even moderate slippage, deadlines (+ 2 years) and costs (+ 35%) planned for the six EPR 2. This would lead to avoiding eight times more cumulative CO2 emissions by 2050 thanks to the mix wind/photovoltaic

compared to six EPR 2, for five times more electricity produced cumulatively over the entire period.

For reference, the delay in the Flamanville EPR construction site and the increase in its cost amounts to at least +12 years and 479% respectively.

Chapter 2 Invest in energy saving: 85 billion euros would allow nearly 12 million people out of energy-poverty in a decade

Energy strainers are houses with a very low energy-label In France more than five million homes¹⁴ don't have good insulation. More than 12 million people live in these houses

The inhabitants of these low-label houses are said to be "in energy poverty". Poor insulation of housing generates harmful living conditions: discomfort in summer during extreme heat and in winter due to ineffective heating and/or unsustainable energy costs for low-income households.

A study¹⁵ on the impact of energy poverty on health carried out by the Fondation Abbé Pierre showed how deprivation of heating worsens the state of health of precarious households who regularly have to choose between heating, food, take proper care of themselves or pay their rent.

¹³ Their impact is detailed in Appendix 1.

¹⁴ It should be noted that the real number of high energy housing in France is debated. If the figures of Ministry of Ecological Transition indicates 5.2 million strainers, other studies arrive at figures much higher: 7 million for Robin Girard, teacher-researcher at the Ecole des Mines in the field of energy transition and Yassine Abdelouadoud, independent researcher specializing in transition energy, and figures of the same order of magnitude for Olivier Sidler, European specialist in buildings

very low consumption. In this report, the choice was made to base itself, as for the economic costing of the six EPR 2, on the official figures of the ministry.

¹⁵ Abbé Pierre Foundation, Links between energy poverty and health: joint analysis of surveys carried out in Hérault and Douaisis, November 2013
<https://www.fondation-abbe-pierre.fr/nos-actions/comprendre-et-interpeller/limpact-de-la-precarite-energetique-sur-la-sante>



Illustration 1 - Affiche d'une campagne de la Fondation Abbé Pierre

© Fondation Abbé Pierre

In old houses, humidity and dilapidation can also lead to degradation of lead paints, the ingestion of dust and scales, particularly dangerous for young children. In 2013, more than 5,300 children suffered from lead poisoning in France, a disease which causes serious and irreversible developmental disorders. In unsanitary housing (600,000 in France) or improvised houses (85,000 tents, cabins and caravans), water infiltration, poor ventilation and insufficient heating (or even absence of it) cause high humidity and the development of mold which aggravate or cause allergic and respiratory pathologies.

According to the Ministry of Ecological Transition and Territorial Cohesion and the Ministry of Energy Transition, in France, building is the sector that emits the second most greenhouse gases. It alone represents

27% of CO2 emissions and almost 45% of final energy consumption¹⁶

Funds have been deployed by the government for the thermal renovation of buildings in the context of France 2030, but they are not adapted to the urgency of the climate and health crisis, nor to the speed at which high energy houses need to be renewed. In October 2022, while the National Assembly had voted for an increase of 6.85 billion euros in the budget for energy savings of houses, bringing it to 12 billion per year, the government used article 49.3 of the Constitution to reject the measure (as well as others).

Presentation of the study and method

Greenpeace carried out a study to estimate the number of public subsidies necessary to efficiently renovate all the badly insulated

¹⁶ Ministry of Ecological Transition and Territorial Cohesion and Ministry of Energy Transition, Energy renovation, February 2, 2023

<https://www.ecologie.gouv.fr/renovation-energetique>

houses (Low Consumption Building, BBC)¹⁷ as well as the quantity of greenhouse gas emissions that would be avoided and the energy savings (electricity, wood, fuel oil, fossil gas) that would result. The methodology and detailed results are available in Appendix 1.

Results and conclusions

Here, in broad terms, are the results obtained:

The total cost of the work necessary for the BBC renovation of all badly insulated houses in France by 2033 amounts to approximately 169 billion euros.

The total amount of public subsidies needed for the renovation performance of all high-energy housing in the next decade amounts to nearly 85 billion euros (see appendix 3¹⁸).

The pace of housing insulation is today much too slow, and the resources made available too small. In 2022, the National Housing Agency counted only 66,000 overall renovations (which can be considered here as similar to BBC renovations). Among them, not all concerned energy strainer housing¹⁹.

To initiate a real energy transition, reduce our greenhouse gas emissions and our energy waste and get out as quickly as possible of precariousness the 12 million occupants of high-energy houses, a real rise in the power of efficient energy renovation, in prioritizing these renovations must be carried out.

For this, the annual rate of BBC renovation must gradually go from a few tens of thousands in 2022 to 700,000 per year by the end of the decade (in 2029 or 2030). With this

rise, all high-energy houses in France could be renovated by 2033, leading to numerous benefits for individuals and society.

85 billion euros of public subsidies invested by 2033 in a scenario BBC renovation in 10 years would allow:

- save more than 156 MtCO2eq by 2050, compared to a slow renovation scenario. This represents six times more greenhouse gas emissions avoided in 2050 than an investment of 52 billion (excluding financing costs) in the construction of six EPR2 (156 vs 24 MtCO2). The calculations are carried out in the spreadsheet available in appendix 3.
- to gradually reduce greenhouse gas emissions from high energy housing up to a saving of 20.2 MtCO2eq/year from 2033. This represents 5% of France's greenhouse gas emissions current in France.
- save the consumption of more than 19 TWh of electricity per year, i.e., approximately the annual electricity production of two EPR 2's
- to lift nearly 12 million people out of energy poverty by a decade, which means a gain in well-being for these inhabitants who do not suffer anymore from cold, humidity or even mold in their accommodation.
- reducing household energy bills.
- an improvement in the French trade balance by reducing fossil fuel imports and energy waste.
- Savings on public health spending.

¹⁷ The BBC label goes beyond just energy performance by taking into account in particular consideration of the tightness of the frame. However, we can consider that a BBC renovation allows to achieve an energy performance diagnosis (EPD) A or B.

¹⁸ Spreadsheet - Calculation of CO2 emissions reduction with different renovation scenarios energy strainers

¹⁹ National Housing Agency, more than 700,000 homes renovated in 2022: anah's activity is continues at a very high level and confirms the trend initiated in 2021, press release, 24 January 2023

<https://www.anah.gouv.fr/presse/plus-de-700-000-logements-renoves-en-2022-l-activite-de-l-anah-se-poursuit-un-tres-haut>



Figure 2: Avoidable greenhouse gas emissions by 2050 by comparing the investment of an equivalent amount in the efficient energy saving in 10 years or in a construction program for 6 EPR 2 nuclear reactors

Conclusion

Even in the most favorable scenario for new nuclear power, at an amount of equal investment, the installation of renewable energy infrastructure of wind/photovoltaic mix would avoid four times more emissions cumulative CO₂ emissions by 2050 than the construction of six EPR 2, while producing three times more electricity cumulatively over the entire period.

The most sensitive parameter for varying this ratio is the offset of the date of commissioning of the first EPR 2, followed by the increase in construction costs construction, the combination of the two giving even greater results spectacular in favor of renewables on the ratio of greenhouse gases avoided. The calculations are carried out with very conservative data, and the experience of the EPR series show a systematic extension of deadlines and a multiplication of costs.

The investment of 85 billion euros in public subsidies by 2033 in BBC renovation would avoid six times more of CO₂ emissions by 2050 than the investment of 52 billion in the construction of six EPR 2s, while getting nearly

12 million people out of fuel poverty in a decade.

The results of this report demonstrate the absurdity of the reasoning “Nuclear is a low-carbon energy, so the development of nuclear power is essential to respond to the climate emergency”, repeated and amplified in the public sphere by the supporters of the industry and the government of Emmanuel Macron whose objective is not the general interest but the maintenance of the nuclear industry.

Instead of tying up billions in the slow, ruinous and uncertain project of construction of EPR 2 reactors whose model is based on one of the largest French industrial fiascos - the EPR -, this money must be used to finance measures that will make it possible to quickly and massively bend the curve of France's greenhouse gas emissions. The efficient renovation of houses and the development of renewable energies such as wind and solar, in addition to having a direct impact on emissions reductions of greenhouse gases in the next decade (crucial for the climate), will generate co-benefits for the population. This includes the return on investment of renewable energies in the community, an

increase in the energy security in the coming years (which could be undermined by the aging of nuclear power plants in the current fleet) and an improvement in the quality of life for millions of people by lifting them out of energy poverty.

On the contrary, nuclear power creates negative externalities for society and the future of future generations such as the production of radioactive waste that we do not know still how to manage in the long term and the risk of accidents. These are likely to increase in an overheating world, following the evolution of global geopolitical situations and the multiplication of conflicts linked to tensions around natural resources, such as the necessity of cooling nuclear reactors in a context where access to water is becoming more complex.

These results are likely to shed light on the debate on the French energy mix. Beyond a technological choice, it is a societal choice that will have an impact on our energy security and our capacity to mitigate and adapt to climate and environmental crises and to respond to social crises.

Far from being as simplistic a decision as presented by the nuclear industry and the government, the new nuclear - with the construction of nuclear reactors EPR 2 - is, in the short, medium and long term, a bad choice for decarbonizing our energy mix in the face of the climate emergency.

Each euro invested in new nuclear power will not be invested in an energy transition dimensioned and adapted to the scale of the climate, ecological and social emergency.

Appendices

Appendix 1 - Methodology and calculations different scenarios

<https://cdn.greenpeace.fr/site/uploads/2023/10/Annexe-1-Diversion-climatique- -le-mauvais-choix-de-la-reiance-du-nucleaire-3.pdf>

Annex 2 - CalculationEmissionsAvoidedEPR2 vs PV + wind

<https://cdn.greenpeace.fr/site/uploads/2023/10/Annexe-2-CalculEmissionsEviteesEPR2-vs-PV-eolien.xlsx>

Appendix 3 - Calculation of the reduction CO2 emissions with different renovation scenarios energy strainers

<https://cdn.greenpeace.fr/site/uploads/2023/10/Annexe-3-Calcul-de-la-reduction-des-emissions-de-CO2-avec-differents-scenarios-de-renovation-des-passoirs-energetiques.xlsx>

No Russian fuel elements from Germany!

Bündnis AgiEL, .ausgestrahlt, Ecodefense

No Russian fuel elements from Germany!

Three ngo's stated a collective objection to the expansion of the Lingen fuel element factory. Germany's only nuclear fuel plant is located in the small town of Lingen. Despite the phase-out of nuclear power in Germany, fuel elements for nuclear power plants, mainly in Western Europe, are still produced there.

There are plans to expand the production of fuel in Lingen. The French company

Framatome, which owns the factory in Lingen, has formed a joint venture with the Russian state company Rosatom to produce fuel for Russian-designed reactors in the future. In the EU, these reactors are located in the Czech Republic, Bulgaria, Slovakia, Hungary, Finland.

The official reason Framatome gives: they want to help these countries to free themselves from their dependence on Russia. However, Framatome cannot simply produce

these fuel elements itself; it needs Russian expertise, Russian machinery, Russian specialists and Russian licences. This is not a way of breaking free from dependency, but actually exacerbates it. The Kremlin, to which Rosatom is directly subordinate, is given access to the European energy supply.

The Lower Saxony Ministry of the Environment, where the Framatome application is currently on the table, ordered a public participation procedure at the beginning of January. The documents are available at the Ministries Website. Anyone (and any organisation) who has objections to these plans can submit an objection to the Ministry of the Environment. The deadline is 3 March.

Atomstadt Lingen needs your support here: please take part in the procedure, this is a real way to influence a situation!

There are two ways to participate and stop this dangerous plan of the Franco-Russian nuclear industry.

- Your organisation can write an own objection, stating why the expansion project are a problem for you and why it has to be stopped. Important arguments are not only

the problems of nuclear fuel production in general, but also why the involvement of Russia is a problem, how espionage and sabotage could affect you, and how this endangers your security.

Please send this objection by 3 March (by post) to the:

Niedersächsisches Umweltministerium,
Archivstr. 2, 30619 Hannover, Germany

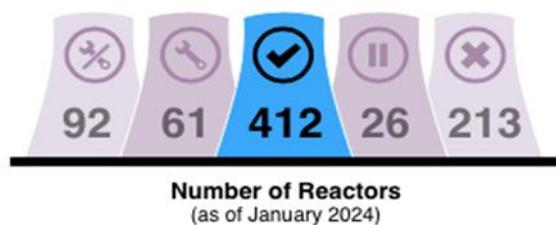
But, most important, please send us the statement as well so that we can publicize it and pass it on to journalists: aevent@web.de

- You can take part in a collective objection, which has already been prepared by us (see <https://atomstadt-lingen.de/files/Sammeleinwendung-Brennelementfabrik-Lingen.pdf>). You should then send the collective objection to the address given at the bottom of the form. Together with several environmental organisations, we will hand over the lists to the Minister of the Environment on 1 March. For more information (german website): <https://atomstadt-lingen.de/2024/01/03/beteiligung>

NUCLEAR NEWS



World Nuclear Power Status



Source: <https://www.worldnuclearreport.org>

Compared to Nuclear Monitor 911, the number of closed reactors has increased from 212 to 213. The number of operating reactors is 412, this is the same number of reactors compared to one month ago.

Human Chain with the Red Card Against Nuclear Power, March 12 2024

Chaine Humaine is a French association founded in 2011 that fights against the supremacy of nuclear energy. Their main goal is to continue actions 'hand in hand' until a total cessation of civil and military nuclear energy. On the 12th of March 2024 a new action of Chaine Humaine is going to happen. In the context of the upcoming European elections and the commemoration of the Fukushima disaster (March 11, 2011), they are calling on candidates to make an

uncompromising commitment to a European shift towards renewable energies and a green taxonomy without greenwashing or nuclear power.

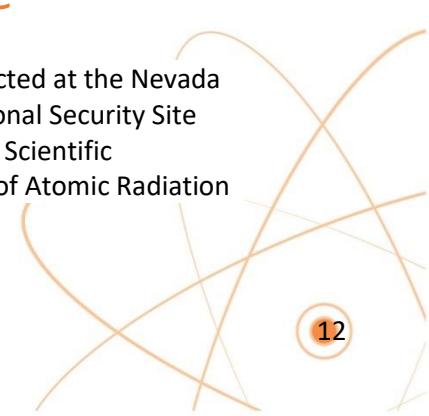
Chaine Humaine calls for a human chain with the red card against nuclear power at 12 noon in front of the European Parliament in Strasbourg.

Source: <http://www.chainehumaine.fr>

'We're running out of time': Program for Arizonans exposed to radiation set to expire in June

From 1945 to 1992, according to the Arms Control Association, the U.S. conducted a total of 1030 nuclear tests. Most of these nuclear tests, about 100 atmospheric and 828

underground, were conducted at the Nevada Test Site, the Nevada National Security Site states. The United Nations Scientific Committee on the Effects of Atomic Radiation



looked into this and found that atmospheric tests involved unrestrained releases of radioactive materials directly into the environment, causing the largest collective dose of radiation thus far from man-made radiation sources. This causes radioactive fallout dispersed by clouds and precipitation into the atmosphere in several states, including Arizona, government models and data have shown since. This means people have been at risk of serious illnesses for decades.

The Radiation Exposure Compensation Act (RECA) provides a program that compensates individuals who become ill because of exposure to radiation from the United States' development and testing of nuclear weapons. Since the start of this program in 1990, more than 55.000 claims have been filed and about 75% of those have been approved which comes to a total of 2.6 billion dollars. RECA

was initially set to expire in July 2022, but President Joe Biden signed a measure extending the program for two more years. Now, people call for another extension, because without this will the RECA program expire in July which means that individuals who get diagnosed with illnesses after July will not get any compensation.

Nika Scheelen, WISE Netherlands

Source:

https://www.azmirror.com/2024/01/09/were-running-out-of-time-program-for-arizonans-exposed-to-radiation-set-to-expire-in-june/?utm_source=substack&utm_medium=email