



RÉPUBLIQUE
FRANÇAISE

*Liberté
Égalité
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IRSN

INSTITUT DE RADIOPROTECTION
ET DE SÛRETÉ NUCLÉAIRE

BAROMETER 2024

THE PERCEPTION OF RISKS
AND SECURITY IN FRANCE

English Summary



For more than 30 years, the IRSN Barometer has been tracking the perception of risks and security among the French population on an annual basis. This continuous study provides valuable insights into understanding risk perception, which in turn helps IRSN better handle risk assessment.

SURVEY METHODOLOGY

In the 2024 edition, as well as in the previous ones since 1997, the surveys were conducted during the preceding fall (from Nov 22rd until Nov 30th) on a representative sample of the French population. The questionnaire remained the same with marginal additions and removals to ensure data consistency. Two changes implemented in 2020 were maintained: the sample size has been increased to 2000 (instead of 1000 the previous years) and the survey is now permanently conducted online (instead of in person) since 2020. Both changes enhance the statistical accuracy and relevance of the data collected. **All results are available on <https://barometre.irsn.fr>**

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BAROMETER 2024

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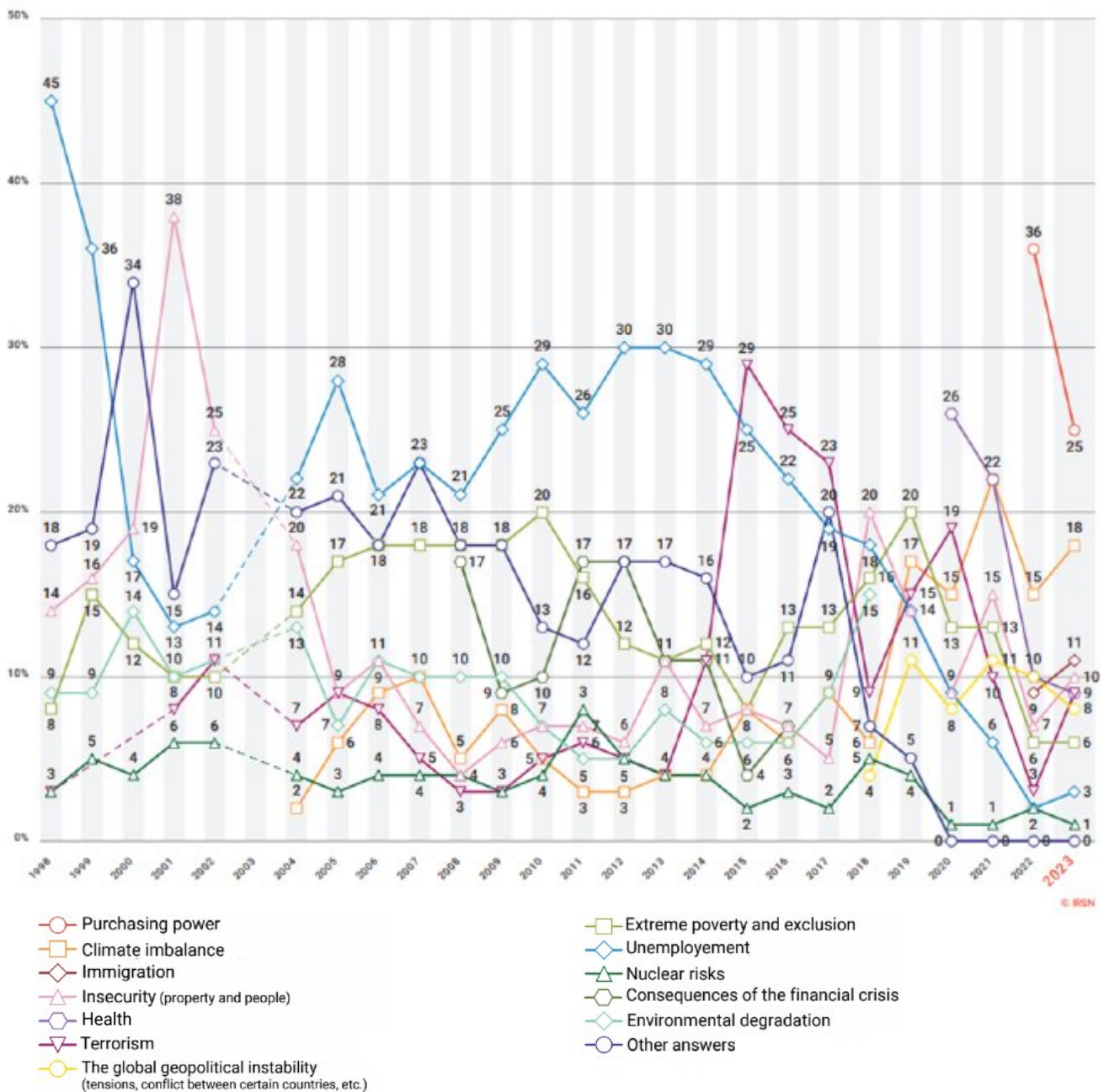
PART 1

**The Current Concerns
of the French**

In 2023, purchasing power, despite a fall of 11 points, remains the main concern for the French, with 25% of responses. It gets in front of climate imbalance (18%, +3 points) and immigration (11%, +2 points), which joins the top three for the first time since 2018. Among the main environmental concerns, climate imbalance (44%, +3 points) continues to lead, far ahead of “damage from natural disasters” (17%, +4 points) and water pollution (12%, +2 points).

Part 1-Question 1: In France, among the following issues, which one is the most concerning for you?

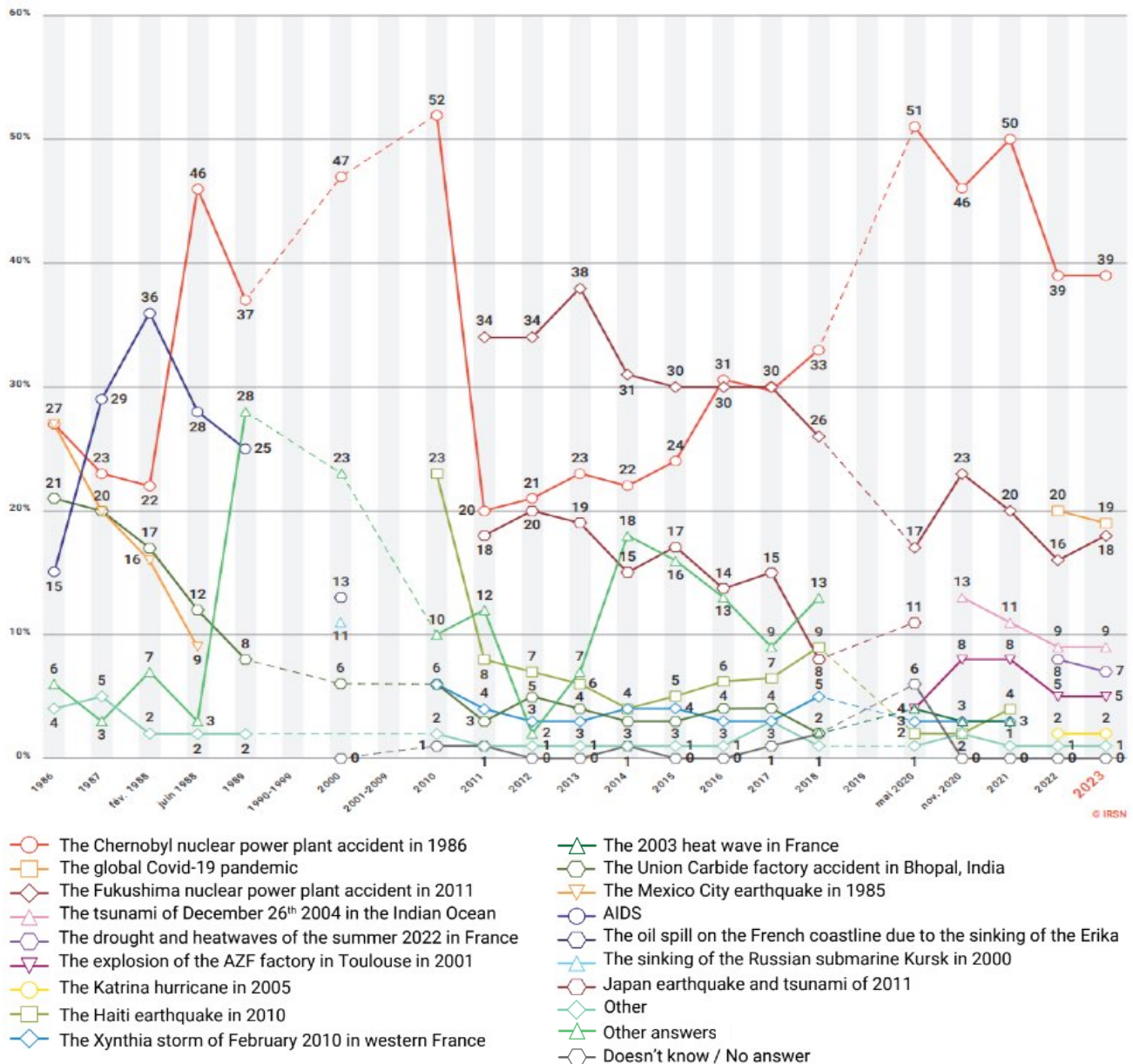
Evolution of the results 1998-2023 (in %)



Regarding the perception of disasters, nuclear power plants remain in 2023 the facilities most liable to provoke a serious accident in France (24%) according to the French. They are followed by chemical plants, now slightly ahead of radioactive waste storage facilities (17%) and virus research laboratories (16%). The Chernobyl accident is still the disaster perceived as the most frightening (39%) followed by the Covid-19 pandemic (19%) and the Fukushima accident (18%).

Part 1-Question 4: Which of the following catastrophic events do you find the most frightening?

Evolution of the results 1986-2023 (in %)



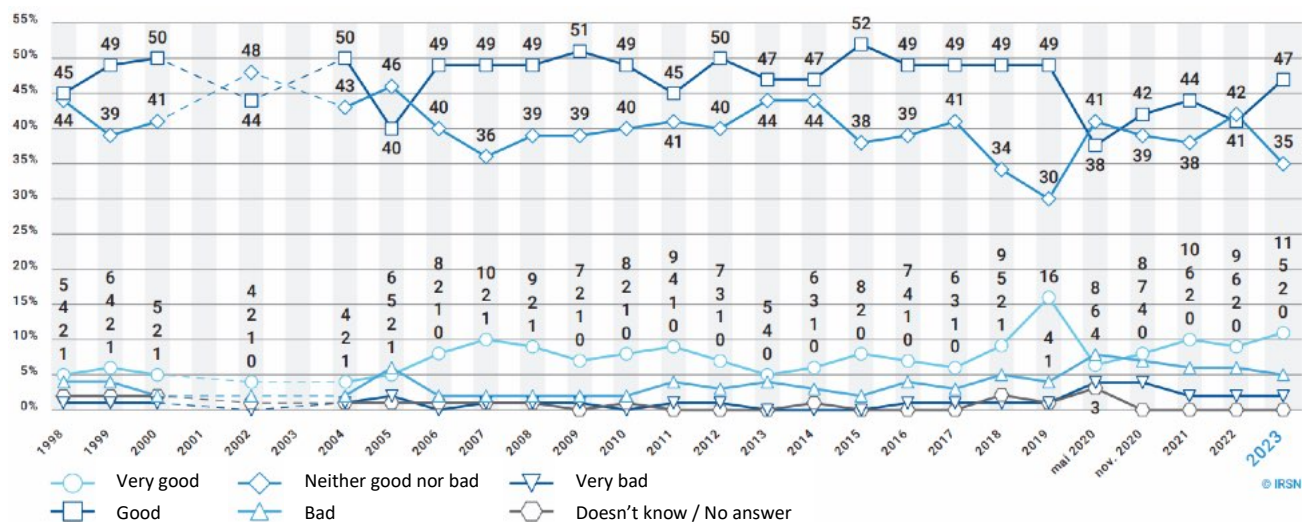
PART 2

The French Perspective on Science and Expertise

This year, the image of science, especially that of experts, is improving: 62% of French people trust scientific institutions (+2 points) and 58% have a positive opinion of scientific experts (+8 points). For the fourth consecutive year, the most expected qualities for a scientific expert are still technical competence (30%), honesty in their scientific approach (26%) and independence of judgement (22%).

Part 2-Question 2: **In general, do you have a good or a bad opinion of scientific experts?**

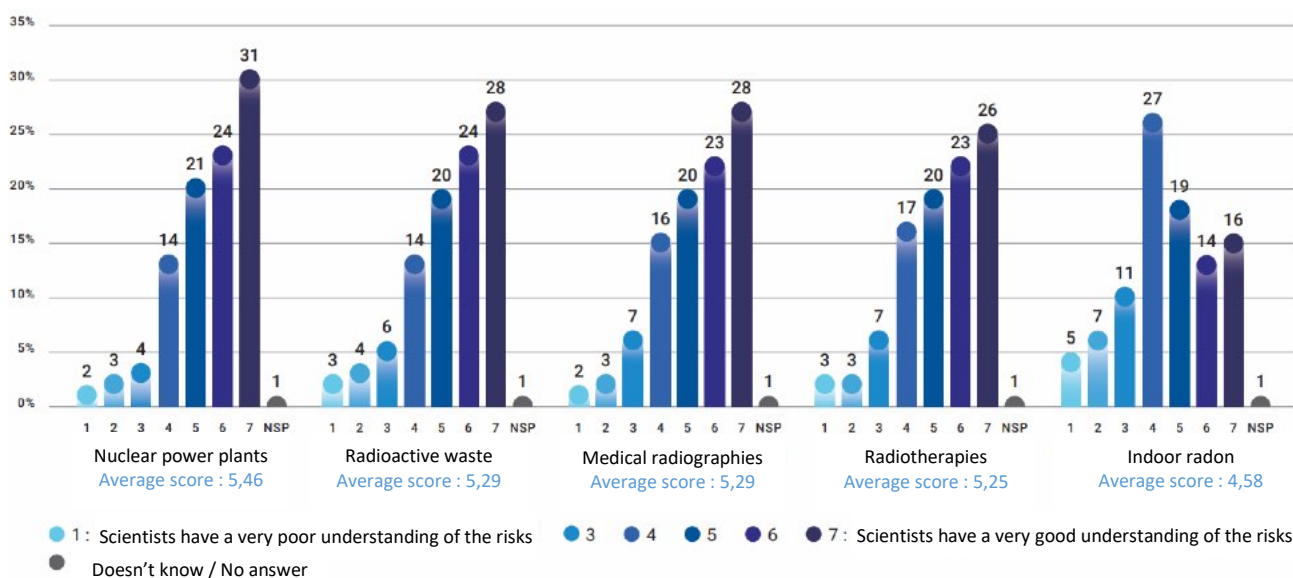
Evolution of the results 1998-2023 (in %)



Due to the addition of a new question this year, the Barometer now provides valuable insight into the French public's perception of scientists' knowledge regarding the risks associated with five specific scenarios related to nuclear energy and radiation. Among these, "nuclear power plants" were identified by respondents as the area where scientists are perceived to have the greatest understanding of the associated risks, with an average score of 5.46. Following closely, with nearly identical averages, are "radioactive waste" (5.29), "medical radiographies" (5.29), and "radiotherapies" (5.25). In contrast, "radon in homes" ranks last, with an average score of 4.58, highlighting the persistent lack of public awareness surrounding the risks associated with radon, a trend that has been consistently noted in the Barometer over several years. This outcome reflects earlier analyses of the Barometer regarding the French population's knowledge of this issue.

Part 2-Question 3: In your opinion, do scientists generally have a good or poor knowledge of the risks associated with each of the following areas?

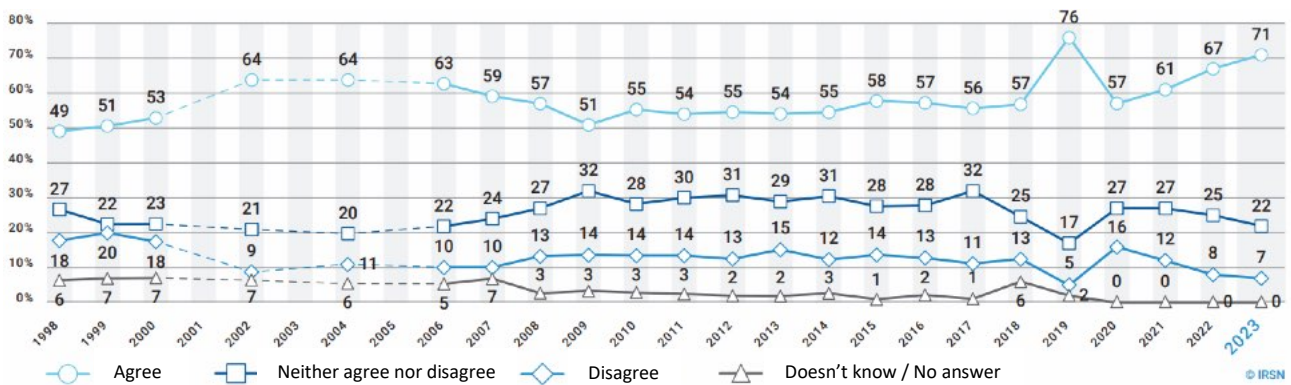
November 2023 (in %)



The demand for a wide access to information of quality is reinstated in 2023. The French remain 88% to think that it is necessary to make available to all comprehensible information on installation's risks and they are 73% to consider that making the reports of expert bodies public is a priority. Nevertheless, 53% of French don't wish to participate to public meetings about at-risk facilities. The feeling that other people are more competent than them (28%) is the main obstacle to their participation, while the feeling of being directly concerned by the subject (45%) is the main lever. The French re-affirm their inclination towards having officials consult experts. 71% of them consider that political decision-makers do not take enough into account the opinions of scientific experts (+4 points).

Part 2-Question 5: **“Political decision-makers do not take scientific experts’ opinions into account enough.”**

Evolution of the results 1998-2023 (in %)



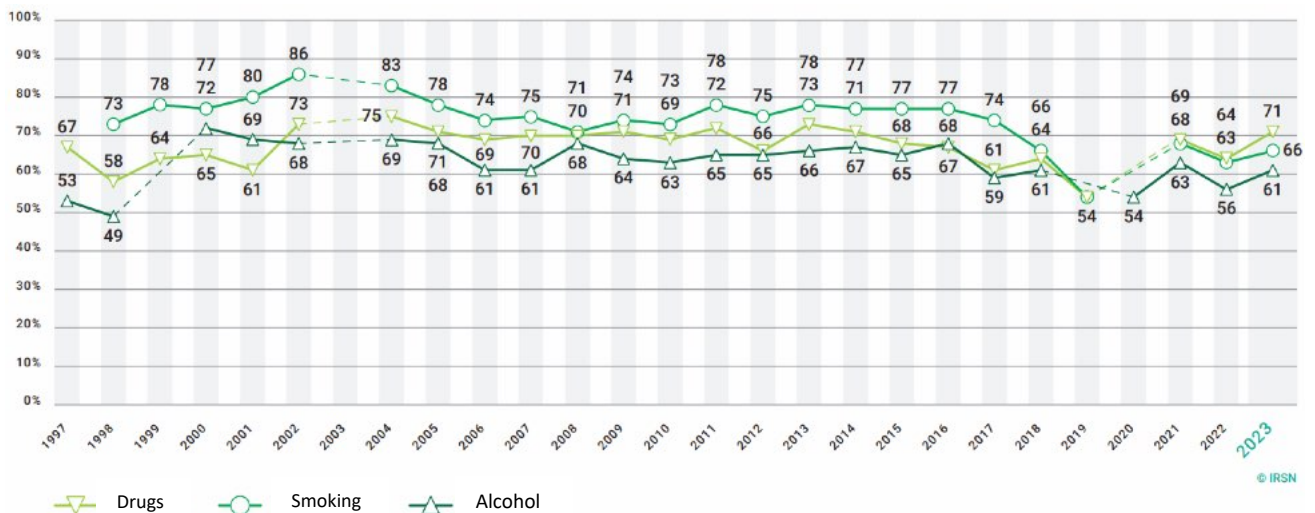
PART 3

The French and Risk Situations

Among the 23 at-risk situations monitored by the Barometer in 2023, cancer (73% of “high risk” answers) remains the risks perceived as the highest. However, this year it is followed by drugs (71%, +7 points), which, for the first time since 2014, enters the top three of the highest perceived risks. Air pollution comes next (69%) and occupies the third place with terrorism (69%) which shows a significant increase (+10 points), thus returning to its 2021 level. Regarding nuclear risks, perceptions surrounding radioactive waste (44%) and nuclear power plants (36%) remain at their lowest recorded risk levels for the past five years. Additionally, this year, the consumption of psychoactive substances—including drugs, tobacco, and alcohol—represents the highest risk area at 66% for the French population.

Part 3-Question 1: In each of the following situations, do you consider that the risks for the French population in general are...

Evolution of the results 1997-2023 (in %) – subtotal of the “high” (“high” and “very high”) answers for “drugs”, “smoking” and “alcohol”.



Regarding the level of information perceived by the French, smoking (78%), alcohol (77%), and road accidents (76%) remain the risk situations for which the French feel the most informed. In contrast, radon (18%), chemical waste (24%), and radiotherapy accidents (25%) are the risk situations for which the French feel the least informed.

The trust the French place in authorities to protect them from at-risk situations remains low (32% of “yes” responses on average). Trust is highest for medical radiographies (44%) and nuclear power plants (42%), which enter the top three for the first time with a 7-point increase. Conversely, the highest level of “distrust” among the French is directed to pesticides and drugs, both eliciting 53% of negative responses.

PART 4

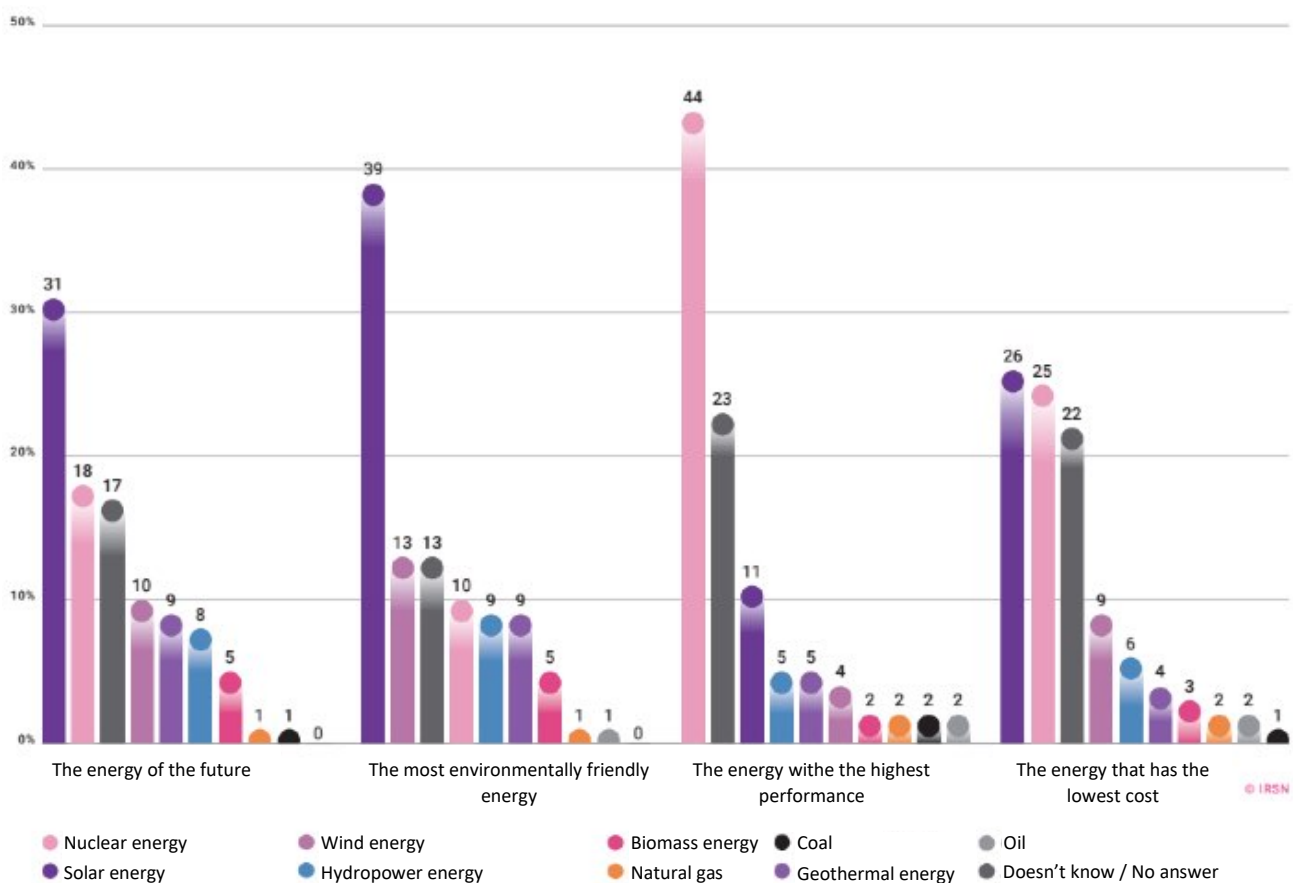
The French, Nuclear Energy and Safety

After a significant shift in 2022, French public opinion in favor of nuclear energy stabilizes in 2023. One in two French people (49%, -1 point) supports the construction of new nuclear power plants, while 22% (+2 points) are against it.

The primary argument in favor of nuclear power remains energy independence, cited by 42% of respondents, significantly ahead of the lower cost of electricity (23%). Conversely, the “production of nuclear waste” continues to be the most frequently used argument against nuclear power (33%), maintaining a 9-point lead over the second concern, the risk of accidents (24%).

Solar energy is the most positively perceived energy in general by the French (27%), followed closely by nuclear energy (23%). Solar energy is regarded as “the most environmentally friendly” (39%) and “the energy of the future” (31%). In contrast, nuclear energy is viewed as “the most efficient energy” by 44% of respondents.

Part 4- Question 5: **In your opinion, which of the following energy sources best corresponds to ...**
November 2023 (in %)

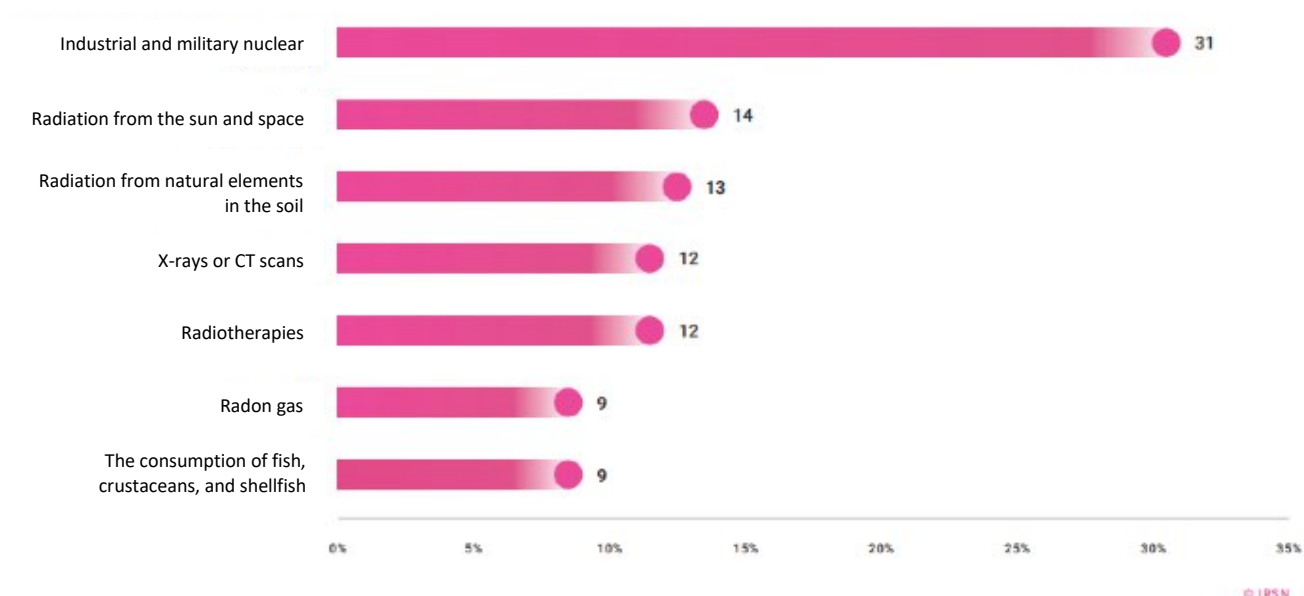


This year, new questions have been introduced to enrich the Barometer's study on the perceived impact of radioactivity and nuclear activities on health and the environment. One of these new additions focuses on the main source of exposure to radioactivity in France.

A majority of the French population (55%) considers that such exposure primarily originates from artificial sources. Industrial and military nuclear facilities are cited most frequently (31%), followed by medical nuclear activities (24%), solar and space radiation (14%), radiation from natural elements in the soil (13%), and, equally at 9%, radon and the consumption of fish, crustaceans, and shellfish.

Part 4- Question 6 : **In your opinion, what is the main source of exposure to radioactivity in France?**

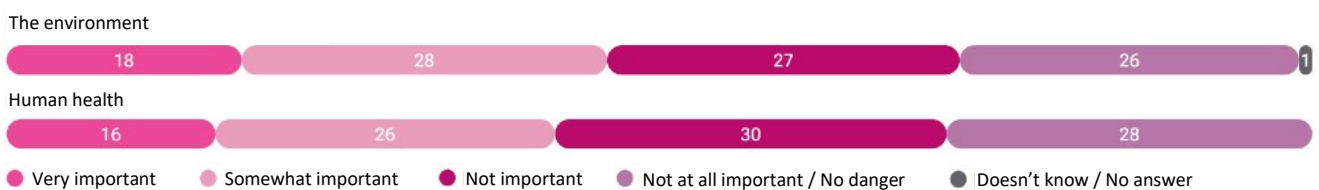
November 2023 (in %)



Another question involved presenting the French with a photograph depicting “white smoke” emanating from a nuclear power plant; this smoke consists of non-radioactive water droplets emitted from the plant's cooling system. For 73% of the French population, this smoke is perceived as a danger to the environment, with 46% thinking this threat to be significant. Similarly, 72% of respondents consider the smoke hazardous to human health, and 42% view this danger as significant.

Part 4- Question 8: **In this photo, you can see a white smoke rising from the nuclear power plant. In your opinion, does this smoke represent a danger for...**

November 2023 (in %)



A topical question was also added regarding Japan’s plans to release treated water from the Fukushima power plant into the sea. After receiving approval from the International Atomic Energy Agency (IAEA), the Japanese government decided, in August 2023, to allow the treatment and discharge of the water used to cool the Fukushima nuclear reactors following the 2011 accident into the Pacific Ocean. When asked about this, 81% of the French consider this operation dangerous for human health and the environment. Of those, 49% consider the danger to be on a global scale, while 32% perceive the threat as more localized, affecting the region around Japan.

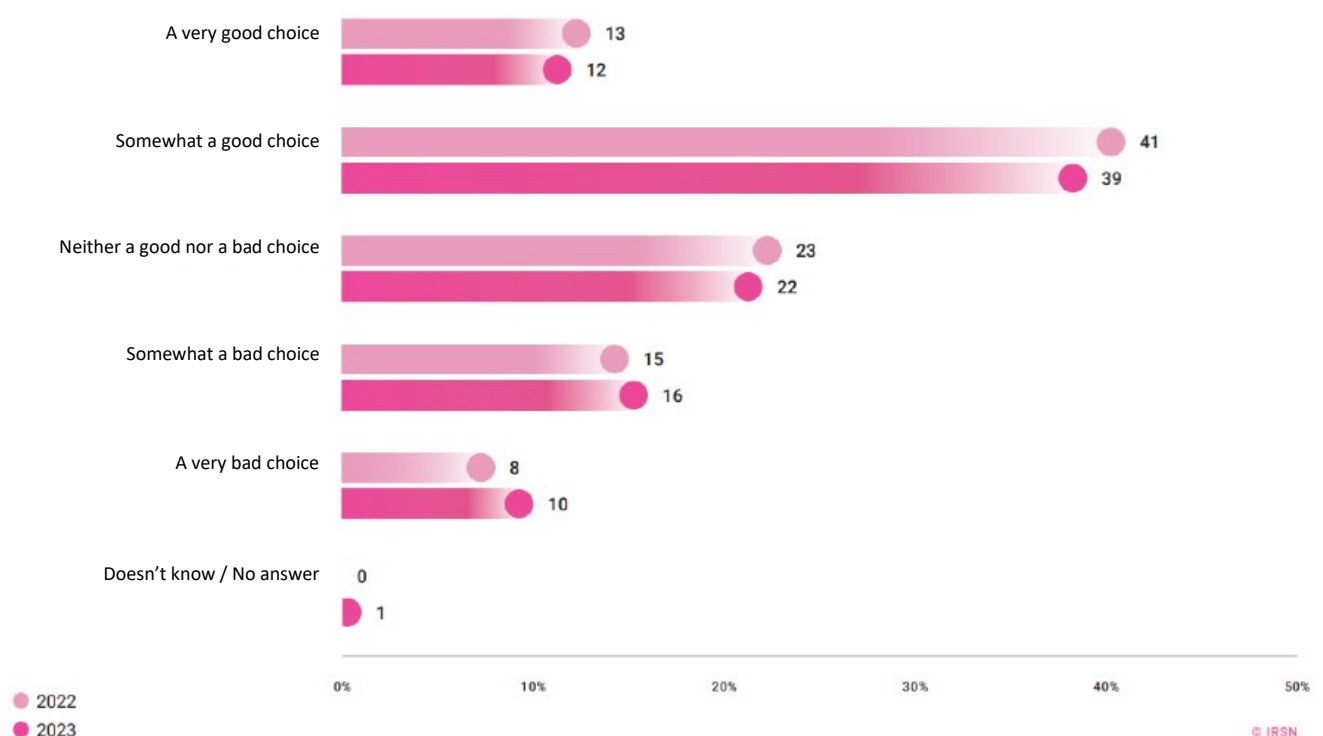
Regarding nuclear waste management, a majority of the French people (68%) continues to think that the “most reasonable position” for resolving the problem of radioactive waste disposal is to “decide and implement the solution as quickly as possible”. Only 5% of respondents prefer to “leave the choice to future generations”. Furthermore, 35% believe that it is not “currently possible today to store nuclear waste safely”, while 32% think the opposite.

The necessity for a high level of nuclear safety is shared by 82% of French people, who declare that “operators of nuclear sites must protect their facilities from all risks, even those deemed highly unlikely”. “This year again, most of the French (69%) assert that “the safety of nuclear facilities takes precedence over energy production”. Furthermore, a significant portion of respondents considers that safety improvement measures should be a priority (67%, +4 points).

On the issue of extending the operating life of nuclear power plants, 51% of French people consider it a good choice, while 26% who think the opposite. However, 38% believe that “extending the operating life of nuclear power plants will lead to accidents”, compared to 23% who disagree with this assertion.

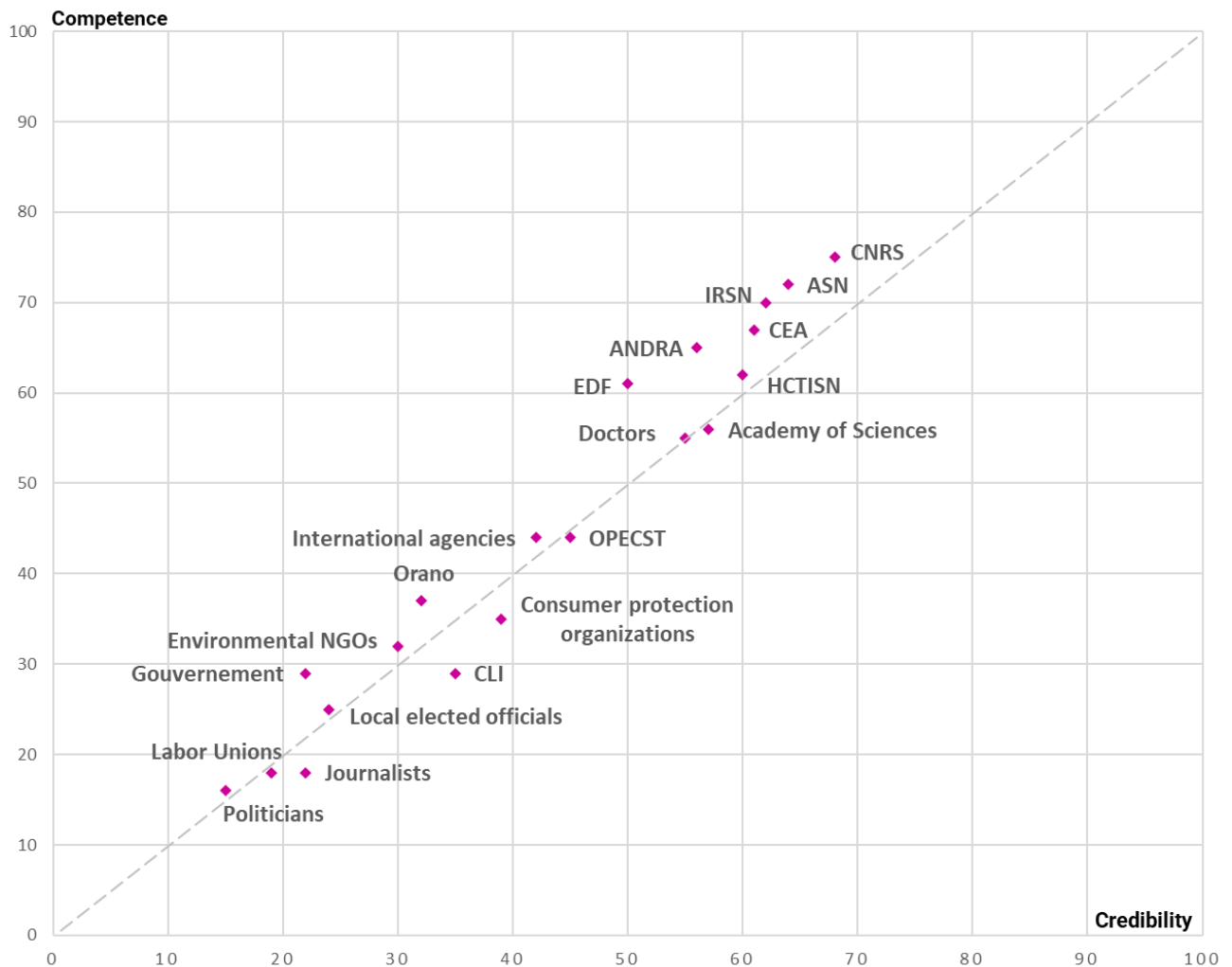
Part 4- Question 14: Based on what you know, do you think that the choice to extend the operating lifespan of nuclear power plants constitutes...

Evolution of the results 2022-2023 (in %)



Finally, the CNRS, ASN and IRSN are once again considered to be both the most competent and the most credible in the field of nuclear industry and energy. Scientific bodies, experts and operators are still perceived as competent and credible. Politicians, trade unions and journalists continue to be perceived as the least competent and credible players in the field.

Part 4- Question 17&18: **In the field of nuclear industry and energy do you think the following actors and organizations are technically competent / trustworthy sources of information?**
November 2023 (in %)





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