BAROMETER 2023
THE PERCEPTION OF RISK
AND SECURITY IN FRANCE
ALL THE CHARTS
OBJECTIVES

Through annual surveys, IRSN follows the opinion of the French regarding risks, including nuclear and radiological risks. The results are shown in the “IRSN Barometer on the perception of risks and security in France” which was created in 1990 in its current form. The yearly results of the surveys give access to long term trends and a hierarchy of the French’s main concerns and perceptions of risks affecting their quality of life. The current form of the Barometer also provides a general outlook on the French’s opinion on science, expertise and nuclear safety.

METHODOLOGY OF THE SURVEY

The 2023 edition of the IRSN Barometer displays the results of a survey carried out online from November 23rd to November 30th 2022. Altogether, 2014 individuals aged 18 years and above participated in the survey. The representativity of the sample is assured by quotas (sex, age, social and professional category) and stratification by region and size of the urban area of residence. For the third year, the survey was carried out online. From 1990 to 2019, respondents were interviewed at home and the sample size was of 1000 individuals. In 2020, during the transition to an online survey, both methods were applied simultaneously in order to check for biases, so that they could be taken into account during the analysis of long-term trends. The results of both surveys are available in open access on the website of the IRSN Barometer: https://barometre.irsn.fr

KEY

In the graphs of the IRSN 2023 Barometer:

Means the question was withdrawn this specific year

AUTHORS

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The outlook of the French on science and expertise

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PART 1

THE CURRENT CONCERNS OF THE FRENCH

5 – 11
Main concerns of the French

12 – 13
Main environmental concerns of the French

14 – 17
The French perception of disasters
In France, which of the following current issues do you find most concerning? First? Second?

→ NOVEMBER 2022 (IN %)

1 – First

- Purchasing power: 36%
- Climate imbalance: 15%
- The global geopolitical instability (tensions, conflict between certain countries, etc.): 10%
- Health: 10%
- Immigration: 9%
- Insecurity (property and people): 7%
- Extreme poverty and exclusion: 6%
- Terrorism: 3%
- Unemployment: 2%
- Nuclear risks: 2%
- Doesn't know / No answer: 0%
In France, which of the following current issues do you find most concerning? First? Second?

→ NOVEMBER 2022 (IN %)

2 – Second

- Purchasing power: 18%
- Climate imbalance: 15%
- The global geopolitical instability (tensions, conflict between certain countries, etc.): 13%
- Health: 11%
- Immigration: 10%
- Insecurity (property and people): 10%
- Extreme poverty and exclusion: 10%
- Terrorism: 4%
- Unemployment: 4%
- Nuclear risks: 4%
- Doesn’t know / No answer: 1%
In France, which of the following current issues do you find most concerning? First? Second?

→ NOVEMBER 2022 (IN %)

3 – Cumulative results

- Purchasing power: 54%
- Climate imbalance: 31%
- The global geopolitical instability (tensions, conflict between certain countries, etc.): 23%
- Health: 20%
- Immigration: 19%
- Insecurity (property and people): 17%
- Extreme poverty and exclusion: 16%
- Terrorism: 7%
- Unemployment: 6%
- Nuclear risks: 5%
- Doesn’t know / No answer: 1%
In France, which of the following current issues do you find most concerning?

The proposed answers have changed over the years. In 2002, “the lack of security” replaced “violence in the suburbs”. In 2018, the modality “destitution and exclusion” was replaced by “extreme poverty and exclusion”. In 2019, the modality “climate change” was replaced by “climate imbalance” and the modality “Insecurity” was replaced by “Insecurity (property and people)”; the answers “environmental degradation”, “traffic accidents”, “AIDS”, “floods”, “chemical risk”, “The quality of medical care” and “substance abuse (drugs, alcohol, Smoking)” were removed. In 2020, the modality “health” was added. In 2022, the answer “the global geopolitical instability (migrant crisis, tensions between certain countries, etc.)” was replaced by “the global geopolitical instability (tensions, conflicts between certain countries, etc.)”; the answers “Purchasing Power” and “Immigration” were added.

* The proposed evolution results represent the answers given “first”.
** The “other answers” curve groups together the responses did not represent this year but proposed in previous years, for example: “too high taxation” at 10% in 2000, or “influenza A (H1N1)” at 4% in 2009.
In the current context of the war in Ukraine, which of the following issues do you find most concerning? First? Second?

→ NOVEMBER 2022 (IN %)

1 – First

- The rise in prices (energy, food products, etc.) 25
- The risk of a third world war 17
- The risk of nuclear weapons use in the conflict 15
- The situation of civilian populations in Ukraine 13
- The risk of an accident concerning a nuclear power plant in Ukraine 11
- The uncertainty regarding energy supplies (gas, electricity, etc.) 7
- The bombings, destruction in Ukraine (cities, roads, energy infrastructure, etc.) 5
- The risk of an attack against France 6
- Other 1
- Doesn't know / No answer 0

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In the current context of the war in Ukraine, which of the following issues do you find most concerning? First? Second?

→ NOVEMBER 2022 (IN %)

2 – Second

<table>
<thead>
<tr>
<th>Issue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The rise in prices (energy, food products, etc.)</td>
<td>16</td>
</tr>
<tr>
<td>The risk of a third world war</td>
<td>16</td>
</tr>
<tr>
<td>The risk of nuclear weapons use in the conflict</td>
<td>15</td>
</tr>
<tr>
<td>The situation of civilian populations in Ukraine</td>
<td>10</td>
</tr>
<tr>
<td>The risk of an accident concerning a nuclear power plant in Ukraine</td>
<td>11</td>
</tr>
<tr>
<td>The uncertainty regarding energy supplies (gas, electricity, etc.)</td>
<td>16</td>
</tr>
<tr>
<td>The bombings, destruction in Ukraine (cities, roads, energy infrastructure, etc.)</td>
<td>8</td>
</tr>
<tr>
<td>The risk of an attack against France</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
</tr>
<tr>
<td>Doesn't know / No answer</td>
<td>1</td>
</tr>
</tbody>
</table>

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In the current context of the war in Ukraine, which of the following issues do you find most concerning? First? Second?

→ NOVEMBER 2022 (IN %)

3 – Cumulative results

**The rise in prices**  (energy, food products, etc.)  40%

**The risk of a third world war**  33%

**The risk of nuclear weapons use in the conflict**  30%

**The situation of civilian populations in Ukraine**  23%

**The risk of an accident concerning a nuclear power plant in Ukraine**  22%

**The uncertainty regarding energy supplies**  (gas, electricity, etc.)  22%

**The bombings, destruction in Ukraine**  (cities, roads, energy infrastructure, etc.)  14%

**The risk of an attack against France**  12%

**Other**  1%

**Doesn't know / No answer**  1%

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Here are a number of environmental issues. Which one do you find most concerning?

- Climate imbalance: 41%
- The disappearance of animal species: 13%
- Damage from natural disasters: 13%
- Water pollution: 10%
- The destruction of forests: 8%
- Air pollution: 7%
- The depletion of the ozone layer: 5%
- Soil pollution: 3%

© IRSN
Here are a number of environmental issues. Which one do you find most concerning?

Evolution of the results 2000-2022 (IN %)

Climate imbalance
The disappearance of animal species
Damage from natural disasters
Water pollution
The destruction of forests

Air pollution
The depletion of the ozone layer
Soil pollution
Landscape degradation
Noise pollution

Some of the proposed answers have changed over the years. In 2002, "Air pollution" replaced "Air pollution in urban areas" and "Greenhouse effect (atmospheric warming)" replaced "atmospheric warming". In 2004, "Water pollution" replaced "Pollution of lakes, rivers and seas". In 2014, "Global warming" replaced "Greenhouse effect (atmospheric warming)". In 2019, "noise pollution" and "landscape degradation" were removed. The modality "Global warming" was replaced by "Climate imbalance".
Which of the following industrial or technological activities do you think is most likely to cause a serious accident or a disaster in France? (one answer only)

**November 2022 (IN %)**

- Nuclear power plants: 28%
- Radioactive waste disposals: 19%
- Chemical facilities: 19%
- Virus research laboratories: 17%
- Transport of hazardous material: 10%
- Dams: 3%
- Air transport: 2%
- Other (specify): 2%
Which of the following industrial or technological activities do you think is most likely to cause a serious accident or a disaster in France? (one answer only)

→ EVOLUTION OF THE RESULTS 2005-2022 (IN %)

The proposed list of answers has evolved over the years. "Oil refineries", "Road freight", "Rail transport" and "Military installations" were removed in 2019, followed by "Fireworks factories and warehouses" in 2020. In 2022, the answer "Natural gas distribution" was removed.
Which of the following catastrophic events do you find most frightening?

→ NOVEMBER 2022 (IN %)

- The Chernobyl nuclear power plant accident in 1986: 39%
- The global Covid-19 pandemic: 20%
- The Fukushima nuclear power plant accident in 2011: 16%
- The tsunami of December 26th 2004 in the Indian Ocean: 9%
- The drought and heatwaves of the summer 2022 in France: 8%
- The explosion of the AZF factory in Toulouse in 2001: 5%
- The Katrina hurricane in 2005: 2%
- Other (specify): 1%
Which of the following catastrophic events do you find most frightening?

- The Chernobyl nuclear power plant accident in 1986
- The Fukushima nuclear power plant accident in 2011
- The tsunami of December 26th 2004 in the Indian Ocean
- The explosion of the AZF factory in Toulouse in 2001
- The Haiti earthquake in 2010
- The Xynthia storm of February 2010 in western France
- The 2003 heat wave in France
- The Union Carbide factory accident in Bhopal, India
- The Mexico City earthquake in 1985
- AIDS
- The oil spill on the French coastline due to the sinking of the Erika
- The sinking of the Russian submarine Kursk in 2000
- Japan earthquake and tsunami of 2011
- Other answers
- Doesn’t know / No answer

In 2020, the answer “Hurricane Katrina in New Orleans in 2005” has been removed. Previously, in 2019, “Heatwaves (France, Sweden, Japan in the summer of 2018)” was replaced by “The 2003 heat wave in France” and “Earthquakes (Haiti in 2010, Nepal in 2015, Philippines and Indonesia in autumn 2018)” was replaced by “The Haiti earthquake in 2010”. In 2022, the answers “The Haiti earthquake in 2010”, “The Xynthia storm of February 2010 in western France”, and “The 2003 heatwave in France” were removed; the categories “The drought and heatwaves of the summer 2022 in France”, “The global COVID-19 pandemic” and “the Katrina hurricane in 2005” were added.

* The “others” curve includes the answers did not represent this year but proposed in previous years, for example: in 1989, “The earthquake in Armenia” received 20% of the replies. In 2000, “The Air France Concorde crash” received 5% of answers. In addition, the ‘other’ curve represents the answers proposed by the respondents themselves. In 2019, 3% spontaneously answered “other: Lubrizol”, in reference to the fire at the chemical plant in Rouen on September 26th 2019.
PART 2

THE OUTLOOK OF THE FRENCH ON SCIENCE AND EXPERTISE

19 – 20
The image of science and expertise

21 – 30
The expertise expected by the French

31 – 41
Sharing the results of the expertise

42 – 43
The management of high-risk facilities

44 – 51
Citizen participation and pluralism
Here are a number of propositions related to science. For each of them, please indicate on the following scale whether you agree or not.

**NOVEMBER 2022 (IN %)**

There can be more than one correct answer to most scientific questions

<table>
<thead>
<tr>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Doesn’t know / No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 %</td>
<td>52 %</td>
<td>22 %</td>
<td>3 %</td>
</tr>
</tbody>
</table>

I trust scientific institutions

<table>
<thead>
<tr>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Doesn’t know / No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 %</td>
<td>46 %</td>
<td>30 %</td>
<td>6 %</td>
</tr>
</tbody>
</table>

The development of science and technology generates more benefits than negative effects

<table>
<thead>
<tr>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Doesn’t know / No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 %</td>
<td>36 %</td>
<td>36 %</td>
<td>9 %</td>
</tr>
</tbody>
</table>

The answers “Strongly disagree” and “Somewhat disagree” were grouped into “Disagree”; the answers “Somewhat agree” and “Strongly agree” into “agree”. 
Here are a number of propositions related to science. For each of them, please indicate on the following scale whether you agree or not.

→ EVOLUTION OF THE RESULTS 2002-2022 (IN %)

2 - The development of science and technology generates more benefits than negative effects

3 - There can be more than one correct answer to most scientific questions

The answers "Strongly disagree" and "Somewhat disagree" were grouped into "Disagree"; the answers "Somewhat agree" and "Strongly agree" into "agree".
Here are a number of proposals regarding scientific expertise. For each one, please indicate on the following scale whether you agree or not.

**QUESTION No. 2**

**NOVEMBER 2022 (IN %)**

1. Understandable information on the risks of industrial installations must be made available to everyone

   - Strongly agree: 51
   - Somewhat agree: 38
   - Neither agree nor disagree: 8
   - Somewhat disagree: 2
   - Strongly disagree: 1

2. In their opinions, scientific experts must also present their points of disagreement

   - Strongly agree: 45
   - Somewhat agree: 44
   - Neither agree nor disagree: 9
   - Somewhat disagree: 1
   - Strongly disagree: 1

3. It is normal that not all scientific experts’ opinions are made public

   - Strongly agree: 7
   - Somewhat agree: 17
   - Neither agree nor disagree: 24
   - Somewhat disagree: 28
   - Strongly disagree: 24

**EVOLUTION OF THE RESULTS 2004-2022 (IN %)**

1 - Understandable information on the risks of industrial installations must be made available to everyone*

*In 2022, the adjective “industrial” was added.

The answers “Strongly disagree” and “Somewhat disagree” were grouped into “Disagree”; the answers “Somewhat agree” and “Strongly agree” into “agree”. In 2019, the answer “May agree” was replaced by “Neither agree nor disagree.”
Here are a number of proposals regarding scientific expertise. For each one, please indicate on the following scale whether you agree or not.

**EVOLUTION OF THE RESULTS 2002-2022 (IN %)**

2 - In their opinions, scientific experts must also present their points of disagreement

3 - It is normal that not all scientific experts' opinions are made public

The answers “Strongly disagree” and “Somewhat disagree” were grouped into “Disagree”; the answers “Somewhat agree” and “Strongly agree” into “agree”. In 2019, the answer “May agree” was replaced by “Neither agree nor disagree”.

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IRSN BAROMETER 2023 // ALL THE CHARTS
What are, in your opinion, the two most important qualities of scientific experts? First? Second?

→ NOVEMBER 2022 (IN %)

1 – First

- They are technically competent: 30%
- They are honest in their scientific approach: 26%
- They are independent in their judgement: 22%
- They can communicate in a comprehensible way for everyone: 8%
- They are responsive in unforeseen situations: 9%
- They pay attention to the concerns of the civil society: 5%
- Doesn’t know / No answer: 0%

2 – Second

- They are honest in their scientific approach: 24%
- They are independent in their judgement: 22%
- They are technically competent: 17%
- They can communicate in a comprehensible way for everyone: 16%
- They are responsive in unforeseen situations: 12%
- They pay attention to the concerns of the civil society: 8%
- Doesn’t know / No answer: 1%
What are, in your opinion, the two most important qualities of scientific experts? First? Second?

→ NOVEMBER 2022 (IN %)

3 – Cumulative results

- They are honest in their scientific approach: 50%
- They are technically competent: 47%
- They are independent in their judgement: 45%
- They can communicate in a comprehensible way for everyone: 24%
- They are responsive in unforeseen situations: 21%
- They pay attention to the concerns of the civil society: 13%
- Doesn’t know / No answer: 1%

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What are, in your opinion, the two most important qualities of scientific experts?

EVOLUTION OF THE CUMULATIVE RESULTS 2002-2022 (IN %)

- They are honest in their scientific approach*
- They are technically competent
- They are independent in their judgement
- They can communicate in a comprehensible way for everyone
- They are responsive in unforeseen situations
- They pay attention to the concerns of the civil society
- They declare their possible links with the industry
- They are creative
- Others
- Doesn’t know / No answer

* In 2020, the answers "They declare their possible links with the industry" and "They are creative" were removed, and "They can communicate in a comprehensible way for everyone" and "They pay attention to the concerns of the civil society" were added. Moreover, the answer "They state honestly how they obtained their results" was replaced by "They are honest in their scientific approach" in 2020.
In general, do you have a good or a bad opinion of scientific experts?

→ NOVEMBER 2022 (IN %)

- Very good: 9%
- Good: 41%
- Neither good nor bad: 42%
- Bad: 6%
- Very bad: 2%
- Doesn't know / No answer: 0%
In general, do you have a good or a bad opinion of scientific experts?

→ EVOLUTION OF THE RESULTS 1998-2022 (IN %)
Here are three sentences regarding scientific experts and decision-makers. For each one, please indicate whether you agree or not.

**NOVEMBER 2022 (IN %)**

- It is necessary to be certain of the opinions of scientific experts before informing the public
  - Strongly agree: 35%
  - Somewhat agree: 44%
  - Neither agree nor disagree: 15%
  - Somewhat disagree: 5%
  - Strongly disagree: 1%
  - Doesn't know / No answer: 1%

- When it comes to risk, it is normal to take every precaution even when the scientists only have doubts
  - Strongly agree: 31%
  - Somewhat agree: 48%
  - Neither agree nor disagree: 16%
  - Somewhat disagree: 4%
  - Strongly disagree: 1%
  - Doesn’t know / No answer: 1%

- Political decision-makers do not take scientific experts’ opinions into account enough
  - Strongly agree: 30%
  - Somewhat agree: 37%
  - Neither agree nor disagree: 25%
  - Somewhat disagree: 6%
  - Strongly disagree: 2%
  - Doesn’t know / No answer: 2%
Here are three sentences regarding scientific experts and decision-makers. For each one, please indicate whether you agree or not.

**EVOLUTION OF THE RESULTS 1997-2022 (IN %)**

1. When it comes to risk, it is normal to take every precaution even when the scientists only have doubts

2. It is necessary to be certain of the opinions of scientific experts before informing the public
Here are three sentences regarding scientific experts and decision-makers. For each one, please indicate whether you agree or not.

3 - Political decision-makers do not take scientific experts' opinions into account enough

The answers "Strongly disagree" and "Somewhat disagree" were grouped into "Disagree"; the answers "Somewhat agree" and "Strongly agree" into "agree". In 2019, the answer "May agree" was replaced by "Neither agree nor disagree". In 2022, the adjective "scientific" was added to the question.
Here are actions that an expertise body could take to better report on the results of its expertise. For each one, please indicate whether it is a priority, secondary or useless.

**NOVEMBER 2022 (IN %)**

<table>
<thead>
<tr>
<th>Action</th>
<th>Priority</th>
<th>Secondary</th>
<th>Useless</th>
<th>Doesn’t know / No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make public its expertise reports</td>
<td>71</td>
<td>25</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Answer all the questions raised by NGOs and citizens</td>
<td>66</td>
<td>28</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Make available to all the list of all its current work</td>
<td>52</td>
<td>39</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Organize public meetings to discuss its work</td>
<td>45</td>
<td>45</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Organize webinars (on the internet) to present and debate about its projects</td>
<td>20</td>
<td>53</td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>
Here are actions that an expertise body could take to better report on the results of its expertise. For each one, please indicate whether it is a priority, secondary or useless.

→ EVOLUTION OF THE RESULTS 2006-2022 (IN %)

1 - Make public its expertise reports

2 - Answer all questions raised by associations and citizens

In 2019, the answer "Important but not a priority" has been deleted and the answer "Useless" has been added. In 2021, the answer "Make available to all the list of expertise requests" has been removed. The answer "Organize webinars (on the internet) to present and debate about its projects" has been added.
Here are actions that an expertise body could take to better report on the results of its expertise. For each one, please indicate whether it is a priority, secondary or useless.

**EVOLUTION OF THE RESULTS 2006-2022 (IN %)**

3 - Organize public meetings to discuss its work

4 - Make available to all the list of its current expertise*

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* In 2022, the adjective "expertise" was added to the question.

In 2019, the answer "Important but not a priority" has been deleted and the answer "Useless" has been added. In 2021, the answer "Make available to all the list of expertise requests" has been removed. The answer "Organize webinars (on the internet) to present and debate about its projects" has been added.
Here are actions that an expertise body could take to better report on the results of its expertise. For each one, please indicate whether it is a priority, secondary or useless.

5 - Make available to all the list of their requests for expertise that are made to it

6 - Organize webinars (on the internet) to present and debate about its projects

In 2019, the answer "Important but not a priority" has been deleted and the answer "Useless" has been added. In 2021, the answer "Make available to all the list of expertise requests" has been removed. The answer "Organize webinars (on the internet) to present and debate about its projects" has been added.
Technological risks expertise is embodied by reports to regulatory agencies in order for them to authorize an industrial installation. What do you prefer regarding these reports?

→ NOVEMBER 2022 (IN %)

- I prefer to have access myself to these reports and make my own opinion: 63%
- I prefer that access to these technical reports be limited only to environmental protection associations, elected officials and journalists: 35%
- Doesn’t know / No answer: 2%

→ EVOLUTION OF THE RESULTS 2006-2022* (IN %)

* Between 2006 and 2018, the base of respondents consisted only of people who considered it useful to diffuse expert reports to all. In 2021, this question has been asked to the entire sample. In 2022, the answer “I prefer that access to these technical reports be limited only to others such as environmental protection associations, elected officials or journalists” was replaced by “I prefer that access to these technical reports be limited only to environmental protection associations, elected officials and journalists.”
Here are two proposals regarding citizens' access to experts. For each of them, independently of the other, please indicate if it appears to you as a priority, secondary, or unnecessary.

→ NOVEMBER 2022 (IN %)

Grant nonprofit organizations the possibility to request an expertise from an agency or public expertise body

- A priority: 64
- Important but not a priority: 32
- Useless: 4

Grant citizens the possibility to request an expertise from an agency or public expertise body if they are sufficiently numerous

- A priority: 58
- Important but not a priority: 38
- Useless: 4
Here are two proposals regarding citizens’ access to experts. For each of them, independently of the other, please indicate if it appears to you as a priority, secondary, or unnecessary.

→ EVOLUTION OF THE RESULTS 2021-2022 (IN %)

1 - Grant nonprofit organizations the possibility to request an expertise from an agency or public expertise body

<table>
<thead>
<tr>
<th>Year</th>
<th>A priority</th>
<th>Secondary</th>
<th>Useless</th>
<th>Doesn’t know / No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>40</td>
<td>51</td>
<td>0</td>
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</tr>
<tr>
<td>2022</td>
<td>64</td>
<td>32</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

2 - Grant citizens the possibility to request an expertise from an agency or public expertise body if they are sufficiently numerous

<table>
<thead>
<tr>
<th>Year</th>
<th>A priority</th>
<th>Secondary</th>
<th>Useless</th>
<th>Doesn’t know / No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>38</td>
<td>51</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>58</td>
<td>38</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

In 2022, the question “Here are two proposals regarding citizens’ access to experts. For each of them, independently of the other, please indicate if it seems important to you” was replaced by “Here are two proposals regarding citizens’ access to experts. For each of them, independently of the other, please indicate if it appears to you as a priority, secondary, or unnecessary.” The value scale was also modified: “not important” was replaced by “unnecessary,” “somewhat important” was replaced by “secondary” and “very important” was replaced by “a priority.”
Here are a number of reasons why the results of a scientific expertise might not be made public. For each one, please indicate on the following scale whether this is a good reason.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Yes, definitely</th>
<th>Yes, somewhat</th>
<th>No, not really</th>
<th>No, not at all</th>
<th>Doesn’t know / No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counterterrorism</td>
<td>31</td>
<td>41</td>
<td>19</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>The lack of scientific certainty</td>
<td>20</td>
<td>50</td>
<td>23</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>“Top secret” classification</td>
<td>29</td>
<td>39</td>
<td>22</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>The fact that the decision related to the result of the expertise has not yet been taken</td>
<td>18</td>
<td>46</td>
<td>27</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>The impossibility to express the results in terms understandable by the public</td>
<td>15</td>
<td>40</td>
<td>32</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Trade secret</td>
<td>18</td>
<td>38</td>
<td>31</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

© IRSN
Here are a number of reasons why the results of a scientific expertise might not be made public. For each one, please indicate on the following scale whether this is a good reason.

→ EVOLUTION OF THE RESULTS 2006-2022 (IN %)

1 - Counterterrorism

2 - The lack of scientific certainty*

* In 2019, the proposition “the scientific uncertainty of the results obtained” was replaced by “the lack of scientific certainty”.

The answers “Yes, definitely” and “Yes, somewhat” were grouped together as “Yes”; the answers “No, not really” and “No, not at all” as “No”.

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Here are a number of reasons why the results of a scientific expertise might not be made public. For each one, please indicate on the following scale whether this is a good reason.

**QUESTION No. 9 (CONT.)**

→ **EVOLUTION OF THE RESULTS 2006-2022 (IN %)**

**3 - “Top secret” classification**

**4 - The fact that the decision related to the result of the expertise has not yet been taken***

*In 2019, the proposition “the wait for the decision to be taken following the results of the expertise” was replaced by “the fact that the decision related to the result of the expertise has not yet been taken”.

The answers “Yes, definitely” and “Yes, somewhat” were grouped together as “Yes”; the answers “No, not really” and “No, not at all” as “No”.

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PART 2 // THE OUTLOOK OF THE FRENCH ON SCIENCE AND EXPERTISE

40  IRSN BAROMETER 2023 // ALL THE CHARTS
Here are a number of reasons why the results of a scientific expertise might not be made public. For each one, please indicate on the following scale whether this is a good reason.

→ EVOLUTION OF THE RESULTS 2006-2022 (IN %)

5 - Trade secret*

* In 2020, the proposal "Industrial property" was replaced by "Trade secret".

6 - The impossibility to express the results in terms understandable by the public

The answers "Yes, definitely" and "Yes, somewhat" were grouped together as "Yes"; the answers "No, not really" and "No, not at all" as "No".
Regarding the oversight of the impact of an installation that poses risks to the environment and neighboring populations, who do you think should control the environmental and health impact outside the installation? (one answer only)

→ NOVEMBER 2022 (IN %)

- A committee of scientific experts: 38%
- Public regulatory authorities: 28%
- Non-governmental organisations: 11%
- Local elected officials (regional council, general council, municipality): 10%
- The operator of the facility: 7%
- A local citizens’ committee: 6%
- Doesn’t know / No answer: 0%
Regarding the oversight of the impact of an installation that poses risks to the environment and neighboring populations, who do you think should control the environmental and health impact outside the installation? (one answer only)

> EVOLUTION OF THE RESULTS 2002-2022 (IN %)

*In 2020, the wording of the question was: “For an installation that poses risks to the environment and neighbouring populations, who do you think should control what happens outside the installation?” In addition, the response “Public authorities at national and local levels” was replaced by “Public regulatory authorities”.

In 2019, the way the question was asked was different: the French expressed their opinions on each actor independently of the others. The specific results for that year can be downloaded from https://barometre.irsn.fr.
A commission bringing together scientific experts, elected representatives, operators, NGOs, citizens and whose aim would be to deal with at-risk situations would be in your opinion…

→ NOVEMBER 2022 (IN %)

- Very useful: 42%
- Somewhat useful: 50%
- Not very useful: 6%
- Not at all useful: 2%
- Doesn't know / No answer: 0%
A commission bringing together scientific experts, elected representatives, operators, NGOs, citizens and whose aim would be to deal with at-risk situations would be in your opinion...

→ EVOLUTION OF THE RESULTS 2004-2022 (IN %)
In your opinion, such a commission bringing together scientific experts, elected representatives, operators, NGOs, citizens and whose aim would be to deal with at-risk situations would be able...

**NOVEMBER 2022 (IN %)**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Yes, definitely</th>
<th>Yes, somewhat</th>
<th>No, not really</th>
<th>No, not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>To bring forth new perspectives and ideas</td>
<td>43</td>
<td>49</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>To improve communication between scientific experts, elected officials,</td>
<td>43</td>
<td>49</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>industry representatives, associations, and citizens</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To better define the question to be studied by taking into account the</td>
<td>38</td>
<td>53</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>stakes of all stakeholders</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To improve the overall quality of expertise</td>
<td>32</td>
<td>55</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>To make the expertise more credible.</td>
<td>34</td>
<td>52</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>To contribute to risk reduction</td>
<td>31</td>
<td>52</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>To reduce the expertise timelines</td>
<td>21</td>
<td>45</td>
<td>28</td>
<td>6</td>
</tr>
</tbody>
</table>

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Would you be willing to spend time participating to information and consultation meetings on the management of a high-risk installation near your home?

**NOVEMBER 2022 (IN %)**

- Yes, once a year: 21%
- Yes, more than once a year: 28%
- No, I’m not interested: 7%
- No, it’s useless: 7%
- No, I don’t have time: 9%
- No, other people are more competent than me for that: 28%
- Doesn’t know / No answer: 0%
Would you be willing to spend time participating to information and consultation meetings on the management of a high-risk installation near your home?*

**EVOLUTION OF THE RESULTS 2021-2022 (IN %)**

<table>
<thead>
<tr>
<th>Response</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, once a year</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>Yes, more than once a year</td>
<td>32</td>
<td>28</td>
</tr>
<tr>
<td>No, I’m not interested</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>No, it’s useless</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>No, I don’t have time</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>No, other people are more competent than me for that</td>
<td>28</td>
<td>26</td>
</tr>
<tr>
<td>Doesn’t know / No answer</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

* This question has been asked before with other choices: “No”, “Yes, once a year”, “Yes twice or three times a year”, “Yes four times a year or more” and “Doesn’t know/No answer”. Results are available on: https://barometre.irsn.fr/graphiques.
In the following list, what could encourage you to make your point of view be heard before a public decision is made?*

- To feel directly concerned by the topic: 51%
- To have access to additional information to better understand the topic: 50%
- To feel that your participation as a citizen matters as much as that of other stakeholders: 48%
- To be sure not to be manipulated or exploited: 48%
- To have the possibility to discuss with experts: 43%
- To have the possibility to participate remotely: 24%
- To adapt meeting locations and times to participants: 23%
- To receive financial compensation for participation: 17%
- None of the above: 10%
- To associate these meetings with existing cultural events in the region: 8%

* Multiple answers possible.
In the following list, what could encourage you to make your point of view be heard before a public decision is made?*

The data from 2014 comes from the “Citizen and Public Decision” survey by TNS Soffres on behalf of the CNDP (National Commission for Public Debate). The possible answers have been adapted over the years. In 2022, the option “to be directly impacted by the decision” was replaced by “to feel directly concerned by the topic”, “to be sure not to be manipulated or exploited”, “to feel that your participation as a citizen matters as much as that of other stakeholders”, “to have the possibility to discuss with experts”, “to have the possibility to participate remotely”, “to adapt meeting locations and times to participants”, “to receive financial compensation for participation”, “to associate these meetings with existing cultural events in the region”, “to have all the necessary information to forge my opinion”, “to be sure that my opinion will make a difference”, “to know the different possibilities for expressing my opinion”, “for the media to talk more about projects where one can express their opinion” and “to notice that other around me are doing the same thing”. The options “to feel that your participation as a citizen matters as much as that of other stakeholders”, “to have access to additional information to better understand the topic”, “to receive financial compensation for participation”, “to have the possibility to participate remotely”, “to adapt meeting locations and times to participants” and “to associate these meetings with existing cultural events in the region” were added.

* Multiple answers possible.

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Do you think that a collaboration between researchers and citizens at all stages of the research process (from formulating the research question to data collection, analysis, and dissemination of results) could...

→ NOVEMBER 2022 (IN %)

- **Further enhance citizens' trust in researchers**
  - Yes, definitely: 46%
  - Yes, somewhat: 48%
  - No, not really: 5%
  - No, not at all: 1%

- **Contribute significantly to the advancement of science**
  - Yes, definitely: 27%
  - Yes, somewhat: 52%
  - No, not really: 18%
  - No, not at all: 3%

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PART 3

THE OPINION OF THE FRENCH ON RISK SITUATIONS

53 – 73
The main risks perceived by the French

74 – 77
The risks perception for oneself and one’s relatives

78 – 98
The level of trust in the authorities to protect them

99 – 100
The level of information perceived by the French

101
Overview of risk situations

102 – 110
The acceptability of facilities

111 – 116
Word enunciations for the term “Nuclear”
In each of the following areas, do you consider that the risks for the French population in general are...

→ NOVEMBER 2022 (IN %)

<table>
<thead>
<tr>
<th>Area</th>
<th>Very high</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>Near zero</th>
<th>Doesn’t know / No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>32</td>
<td>44</td>
<td>18</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Forest fires</td>
<td>28</td>
<td>42</td>
<td>22</td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Air pollution</td>
<td>26</td>
<td>42</td>
<td>25</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Drugs</td>
<td>28</td>
<td>36</td>
<td>24</td>
<td>8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Pesticides</td>
<td>25</td>
<td>38</td>
<td>25</td>
<td>6</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Smoking</td>
<td>26</td>
<td>37</td>
<td>25</td>
<td>7</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Heatwaves*</td>
<td>23</td>
<td>39</td>
<td>28</td>
<td>7</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Soil pollution</td>
<td>21</td>
<td>40</td>
<td>26</td>
<td>7</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Terrorism</td>
<td>25</td>
<td>34</td>
<td>28</td>
<td>9</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Water pollution</td>
<td>21</td>
<td>38</td>
<td>28</td>
<td>8</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Chemical waste</td>
<td>21</td>
<td>37</td>
<td>27</td>
<td>9</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Obesity</td>
<td>18</td>
<td>40</td>
<td>32</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Pandemics (global epidemics)</td>
<td>20</td>
<td>36</td>
<td>29</td>
<td>10</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Alcohol</td>
<td>22</td>
<td>34</td>
<td>30</td>
<td>8</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Floods</td>
<td>18</td>
<td>37</td>
<td>32</td>
<td>9</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Traffic accidents</td>
<td>18</td>
<td>34</td>
<td>34</td>
<td>10</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

The option "Don't know/No answer" represents the sum of "I don't know" and the lack of response.
In each of the following areas, do you consider that the risks for the French population in general are...

→ NOVEMBER 2022 (IN %)

<table>
<thead>
<tr>
<th>Area</th>
<th>Very high</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>Near zero</th>
<th>Doesn't know / No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endocrine disruptors</td>
<td>19</td>
<td>31</td>
<td>28</td>
<td>9</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Chemical facilities</td>
<td>16</td>
<td>32</td>
<td>31</td>
<td>11</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Radioactive waste</td>
<td>19</td>
<td>27</td>
<td>26</td>
<td>17</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Sound pollution</td>
<td>15</td>
<td>31</td>
<td>34</td>
<td>13</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Food products safety</td>
<td>16</td>
<td>29</td>
<td>35</td>
<td>13</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>GMO's (Genetically Modified Organisms)</td>
<td>15</td>
<td>29</td>
<td>31</td>
<td>14</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Nanoparticles</td>
<td>15</td>
<td>28</td>
<td>27</td>
<td>11</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>Nuclear power plants</td>
<td>16</td>
<td>23</td>
<td>31</td>
<td>19</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Radioactive fallouts in France from the Chernobyl accident</td>
<td>14</td>
<td>25</td>
<td>27</td>
<td>20</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Marine submersions (temporary floods caused by the sea)</td>
<td>11</td>
<td>27</td>
<td>35</td>
<td>18</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Domestic accidents</td>
<td>11</td>
<td>27</td>
<td>41</td>
<td>16</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>AIDS</td>
<td>7</td>
<td>20</td>
<td>37</td>
<td>27</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>High-voltage lines</td>
<td>7</td>
<td>19</td>
<td>34</td>
<td>23</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Medical radiographies</td>
<td>7</td>
<td>14</td>
<td>30</td>
<td>29</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Radiotherapy accidents</td>
<td>6</td>
<td>14</td>
<td>30</td>
<td>28</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Indoor radon</td>
<td>5</td>
<td>14</td>
<td>31</td>
<td>18</td>
<td>5</td>
<td>27</td>
</tr>
</tbody>
</table>

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The option "Don't know/No answer" represents the sum of "I don't know" and the lack of response.
In each of the following areas, do you consider that the risks for the French population in general are...

**EVOLUTION OF THE RESULTS 2004-2022 (IN %)**

1 - Domestic accidents

2 - Radiotherapy accidents

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
In each of the following areas, do you consider that the risks for the French population in general are...

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

3 - Traffic accidents

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".

* In 2020, "Alcoholism" was replaced by "Alcohol".

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
In each of the following areas, do you consider that the risks for the French population in general are...

**EVOLUTION OF THE RESULTS 2002-2022 (IN %)**

5 - Mobile phone relay antennas*

* The wording was "Mobile phones" in 2002, then "Mobile phone network antennas" from 2004 to 2018 and finally, "Mobile phone relay antennas" since 2020.

6 - Cancer

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
In each of the following areas, do you consider that the risks for the French population in general are...

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

7 - Heatwaves*

* In 2022, “heatwave” was replaced by “heatwaves”.

8 - Nuclear power plants

In 2021 and 2022, the questions “medical risks”, “hazardous materials transportation”, “work-related illnesses”, “mobile phone relay antennas”, “household waste incinerators” were not surveyed but they are still represented this year.

The answers “Very high” and “High” were grouped into “High”; “Near-zero” and “Low” responses into “Low”.

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In each of the following areas, do you consider that the risks for the French population in general are...

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

9 - Chemical waste

10 - Radioactive waste

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".

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In each of the following areas, do you consider that the risks for the French population in general are...

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

11 - Drugs

12 - Forest fires

In 2021 and 2022, the questions “medical risks”, “hazardous materials transportation”, “work-related illnesses”, “mobile phone relay antennas”, “household waste incinerators” were not surveyed but they are still represented this year.

The answers “Very high” and “High” were grouped into “High”; “Near-zero” and “Low” responses into “Low”.

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In 2021 and 2022, the questions “medical risks”, “hazardous materials transportation”, “work-related illnesses”, “mobile phone relay antennas”, “household waste incinerators” were not surveyed but they are still represented this year.

The answers “Very high” and “High” were grouped into “High”; “Near-zero” and “Low” responses into “Low”.
In each of the following areas, do you consider that the risks for the French population in general are...

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

15 - Chemical facilities

16 - High-voltage lines

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
In each of the following areas, do you consider that the risks for the French population in general are...

→ EVOLUTION OF THE RESULTS 2004-2022 (IN %)

17 - Work-related illnesses

18 - Nanoparticles

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
In each of the following areas, do you consider that the risks for the French population in general are...

→ EVOLUTION OF THE RESULTS 1999-2022 (IN %)

19 - Obesity*

* In 2020, "Obesity" replaced "Child obesity".

20 - GMO's (Genetically Modified Organisms)

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
In each of the following areas, do you consider that the risks for the French population in general are...

→ EVOLUTION OF THE RESULTS 2014-2022 (IN %)

21 - Pandemics (global epidemics)

22 - Endocrine disruptors

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
In each of the following areas, do you consider that the risks for the French population in general are...

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

23 - Pesticides*

* The title was "Nitrate and pesticides" until 2011.

24 - Air pollution*

* The title was "Atmospheric pollution" until 2018.

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
In each of the following areas, do you consider that the risks for the French population in general are...

→ EVOLUTION OF THE RESULTS 1999-2022 (IN %)

25 - Water pollution*

* The title was "Pollution of lakes, rivers and seas" until 2018.

26 - Soil pollution

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.
The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
In each of the following areas, do you consider that the risks for the French population in general are...

**EVOLUTION OF THE RESULTS 1998-2022 (IN %)**

27 - Noise pollution* 

* The title was "Noise" until 2018.

28 - Food products safety* 

* The title was "Food products" until 2020.

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers “Very high” and “High” were grouped into “High”; “Near-zero” and “Low” responses into “Low”.

© IRSN
In each of the following areas, do you consider that the risks for the French population in general are...

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

29 - Medical radiographies

30 - Indoor radon

In 2021 and 2022, the questions “medical risks”, “hazardous materials transportation”, “work-related illnesses”, “mobile phone relay antennas”, “household waste incinerators” were not surveyed but they are still represented this year.

The answers “Very high” and “High” were grouped into “High”; “Near-zero” and “Low” responses into “Low”.

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In each of the following areas, do you consider that the risks for the French population in general are...

→ EVOLUTION OF THE RESULTS 1999-2022 (IN %)

31 - Radioactive fallouts in France from the Chernobyl accident

32 - Medical risks

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
In each of the following areas, do you consider that the risks for the French population in general are...

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

33 - AIDS

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".

34 - Marine submersion (temporary flooding caused by the sea)
In each of the following areas, do you consider that the risks for the French population in general are...

EVOLUTION OF THE RESULTS 1997-2022 (IN %)

35 - Smoking*  
* The title was “teenage smoking” until 2018.

36 - Terrorism

In 2021 and 2022, the questions “medical risks”, “hazardous materials transportation”, “work-related illnesses”, “mobile phone relay antennas”, “household waste incinerators” were not surveyed but they are still represented this year.

The answers “Very high” and “High” were grouped into “High”; “Near-zero” and “Low” responses into “Low”. "Smoking*" and "Terrorism" graphs are not visible due to limitations in text representation. However, you can refer to the original document for visual data.
In each of the following areas, do you consider that the risks for the French population in general are...

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

37 - Hazardous materials transportations

In 2021 and 2022, the questions “medical risks”, “hazardous materials transportation”, “work-related illnesses”, “mobile phone relay antennas”, “household waste incinerators” were not surveyed but they are still represented this year.

The answers “Very high” and “High” were grouped into “High”; “Near-zero” and “Low” responses into “Low”.

© IRSN
**NOVEMBER 2022 (IN %)**

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<th>Risk</th>
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<th>Medium</th>
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* In 2022, “heatwave” was replaced by “heatwaves”.

The option "Don't know/No answer" represents the sum of “I don't know” and the lack of response.
How about for yourself and the ones close to you, do you consider that the risks are:

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**NOVEMBER 2022 (IN %)**

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The option “Don’t know/No answer” represents the sum of “I don’t know” and the lack of response.
How about for yourself and the ones close to you, do you consider that the risks are:

### NOVEMBRE 2021 (IN %)

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<th>Risk</th>
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* In 2022, "heatwave" was replaced by "heatwaves".

The option "Don’t know/No answer" represents the sum of "I don’t know" and the lack of response.

© IRSN
How about for yourself and the ones close to you, do you consider that the risks are:

**NOVEMBRE 2021 (IN %)**

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<tr>
<th>Risk Category</th>
<th>Very High</th>
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The option "Don't know/No answer" represents the sum of "I don't know" and the lack of response.
Do you trust the French authorities to protect people against the following risks?

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© IRSN
**QUESTION No. 3 (CONT.)**

Do you trust the French authorities to protect people against the following risks?

→ **NOVEMBER 2022 (IN %)**

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<td>GMO’s (Genetically Modified Organisms)</td>
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<td>31</td>
<td>27</td>
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<td>1</td>
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<td>30</td>
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<td>1</td>
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<td>1</td>
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<td>Radioactive fallouts in France from the Chernobyl accident</td>
<td>4</td>
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<td>Pesticides</td>
<td>2</td>
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<td>1</td>
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<tr>
<td>Indoor radon</td>
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<td>14</td>
<td>52</td>
<td>14</td>
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<td>1</td>
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<tr>
<td>Soil pollution</td>
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<td>30</td>
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<td>1</td>
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<tr>
<td>Endocrine disruptors</td>
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<td>14</td>
<td>38</td>
<td>25</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>Nanoparticles</td>
<td>3</td>
<td>13</td>
<td>42</td>
<td>23</td>
<td>18</td>
<td>1</td>
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</table>
In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
Do you trust the French authorities to protect people against the following risks?

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

3 - Traffic accidents

4 - Alcohol*

* In 2020, “Alcoholism” was replaced by “Alcohol”.

In 2021 and 2022, the questions “medical risks”, “hazardous materials transportation”, “work-related illnesses”, “mobile phone relay antennas”, “household waste incinerators” were not surveyed but they are still represented this year.

The answers “Very high” and “High” were grouped into “High”; “Near-zero” and “Low” responses into “Low”.

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QUESTION No. 3 (CONT.)

Do you trust the French authorities to protect people against the following risks?

→ EVOLUTION OF THE RESULTS 2002-2022 (IN %)

5 - Mobile phone relay antennas*

* The title was "Mobile phones" in 2002, then "Mobile phone network antennas" from 2004 to 2018 and finally "Mobile phone antennas" since 2020.

6 - Cancer

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".

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Do you trust the French authorities to protect people against the following risks?

EVOLUTION OF THE RESULTS 1997-2022 (IN %)

7 - Heatwaves*

* In 2022, “heatwave” was replaced by “heatwaves”.

8 - Nuclear power plants

In 2021 and 2022, the questions “medical risks”, “hazardous materials transportation”, “work-related illnesses”, “mobile phone relay antennas”, “household waste incinerators” were not surveyed but they are still represented this year.

The answers “Very high” and “High” were grouped into “High”; “Near-zero” and “Low” responses into “Low”.

© IRSN
Do you trust the French authorities to protect people against the following risks?

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

9 - Chemical waste

10 - Radioactive waste

In 2021 and 2022, the questions “medical risks”, “hazardous materials transportation”, “work-related illnesses”, “mobile phone relay antennas”, “household waste incinerators” were not surveyed but they are still represented this year.

The answers “Very high” and “High” were grouped into “High”; “Near-zero” and “Low” responses into “Low”.

© IRSN
Do you trust the French authorities to protect people against the following risks?

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

11 - Drugs

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".

12 - Forest fires

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
Do you trust the French authorities to protect people against the following risks?

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

13 - Household waste incinerators

14 - Floods

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
Do you trust the French authorities to protect people against the following risks?

EVOLUTION OF THE RESULTS 1997-2022 (IN %)

15 - Chemical Facilities

16 - High-voltage lines

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
Do you trust the French authorities to protect people against the following risks?

→ EVOLUTION OF THE RESULTS 1999-2022 (IN %)

19 - Obesity*

* Until 2020, the title was "Child obesity".

20 - GMO’s (Genetically Modified Organisms)*

* Until 2002, the title was “genetic manipulations”.

In 2021 and 2022, the questions “medical risks”, “hazardous materials transportation”, “work-related illnesses”, “mobile phone relay antennas”, “household waste incinerators” were not surveyed but they are still represented this year.

The answers “Very high” and “High” were grouped into “High”; “Near-zero” and “Low” responses into “Low.”
Do you trust the French authorities to protect people against the following risks?

→ **EVOLUTION OF THE RESULTS 2014-2022 (IN %)**

**21 - Pandemics (global epidemics)**

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers “Very high” and “High” were grouped into “High”; “Near-zero” and “Low” responses into “Low”.

**22 - Endocrine disruptors**

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Do you trust the French authorities to protect people against the following risks?

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

23 - Pesticides*

24 - Air pollution*

* The title was "Nitrates and pesticides" until 2011.

* The title was "Atmospheric pollution" until 2018.

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
In 2021 and 2022, the questions “medical risks”, “hazardous materials transportation”, “work-related illnesses”, “mobile phone relay antennas”, “household waste incinerators” were not surveyed but they are still represented this year.

The answers “Very high” and “High” were grouped into “High”; “Near-zero” and “Low” responses into “Low”.

* The title was “Pollution of lakes, rivers and seas” until 2018.
Do you trust the French authorities to protect people against the following risks?

EVOLUTION OF THE RESULTS 1998-2022 (IN %)

27 - Noise pollution*

* The title was "Noise" until 2018.

28 - Food products safety*

* The title was "Food products" until 2018.

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".

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Do you trust the French authorities to protect people against the following risks?

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

29 - Medical radiographies

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".

30 - Indoor radon

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
Do you trust the French authorities to protect people against the following risks?

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

33 - AIDS

34 - Marine submersion (temporary floods caused by the sea)

In 2021 and 2022, the questions “medical risks”, “hazardous materials transportation”, “work-related illnesses”, “mobile phone relay antennas”, “household waste incinerators” were not surveyed but they are still represented this year.

The answers “Very high” and “High” were grouped into “High”; “Near-zero” and “Low” responses into “Low”.

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Do you trust the French authorities to protect people against the following risks?

EVOLUTION OF THE RESULTS 1997-2022 (IN %)

35 - Smoking*

* The title was "Teenage smoking" until 2018.

36 - Terrorism

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
Do you trust the French authorities to protect people against the following risks?

→ EVOLUTION OF THE RESULTS 1997-2022 (IN %)

37 - Hazardous materials transportations

In 2021 and 2022, the questions "medical risks", "hazardous materials transportation", "work-related illnesses", "mobile phone relay antennas", "household waste incinerators" were not surveyed but they are still represented this year.

The answers "Very high" and "High" were grouped into "High"; "Near-zero" and "Low" responses into "Low".
### QUESTION No. 4

Do you feel well-informed or poorly informed about the risks related to each of the following areas?

#### NOVEMBER 2022 (IN %)

<table>
<thead>
<tr>
<th>Area</th>
<th>Very well informed</th>
<th>Rather well informed</th>
<th>Rather poorly informed</th>
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<td>Drugs</td>
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<td>10</td>
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<td>Floods</td>
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<td>46</td>
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<td>12</td>
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<tr>
<td>Terrorism</td>
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<td>Air pollution</td>
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<td>Marine submersions (temporary floods caused by the sea)</td>
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<td>36</td>
<td>41</td>
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<tr>
<td>Food products safety</td>
<td>6</td>
<td>34</td>
<td>41</td>
<td>19</td>
</tr>
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</table>

© IRSN
Do you feel well-informed or poorly informed about the risks related to each of the following areas?

### NOVEMBER 2022 (IN %)

<table>
<thead>
<tr>
<th>Area</th>
<th>Very well informed</th>
<th>Rather well informed</th>
<th>Rather poorly informed</th>
<th>Very poorly informed</th>
<th>Doesn't know / No answer</th>
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<tbody>
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<tr>
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<tr>
<td>Soil pollution</td>
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<td>22</td>
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<tr>
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<tr>
<td>Radioactive fallouts in France from the Chernobyl accident</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>Nanoparticles</td>
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<td>16</td>
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<tr>
<td>Indoor radon</td>
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<td>15</td>
<td>43</td>
<td>39</td>
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</table>

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NOVEMBER 2022 (IN %)

QUESTION No. 1

QUESTION No. 3

QUESTION No. 4

Representation of the 32 risk situations according to the 3 dimensions.
<table>
<thead>
<tr>
<th>Option</th>
<th>Yes</th>
<th>No</th>
<th>Doesn't know / No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>A chemical waste disposal</td>
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<td>93</td>
<td></td>
</tr>
<tr>
<td>A major chemical facility</td>
<td>8</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>A radioactive waste disposal</td>
<td>8</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>A landfill</td>
<td>7</td>
<td>92</td>
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</tr>
<tr>
<td>A marine submersion zone (temporary floods caused by the sea)</td>
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<td>90</td>
<td></td>
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<tr>
<td>A household waste incinerator</td>
<td>12</td>
<td>88</td>
<td></td>
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<tr>
<td>A flood zone</td>
<td>11</td>
<td>88</td>
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</tr>
<tr>
<td>An airport</td>
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<td>86</td>
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</tr>
<tr>
<td>A seismic zone</td>
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<tr>
<td>A nuclear power plant</td>
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<td>79</td>
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<td>A carbon capture and geological storage site</td>
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<td>A nuclear research center</td>
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<tr>
<td>A high-voltage power lines</td>
<td>25</td>
<td>74</td>
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<tr>
<td>An area of forest at risk of forest fire</td>
<td>35</td>
<td>65</td>
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<tr>
<td>A mobile phone relay antenna</td>
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<td>62</td>
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<tr>
<td>A wind farm</td>
<td>38</td>
<td>62</td>
<td></td>
</tr>
</tbody>
</table>

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EVOLUTION OF THE “YES” ANSWERS 1982-2022 (IN %)

- A nuclear power plant
- A major chemical facility
- A chemical waste disposal
- A radioactive waste disposal

© IRSN
Would you be willing to live near...

**EVOLUTION OF THE RESULTS 2000-2022 (IN %)**

1 - An airport

![Graph showing the percentage of people willing to live near an airport from 2000 to 2022.]

2 - A mobile phone relay antenna

![Graph showing the percentage of people willing to live near a mobile phone relay antenna from 2000 to 2022.]

© IRSN
Would you be willing to live near...?

→ EVOLUTION OF THE RESULTS 1990-2022 (IN %)

3 - A nuclear power plant

4 - A nuclear research center
QUESTION No. 5 (CONT.)
Would you be willing to live near...?

→ EVOLUTION OF THE RESULTS 1991-2022 (IN %)

5 - A landfill

6 - A household waste incinerator
Would you be willing to live near...

→ EVOLUTION OF THE RESULTS 1990-2022 (IN %)

7 - A major chemical facility

8 - High-voltage power lines

© IRSN 2022
Would you be willing to live near...

EVOLUTION OF THE RESULTS 1990-2022 (IN %)

9 - A wind farm

10 - A chemical waste disposal

© IRSN
Would you be willing to live near...

11 - A radioactive waste disposal

12 - A flood zone
Would you be willing to live near...

→ EVOLUTION OF THE RESULTS 2000-2022 (IN %)

13 - A seismic zone

14 - A marine submersion zone (temporary floods caused by the sea)
What is the first thing that comes to mind when you hear the word 'nuclear'? Please list the first five words that come to mind.
What is the first thing that comes to mind when you hear the word ‘nuclear’? Please list the first five words that come to mind.
What is the first thing that comes to mind when you hear the word ‘nuclear’? Please list the first five words that come to mind.
What is the first thing that comes to mind when you hear the word ‘nuclear’? Please list the first five words that come to mind.
What is the first thing that comes to mind when you hear the word ‘nuclear’? Please list the first five words that come to mind.

5 – Fifth word
What is the first thing that comes to mind when you hear the word ‘nuclear’? Please list the first five words that come to mind.

→ NOVEMBER 2022 (IN %)

6 – Total of all words mentioned
THE OPINION OF THE FRENCH ON NUCLEAR MATTERS

118 – 125
French expectations regarding nuclear safety

126 – 143
French people’s views on nuclear energy

144
The perception of nuclear waste and its management

145 – 168
Competence and credibility of nuclear stakeholders
Nuclear facilities operators must protect their facilities from all risks, even those considered very unlikely

- Strongly agree: 58%
- Somewhat agree: 26%
- Neither agree nor disagree: 13%
- Somewhat disagree: 2%
- Strongly disagree: 1%

The safety of nuclear installations takes precedence over energy production, even if it may result in power outages in the country

- Strongly agree: 34%
- Somewhat agree: 35%
- Neither agree nor disagree: 23%
- Somewhat disagree: 6%
- Strongly disagree: 2%

Every precaution is being taken to ensure a very high level of safety in French nuclear power plants

- Strongly agree: 23%
- Somewhat agree: 38%
- Neither agree nor disagree: 26%
- Somewhat disagree: 9%
- Strongly disagree: 4%

Radioactivity from nuclear power plants cause cancers

- Strongly agree: 20%
- Somewhat agree: 28%
- Neither agree nor disagree: 36%
- Somewhat disagree: 11%
- Strongly disagree: 5%

Nuclear installations are vulnerable to climate change

- Strongly agree: 16%
- Somewhat agree: 32%
- Neither agree nor disagree: 35%
- Somewhat disagree: 13%
- Strongly disagree: 4%

Around nuclear facilities, people are as healthy as elsewhere

- Strongly agree: 15%
- Somewhat agree: 28%
- Neither agree nor disagree: 36%
- Somewhat disagree: 14%
- Strongly disagree: 7%

Extending the operating lifespan of nuclear power plants will lead to accidents

- Strongly agree: 13%
- Somewhat agree: 24%
- Neither agree nor disagree: 39%
- Somewhat disagree: 18%
- Strongly disagree: 6%

Nuclear sites cause groundwater contamination

- Strongly agree: 11%
- Somewhat agree: 23%
- Neither agree nor disagree: 41%
- Somewhat disagree: 16%
- Strongly disagree: 9%

Today, it is possible to safely store nuclear waste

- Strongly agree: 9%
- Somewhat agree: 24%
- Neither agree nor disagree: 35%
- Somewhat disagree: 19%
- Strongly disagree: 13%

© IRSN
Here are a number of proposals relating to nuclear facilities. Please indicate on the following scale whether you agree or disagree.

→ EVOLUTION OF THE RESULTS 2008-2022 (IN %)

1 - Nuclear facilities operators* must protect their facilities from all risks, even those considered very unlikely

![Graph showing the evolution of the results for the protection of facilities from 2008 to 2022.]

* In 2019, the name “Nuclear facilities managers” became “Nuclear facilities operators”.

2 - Nuclear sites can cause groundwater contamination*

![Graph showing the evolution of the results for groundwater contamination from 2008 to 2022.]

* In 2022, the proposition “Nuclear sites can cause groundwater contamination” was replaced by “Nuclear sites cause groundwater contamination”.

Starting from 2019, the response option “maybe agree” was replaced by “neither agree nor disagree.” In 2022, the propositions “nuclear installations are vulnerable to climate change”, “the safety of nuclear installations takes precedence over energy production, even if it may result in power outages in the country”, and “extending the operating lifespan of nuclear power plants will lead to accidents” were added.

The answers “Strongly agree” and “Somewhat agree” were grouped into “Agree”; “Somewhat disagree” and “Strongly disagree” answers into “Disagree.”
Starting from 2019, the response option “maybe agree” was replaced by “neither agree nor disagree.” In 2022, the propositions “nuclear installations are vulnerable to climate change”, “the safety of nuclear installations takes precedence over energy production, even if it may result in power outages in the country”, and “extending the operating lifespan of nuclear power plants will lead to accidents” were added.

The answers “Strongly agree” and “Somewhat agree” were grouped into “Agree”, “Somewhat disagree” and “Strongly disagree” answers into “Disagree”.

Here are a number of proposals relating to nuclear facilities. Please indicate on the following scale whether you agree or disagree.

→ EVOLUTION OF THE RESULTS 2007-2022 (IN %)

3 - Every precaution is being taken to ensure a very high level of safety in French nuclear power plants

4 - Around nuclear facilities, people are as healthy as elsewhere
Here are a number of proposals relating to nuclear facilities. Please indicate on the following scale whether you agree or disagree.

**EVOLUTION OF THE RESULTS 1977-2022 (IN %)**

- **5 - Today, it is possible to safely store nuclear waste**

- **6 - Radioactivity from nuclear power plants will cause cancers**

* In 2019 and for this year only, the proposal became “Radioactivity from nuclear power plants can cause cancer”. In 2022, the proposition “radioactivity from nuclear power plants cause cancers” was replaced by “radioactivity from nuclear power plants will cause cancers”.

Starting from 2019, the response option “maybe agree” was replaced by “neither agree nor disagree.” In 2022, the propositions “nuclear installations are vulnerable to climate change”, “the safety of nuclear installations takes precedence over energy production, even if it may result in power outages in the country”, and “extending the operating lifespan of nuclear power plants will lead to accidents” were added.

The answers “Strongly agree” and “Somewhat agree” were grouped into “Agree”, “Somewhat disagree” and “Strongly disagree” answers into “Disagree”.

© IRSN
Here are various measures to strengthen the safety of nuclear sites. For each one, please indicate whether you consider it to be a priority, secondary or useless to strengthen the safety of nuclear sites.

**NOVEMBER 2022 (IN %)**

- **Develop research on the safety of existing nuclear reactors**: 74% priority, 21% secondary, 5% useless
- **Strengthen inspections by competent authorities in the facilities**: 74% priority, 21% secondary, 5% useless
- **Improve the capacity of France to handle a possible nuclear emergency**: 70% priority, 24% secondary, 6% useless
- **Develop research to design a new generation of nuclear reactors**: 64% priority, 26% secondary, 10% useless
- **Better take into account the human factor and work organization**: 55% priority, 36% secondary, 9% useless
- **Strengthen the ability of citizens to exercise vigilance over the safety of facilities**: 42% priority, 41% secondary, 17% useless
Here are various measures to strengthen the safety of nuclear sites. For each one, please indicate whether you consider it to be a priority, secondary or useless to strengthen the safety of nuclear sites.

→ EVOLUTION OF THE RESULTS 2011-2022 (IN %)

1 - Strengthen inspections by competent authorities in the facilities*

2 - Develop research on the safety of existing nuclear reactors

* Up to and including 2018, the proposal was "strengthening inspections in nuclear facilities by the oversight units".

In 2019, the answer "Important but not a priority" was removed and the answer "Useless" was added.
Here are various measures to strengthen the safety of nuclear sites. For each one, please indicate whether you consider it to be a priority, secondary or useless to strengthen the safety of nuclear sites.

→ EVOLUTION OF THE RESULTS 2011-2022 (IN %)

3 - Improve the capacity of France to handle a possible nuclear emergency

4 - Better consider the human factor and work organization*

* Up to and including 2018, the proposal was "improve the safety of installations by taking greater account of the human factor and work organization".

In 2019, the answer "Important but not a priority" was removed and the answer "Useless" was added.
Here are various measures to strengthen the safety of nuclear sites. For each one, please indicate whether you consider it to be a priority, secondary or useless to strengthen the safety of nuclear sites.

EVOLUTION OF THE RESULTS 2011-2022 (IN %)

5 - Develop research to design a new generation of nuclear reactors

6 - Strengthen the ability of citizens to exercise vigilance over the safety of facilities*

* Up to and including 2018, the proposal was "Strengthen the means for citizens’ vigilance and participation".
What do you think is the strongest argument for nuclear power today?

→ NOVEMBER 2022 (IN %)

- Energy Independence: 43%
- Low cost of electricity: 22%
- Low emissions of greenhouse gas: 13%
- The safety of nuclear facilities: 9%
- The creation or preservation of jobs in France: 8%
- Other: 4%
- Doesn't know / No answer: 1%

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QUESTION No. 3 (CONT.)

What do you think is the strongest argument for nuclear power today?

EVOLUTION OF THE RESULTS 2002-2022 (IN %)

1. Energy Independence
2. Low cost of electricity
3. Low emissions of greenhouse gas
4. The safety of nuclear facilities
5. The creation or preservation of jobs in France
6. Other
7. Doesn't know / No answer

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What do you think is the strongest argument against nuclear power today?

NOVEMBER 2022 (IN %)

- The production of radioactive waste
- The risk of an accident
- The cost of nuclear (construction, operation, decommissioning, waste)
- The lack of transparency in the nuclear industry
- The emission of greenhouse gas
- The competition with investments in renewable energies
- Other
- Doesn’t know / No answer
What do you think is the strongest argument against nuclear power today?

→ EVOLUTION OF THE RESULTS 2002-2022 (IN %)

In recent years, the list of proposals has changed. In 2018, “the risk of an accident” replaced “the Chernobyl and Fukushima accidents”. In 2020, “vulnerability of nuclear facilities” was removed, “nuclear waste” was replaced by “nuclear waste production”, and “the cost of nuclear power (construction, decommissioning, waste)”, “competition to investments in renewable energy” and “the emission of greenhouse gas” were added. In 2022, “the cost of nuclear (construction, decommissioning, waste)” was replaced by “the cost of nuclear (construction, operation, decommissioning, waste)”. 
Here are various proposals relating to nuclear energy. For each one, please indicate your opinion according to the following scale.

**NOVEMBER 2022 (IN %)**

- **Building nuclear power plants was a good thing**
  - Strongly agree: 30%
  - Somewhat agree: 35%
  - Neither agree nor disagree: 24%
  - Somewhat disagree: 6%
  - Strongly disagree: 5%

- **New nuclear power plants must be built**
  - Strongly agree: 25%
  - Somewhat agree: 25%
  - Neither agree nor disagree: 30%
  - Somewhat disagree: 11%
  - Strongly disagree: 9%

- **Nuclear power plants must be closed**
  - Strongly agree: 7%
  - Somewhat agree: 12%
  - Neither agree nor disagree: 27%
  - Somewhat disagree: 23%
  - Strongly disagree: 31%

**EVOLUTION OF THE RESULTS 1977-2022 (IN %)**

1 - **New nuclear power plants must be built**

In 2020, the list "fully agree, rather agree, maybe agree, not so much agree, not at all agree" was replaced by "strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, strongly disagree".

The answers "Strongly agree" and "Somewhat agree" were grouped into "Agree"; "Somewhat disagree" and "Strongly disagree" answers into "Disagree".
Here are various proposals relating to nuclear energy. For each one, please indicate your opinion according to the following scale.

2 - Building nuclear power plants was a good thing

3 - Nuclear power plants must be closed

In 2020, the list “fully agree, rather agree, maybe agree, not so much agree, not at all agree” was replaced by “strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, strongly disagree”.
The answers “Strongly agree” and “Somewhat agree” were grouped into “Agree”; “Somewhat disagree” and “Strongly disagree” answers into “Disagree”.

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In your opinion, which of the following energy sources best corresponds to...

→ NOVEMBER 2022 (IN %)

- The energy of the future
- The most environmentally friendly energy
- The energy with the highest performance
- The energy that has the lowest cost
- The energy best suited for the energy transition

In 2022, "hydroelectric power (energy produced by dams)" was replaced by "hydropower energy". The answers "geothermal energy" and "coal" have been added.
In your opinion, which of the following energy sources best corresponds to...*

* In 2022, the title of the question "Among the energies I will state to you, which one best corresponds to each of the following qualities?" has been replaced by "In your opinion, which of the following energy sources best corresponds to...". The questions "the least problematic energy at the international level", "the least expensive energy per kilowatt", "the cheapest energy to exploit per kilowatt produced", "the least polluting energy", "the energy that best helps fight the greenhouse effect" have been deleted, but some continue to be represented this year. The questions "the energy that has the lowest cost" and "the energy best suited for the energy transition" have been added.

In 2022, "hydroelectric power (energy produced by dams)" was replaced by "hydropower energy". The answers "geothermal energy" and "coal" have been added.

© IRSN
In your opinion, which of the following energy sources best corresponds to...*

3 - The energy with the highest performance

- Solar energy
- Biomass energy
- Nuclear energy
- Natural gas
- Geothermal energy
- Wind energy
- Hydropower energy
- Geothermal energy

4 - The energy that has the lowest cost(1)

- Solar energy
- Nuclear energy
- Wind energy
- Hydropower energy
- Biomass energy
- Natural gas
- Coal

(1) In 2022, the question “the energy that has the lowest cost” has been added.

* In 2022, the title of the question “Among the energies I will state to you, which one best corresponds to each of the following qualities?” has been replaced by “In your opinion, which of the following energy sources best corresponds to...”. The questions “the least problematic energy at the international level”, “the least expensive energy per kilowatt”, “the cheapest energy to exploit per kilowatt produced”, “the least polluting energy”, “the energy that best helps fight the greenhouse effect” have been deleted, but some continue to be represented this year. The questions “the energy that has the lowest cost” and “the energy best suited for the energy transition” have been added.

In 2022, “hydroelectric power (energy produced by dams)" was replaced by "hydropower energy". The answers “geothermal energy” and "coal" have been added.
In your opinion, which of the following energy sources best corresponds to...*

→ EVOLUTION OF THE RESULTS 2013-2022 (IN %)

5 - The energy best suited for the energy transition\(^{(1)}\)

- Solar energy
- Wind energy
- Geothermal energy
- Natural gas
- Oil
- Hydropower energy
- Nuclear energy
- Biomass energy
- Coal
- Doesn’t know / No answer

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(1) In 2022, the question “The energy best suited for the energy transition” has been added.

6 - The least problematic energy at the international level\(^{(2)}\)

- Solar energy
- Nuclear energy
- Geothermal energy
- Wind energy
- Hydropower energy
- Biomass energy
- Natural gas
- Oil
- Coal
- Doesn’t know / No answer

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(2) In 2022, the question “The least problematic energy at the international level” has been deleted.

* In 2022, the title of the question “Among the energies I will state to you, which one best corresponds to each of the following qualities?” has been replaced by “In your opinion, which of the following energy sources best corresponds to...”. The questions “the least problematic energy at the international level”, “the least expensive energy per kilowatt”, “the cheapest energy to exploit per kilowatt produced”, “the least polluting energy”, “the energy that best helps fight the greenhouse effect” have been deleted, but some continue to be represented this year. The questions “the energy that has the lowest cost” and “the energy best suited for the energy transition” have been added.

In 2022, “hydroelectric power (energy produced by dams)” was replaced by “hydropower energy”. The answers “geothermal energy” and “coal” have been added.
In your opinion, which of the following energy sources best corresponds to...* 

- The energy that best helps fight the greenhouse effect 

* In 2022, the title of the question "Among the energies I will state to you, which one best corresponds to each of the following qualities?" has been replaced by "In your opinion, which of the following energy sources best corresponds to...". The questions "the least problematic energy at the international level", "the least expensive energy per kilowatt", "the cheapest energy to exploit per kilowatt produced", "the least polluting energy", "the energy that best helps fight the greenhouse effect" have been deleted, but some continue to be represented this year. The questions "the energy that has the lowest cost" and "the energy best suited for the energy transition" have been added.

In 2022, "hydroelectric power (energy produced by dams)" was replaced by "hydropower energy". The answers "geothermal energy" and "coal" have been added.
Now and with hindsight, do you think that the choice of nuclear power was ...

→ NOVEMBER 2022 (IN %)

→ EVOLUTION OF THE RESULTS 1988-2022 (IN %)
In your opinion, can an accident of the same magnitude as the one in Fukushima occur in a French nuclear power plant?*

* Before 2018, the wording of the question was: “In your opinion, can an accident in a nuclear power plant of the same magnitude as the one in Fukushima occur in France?”
How likely do you think such an accident is?

→ NOVEMBER 2022 (IN %)

- Sub-total Probable: 42%
- Sub-total Not probable: 58%
- Yes, very probable: 8%
- Yes, somewhat probable: 34%
- No, not really probable: 51%
- No, not at all probable: 7%
- Doesn’t know / No answer: 0%

→ EVOLUTION OF THE RESULTS 2020-2022 (IN %)

- Yes, very probable: 10 → 38 → 36 → 34%
- Yes, somewhat probable: 6 → 46 → 48 → 51%
- No, not really probable: 0 → 9 → 7 → 8%
- No, not at all probable: 0 → 7 → 7 → 0%
- Doesn’t know / No answer: 0 → 0 → 0 → 0%
Based on what you know, do you think that the choice to extend the operating lifespan of nuclear power plants constitutes:

→ NOVEMBER 2022 (IN %)

- Sub-total – A good choice: 54%
- Sub-total – A bad choice: 23%
- A very good choice: 13%
- Somewhat a good choice: 41%
- Neither a good nor a bad choice: 23%
- Somewhat a bad choice: 15%
- A very bad choice: 8%
Have you heard of the following topics?

→ NOVEMBER 2022 (IN %)

1. The Flamanville EPR reactor (European Pressurized Reactor)
2. The development of SMRs (Small Modular Reactors)
3. The construction of the international fusion nuclear reactor ITER at Cadarache (International Thermonuclear Experimental Reactor)
4. The “Cigeo” project of radioactive waste burial in Bure

→ EVOLUTION OF THE RESULTS 2019-2022 (IN %)

1. The “Cigéo” project for radioactive waste storage in Bure*

* In 2022, the word “nuclear” was replaced by “radioactive”.

In 2021, the answer “Yes, and I can pretty much guess what it is” was added and the answer “Yes, I know more or less what it is about” was replaced by “Yes, but only by name”.

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Have you heard of the following topics?

→ EVOLUTION OF THE RESULTS 2021-2022 (IN %)

2 - The development of SMRs (Small Modular Reactors)

3 - The Flamanville EPR reactor (European Pressurized Reactor)

* In 2021, the answer “Yes, and I can pretty much guess what it is” was added and the answer “Yes, I know more or less what it is about” was replaced by “Yes, but only by name”.
Have you heard of the following topics?

→ NOVEMBER 2022 (IN %)

4 - The construction of the international fusion nuclear reactor ITER at Cadarache (International Thermonuclear Experimental Reactor)

* In 2021, the answer “Yes, and I can pretty much guess what it is” was added and the answer “Yes, I know more or less what it is about” was replaced by “Yes, but only by name”.

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QUESTION No. 10

To solve the radioactive waste problem, which solution sounds the most reasonable to you?

→ NOVEMBER 2022 (IN %)

- Make a decision as soon as possible and apply it right away
- Extend research for 10 years
- Leave the choice to future generations
- Doesn’t know / No answer

→ EVOLUTION OF THE RESULTS 2005-2022 (IN %)

- Make a decision as soon as possible and apply it right away
- Extend research for 10 years
- Leave the choice to future generations
- Doesn’t know / No answer
In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

**NOVEMBER 2022 (IN %)**

<table>
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<tr>
<th>Organization</th>
<th>Yes</th>
<th>No</th>
<th>I don't know</th>
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<td>Politicians</td>
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</tbody>
</table>
In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

**QUESTION No. 13 (CONT.)**

1 - The Academy of Sciences

2 - International agencies (IAEA, NEA, etc.)*

* In 1999 (and that year only), the wording “International expert bodies” was replaced by “International bodies”. Then, in 2019, it was replaced by “International agencies (IAEA, NEA, etc.).”
In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

**QUESTION No. 13 (CONT.)**

→ EVOLUTION OF THE RESULTS 1990-2022 (IN %)

3 - ANDRA (National agency for radioactive waste management)

![Diagram showing the evolution of ANDRA's rating from 1990 to 2022.]

4 - Consumer protection organizations

![Diagram showing the evolution of consumer protection organizations' rating from 1990 to 2022.]

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**THE OPINION OF THE FRENCH ON NUCLEAR MATTERS  //  PART 4**

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In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

**EVOlution of the Results 1990-2022 (IN %)**

5 - Environmental NGOs*

*In 1998, the title "The environmentalists" was replaced by "Environmental NGOs".

6 - ASN (Nuclear Safety Authority) *

*In 1999, the wording "Control bodies" was replaced by "Control bodies (Directorate for the safety of nuclear installations, etc.)". In 2002, it was replaced by "The control bodies (Directorate General of Nuclear Safety and Radiation Protection)"; in 2006, by "The control bodies (Nuclear Safety Authority, etc.)"; in 2019 by "The Nuclear Safety Authority".

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In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

7 - CEA (Atomic energy commission)

8 - The CLI (Local Information Commissions)
In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

9 - The CNRS (National Center for Scientific Research)

10 - EDF
In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

**Question No. 13 (Cont.)**

→ **EVOlution of the Results 1990-2022 (IN %)**

11 - Local elected officials

12 - The government

© IRSN
In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

13 - The HCTISN (High committee for transparency and information on nuclear security)

14 - Politicians
In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

15 - IRSN (Institute for Radiological Protection and Nuclear Safety)*

16 - Journalists

* In 2002, the wording "IPSN, Protection and Nuclear Safety Institute" was replaced by "IRSN, Institute for radiological protection and nuclear safety".
In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

→ EVOLUTION OF THE RESULTS 1990-2022 (IN %)

17 - Physicians

18 - OPECST (Parliamentary Office for the Evaluation of Scientific and Technological Choices)
In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

**QUESTION No. 13 (CONT.)**

→ EVOLUTION OF THE RESULTS 1990-2022 (IN %)

19 - ORANO (formerly AREVA)

20 - Labor Unions
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

<table>
<thead>
<tr>
<th>Actor/Organization</th>
<th>Yes</th>
<th>No</th>
<th>I don’t know</th>
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</table>

In 2019, the title of the question was changed from “Do the following information sources tell you the truth about nuclear power in France?” to “In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?”.
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

→ EVOLUTION OF THE RESULTS 1998-2022 (IN %)

1 - The Academy of Sciences

2 - International agencies (IAEA, NEA, etc.)*

* In 1999 (and that year only), the wording “International expert bodies” was replaced by “International bodies”. Then, in 2019, it was replaced by “International agencies (IAEA, NEA, etc.)."
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

→ EVOLUTION OF THE RESULTS 1998-2022 (IN %)

3 - ANDRA (National agency for radioactive waste management)

4 - Consumer protection Organizations

In 2019, the title of the question was changed from "Do the following information sources tell you the truth about nuclear power in France?" to "In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?".
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

→ EVOLUTION OF THE RESULTS 1998-2022 (IN %)

5 - Environmental NGOs*

* In 1998, the title "The environmentalists" was replaced by "Environmental NGOs".

6 - ASN (Nuclear Safety Authority)*

* In 1999, the wording "Control bodies" was replaced by "Control bodies (Directorate for the safety of nuclear installations, etc.)". In 2002, it was replaced by "The control bodies (Directorate General of Nuclear Safety and Radiation Protection)"; in 2006, by "The control bodies (Nuclear Safety Authority, etc.)"; in 2019 by "The Nuclear Safety Authority".

In 2019, the title of the question was changed from "Do the following information sources tell you the truth about nuclear power in France?" to "In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?".
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

→ EVOLUTION OF THE RESULTS 1998-2022 (IN %)

7 - CEA (Atomic energy commission)

8 - The CLI (Local Information Commissions)

© IRSN

In 2019, the title of the question was changed from “Do the following information sources tell you the truth about nuclear power in France?” to “In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?”.
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

→ EVOLUTION OF THE RESULTS 1998-2022 (IN %)

9 - The CNRS (National Center for Scientific Research)

10 - EDF

In 2019, the title of the question was changed from "Do the following information sources tell you the truth about nuclear power in France?" to "In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?".
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

→ EVOLUTION OF THE RESULTS 1998-2022 (IN %)

11 - Local elected officials

12 - The government

In 2019, the title of the question was changed from “Do the following information sources tell you the truth about nuclear power in France?” to “In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?”.
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

**13 - The HCTISN (High committee for transparency and information on nuclear security)**

**EVOlUTION OF THE RESULTS 1998-2022 (IN %)**

In 2019, the title of the question was changed from "Do the following information sources tell you the truth about nuclear power in France?" to "In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?".
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

→ EVOLUTION OF THE RESULTS 1998-2022 (IN %)

15 - IRSN (Institute for Radiological Protection and Nuclear Safety)*

* In 2002, the wording “IPSN, Protection and Nuclear Safety Institute” was replaced by “IRSN, Institute for radiological protection and nuclear safety”.

16 - Journalists

In 2019, the title of the question was changed from “Do the following information sources tell you the truth about nuclear power in France?” to “In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?”.
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

→ EVOLUTION OF THE RESULTS 1998-2022 (IN %)

17 - Physicians

18 - OPECST (Parliamentary Office for the Evaluation of Scientific and Technological Choices)

In 2019, the title of the question was changed from “Do the following information sources tell you the truth about nuclear power in France?” to “In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?”.
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

→ EVOLUTION OF THE RESULTS 1998-2022 (IN %)

19 - ORANO (formerly AREVA)

20 - Labor Unions

In 2019, the title of the question was changed from "Do the following information sources tell you the truth about nuclear power in France?" to "In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?".
### In the field of nuclear industry and energy, do you think the following actors and organizations are technically competent?

<table>
<thead>
<tr>
<th>Organization</th>
<th>Yes</th>
<th>No</th>
<th>I don't know</th>
<th>Doesn't know/No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>The CNRS (National Center for Scientific Research)</td>
<td>75</td>
<td>10</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>ASN (Nuclear Safety Authority)</td>
<td>73</td>
<td>9</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>IRSN (Institute for Radiological Protection and Nuclear Safety)</td>
<td>72</td>
<td>8</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>CEA (Atomic energy commission)</td>
<td>69</td>
<td>9</td>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>ANDRA (National agency for radioactive waste management)</td>
<td>65</td>
<td>11</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>The HCTISN (High committee for transparency and information on nuclear security)</td>
<td>64</td>
<td>11</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
<td>EDF</td>
<td>60</td>
<td>21</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>The Academy of Sciences</td>
<td>56</td>
<td>18</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>Physicians</td>
<td>53</td>
<td>26</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>OPECST (Parliamentary Office for the Evaluation of Scientific and Technological Choices)</td>
<td>46</td>
<td>19</td>
<td>35</td>
<td>0</td>
</tr>
<tr>
<td>International agencies (IAEA, NEA, etc.)</td>
<td>45</td>
<td>15</td>
<td>39</td>
<td>1</td>
</tr>
<tr>
<td>ORANO (formerly AREVA)</td>
<td>37</td>
<td>19</td>
<td>43</td>
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<tr>
<td>Consumer protection organizations</td>
<td>33</td>
<td>44</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td>Environmental NGOs</td>
<td>32</td>
<td>47</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>The government</td>
<td>31</td>
<td>52</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>The CLI (Local Information Commissions)</td>
<td>29</td>
<td>32</td>
<td>39</td>
<td>0</td>
</tr>
<tr>
<td>Local elected officials</td>
<td>24</td>
<td>53</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>Labor Unions</td>
<td>17</td>
<td>62</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>Journalists</td>
<td>17</td>
<td>64</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>Politicians</td>
<td>14</td>
<td>69</td>
<td>17</td>
<td>0</td>
</tr>
</tbody>
</table>

### In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

<table>
<thead>
<tr>
<th>Organization</th>
<th>Yes</th>
<th>No</th>
<th>I don't know</th>
<th>Doesn't know/No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>The CNRS (National Center for Scientific Research)</td>
<td>69</td>
<td>11</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>ASN (Nuclear Safety Authority)</td>
<td>65</td>
<td>12</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>IRSN (Institute for Radiological Protection and Nuclear Safety)</td>
<td>64</td>
<td>11</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
<td>CEA (Atomic energy commission)</td>
<td>62</td>
<td>14</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>The HCTISN (High committee for transparency and information on nuclear security)</td>
<td>59</td>
<td>14</td>
<td>26</td>
<td>1</td>
</tr>
<tr>
<td>ANDRA (National agency for radioactive waste management)</td>
<td>57</td>
<td>16</td>
<td>27</td>
<td>0</td>
</tr>
<tr>
<td>The Academy of Sciences</td>
<td>56</td>
<td>18</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
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<td>54</td>
<td>25</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>EDF</td>
<td>49</td>
<td>28</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td>OPECST (Parliamentary Office for the Evaluation of Scientific and Technological Choices)</td>
<td>46</td>
<td>20</td>
<td>33</td>
<td>1</td>
</tr>
<tr>
<td>International agencies (IAEA, NEA, etc.)</td>
<td>45</td>
<td>17</td>
<td>37</td>
<td>1</td>
</tr>
<tr>
<td>Consumer protection organizations</td>
<td>40</td>
<td>38</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>The CLI (Local Information Commissions)</td>
<td>34</td>
<td>30</td>
<td>35</td>
<td>1</td>
</tr>
<tr>
<td>ORANO (formerly AREVA)</td>
<td>33</td>
<td>25</td>
<td>41</td>
<td>1</td>
</tr>
<tr>
<td>Environmental NGOs</td>
<td>29</td>
<td>49</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>Local elected officials</td>
<td>24</td>
<td>52</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
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<td>24</td>
<td>58</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
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<td>20</td>
<td>60</td>
<td>19</td>
<td>1</td>
</tr>
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<td>20</td>
<td>1</td>
</tr>
<tr>
<td>Politicians</td>
<td>12</td>
<td>69</td>
<td>18</td>
<td>1</td>
</tr>
</tbody>
</table>

Until 2020, the survey was administered face-to-face. In 2021, we conducted two parallel surveys: one on the Internet (the results of which are presented in the Barometer) and another, a control survey, carried out in the same way as in previous years (face-to-face). For almost all of the questions, the effect of the new administration is negligible. But for these two questions a significant bias is recorded, particularly about trust. As you can see on the following pages, not all actors are affected in the same way. The results of both surveys can be found on the website: [https://barometre.irsn.fr/graphiques](https://barometre.irsn.fr/graphiques).
In the field of nuclear industry and energy, do you think the following actors and organizations are technically competent?

In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

→ NOVEMBER 2022 (IN %)

Until 2020, the survey was administered face-to-face. In 2021, we conducted two parallel surveys: one on the Internet (the results of which are presented in the Barometer) and another, a control survey, carried out in the same way as in previous years (face-to-face). For almost all of the questions, the effect of the new administration is negligible. But for these two questions a significant bias is recorded, particularly about trust. As you can see on the following pages, not all actors are affected in the same way. The results of both surveys can be found on the website: [https://barometre.irsn.fr/graphiques](https://barometre.irsn.fr/graphiques).
Description of the sample

Questionnaire

Surveys
DESCRIPTION OF THE SAMPLE

<table>
<thead>
<tr>
<th>GEOGRAPHICAL DISTRIBUTION</th>
<th>%</th>
<th>2018 NATIONAL CENSUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Île-de-France</td>
<td>17.9</td>
<td>17.9</td>
</tr>
<tr>
<td>North</td>
<td>6.4</td>
<td>6.4</td>
</tr>
<tr>
<td>East</td>
<td>8.6</td>
<td>8.6</td>
</tr>
<tr>
<td>East Paris Basin</td>
<td>7.7</td>
<td>7.7</td>
</tr>
<tr>
<td>West Paris Basin</td>
<td>9.7</td>
<td>9.7</td>
</tr>
<tr>
<td>West</td>
<td>14.2</td>
<td>14.2</td>
</tr>
<tr>
<td>Southwest</td>
<td>11.1</td>
<td>11.1</td>
</tr>
<tr>
<td>Central East</td>
<td>12.2</td>
<td>12.2</td>
</tr>
<tr>
<td>Mediterranean area</td>
<td>12.2</td>
<td>12.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIZE OF URBAN AREA</th>
<th>%</th>
<th>2018 NATIONAL CENSUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>22.3</td>
<td>22.3</td>
</tr>
<tr>
<td>Between 2 000 and 19 999 inhab.</td>
<td>22.0</td>
<td>22.0</td>
</tr>
<tr>
<td>Between 20 000 and 99 999 inhab.</td>
<td>12.1</td>
<td>12.1</td>
</tr>
<tr>
<td>100 000 inhab and more</td>
<td>28.1</td>
<td>28.1</td>
</tr>
<tr>
<td>Paris metropolitan area</td>
<td>15.5</td>
<td>15.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GENDER</th>
<th>%</th>
<th>2018 NATIONAL CENSUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man</td>
<td>47.7</td>
<td>47.7</td>
</tr>
<tr>
<td>Woman</td>
<td>52.3</td>
<td>52.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AGE</th>
<th>%</th>
<th>2018 NATIONAL CENSUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24 years</td>
<td>10.6</td>
<td>10.6</td>
</tr>
<tr>
<td>25-34 years</td>
<td>15.8</td>
<td>15.8</td>
</tr>
<tr>
<td>35-49 years</td>
<td>24.8</td>
<td>24.8</td>
</tr>
<tr>
<td>50-64 years</td>
<td>24.5</td>
<td>24.5</td>
</tr>
<tr>
<td>65 years and more</td>
<td>24.3</td>
<td>24.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCIO-PROFESSIONAL CATEGORY</th>
<th>%</th>
<th>2018 NATIONAL CENSUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer, craftsperson, shopkeeper, entrepreneur</td>
<td>5.2</td>
<td>5.2</td>
</tr>
<tr>
<td>Professional (incl. intellectual professions, lawyers, physicians...)</td>
<td>10.3</td>
<td>10.3</td>
</tr>
<tr>
<td>Intermediate-skill worker</td>
<td>15.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Employee</td>
<td>17.0</td>
<td>17.0</td>
</tr>
<tr>
<td>Worker</td>
<td>12.7</td>
<td>12.7</td>
</tr>
<tr>
<td>Retired, other inactive</td>
<td>39.8</td>
<td>39.8</td>
</tr>
</tbody>
</table>

End of quota variables.

Thanks to the statistical adjustment, the sample corresponds exactly to the targeted quotas. It is fully comparable to the samples of previous years and does not contain any under or over-representation of a socio-demographic parameter that could lead to an inaccurate representation of the French population.
**POLITICAL AFFILIATION**

Without thinking only of the elections, of the following political parties, can you tell me which one you feel closest to or let's say the least distant?

<table>
<thead>
<tr>
<th>Party</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lutte Ouvrière</td>
<td>2</td>
</tr>
<tr>
<td>The NPA (New Anti-Capitalist Party)</td>
<td>1</td>
</tr>
<tr>
<td>The Communist Party</td>
<td>2</td>
</tr>
<tr>
<td>La France Insoumise</td>
<td>8</td>
</tr>
<tr>
<td>The Socialist Party</td>
<td>8</td>
</tr>
<tr>
<td>Europe Ecologie Les Verts (Green Party)</td>
<td>6</td>
</tr>
<tr>
<td>Renaissance (ex-La République En Marche)</td>
<td>10</td>
</tr>
<tr>
<td>MoDem</td>
<td>2</td>
</tr>
<tr>
<td>Horizons (by Édouard Philippe)</td>
<td>1</td>
</tr>
<tr>
<td>UDI (Union des Démocrates et Indépendants)</td>
<td>1</td>
</tr>
<tr>
<td>Les Républicains (formerly UMP)</td>
<td>8</td>
</tr>
<tr>
<td>Debout la France (by Nicolas Dupont-Aignan)</td>
<td>2</td>
</tr>
<tr>
<td>Le Rassemblement National (formerly Front National)</td>
<td>17</td>
</tr>
<tr>
<td>Reconquête ! (by Éric Zemmour)</td>
<td>3</td>
</tr>
<tr>
<td>No party</td>
<td>3</td>
</tr>
<tr>
<td>Doesn't know/No answer</td>
<td>3</td>
</tr>
</tbody>
</table>

**INCOME LEVEL**

What is your monthly net income of your household?

| Subtotal less than 2,000 € monthly         | 36 |
| Less than 1,000 € monthly                 | 9 |
| 1,000 € to 1,499 € monthly                | 12|
| 1,500 € to 1,999 € monthly                | 15|
| Subtotal 2,000 € to 4,000 € monthly       | 46|
| 2,000 € to 2,999 € monthly                | 25|
| 3,000 € to 3,999 € monthly                | 21|
| Subtotal 4,000 € or more monthly          | 18|
| 4,000 € to 5,999 € monthly                | 11|
| 5,000 € to 6,999 € monthly                | 4 |
| 6,000 € or more monthly                   | 3 |

**SCIENCE MAGAZINES READING**

Do you read scientific newspapers, journals or magazines, such as Science & Vie, Science et Avenir, Ça m’intéresse, La Recherche, etc.?

| Subtotal Often/Sometimes                  | 41|
| Often                                      | 9 |
| Sometimes                                  | 32|
| Subtotal Rarely/Never                      | 59|
| Rarely                                     | 30|
| Never                                      | 29|

**POLITICAL STANCE**

Can you tell me where you stand politically?

| Subtotal Left                             | 28|
| Far-left                                  | 3 |
| Left                                      | 13|
| Center-left                               | 12|
| Neither left nor right                    | 40|
| Subtotal right                            | 32|
| Center-right                              | 14|
| Right                                     | 10|
| Far-right                                 | 8 |

**2022 FRENCH PRESIDENTIAL ELECTION – FIRST ROUND**

In the first round of the 2022 presidential election, which candidate did you vote for?

<table>
<thead>
<tr>
<th>Candidate</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nathalie Arthaud</td>
<td>1</td>
</tr>
<tr>
<td>Philippe Poutou</td>
<td>1</td>
</tr>
<tr>
<td>Fabien Roussel</td>
<td>2</td>
</tr>
<tr>
<td>Jean-Luc Mélenchon</td>
<td>15</td>
</tr>
<tr>
<td>Anne Hidalgo</td>
<td>2</td>
</tr>
<tr>
<td>Yannick Jadot</td>
<td>4</td>
</tr>
<tr>
<td>Emmanuel Macron</td>
<td>21</td>
</tr>
<tr>
<td>Valérie Pécresse</td>
<td>5</td>
</tr>
<tr>
<td>Nicolas Dupont-Aignan</td>
<td>2</td>
</tr>
<tr>
<td>Marine Le Pen</td>
<td>20</td>
</tr>
<tr>
<td>Eric Zemmour</td>
<td>6</td>
</tr>
<tr>
<td>Jean Lassalle</td>
<td>2</td>
</tr>
<tr>
<td>You voted blank</td>
<td>5</td>
</tr>
<tr>
<td>You voted invalid</td>
<td>2</td>
</tr>
<tr>
<td>You abstained</td>
<td>8</td>
</tr>
<tr>
<td>You were not registered to vote</td>
<td>4</td>
</tr>
</tbody>
</table>

**RELIGION**

Do you regularly practice a religion?

| Yes                                     | 18|
| No                                      | 82|

**DO YOU LIVE WITHIN 20 KM...?**

of a nuclear power plant?

| Yes                                     | 12|
| No                                      | 88|
| Doesn't know / No answer                | 0 |

of another nuclear facility?

| Yes                                     | 8 |
| No                                      | 91|
| Doesn't know / No answer                | 1 |

of a major chemical facility?

| Yes                                     | 16|
| No                                      | 83|
| Doesn't know / No answer                | 1 |
Gender
1. Man
2. Woman

How old are you?

Automatically recode age
1. 18-24 years
2. 25-34 years
3. 35-49 years
4. 50-64 years
5. 65 years and more

What is the postal code of your main residence?
(Metropolitan France only)

Geographical distribution (automatically recoded)
1. Île-de-France
2. North
3. East
4. East Paris Basin
5. West Paris Basin
6. West
7. South-West
8. Central East
9. Mediterranean area

What is your current occupation? (If unemployed having previously worked, code former occupation)
1. Farmer
2. Craftsperson, shopkeeper, entrepreneur
3. Liberal profession and similar
4. Company manager, public service manager, intellectual and artistic profession
5. Intermediate-skill worker
6. Employee
7. Worker
8. Housewife, househusband
9. Pupil, student
10. Retired
11. Looking for first job
12. Other inactive

What is your employment status?
1. Public sector employee
2. Private sector employee
3. Self-employed
4. Unemployed
5. Inactive

In France, which of the following current issues do you find most concerning? First? Second?
1. Insecurity (property and people)
2. Nuclear risks
3. Unemployment
4. Extreme poverty and exclusion
5. Terrorism
6. Health
7. Climate imbalance
8. The global geopolitical instability (tensions, conflict between countries, etc.)
9. Purchasing power
10. Immigration
11. Doesn’t know / No answer

In the current context of the war in Ukraine, which of the following issues do you find most concerning? First? Second?
1. The rise in prices (energy, food products, etc.)
2. The uncertainty regarding energy supplies (gas, electricity, etc.)
3. The bombings, destruction in Ukraine (cities, roads, energy infrastructure, etc.)
4. The situation of civilian populations in Ukraine
5. The risk of an accident concerning a nuclear power plant in Ukraine
6. The risk of nuclear weapons use in the conflict
7. The risk of an attack against France
8. The risk of a third world war
9. Other
10. Doesn’t know / No answer

Here are a number of environmental issues. Which one do you find most concerning?
1. The disappearance of animal species
2. The destruction of forests
3. Climate imbalance
4. Water pollution
5. The depletion of the ozone layer
6. Air pollution
7. Soil pollution
8. Damage from natural disasters
9. Doesn’t know / No answer

In each of the following areas, do you consider that the risks for the French population in general are...
1. Near zero
2. Low
3. Medium
4. High
5. Very high
6. No opinion
7. Doesn’t know / No answer

PROPOSITIONS
1. Radioactive waste
2. AIDS
3. Air pollution
4. Nuclear power plants
5. Water pollution
6. Food products safety
7. Chemical waste
8. Floods
9. Radioactive fallout in France from the Chernobyl accident
10. Terrorism
11. GMO’s (Genetically Modified Organisms)
12. Indoor radon
13. Chemical facilities
14. Medical radiographies
15. Pesticides
16. Forest fires
17. Noise pollution
18. Soil pollution
19. Heatwaves
20. Radiotherapy accidents
21. Nanoparticles
22. Endocrine disruptors
23. Cancer
24. Marine submersions (temporary floods caused by the sea)
25. Obesity
26. Domestic accidents
27. Alcohol
28. Pandemics (global epidemics)
29. Smoking
30. Traffic accidents
31. Drugs
32. High-voltage lines

How about for yourself and the ones close to you, do you consider that the risks are?

1. Near zero
2. Low
3. Medium
4. High
5. Very high
6. No opinion
7. Doesn’t know / No answer

PROPOSITIONS
1. Radioactive waste
2. AIDS
3. Air pollution
4. Nuclear power plants
5. Water pollution
6. Food products safety
7. Chemical waste
8. Floods
9. Radioactive fallout in France from the Chernobyl accident
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24. Marine submersions (temporary floods caused by the sea)
25. Obesity
26. Domestic accidents
27. Alcohol
28. Pandemics (global epidemics)
29. Smoking
30. Traffic accidents
31. Drugs
32. High-voltage lines

Do you trust the French authorities to protect people against the following risks?

1. Yes, definitely
2. Yes, somewhat
3. Neither trust nor doesn’t trust
4. No, not really
5. No, not at all
6. Doesn’t know / No answer

PROPOSITIONS
1. Radioactive waste
2. AIDS
3. Air pollution
4. Nuclear power plants
5. Water pollution
6. Food products safety
7. Chemical waste
8. Floods
9. Radioactive fallout in France from the Chernobyl accident
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25. Obesity
26. Domestic accidents
27. Alcohol
28. Pandemics (global epidemics)
29. Smoking
30. Traffic accidents
31. Drugs
32. High-voltage lines

Do you feel well-informed or poorly informed about the risks related to each of the following areas?

1. Very well informed
2. Rather well informed
3. Rather poorly informed
4. Very poorly informed
5. Doesn’t know / No answer

PROPOSITIONS
1. Radioactive waste
2. AIDS
3. Air pollution
4. Nuclear power plants
5. Water pollution
6. Food products safety
7. Chemical waste
8. Floods
9. Radioactive fallout in France from the Chernobyl accident
10. Terrorism
11. GMO’s (Genetically Modified Organisms)
12. Indoor radon
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25. Obesity
26. Domestic accidents
27. Alcohol
28. Pandemics (global epidemics)
29. Smoking
30. Traffic accidents
31. Drugs
32. High-voltage lines
Here are a number of proposals regarding scientific expertise. For each one, please indicate whether you agree or not.

1. Strongly agree
2. Somewhat agree
3. Neither agree nor disagree
4. Somewhat disagree
5. Strongly disagree
6. Doesn't know / No answer

PROPOSITIONS
1. Understandable information on the risks of installations must be made available to everyone
2. In their opinions, scientific experts must also present their points of disagreement
3. It is normal that not all scientific experts' positions are made public

What are, in your opinion, the two most important qualities of scientific experts? First? Second?

1. They are technically competent
2. They are independent in their judgement
3. They are honest in their scientific approach
4. They are responsive in unforeseen situations.
5. They pay attention to the concerns of the civil society
6. They can communicate in a comprehensible way for everyone
7. Doesn't know / No answer

In general, do you have a good or a bad opinion of scientific experts?

1. Very good
2. Good
3. Neither good nor bad
4. Poor
5. Very bad
6. Doesn't know / No answer

Here are three sentences regarding scientific experts and decision-makers. For each one, please indicate whether you agree or not.

1. Strongly agree
2. Somewhat agree
3. Neither agree nor disagree
4. Somewhat disagree
5. Strongly disagree
6. Doesn't know / No answer

PROPOSITIONS
1. When it comes to risk, it is normal to take every precaution even when the scientists only have doubts
2. It is necessary to be certain of the opinions of scientific experts before informing the public
3. Political decision-makers do not take scientific experts' opinions into account enough

Here are a number of propositions related to science. For each one, please indicate on the following scale whether you agree or not.

1. Strongly agree
2. Somewhat agree
3. Neither agree nor disagree
4. Somewhat disagree
5. Strongly disagree
6. Doesn't know / No answer

PROPOSITIONS
1. The development of science and technology generates more benefits than negative effects
2. I trust scientific institutions
3. There can be more than one correct answer to most scientific questions

Regarding the oversight of the impact of an installation that poses risks to the environment and neighboring populations, who do you think should control the environmental and health impact outside the installation? (One answer only)

1. Public regulatory authorities
2. Local elected officials (regional council, general council, municipality)
3. Non-governmental organizations
4. A local citizens' committee
5. The operator of the facility
6. A committee of scientific experts
7. Doesn't know / No answer

Would you be willing to live near...?

1. Yes
2. No
3. Doesn't know / No answer

PROPOSITIONS
1. A nuclear power plant
2. A major chemical facility
3. A chemical waste disposal
4. A radioactive waste disposal
5. A landfill
6. A flood zone
7. A seismic zone
8. An airport
9. A high-voltage power lines
10. A household waste incinerator
11. A nuclear research center
12. A mobile phone relay antenna
13. A wind farm
14. A marine submersion zone (temporary floods caused by the sea)
15. An area of forest at risk of forest fire
16. A carbon capture and geological storage site

Would you be willing to spend time participating to information and consultation meetings on the management of a high-risk installation near your home?
1. Yes, once a year
2. Yes, more than once a year
3. No, I’m not interested
4. No, it’s useless
5. No, I don’t have time
6. No, other people are more competent than me for that
7. Doesn’t know / No answer

A commission bringing together scientific experts, elected representatives, operators, NGOs, citizens and whose aim would be to deal with at-risk situations would be in your opinion...?
1. Very useful
2. Somewhat useful
3. Not very useful
4. Not at all useful
5. Doesn’t know / No answer

In your opinion, such a commission bringing together scientific experts, elected representatives, operators, NGOs, citizens and whose aim would be to deal with at-risk situations would be able...
1. Yes, definitely
2. Yes, somewhat
3. No, not really
4. No, not at all
5. Doesn’t know / No answer

Here are actions that an expertise body could take to better report on the results of its expertise. For each one, please indicate whether it is a priority, secondary or useless.
1. A priority
2. Secondary
3. Useless
4. Doesn’t know / No answer

PROPOSITIONS
1. Make available to all the list of all its current work
2. Answer all questions raised by NGOs and citizens
3. Organize public meetings to discuss its work
4. Make public its expertise reports
5. Organize webinars (on the internet) to present and debate about its projects

Technological risks expertise is embodied by reports to regulatory agencies in order for them to authorize an industrial installation. What do you prefer in regards to these reports?
1. I prefer to have access myself to these reports and make my own opinion
2. I prefer that access to technical reports be reserved only to others such as environmental protection organizations, elected officials or journalists.
3. Doesn’t know / No answer

Here are two proposals regarding citizens’ access to experts. For each of them, independently of the other, please indicate if it appears to you as a priority, secondary, or unnecessary.
1. Very important
2. Somewhat important
3. Not important
4. Not at all important
5. Doesn’t know / No answer

PROPOSITIONS
1. Grant citizens the possibility to request an expertise from an agency or public expertise body if they are sufficiently numerous
2. Grant nonprofit organizations the possibility to request an expertise from an agency or public expertise body

In the following list, what could encourage you to make your point of view be heard before a public decision is made?
1. To have the possibility to discuss with experts
2. To feel directly concerned by the topic
3. To feel that your participation as a citizen matters as much as that of other stakeholders
4. To have access to additional information to better understand the topic
5. To be sure not to be manipulated or exploited.
6. To receive financial compensation for participation
7. To have the possibility to participate remotely
8. To adapt meeting locations and times to participants
9. To associate these meetings with existing cultural events in the region
10. None of the above

Which of the following industrial or technological activities do you think is most likely to cause a serious accident or a disaster in France?
1. Chemical facilities
2. Transport of hazardous material
3. Nuclear power plants
4. Dams
5. Radioactive waste disposals
6. Air transport
7. Virus research laboratories
8. Other
9. Doesn’t know / No answer

Do you think that a collaboration between researchers and citizens at all stages of the research process (from formulating the research question to data collection, analysis, and dissemination of results) could...

11. Yes, definitely
12. Yes, somewhat
13. No, not really
14. No, not at all

PROPOSITIONS
1. Further enhance citizens’ trust in researchers.
2. Contribute significantly to the advancement of science.

Here are a number of reasons why the results of a scientific expertise might not be made public. For each one, please indicate on the following scale whether this is a good reason.

3. Yes, definitely
4. Yes, somewhat
5. No, not really
6. No, not at all
7. Doesn’t know/ No answer

PROPOSITIONS
1. Trade secret
2. The impossibility to express the results in terms understandable by the public
3. The fact that the decision related to the result of the expertise has not yet been taken
4. The lack of scientific certainty
5. Counterterrorism
6. ‘Top secret’ classification

In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

7. Yes
8. No
9. No opinion
10. Doesn’t know/ no answer

PROPOSITIONS
1. The government
2. Environmental NGOs
3. EDF
4. Journalists
5. CEA (Atomic energy commission)
6. Physicians
7. The CNRS (National Center for Scientific Research)
8. International agencies (IAEA, NEA, etc.)
9. ORANO (formerly AREVA)
10. Consumer protection organizations
11. Politicians
12. The Academy of Sciences
13. Local elected officials
14. Labor Unions
15. ASN (Nuclear Safety Authority)
16. IRSN (Institute for Radiological Protection and Nuclear Safety)
17. ANDRA (National agency for radioactive waste management)
18. OPECS (Parliamentary Office for the Evaluation of Scientific and Technological Choices)
19. The CLI (Local Information Commissions)
20. The HCTISN (High committee for transparency and information on nuclear security)

What do you think is the strongest argument against nuclear power today?

1. The lack of transparency in the nuclear industry
2. The risk of an accident
3. The production of radioactive waste
4. The cost of nuclear (construction, operation, decommissioning, waste)
5. The competition with investments in renewable energies
6. The emission of greenhouse gas
7. Other
8. Doesn’t know/ no answer

What do you think is the strongest argument for nuclear power today?

1. Energy independence
2. The low cost of electricity
3. The low emissions of greenhouse gas
4. The safety of nuclear facilities
5. The creation or preservation of jobs in France
6. Other
7. Doesn’t know/ no answer
Here are various proposals relating to nuclear energy. For each one, please indicate your opinion according to the following scale if you agree or not.

1. Strongly agree
2. Somewhat agree
3. Neither agree nor disagree
4. Somewhat disagree
5. Strongly disagree
6. Doesn't know / no answer

**PROPOSITIONS**
1. New nuclear power plants must be built
2. Building nuclear power plants was a good thing
3. Nuclear power plants must be closed

**In your opinion, which of the following energy sources best corresponds to...?**

1. Nuclear energy
2. Solar energy
3. Wind energy
4. Hydropower energy
5. Biomass energy
6. Geothermal energy
7. Natural gas
8. Oil
9. Coal
10. Doesn't know / No answer

**PROPOSITIONS**
1. The most environmentally friendly energy
2. The energy of the future
3. The energy with the highest performance
4. The energy that has the lowest cost
5. The energy best suited for the energy transition

**Now and with hindsight, do you think that the choice of nuclear power was ...?**

1. A good choice
2. A bad choice
3. A realistic choice
4. Doesn’t know / No answer

**PROPOSITIONS**
1. Every precaution is being taken to ensure a very high level of safety in French nuclear power plants
2. Radioactivity from nuclear power plants cause cancers
3. Around nuclear facilities, people are as healthy as elsewhere
4. Nuclear sites cause groundwater contamination
5. Nuclear site operators must protect their facilities from all risks, even those considered very unlikely
6. Today, it is possible to safely store nuclear waste
7. Nuclear installations are vulnerable to climate change
8. The safety of nuclear installations takes precedence over energy production, even if it may result in power outages in the country
9. Extending the operating lifespan of nuclear power plants will lead to accidents

Here are various measures to strengthen the safety of nuclear sites. For each one, please indicate whether you consider it to be a priority, secondary or useless to strengthen the safety of nuclear sites.

1. A priority
2. Secondary
3. Useless
4. Doesn’t know / No answer

**PROPOSITIONS**
1. Develop research to design a new generation of nuclear reactors
2. Develop research on the safety of existing nuclear reactors
3. Better take into account the human factor and work organization
4. Improve the capacity of France to handle a possible nuclear emergency
5. Reinforce inspections by the competent inspections of facilities
6. Reinforcing citizens’ ability to exercise vigilance their vigilance with regard to plant safety

To solve the radioactive waste problem, which solution sounds the most reasonable to you?

1. Make a decision as soon as possible and apply it right away
2. Extend research for 10 years
3. Leave the choice to future generations
4. Doesn’t know / No answer

**Based on what you know, do you think that the choice to extend the operating lifespan of nuclear power plants constitutes :**

1. A very good choice
2. Somewhat a good choice
3. Neither a good nor a bad choice
4. Somewhat a bad choice
5. A very bad choice

**Do you live within 20 km...**

6. Yes
7. No
8. Doesn’t know / No answer

**PROPOSITIONS**
1. of a nuclear power plant?
2. of another nuclear facility?
3. of a major chemical facility?

**Which of the following catastrophic events do you find most frightening?**

1. The explosion of the AZF factory in Toulouse in 2001
2. The Chernobyl nuclear power plant accident in 1986
3. The tsunami of December 26th 2004 in the Indian Ocean
4. The Fukushima nuclear power plant accident in 2011
5. The drought and heatwaves of the summer 2022 in France.
6. The global Covid-19 pandemic
7. The Katrina hurricane in 2005
8. Other
9. Doesn’t know / No answer
In your opinion, can an accident of the same magnitude as the one in Fukushima occur in a French nuclear power plant?
1. Yes
2. No
3. Doesn’t know / No answer

How likely do you think such an accident is?
1. Very likely
2. Somewhat likely
3. Somewhat not likely
4. Not at all likely
5. Doesn’t know / No answer

Have you heard of the following topics?
1. Yes, I know exactly what it is about
2. Yes, and I can pretty much guess what it is
3. Yes, but only by name
4. No, I have never heard about it
5. Doesn’t know / No answer

PROPOSITIONS
1. The “Cigeo” project of radioactive waste burial in Bure
2. The development of SMRs (Small Modular Reactors)
3. The Flamanville EPR reactor (European Pressurized Reactor)
4. The construction of the international fusion nuclear reactor ITER at Cadarache (International Thermonuclear Experimental Reactor)

What is the first thing that comes to mind when you hear the word ‘nuclear’? Please list the first five words that come to mind
(Only five words)

Do you have one or more children under the age of 18?
1. Yes, I have a child under the age of 18.
2. Yes, I have several children under the age of 18.
3. No
4. Doesn’t know / No answer

What is the highest degree you have obtained?
1. No diploma / Primary education
2. BEPC
3. CAP
4. BEP
5. Baccalaureate
6. Bac +2
7. Bac +3
8. Bac +4
9. Bac +5
10. Business schools, grandes écoles
11. Higher than Bac +5
12. Doesn’t know / No answer

Your training is rather:
1. Scientific (physics, maths, chemistry, technology, IT)
2. Economic and legal sciences (law, management, business)
3. Life sciences, health (medicine, paramedics, pharmacy, biology)
4. Humanities and social sciences (literature, psychology, sociology, arts)
5. Other
6. Doesn’t know / No answer

Do you read scientific newspapers, journals or magazines such as Science & Vie, Science et Avenir, Ça m’intéresse, La Recherche...?
1. Often
2. Sometimes
3. Rarely
4. Never
5. Doesn’t know / No answer

Without thinking only about the elections, which political party or movement do you feel closest to?
1. Lutte Ouvrière
2. The NPA (New Anti-Capitalist Party)
3. The Communist Party
4. La France Insoumise
5. The Socialist Party
6. Europe Écologie Les Verts (Green Party)
7. Renaissance (formerly « La République en Marche »)
8. Modem
9. Horizons (by Édouard Philippe)
10. UDI (Union des Démocrates et Indépendants)
11. Subtotal Right
12. Les Républicains (formerly UMP)
13. Debout la France (by Nicolas Dupont-Aignan)
14. Le Rassemblement National (formerly Front National)
15. Reconquête ! (by Eric Zemmour)
16. No party
17. Doesn’t know / No answer

Can you tell me where you stand politically?
1. Far-left
2. Left
3. Center-left
4. Neither left nor right
5. Center-right
6. Right
7. Far-right
In the first round of the 2022 presidential election, which candidate did you vote for?
1. Nathalie Arthaud
2. Philippe Poutou
3. Fabien Roussel
4. Jean-Luc Mélenchon
5. Anne Hidalgo
6. Yannick Jadot
7. Emmanuel Macron
8. Valérie Pécrese
9. Nicolas Dupont-Aignan
10. Marine Le Pen
11. Eric Zemmour
12. Jean Lassalle
13. You voted blank
14. You voted invalid
15. You abstained
16. You were not registered to vote

What is your monthly net income of your household?
1. Less than 1,000 € monthly
2. 1,000 to 1,499 € monthly
3. 1,500 to 1,999 € monthly
4. 2,000 to 2,999 € monthly
5. 3,000 to 3,999 € monthly
6. 4,000 to 4,999 € monthly
7. 5,000 to 5,999 € monthly
8. 6,000 or more € monthly
9. Doesn't know / No answer

Do you regularly practice a religion?
1. Yes
2. No

Finally, do you have any comments on this questionnaire?
(Open-ended question)
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Created in 2001, IRSN is a public institution with industrial and commercial activities (EPIC). IRSN's missions have been consolidated by the Act No. 2015-992 of 17 August 2015 concerning Energy Transition and Green Growth (TECV). IRSN is the national public expert on nuclear and radiological risks. IRSN contributes to public policies in the fields of nuclear safety and ionizing radiation protection for public health and environment. As a research and scientific institution it acts in consultation with all stakeholders concerned by these policies, while preserving its independence of judgment.

IRSN is placed under the joint authority of the Ministry of environment, the Ministry of Defence, the Ministry of Energy, the Ministry of Education, and the Ministry of Research and Health.