



Through annual surveys, IRSN follows the opinion of the French regarding risks, including those relating to nuclear and radiological risks. The results of the surveys are presented in the IRSN Barometer on the perception of risks and security in France, created in 1990 in its current form.

AUTHORS

Ludivine GILLI • Deputy Head of the Division for Strategic Planning, Foresight, Partnerships and Innovation Support (DST/SP³In).

Rémi VELEZ • Strategic foresight Officer (DST/SP³In).

and

Patrice BUESO • Director of the Strategy Department

KEY

In the graphs of the IRSN 2021 Barometer:

Means the question was withdrawn this specific year



METHODOLOGY OF THE SURVEY

A significant change was made in the 2021 Barometer: a switch from a face-to-face survey to a survey conducted over the Internet. It was made for two reasons: to benefit from the advantages of online questionnaires (better geographical distribution of respondents, lower price, etc.) and to reduce the disadvantages of face-to-face questionnaires (in particular the time needed to collect 1,000 responses, or the potential impossibility of conducting the survey in case of a lockdown). This evolution entails risks of discontinuity in the data series. Indeed, the person questioned does not necessarily react in the same way when replying to an interviewer or to a computer. The effect is mostly negligible. For certain types of questions, however, a significant bias is recorded. We wanted to identify with certainty the variations attributable to the method and to distinguish them from those due to the natural evolution of the perception that the French have of a particular issue. That is why we exceptionally conducted two surveys in parallel this year: one over the Internet (the results of which are presented in the Barometer) and another, a control survey, entrusted to our partner CDA, which used the same method as in previous years (face-to-face). Both surveys were conducted at the same time with a sample that met the same criteria of representativeness.

Internet survey: conducted by Harris Interactive November 17-25, 2020 with a representative sample of 2,011 people. Average time, 22 minutes.

Face-to-face survey: conducted by CDA from November 16 to December 3, 2020 with a representative sample of 1,048 people. Average time, 39 minutes.

In both cases, the representativeness of the sample was ensured by the quota method (gender, age, socio-professional category of the interviewee) after stratification by region and size of town.

PART 1
PART 2
PART 3
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ANNEXES 139 – 147

PART

THE CURRENT CONCERNS OF THE FRENCH

5 – 6

Main concerns of the French

7 – 8

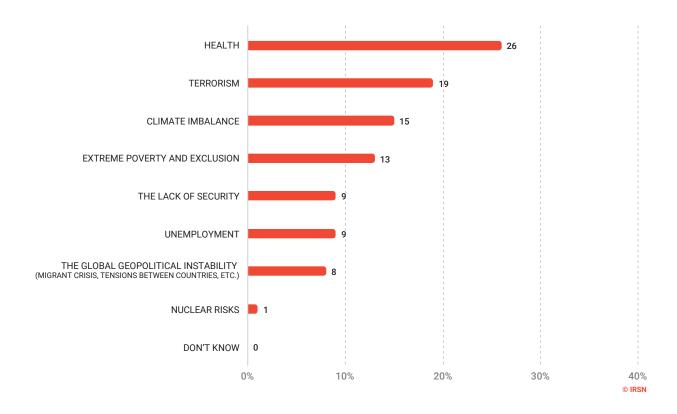
Main environmental concerns

9 - 12

The perception of disasters

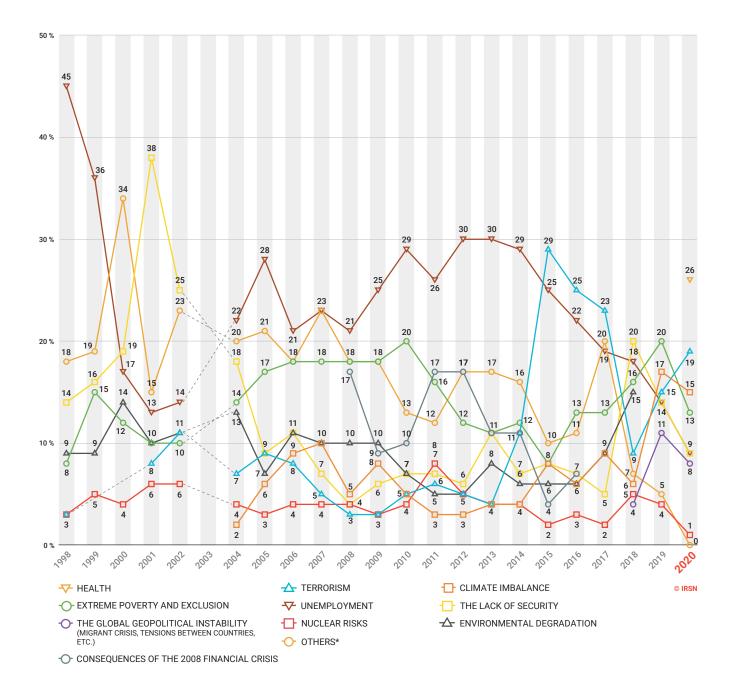
In France, which of the following current issuesdo you find most concerning?

NOVEMBER 2020



QUESTION No. 1 In France, which of the following current issues CONT. do you find most concerning?

(EVOLUTION OF THE RESULTS 1998 - 2020

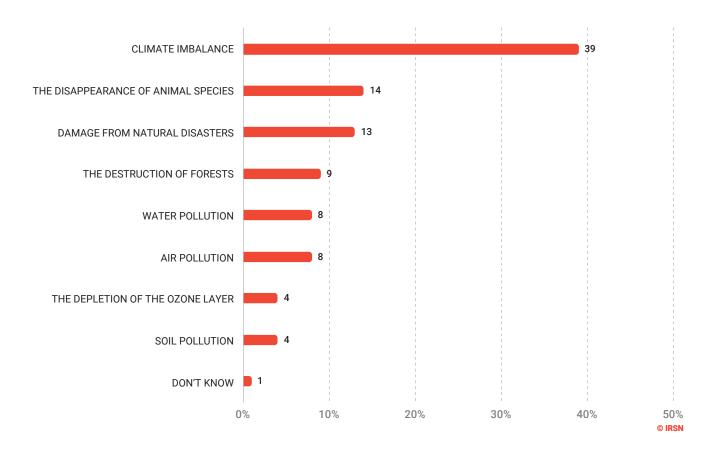


The proposed responses have changed over the years. In 2002, "the lack of security" replaced "violence in the suburbs". In 2018, the modality "destitution and exclusion" was replaced by "extreme poverty and exclusion". In 2019, the modality "climate change" was replaced by "climate imbalance"; the responses "environmental degradation", "traffic accidents", "AIDS", "floods", "chemical risk", "the quality of medical care" and "substance abuse (drugs, alcohol, tobacco)" were removed. In 2020, the modality "health" was added.

^{*} The "others" curve groups together the responses not represented this year but proposed in previous years, for example: "too high taxation" in 2000, or "influenza A (H1N1)" in 2009.

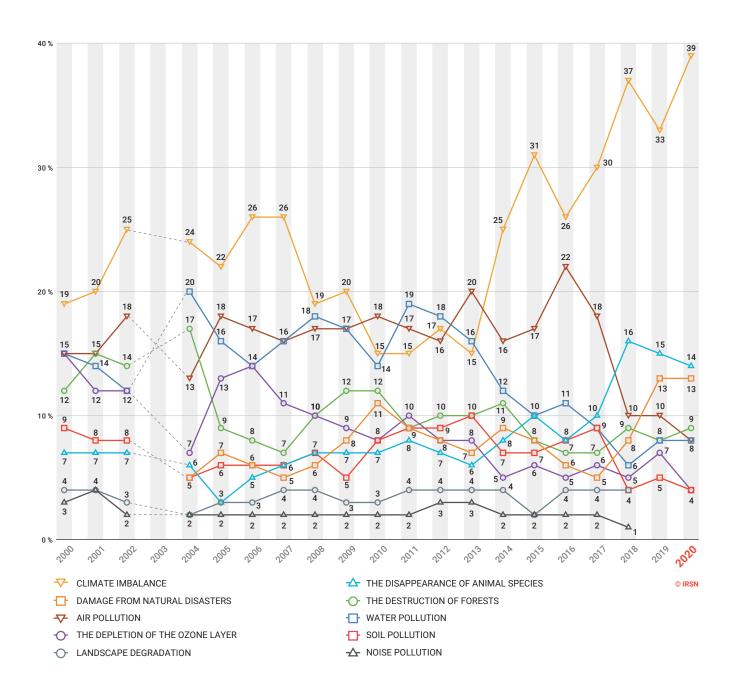
Here are a number of environmental issueWhich one do you find most concerning? Here are a number of environmental issues.

NOVEMBER 2020



QUESTION No. 2 Here are a number of environmental issues. CONT. Which one do you find most concerning?

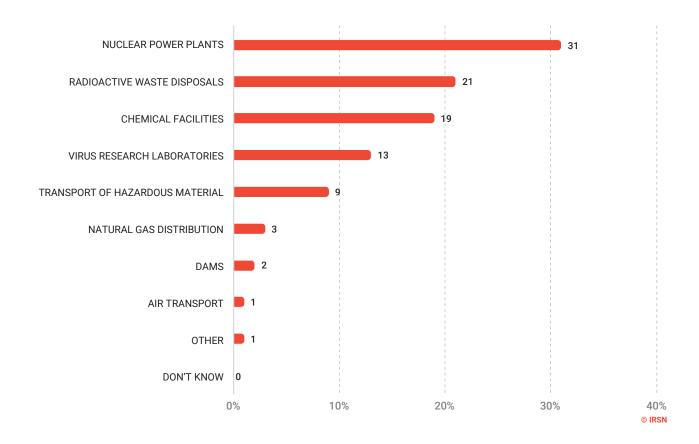
EVOLUTION OF THE RESULTS 2000 - 2020



Some of the proposed responses 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?

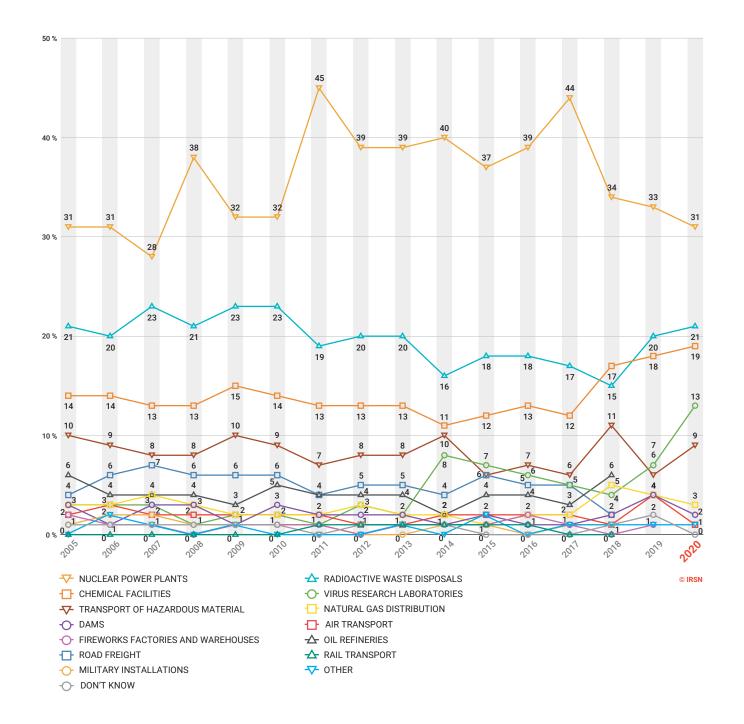
NOVEMBER 2020



QUESTION No. 3 CONT.

Which of the following industrial or technological activities do you think is most likely to cause a serious accident or a disaster in France?

(EVOLUTION OF THE RESULTS 2005 - 2020

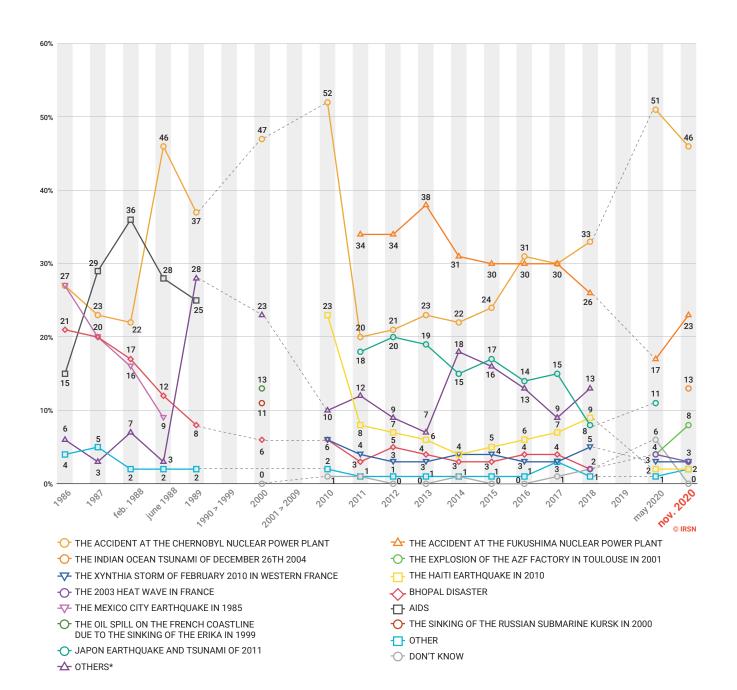


The proposed list of responses has evolved over the years. "Oil refineries", "road freight", "rail transport" and "military installations" were removed in 2019, followed by "fireworks factories and warehouses" in 2020.

Which of the following catastrophic events

do you find most frightening?

EVOLUTION OF THE RESULTS 1986 - 2020



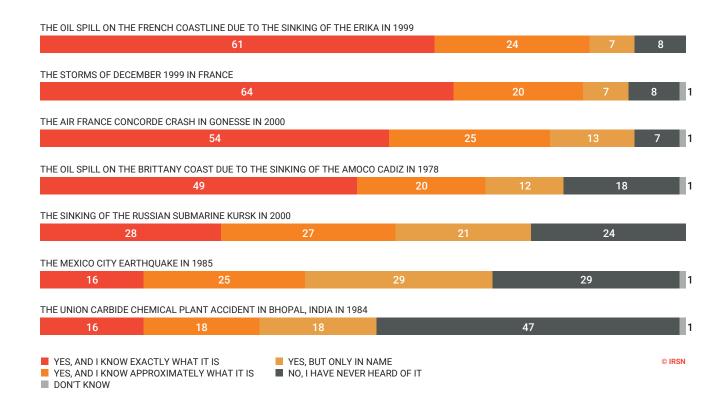
In 2020, the response "Hurricane Katrina in New Orleans in 2005" has been removed. Previously, in 2019, "Heat waves (France, Sweden, Japan in the summer of 2018)" was replaced by "The 2003 heat wave in France" and "Earthquakes (Haiti in 2010, Nepal in 2015, Philippines and Indonesia in autumn 2018)" was replaced by "The Haiti earthquake in 2010".

*The "others" curve groups the responses not represented 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 responses. 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.

Here are some old catastrophic events.

Can you indicate if you have personally heard about them?

NOVEMBER 2020



This year, 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 method is negligible.

For this question, however, a significant bias is recorded. The difference between the two surveys is explained on page 14 of the Barometer 2021 ("The Analysis"). The results of both surveys can be found on the website: https://barometre.irsn.fr/graphiques.

2

THE OUTLOOK OF THE FRENCH ON SCIENCE AND EXPERTISE

14 - 17

The image of science and expertise

18 - 24

Expertise, as expected by the French

24 - 31

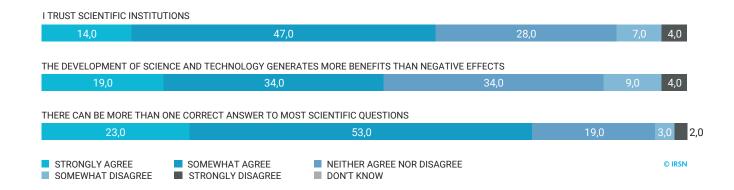
How to share the results of expertise

32 - 35

The management of high-risk facilities

Here are a number of propositions related to science. For each one, please indicate on the following scale whether you...

NOVEMBER 2020

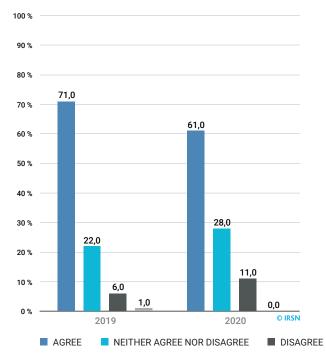


DON'T KNOW

EVOLUTION OF THE RESULTS 2019 - 2020

The responses "strongly disagree" and "somewhat disagree" were grouped into "disagree"; the "somewhat agree" and "strongly agree" into "agree".

1 - I trust scientific institutions



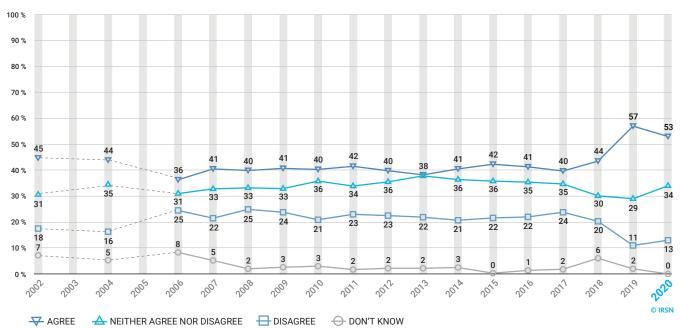
QUESTION No. 1 CONT.

Here are a number of propositions related to science. For each one, please indicate on the following scale whether you...

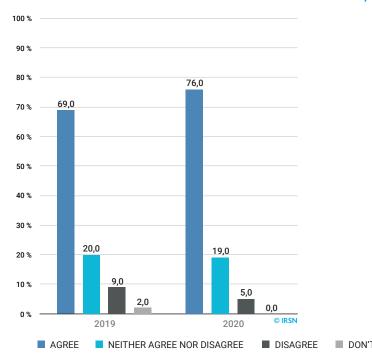
EVOLUTION OF THE RESULTS 2002 - 2020

The responses "strongly disagree" and "somewhat disagree" were grouped into "disagree"; the "somewhat agree" and "strongly agree" into "agree".

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



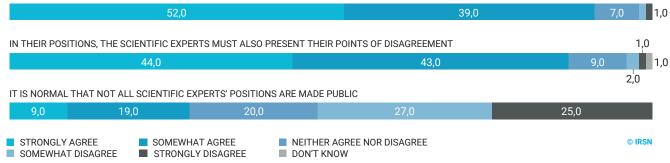
3 - There can be more than one correct answer to most scientific questions



Here are a number of proposals regarding scientific expertise. For each one, please indicate on the following scale whether you...

NOVEMBER

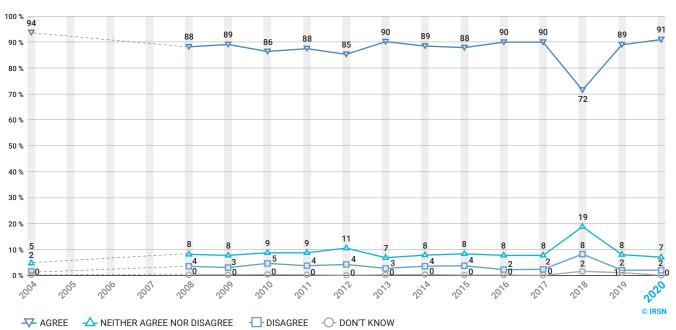
UNDERSTANDABLE INFORMATION ON THE RISKS OF INSTALLATIONS MUST BE MADE AVAILABLE TO EVERYONE



(EVOLUTION OF THE RESULTS 2004 - 2020

The responses "strongly disagree" and "somewhat disagree" were grouped into "disagree"; the "somewhat agree" and "strongly agree" into "agree". In 2019, the answer "may agree" was replaced by "neither agree nor disagree".

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

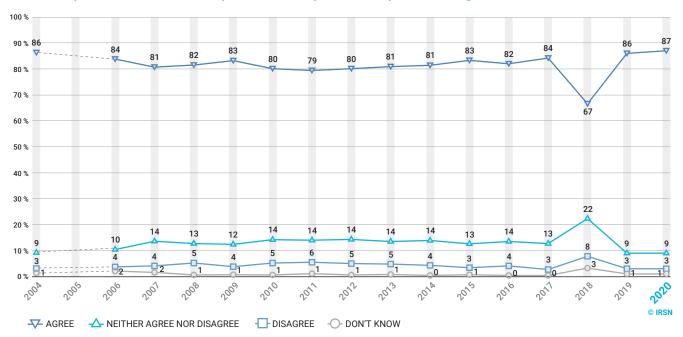


Here are a number of proposals regarding scientific expertise. For each one, please indicate on the following scale whether you...

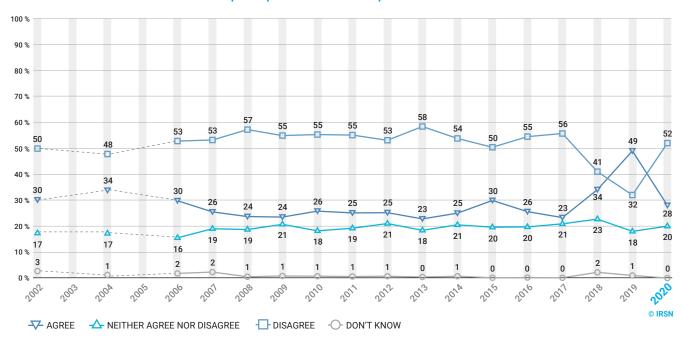
EVOLUTION OF THE RESULTS 2002 - 2020

The responses "strongly disagree" and "somewhat disagree" were grouped into "disagree"; the "somewhat agree" and "strongly agree" into "agree". In 2019, the answer "may agree" was replaced by "neither agree nor disagree".

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



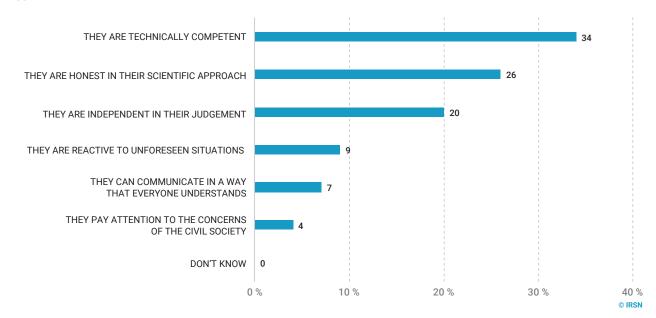
3 - It is normal that not all scientific experts' positions are made public



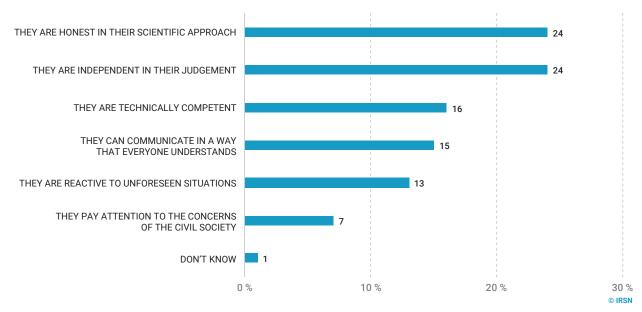
What are, in your opinion, the two most important qualities of scientific experts? First and second.



First



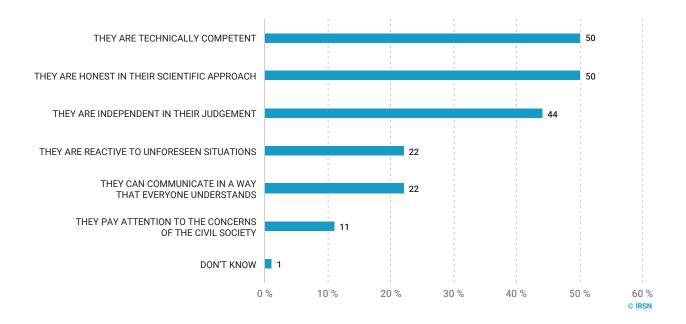
Second



QUESTION No. 3 CONT.

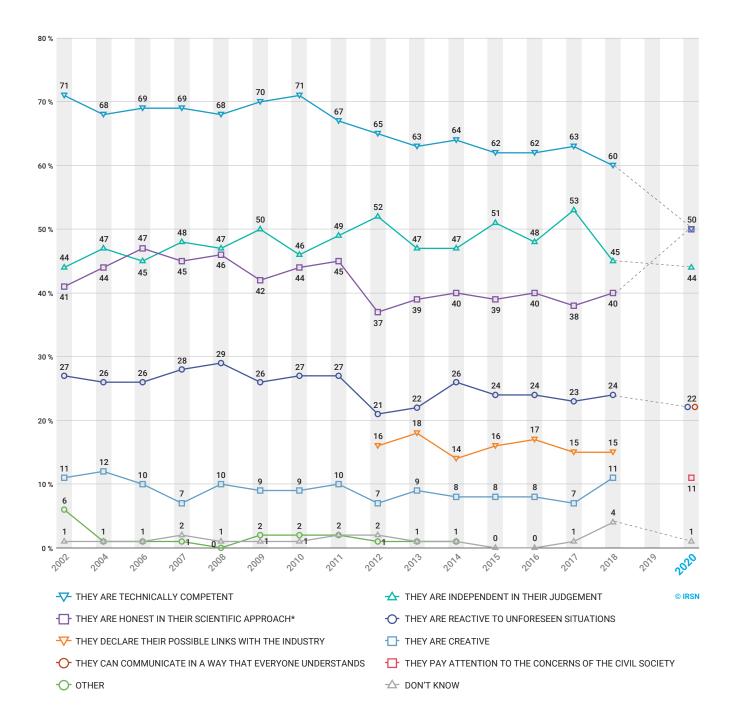
What are, in your opinion, the two most importantqualities of scientific experts? First and second. qualities of scientific experts? First and second.

CUMULATIVE RESULTS NOVEMBER 2020



What are, in your opinion, the two most important qualities of scientific experts? (two possible answers)

EVOLUTION OF THE CUMULATIVE RESULTS 2002 - 2020

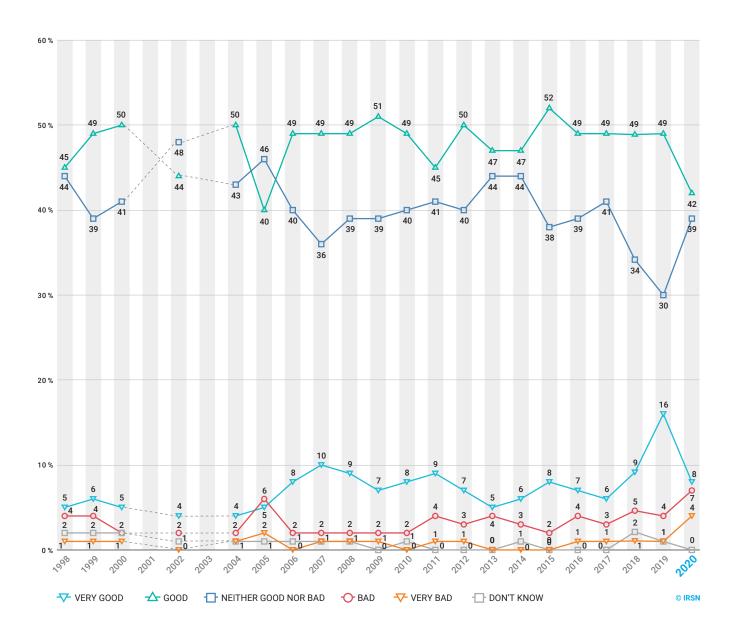


In 2020, the responses "They declare their possible links with the industry" and "They are creative" were removed, and "They can communicate in a way that everyone understands" and "They pay attention to the concerns of the civil society" were added.

^{*} In 2020, the response "They state honestly how They obtained their results" was replaced by "They are honest in their scientific approach".

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

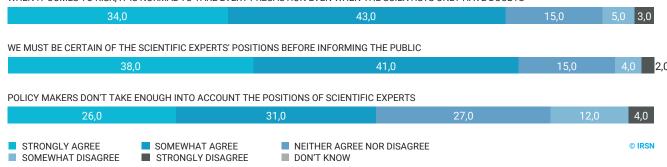
EVOLUTION OF THE RESULTS 1998 - 2020



Here are three sentences regarding experts and decision-makers. For each one, please indicate whether you...

NOVEMBER 2020

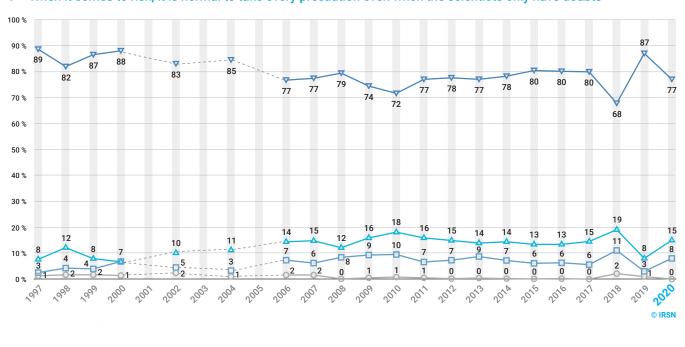
WHEN IT COMES TO RISK, IT IS NORMAL TO TAKE EVERY PRECAUTION EVEN WHEN THE SCIENTISTS ONLY HAVE DOUBTS



EVOLUTION OF THE RESULTS 1997 - 2020

In 2019, the answer "may agree" was replaced by "neither agree nor disagree". The responses "strongly disagree" and "somewhat disagree" were grouped into "disagree"; the "somewhat agree" and "strongly agree" into "agree".

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



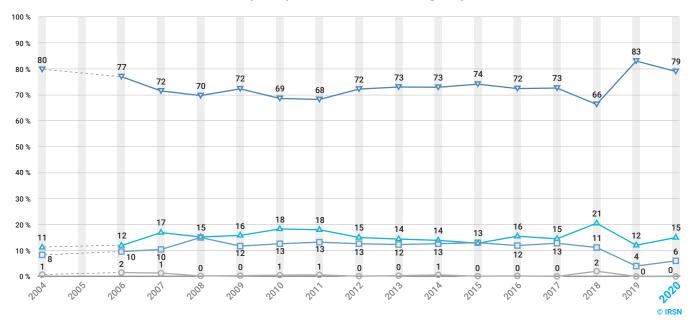
QUESTION No. 5 CONT.

Here are three sentences regarding experts and decision-makers. For each one, please indicate whether you...

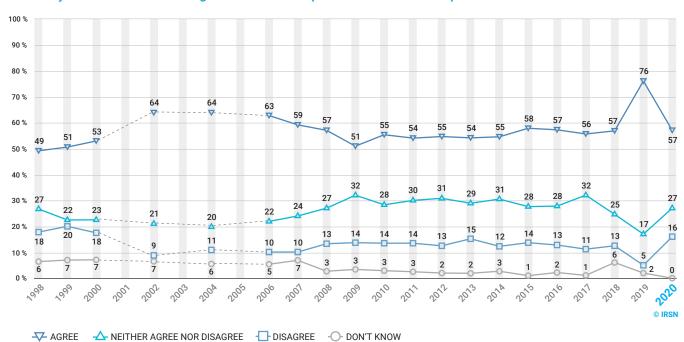
EVOLUTION OF THE RESULTS 1998 - 2020

In 2019, the answer "may agree" was replaced by "neither agree nor disagree". The responses "strongly disagree" and "somewhat disagree" were grouped into "disagree"; the "somewhat agree" and "strongly agree" into "agree".

2 - We must be certain of the scientific experts' positions before informing the public

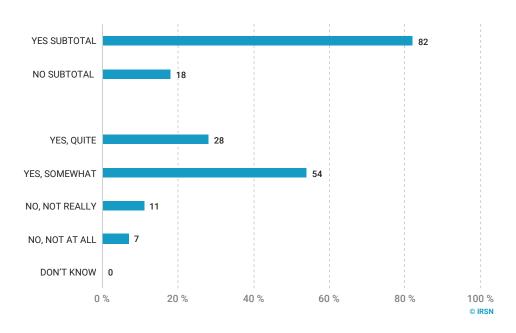


3 - Policy makers don't take enough into account the positions of scientific experts



Since the start of the 2020 coronavirus epidemic, the government has relied on input from a scientific council to make decisions. In your opinion, is this a good thing?

NOVEMBER 2020



QUESTION No. 7

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 2020



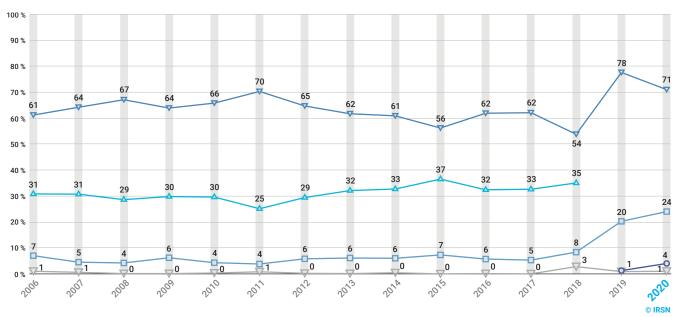
QUESTION No. 7 CONT.

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.

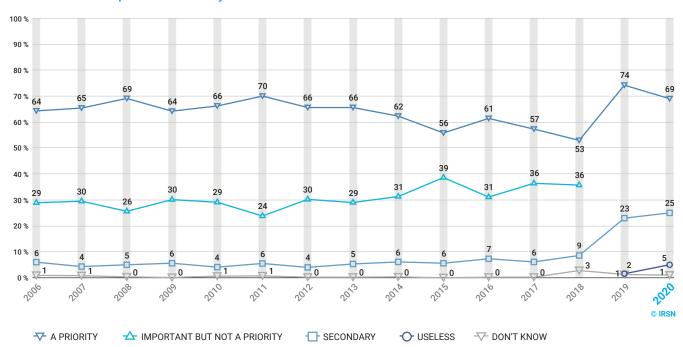
EVOLUTION OF THE RESULTS 2006 - 2020

In 2019, the modality "important but not a priority" has been removed and the modality "useless" has been added.

1 - Make public its expertise reports



2 - Answer all the questions raised by NGOs and citizens

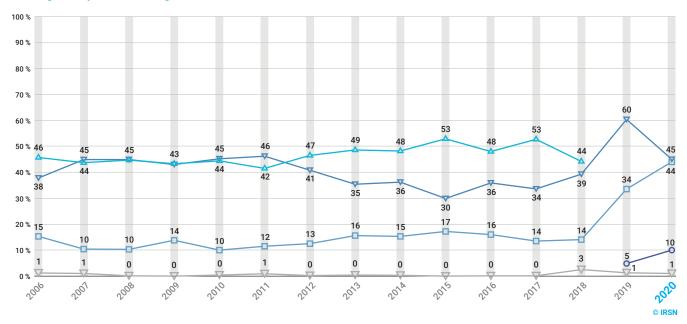


Here are actions that an expertise body could take to better report on the results of its expertise. For each one, please indicate whether it is a priority, secondary or useless.

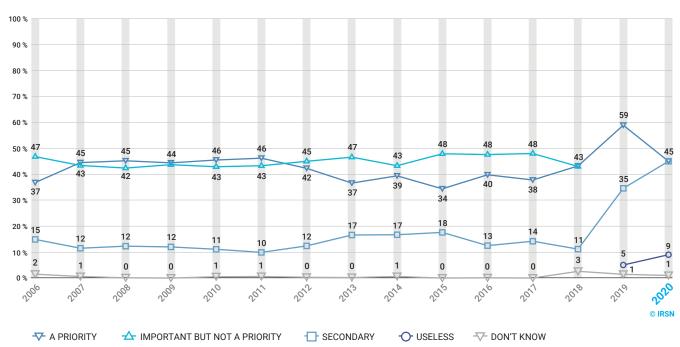
EVOLUTION OF THE RESULTS 2006 - 2020

In 2019, the modality "important but not a priority" has been removed and the modality "useless" has been added.

3 - Organise public meetings to discuss its work



4 - Make available to all the list of all its current work



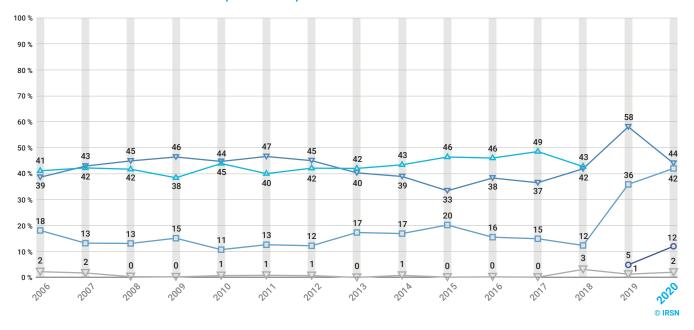
QUESTION No.7 CONT.

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 - 2020

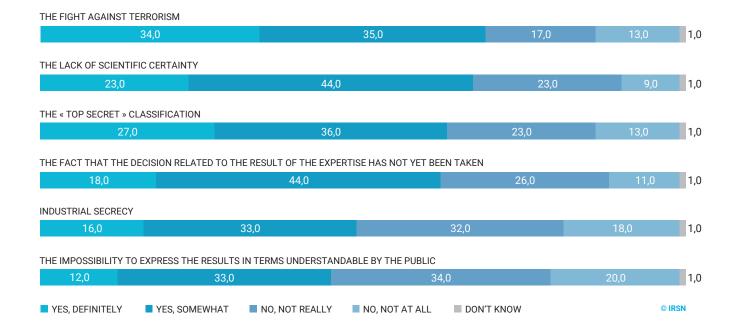
In 2019, the modality "important but not a priority" has been removed and the modality "useless" has been added.

5 - Make available to all the list of requests for expertise



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.

NOVEMBER



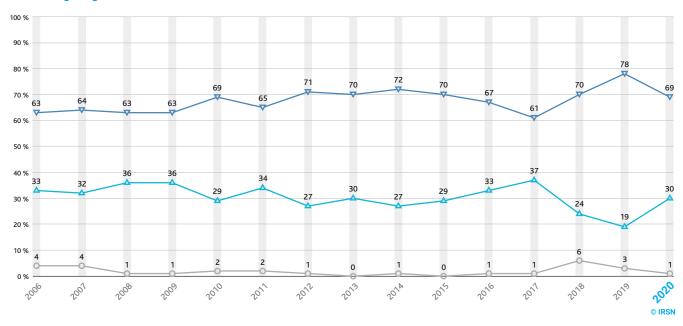
QUESTION No. 8 CONT.

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.

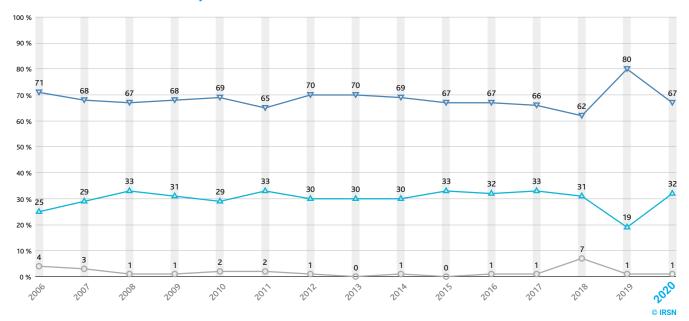
EVOLUTION OF THE RESULTS 2006 - 2020

The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not really" and "no, not at all" as "no".

1 - The fight against terrorism



2 - The lack of scientific certainty*



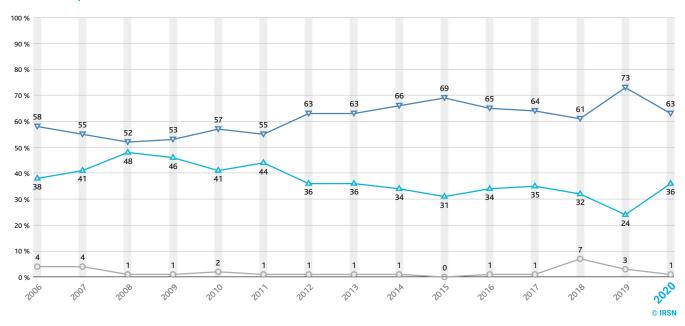
^{*} In 2019, the proposal "the scientific uncertainty of the results obtained" was replaced by "the lack of scientific certainty".

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.

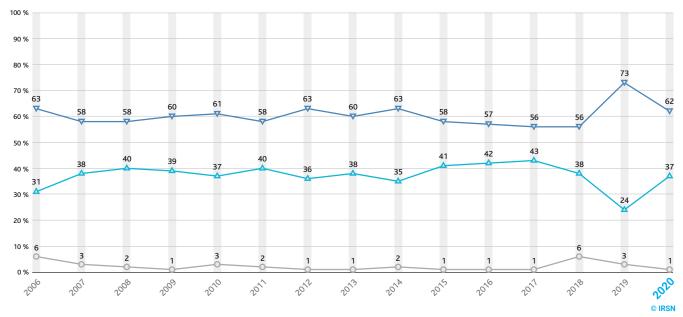
EVOLUTION OF THE RESULTS 2006 - 2020

The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not really" and "no, not at all" as "no".

3 - The "Top secret "classification



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



^{*} In 2019, the proposal "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".

▼ YES / AGREE

◆ NO / DISAGREE

O- DON'T KNOW

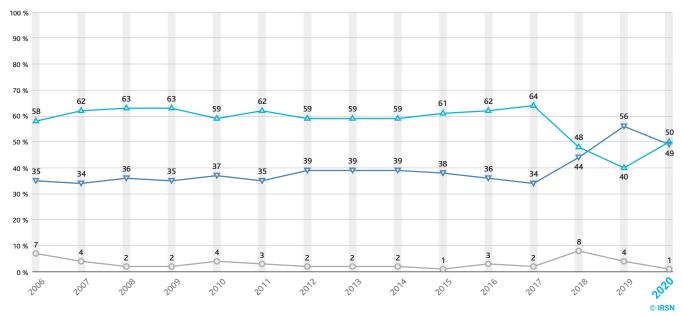
QUESTION No. 8 CONT.

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 - 2020

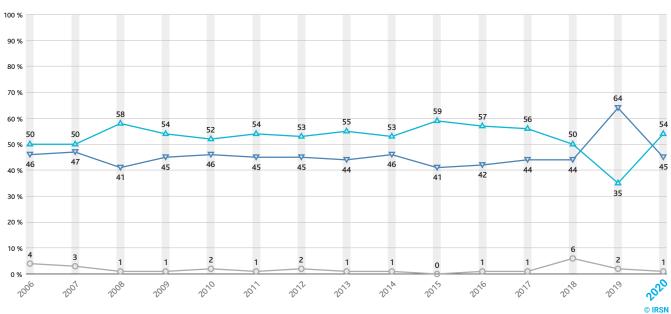
The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not really" and "no, not at all" as "no".

5 - Industrial secrecy*



^{*} In 2020, the proposal "Industrial property" was replaced by "Industrial secrecy".

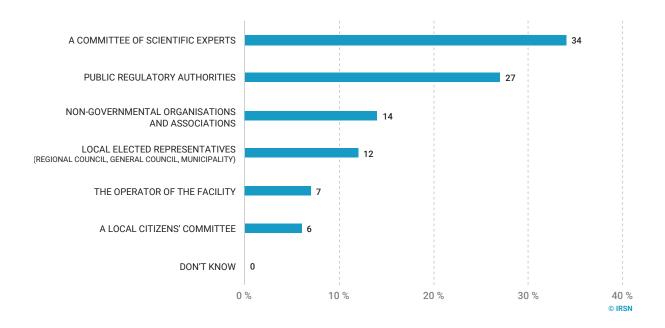
6 - The impossibility to express the results in terms understandable by the public



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?



In 2020, the responses "public authorities at national and local levels" was replaced by "public regulatory authorities".

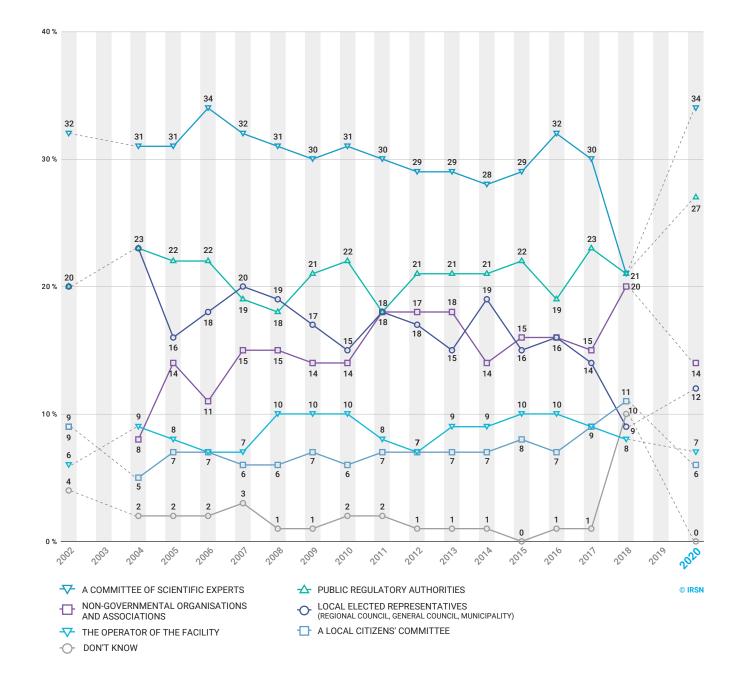


QUESTION No. 9 CONT.

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 - 2020

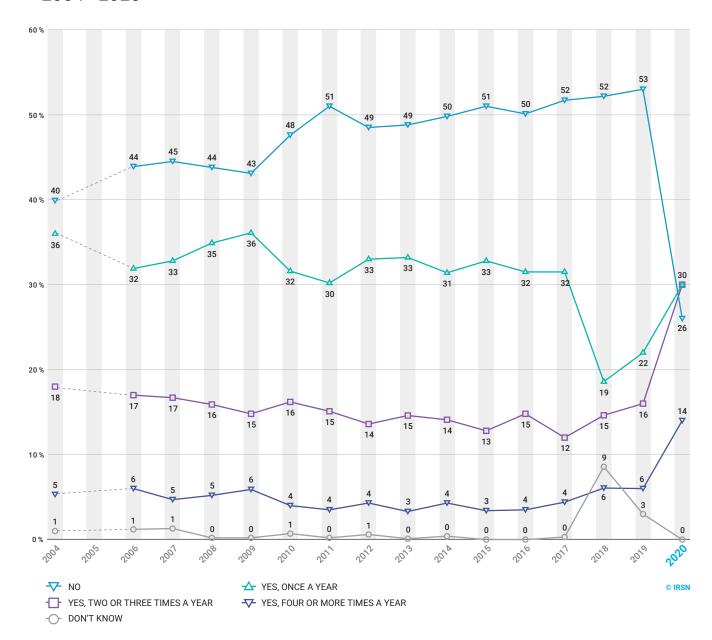
In 2019, the way the question was asked was different: the French answered about each actor independently of the others. The specific results for that year can be downloaded free of charge on http://barometre.irsn.fr.



^{*} Before 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".

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

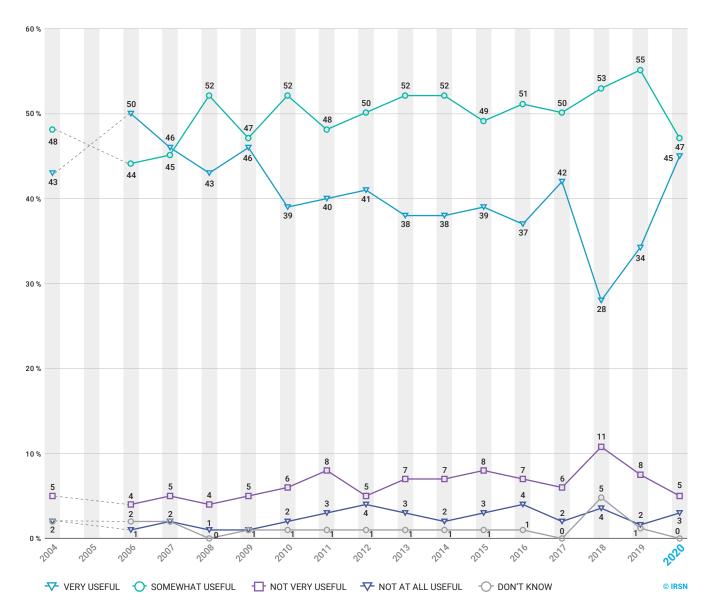
EVOLUTION OF THE RESULTS 2004 - 2020



^{*} A significant break was noted in 2020. It is due to the new survey methodology: the switch from a face-to-face survey to an Internet survey (see methodological note on page 2). For this question, the difference between the two surveys are explained on page 22 of "The Analysis". The results of both surveys can be consulted on the website: https://barometre.irsn.fr/graphiques.

A structure 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 - 2020



3

THE OPINION OF THE FRENCH ON RISK SITUATIONS

37 - 57

The risks the French feel most exposed to

58 - 78

The level of trust in the authorities to protect them

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Overview of at-risk situations

80 - 88

Acceptability of facilities

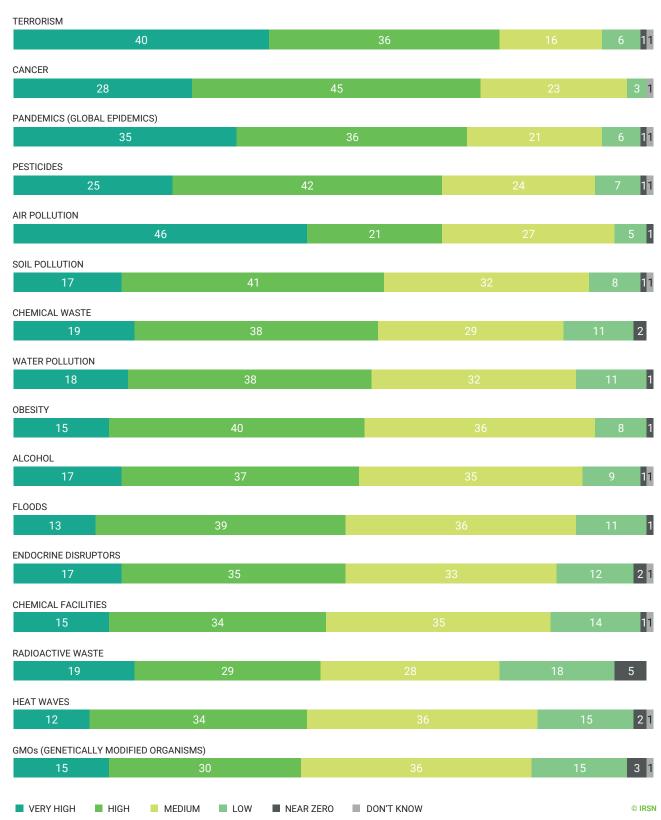
89 - 91

The representations of the coronavirus

QUESTION No. 1

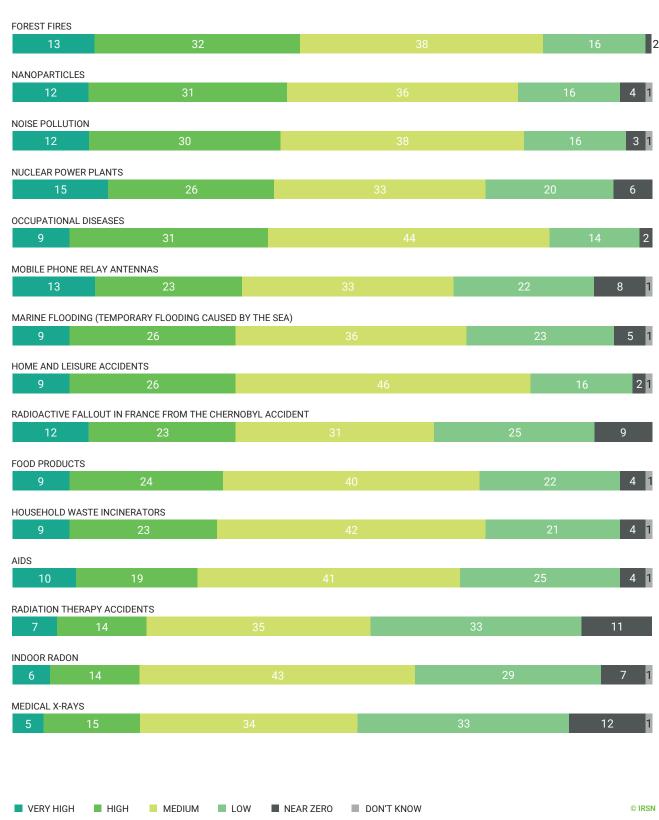
In each of the following areas, do you consider that the risks for the French population in general are...?

NOVEMBER 2020



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

NOVEMBER 2020

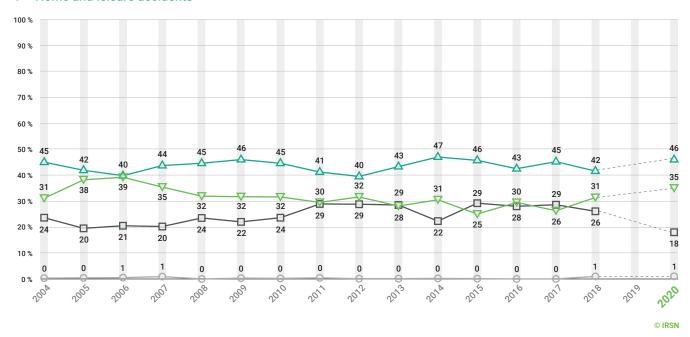


In each of the following areas, do you consider that the risks for the French population in general are...?

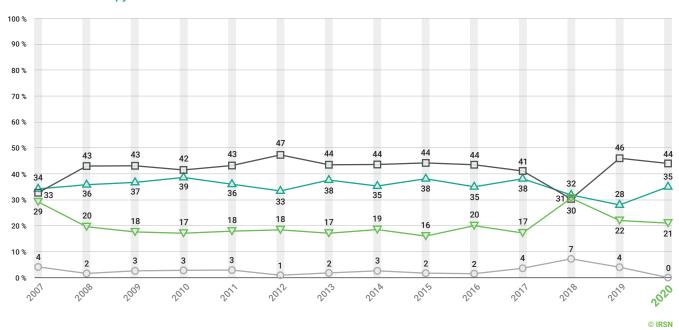
EVOLUTION OF THE RESULTS 2004 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking and transport of hazardous material.

1 - Home and leisure accidents



2 - Radiation therapy accidents



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

→ HIGH

→ MEDIUM

-D- LOW

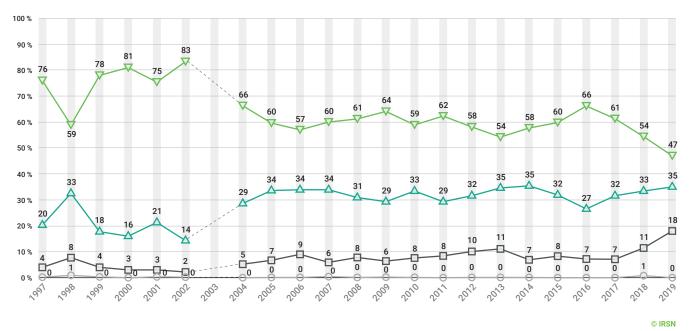
QUESTION No. 1

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

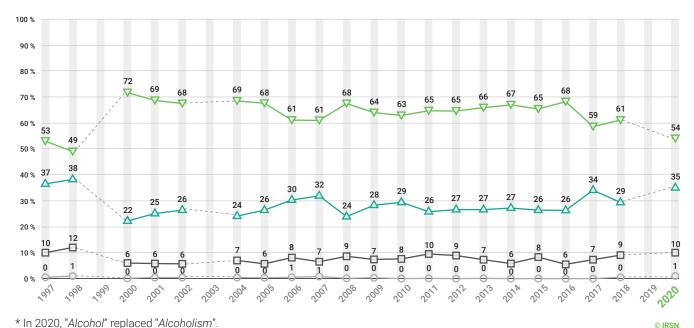
EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

3 - Traffic accidents



4 - Alcohol*



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

→ HIGH → MEDIUM → LOW → DON'T KNOW

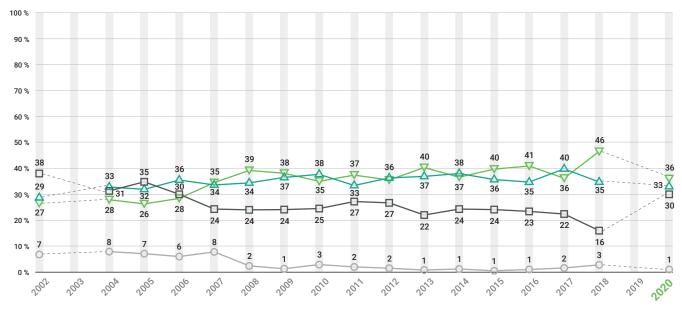
40

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

EVOLUTION OF THE RESULTS 2002 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

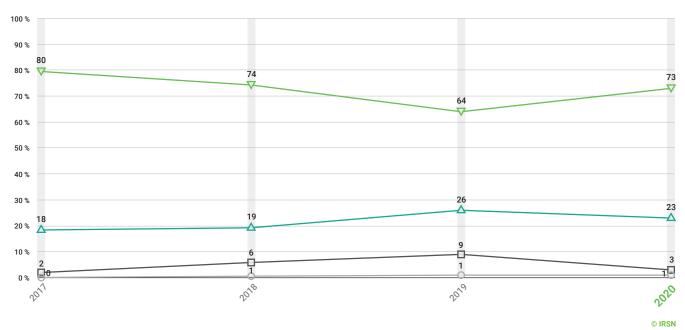
5 - Mobile phone relay antennas*



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

© IRSN

6 - Cancer



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

→ HIGH

→ MEDIUM

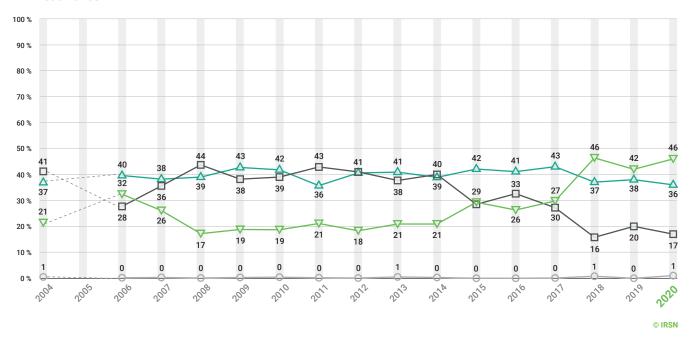
-D- LOW

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

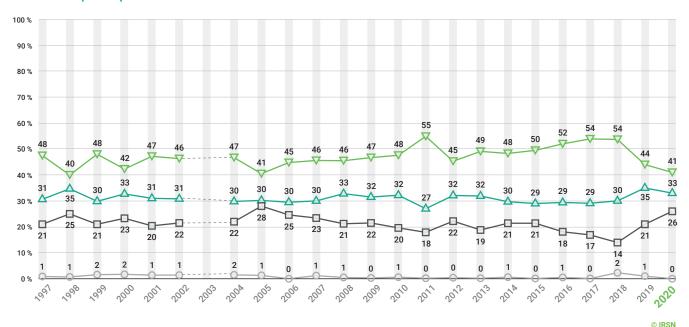
EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

7 - Heat waves



8 - Nuclear power plants



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

→ HIGH

→ MEDIUM

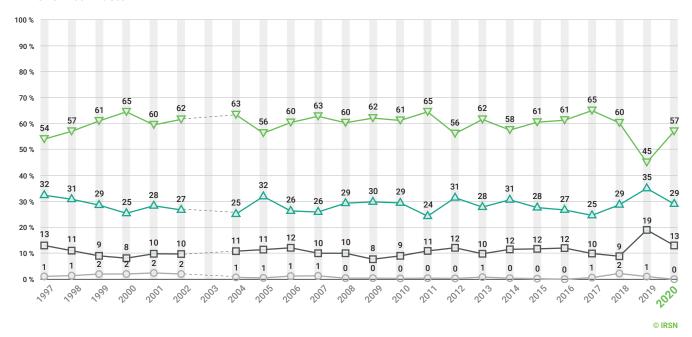
- Low

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

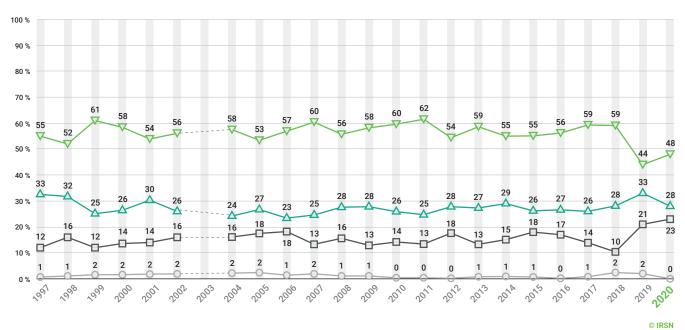
EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

9 - Chemical waste



10 - Radioactive waste



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

→ HIGH

→ MEDIUM

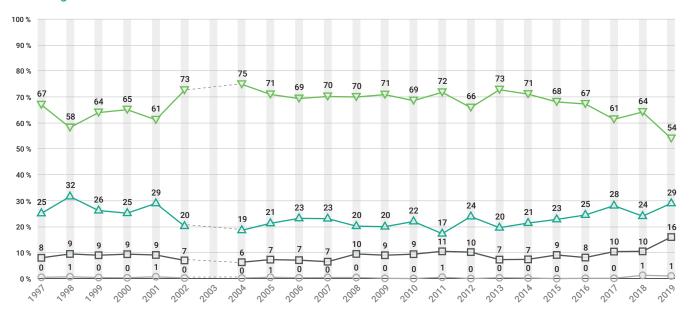
-D- LOW

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

EVOLUTION OF THE RESULTS 1997 - 2020

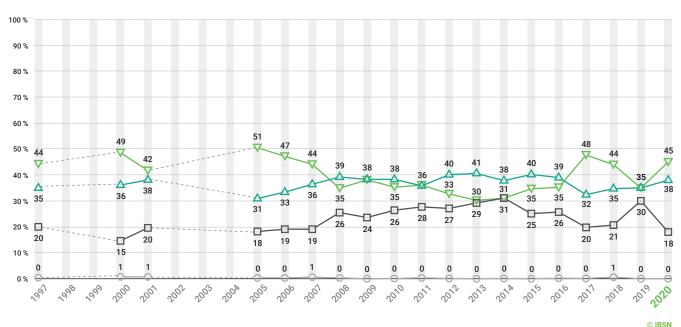
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

11 - Drugs



© IRSN

12 - Forest fires



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

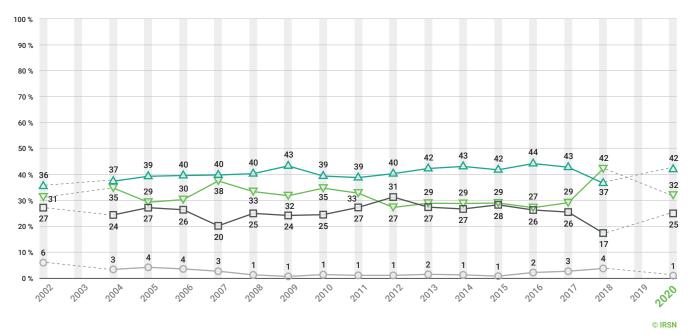
UM -□-LOW

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

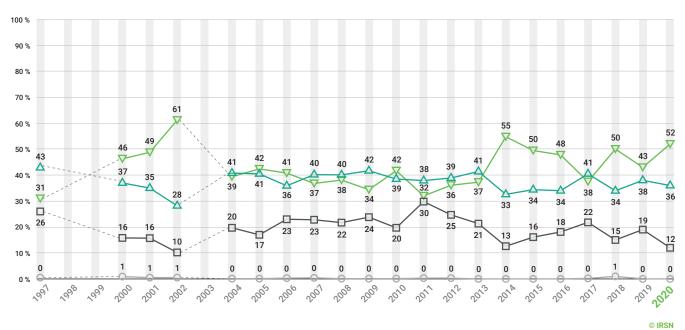
EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

13 - Household waste incinerators



14 - Floods



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

→ HIGH

→ MEDIUM

-D- LOW

QUESTION No.1

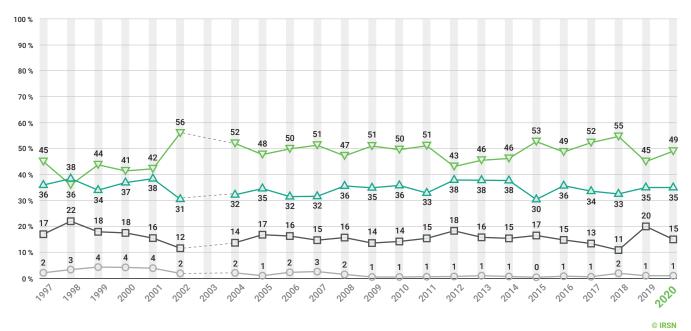
In each of the following areas, do you consider that the risks for the French population in general are...?

EVOLUTION OF THE RESULTS 1997 - 2020

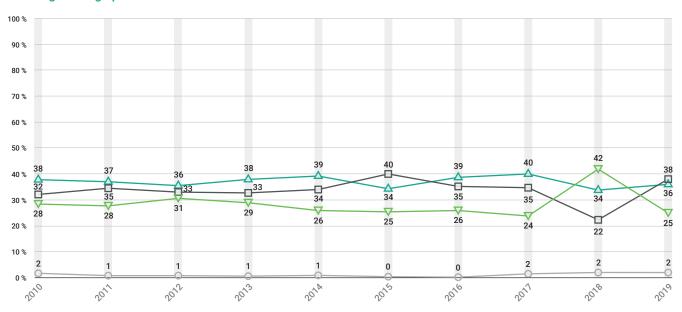
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

© IRSN

15 - Chemical facilities



16 - High-voltage power lines



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

→ HIGH

→ MEDIUM

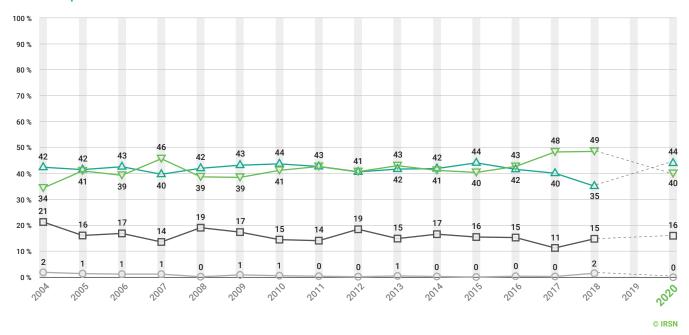
-D- LOW

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

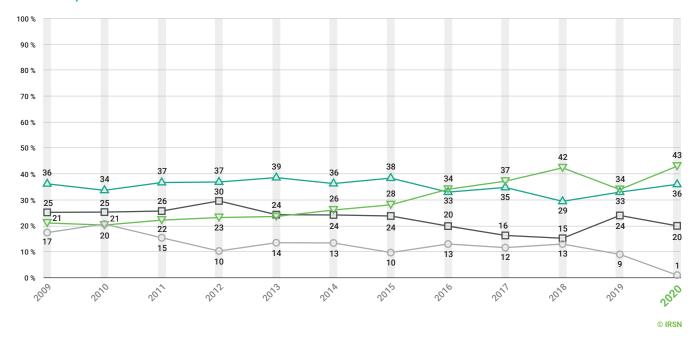
EVOLUTION OF THE RESULTS 2004 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

17 - Occupational diseases



18 - Nanoparticles



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

→ HIGH

→ MEDIUM

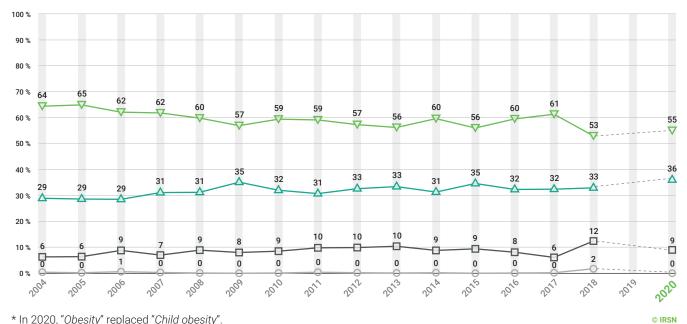
-D- LOW

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

EVOLUTION OF THE RESULTS 1999 - 2020

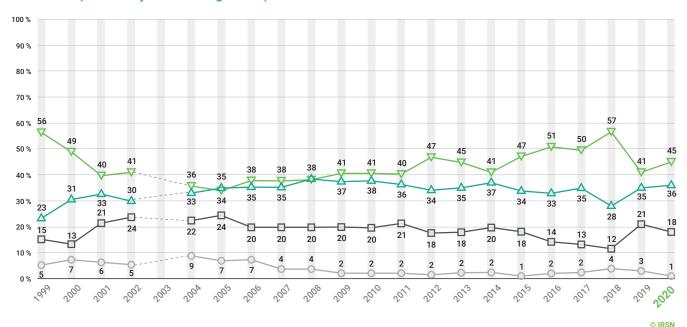
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

19 - Obesity*



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

20 - GMOs (Genetically Modified Organisms)



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

→ HIGH

→ MEDIUM

-D- LOW

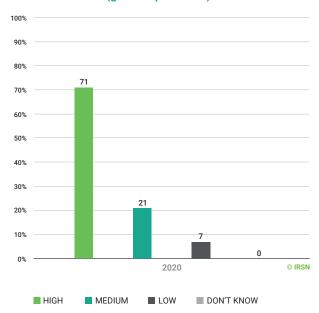
QUESTION No. 1

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

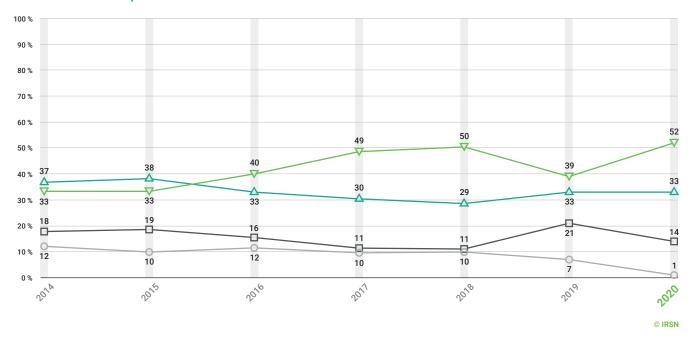
EVOLUTION OF THE RESULTS 2014 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

21 - Pandemics (global epidemics)



22 - Endocrine disruptors



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

→ HIGH → MEDIUM → LOW → DON'T KNOW

QUESTION No. 1

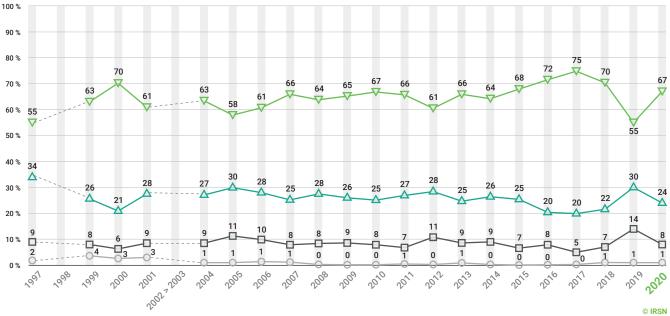
In each of the following areas, do you consider that the risks for the French population in general are...?

EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

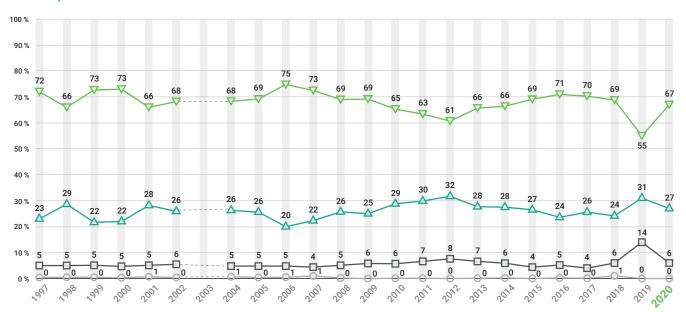
© IRSN

23 - Pesticides*



^{*} The title was "Nitrates and pesticides" until 2011.

24 - Air pollution*



^{*} The title was "atmospheric pollution" until 2018

→ HIGH → MEDIUM → LOW → DON'T KNOW

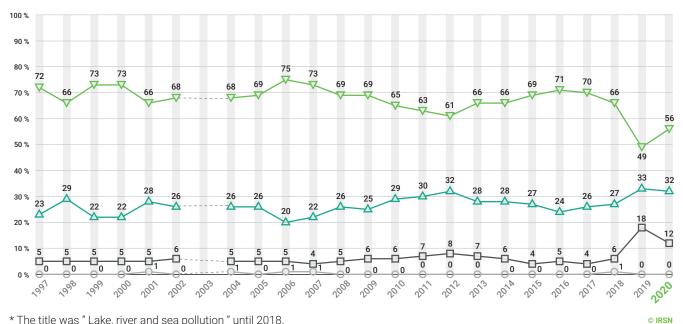
[&]quot;Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

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

EVOLUTION OF THE RESULTS 1997 - 2020

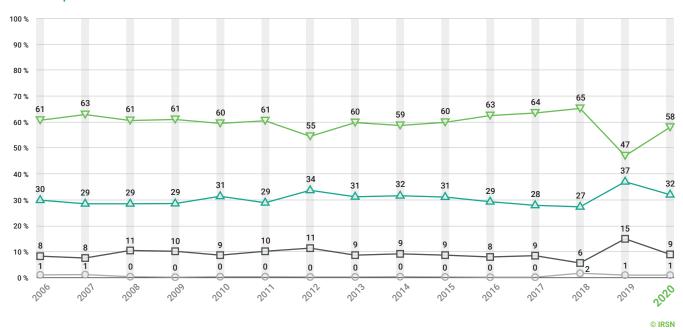
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

25 - Water pollution*



* The title was "Lake, river and sea pollution" until 2018.

26 - Soil pollution



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

→ HIGH

→ MEDIUM

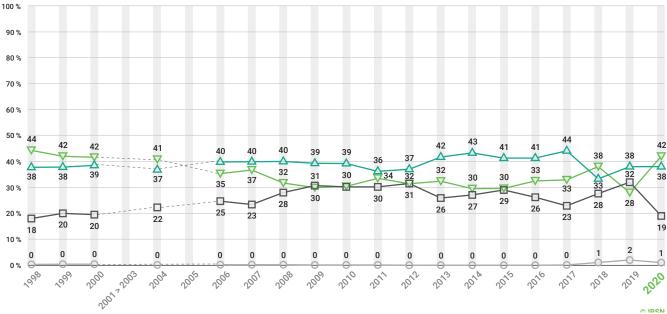
-D- LOW

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

EVOLUTION OF THE RESULTS 1998 - 2020

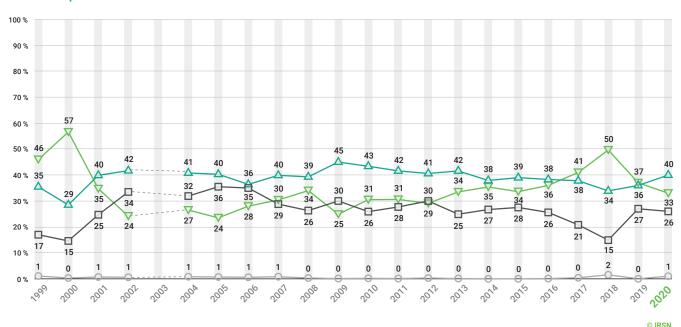
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

27 - Noise pollution*



^{*} The title was "Noise" until 2018.

28 - Food products



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

→ HIGH

→ MEDIUM

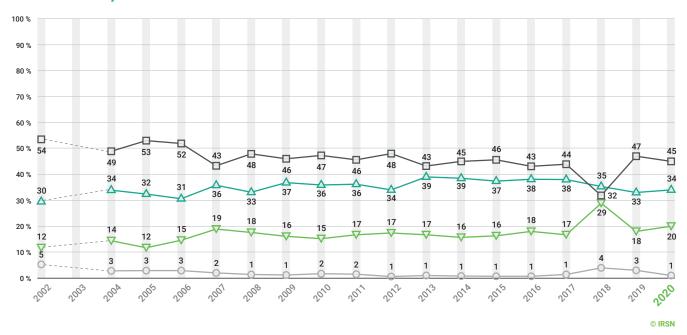
-D- LOW

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

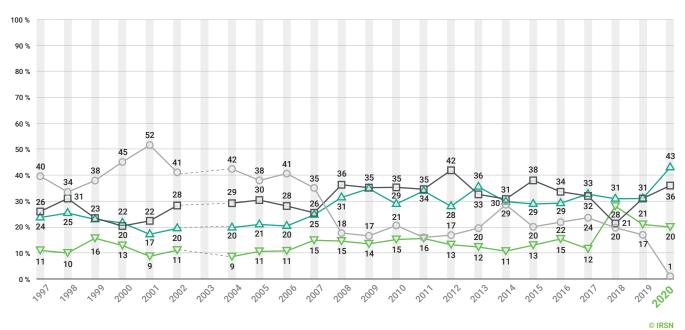
EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

29 - Medical X-rays



30 - Indoor radon



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

∀ HIGH

→ MEDIUM

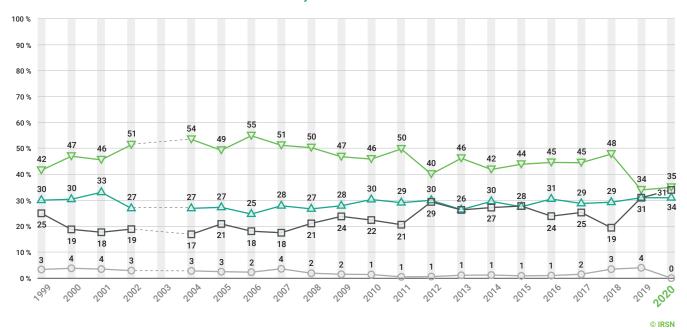
-D- LOW

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

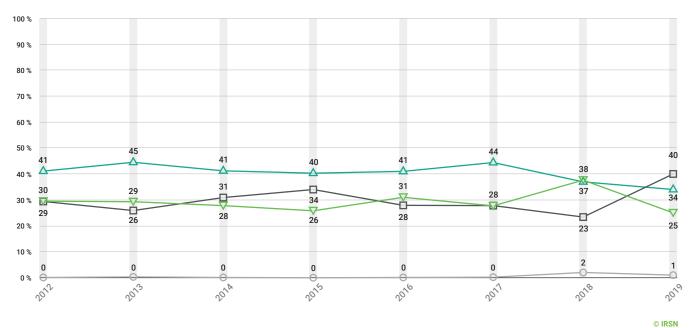
EVOLUTION OF THE RESULTS 1999 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

31 - Radioactive fallout in France from the Chernobyl accident



32 - Medical risks



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

₩ HIGH

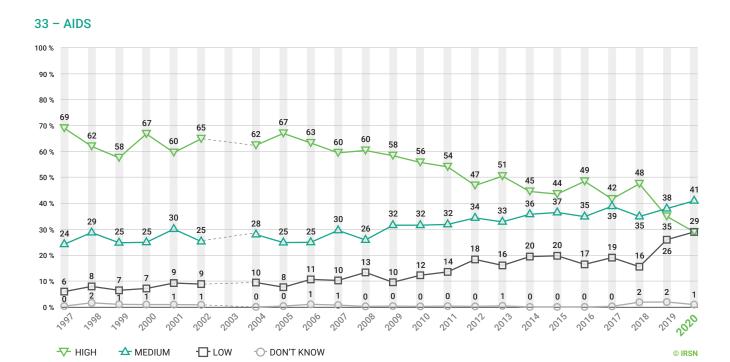
▲ MEDIUM

-D- LOW

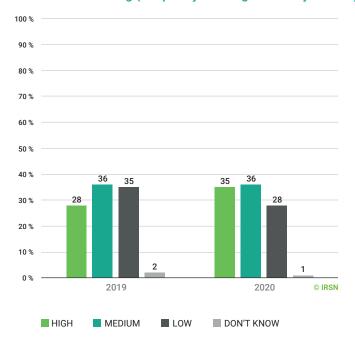
In each of the following areas, do you consider that the risks for the French population in general are...?

EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.



34 - Marine flooding (temporary flooding caused by the sea)



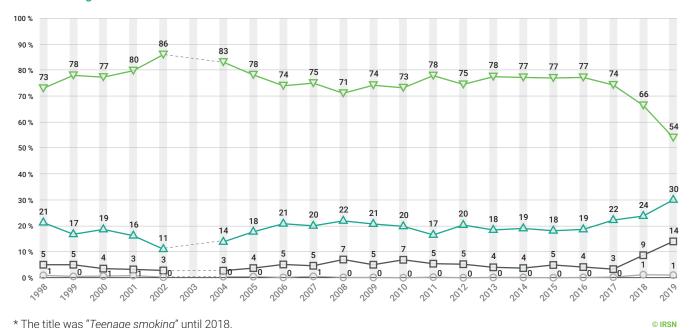
[&]quot;Very high" and "high" responses were grouped into "high", "near-zero" and "low" responses into "low".

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

EVOLUTION OF THE RESULTS 1997 - 2020

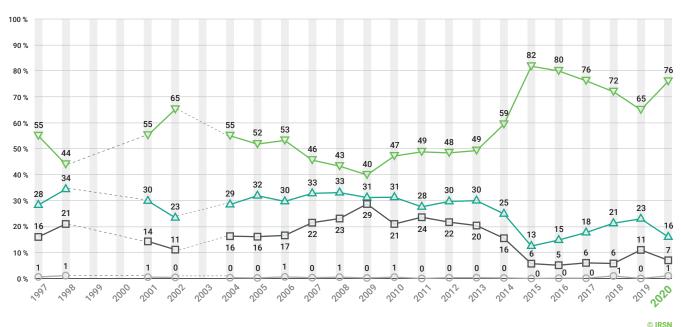
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

35 - Smoking*



^{*} The title was "Teenage smoking" until 2018.

36 - Terrorism



"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

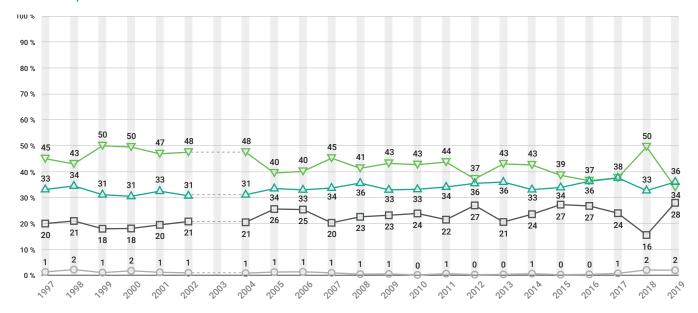
→ HIGH → MEDIUM O- DON'T KNOW

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

EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

37 - Transport of hazardous materials



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"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

→ HIGH

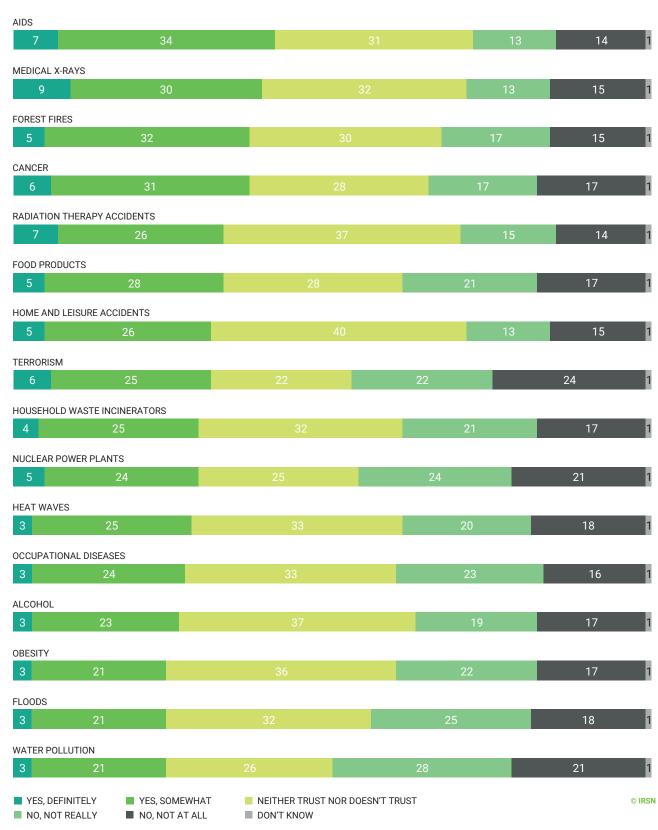
→ MEDIUM

-D- LOW

QUESTION No. 2

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

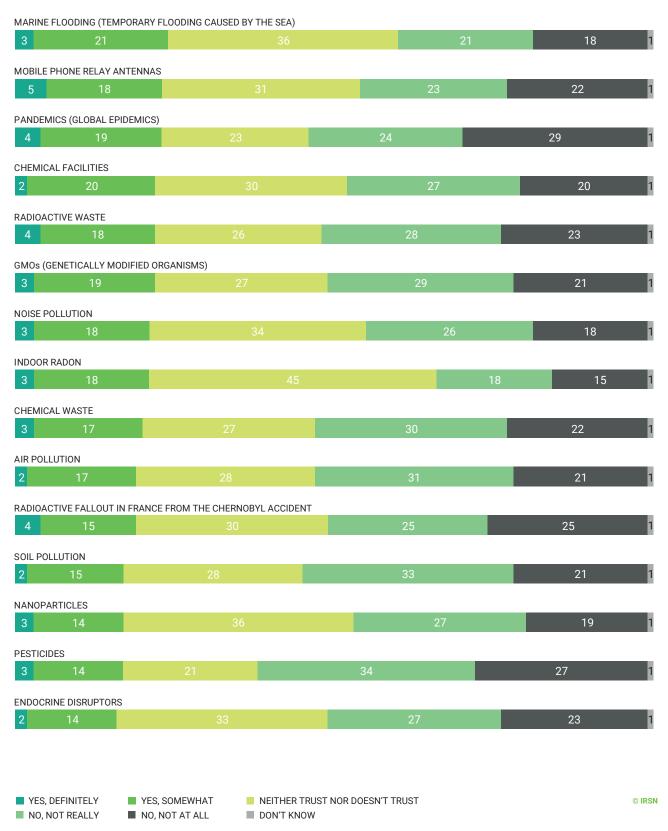
NOVEMBER 2020



CONT.

QUESTION No. 2 Do you trust the French authorities to protect people against the following risks?

NOVEMBER 2020



QUESTION No. 2

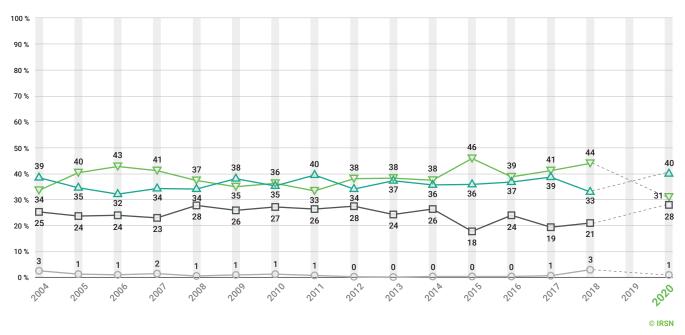
Do you trust the French authorities to protect people

CONT. against the following risks?

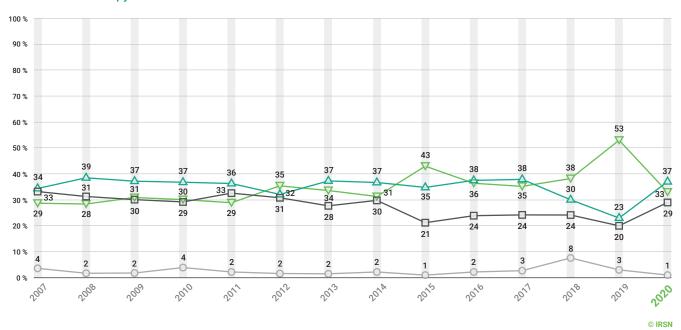
EVOLUTION OF THE RESULTS 2004 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

1 - Home and leisure accidents



2 - Radiation therapy accidents



The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

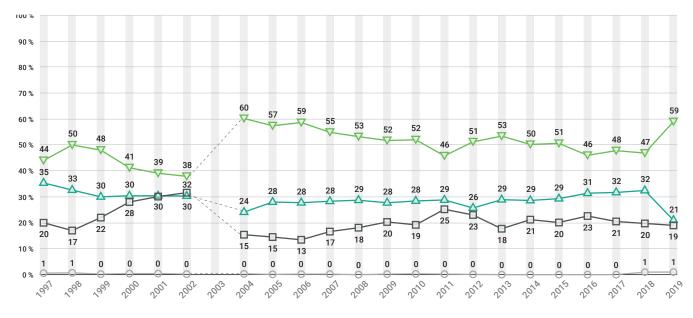
→ NO → DON'T KNOW

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

EVOLUTION OF THE RESULTS 1997 - 2020

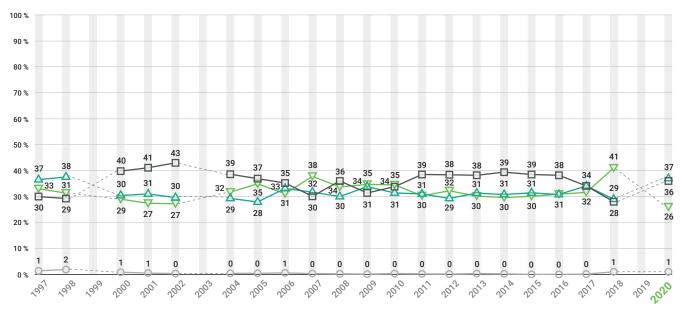
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

3 - Traffic accidents



© IRSN

4 - Alcohol*



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

© IRSN

The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

▼YES

▲ NEITHER TRUST NOR DOESN'T TRUST

- NO

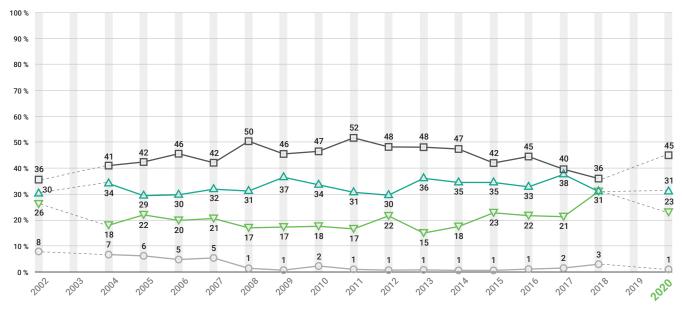
Do you trust the French authorities to protect people against the following risks?

EVOLUTION OF THE RESULTS 2002 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

© IRSN

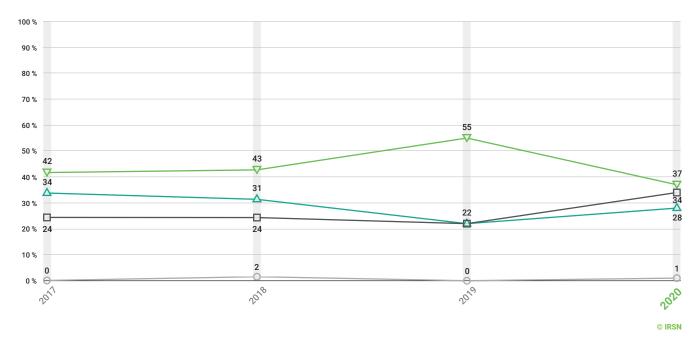
5 - Mobile phone relay antennas*



^{*} The title was "Mobile phones" in 2002, then "Mobile phone network antennas" from 2004 to 2018 and finally "Mobile phone masts" in 2020.vv

.020.vv

6 - Cancer



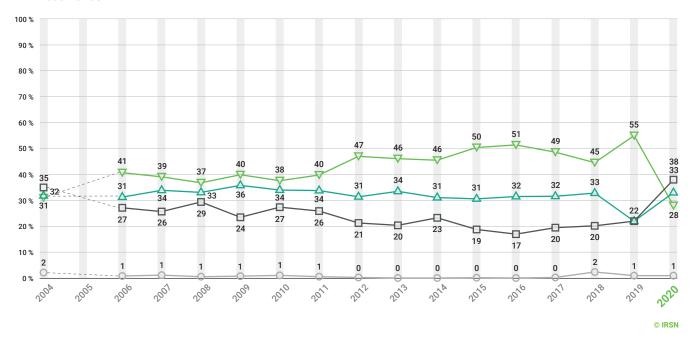
The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

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

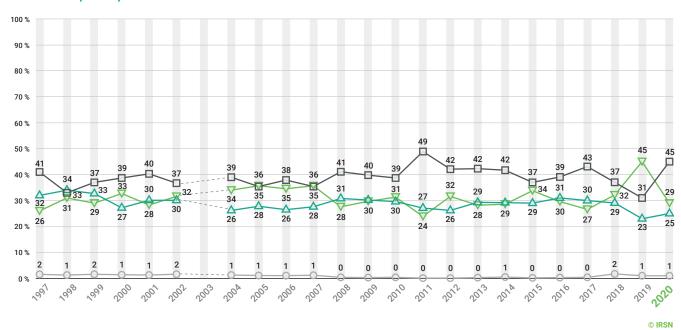
EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

7 - Heat waves



8 - Nuclear power plants



The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

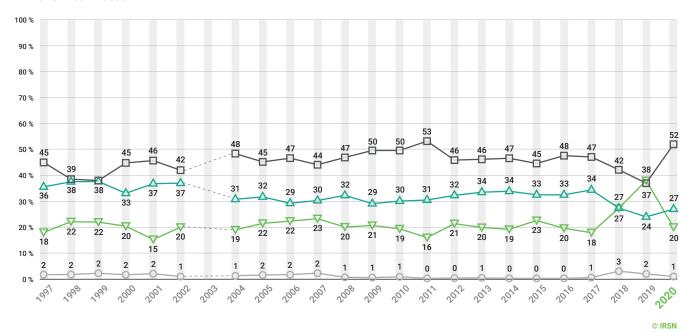
 - NO

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

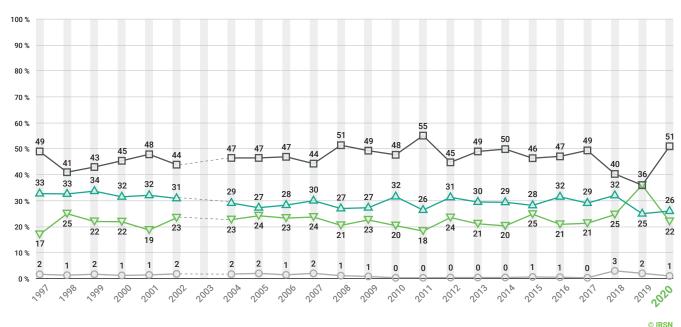
EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

9 - Chemical waste



10 - Radioactive waste



The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

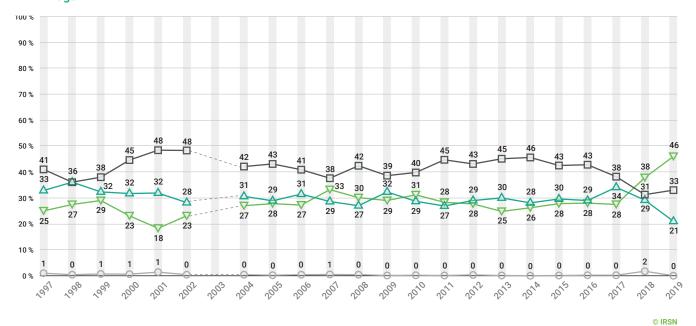
→ YES → NEITHER TRUST NOR DOESN'T TRUST → NO → DON'T KNOW

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

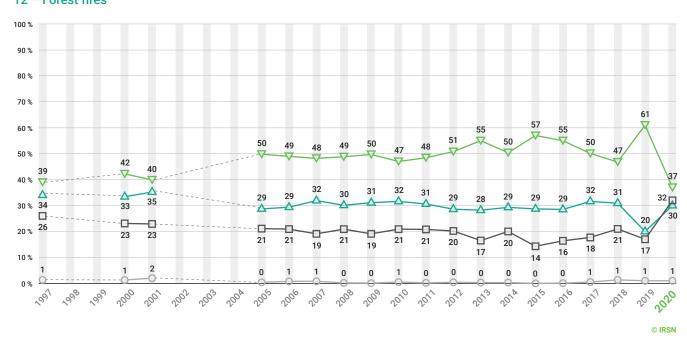
EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

11 - Drugs



12 - Forest fires



The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

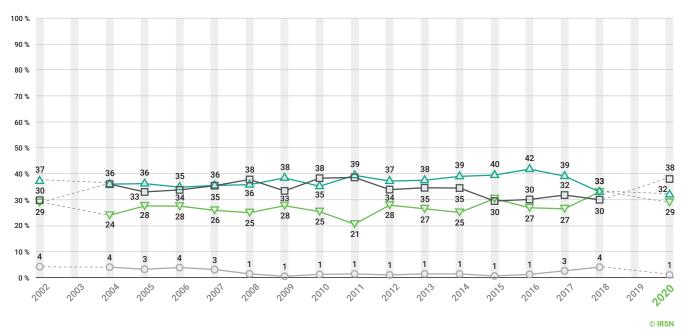
▼YES ▲ NEITHER TRUST NOR DOESN'T TRUST → NO DON'T KNOW

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

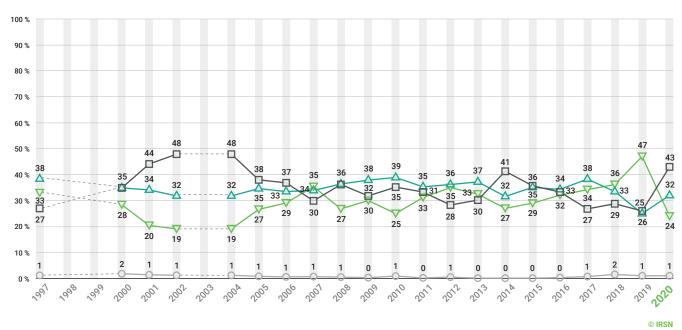
EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

13 - Household waste incinerators



14 - Floods



The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

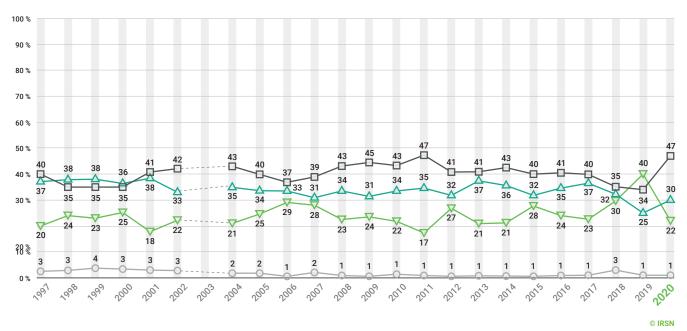
→ YES → NEITHER TRUST NOR DOESN'T TRUST → NO → DON'T KNOW

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

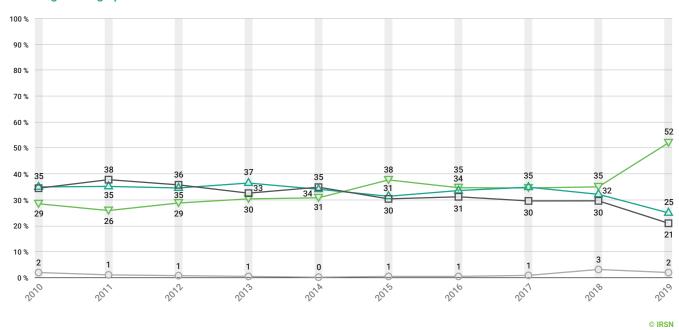
EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

15 - Chemical facilities



16 - High-voltage power lines



The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

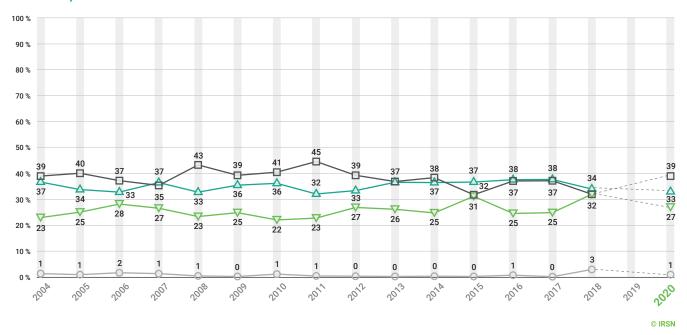
 - NO

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

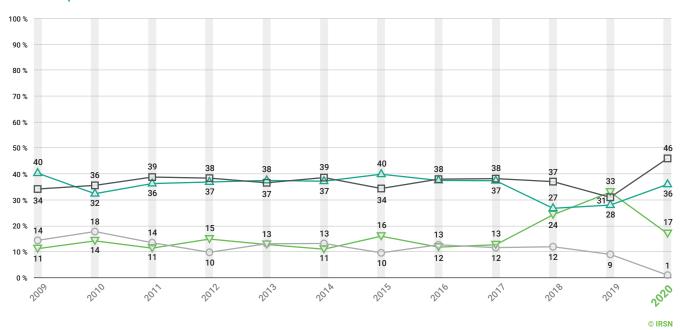
EVOLUTION OF THE RESULTS 2004 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

17 - Occupational diseases



18 - Nanoparticles



The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

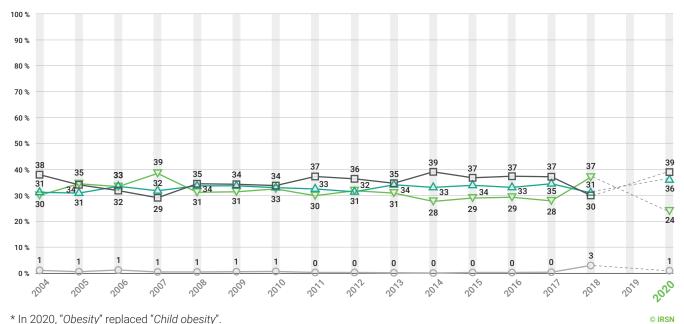
 - NO

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

EVOLUTION OF THE RESULTS 1999 - 2020

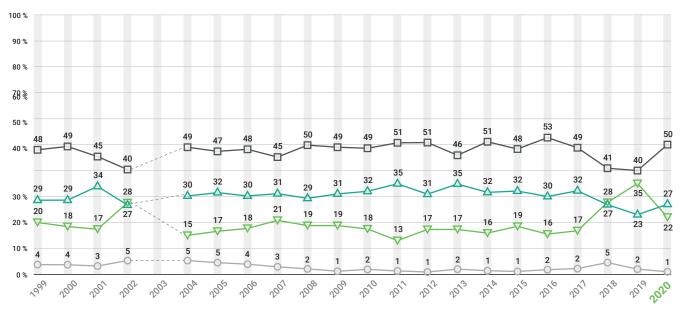
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

19 - Obesity*



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

20 - GMOs (Genetically Modified Organisms)*



* Until 2002, the title was "genetic manipulations".

The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

▼YES ▲ NEITHER TRUST NOR DOESN'T TRUST → NO

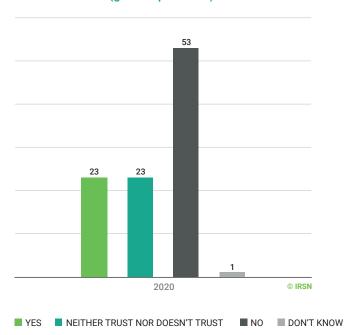
© IRSN

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

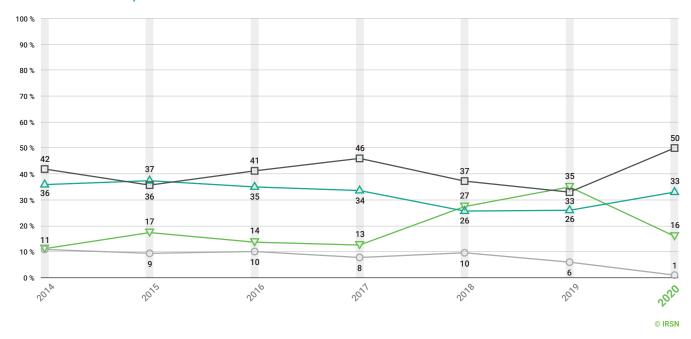
EVOLUTION OF THE RESULTS 2014 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

21 - Pandemics (global epidemics)



22 - Endocrine disruptors



The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

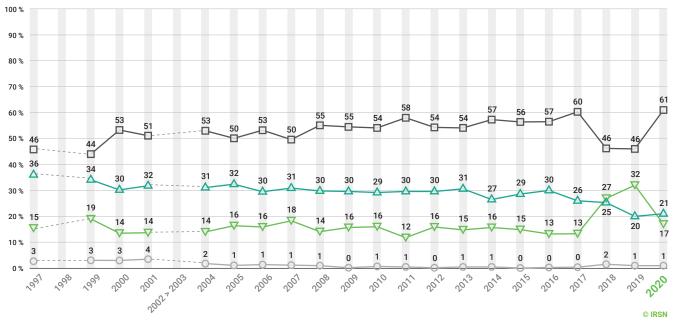
→ YES → NEITHER TRUST NOR DOESN'T TRUST → NO → DON'T KNOW

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

EVOLUTION OF THE RESULTS 1997 - 2020

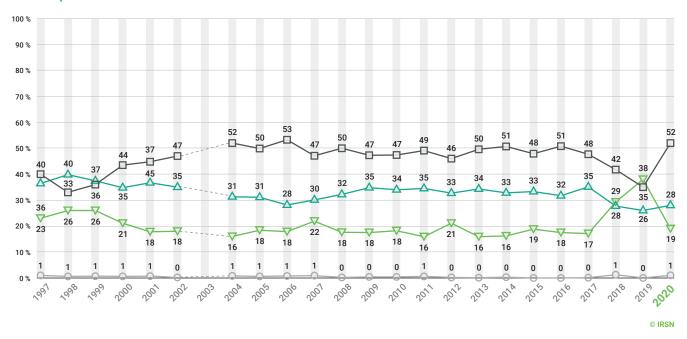
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

23 - Pesticides*



^{*} The title was "Nitrates and pesticides" until 2011.

24 - Air pollution



The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

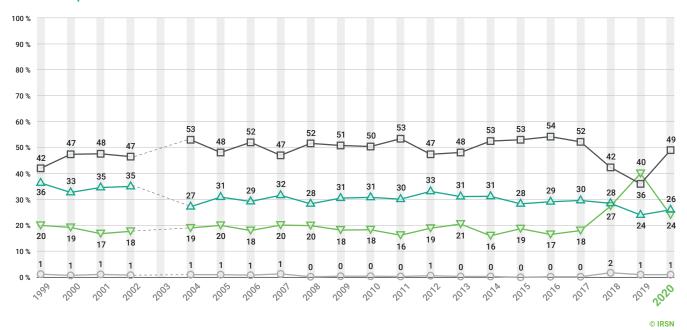
 - NO

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

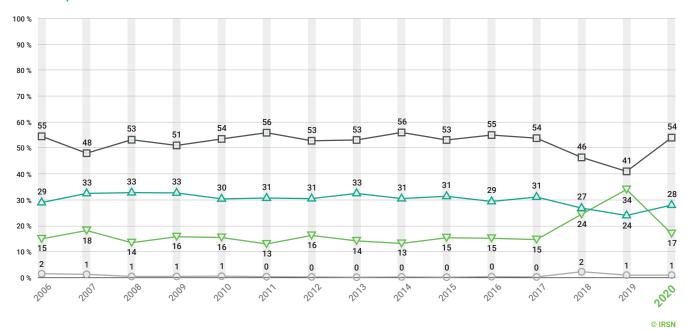
EVOLUTION OF THE RESULTS 1999 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

25 - Water pollution



26 - Soil pollution



The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

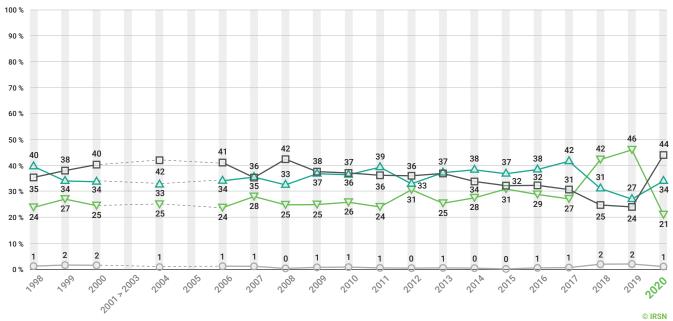
→ YES ★ NEITHER TRUST NOR DOESN'T TRUST ☐ NO ○ DON'T KNOW

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

EVOLUTION OF THE RESULTS 1998 - 2020

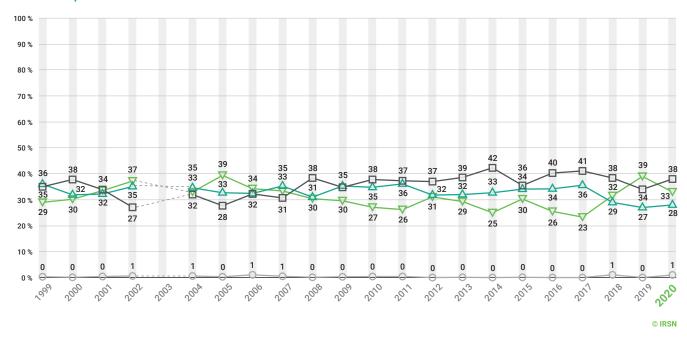
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

27 - Noise pollution*



^{*} The title was "Noise" until 2018.

28 - Food products



The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

 - NO

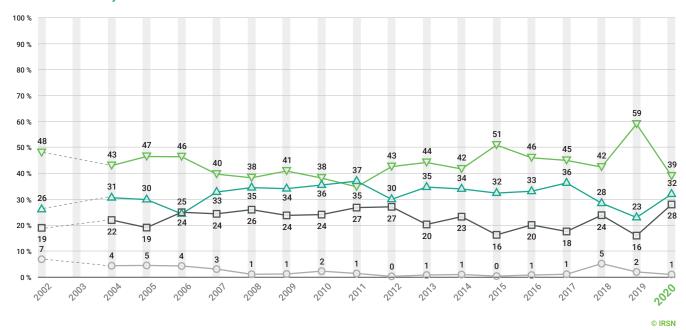
O DON'T KNOW

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

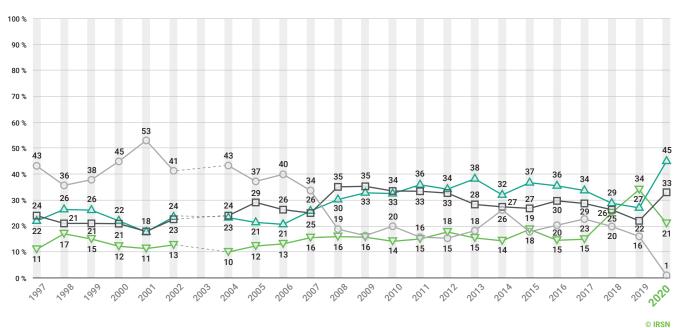
EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

29 - Medical X-rays



30 - Indoor radon



The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

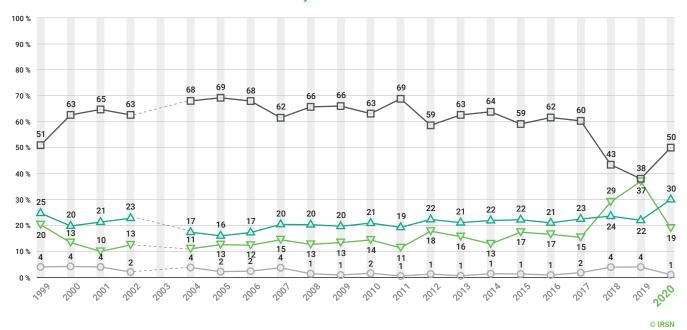
→ YES → NEITHER TRUST NOR DOESN'T TRUST → NO → DON'T KNOW

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

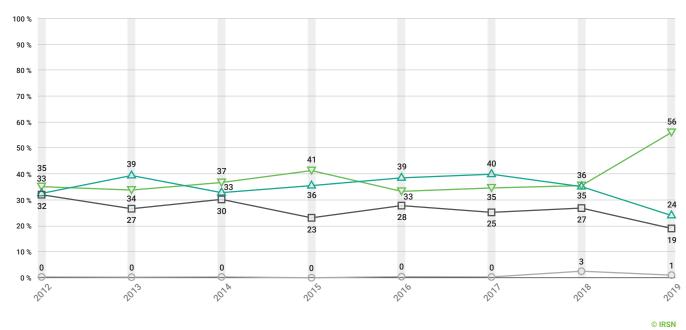
EVOLUTION OF THE RESULTS 1999 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

31 - Radioactive fallout in France from the Chernobyl accident



32 - Medical risks



The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

 - NO - □- I

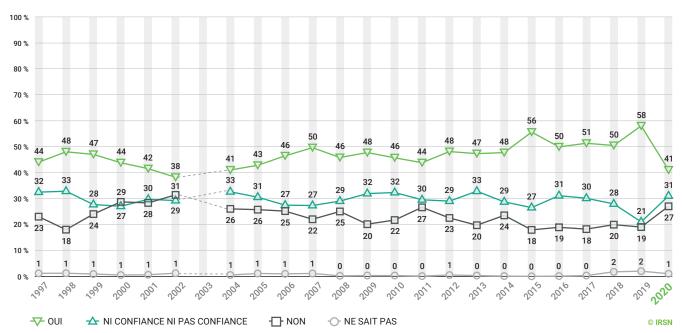
O DON'T KNOW

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

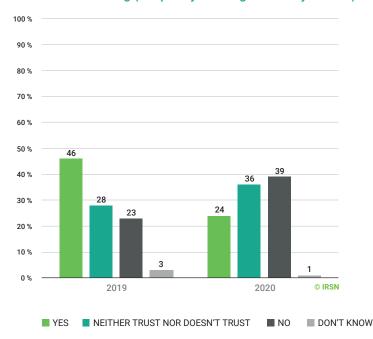
EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.





34 - Marine flooding (temporary flooding caused by the sea)



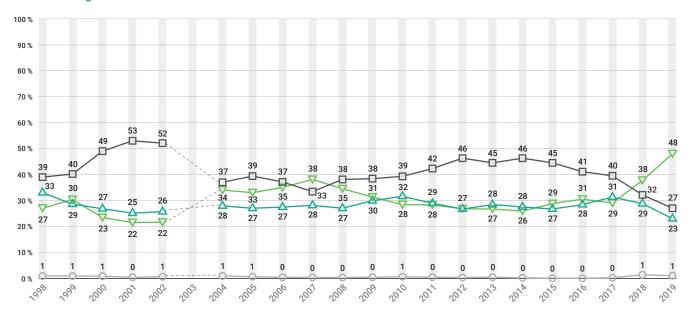
The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

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

EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

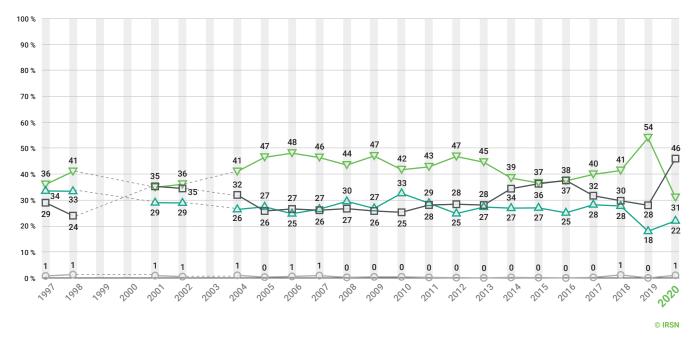
35 - Smoking*



^{*} The title was "Teenage smoking" until 2018.

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36 - Terrorism



The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

▼- YES

▲ NEITHER TRUST NOR DOESN'T TRUST

- NO

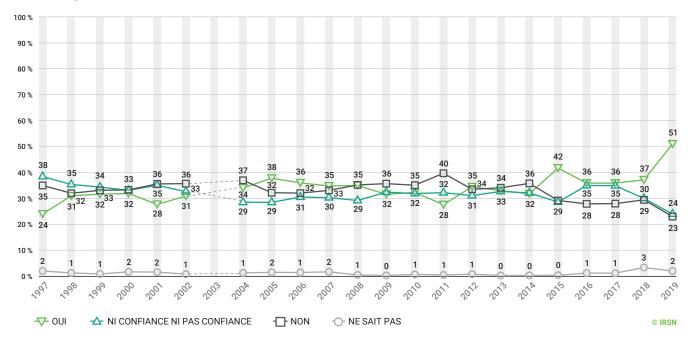
O DON'T KNOW

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

EVOLUTION OF THE RESULTS 1997 - 2020

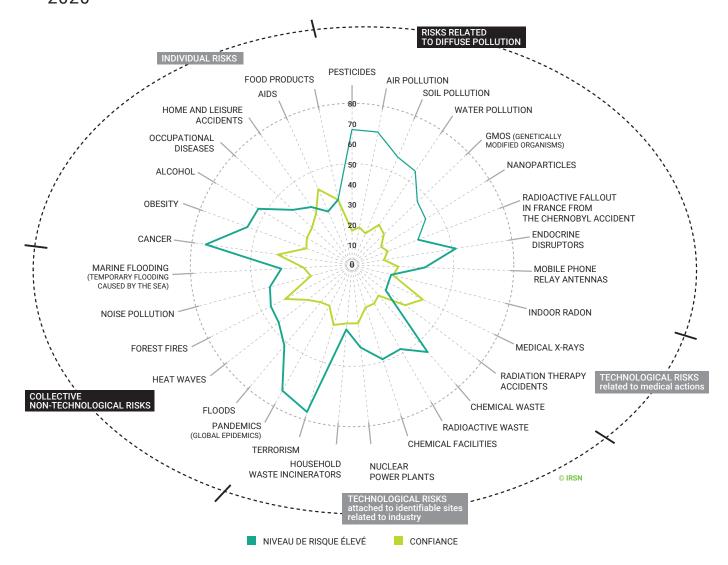
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

37 - Transport of hazardous materials



Representation of the 31 at-risk situations according to the 2 dimensions: high risk level and trust.

NOVEMBER 2020

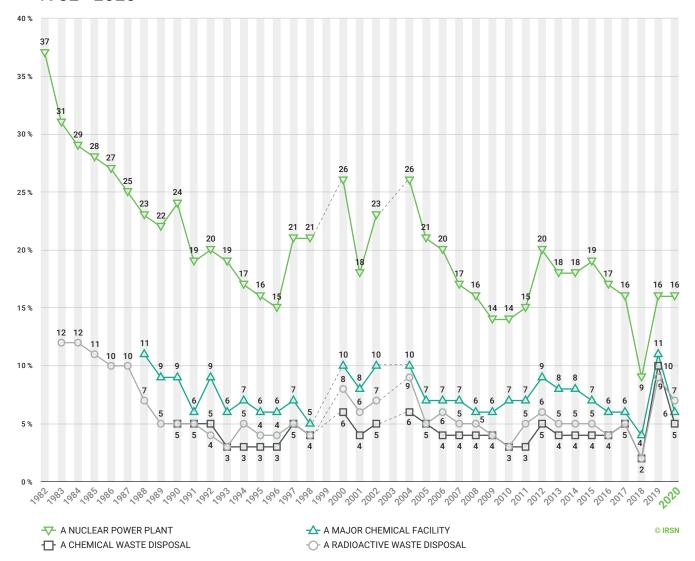


QUESTION No. 3 Would you be willing to live near...?

NOVEMBER 2020



EVOLUTION OF "YES" RESPONSES 1982 - 2020

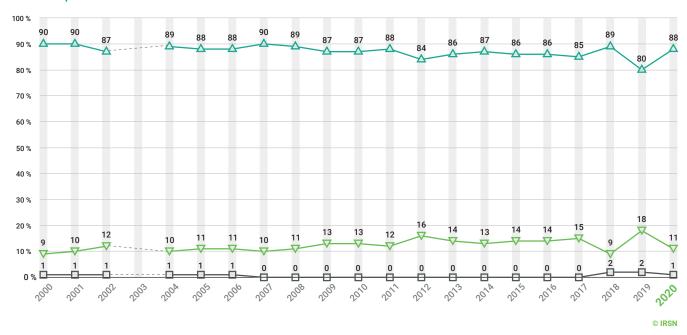


Would you be willing

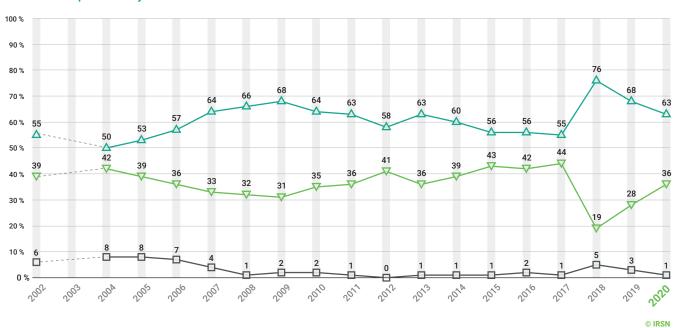
CONT. to live near ...?

EVOLUTION 2000 - 2020

1 - an airport



2 - a mobile phone relay antenna



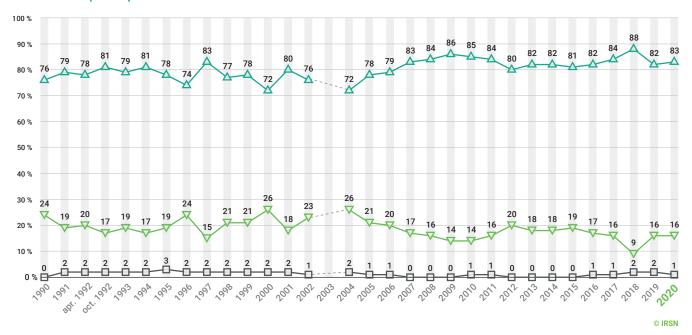
-V-YES - NO -D- DON'T KNOW

Would you be willing

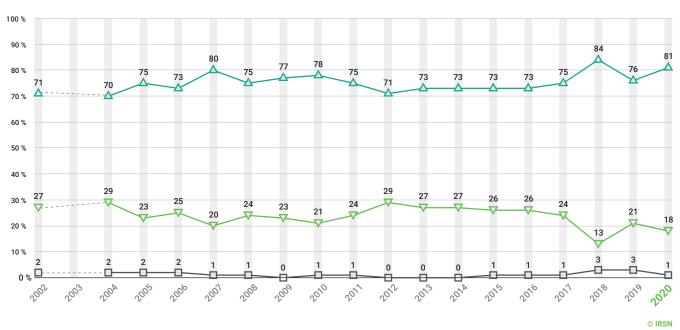
CONT. to live near ...?

EVOLUTION 1990 - 2020

3 - a nuclear power plant



4 - a nuclear research center



-V-YES -D- DON'T KNOW -**∕** NO

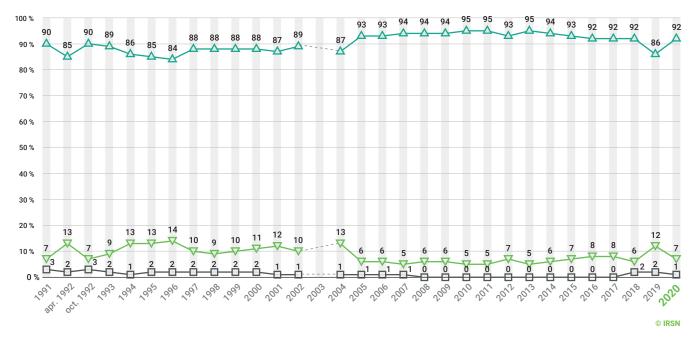
QUESTION No. 3 ······

Would you be willing

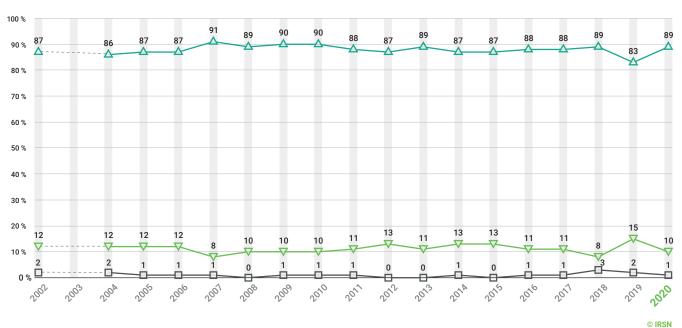
CONT. : to live near...?

EVOLUTION 1990 - 2020

5 - a household waste incinerator



6 - a landfill



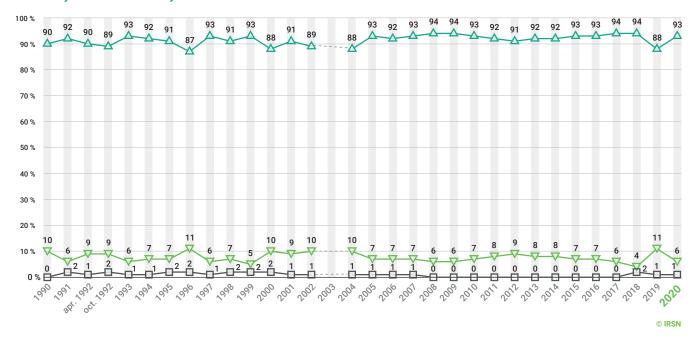
✓ YES NO DON'T KNOW

QUESTION No. 3 Would you be willing

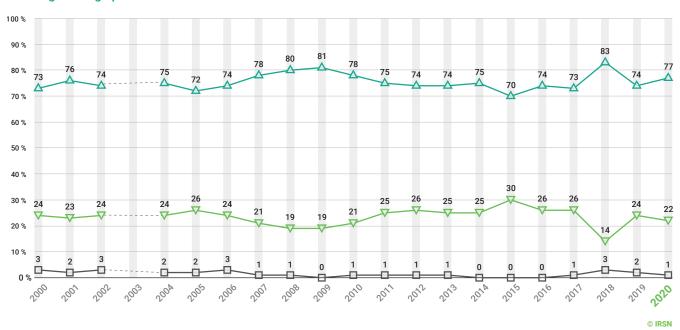
CONT. to live near ...?



7 - a major chemical facility



8 - a high-voltage power line



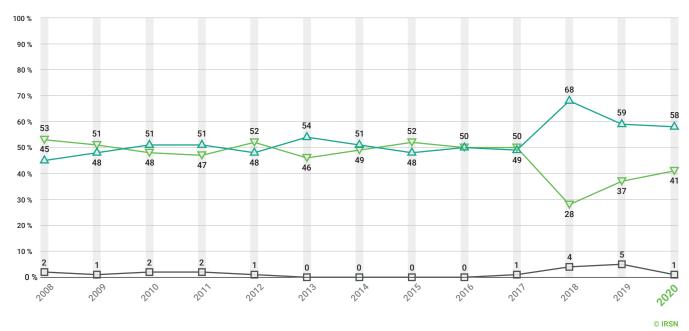
-D- DON'T KNOW ₹YES ♣ NO

Would you be willing

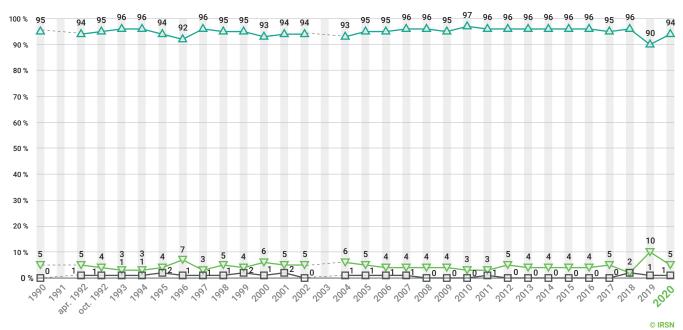
CONT. to live near ...?

EVOLUTION 1990 - 2020

9 - a wind farm



10 - a chemical waste disposal

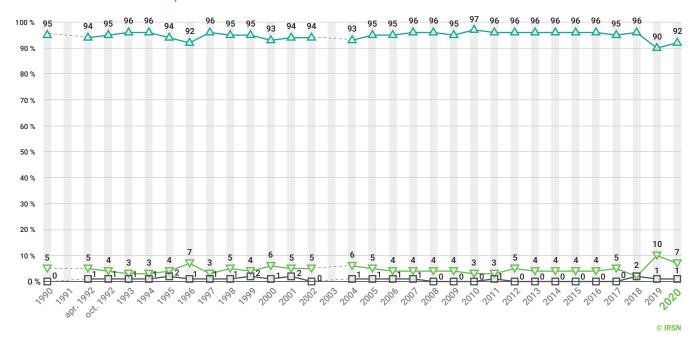


₹YES ♣ NO -D- DON'T KNOW

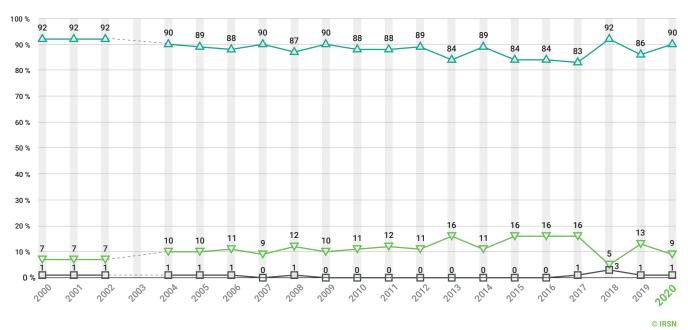
QUESTION No. 3 · · · · Would you be willing CONT. to live near ...?

EVOLUTION 1990 - 2020

11 - a radioactive waste disposal



12 - a flood zone

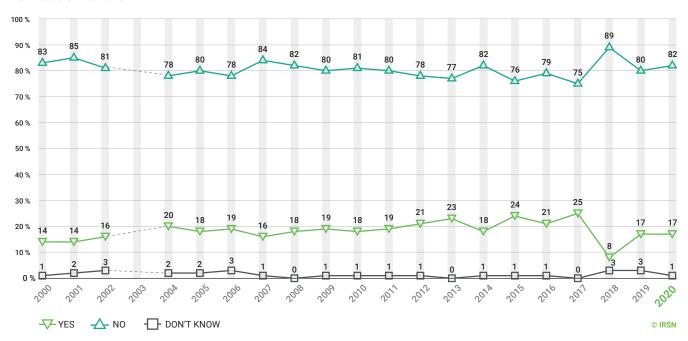


-D- DON'T KNOW ₹YES ♣ NO

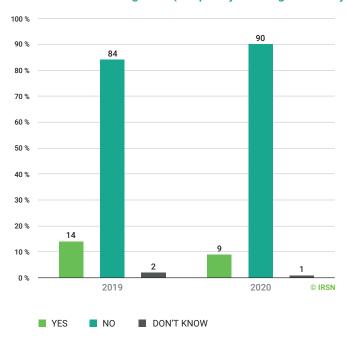
QUESTION No. 3 Would you be willing CONT. to live near ...?

EVOLUTION 1990 - 2020

13 - a seismic zone



14 - a marine flooding zone (temporary flooding caused by the sea)



What is the first thing that comes to mind when you hear the word "coronavirus"?

Please list the first five words that come to mind.



The word clouds in the French version featured all the words collected. Here, words with the same radical have been grouped and only the words with a frequency above 0.5% are displayed.

1 - First word



2 - Second word



What is the first thing that comes to mind when you hear the word "coronavirus"?

Please list the first five words that come to mind.

NOVEMBER

The word clouds in the French version featured all the words collected. Here, words with the same radical have been grouped and only the words with a frequency above 0.5% are displayed.

3 - Third word



4 - Fourth word



CONT.

What is the first thing that comes to mind when you hear the word "coronavirus"?

Please list the first five words that come to mind.



The word clouds in the French version featured all the words collected. Here, words with the same radical have been grouped and only the words with a frequency above 0.5% are displayed.

5 - Fifth word



6 - Total of all words mentioned



THE OPINION OF THE FRENCH ON NUCLEAR MATTERS

93 - 101

French expectations regarding nuclear safety

102 - 107

French people's views on nuclear energy

108 - 112

Perception and representations of nuclear accidents

113 - 114

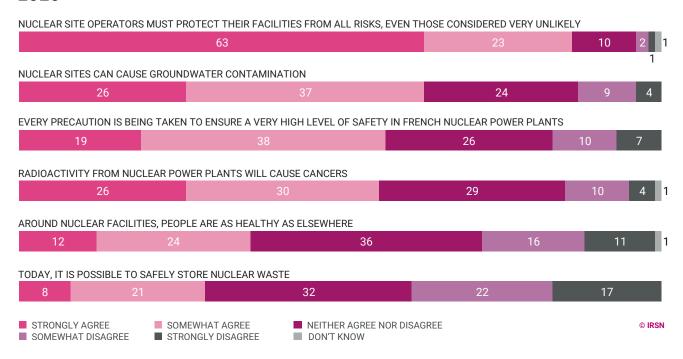
The perception of nuclear waste and its management

115 - 138

Competence and credibility of nuclear stakeholders

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

NOVEMBER 2020



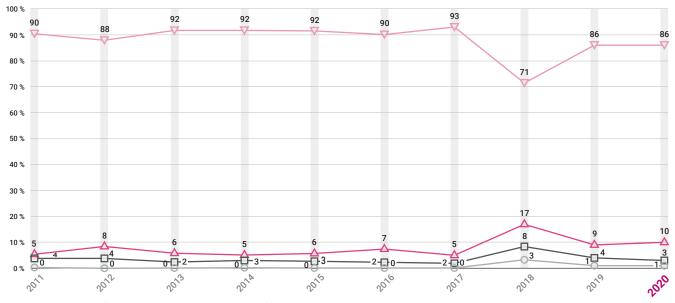
Here are a number of proposals relating to nuclear facilities. Please indicate on the following scale whether you agree or disagree.



In 2019, the answer "may agree" was replaced by "neither agree nor disagree".

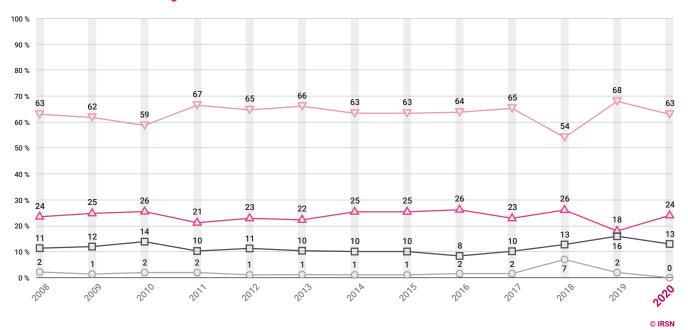
© IRSN

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



* In 2019, the name "Nuclear site managers" became "Nuclear site operators"

2 - Nuclear sites can cause groundwater contamination



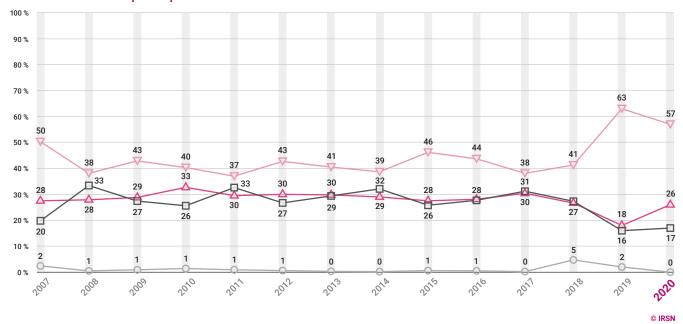
→ DISAGREE → DON'T KNOW

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

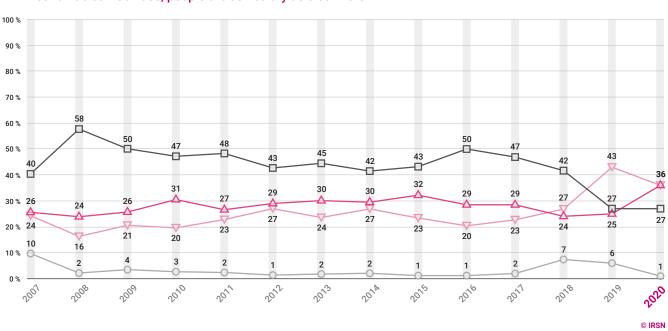


In 2019, the answer "may agree" was replaced by "neither agree nor disagree".

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



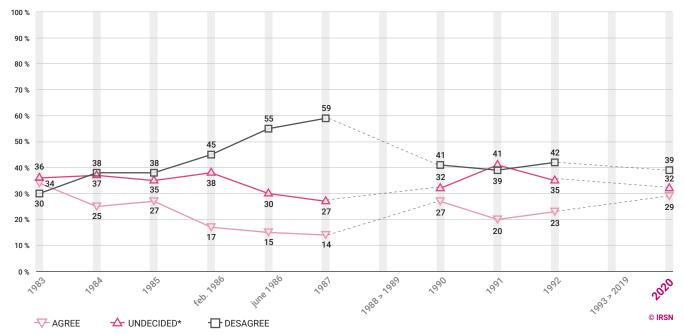
→ AGREE
→ NEITHER AGREE NOR DISAGREE
→ DISAGREE
→ DON'T KNOW

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



In 2019, the answer "may agree" was replaced by "neither agree nor disagree".

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



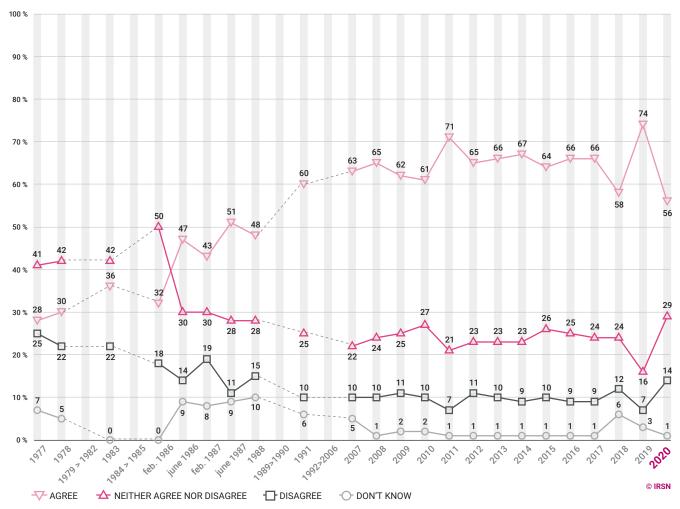
^{*} The "undecided" modality combines the responses "maybe agree" (from 1983 to 1992) and "neither agree nor disagree" (in 2020) with the "don't know" responses.

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



In 2019, the answer "may agree" was replaced by "neither agree nor disagree".

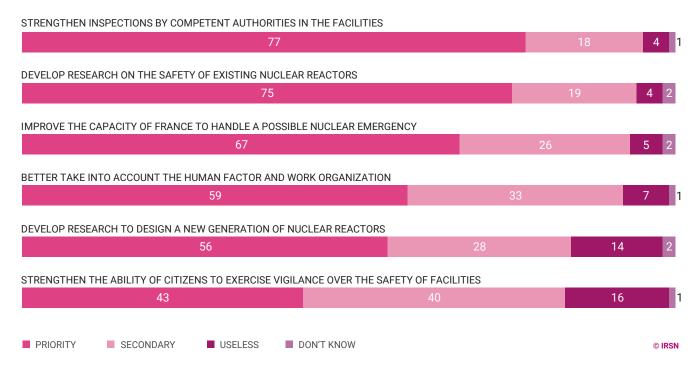
Radioactivity from nuclear power plants will cause cancers*



^{*} In 2019 and for this year only, the proposal became "Radioactivity from nuclear power plants can cause cancer".

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 2020



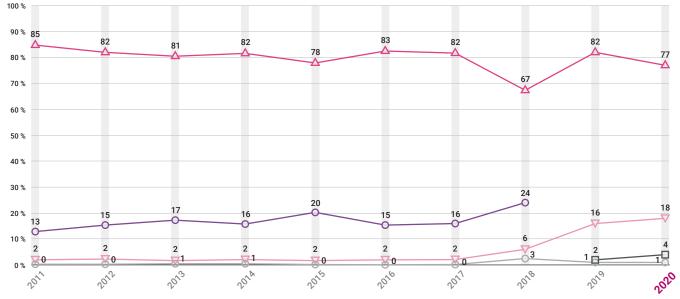
Here are various measures to strengthen the safety of nuclear sites. For each one, please indicate whether you consider it to be a priority, secondary or useless to strengthen the safety of nuclear sites.



→ PRIORITY

In 2019, the modality "important but not a priority" has been removed and the modality "useless" has been added.

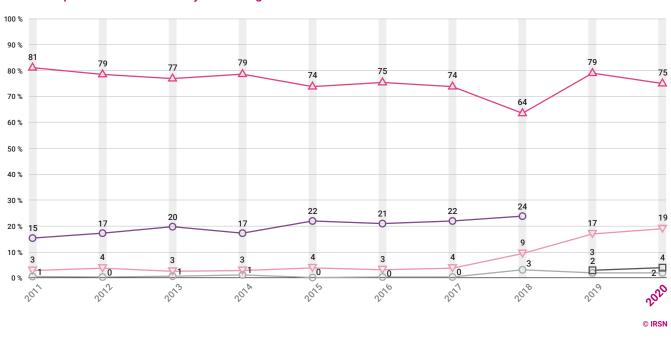
1 - Strengthen inspections by competent authorities in the facilities*



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

2 - Develop research on the safety of existing nuclear reactors

O IMPORTANT BUT NOT A PRIORITY



▼ SECONDARY

── USELESS

99

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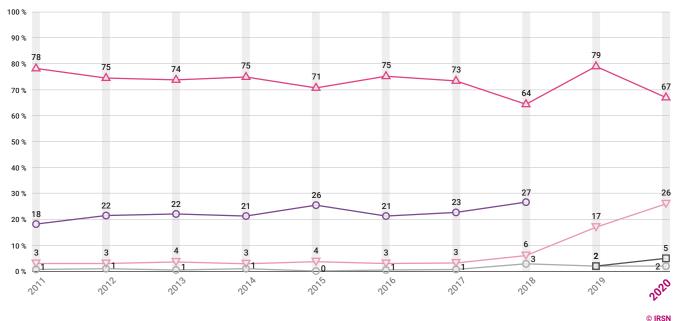
-O- DON'T KNOW

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.

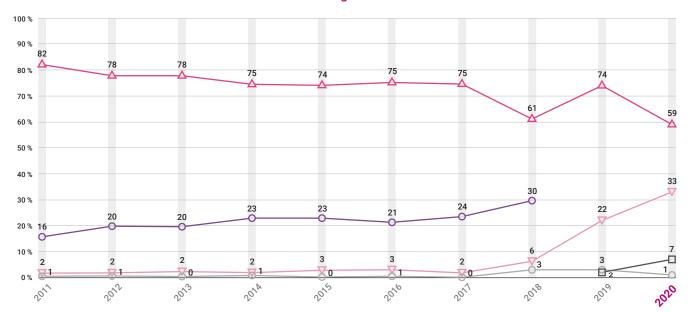


In 2019, the modality "important but not a priority" has been removed and the modality "useless" has been added.

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



4 - Better take into account 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".

→ PRIORITY

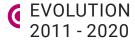
- IMPORTANT BUT NOT A PRIORITY

▼ SECONDARY

-USELESS

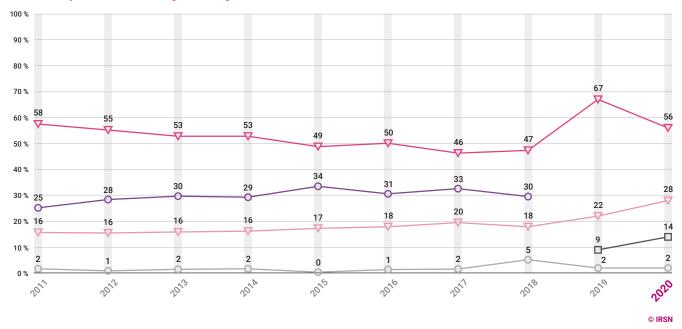
O DON'T KNOW

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.



In 2019, the modality "important but not a priority" has been removed and the modality "useless" has been added.

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*

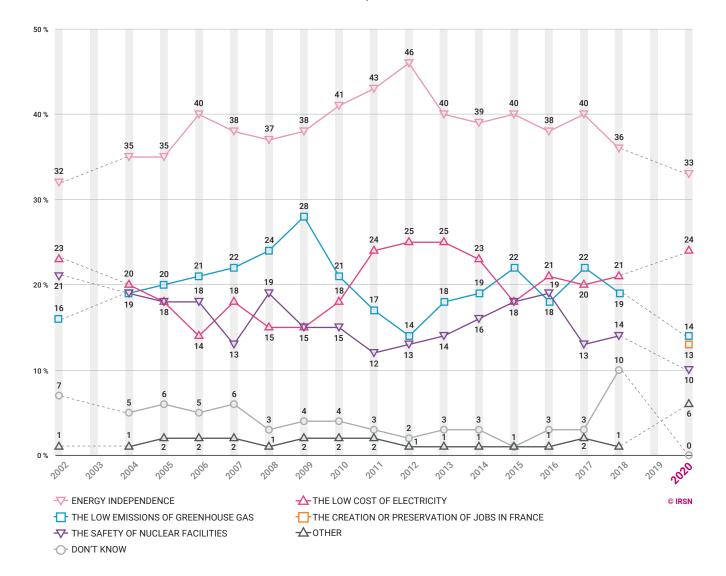


→ PRIORITY O IMPORTANT BUT NOT A PRIORITY **▼** SECONDARY ── USELESS -O- DON'T KNOW

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



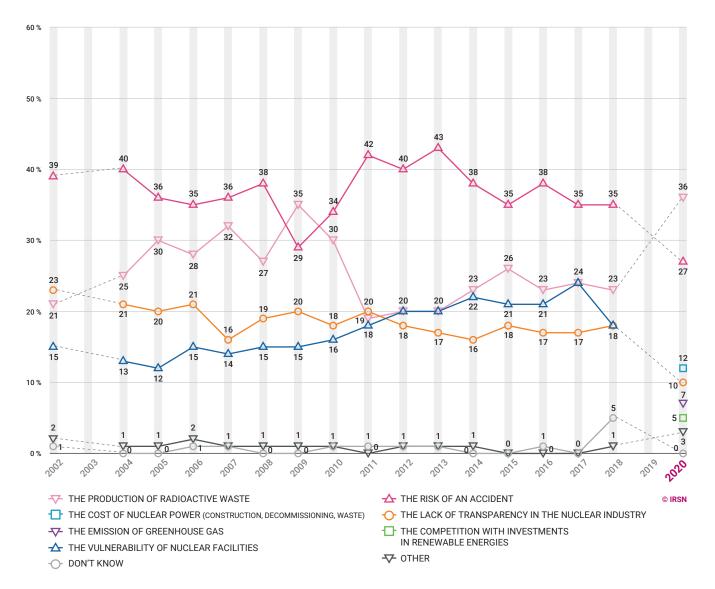
In 2019, the question was asked in a different way: the French expressed themselves on each actor independently from the others. The specific results for that year can be downloaded on http://barometre.irsn.fr.



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



In 2019, the question was asked in a different way: the French expressed themselves on each actor independently from the others. The specific results for that year can be downloaded on http://barometre.irsn.fr



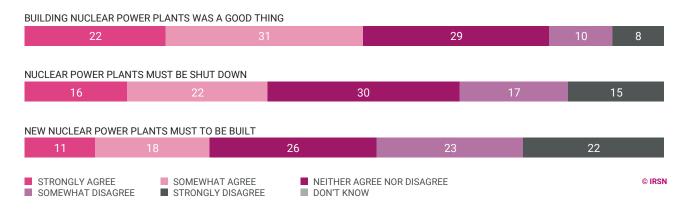
In recent years, the list of proposals has changed. In 2018, "the risk of an accident" replaced "the Chernobyl and Fukushima accidents". In 2020, "vulnerability of nuclear facilities" was removed, "nuclear waste" was replaced by "nuclear waste production", and "the cost of nuclear power (construction, decommissioning, waste)", "competition to investments in renewable energy" and "the emission of greenhouse gas" were added.

Here are various proposals relating to nuclear energy.

For each one, please indicate your opinion

according to the following scale...

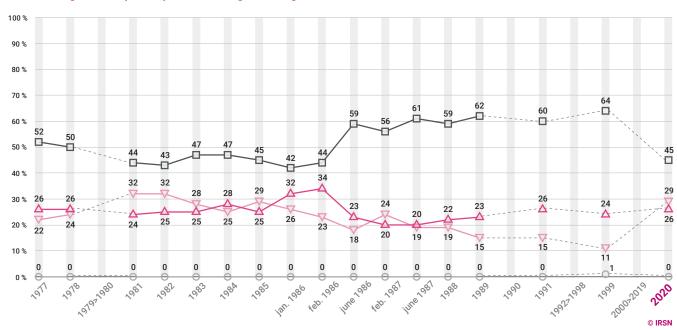
NOVEMBER 2020





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".

1 - Building nuclear power plants was a good thing



The responses "strongly disagree" and "somewhat disagree" were grouped into "disagree"; the "somewhat agree" and "strongly agree" into "agree".

Here are various proposals relating to nuclear energy.

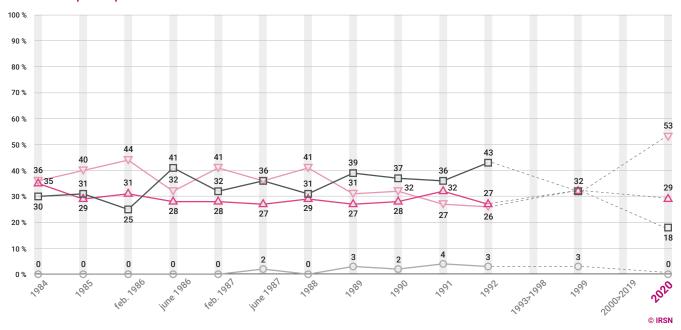
For each one, please indicate your opinion

according to the following scale...

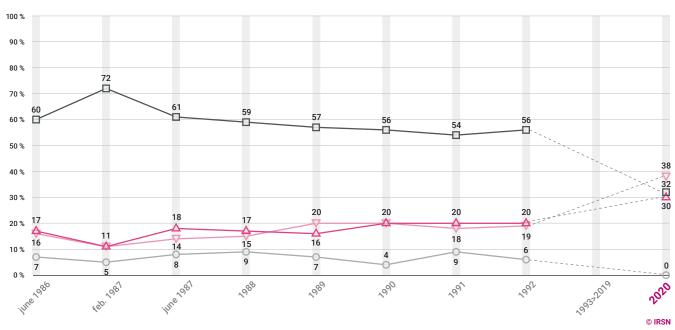


In 2020, the list "fully agree, rather agree, maybe agree, not so much agree, not at all agree" was replaced by "strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, strongly disagree".

2 - Nuclear power plants must be shut down



3 - New nuclear power plants must to be built

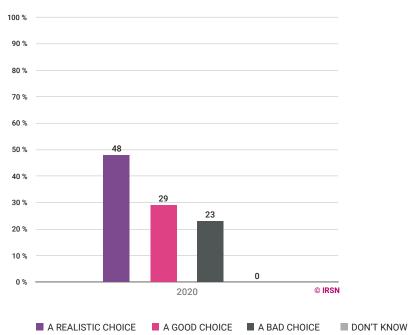


The responses "strongly disagree" and "somewhat disagree" were grouped into "disagree"; the "somewhat agree" and "strongly agree" into "agree".

-DISAGREE -O- DON'T KNOW

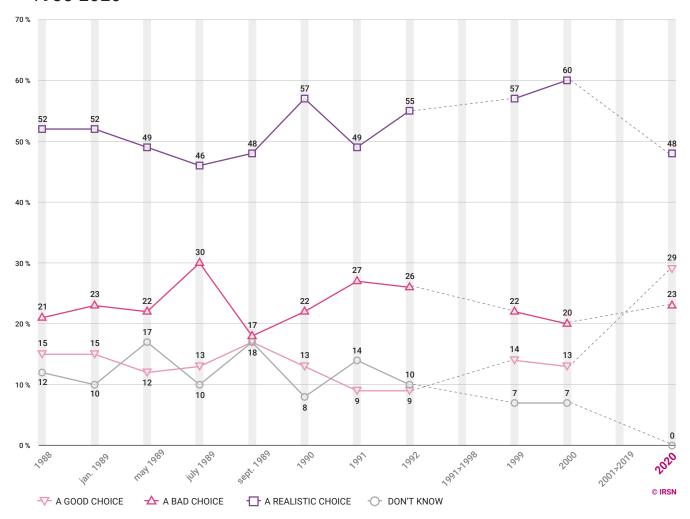
Now and with hindsight, do you think that the choice of nuclear power was ...?

NOVEMBER 2020



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

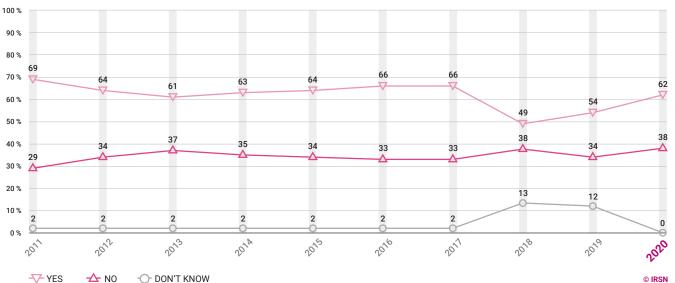
EVOLUTION OF THE RESULTS 1988-2020



In your opinion, can an accident of the same magnitude as the one in Fukushima occur in a French nuclear power plant?

NOVEMBER 2020

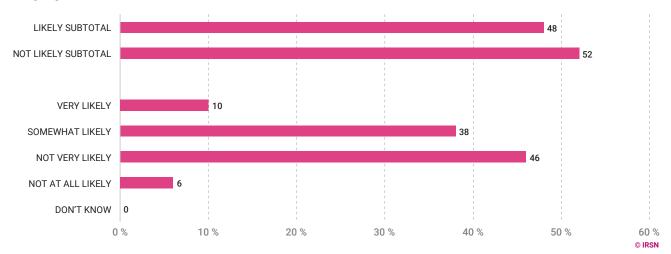
Before 2018, the wording of the question was: "In your opinion, can an accident in a nuclear power plant of the same magnitude as the one in Fukushima occur in France?".



QUESTION No. 8

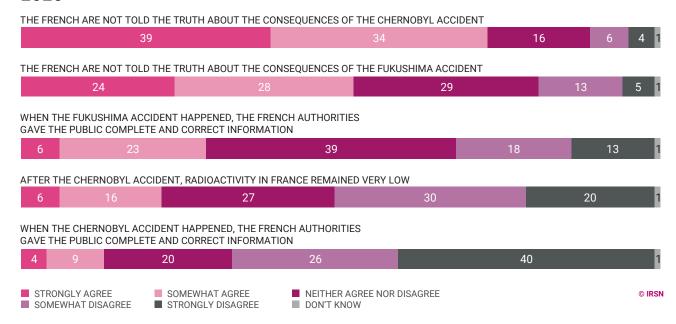
How likely do you think such an accident is?

NOVEMBER 2020

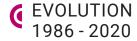


Almost 10 years have passed since the Fukushima accident. Here are a number of proposals relating to the Chernobyl and Fukushima nuclear accidents. For each proposal, please indicate your opinion according to the following scale...

NOVEMBER 2020

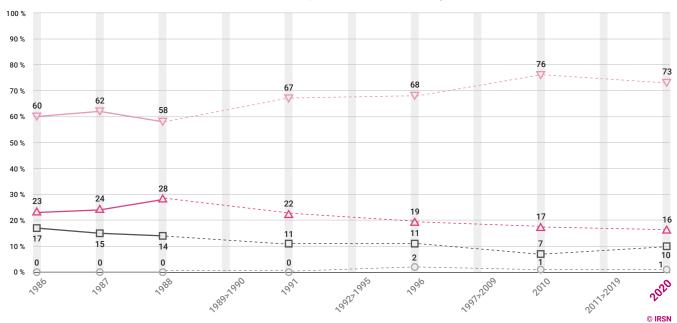


Almost 10 years have passed since the Fukushima accident. Here are a number of proposals relating to the Chernobyl and Fukushima nuclear accidents. For each proposal, please indicate your opinion according to the following scale...

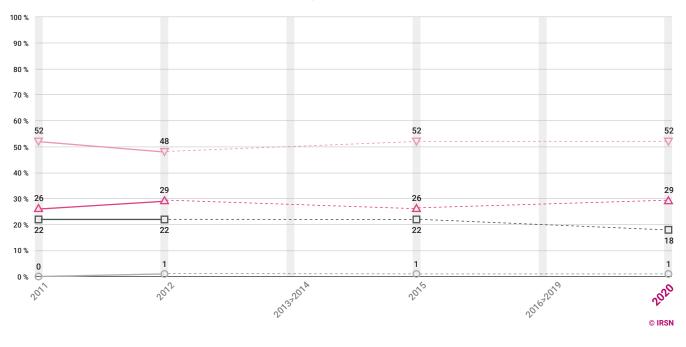


The median response modality was changed several times: "maybe agree" became "more or less agree" in 1996, then "neither agree nor disagree" in 2020.

1 - The French are not told the truth about the consequences of the Chernobyl accident



2 - The French are not told the truth about the consequences of the Fukushima accident

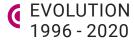


-O- DON'T KNOW

CONT.

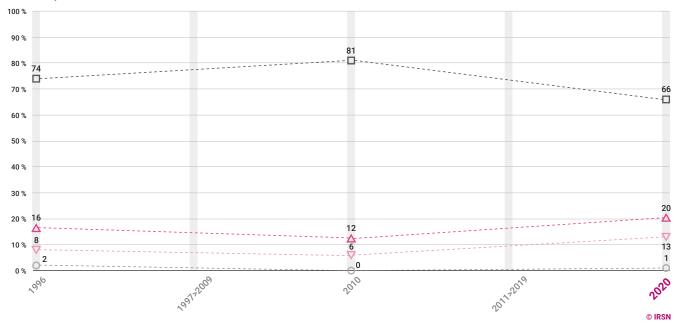
Almost 10 years have passed since the Fukushima accident. Here are a number of proposals relating to the Chernobyl and Fukushima nuclear accidents.

For each proposal, please indicate your opinion according to the following scale...

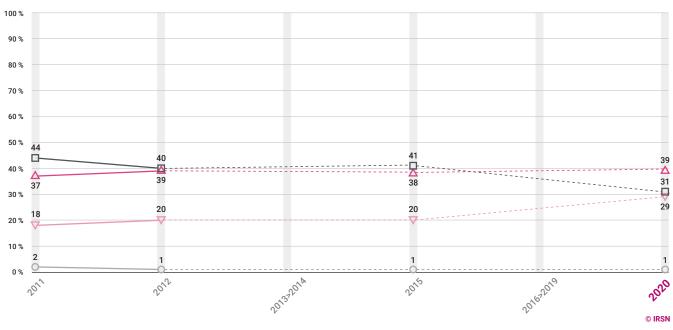


The median response modality was changed several times: "maybe agree" became "more or less agree" in 1996, then "neither agree nor disagree" in 2020.

3 – When the Fukushima accident happened, the French authorities gave the public complete and correct information



4 – When the Chernobyl accident happened, the French authorities gave the public complete and correct information



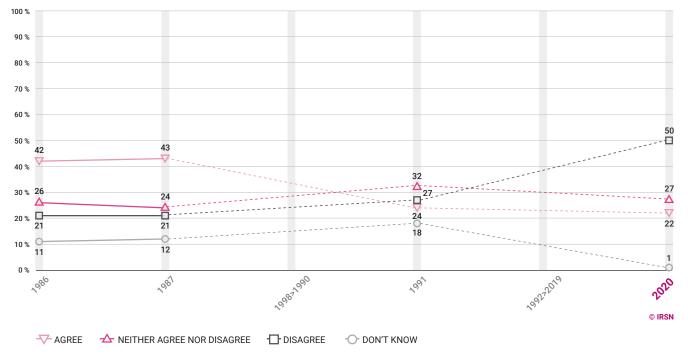
QUESTION No. 9 CONT.

Almost 10 years have passed since the Fukushima accident. Here are a number of proposals relating to the Chernobyl and Fukushima nuclear accidents. For each proposal, please indicate your opinion according to the following scale...



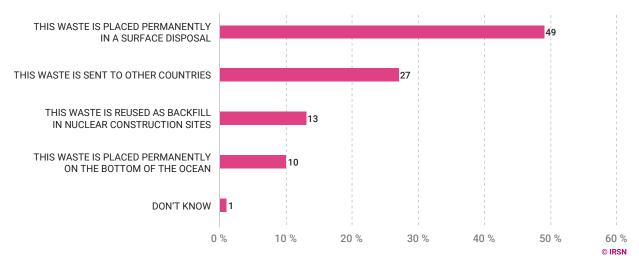
The median response modality was changed several times: "maybe agree" became "more or less agree" in 1996, then "neither agree nor disagree" in 2020.

5 - After the Chernobyl accident, radioactivity in France remained very low



In your opinion, what is currently being done with the slightly radioactive waste produced in France, called "very low-level waste"?

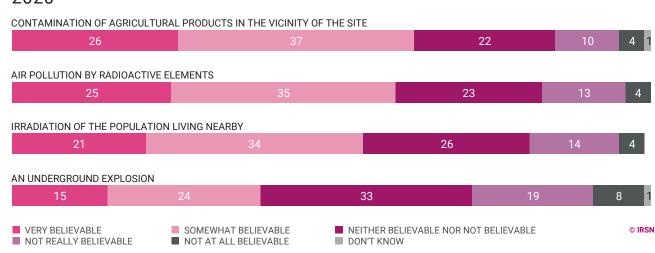
NOVEMBER 2020



QUESTION No. 11

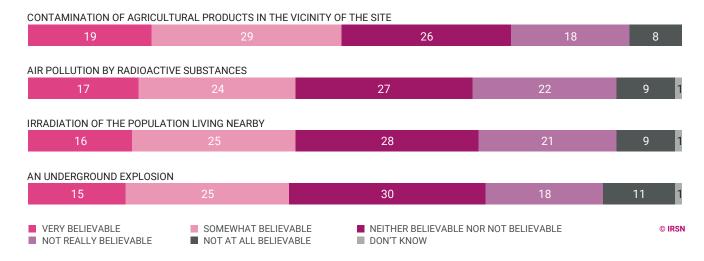
In your opinion, are the following events likely to occur in or near a French "high-level" radioactive waste disposal site?

6 NOVEMBER 2020



Today, in France, the most radioactive waste is mixed with molten glass in sealed stainless steel containers. It will be stored in tunnels dug into the clay 500 m deep and sealed with concrete. Thus, in your opinion, are the following events likely to occur in or near a French "high-level" radioactive waste disposal site?

6 NOVEMBER 2020

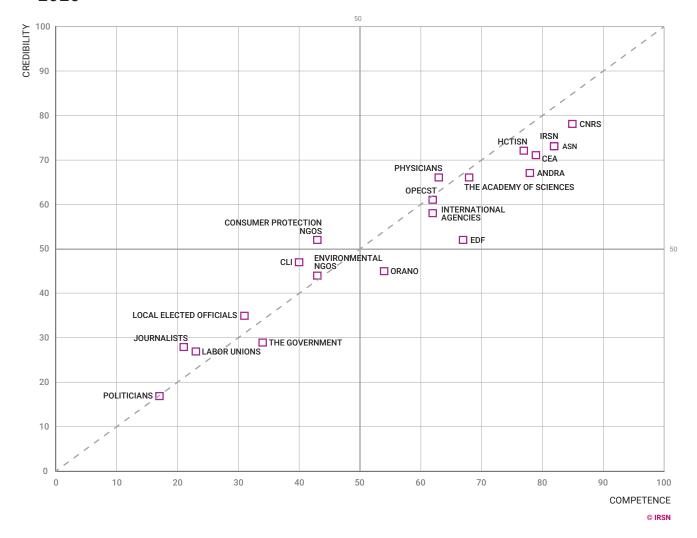


In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

QUESTION No. 14

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

NOVEMBER 2020



This year, 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 method is negligible. For these two questions, however, a significant bias is recorded. This is particularly true for the question on 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.

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

QUESTION No. 14

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

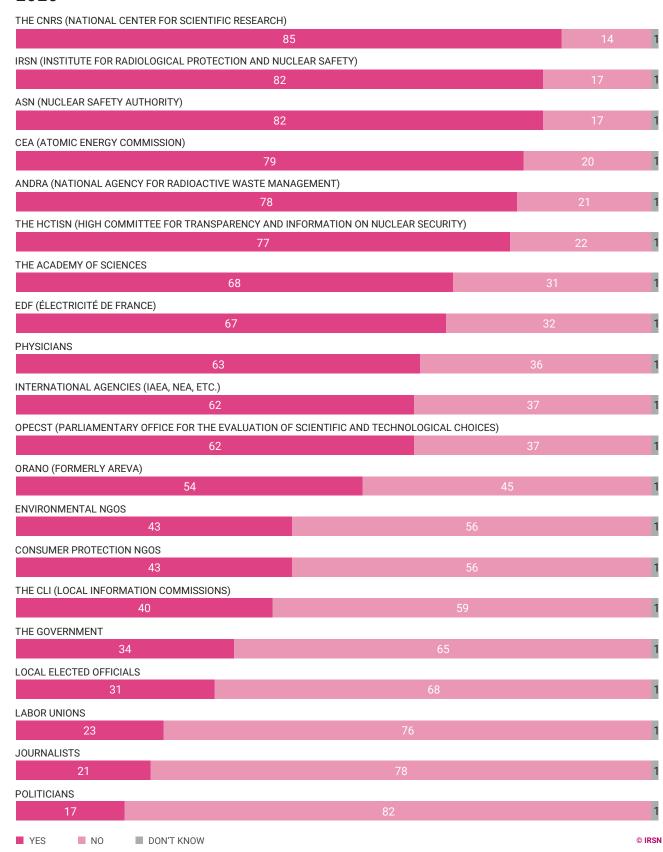
70% or more	YES	NO	DON'T KNOW
The CNRS (National center for scientific research)	85	14	1
IRSN (Institute for radiological protection and nuclear safety)	82	17	1
ASN (Nuclear safety authority)	82	17	1
CEA (Atomic energy commission)	79	20	1
ANDRA (National agency for radioactive waste management)	78	21	1
The HCTISN (High committee for transparency and information on nuclear security)	77	22	1
Less than 70%	YES	NO	DON'T KNOW
The Academy of Sciences	68	31	1
EDF (Électricité de France)	67	32	1
Physicians	63	36	1
International agencies (IAEA, NEA, etc.)	62	37	1
OPECST (Parliamentary office for the evaluation of scientific and technological choices)	62	37	1
Orano (formerly AREVA)	54	45	1
Less than 50%	YES	NO	DON'T KNOW
Environmental NGOs	43	56	1
Consumer protection NGOs	43	56	1
The CLI (Local Information Commissions)	40	59	1
Less than 40%	YES	NO	DON'T KNOW
The government	34	65	1
Local elected officials	31	68	1
Labor Unions	23	76	1
Journalists	21	78	1
Politicians	17	82	1

70% or more	YES	NO	DON'T KNOW
The CNRS (National center for scientific research)	78	21	1
IRSN (Institute for radiological protection and nuclear safety)	73	26	1
ASN (Nuclear safety authority)	73	26	1
The HCTISN (High committee for transparency and information on nuclear security)	72	27	1
CEA (Atomic energy commission)	71	28	1
Less than 70%	YES	NO	DON'T KNOW
ANDRA (National agency for radioactive waste management)	67	32	1
The Academy of Sciences	66	33	1
Physicians	66	33	1
OPECST (Parliamentary office for the evaluation of scientific and technological choices)	61	38	1
International agencies (IAEA, NEA, etc.)	58	41	1
EDF (Électricité de France)	52	47	1
Consumer protection NGOs	52	47	1
Less than 50%	YES	NO	DON'T KNOW
The CLI (Local Information Commissions)	47	52	1
Orano (formerly AREVA)	45	54	1
Environmental NGOs	44	55	1
			1 1 1
Less than 40%	YES	NO	DON'T KNOW
Local elected officials	35	64	1
The government	29	70	1
Journalists	28	71	1
Labor Unions	27	72	1
Politicians	17	82	1

In the field of nuclear industry and energy do you think the following actors and organizations

are technically competent?

6 NOVEMBER 2020



CONT.

In the field of nuclear industry and energy do you think the following actors and organizations

are technically competent?

EVOLUTION OF THE RESULTS 1990 - 2020

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.)".

▼ YES
O NO
DON'T KNOW

In the field of nuclear industry and energy

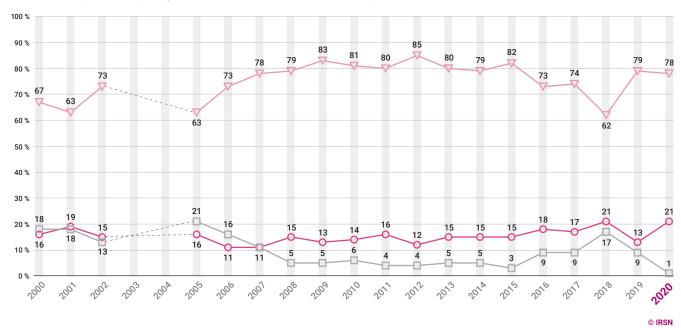
CONT.

do you think the following actors and organizations

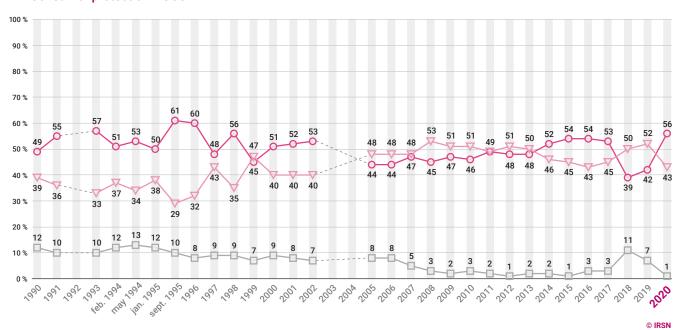
are technically competent?

EVOLUTION OF THE RESULTS 1990 - 2020

3 - ANDRA (National agency for radioactive waste management)



4 - Consumer protection NGOs



CONT.

In the field of nuclear industry and energy do you think the following actors and organizations

are technically competent?

EVOLUTION OF THE RESULTS 1990 - 2020

5 - Environmental NGOs*



* In 1998, the wording "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".

▼ YES
→ NO
→ DON'T KNOW

In the field of nuclear industry and energy

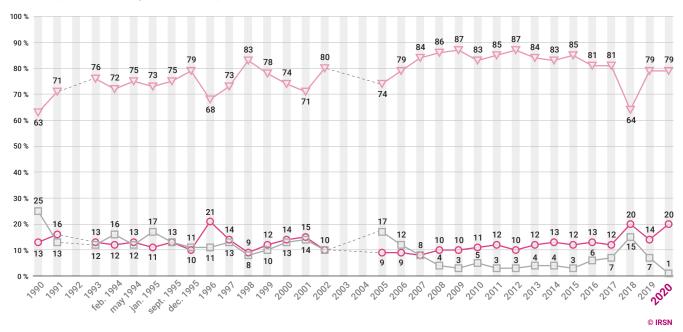
CONT.

do you think the following actors and organizations

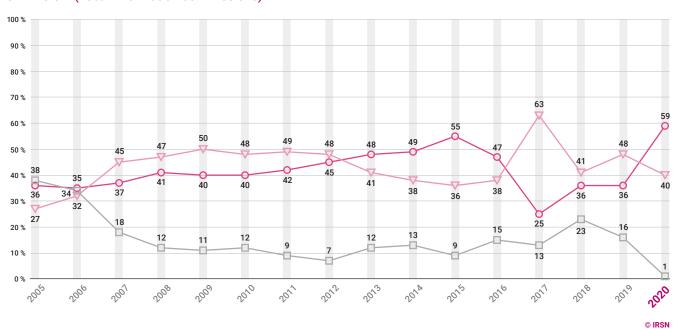
are technically competent?

EVOLUTION OF THE RESULTS 1990 - 2020

7 - CEA (Atomic energy commission)



8 - The CLI (Local information commissions)



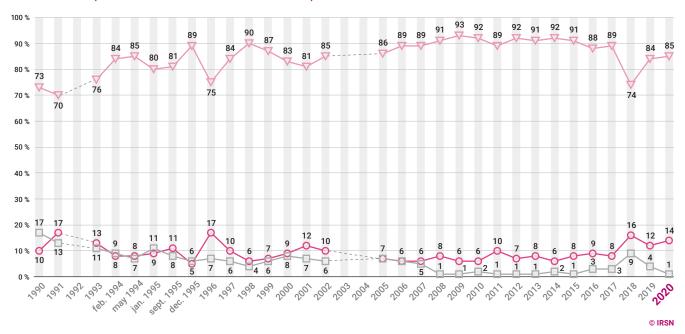
CONT.

In the field of nuclear industry and energy do you think the following actors and organizations

are technically competent?

EVOLUTION OF THE RESULTS 1990 - 2020

9 - The CNRS (National center for scientific research)



10 - EDF (Électricité de France)



In the field of nuclear industry and energy

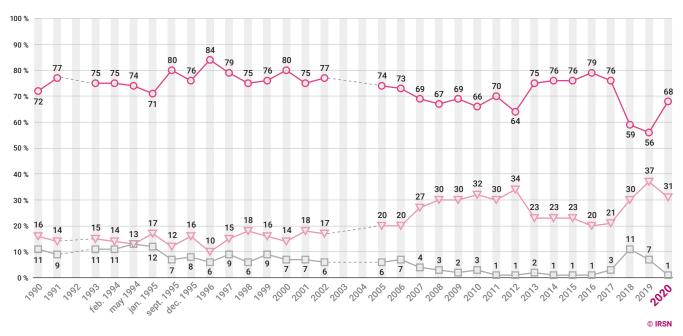
CONT.

do you think the following actors and organizations

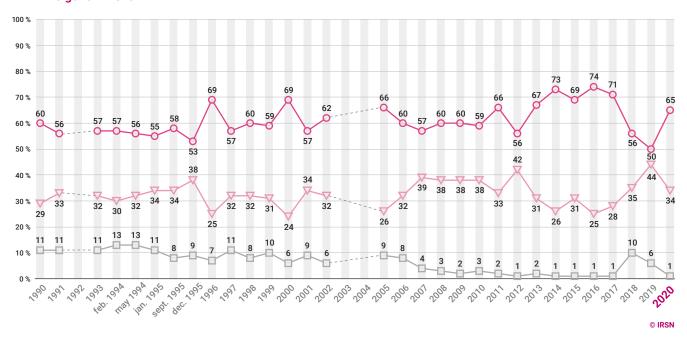
are technically competent?

EVOLUTION OF THE RESULTS 1990 - 2020

11 - Local elected officials



12 - The government



CONT.

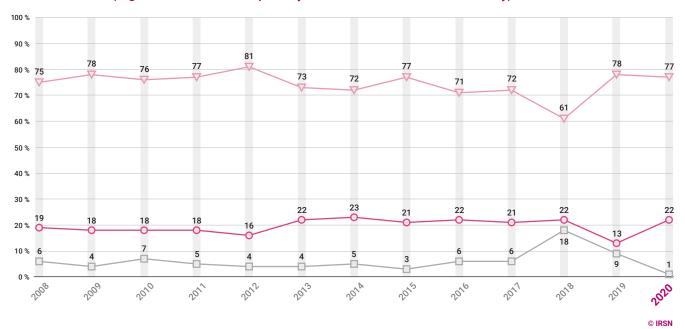
In the field of nuclear industry and energy

do you think the following actors and organizations

are technically competent?

EVOLUTION OF THE RESULTS 1990 - 2020

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



14 - Politicians



CONT.

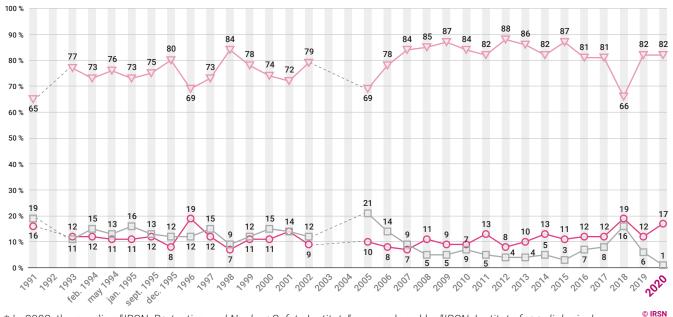
In the field of nuclear industry and energy

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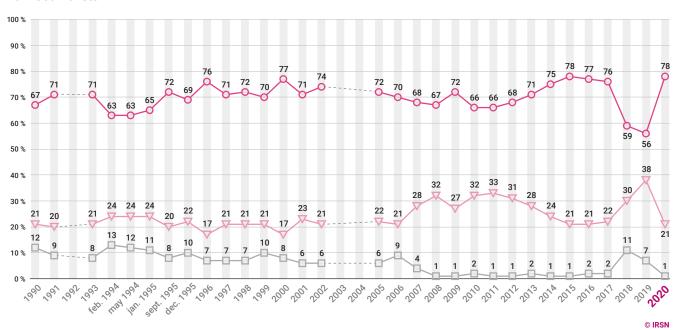
EVOLUTION OF THE RESULTS 1990 - 2020

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 the field of nuclear industry and energy

do you think the following actors and organizations

are technically competent?

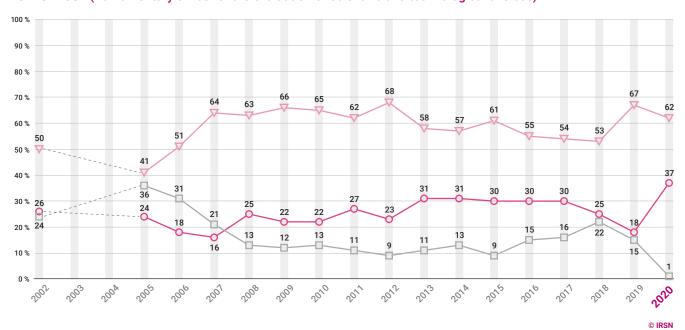
EVOLUTION OF THE RESULTS 1990 - 2020

17 - Physicians

CONT.



18 - OPECST (Parliamentary office for the evaluation of scientific and technological choices)



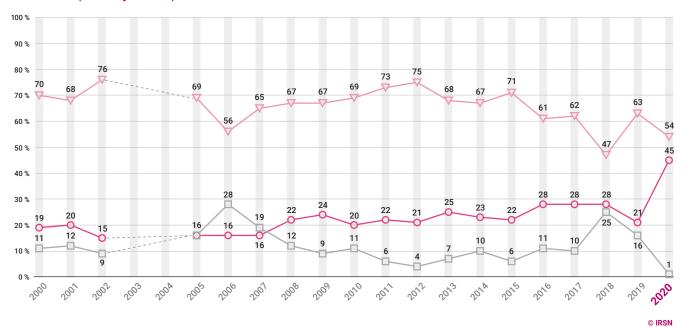
In the field of nuclear industry and energy

CONT. do you think the following actors and organizations

are technically competent?

EVOLUTION OF THE RESULTS 1990 - 2020

19 - Orano (formerly AREVA)



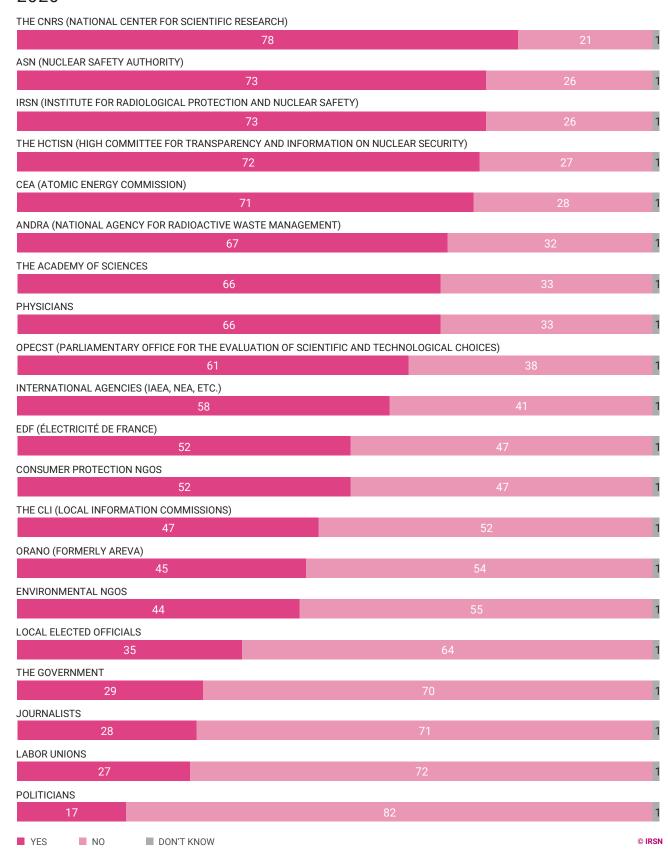
20 - Labor Unions



In the field of nuclear industry and energy, do you think the following actors and organizations

are trustworthy sources of information?

6 NOVEMBER 2020

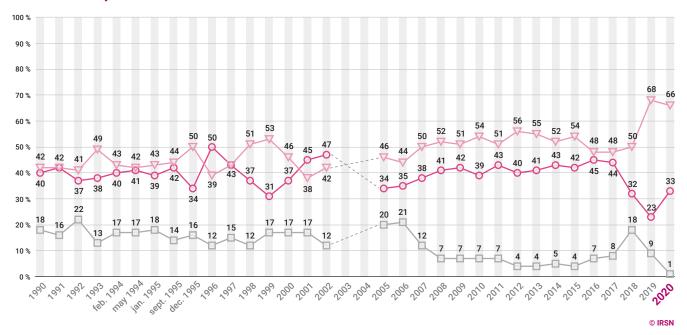


In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

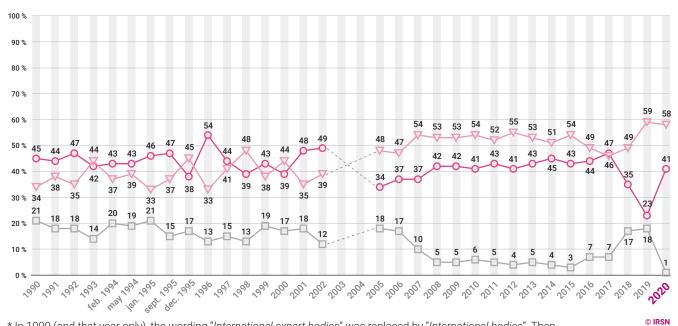
EVOLUTION OF THE RESULTS 1990 - 2020

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?".

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.)".

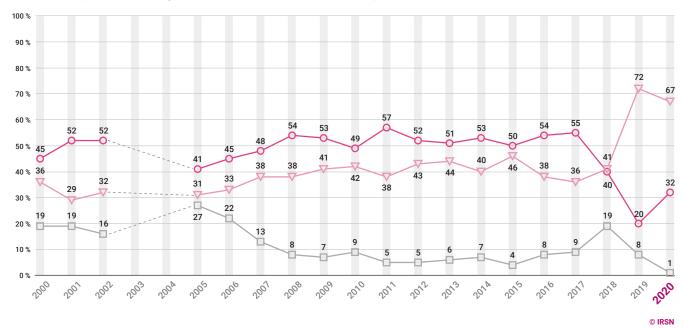
▼ YES ONO DON'T KNOW

CONT.

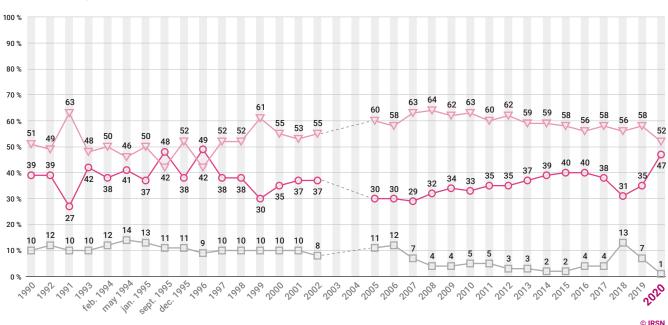
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EVOLUTION OF THE RESULTS 1990 - 2020 In 2019, the title of the question was changed from "Do the following information sources tell you the truth about nuclear power in France?" to "In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?".

3 - ANDRA (National agency for radioactive waste management)



4 - Consumer protection NGOs



▼ YES
O NO
DON'T KNOW

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 1990 - 2020

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?".

5 - Environmental NGOs*



^{*} In 1998, the wording "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".

₹ YES

O NO

- DON'T KNOW

QUESTION No. 14 CONT.

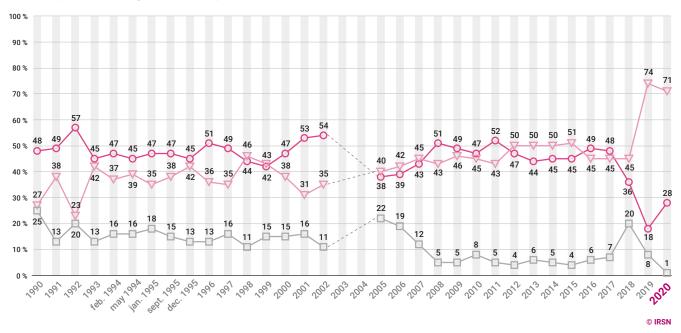
In the field of nuclear industry and energy, do you think the following actors and organizations

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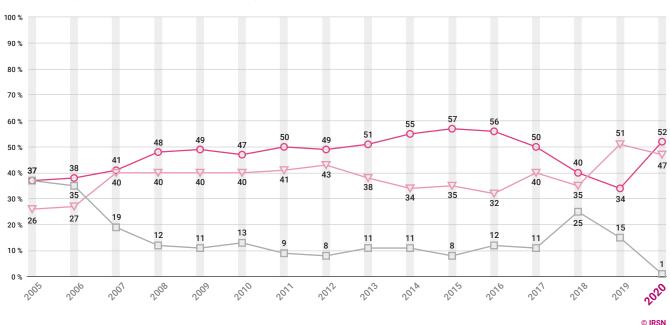
EVOLUTION OF THE RESULTS 1990 - 2020

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7 - CEA (Atomic energy commission)



8 - The CLI (Local information commissions)



₹ YES - DON'T KNOW O NO

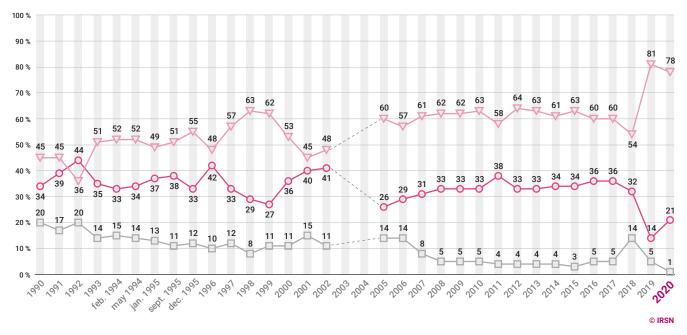
CONT.

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

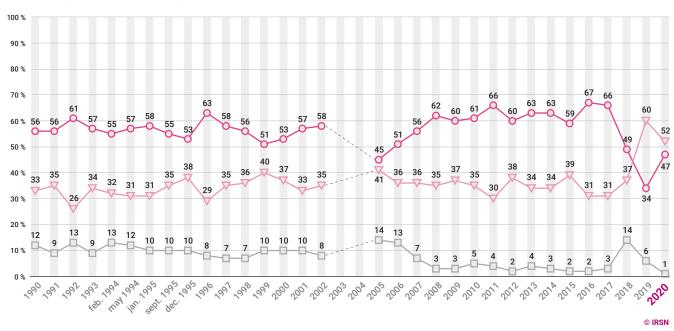
EVOLUTION OF THE RESULTS 1990 - 2020

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?".

9 - The CNRS (National center for scientific research)



10 - EDF (Électricité de France)



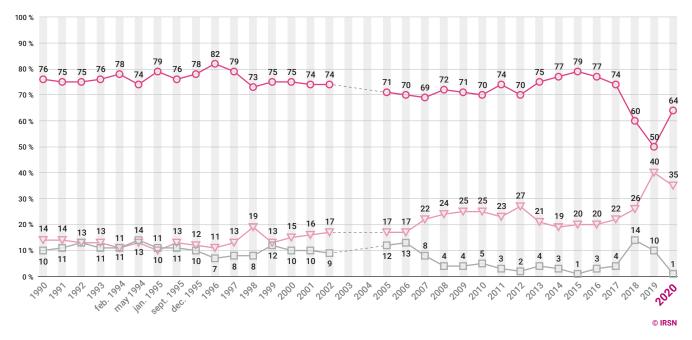
QUESTION No. 14 CONT.

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

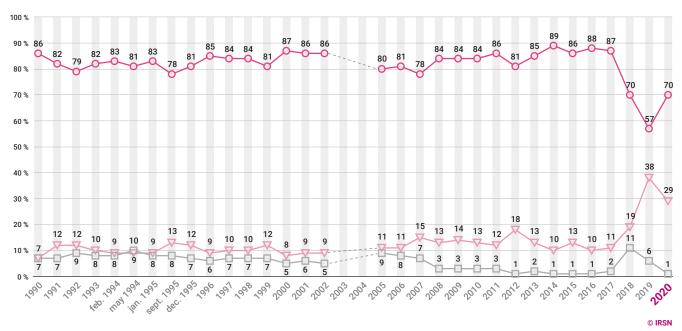
EVOLUTION OF THE RESULTS 1990 - 2020

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11 - Local elected officials



12 - The government



CONT.

In the field of nuclear industry and energy,

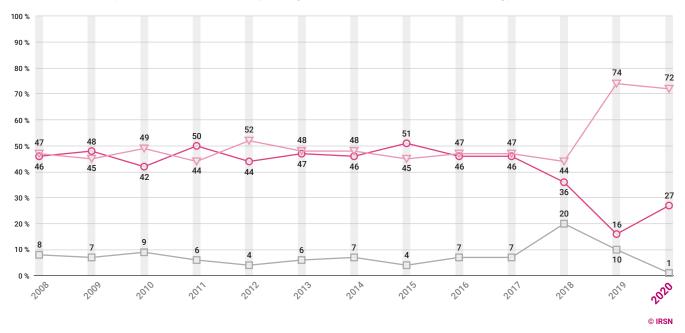
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13 - The HCTISN (High committee for transparency and information on nuclear security)



14 - Politicians



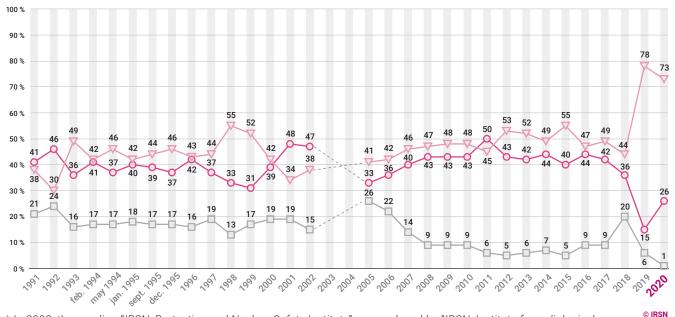
QUESTION No. 14 CONT.

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 1990 - 2020

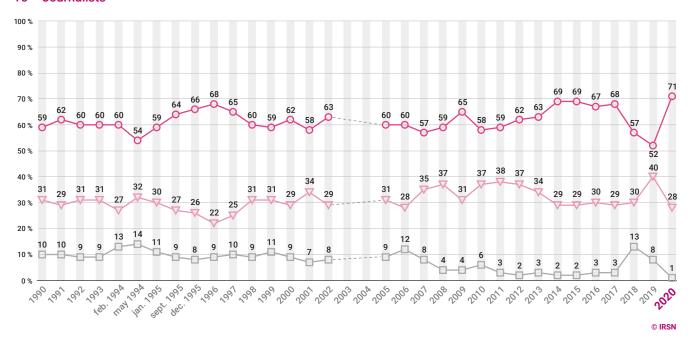
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* In 2002, the wording "IPSN, Protection and Nuclear Safety Institute" was replaced by "IRSN, Institute for radiological protection and nuclear safety".

16 - Journalists



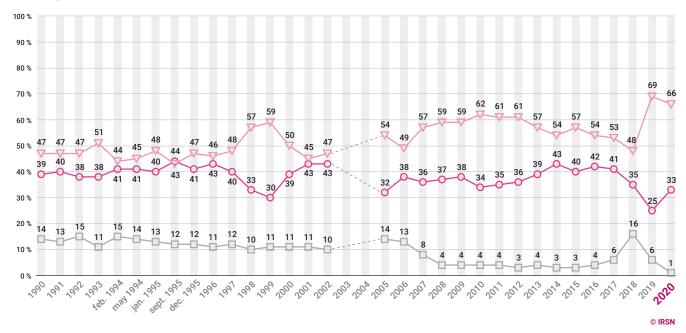
▼ YES - DON'T KNOW O NO

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

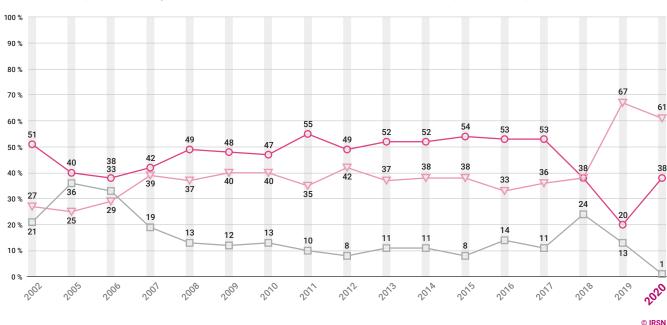
EVOLUTION OF THE RESULTS 1990 - 2020

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?".

17 - Physicians



18 - OPECST (Parliamentary office for the evaluation of scientific and technological choices)



▼YES - DON'T KNOW O NO

CONT.

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 1990 - 2020

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?".

19 - Orano (formerly AREVA)



20 - Labor Unions



ANNEXES

 $\begin{array}{c} 140-141 \\ \text{Description of the sample} \end{array}$

142 - 146

Questionnaire

147

Surveys

ANNEXES

Description of the sample

	(%)	2018 national census	
GEOGRAPHICAL DISTRIBUTION			
Île-de-France	17.9	(17.9)	
East Paris Basin	7.7	(7.7)	
West Paris Basin	9.7	(9.7)	
North	6.4	(6.4)	
East	8.6	(8.6)	
West	14.2	(14.2)	
South West	11.1	(11.1)	
Central East	12.2	(12.2)	
Mediterranean area	12.2	(12.2)	
SIZE OF AGGLOMERATION			
Rural	22.3	(22.3)	
Less than 20 000 hab.	22.0	(22.0)	
Between 20 000 and 100 000 hab.	12.1	(12.1)	
More than 100 000 hab.	28.1	(28.1)	
Paris metropolitan area	15.5	(15.5)	
GENDER			
Man	47.7	(47.7)	
Woman	52.3	(52.3)	
AGE			
18-24 years	10.6	(10.6)	
25-34 years	15.8	(15.8)	
35-49 years	24.8	(24.8)	
50-64 years	24.5	(24.5)	
65 years and more	24.3	(24.3)	
SOCIO-PROFESSIONAL CATEGORY			
Farmer, craftsperson, shopkeeper, entrepreneur	5.2	(5.2)	
Professional (incl. intellectual professions, lawyers, physicians)	10.3	(10.3)	
Intermediate-skill worker	15.0	(15.0)	
Employee	17.0	(17.0)	
Worker	12.7	(12.7)	
Retired, other inactive End of quota variables	39.8	(39.8	

	(%)
STATUS OF THE INTERVIEWEE	
Public sector employee	12
Private sector employee	39
Subtotal employees	51
Self-employed	4
Unemployed	5
Inactive	40
DIPLOMA	
What is the highest degree you have obtained?	
No diploma	3
CEP, CAP	11
Brevet (BEPC, BEP)	11
Subtotal below Baccalaureat	25
Baccalaureat	25
BTS, DUT	20
Other higher education diplomas	30
Subtotal Baccalaureat and more	75
EDUCATION	
Your training is mostly:	
Scientific (physics, mathematics, chemistry, technology computer science)	, 24
Economic and legal sciences (law, management, business)	26
Life sciences, health (medicine, paramedics, pharmacy biology)	. 11
Humanities and social sciences (literature, psychology, sociology, arts)	18
	21
Other	

population.

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 underor over-representation of a socio-demographic parameter that could lead to an inaccurate representation of the French

ANNEXES

Often Sometimes

Rarely Subtotal Yes

Never Don't know

Description of the sample

	(%)		(10)
POLITICAL PROXIMITY		POLITICAL STANCE	
Of the following political parties, can you tell m		Can you tell me where you stand politically?	
which one you feel closest to or let's say the le	ast distant?	Radical left	3
Subtotal Left		Left	12
Lutte Ouvrière	1	Center-left	14
The NPA (New Anti-Capitalist Party)	1	Subtotal left	29
The Communist Party	1	Neither left nor right	40
La France Insoumise	5	Subtotal right	31
The Socialist Party	8	Center-right	16
Europe Écologie Les Verts (Green Party)	8	Right	9
Subotal Centre	17	Far-right	6
La République en Marche	13	•	
Modem	3	RELIGION	
UDI	1	Do you regularly practice a religion?	
Subtotal Right	24	Do you regularly practice a religion?	
Les Républicains	10	Yes	15
Le Rassemblement National	14	Non	85
Another party	4	Don't know	0
No party			
No answer	4	DO YOU LIVE WITHIN 20 KM	
		of a nuclear power plant?	
INCOME LEVEL		Yes	9
Less than 1,000 euros	9	No	90
1,000 to 1,499 euros	11	Don't know	1
1,500 to 1,999 euros	15	of another musican facility?	
2,000 to 2,999 euros	25	of another nuclear facility?	
3,000 to 3,999 euros	17	Yes	6
4,000 to 5,999 euros	9	No	93
5,000 to 6,999 euros	4	Don't know	1
6,000 or more euros	3	of a major chemical facility?	
Don't know	7		15
		Yes	
SCIENTIFIC JOURNALS READING		No Don't know	84
Do you read scientific newspapers, journals or such as Science & Vie, Science et Avenir, Ça m La Recherche?		DOITE KNOW	

10

34 33

77 23

GEOGRAPHICAL DISTRIBUTION

- Île-de-France
- 2 North
- 3 East
- East Paris Basin 4
- 5 West Paris Basin
- 6 West
- 7 South-West
- 8 Central East
- Mediterranean area

SIZE OF AGGLOMERATION

- < 2 000 hab 1
- 2 000 20 000 hab. 2
- 20 000 100 000 hab. 3
- > 100 000 hab
- 5 Paris metropolitan area

Gender

Man

Woman

Record age of the interviewee

Automatically recode age

- 18-24 years
- 2 25-34 years
- 3 35-49 years
- 50-64 years
- 65 years and more

What is your current occupation? (if unemployed having previously worked, code former occupation)

- Farmer, craftsperson, shopkeeper, entrepreneur
- 2 Professional (incl. intellectual professions, lawyers, physicians...)
- 3 Intermediate-skill worker
- 4 Employee
- 5 Worker
- 6 Retired, other inactive

What is your employment status?

- Public sector employee 1
- 2 Private sector employee
- 3 Subtotal employees
- 4 Self-employed
- 5 Unemployed
- Inactive 6

In France, which of the following current issues do you find most concerning?

- The lack of security
- Nuclear risks 2
- 3 Unemployment
- 4 Extreme poverty and exclusion
- 5 Terrorism
- 6 Health
- Climate imbalance
- The global geopolitical instability (migrant crisis, tensions between countries, etc.)
- (Don't know)

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

- The disappearance of animal species
- The destruction of forests
- 3 Climate imbalance
- 4 Water pollution
- 5 The depletion of the ozone layer
- Air pollution
- Soil pollution
- Damage from natural disasters 8
- (Don't know)

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

- Very high
- 2 High
- Medium 3
- 4 Low
- 5 Near zero
- (Don't know)
- 1 Terrorism
- 2 Cancer
- Pandemics (global epidemics) 3
- 4
- Air pollution
- Soil pollution
- 7 Chemical waste
- 8 Water pollution
- 9 Obesity
- 10 Alcohol
- 12 Endocrine disruptors
- Chemical facilities 13
- 14 Radioactive waste
- 15 Heat waves
- 16 GMOs (Genetically Modified Organisms)
- 17 Forest fires
- 18 Nanoparticles
- 19 Noise pollution
- 20 Nuclear power plants
- 21 Occupational diseases
- 22 Mobile phone relay antennas
- Marine flooding (temporary flooding caused by 23 the sea)
- 24 Home and leisure accidents
- 25 Radioactive fallout in France from the Chernobyl accident
- 26 Food products
- 27 Household waste incinerators
- 28 AIDS
- 29 Radiation therapy accidents
- 30 Indoor Radon
- 31 Medical X-rays

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

- Yes. definitely 1
- 2 Yes, somewhat
- Neither trust nor doesn't trust 3
- No. not really
- 5 No, not at all
- 6 (Don't know)
- AIDS 1
- 2 Medical X-rays
- Forest fires 3
- 4 Cancer
- 5 Radiation therapy accidents
- 6 Food products
- 7 Home and leisure accidents
- 8 Terrorism
- Household waste incinerators
- 10 Nuclear power plants
- Heat waves 11
- 12 Occupational diseases
- 13 Alcohol
- 14 Obesity
- 15 Floods
- Water pollution 16
- Marine flooding (temporary flooding caused by 17 the sea)
- 18 Mobile phone relay antennas
- 19 Pandemics (global epidemics)
- 20 Chemical facilities
- 21 Radioactive waste
- 22 GMOs (Genetically Modified Organisms)
- 23 Noise pollution
- 24 Indoor radon 25 Chemical waste
- 26 Air pollution
- 27 Radioactive fallout in France from the Chernobyl
- accident 28 Soil pollution
- 29 Nanoparticles
- 30 Pesticides
- 31 Endocrine disruptors

What is the first thing that comes to mind when you hear the word

"coronavirus"? Please list the first five words that come to mind.

(Answer written in plain text)

(Maximum five words)

Here are a number of proposals regarding scientific expertise. For each one, please indicate on the following scale whether you agree or not.

- Strongly agree
- 2 Somewhat agree
- 3 Neither agree nor disagree
- Somewhat disagree
- 5 Strongly disagree
- 6 (Don't know)
- 1 Understandable information on the risks of installations must be made available to everyone
- 2 In their positions, the scientific experts must also present their points of disagreement
- 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?

- They are technically competent
- 2 They are honest in their scientific approach
- 3 They are independent in their judgement
- They are reactive to unforeseen situations
- They can communicate in a way that everyone understands
- They pay attention to the concerns of the civil society
- (Don't know)

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

- Very good
- 2 Good
- 3 Neither good nor bad
- Poor
- 5 Very bad
- (Don't know)

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

- Strongly agree
- 2 Somewhat agree
- 3 Neither agree nor disagree
- 4 Somewhat disagree
- Strongly disagree 5
- 6 (Don't know)
- 1 When it comes to risk, it is normal to take every precaution even when the scientists only have
- 2 We must be certain of the scientific experts' positions before informing the public
- Policy makers don't take enough into account the positions of scientific experts

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

- Strongly agree
- 2 Somewhat agree
- 3 Neither agree nor disagree
- 4 Somewhat disagree
- 5 Strongly disagree
- 6 (Don't know)
- I trust scientific institutions
- The development of science and technology 2 generates more benefits than negative effects
- 3 There can be more than one correct answer to most scientific questions

Since the start of the 2020 coronavirus epidemic, the government has relied on input from a scientific council to make decisions. In your opinion, is this a good thing?

- Yes, quite
- Yes, somewhat
- 3 No, not really
- 4 No, not at all
- (Don't know)

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)

- A committee of scientific experts
- Public regulatory authorities
- Non-governmental organisations and associations
- Local elected representatives (regional council, general council, municipality)
- The operator of the facility
- A local citizens' committee
- (Don't know)

Would you be willing to live near ...?

- Yes 1
- 2 No
- 3 (Don't know)
- a wind farm
- a mobile phone relay antenna
- 3 a high-voltage power line
- 4 a nuclear research center
- 5 a seismic zone
- 6 a nuclear power plant
- an airport
- 8 a household waste incinerator
- a marine flooding zone (temporary flooding caused by the sea)
- 10 a flood zone
- 11 a radioactive waste disposal
- 12 a landfill
- 13 a major chemical facility
- 14 a chemical waste disposal

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

- Yes, once a year
- 2 Yes, two or three times a year
- 3 Yes, four or more times a year
- 4 No
- 5 (Don't know)

A structure 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...?

- Very useful
- Somewhat useful 2
- Not very useful 3
- 4 Not at all useful (Don't know)

Which of the following industrial or technological activities do you think is most likely to cause a serious accident or a disaster in France?

- Chemical facilities
- Transport of hazardous material 2
- Natural gas distribution 3
- Nuclear power plants 4
- 5 Dams
- Radioactive waste disposals 6
- 7 Air transport
- 8 Virus research laboratories
- 9 Other, please specify: ...
- 10 (Don't know)

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.

- A priority
- 2 Secondary
- 3 Useless
- (Don't know)
- 1 Make public its expertise reports
- Answer all the questions raised by NGOs and 2
- 3 Organise public meetings to discuss its work
- Make available to all the list of all its current 4
- 5 Make available to all the list of requests for expertise

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.

- Yes, definitely
- 2 Yes, somewhat
- No not really 3
- 4 No, not at all
- 5 (Don't know)
- 1 The lack of scientific certainty
- 2 The fight against terrorism
- The fact that the decision related to the result of the expertise has not yet been taken
- 4 The "Top secret" military classification
- The impossibility to express the results in terms 5 understandable by the public
- Industrial secrecy

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

- Yes 1
- 2 No
- 3 (Don't know)
- 1 The CNRS (National center for scientific
- 2 ASN (Nuclear safety authority)
- 3 IRSN (Institute for radiological protection and nuclear safety)
- 4 CEA (Atomic energy commission)
- International agencies (IAEA, NEA, etc.) 5
- The Academy of Sciences 6
- ANDRA (National agency for radioactive waste
- The HCTISN (High committee for transparency 8 and information on nuclear security)
- Environmental NGOs
- EDF (Electricité de France)

- 11 Physicians
- 12 OPECST (Parliamentary office for the evaluation of scientific and technological choices)
- 13 Consumer protection NGOs
- Orano (formerly AREVA)
- 15 The CLI (Local Information Commissions)
- 16 The government
- 17 Journalists
- Local elected officials 18
- 19 Labor Unions
- 20 Politicians

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

- Yes
- 2 No
- (Don't know)
- The CNRS (National center for scientific 1 research)
- 2 ASN (Nuclear safety authority)
- 3 IRSN (Institute for radiological protection and nuclear safety)
- CEA (Atomic energy commission)
- 5 International agencies (IAEA, NEA, etc.)
- The Academy of Sciences
- ANDRA (National agency for radioactive waste management)
- The HCTISN (High committee for transparency 8 and information on nuclear security)
- **Environmental NGOs**
- 10 EDF (Electricité de France)
- Physicians 11
- OPECST (Parliamentary office for the evaluation of scientific and technological choices)
- 13 Consumer protection NGOs
- Orano (formerly AREVA) 14
- The CLI (Local Information Commissions)
- 16 The government
- Journalists 17
- 18 Local elected officials
- 19 Labor Unions
- 20 Politicians

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

- The risk of an accident 1
- 2 The production of radioactive waste
- The lack of transparency in the nuclear industry 3
- The cost of nuclear power (construction, decommissioning, waste)
- 5 The competition with investments in renewable energies
- 6 The emission of greenhouse gas
- 7 Other
- (Don't know)

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

- Energy independence
- 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
- Other 6
- (Don't know)

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.

- Strongly agree
- 2 Somewhat agree
- Neither agree nor disagree 3
- Somewhat disagree 4
- Strongly disagree
- 6 (Don't know)
- Building nuclear power plants was a good thing
- 2 Nuclear power plants must be closed
- New nuclear power plants must to be built

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

- A good choice
- 2 A bad choice
- 3 A realistic choice
- (Don't know)

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

- Strongly agree
- 2 Somewhat agree
- Neither agree nor disagree 3
- Somewhat disagree
- 5 Strongly disagree
- 6 (Don't know)
- Nuclear site operators must protect their facilities from all risks, even those considered very unlikely
- 2 Nuclear sites can cause groundwater contamination
- Every precaution is being taken to ensure a very high level of safety in French nuclear power
- 4 Radioactivity from nuclear power plants will
- Around nuclear facilities, people are as healthy as elsewhere
- Today, it is possible to safely store nuclear 6 waste

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.

- A priority
- 2 Secondary
- 3 Useless
- (Don't know)
- 1 Strengthen inspections by competent authorities in the facilities
- 2 Develop research on the safety of existing nuclear reactors
- Improve the capacity of France to handle a 3 possible nuclear emergency
- Better take into account the human factor and work organization
- 5 Develop research to design a new generation of nuclear reactors
- Strengthen the ability of citizens to exercise vigilance over the safety of facilities

In your opinion, what is currently being done with the very low-level waste produced in France, known as "very low-level waste"?

- This waste is placed permanently in a surface disposal facility.
- This waste is sent to other countries
- This waste is reused as backfill in nuclear construction sites
- This waste is placed permanently on the bottom of the ocean
- (Don't know)

In your opinion, are the following events likely to occur in or near a French "high-level" waste disposal site?

- Very believable
- 2 Somewhat believable
- 3 Neither believable nor not believable
- 4 Not really believable
- Not at all believable 5
- (Don't know)
- Contamination of agricultural products in the 1 vicinity of the site
- Air pollution by radioactive elements
- Irradiation of the population living nearby
- An underground explosion

Today, in France, the most radioactive waste is mixed with molten glass in sealed stainless steel containers. It will be stored in tunnels dug into the clay 500 m deep and sealed with concrete. Thus, in your opinion, are the following events likely to occur in or near a French "high-level" waste disposal site?

- Very believable
- 2 Somewhat believable
- 3 Neither believable nor not believable
- 4 Not really believable
- Not at all believable
- 6 (Don't know)
- Contamination of agricultural products in the vicinity of the site
- 2 Air pollution by radioactive substances
- 3 Irradiation of the population living nearby
- An underground explosion

Do you live within 20 km...

- Yes
- 2 Nο
- (Don't know) 3
- 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?

- The explosion of the AZF factory in Toulouse in
- 2 The Haiti earthquake in 2010
- 3 The accident at the Chernobyl nuclear power plant
- The Xynthia storm of February 2010 in western France
- 5 The Indian Ocean tsunami of December 26th 2004
- 6 The accident at the Fukushima nuclear power plant
- 7 The 2003 heat wave in France
- Other, please specify: ... 8
- (Don't know)

Here are some old catastrophic events. Can you indicate if you have personally heard about them?

- Yes, and I know exactly what it is
- 2 Yes, and I know approximately what it is
- 3 Yes, but only in name
- 4 No, I have never heard of it
- (Don't know) 5
- 1 The oil spill on the Brittany coast due to the sinking of the Amoco Cadiz in 1978
- The oil spill on the French coastline due to the sinking of the Erika in 1999
- 3 The Union Carbide chemical plant accident in Bhopal, India in 1984
- The Mexico City earthquake in 1985
- 5 The sinking of the Russian submarine Kursk in
- The storms of December 1999 in France
- The Air France Concorde crash in Gonesse in

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
- (Don't know)

How likely do you think such an accident is?

- Very likely
- 2 Somewhat likely
- Somewhat not likely
- 4 Not at all likely
- (Don't know)

Almost 10 years have passed since the Fukushima accident. Here are a number of proposals relating to the Chernobyl and Fukushima nuclear accidents. For each proposal, please indicate your opinion according to the following scale if you agree or not.

- Strongly agree 1
- 2 Somewhat agree
- Neither agree nor disagree 3
- Somewhat disagree
- 5 Strongly disagree
- 6 (Don't know)
- 1 The French are not told the truth about the consequences of the Chernobyl accident
- 2 The French are not told the truth about the consequences of the Fukushima accident
- When the Fukushima accident happened, the French authorities gave the public complete and correct information
- When the Chernobyl accident happened, the French authorities gave the public complete and correct information
- 5 After the Chernobyl accident, radioactivity in France remained very low

Finally, here are some final questions: What is the highest degree you have been graduated?

- No diploma / Primary education 1
- 2 **BEPC**
- 3 CAP
- 4 BEP
- Baccalaureate 5
- Bac +2 6
- 7 Bac +3
- 8 Bac +4
- 9 Bac +5
- 10 Business schools, grandes écoles
- 11 Higher than Bac +5
- 12 (Don't know)

Your training is rather:

- Scientific (physics, maths, chemistry, technology,
- 2 Economic and legal sciences (law, management,
- Life sciences, health (medicine, paramedics, pharmacy, biology)
- Humanities and social sciences (literature, psychology, sociology, arts)
- Other, please specify: ...
- (Don't know)

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

- Often
- 2 Sometimes
- 3 Rarely
- Never
- (Don't know)

Without thinking only about the elections, which political party or movement do you feel closest to?

- Lutte Ouvrière
- 2 The NPA (New Anti-Capitalist Party)
- 3 The Communist Party
- 4 La France Insoumise
- The Socialist Party
- Generation.s
- Le Parti radical
- Europe Écologie Les Verts (Green Party)
- 9 La République en Marche
- 10 Modem
- 11 UDI
- 12 Les Républicains
- 13 Debout la France
- 14 Le Rassemblement national
- 15 Another party
- 16 No party
- 17 Do not answer

Can you tell me where you stand politically?

- Radical left
- Left
- 3 Center-left
- Neither left nor right
- 5 Center-right
- Right
- Radical right

What is your monthly net income of your household?

- Less than 1.000 euros
- 2 1,000 to 1,499 euros
- 1,500 to 1,999 euros 3
- 4 2,000 to 2,999 euros
- 5 3,000 to 3,999 euros
- 4,000 to 5,999 euros
- 7 5,000 to 6,999 euros
- 8 6,000 or more euros
- (Don't know)

Do you regularly practice a religion?

- Yes
- 2 Nο
- 3 (Don't know)

Finally, do you have any comments on this questionnaire?

ANNEXES Surveys

Year	Size of the sample	Type of survey	Polling company
December 1990	1,000	EXCLUSIVE	BVA
June 1991	1,010	EXCLUSIVE	BVA
April 1992	1,014	EXCLUSIVE	BVA
October 1992	951	OMNIBUS	BVA
May 1993	1,022	EXCLUSIVE	BVA
February 1994	944	OMNIBUS	BVA
May 1994	942	OMNIBUS	BVA
January 1995	972	OMNIBUS	BVA
September 1995	1,052	EXCLUSIVE	BVA
December1995	1,000	EXCLUSIVE	BVA
May 1996	1,009	EXCLUSIVE	BVA
August 1997	1,002	OMNIBUS - TÉL	BVA
NovDec. 1997	1,035	EXCLUSIVE	BVA
October 1998	1,012	EXCLUSIVE	BVA
October 1999	1,015	EXCLUSIVE	BVA
October 2000	1,000	EXCLUSIVE	BVA
November 2001	1,032	EXCLUSIVE	BVA
November 2002	1,082	EXCLUSIVE	BVA
October 2004	1,008	EXCLUSIVE	BVA
November 2005	1,047	EXCLUSIVE	BVA
November 2006	1,042	EXCLUSIVE	BVA
November 2007	1,002	EXCLUSIVE	BVA
December 2008	1,002	EXCLUSIVE	BVA
December 2009	1,003	EXCLUSIVE	BVA
December 2010	1,009	EXCLUSIVE	BVA
October 2011	1,013	EXCLUSIVE	BVA
October 2012	1,005	EXCLUSIVE	BVA
October 2013	1,022	EXCLUSIVE	BVA
November 2014	1,006	EXCLUSIVE	BVA
NovDec. 2015	1,016	EXCLUSIVE	BVA
NovDec. 2016	1,025	EXCLUSIVE	BVA
NovDec. 2017	1,005	EXCLUSIVE	BVA
NovDec. 2018	1,039	EXCLUSIVE	CDA
NovDec. 2019	1,039	EXCLUSIVE	CDA
NovDec. 2020	1,032	EXCLUSIVE	CDA
November 2020	1,048	EXCLUSIVE	CDA
November 2020	2,011	EXCLUSIVE - WEB	HARRIS INTERACTIVE

For further information

IRSN

BP 17 - 92262 Fontenay-aux-Roses Cedex

Telephone: +33 (0)1 58 35 92 23

Email: ludivine.gilli@irsn.fr

Previous editions of the barometer are available on the Internet at the following address:

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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.



31, avenue de la Division-Leclerc 92260 Fontenay-aux-Roses France RCS Nanterre B 440 546 018

COURRIER

BP 17 92262 Fontenay-aux-Roses Cedex France **TELEPHONE** +33 (0)1 58 35 88 88

WEBSITE

www.irsn.fr

E-MAIL

contact@<u>irsn.fr</u> **y** @<u>irsn</u> france

