

Press Release

Czech public opinion on nuclear energy – May 2018

- ⊙ Approximately three in ten citizens think that the proportion of nuclear energy in electricity production should increase in future; more than two-fifths think that the proportion of nuclear energy should be kept at current level; and under one-fifth believe that this proportion should decrease.
- ⊙ Approximately every other person agrees with the completion of the third and fourth units of the Temelín Nuclear Power Station (TNPS), one in three does not agree.

Prepared by:

Jan Červenka, Martin Ďurďovič

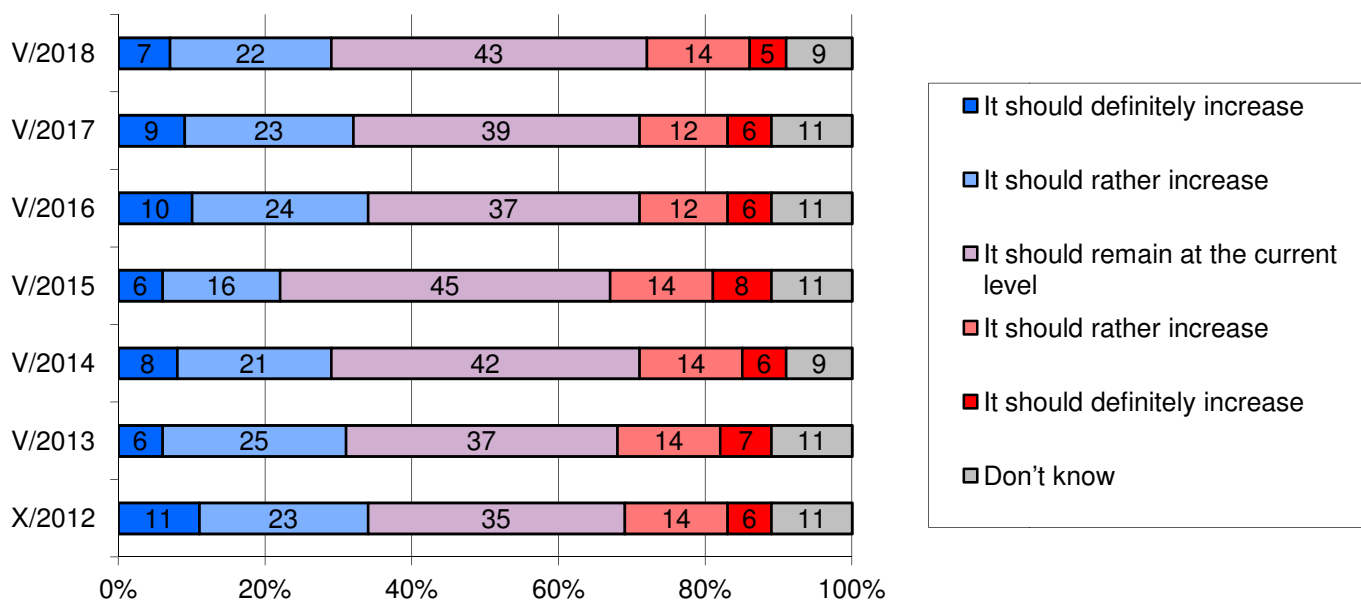
Public Opinion Research Centre, Institute of Sociology, Czech Academy of Sciences

Phone: +420 210310592



In its May 2018 survey, the Our Society series included a battery of questions on issues of nuclear energy. The survey examined public opinion about whether the proportion of nuclear energy in electricity production should increase or decrease in future, what people think about completing the third and fourth units of the TNPS, whether or not they are concerned about the use of nuclear energy in the country, and whether they have confidence in the government's decisions about the development of nuclear energy.

Graph 1: Should the proportion of nuclear energy in electricity production increase or decrease?¹



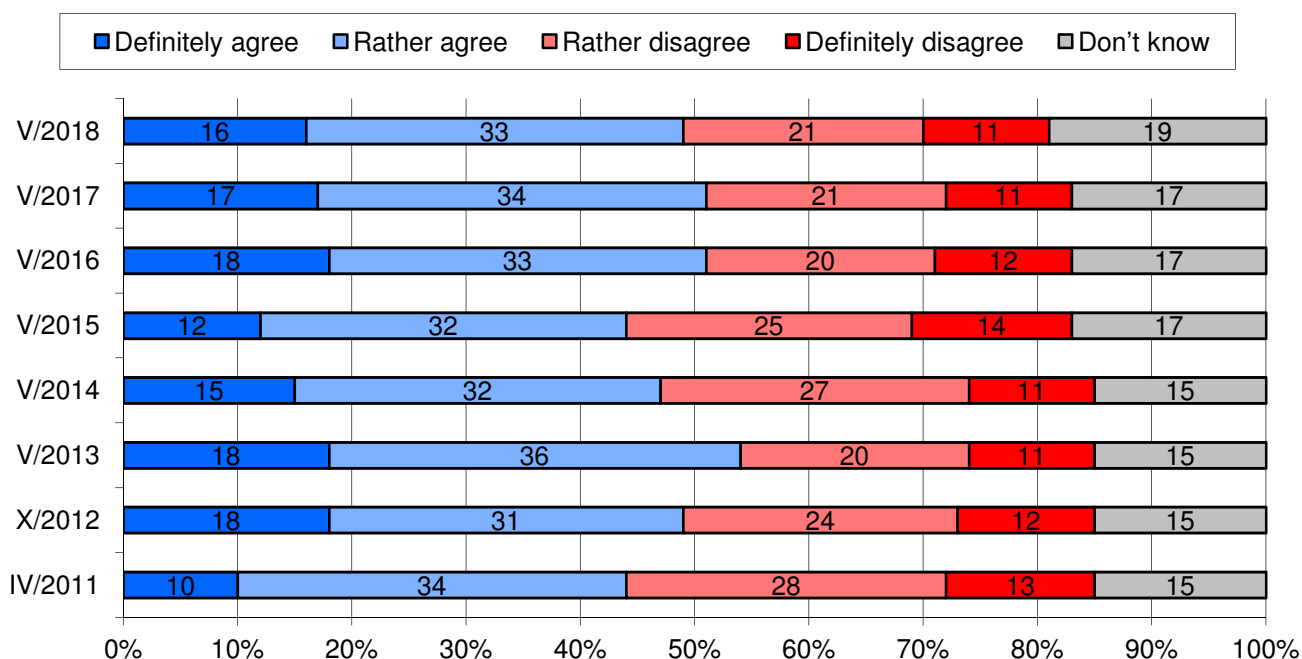
Source: Public Opinion Research Centre, Institute of Sociology CAS (CVVM SOÚ AV ČR, v.v.i.), Czech Society (*Naše společnost*), May 12–24, 2018, 1008 respondents aged 15 and over, face-to-face interviews.

¹ Question: "Do you think that the proportion of nuclear energy in electricity production in our country should increase, remain at the current level, or should it decrease in future? It should definitely increase, it should rather increase, it should remain at the current level, it should rather decrease, it should definitely decrease."

As shown in Graph 1, about three in ten (29%) citizens think that the proportion of nuclear energy in electricity production should increase in future – among them, 7% think it should “definitely” and 22% “rather” increase. More than two-fifths (43%) believe that the proportion of nuclear energy should be preserved at current level, and just under one-fifth (19%) find that the proportion should decrease – among them, 14% think it should “rather” and 5% “definitely” decrease. The remaining almost one-tenth (9%) were unable to respond to the question about proportion of nuclear energy in the future energy mix. Compared to the last year, the distribution of opinions on the question did not change significantly, except a minor growth (plus 4 percentage points) of those in favour of preserving the current level. Compared to the year 2015, the percentage of those in favour of increasing the proportion of nuclear energy has grown (by 7 percentage points); the level of support for increasing the proportion of nuclear energy in the mix is 5 percentage points lower than in the years 2012, when that question was asked for the first time, and 2016.

Detailed analysis revealed that men, college graduates, residents of the South Moravian Region, respondents rating the country’s economic situation as good, those with self-declared interest in the country’s energy policy, those rating the country’s energy policy at level 1, those expecting electricity consumption to “definitely increase” and those who consider traditional sources of electric energy as irreplaceable were more likely in favour of increasing the proportion of nuclear energy in electricity production. In addition, men, residents of the South Moravian Region, highly qualified experts or managers, people who trusted the government, those rating the country’s economic situation as good, those with self-declared interest in the country’s energy policy and those sceptical about the possibility of replacing traditional sources of electric energy were less likely to favour decreasing the proportion of nuclear energy in electricity production. In contrast, women, respondents who did not trust the government, those rating the country’s energy policy at levels 4 or 5, those expecting electricity consumption to decrease, those not interested in the country’s energy policy and those who consider traditional sources of electric energy as replaceable were more likely to favour decreasing the proportion of nuclear energy in electricity production.

Graph 2: Completion of the third and fourth units of the TNPS (%)²



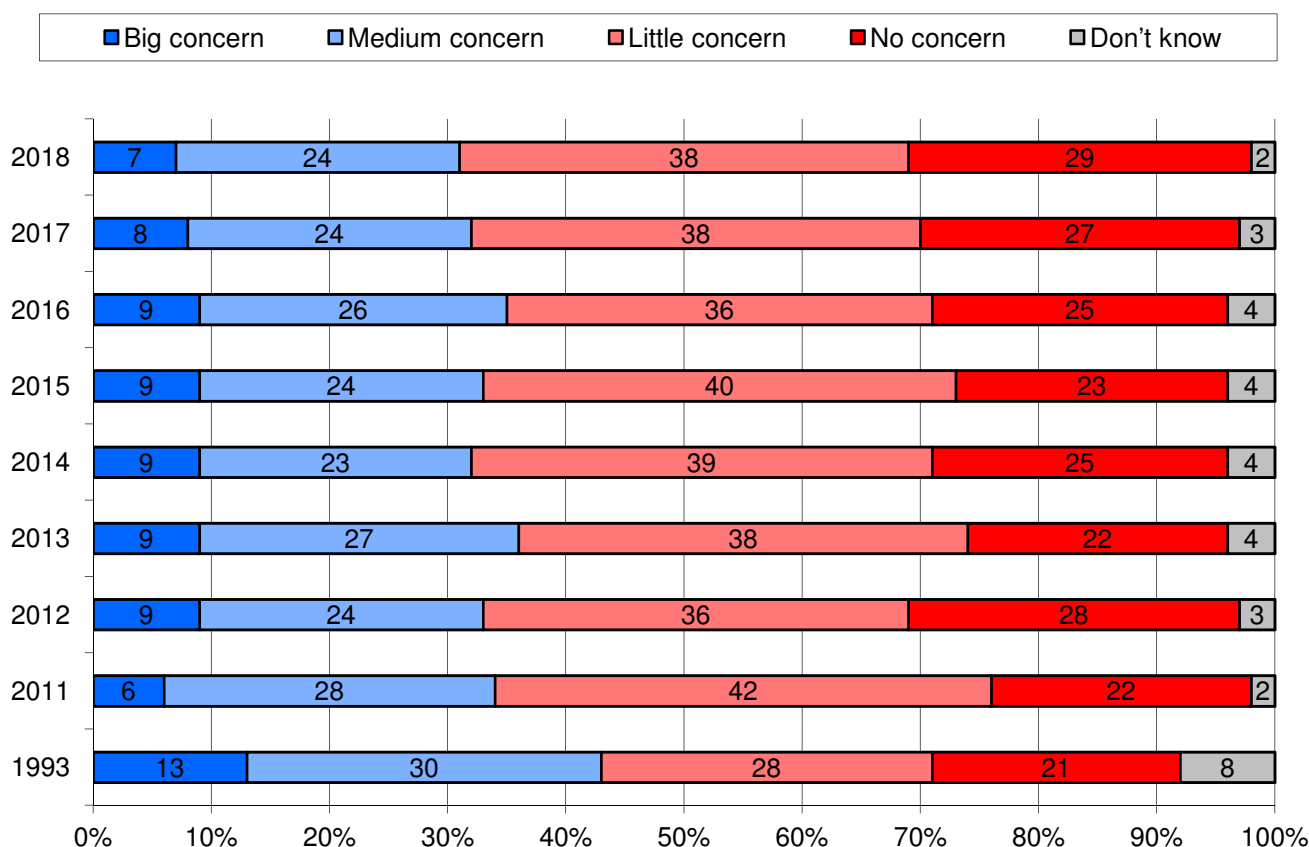
Source: Public Opinion Research Centre, Institute of Sociology CAS (CVVM SOÚ AV ČR, v.v.i.), Czech Society (*Naše společnost*), May 12–24, 2018, 1008 respondents aged 15 and over, face-to-face interviews.

² Question: “As for the completion of the third and fourth units of the TNPS, do you think that the completion should be implemented? Definitely agree, rather agree, rather disagree, definitely disagree.”

As shown in Graph 2, about one-half (49%) were in favour of completing the TNPS, whereas 16% definitely agreed and 33% rather agreed with the completion. About every third citizen (32%) opposed the completion, with 21% “rather” and 11% “definitely” opposed. 19% of the respondents did not know how to respond to the question. Furthermore, Graph 2 demonstrates that support for completing the power station has not shifted significantly over the past year, although it is statistically significantly lower (by 5 percentage points) than the peak value (54%) of the year 2013.

Detailed analysis revealed that the completion of the TNPS is more frequently supported by men (women are more likely undecided), college graduates, highly qualified experts or managers, residents of the South Moravian Region, residents of towns with a population of 15–30 thousand, respondents with a high standard of living, those rating the country’s economic situation as good, those with self-declared interest in the country’s energy policy, those rating the country’s energy policy at levels 1 or 2, those who consider traditional sources of electric energy as irreplaceable and those who believe that the proportion of nuclear energy in electricity production should increase. The completion of the TNPS is more frequently opposed by people rating the country’s economic situation as “bad” or “neither good nor bad”, those who declared no interest in the country’s energy policy, those rating the country’s energy policy at levels 4 or 5, those who consider traditional sources of electric energy as replaceable, those expecting electricity consumption to decrease and, above all, those who believe that the proportion of nuclear energy in electricity production should decrease in future.

Graph 3: Concerns about the use of nuclear energy (%)³



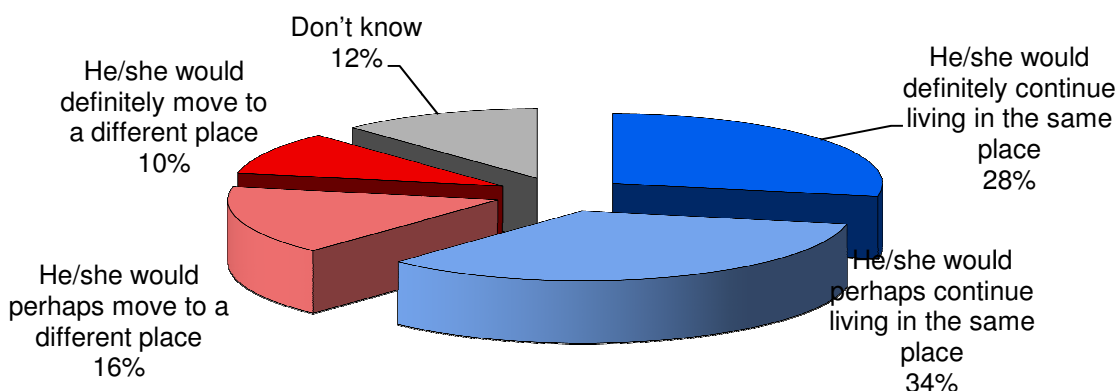
Source: Public Opinion Research Centre, Institute of Sociology CAS (CVVM SOÚ AV ČR, v.v.i.), Czech Society (*Naše společnost*), May 12–24, 2018, 1008 respondents aged 15 and over, face-to-face interviews.

³ Question: “Do you personally feel concern about the use of nuclear energy in our country? Big concern, medium concern, little concern, no concern at all.”

Just under one-third of people (31%) expressed big or medium concerns about the use of nuclear energy in the Czech Republic, with 7% feeling “big concern” and 24% “medium concern”. Two-thirds (67%) of the respondents expressed little or no concerns; of them, 38% talked about “little concern” and 29% expressed “no concern at all”. There has been no statistically significant change from last year’s survey; compared to the year 2016, the proportion of those with “little” or “no” concern increased (by 6 percentage points) and the percentage of those feeling “big” or “medium” concern decreased slightly (by 2 percentage points). In spite of these minor fluctuations in the distribution of answers on the scale applied, the level of concerns about the use of nuclear energy has been relatively stable since 2011 and, at the same time, considerably below the level of the year 1993, when the question was first included in its current form. More specifically, the proportion of those with “big” and “medium” concern is 12 percentage points lower than in 1993.

Detailed analysis reveals that women are somewhat more likely to express concern than men. Relatively higher levels of concern are also expressed by people with self-declared interest in the country’s energy policy. “Big concern” is more often expressed by people rating the country’s energy policy at level 5, while “big” or “medium concern” is less often expressed by those rating the country’s energy policy at level 2. “Big concern” is also more likely expressed by those who expect electricity consumption in the country to “definitely increase”. Lower levels of concern are exhibited by respondents who are sceptical about the possibility of replacing traditional sources of electric energy, whereas people with the opposite view on the replaceability of traditional sources are less likely to mention “no concern at all” and more likely to express “medium concern”, in particular; those undecided in that respect are more likely to express “big concern”. These concerns are relatively strongly correlated to general attitudes to nuclear energy. Concerns are especially expressed by those who think that the proportion of nuclear energy in electricity production should decrease in future, whereas proponents of an increase are more likely to express no concern at all and less likely to express big or medium concern, in particular. The same applies to those in favour of and opposed to completing the TNPS, respectively, whereas the former are more likely to express no concern and the latter more likely to express big or medium concern.

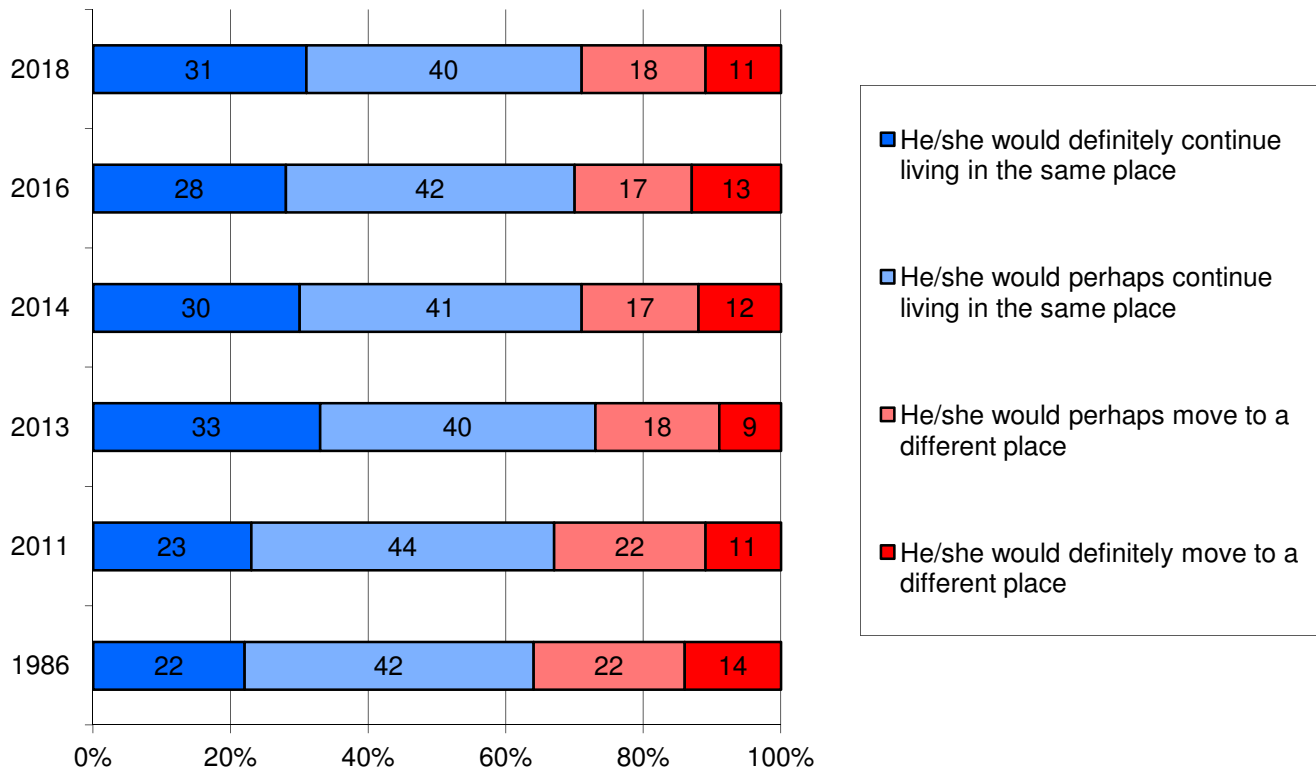
Graph 4: Relocation should a nuclear power plant become operational within 20–30 km of one’s place of residence (%)⁴



Source: Public Opinion Research Centre, Institute of Sociology CAS (CVVM SOÚ AV ČR, v.v.i.), Czech Society (*Naše společnost*), May 12–24, 2018, 1008 respondents aged 15 and over, face-to-face interviews.

⁴ Question: “How would you act should a nuclear power plant become operational within 20–30 km of your place of residence? You would definitely continue living in the same place, you would perhaps continue living in the same place, you would perhaps move to a different place, you would definitely move to a different place.”

Graph 5: Relocation should a nuclear power plant become operational within 20–30 km of one’s place of residence – time comparison (%)



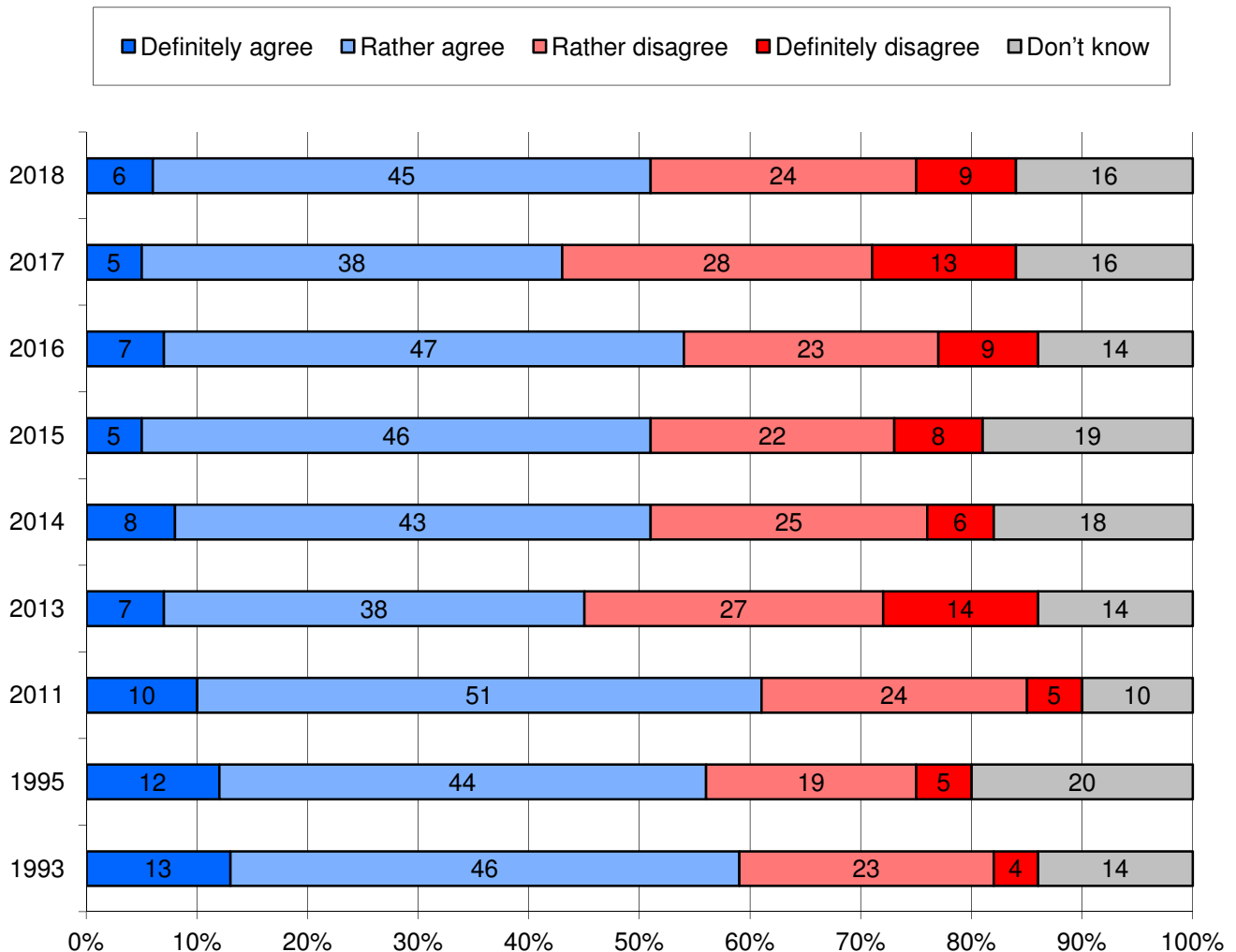
Note: The “don’t know” answers were left out from the analysis for the years 2011–2018 to ensure comparability with the 1986 survey.

Source: Public Opinion Research Centre, Institute of Sociology CAS (CVVM SOÚ AV ČR, v.v.i.), Czech Society (*Naše společnost*).

As shown in Graphs 4 and 5, a large majority of Czech citizens would not consider the building and operation of a nuclear power plant in relative vicinity of their home to be a reason to relocate. In the current survey, approximately one in four (26%) respondents agreed they would relocate if a nuclear power plant became operational within 30 km of their place of residence (10% would “definitely move” and 16% “perhaps”). In contrast, slightly more than three-fifths (62%) would continue living in the same place (28% “definitely” and 34% “perhaps” so). In contrast to the surveys in 1986 and 2011, both of which took place immediately after the accidents at the Chernobyl and Fukushima nuclear power plants, respectively, there is a lower proportion of those who would seek relocation from the vicinity of a nuclear power plant and a higher percentage of those who say they would “definitely” stay.

More likely in favour of staying were men, college graduates, retired persons, people from municipalities or towns with a population below 2 thousand (higher percentages of those who would “definitely continue living in the same place”), residents of the South Bohemian and South Moravian regions, those rating the country’s energy policy at levels 1 or 2, those who consider traditional sources of electric energy as irreplaceable, and generally those with favourable attitudes to nuclear energy, namely proponents of increasing the proportion of nuclear energy in electricity production and of completing Units 3 and 4 of the TNPS or those with no or little concern about the use of nuclear energy. In contrast, relocation was more often favoured by respondents from the Hradec Králové and Moravian-Silesian regions, those rating the country’s energy policy at levels 4 or 5, those who consider traditional sources of electric energy as replaceable, and opponents of nuclear energy who believe that the proportion of nuclear energy in electricity production should decrease or who express big or medium concern about the use of nuclear energy.

Graph 6: Confidence in government's decisions about development of nuclear energy in the Czech Republic (%)⁵



Source: Public Opinion Research Centre, Institute of Sociology CAS (CVVM SOÚ AV ČR, v.v.i.), Czech Society (*Naše společnost*), May 12–24, 2018, 1008 respondents aged 15 and over, face-to-face interviews.

As for the extent to which Czechs confide in their government's decisions about the development of nuclear energy in the country (see Graph 6), more people currently express confidence than no confidence. Confidence in the government's decisions in this respect is felt by about one-half (51%) of the respondents, namely 6% "definitely" and 45% "rather" so, whereas 33% feel no confidence (24% "rather" and 9% "definitely" so). 16% of the respondents were unable to answer and picked the "don't know" option. Compared to last year's survey, there has been a remarkable growth of confidence in government's decisions about the development of nuclear energy in the country, namely by 8 percentage points, while the percentage of those with no confidence decreased equally by 8 percentage points. This, however, only means that the distribution of answers aligned back with the years 2014–2016. Last year's drop likely

⁵ Question: "Do you feel confidence in the government of the Czech Republic that it is making the right decisions about the development of nuclear energy in the country? Definitely agree, rather agree, rather disagree, definitely disagree."

reflected the overall decline of confidence in government, which was undergoing a crisis at the time of the survey. Somewhat higher levels of confidence in government in this respect were seen in the 1990s and as late as in 2011, whereas respondents in the years 2013 and 2017 declared lower levels of confidence in their government's decisions about the development of nuclear energy in the country.

Detailed analysis reveals that confidence in the government's decisions about the development of nuclear energy in the country is significantly linked to trust in government as such.⁶ Higher levels of confidence in this type of government decisions are exhibited by college graduates, highly qualified experts or managers, respondents with a high standard of living, those rating the country's economic situation as good, those interested in the country's energy policy, those rating the country's energy policy at levels 1 or 2, those expecting electricity consumption to "rather increase", those in favour of increasing the proportion of nuclear energy in electricity production, those in favour of completing the TNPS, those with little or no concern about nuclear energy, and those who would not relocate due to a nuclear installation. In contrast, among the respondents more likely to express no confidence in this type of government's decisions were unemployed respondents, those rating the country's economic situation as bad, those expecting electricity consumption in the country to decrease, those rating the country's energy policy at levels 4 or 5, those in favour of decreasing the proportion of nuclear energy in electricity production, those opposed to completing the TNPS, those with big or medium concern about nuclear energy, and respondents who would definitely or perhaps move should a nuclear installation arise in the vicinity of their home.

⁶ The Spearman rank-order correlation coefficient between trust in government and confidence in its decisions about the development of nuclear energy in the country equals 0.357.

Technical parameters of the survey

<i>Survey:</i>	<i>Czech Society, v18-05</i>
<i>Survey by:</i>	<i>Public Opinion Research Centre, Institute of Sociology, Czech Academy of Sciences</i>
<i>Project:</i>	<i>Czech Society – Continuous Public Opinion Research Project of the Public Opinion Research Centre, Institute of Sociology, Czech Academy of Sciences</i>
<i>Survey dates:</i>	<i>12–24 May 2018</i>
<i>Sampling method:</i>	<i>Quota sampling</i>
<i>Quotas:</i>	<i>Region (NUTS 3 Regions), size of place of residence, sex, age, education</i>
<i>Data source for quota sampling:</i>	<i>Czech Statistical Office</i>
<i>Representativeness:</i>	<i>Population of the Czech Republic aged 15+</i>
<i>Number of respondents:</i>	<i>1008</i>
<i>Number of interviewers:</i>	<i>227</i>
<i>Data collection method:</i>	<i>Face-to-face interviews conducted by interviewers with respondents – mixed CAPI and PAPI methods</i>
<i>Research instrument:</i>	<i>Standardised questionnaire</i>
<i>Questions:</i>	<i>OE.53, OE.44, OE.42, OE.43, OE.41</i>
<i>Press release no.:</i>	<i>oe180913b_en</i>
<i>Published on:</i>	<i>13th September 2018</i>
<i>Prepared by:</i>	<i>Jan Červenka, Martin Ďurďovič</i>

Glossary of terms:

A quota sample replicates the structure of the **basic population** of the study (in this case the population of the Czech Republic aged 15+) by setting quotas for different parameters. **In other words, a quota sample is based on the same proportion of persons with the selected characteristics.** We used data from the Czech Statistical Office to create the quotas. In our surveys, quotas are set for sex, age, education, region, and community size. The sample is thus selected so that the percentage of men and women in the sample, for instance, corresponds to the share of men and women in each region of the CR. Similarly, the sample reflects the corresponding shares of the population in individual regions in the CR, citizens in different age groups, people with different levels of educational attainment, and people in different sizes of communities.

A representative sample is a sample of the total population whose characteristics can be validly inferred to apply as the characteristics of the population overall. In our case, this means that respondents were selected with a view to generalising the collected data as applicable to the population of the Czech Republic aged 15 and over.

The Public Opinion Research Centre (CVVM) is a research department of the Institute of Sociology, Czech Academy of Sciences. It dates back to 1946, when the Czechoslovak Institute for Public Opinion Research began operating as part of the Ministry of Information. The current CVVM emerged in 2001 when its predecessor (IVVM) was transferred from the Czech Statistical Office to the Institute of Sociology. Its incorporation within an academic institution provides a guarantee of high professional standards and quality, and as part of an academic environment, the CVVM **is required to fulfil criteria that ensure it meets the highest professional standards.** The CVVM's work is centred on the Czech Society research project, under which it examines public opinion by conducting ten surveys annually on a representative sample of the population over the age of 15, with approximately 1000 respondents participating in each survey. The questionnaire's omnibus format makes it possible to cover a wide array of topics. Political, economic, and other general social topics are regularly covered by the survey. The surveys include both repeat questions, whereby it is possible to observe phenomena over time, and new topics that reflect current events. The long-term and continuous nature of this public opinion survey project is unique in the Czech Republic.

This work has been supported by the AV21 Strategy of the Academy of Sciences under the ‘Systems for Nuclear Energy’ research programme and the ‘Social Aspects of Nuclear Energy’ research topic. |