

Public Attitudes to Nuclear Power in Sweden 2023

EECC – Swedish Opinion on
Environment, Energy and Climate
Change

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the National SOM Survey 2023

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Table of Contents

Table 1 Opinion about the long-term use of nuclear power, 2020–2023 (percent).....	2
Figure 1 Abolish or use nuclear power in the long-term, 2010–2023 (percent)	3
Figure 2 Use nuclear power in the long term by gender, 2010–2023 (percent)	4
Figure 3 Use nuclear power in the long-term by age, 2010–2023 (percent)	5
Figure 4 Use nuclear power in the long-term by ideology, 2010–2023 (percent).....	6
Table 2 Use nuclear power in the long-term by party affiliation, 2010–2023 (percent).....	7
Table 3 Attitudes towards hydropower, wind power, nuclear power and solar power, 2012–2023 (percent)	8
Figure 5 Attitudes towards nuclear power, 2012–2023 (percent)	9
Figure 6 Positive attitude towards nuclear power by gender, 2012–2023 (percent).....	10
Figure 7 Positive attitude towards nuclear power by age, 2012–2023 (percent).....	11
Figure 8 Positive attitude towards nuclear power by ideology, 2012–2023 (percent)	12
Table 4 Positive attitude towards nuclear power by party affiliation, 2012–2023 (percent)	13
Figure 9 Share that wants to invest more in different energy sources, 1999–2023 (percent)	14
Figure 10 Share that wants to invest more, invest about the same as today, invest less, or completely give up nuclear energy as an energy source, 1999–2023 (percent)	15
Figure 11 Invest more in nuclear power by gender, 1999–2023 (percent).....	16
Figure 12 Invest more in nuclear power by age, 1999–2023 (percent).....	17
Figure 13 Invest more in nuclear power by ideology, 1999–2023 (percent).....	18
Table 5 Invest more in nuclear power by party affiliation, 1999–2023 (percent).....	19
Figure 14 Attitude towards investments in Small Modular Reactors (SMRs), 2023 (percent)	20
Figure 15 Positive attitude towards SMRs by gender, 2023 (percent).....	21
Figure 16 Positive attitude towards SMRs by age, 2023 (percent).....	22
Figure 17 Positive attitude towards SMRs by ideology, 2023 (percent).....	23
Figure 18 Positive attitude towards SMRs by party affiliation, 2023 (percent)	24

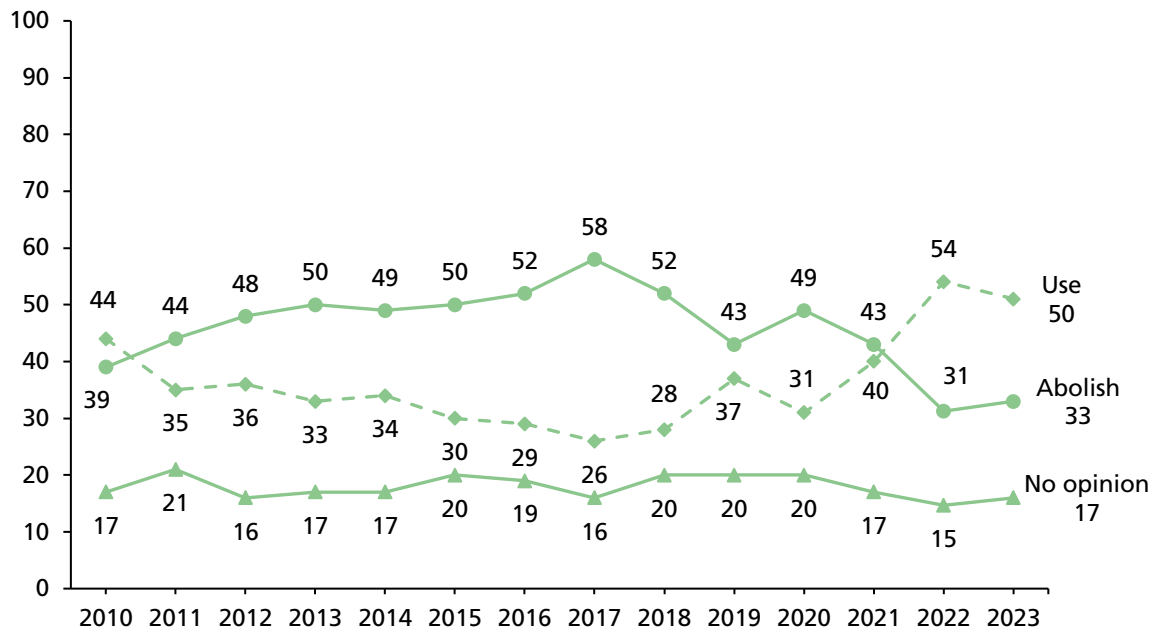
Table 1 Opinion about the long-term use of nuclear power, 2020–2023 (percent)

	2020	2021	2022	2023
Abolish nuclear power as soon as possible	10	9	4	6
Abolish nuclear power, but keep using our current reactors until they are worn out	39	34	27	27
Use nuclear power and replace the current reactors with at most as many new ones as today	19	20	23	22
Use nuclear power and build more reactors than the current ones we have in the future	12	20	31	28
No opinion/no response	20	17	15	17
Total percent	100	100	100	100
Number of respondents	1 871	1 610	1 805	1 732
Share abolish	49	43	31	33
Share use	31	40	54	50
Difference abolish-use	+18	+3	-23	-17

Comment: The question reads: 'What is your opinion about the long-term use of nuclear power as an energy source in Sweden?'. The question, with these response options, was asked for the first time in 2020. The percentage base consists of all respondents who received the question.

Source: The National SOM survey 2020–2023.

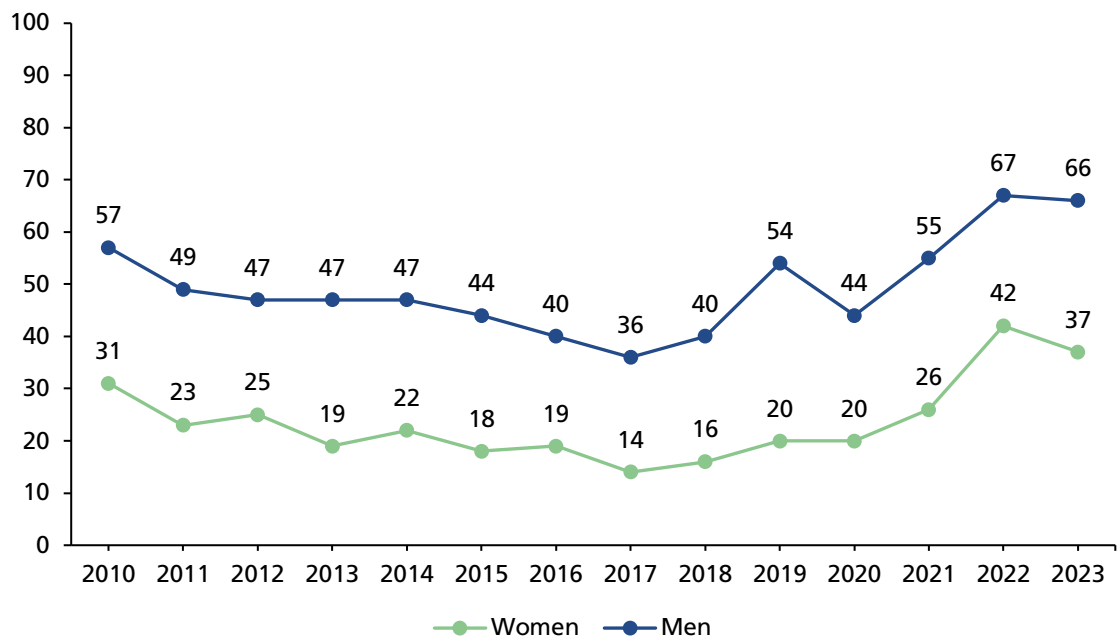
Figure 1 Abolish or use nuclear power in the long-term, 2010–2023 (percent)



Comment: The question reads: 'What is your opinion about the long-term use of nuclear power as an energy source in Sweden?'. The response options for 2020–2023 are reported in Table 1. The response options for 2010–2019 were 'Abolish nuclear power as soon as possible', 'Abolish nuclear power, but keep using our 10 reactors until they are worn out', 'Use nuclear power and replace the current reactors with at most 10 new reactors', 'Use nuclear power and build more than the current 10 reactors in the future', and 'No opinion'. The percentage base consists of all respondents who received the question. The number of respondents varies between approximately 1 500 and 1 900 for the survey years. The nuclear accident in Fukushima occurred in March 2011, about six months before the SOM Institute's data collection took place during the fall of 2011.

Source: The National SOM Survey 2010–2023.

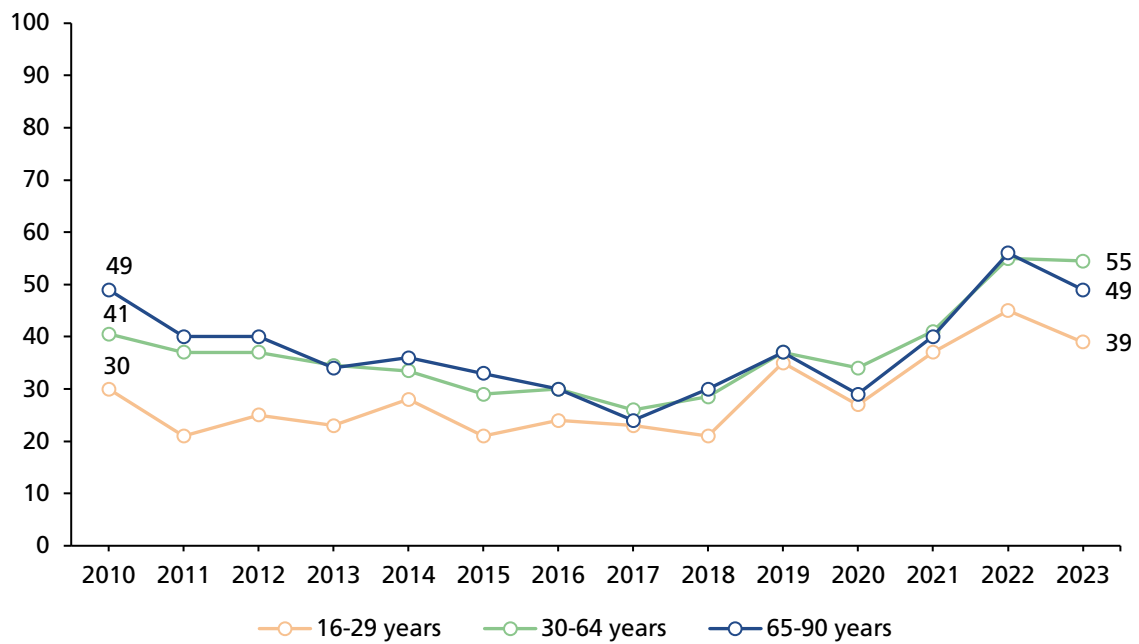
Figure 2 Use nuclear power in the long term by gender, 2010–2023 (percent)



Comment: The question reads: 'What is your opinion about the long-term use of nuclear power as an energy source in Sweden?'. The response options for 2020–2023 are reported in Table 1 (2020–2023) and the response options for 2010–2019 are reported in Figure 1 (2010–2019). The figure shows the share of respondents that want nuclear power to be used in the long-term. The percentage base consists of all respondents who received the question. The number of respondents varies between approximately 1 500 and 1 900 for the survey years. The nuclear accident in Fukushima occurred in March 2011, about six months before the SOM Institute's data collection took place during the fall of 2011.

Source: The National SOM Survey 2010–2023.

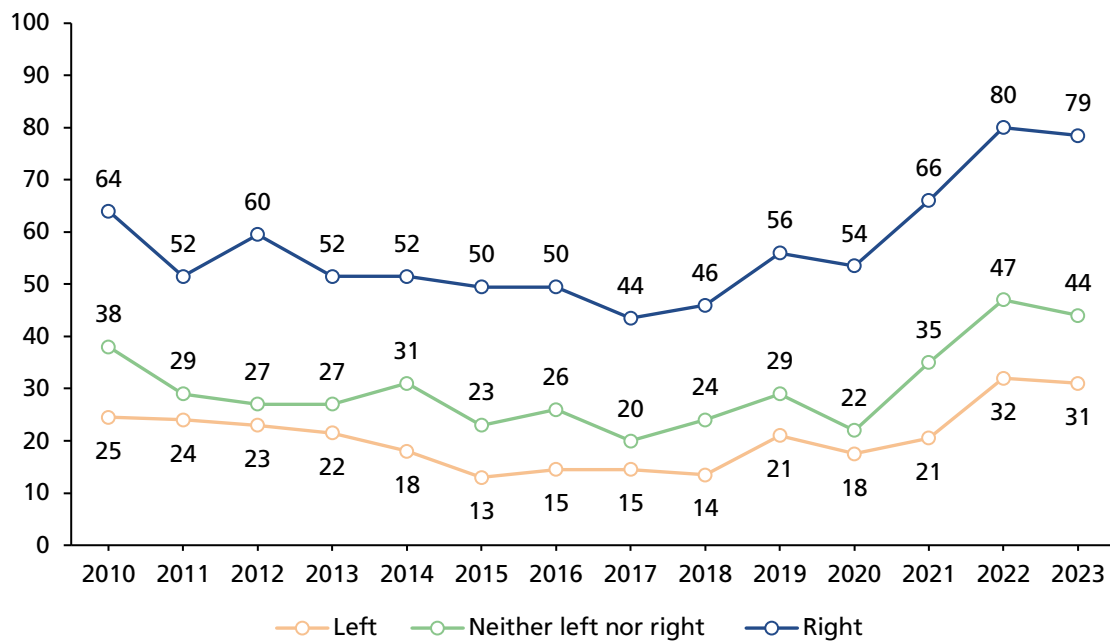
Figure 3 Use nuclear power in the long-term by age, 2010–2023 (percent)



Comment: The question reads: 'What is your opinion about the long-term use of nuclear power as an energy source in Sweden?'. The response options are reported in Table 1 (2020–2023) and Figure 1 (2010–2019). The figure shows the share of respondents that want nuclear power to be used in the long-term. The percentage base consists of all respondents who received the question. The number of respondents varies between approximately 1 500 and 1 900 for the survey years. The nuclear accident in Fukushima occurred in March 2011, about six months before the SOM Institute's data collection took place during the fall of 2011.

Source: The National SOM Survey 2010–2023.

Figure 4 Use nuclear power in the long-term by ideology, 2010–2023 (percent)



Comment: The question reads: 'What is your opinion about the long-term use of nuclear power as an energy source in Sweden?'. The response options are reported in Table 1 (2020–2023) and Figure 1 (2010–2019). The figure shows the share of respondents that want nuclear power to be used in the long-term. The question about subjective placement on an ideological left-right scale reads: 'The concept of a political left-right scale is often used to describe a person's political opinions. Where would you place yourself on such a scale?'. The figure shows respondents that are 'Clearly to the left' or 'Somewhat to the left' as 'Left', and respondents that are 'Somewhat to the right' or 'Clearly to the right' as 'Right'. The percentage base consists of all respondents who received the question. The number of respondents varies between approximately 1 500 and 1 900 for the survey years. The nuclear accident in Fukushima occurred in March 2011, about six months before the SOM Institute's data collection took place during the fall of 2011.

Source: The National SOM Survey 2010–2023.

Table 2 Use nuclear power in the long-term by party affiliation, 2010–2023 (percent)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Party affiliation														
Left Party (V)	14	21	13	12	16	15	15	12	8	17	10	17	22	22
Social Democratic Party (S)	33	29	27	25	26	16	20	17	18	25	20	26	41	38
Green Party (MP)	13	10	18	11	8	8	2	13	7	14	18	11	12	17
Centre Party (C)	38	25	27	17	32	27	24	23	17	27	23	34	43	42
Liberals (L)	62	53	43	38	49	45	50	33	33	32	42	61	70	68
Christian Democrats (KD)	51	39	34	40	42	46	20	23	31	56	49	67	71	62
Moderate Party (M)	63	51	58	53	53	39	43	35	49	55	45	62	80	75
Sweden Democrats (SD)	63	54	50	49	49	53	48	50	50	55	55	66	81	79
Other	43	33	20	27	16	24	9	17	31	35	29	48	43	54

Comment: The question reads: 'What is your opinion about the long-term use of nuclear power as an energy source in Sweden?'. The response options are reported in Table 1 (2020–2023) and Figure 1 (2010–2019). The table shows the share of respondents that want nuclear power to be used in the long-term. The question about party affiliation reads: 'Which party do you like the best today?'. The percentage base consists of all respondents who received the question. The number of respondents varies between approximately 1 500 and 1 900 for the survey years. The nuclear accident in Fukushima occurred in March 2011, about six months before the SOM Institute's data collection took place during the fall of 2011.

Source: The National SOM Survey 2010–2023.

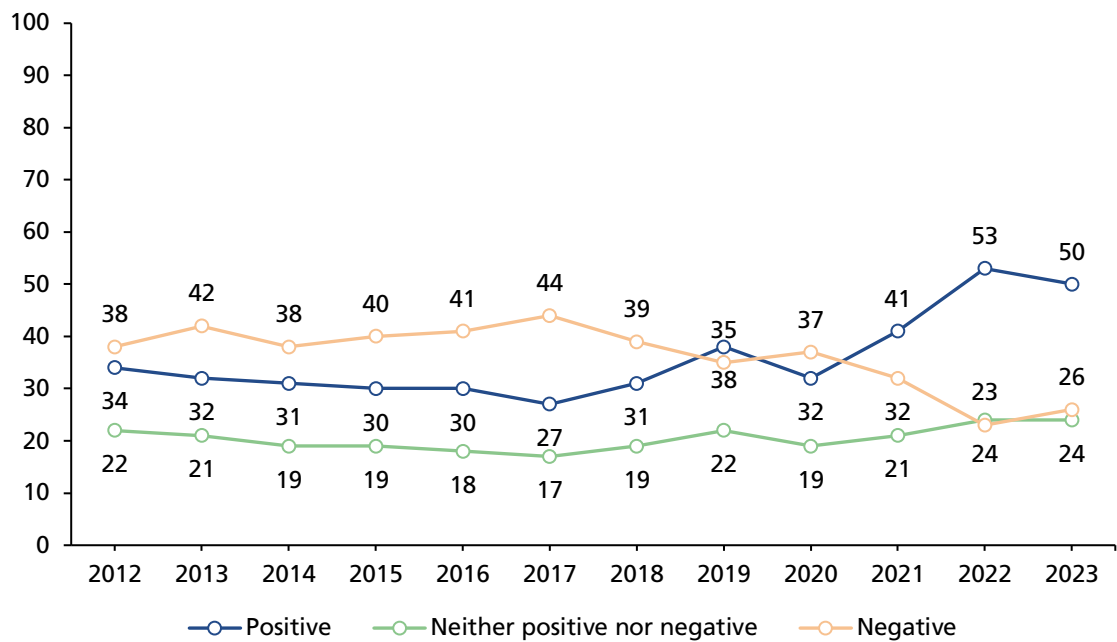
Table 3 Attitudes towards hydropower, wind power, nuclear power and solar power, 2012–2023 (percent)

Energy source and survey year	Very positive	Rather positive	Neither positive nor negative	Rather negative	Very negative	No opinion	Total percent	Number of respondents	Balance measure
Hydropower									
2012	55	31	8	2	0	4	100	1 460	+84
2013	53	31	7	3	1	5	100	1 573	+80
2014	52	31	8	3	1	5	100	1 656	+79
2015	53	29	8	3	1	6	100	1 654	+78
2016	54	29	8	2	1	6	100	1 588	+80
2017	55	28	8	2	1	6	100	1 772	+80
2018	53	31	8	2	0	6	100	1 752	+82
2019	53	30	8	2	1	6	100	1 681	+80
2020	51	31	8	3	1	6	100	1 818	+78
2021	51	30	10	3	1	5	100	1 533	+77
2022	58	25	8	2	1	6	100	1 724	+80
2023	58	30	6	2	0	4	100	1 662	+86
Wind power									
2012	57	27	7	4	2	3	100	1 459	+78
2013	54	27	8	5	2	4	100	1 569	+74
2014	52	27	9	5	2	5	100	1 651	+73
2015	55	25	7	5	3	5	100	1 656	+72
2016	57	23	6	5	3	6	100	1 595	+72
2017	57	24	8	4	2	5	100	1 765	+75
2018	57	26	7	3	2	5	100	1 746	+78
2019	56	27	8	3	2	4	100	1 680	+78
2020	51	29	8	4	3	5	100	1 818	+73
2021	49	28	9	7	3	4	100	1 528	+67
2022	50	25	9	7	4	5	100	1 719	+64
2023	54	26	8	6	3	3	100	1 660	+71
Nuclear power									
2012	12	22	24	20	18	4	100	1 452	-4
2013	11	21	20	22	20	6	100	1 560	-10
2014	12	19	24	21	17	7	100	1 634	-7
2015	11	19	23	19	21	7	100	1 632	-10
2016	12	18	21	20	21	8	100	1 575	-11
2017	10	17	21	23	21	8	100	1 749	-17
2018	12	19	21	20	19	9	100	1 741	-8
2019	16	22	19	19	16	8	100	1 672	+3
2020	13	19	22	20	17	9	100	1 801	-5
2021	20	21	21	17	15	6	100	1 508	+9
2022	29	24	18	13	10	6	100	1 720	+30
2023	26	24	19	15	11	5	100	1 656	+24
Solar power									
2021	70	22	4	0	0	4	100	1 527	+92
2022	73	18	4	1	0	4	100	1 722	+90
2023	72	20	4	1	0	3	100	1 665	+91

Comment: The question reads: 'In general, what is your attitude towards the following energy sources?'. The percentage base consists of all respondents who answered the question. The share that skips the questions about hydropower, wind power, nuclear power and solar power varies between 3 and 6 percent for the period studied. The balance measure is calculated by subtracting the share of negative responses from the share of positive responses.

Source: The National SOM Survey 2012–2023.

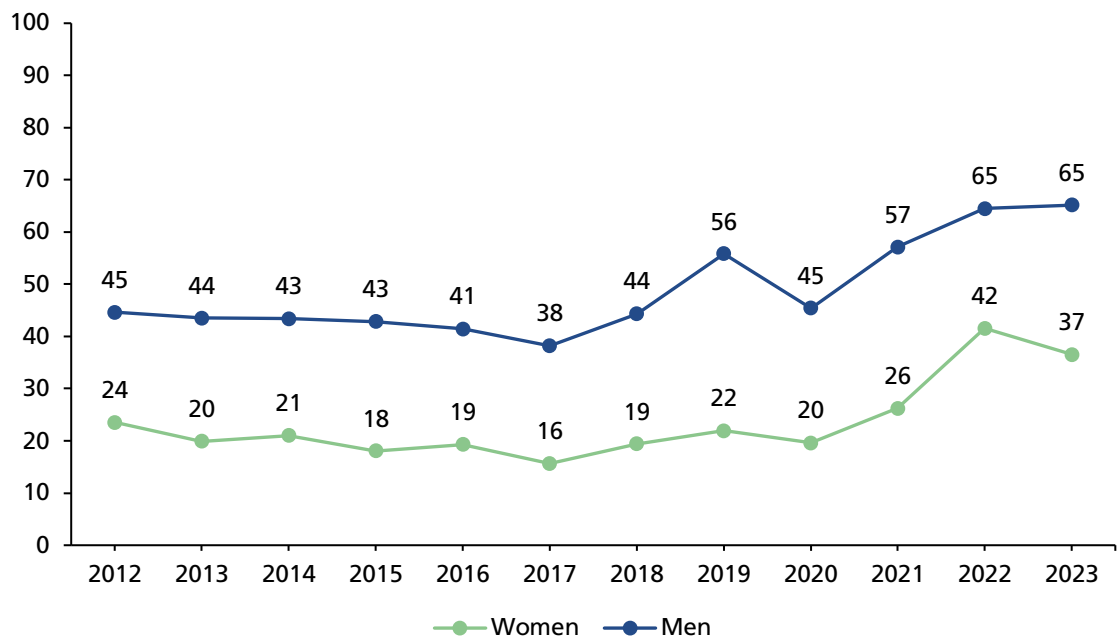
Figure 5 Attitudes towards nuclear power, 2012–2023 (percent)



Comment: The question reads: 'In general, what is your attitude towards the following energy sources? Nuclear power'. The response options are 'Very positive', 'Rather positive', 'Neither positive nor negative', 'Rather negative', 'Very negative' and 'No opinion'. The figure shows respondents that are 'Very positive' or 'Rather positive' as 'Positive', and respondents that are 'Rather negative' or 'Very negative' as 'Negative'. The percentage base consists of all respondents who answered the question. The number of respondents varies between approximately 1 450 and 1 800 for the survey years.

Source: The National SOM Survey 2012–2023.

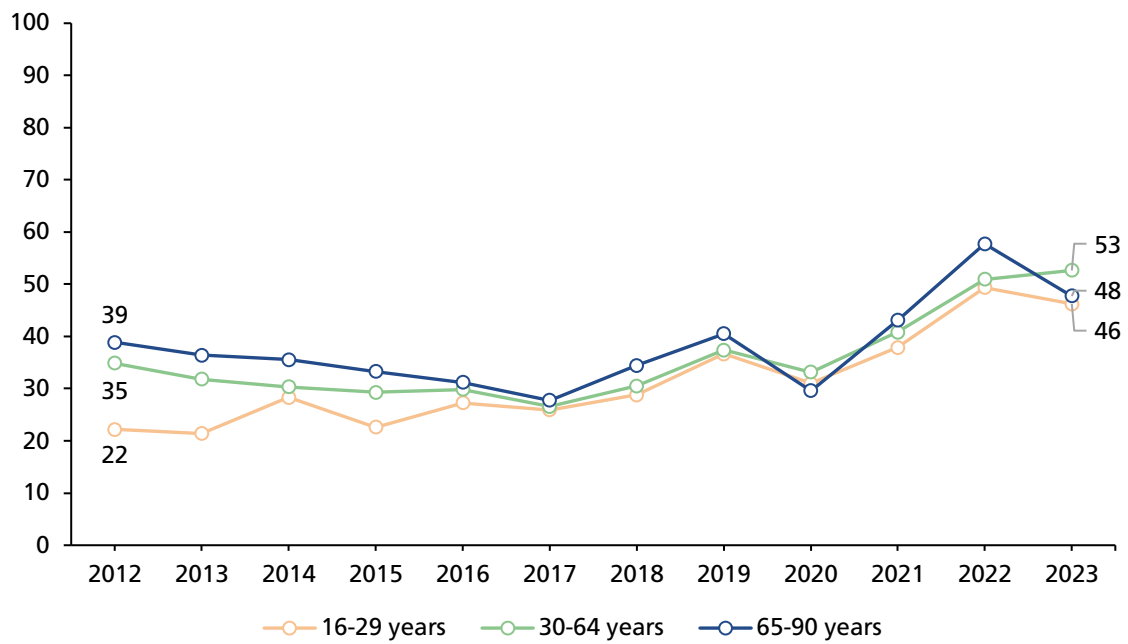
Figure 6 Positive attitude towards nuclear power by gender, 2012–2023 (percent)



Comment: The question reads: 'In general, what is your attitude towards the following energy sources? Nuclear power'. The response options are 'Very positive', 'Rather positive', 'Neither positive nor negative', 'Rather negative', 'Very negative' and 'No opinion'. The figure shows the share of respondents that are 'Very positive' or 'Rather positive' as having a positive attitude towards nuclear power. The percentage base consists of all respondents who answered the question. The number of respondents varies between approximately 1 450 and 1 800 for the survey years.

Source: The National SOM Survey 2012–2023.

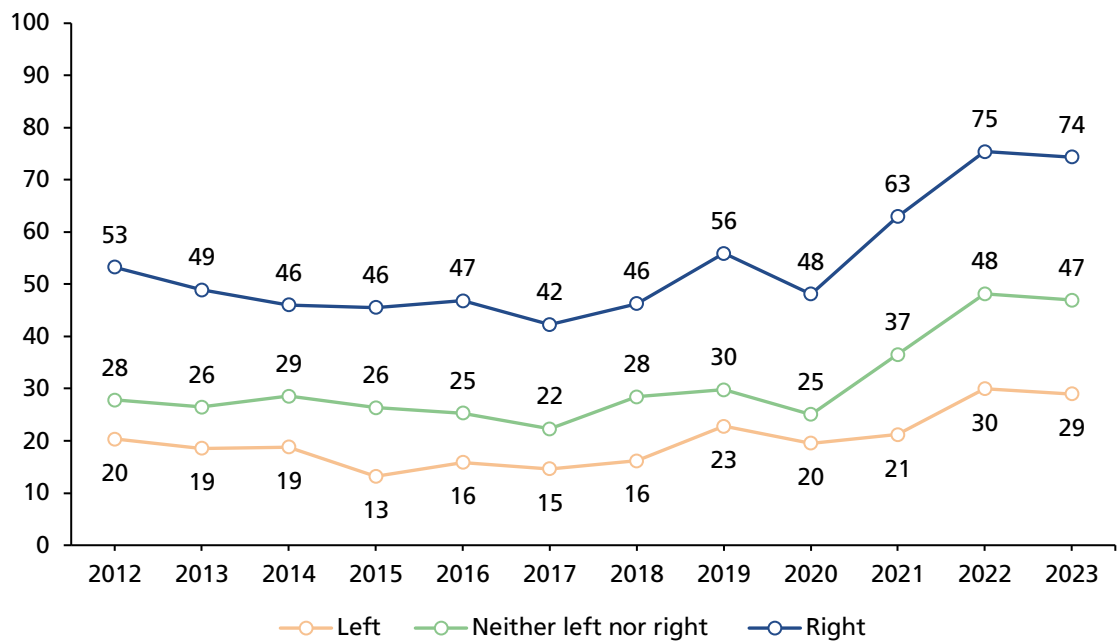
Figure 7 Positive attitude towards nuclear power by age, 2012–2023 (percent)



Comment: The question reads: 'In general, what is your attitude towards the following energy sources? Nuclear power'. The response options are 'Very positive', 'Rather positive', 'Neither positive nor negative', 'Rather negative', 'Very negative' and 'No opinion'. The figure shows the share of respondents that are 'Very positive' or 'Rather positive' as having a positive attitude towards nuclear power. The percentage base consists of all respondents who answered the question. The number of respondents varies between approximately 1 450 and 1 800 for the survey years.

Source: The National SOM Survey 2012–2023.

Figure 8 Positive attitude towards nuclear power by ideology, 2012–2023 (percent)



Comment: The question reads: 'In general, what is your attitude towards the following energy sources? Nuclear power'. The response options are 'Very positive', 'Rather positive', 'Neither positive nor negative', 'Rather negative', 'Very negative' and 'No opinion'. The figure shows the share of respondents that are 'Very positive' or 'Rather positive' as having a positive attitude towards nuclear power. The percentage base consists of all respondents who answered the question. The question about subjective placement on an ideological left-right scale reads: 'The concept of a political left-right scale is often used to describe a person's political opinions. Where would you place yourself on such a scale?'. The figure shows respondents that are 'Clearly to the left' or 'Somewhat to the left' as 'Left', and respondents that are 'Somewhat to the right' or 'Clearly to the right' as 'Right'. The number of respondents varies between approximately 1 450 and 1 800 for the survey years.

Source: The National SOM Survey 2012–2023.

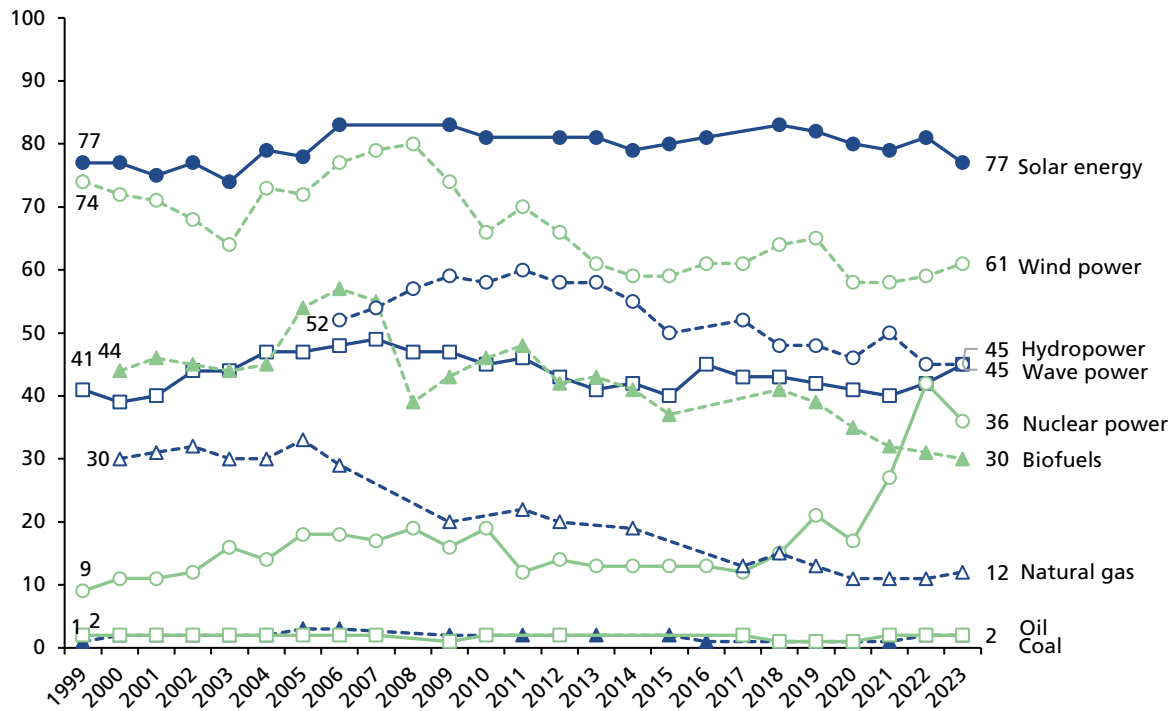
Table 4 Positive attitude towards nuclear power by party affiliation, 2012–2023 (percent)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Party affiliation												
Left Party (V)	10	15	13	10	11	10	11	17	8	15	21	24
Social Democratic Party (S)	25	24	26	17	22	18	21	25	21	27	37	36
Green Party (MP)	9	9	9	11	5	13	5	14	15	5	12	12
Centre Party (C)	23	18	28	32	23	22	24	28	25	32	34	36
Liberals (L)	36	31	41	41	45	38	38	32	41	56	61	66
Christian Democrats (KD)	29	45	31	48	38	33	35	57	38	69	66	68
Moderate Party (M)	58	51	51	41	43	41	51	58	46	63	78	72
Sweden Democrats (SD)	46	47	47	53	49	50	52	60	54	68	84	81
Other	27	24	16	18	14	19	31	29	31	48	51	52

Comment: The question reads: 'In general, what is your attitude towards the following energy sources? Nuclear power'. The response options are 'Very positive', 'Rather positive', 'Neither positive nor negative', 'Rather negative', 'Very negative' and 'No opinion'. The table shows the share of respondents that are 'Very positive' or 'Rather positive' as having a positive attitude towards nuclear power. The percentage base consists of all respondents who answered the question. The question about party affiliation reads: 'Which party do you like the best today?'. The number of respondents varies between approximately 1 450 and 1 800 for the survey years.

Source: The National SOM Survey 2012–2023.

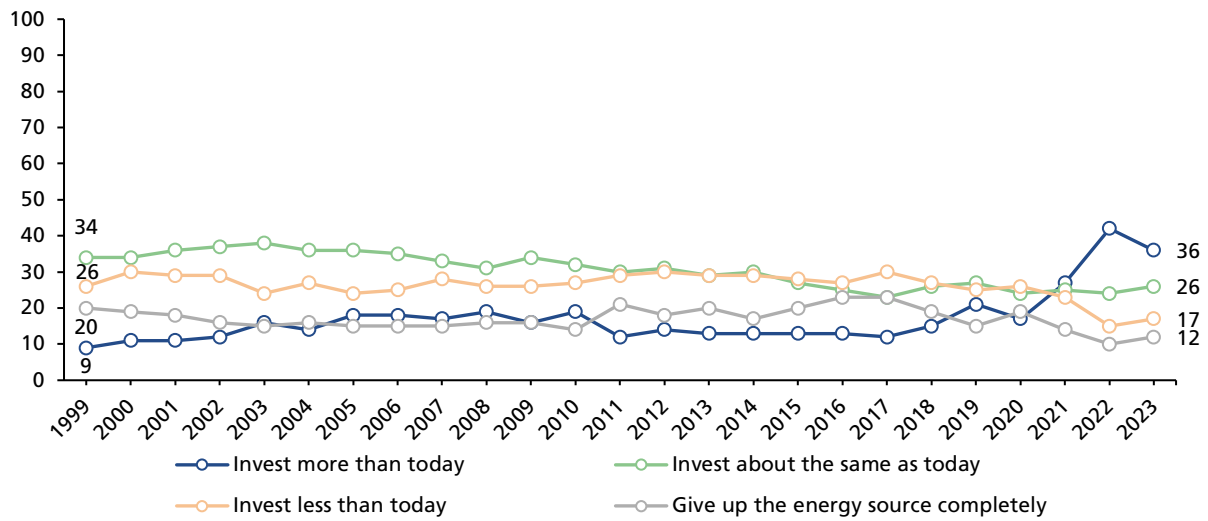
Figure 9 Share that wants to invest more in different energy sources, 1999–2023 (percent)



Comment: The question reads: ‘During the next 5-10 years, how much should we in Sweden invest in the following energy sources?’. The response options are: ‘More than today’, ‘About the same as today’, ‘Less than today’, ‘Completely abolish the energy source’ and ‘No opinion’. The percentage base consists of all respondents who answered the question. Not all energy sources have been part of the National SOM Survey annually. The figure shows the share of respondents who want to invest more in each energy source, respectively. For biofuels and natural gas, the results were 29 and 21 percent respectively in the National SOM Survey 1999. The relatively low numbers are not included in the figure since we suspect that they are caused by contextual effects in the questionnaire. The number of respondents varies between approximately 1 450 and 1 750 for the survey years.

Source: The National SOM Survey 1999–2023.

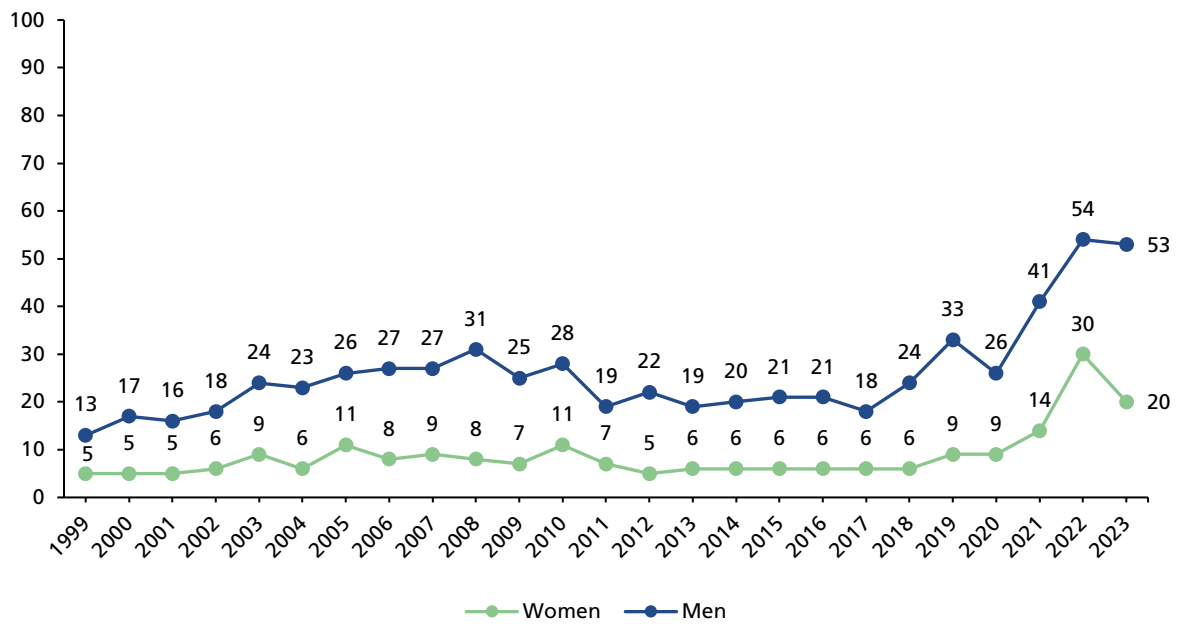
Figure 10 Share that wants to invest more, invest about the same as today, invest less, or completely give up nuclear energy as an energy source, 1999–2023 (percent)



Comment: The question reads: 'During the next 5-10 years, how much should we in Sweden invest in the following energy sources? Nuclear energy'. The response options are: 'More than today', 'About the same as today', 'Less than today', 'Completely abolish the energy source' and 'No opinion'. The percentage base consists of all respondents who answered the question. The number of respondents varies between approximately 1 450 and 1 750 for the survey years.

Source: The National SOM Survey 1999–2023.

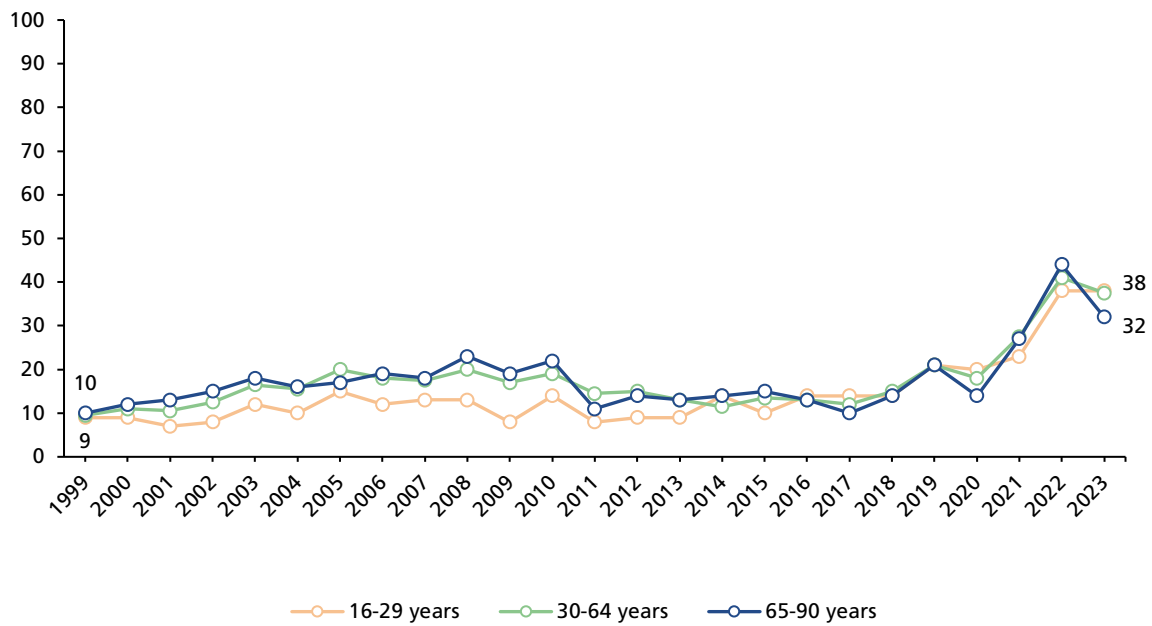
Figure 11 Invest more in nuclear power by gender, 1999–2023 (percent)



Comment: The question reads: 'During the next 5-10 years, how much should we in Sweden invest in the following energy sources? Nuclear energy'. The response options are: 'More than today', 'About the same as today', 'Less than today', 'Completely abolish the energy source' and 'No opinion'. The figure shows the share of respondents who want to invest more in nuclear power. The percentage base consists of all respondents who answered the question.

Source: The National SOM Survey 1999–2023.

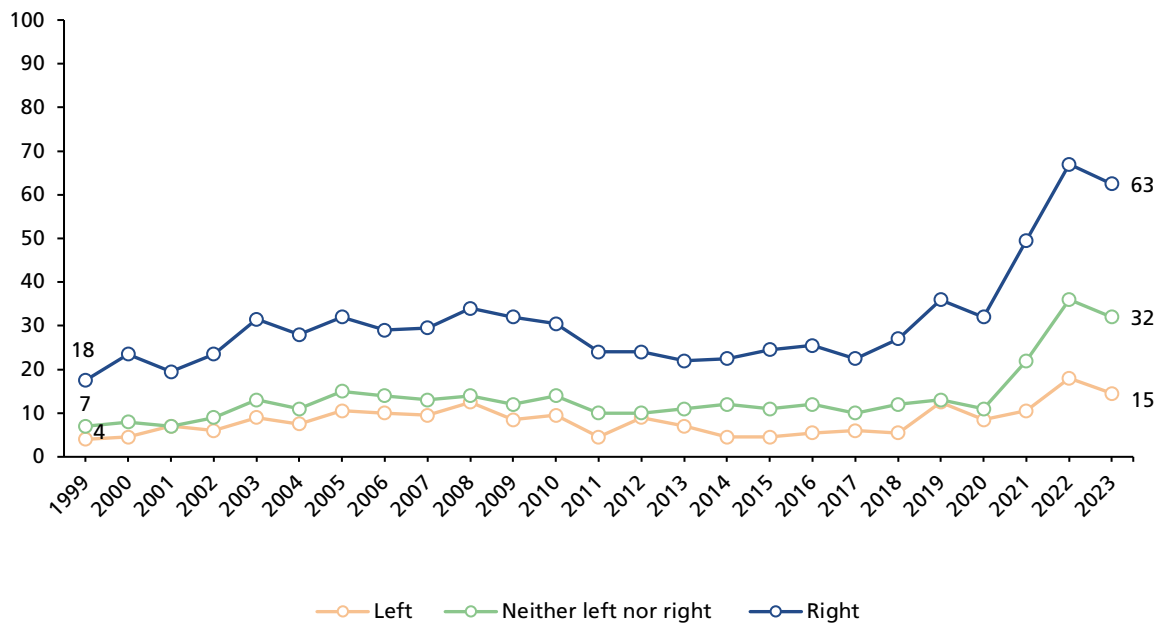
Figure 12 Invest more in nuclear power by age, 1999–2023 (percent)



Comment: The question reads: 'During the next 5-10 years, how much should we in Sweden invest in the following energy sources? Nuclear energy'. The response options are: 'More than today', 'About the same as today', 'Less than today', 'Completely abolish the energy source' and 'No opinion'. The figure shows the share of respondents who want to invest more in nuclear power. The percentage base consists of all respondents who answered the question.

Source: The National SOM Survey 1999–2023.

Figure 13 Invest more in nuclear power by ideology, 1999–2023 (percent)



Comment: The question reads: 'During the next 5-10 years, how much should we in Sweden invest in the following energy sources? Nuclear energy'. The response options are: 'More than today', 'About the same as today', 'Less than today', 'Completely abolish the energy source' and 'No opinion'. The figure shows the share of respondents who want to invest more in nuclear power. The percentage base consists of all respondents who answered the question. The question about subjective placement on an ideological left-right scale reads: 'The concept of a political left-right scale is often used to describe a person's political opinions. Where would you place yourself on such a scale?'. The figure shows respondents that are 'Clearly to the left' or 'Somewhat to the left' as 'Left', and respondents that are 'Somewhat to the right' or 'Clearly to the right' as 'Right'.

Source: The National SOM Survey 1999–2023.

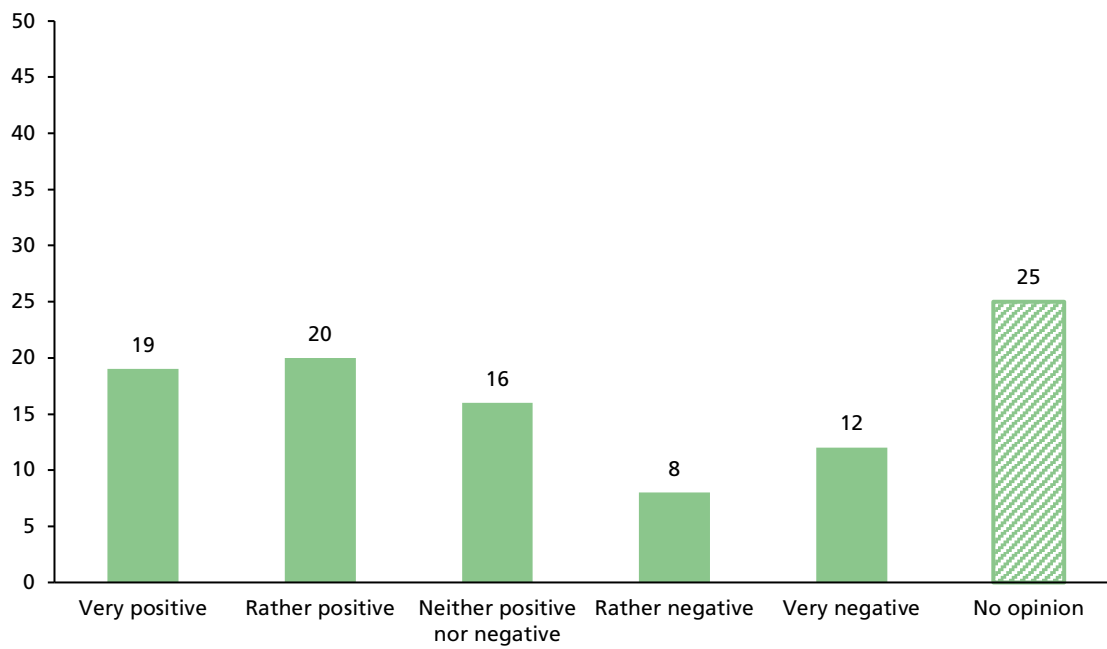
Table 5 Invest more in nuclear power by party affiliation, 1999–2023 (percent)

	V	S	MP	C	L	KD	M	SD	Other
1999	5	5	2	3	6	9	19	–	12
2000	3	9	3	2	10	10	25	–	8
2001	7	7	3	2	11	15	19	–	17
2002	4	9	0	3	15	11	27	–	22
2003	11	13	8	5	13	19	36	–	21
2004	6	10	3	5	18	12	31	–	15
2005	7	13	3	11	20	21	31	–	26
2006	11	13	2	11	19	14	29	42	22
2007	9	14	4	11	24	29	28	22	21
2008	4	14	3	9	28	17	36	40	8
2009	4	10	3	5	18	20	30	37	16
2010	6	14	2	13	26	19	29	32	18
2011	0	7	3	10	19	8	21	21	13
2012	6	10	5	3	15	4	22	24	5
2013	7	8	3	5	17	15	18	24	21
2014	6	7	3	6	16	7	21	27	6
2015	8	6	2	13	17	25	19	26	12
2016	8	8	2	3	20	20	20	25	5
2017	4	7	4	8	17	9	18	28	6
2018	1	9	0	7	21	15	23	31	23
2019	10	11	4	10	15	28	30	41	27
2020	6	9	8	12	24	23	24	36	19
2021	8	14	4	19	34	42	43	55	32
2022	15	24	7	21	58	52	67	70	42
2023	10	19	7	23	56	57	54	71	41

Comment: The question reads: 'During the next 5-10 years, how much should we in Sweden invest in the following energy sources? Nuclear energy'. The response options are: 'More than today', 'About the same as today', 'Less than today', 'Completely abolish the energy source' and 'No opinion'. The table shows the share of respondents who want to invest more in nuclear power. The percentage base consists of all respondents who answered the question. The question about party affiliation reads: 'Which party do you like the best today?'. The party abbreviations stand for: the Left Party (V), the Social Democratic Party (S), the Green Party (MP), the Centre Party (C), the Liberal Party (L), the Christian Democrats (KD), the Moderate Party (M) and the Sweden Democrats (SD).

Source: The National SOM Survey 1999–2023.

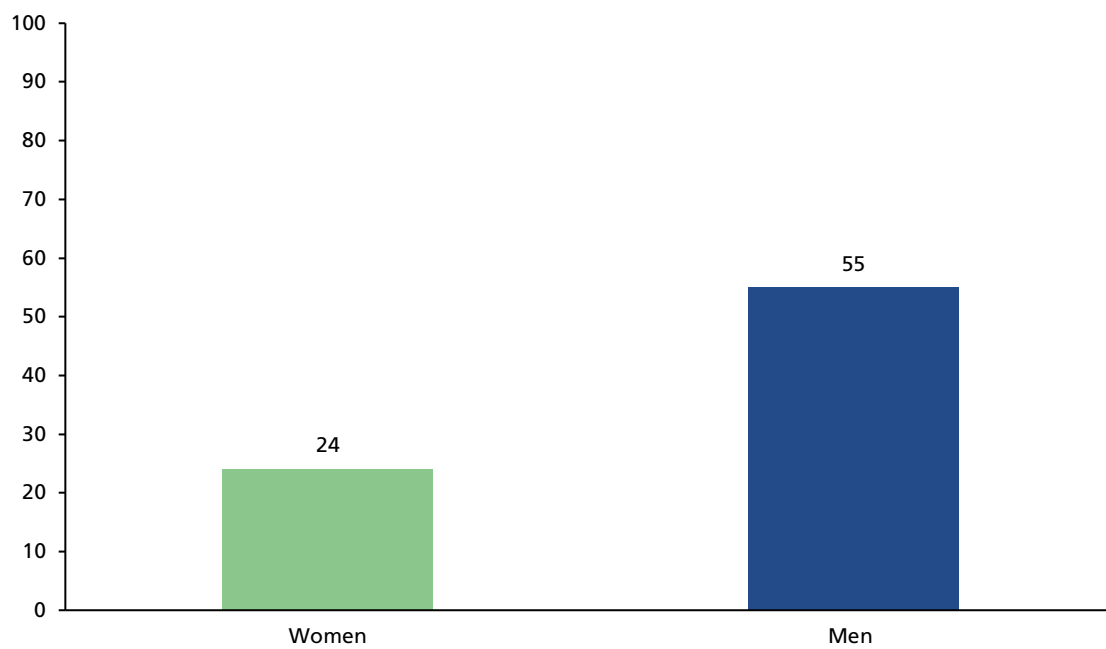
Figure 14 Attitude towards investments in Small Modular Reactors (SMRs), 2023 (percent)



Comment: The question reads: 'What is your opinion about more investments in so called Small Modular Reactors (SMRs) in Sweden?' The percentage base consists of all respondents who answered the question. The number of respondents is 1 660.

Source: The National SOM Survey 2023.

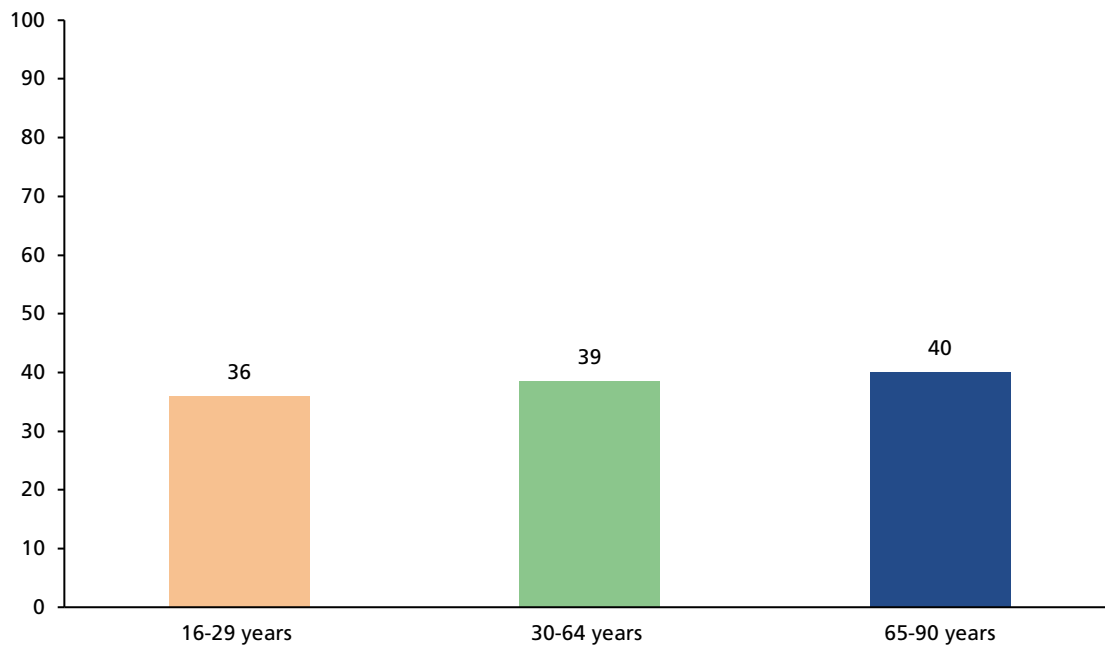
Figure 15 Positive attitude towards SMRs by gender, 2023 (percent)



Comment: The question reads: 'What is your opinion about more investments in so called Small Modular Reactors (SMRs) in Sweden?'. The response options are presented in Figure 11. The figure shows the share of respondents that are 'Very positive' or 'Rather positive' as having a positive attitude towards more investments in SMRs. The percentage base consists of all respondents who answered the question. The number of respondents is 1 647.

Source: The National SOM Survey 2023.

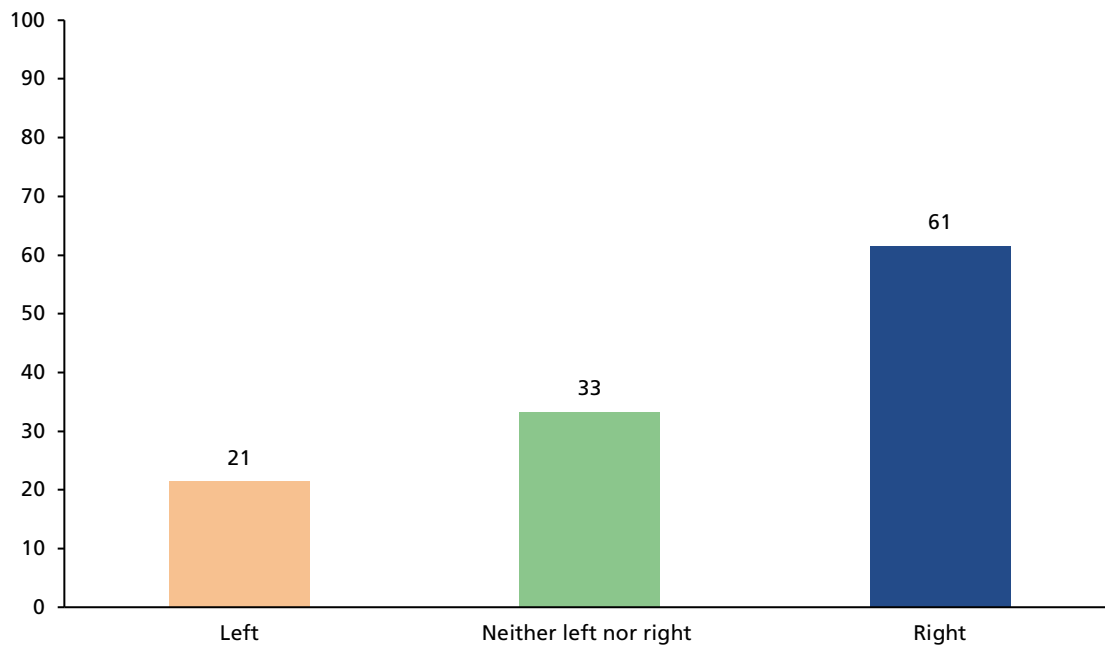
Figure 16 Positive attitude towards SMRs by age, 2023 (percent)



Comment: The question reads: 'What is your opinion about more investments in so called Small Modular Reactors (SMRs) in Sweden?' The response options are presented in Figure 14. The figure shows the share of respondents that are 'Very positive' or 'Rather positive' as having a positive attitude towards more investments in SMRs. The percentage base consists of all respondents who answered the question. The number of respondents is 1 660.

Source: The National SOM Survey 2023.

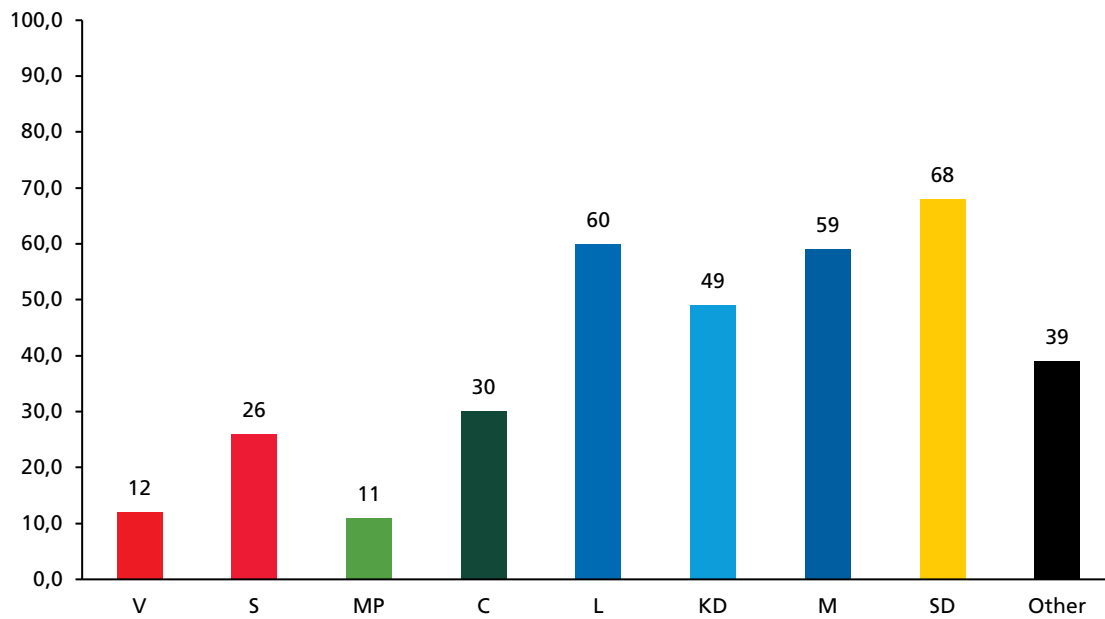
Figure 17 Positive attitude towards SMRs by ideology, 2023 (percent)



Comment: The question reads: 'What is your opinion about more investments in so called Small Modular Reactors (SMRs) in Sweden?' The response options are presented in Figure 11. The figure shows the share of respondents that are 'Very positive' or 'Rather positive' as having a positive attitude towards more investments in SMRs. The percentage base consists of all respondents who answered the question. The question about subjective placement on an ideological left-right scale reads: 'The concept of a political left-right scale is often used to describe a person's political opinions. Where would you place yourself on such a scale?'. The figure shows respondents that are 'Clearly to the left' or 'Somewhat to the left' as 'Left', and respondents that are 'Somewhat to the right' or 'Clearly to the right' as 'Right'. The number of respondents is 1 633.

Source: The National SOM Survey 2023.

Figure 18 Positive attitude towards SMRs by party affiliation, 2023 (percent)



Comment: The question reads: 'What is your opinion about more investments in so called Small Modular Reactors (SMRs) in Sweden?' The response options are presented in Figure 11. The figure shows the share of respondents that are 'Very positive' or 'Rather positive' as having a positive attitude towards more investments in SMRs. The percentage base consists of all respondents who answered the question. The question about party affiliation reads: 'Which party do you like the best today?'. The party abbreviations stand for: the Left Party (V), the Social Democratic Party (S), the Green Party (MP), the Centre Party (C), the Liberal Party (L), the Christian Democrats (KD), the Moderate Party (M) and the Sweden Democrats (SD). The number of respondents is 1 514.

Source: The National SOM Survey 2023.

EECC – Swedish Opinion on Environment, Energy and Climate Change

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Swedish Opinion in Environment, Energy and Climate Change is a research project at the Department of Political Science, University of Gothenburg. The project seeks to contribute to the knowledge supply of environmental public opinion and collect data for the benefit of the public, decision-makers and researchers. In collaboration with the SOM Institute at the University of Gothenburg, the project conducts systematic measurements of attitudes to environmental, energy and climate issues. The 2023 SOM Survey with questions on the environment, energy and climate includes 3,750 randomly selected respondents from all over Sweden. The project is funded by the Swedish Energy Agency.

