

Nuclear power supporters maintain lead in Sweden

by
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What happened in 2003 was not a chance occurrence. For the first time nuclear power supporters were more numerous than nuclear power opponents in Sweden. In the latest 2004 SOM survey nuclear power supporters maintained their lead, although with a somewhat smaller advantage than the previous year: 45% want to use nuclear power in the long term, compared with 36% who want to abandon it. In the 2003 survey the proportion of nuclear power supporters was 46%, compared with 34% opponents (see Table 1 and Figure 1).

It should be noted that we are not talking about short-term opinions concerning current nuclear power disputes, such as, for example, the closure of the Barsebäck reactors. When it comes to immediate issues of that kind, the positive opinion towards nuclear power was already stronger than the negative opinion. The closure of Barsebäck I in 1999 was carried out against majority opinion, not with it. The same applies to this year's closure of Barsebäck II.¹

What we are talking about is the long-term use of nuclear power in Sweden – whether it should be used as an energy source or not. And in this regard Swedish opinion has always clearly favoured phasing out rather than use, ever since the battle over nuclear power was started in the middle of the 1970s (Holmberg, Westerståhl and Branzén 1977). But it changed in 2003 when the supporters of nuclear power overtook the opponents for the first time.²

At the time of the 1980 referendum opinions were very different, with 66% wanting the phasing-out of nuclear power in the long term, against 30% preferring to use nuclear power (Holmberg and Asp 1984). Immediately after the Chernobyl accident in 1986 the proportion who wanted to phase out nuclear power increased to as much as 75%, against a record low of 12% who wanted to keep it (Holmberg 1988).

The favourable wind for supporters of nuclear power has even meant that the proportion of people who not only want to use existing reactors, but also want to actively invest in more nuclear reactors increased from 2% in 1980 to 6% in 1996 and 15% in 2004 – still a minority, but a slowly growing minority. Other measurements in the SOM survey point in the same direction. Opinion is shifting towards more support for using nuclear power and towards increased support for building more reactors (see Table 1 in Per Hedberg's chapter).

¹ In a SIFO survey from January 2003, 62% responded “no” to the question “Do you think that the nuclear power station Barsebäck 2 should be closed, or not?”. The proportion that responded “yes” was 24%, while 13% were doubtful or responded “don't know” (Sifo 2003). Broken down by party preference, the results look as follows: Left Party no 37%/yes 50%; Social Democrats 62/23; Centre Party 46/44; Liberal Party 76/18; Moderate Party 86/9; Christian Democrats 75/11 and Green Party 27/63. The outcome points to a clear leaning towards “no” among supporters of the Social Democrats, the Liberal Party, the Moderate Party and the Christian Democrats, a slight leaning towards “no” among Centre Party supporters, a slight leaning towards “yes” among Left Party supporters and a clear leaning towards “yes” among Green Party supporters. In other words, the Social Democrat Government does not have a majority of its own voters behind it on the decision to close Barsebäck II. In fact, a clear majority of Social Democrat supporters are against closing Barsebäck II (62%). On the other hand, this situation is not news. A majority of Social Democrat voters were also against starting the phasing out of nuclear power in 1999 (Holmberg 2000:326).

² An historic perspective on the development of opinions on nuclear power can be found in the booklet “Kärnkraftsopinionen 25 år efter folkomröstningen” (“Opinions on nuclear power 25 years after the referendum”). The measurements were carried out by Temo and financed by the organisation Kärnkraftssäkerhet och utbildning AB (Nuclear power safety and education AB) which is close to the nuclear power industry. See Modig (2005).

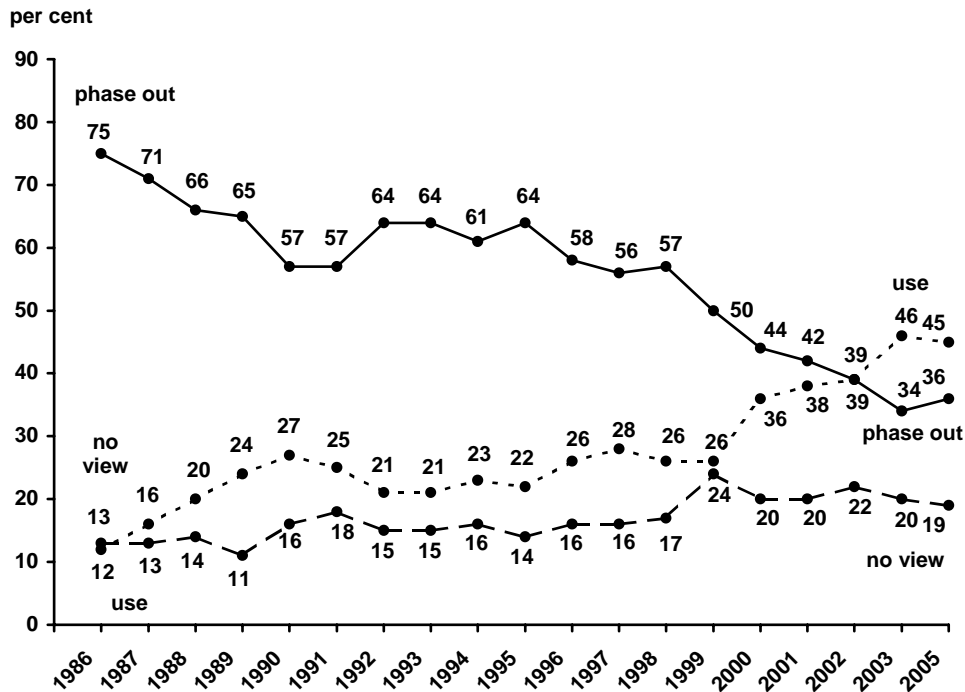
Table 1 Views on the long-term use of nuclear power in Sweden (per cent)

question: “What is your view on the long-term use of nuclear power as an energy source in Sweden?”

| view | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|---|------|------|------|------|------|------|------|------|------|
| phase out nuclear power by 2010 at the latest | 22 | 19 | 17 | 16 | 15 | 14 | 12 | 12 | 11 |
| phase out nuclear power, but use the nuclear reactors we have until they have served out their time | 31 | 32 | 40 | 34 | 29 | 28 | 27 | 22 | 25 |
| use nuclear power and then renovate the nuclear reactors, but do not build more | 18 | 19 | 21 | 19 | 26 | 29 | 28 | 31 | 30 |
| use nuclear power and invest in more nuclear reactors in future | 6 | 7 | 5 | 7 | 10 | 9 | 11 | 15 | 15 |
| no particular view/no response | 23 | 23 | 17 | 24 | 20 | 20 | 22 | 20 | 19 |
| total per cent | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| number of people | 1779 | 1754 | 1740 | 1703 | 1704 | 1739 | 1777 | 1818 | 1774 |
| proportion phase out | 53 | 51 | 57 | 50 | 44 | 42 | 39 | 34 | 36 |
| proportion use | 24 | 26 | 26 | 26 | 36 | 38 | 39 | 46 | 45 |
| net balance, phase out | +29 | +25 | +31 | +24 | +8 | +4 | ±0 | -12 | -9 |

Comments: The wording of the question in the years 2000-2004 was somewhat different to the wording in the years 1996-1999.

Figure 1 Phase out or use nuclear power in the long term? Development in opinion 1986-2004 (per cent)



Comments: See Table 1 for the wording of the survey question in 2004. Response options 1-2 have been defined as “phase out”, while response options 3-4 have been classified as “use”. In the years 1986-1997 and 1996-1999 a slightly different survey question was used. In Figure 1 the older five-part survey question was used for the years 1986-1997 and the new four-part one thereafter.

Table 2 Phase out nuclear power in the long term*statement:* "Sweden should phase out nuclear power in the long term"

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|-------------------------------|------|------|------|------|------|------|------|
| very good proposal | 22 | 21 | 22 | 19 | 17 | 14 | 14 |
| quite good proposal | 25 | 23 | 22 | 21 | 23 | 19 | 19 |
| neither good nor bad proposal | 21 | 22 | 21 | 23 | 23 | 23 | 23 |
| quite bad proposal | 16 | 16 | 18 | 17 | 17 | 20 | 20 |
| very bad proposal | 13 | 13 | 12 | 14 | 14 | 19 | 18 |
| no response | 3 | 5 | 5 | 6 | 6 | 5 | 6 |
| total per cent | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| number of people | 3561 | 3503 | 1842 | 3638 | 3606 | 3675 | 3612 |
| proportion good | 47 | 44 | 44 | 40 | 40 | 33 | 33 |
| proportion bad | 29 | 29 | 30 | 31 | 31 | 39 | 38 |
| net balance, good proposal | +18 | +15 | +14 | +9 | +9 | -6 | -5 |

The recovery in opinion on the side of nuclear power supporters came in two stages. First at the end of the 1980s when the immediate effects of Chernobyl faded away. Then in the most recent five-year period when the phasing out of nuclear power started, the electricity market was exposed to competition and electricity prices increased dramatically. All this over a twenty year period in which no serious nuclear accidents have occurred.

Not as dangerous

The reduced opposition to nuclear power is clearly connected with people's assessment of risk. Nuclear power is not regarded to be as dangerous now as it was twenty or thirty years ago. It has been a long time since anything nasty occurred. The risk of a major nuclear accident in Sweden was given on average – on a scale of 1 (low risk) to 10 (high risk) – a value of 6.2 by the Swedish people in 1980 and 6.8 in 1986 immediately after the Chernobyl accident. Today in the 2000s the corresponding risk assessment is much lower, 5.4 in 2004 (see Table 3). This is one of the main reasons for the reduced opposition to nuclear power in Sweden. But it does not explain why opposition has declined in recent years. The danger of nuclear power has not been judged to be declining in the past six to seven years. The level of risk is perceived as roughly the same today as at the end of the 1990s. In other words, no toned-down risk assessments lie behind the shift in opinion in favour of nuclear power in recent years.³ In the short term other factors have had an effect.

³ The correlation at the level of individuals between views on nuclear power and various risk assessments is strong, but in many cases even these have diminished in recent years, with one exception – the risk that eastern Europe cannot safely manage its nuclear power. The correlations is as follows in some SOM studies in various years. The risk of a reactor accident in Sweden: .62 1986, .57 1993 and .50 2004. The risk that we cannot safely manage the ultimate disposal of nuclear power in Sweden: .61 1986, .55 1993 and .53 2004. The risk of the spread of atomic weapons: .45 1986, .43 1993 and .36 2004. The risk that eastern Europe cannot manage nuclear power safely: .13 1995, .16 2002 and .20 2004. In other words, it is the assessments of the Swedish-related nuclear power risks that are most strongly linked to the views on the future of nuclear power in Sweden.

Table 3 Risk assessments on the question of nuclear power 1980-2004 (average)

question: “What is your view on the following risks which have been discussed in connection with nuclear power? How big is the risk ...”

| How big is the risk: | 80 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| that nuclear power leads to more and more countries obtaining nuclear weapons? | 6.2 | 6.8 | 6.5 | 5.8 | 5.7 | 5.5 | 5.9 | 5.7 | 5.9 | 5.8 | 5.6 | 5.9 | 5.2 | 5.2 | 5.5 | 5.0 | 5.0 | 5.2 | 5.4 | 5.4 |
| that we in Sweden cannot manage and ultimately dispose of nuclear waste in a safe way? | -- | 6.1 | 6.1 | 5.8 | 5.7 | 5.2 | 5.4 | 5.3 | 5.1 | 5.3 | 4.8 | 5.2 | 4.5 | 5.0 | 4.6 | 4.8 | 4.6 | 4.5 | 4.7 | 4.5 |
| of a major accident with radioactive discharge at a nuclear power station in Sweden? | 4.8 | 4.8 | 4.4 | 3.9 | 3.9 | 3.5 | 3.7 | 3.7 | 4.0 | 3.9 | 3.6 | 3.9 | 3.7 | 3.6 | 3.6 | 3.5 | 3.6 | 3.4 | 4.0 | 3.6 |
| that the countries of eastern Europe cannot manage their nuclear power stations and nuclear waste in a safe way? | -- | -- | -- | -- | -- | -- | -- | -- | -- | 8.8 | 8.7 | 8.9 | 8.4 | 8.5 | 8.5 | 8.5 | 8.2 | 8.1 | 8.2 | 8.0 |

Comments: The average can vary from 1.0 (very low risk) to 10.0 (very high risk). The figures for 1980 are taken from *Kampen om kärnkraften* (The battle over nuclear power) by Sören Holmberg and Kent Asp (1984: 476). A “--” indicates that the question was not asked.

Electricity price sensitivity

A factor on which there is speculation is the increases in electricity prices. There has been talk of continued high electricity prices, or even increasing prices, if nuclear power is phased out. However, we do not have any firm evidence that the increased electricity prices have really influenced opinion in favour of nuclear power. But it is thought that groups sensitive to electricity prices in particular are among those who have become more positive towards nuclear power – self-interest shall have kicked in. However, a more thorough test of such a hypothesis cannot be carried out since we lack data on people’s electricity price sensitivity over time. But we are not entirely at a loss. On at least one occasion the Swedish people’s economic sensitivity to the price of electricity has been measured. That is in the 2004 SOM survey. We cannot measure the time-series relationship, but we can examine the link at the level of individuals between views on nuclear power and electricity price sensitivity.

We asked: “How financially dependent is your household on the price of electricity?” There were four response options from very dependent to not dependent at all. The results show that a majority indicated that they were very dependent or quite dependent on the price of electricity (58%), while a quite large minority responded that there were not particularly or not at all dependent (38%). According to the hypothesis, we would expect to find a larger proportion of nuclear power supporters among electricity price sensitive people than among those who say they are not particularly financially dependent on the price of electricity. The results point to a directly reversed relationship. Electricity price sensitive people tend to be somewhat *less* positive towards using nuclear power than people who are not electricity price sensitive. The most positive towards nuclear power are people who say that they are not at all financially dependent on the price of electricity

(see Table 4). The relationship is relatively weak, but it does go in the opposite direction to that predicted by the self-interest hypothesis.

The results may be somewhat surprising to those who believe that *Homo Economicus* always makes his presence felt. In this case we must look deeper to find his faint shadow. If we control for income – which is important because rich people are both less electricity price sensitive than poor people and more positive towards nuclear energy – it transpires that the relationship is the one expected, although very weak. That is to say that within each income group electricity price sensitive people tend to be somewhat more positive towards nuclear power than people who are not particularly electricity price sensitive. The factor “electricity price sensitivity” thus has the expected effect on attitudes to nuclear power, but the effect is very modest.

Unchanged social patterns

The big changes in views on the issue of nuclear power in recent years have not given rise to any new patterns with regard to which social and political groups tend to be for or against nuclear power. Old truths still apply. The front lines are the same as in the 1970s. It is still women, young people, low earners and people living in rural areas who tend to be most negative towards nuclear power. Men, older people, people living in towns and high earners provide the core of nuclear power supporters today just as in the 1970s (see Table 4). However, the differences in views between various social groups should not be exaggerated. They exist, but they have always been relatively modest.

Left-right

The differences in views between different political groups are far more interesting. Here we find much bigger differences. People’s views on nuclear power are primarily shaped by political and ideological factors, not by social circumstances or by short-term economic considerations. The results in Table 4 illustrate very clearly that political factors, such as left-right ideology, green attitude and party preference, have a very obvious link with people’s views on nuclear power. And again things are largely reminiscent of the 1970s when it comes to political party and green attitude, but, interestingly enough, not when it comes to left-right ideology. Today, as in the years surrounding the 1980 referendum, the largest proportion of nuclear power opponents are among Left Party, Green Party and Centre Party supporters, while nuclear power supporters are clearly strongest among the Moderates.⁴ The new environmentally critical attitudes of the 1970s also tended to be anti nuclear power and they still are in the 2000s (Bennulf 1994).

⁴ The proportion of votes for option 3 in the 1980 referendum (the most anti nuclear power option) breaks down as follows among the parties’ supporters in March 1980: Left Party/Communists 90%, Centre Party 90%, Christian Democrats 77%, Liberal Party 28%, Social Democrats 19% and Moderate Party 17% (Holmberg and Asp 1984:381). In the 1976 election the order of the party supporters was somewhat different: Centre Party 72%, Left Party/Communists 60%, Liberal Party 40%, Moderate Party 38% and Social Democrats 21% (no reliable data on Christian Democrats). The 1976 results concern the proportion consistently against nuclear power on a nuclear power views index (Holmberg, Westerståhl and Branzén 1977:90). This means that in the 1976 election Social Democrat voters were the most positive/least negative towards nuclear power. At the time of the 1980 referendum we had the pattern we have today, with Moderate Party voters as the most positive/least negative towards using nuclear power.

Table 4 Phasing out or using nuclear power in the long term, by various social and political variables (per cent)

| | phase out | use | no view | total percent | number of respondents | net balance |
|--|--------------|-----|---------|------------------|-----------------------------|----------------|
| gender | | | | | | |
| male | 32 | 57 | 11 | 100 | 882 | -25 |
| female | 40 | 33 | 27 | 100 | 892 | +7 |
| age | | | | | | |
| 18-30 | 41 | 37 | 22 | 100 | 350 | +4 |
| 31-60 | 35 | 47 | 18 | 100 | 918 | -12 |
| 61-85 | 34 | 47 | 19 | 100 | 506 | -13 |
| education | | | | | | |
| basic level | 37 | 40 | 23 | 100 | 453 | -3 |
| intermediate level | 34 | 48 | 18 | 100 | 789 | -14 |
| university | 39 | 47 | 14 | 100 | 501 | -8 |
| place of residence | | | | | | |
| rural area | 44 | 34 | 22 | 100 | 261 | +10 |
| built-up area | 35 | 46 | 19 | 100 | 391 | -11 |
| town, large built-up area | 34 | 48 | 18 | 100 | 820 | -14 |
| the three big cities | 37 | 47 | 16 | 100 | 268 | -10 |
| income | | | | | | |
| very low | 42 | 33 | 25 | 100 | 343 | +9 |
| quite low | 38 | 45 | 17 | 100 | 439 | -7 |
| medium | 38 | 42 | 20 | 100 | 301 | -4 |
| quite high | 37 | 50 | 13 | 100 | 291 | -13 |
| very high | 29 | 61 | 10 | 100 | 369 | -32 |
| financial dependence on the price of electricity | | | | | | |
| very dependent | 35 | 45 | 20 | 100 | 365 | -10 |
| quite dependent | 38 | 45 | 17 | 100 | 624 | -7 |
| not particularly dependent | 38 | 50 | 12 | 100 | 548 | -12 |
| not at all dependent | 35 | 56 | 9 | 100 | 95 | -21 |
| left-right dimension | | | | | | |
| firmly on the left | 53 | 31 | 16 | 100 | 134 | +22 |
| somewhat on the left | 46 | 39 | 15 | 100 | 431 | +7 |
| neither left nor right | 35 | 39 | 26 | 100 | 557 | -4 |
| somewhat on the right | 30 | 58 | 12 | 100 | 419 | -28 |
| firmly on the right | 15 | 72 | 13 | 100 | 141 | -57 |
| green dimension | | | | | | |
| firmly green | 54 | 27 | 19 | 100 | 220 | +27 |
| somewhat green | 43 | 42 | 15 | 100 | 473 | +1 |
| neither green nor grey | 34 | 46 | 20 | 100 | 523 | -12 |
| somewhat grey | 28 | 61 | 11 | 100 | 334 | -33 |
| firmly grey | 19 | 65 | 16 | 100 | 116 | -46 |
| party preference | | | | | | |
| Left Party | 62 | 27 | 11 | 100 | 149 | +35 |
| Social Democrats | 35 | 43 | 22 | 100 | 570 | -8 |
| Centre Party | 51 | 37 | 12 | 100 | 109 | +14 |
| Liberal Party | 31 | 59 | 10 | 100 | 164 | -28 |
| Moderate Party | 18 | 69 | 13 | 100 | 354 | -51 |
| Christian Democrats | 37 | 39 | 24 | 100 | 80 | -2 |
| Green Party | 66 | 13 | 21 | 100 | 92 | +53 |
| other parties | 36 | 43 | 21 | 100 | 70 | -7 |
| no party | 31 | 33 | 36 | 100 | 186 | -2 |
| all respondents | 36 | 45 | 19 | 100 | 1774 | -9 |

Comments: The interview question on nuclear power is shown in Table 1. The results relate to the year 2004. The question of dependence on the price of electricity read: "How financially dependent is your household on the price of electricity: very dependent, quite dependent, not particularly dependent, not at all dependent?" The income variable relates to household income. Households with incomes between SEK 0 and 200 000 have been categorised as very low, 201 000 to 300 000 as quite low, 301 000 to 400 000 as medium, 401 000 to 500 000 as quite high and household incomes from SEK 501 000 upwards as very high. The measure of the green dimension is based on a question about an environmentally friendly society. The question is formulated as a proposal where the respondent is requested to judge whether the proposal is very good, quite good, neither good nor bad, quite bad or very bad. The wording of the question was: "Invest in an environmental society even if it means low or zero growth." In the table, the scale from "very good proposal" to "very bad proposal" has been translated into points on a green-grey dimension where "very good proposal" corresponds to "firmly green" and "very bad proposal" corresponds to "firmly grey". People's left-right ideology was measured through a self-classification question.

But when it comes to the left-right dimension a clear change can be seen. In the 1970s there was no connection between views on nuclear power and left-right. Nuclear power opponents and supporters could be found both on the left and on the right; even somewhat more on the right in the first surveys (Holmberg, Westerståhl and Branzén 1977). Nuclear power was a new and separate dimension of conflict in Swedish politics in the years around 1976-1980. But that is no longer so. Amongst the wider public nuclear power has increasingly become a left-right issue. The correlation(s) between people's attitudes to nuclear power and their left-right views stood at around .00 at the time of the 1980 referendum. The first SOM surveys in the 1980s showed corresponding values of correlations of around -.15. In the most recent SOM studies the correlations have moved further to values of around -.30. In this context, a negative coefficient indicates that opposition to nuclear power and the left tend to go together, as do supporters of nuclear power and the right.⁵ At the mass level, nuclear power is no longer an alternative dimension of conflict. The left-right dimension has incorporated its competitor.

Party polarisation

However, the pattern of opinions on nuclear power among the parties' supporters largely looks the same as in the 1980 referendum. Now, as then, supporters of the Left Party, Green Party and Centre Party have the most anti nuclear power views, with net balances in favour of phasing out nuclear power in the long term. Among supporters of the Social Democrats, Christian Democrats, Liberal Party and Moderate Party the current balance of opinion is that nuclear power should be used in the long term, with Liberal Party and Moderate Party supporters the most positive, and Social Democrats and Christian Democrats somewhat more divided. Compared with 1980, Christian Democrats in particular have moved in terms of opinion from a clear majority voting for option 3 to a net balance today in favour of using nuclear power in the long term. Among Social Democrat, Liberal and Moderate voters only minorities chose option 3 in 1980. Even at that time most voted for the more pro nuclear power options 1 or 2. However, on paper, these entail support for a long-term phasing out of nuclear power. In the 1980 referendum it was not possible to vote for using nuclear power, only for phasing it out in the long term!

Compared with the situation in 2003 supporters of all parties have become somewhat more negative towards nuclear power, with two exceptions – the Social Democrats, who have not changed at all, and the Moderates, who have become somewhat more positive. Supporters of the other parties have become somewhat more negative or less positive. Left Party and Green Party supporters have made the largest shift towards the negative corner, while there is also a clear move towards the critical corner among supporters of the Centre Party.⁶ Thus the favourable wind for nuclear power among Centre Party supporters which could be observed in 2003 has not continued in 2004. Instead we can see a certain recoil back towards more anti nuclear power views.

The shifts in opinions in 2004, which were not dramatic in themselves, mean that party polarisation is again increasing somewhat on the issue of nuclear power. Last year the

⁵ The correlation between subjective left-right position and nuclear power view was -.13 in 1986 and 1987 and -.20 in 1988. In the SOM surveys in 2002, 2003 and 2004 the corresponding correlations were -.29, -.27 and -.28 respectively (Holmberg 2004:189).

⁶ The net balance of opinion in favour of phasing out nuclear power was as follows among the supporters of the various parties in 2003 and 2004 respectively (the higher the positive value the more negative the view on nuclear power): Left Party +21, +35; Social Democrats -8, -8; Centre Party +6, +14; Liberal Party -31, -28; Moderate Party -48, -51; Christian Democrats -13, -2; Green Party +41, +53.

polarisation appeared to be clearly on the way down, but that development has not continued in 2004. We can measure the polarisation using the statistical correlation coefficient eta, which can vary between .00 (no party polarisation) and 1.00 (maximum polarisation). When the issue of nuclear power reached its peak in Swedish politics in the years around 1980 the eta coefficient was around .45 to .50. In SOM studies since 1986 eta has been at lower levels, between a high of .40 (1991) and a low of .28 (2003). In the 2004 survey eta achieved a value of .40, equalling the highest value we have measured in SOM. Party differences amongst the wider public on the issue of nuclear power, measured as the degree of polarisation, are thus at least as great today as they have ever been over the last twenty years – much smaller than they were during the nuclear power debate around 1980, but still considerable.

Trust in players

Trust is always a key factor when it comes to forming opinion. We are influenced not only by arguments but also by who is promoting them. Messages are important, but so are messengers. And this is where trust comes in. We are more influenced by messengers who we trust.

Since they started in 1986, the SOM surveys have measured people's trust in some of the most important players in the nuclear power debate. The results in Table 5 point to some interesting changes with regard to who we trust when it comes to energy and nuclear power.

Table 5 Trust in various players on the issue of energy and nuclear power. Proportion of people indicating a very high or quite high degree of trust (per cent)

question: "How much trust do you have in the following groups when it comes to information on energy and nuclear power?"

| | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 |
|--------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| environmental organisations | 57 | 65 | 63 | 64 | 61 | 64 | 69 | 68 | 65 | 71 | 67 | 59 | 59 | 65 | 59 | 55 | 61 | 61 | 60 |
| nuclear power industry | 36 | 46 | 47 | 49 | 58 | 52 | 45 | 48 | 42 | 45 | 45 | 41 | 52 | 53 | 52 | 54 | 52 | 55 | 58 |
| the government | 52 | 52 | 49 | 37 | 36 | 44 | 36 | 43 | 46 | 39 | 38 | 28 | 43 | 42 | 44 | 54 | 52 | 52 | 42 |
| scientists | 81 | 89 | 88 | 85 | 87 | 83 | 80 | 83 | 81 | 81 | 85 | 81 | 82 | 85 | 87 | 85 | 85 | 82 | 85 |
| journalists | 16 | 21 | 28 | 26 | 20 | 24 | 28 | 30 | 26 | 28 | 29 | 26 | 26 | 30 | 29 | 22 | 25 | 25 | 30 |
| national authorities | 40 | 40 | 44 | 35 | 36 | 38 | 36 | 45 | 42 | 41 | 40 | 33 | 45 | 47 | 56 | 58 | 60 | 59 | 57 |
| local authority where you live | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 26 | 35 | 36 | 33 | 37 | 39 | 41 | 34 |
| electricity companies | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 29 | 27 | -- | 26 |

Comments: The question also included the response options "little" and "very little" trust. People who did not answer the trust questions (between 4% and 10% over the years) are not included in the percentage base. A "--" indicates that the question was not asked.

Until now environmental organisations and the nuclear power industry have been opponents in the debate on nuclear power and the environmental side has benefited from a higher degree of trust than the industry. The trust figures for environmental organisations have always been higher than corresponding figures for the nuclear power industry. But it is evening out. Compared with ten years ago, trust in environmental organisations is standing still or falling somewhat, while trust in the nuclear power industry is increasing. In the latest 2004 survey, 60% expressed trust in environmental organisations, compared with 58% for the nuclear power industry. The corresponding figures in 1994 were 65% for environmental organisations and 42% for the nuclear power industry. Thus it is not only views on nuclear power that have become more positive. Trust in the nuclear power industry has also grown.

When it comes to other players, it is worth noting the low figures for electricity companies, the very strong and stable figures for scientists, and the relatively high figures for national authorities. The latter result in particular is very positive. Supervisory authorities who have the task of checking that everything is being done correctly should have a high level of trust. If we do not trust all the parties, we should at least be able to trust the referee.

Advantage nuclear power

Nuclear power opponents and environmental organisations are losing public support at the same time as nuclear power proponents and the nuclear power industry have the wind in their sails. This is how the SOM survey trends can be summarised in simple terms. Energy and nuclear power issues are no longer big issues on the voters' agenda. Only 1% of respondents in the 2004 SOM survey pointed to energy/nuclear power as an important social issue. As recently as 1990 the corresponding proportion was 11%. And if we go further back to the 1976 and 1979 elections, nuclear power topped the voters' list of important issues (Holmberg and Oscarsson 2004). But that is no longer the case.

The question is what will happen in the 2006 election in the aftermath of the closure of Barsebäck II and at the start of a Swedish and international debate on not phasing out nuclear power and instead investing in its expansion (Domenici 2004). One of the main arguments of the proponents of expansion relates to the greenhouse effect. More nuclear power does not contribute to global warming. Among voters the greenhouse effect is perceived as one of the greatest threats to the environment. Only the thinning of the ozone layer was seen as a bigger threat in the 2004 SOM survey. When we measure the degree of concern about changes in the earth's climate we get similar results, i.e. relatively high proportions who express concern – higher proportions than for economic crises, for example, but lower than for terrorism.⁷

The problem for the proponents of expansion is, however, that so far public opinion is *not* showing a link between concern over/fear of the greenhouse effect and a positive attitude towards nuclear power. At present the opinion patterns are the exact opposite. People who see the greenhouse effect as a big risk or are concerned about climate changes tend to be the least positive towards nuclear power, not the most positive.⁸ Environmental and climate arguments have clearly not worked particularly well so far for the proponents of expansion.

However, the 2006 election could bring a change in this. Over the past twenty years the battle over nuclear power has been about phasing it out. Over the coming years will the battle instead be about expansion?

⁷ SOM's surveys of environmental threat and concern for the future were financed by a research project lead by Lennart J. Lundqvist. The measurements of environmental threat cover around ten different threats and the time series extend back to 1993. The concern measurements relate to the degree of concern for the future and began in 1986. So far they cover around 20 phenomena (e.g. destruction of the environment, unemployment, terrorism, economic crisis, increased numbers of refugees etc.), but not every one is measured every year. The results of the concern and environmental threat surveys are documented in Holmberg and Nilsson 2005.

⁸ Environmental threats are measured on a scale of 1 (low) to 10 (high). In the 2004 survey the *lowest* proportion of nuclear power supporters was found among people who put the greenhouse threat at 10, i.e. among those who perceived the greenhouse effect as the most serious. The *highest* proportion of nuclear power supporters was among people who gave the greenhouse threat a risk value of 4, i.e. just below the middle of the scale. The concern question had four response options between very worrying to not at all worrying and concerned what people themselves perceived as worrying for the future. The *lowest* proportion of nuclear power supporters was found among people who thought that climate changes were very worrying (4) (40%, 625 people). We find the *highest* proportion of nuclear power supporters among the small group of people who do not think that climate changes are worrying at all (65%, 40 people).

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