Knowledge of and attitude to the Geological Survey of Sweden (SGU) and view of the Swedish Mining Industry

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Background & Implementation

BACKGROUND

The survey was carried out by Novus on behalf of the Geological Survey of Sweden (SGU). The purpose of the survey is to investigate the knowledge and attitude of the general public to SGU, and their view of the Swedish mining industry.

RESULTS

The results are delivered in a diagram report. Significant differences noted in the report (gender, age, education, religion) are in comparison to the total. A significant difference means that a result from a sub-group, e.g. gender, diverges from the total to such an extent that it cannot be seen as random. Post-stratification has been applied to the results, i.e. afterwards the results have been weighted against known population data in order to correct any inaccuracies in the sample compared to the target population.

IMPLEMENTATION



The response rate is the proportion of the targeted people who have completed the survey. The response rate for this survey was 55%.

The survey was carried out through web interviews with respondents in the Novus Sweden Panel, which has been randomly recruited; this ensures that the results are representative. This means that the results can be generalized to represent the target population.

TARGET GROUP The Swedish general public Image: Constraint of the system of the system

MARGIN OF ERROR

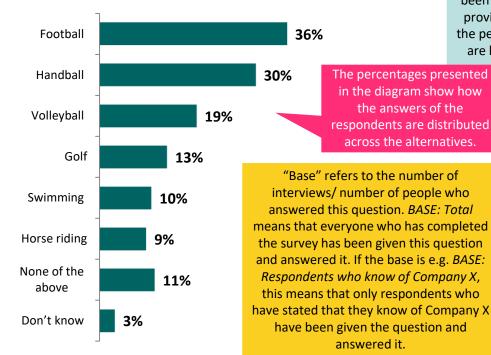
The margin of error is a measurement of the uncertainty of an estimated parameter. The margin of error depends on the proportion of people who have responded and on the number of interviews conducted. Examples of different margins of error depending on the outcomes of a survey can be seen below:

For 1 000 interviews: Outcome 20/80: +/- 2.5% Outcome 50/50: +/- 3.2%

For 5000 interviews: Outcome 20/80: +/- 1.1% Outcome 50/50: +/- 1.4%

Reader's Guide

QUESTION: Which of the following sports do you have an interest in? Multiple answers possible.



If it has been possible for the respondents to provide more than 1 answer to the question, this will be noted after the question. Another example may be Maximum 3 answers. Thus if each respondent has been given the opportunity to provide more than 1 answer, the percentages of the diagram are likely to add up to more than 100%.

Significant differences compared with total The following sub-groups respond more frequently:

Football (36%)

- Woman (41%) •
- Age 18-29 (42%) •
- Highest education level: University (41%)

How to read the results on significant differences:

The heading Football 36% represents the proportion of total respondents and is shown in the diagram on the left. "Woman 41%" means that to a significant extent, women are more interested in football than the total.

A significant difference means that a result from a sub-group, e.g. gender, diverges from the total to such an extent that it cannot be seen as random.

BASE: Total (n=1000)

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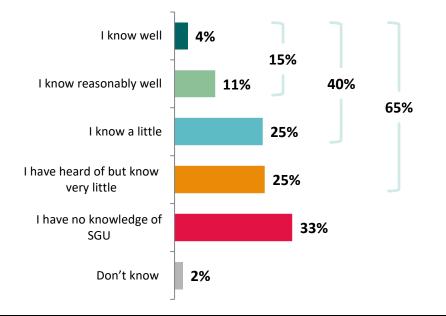
Quick Summary

- Four out of ten respondents (40%) know that SGU works with issues related to the Swedish mining industry. One third (33%) do not know of SGU at all.
- Six out of ten (62%) think that the Swedish mining industry should be given the opportunity to develop in order to secure the supply of important metals. Almost one out of ten (9%) does not think that the industry should be given the opportunity to develop.
- Almost seven out of ten respondents (68%) think that the Swedish mining industry is important for the creation of more job opportunities. Almost one out of ten (6%) does not think so.
- More than seven out of ten (73%) say that the Swedish mining industry is important to the Swedish economy. Very few (2%) think that the mining industry is not important.

- More than four out of ten (44%) think that the Swedish mining industry is important for the reduction of negative climate impact. One of ten (10%) does not think so.
- Almost seven out of ten (69%) think that there is a conflict between the mining industry and the environment. One of ten does not think so.
- More than one out of four (27%) think that it should be easier to start a mine in Sweden. Almost one of four (23%) thinks it should be more difficult.
 - Half of the respondents (49%) could see themselves accepting an active mine in their vicinity. A third (34%) could not.
- Almost six out of ten (56%) cannot see themselves working in the mining industry. More than a third (36%) could see themselves working in the mining industry.

Four out of ten respondents know that SGU works with issues relating to the Swedish mining industry

QUESTION: To what degree do you know that the Geological Survey of Sweden (SGU)works with issues relating to the Swedish mining industry?



Significant differences compared with total

The following sub-groups respond more frequently:

Know well (15%)

Man (21%) Age: 65-79 (26%) 50-79 (21%) Man 50-64 (26%) 65-79 (37%) Education: University (20%) Region: Norrland/Northern Sweden (24%)

Know (40%)

Man (48%) Age: 50-64 (47%) 65-79 (56%) 50-79 (51%) Man, 30-49 (47%) 50-64 (55%) 65-79 (65%) Woman, 65-79 (47%) Education: University (48%) Annual household income (SEK): 500k-799k (47%) Region: Norrland/Northern Sweden (51%)

Heard of (65%)

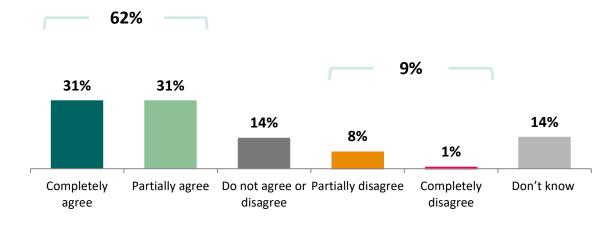
Man (75%) Age: 50-64 (76%) 65-79 (82%) 50-79 (79%) Man, 30-49 (75%) 50-64 (86%) 65-79 (88%) Woman, 65-79 (76%) Education: University (71%) Annual household income: 500k-799k (73%)

BASE: Total (n=2046)

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Six out of ten think that the Swedish mining industry should be given the opportunity to develop in order to secure the supply of important metals

QUESTION: The Swedish mining industry should be given the opportunity to develop in order to secure the supply of important metals?



Significant differences compared with total The following sub-groups respond more frequently:

Completely agree + Partially agree (62%) Man (77%)

Age: 50-64 (68%) 65-79 (72%) 50-79 (70%) Man, 30-49 (76%) 50-64 (83%) 65-79 (86%) Annual household income: 500k-799k (69%)

Partially disagree + Completely disagree (9%) Age: 18-29 (14%) Woman, 18-29 (22%) Region: Sydsverige/Southern Sweden (14%)

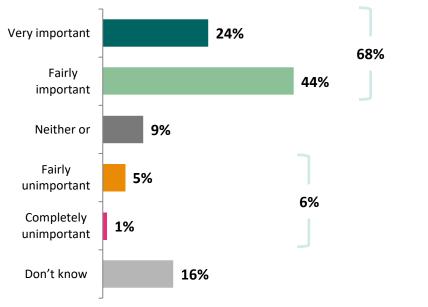
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BASE: Total (n=2046)

Almost seven out of ten think that the Swedish mining industry is important for the creation of more job opportunities

QUESTION: In your opinion, how important or unimportant is the Swedish mining industry for the creation of job opportunities?



Significant differences compared with total *The following sub-groups respond more frequently:*

Very + Fairly Important (68%) Man (79%) Age 50-64 (75%) 65-79 (76%) 50-79 (76%) Man, 30-49 (80%)50-64 (83%) 65-79 (85%) Annual household income: 500k-799k (79%) Region: Stockholm (75%)

Very + Fairly Unimportant (6%) Age: 18-29 (12%) Woman, 18-29 (16%)

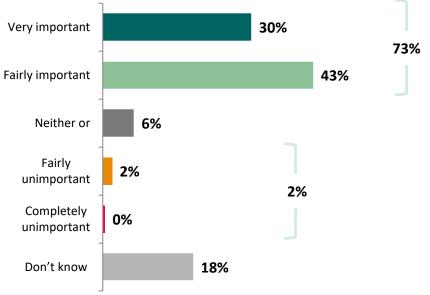
BASE: Total (n=2046)



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More than seven out of ten say that the Swedish mining industry is important to the Swedish economy.

QUESTION: In your opinion, how important or unimportant is the mining industry for the Swedish economy?



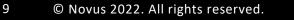
Significant differences compared with total *The following sub-groups respond more frequently:*

Very + Fairly Important (73%)

Man (83%)

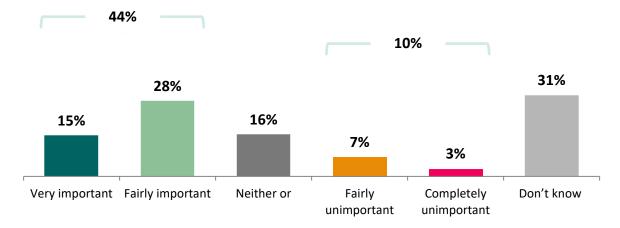
Age: 50-64 (79%) 65-79 (81%) 50-79 (80%) Man, 30-49 (83%) 50-64 (89%) 65-79 (86%) Annual household income: 500k-799k (83%)

BASE: Total (n=2046)



More than four out of ten think that the mining industry is important for the reduction of negative climate impact

QUESTION: In your opinion, how important or unimportant is the mining industry for the reduction of negative climate impact?



Significant differences compared with total The following sub-groups respond more frequently:

Very + Fairly Important (44%) Man (50%) Man, 30-49 (52%) Man, 50-64 (52%) Annual household income: 500k-799k (49%)

Very + Fairly Unimportant (10%)

Age: 18-29 (16%) Woman, 18-29 years(19%) Education: Secondary school (19%) Region: Sydsverige/Southern Sweden (17%)

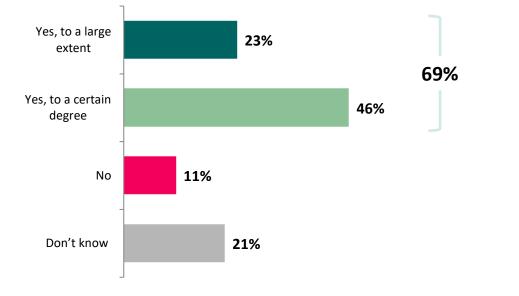
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BASE: Total (n=2046)

Seven out of ten think that there is a conflict between the mining industry and the environment

QUESTION: In your opinion, is there a conflict between the mining industry and the environment, or not?



Significant differences compared with total *The following sub-groups respond more frequently:*

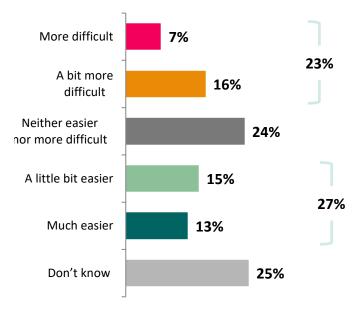
Yes, to a large extent + Yes, to a certain degree (69%) Man (74%) Age: 65-79 (79%), 30-49 years (77%) Man, 65-79 years (88%) Education: University (75%) Annual household income: 500k-799k (74%) Region: Sydsverige/Southern Sweden (77%)

No (11%) Man (16%) Man, 18-29 years (23%) 50-64 (20%)

BASE: Total (n=2046)

More than one out of four think that it should be easier to start a mine in Sweden

QUESTION: In your opinion, do you think it should be easier or more difficult to start a mine in Sweden?



Significant differences compared with total The following sub-groups respond more frequently:

More difficult + A bit more difficult (23%) Woman, 18-79 (34%) 65-79 (29%) Region: Sydsverige/Southern Sweden (31%)

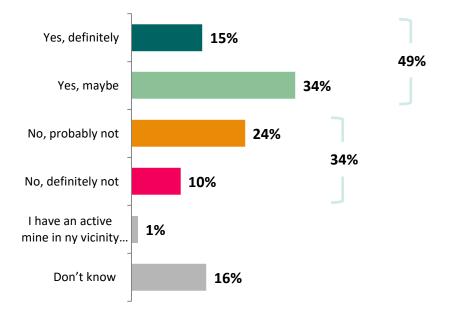
A little bit easier + Much easier (27%) Man (41%) Man, 18-29 years (40%) 30-49 years (39%) 50-64 years (45%) 65-79 years (43%)

BASE: Total (n=2046)

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Half of the respondents could see themselves accepting an active mine in their vicinity

QUESTION: Could you see yourself accepting an active mine in your vicinity, or not?



Significant differences compared with total The following sub-groups respond more frequently:

Yes, definitely + Yes, maybe (49%) Man (62%) Man, 18-79 (63%) 30-49 (62%) 50-64 (67%) Type of municipality: Smaller towns/urban areas and rural municipalities (57%) Region: Mellansverige/Central Sweden (55%)

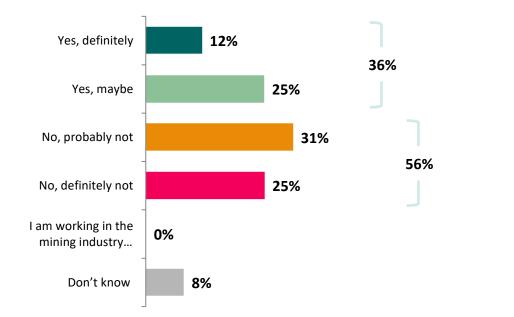
No, probably not + No, definitely not (34%) Woman (39%) Woman, 18-29 years (43%) Type of municipality: Large cities and municipalities near large cities (40%) Region: Stockholm (40%) Sydsverige/Southern Sweden (43%)

BASE: Total (n=2046)

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Almost six out of ten cannot see themselves working in the mining industry

QUESTION: Could you see yourself working in the mining industry, or not?



Significant differences compared with total The following sub-groups respond more frequently:

Yes, definitely + Yes, maybe (36%) Man (49%) Age: 30-49 (47%) 18-49 (42%) Man, 18-29 (46%) 30-49 (60%) 50-64 (48%) Education: Upper secondary school (43%) Annual household income: 500k-799k (44%) Type of municipality: Smaller towns/urban areas and rural municipalities (43%) Region: Norrland/Northern Sweden (58%)

No, probably not + No, definitely not (56%) Woman (67%) Age: 65-79 (62%) Woman, 18-29 (74%) 50-64 (72%) 65-79 (71%) Education: Secondary school (64%) Annual household income: >800k (61%) Type of municipality: Large cities and municipalities near large cities (61%) Region: Stockholm (65%) Sydsverige/Southern Sweden (61%)

BASE: Total (n=2046)

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Three questions, results breakdown for different types of municipality

Types of municipality:

Large cities and municipalities near large cities

Medium-sized towns and municipalities near medium-sized towns

Smaller towns/urban areas and rural municipalities



Results breakdown for type of municipality – three questions

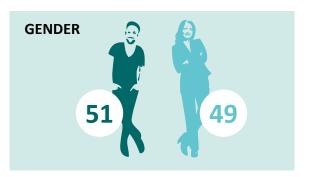
To what degree do you know that the Geological Survey of Sweden (SGU) works with issues relating to 72 % 68 % 69 % 65 % the Swedish mining industry? 4% 3% I know well 8% 6% 7% 3% 3% 5% Important (net result) 11% Unimportant (net result) 10 % I know reasonably well 11% 13 % Could you see yourself accepting an active mine in your vicinity, or not? 25 % 25 % 57 % I know a little 49 % 49 % 43 % 26 % 40 % 35 % 34 % 26 % 23 % 25 % I have heard of but know very 22 % little 29 % Yes (net result) No (net result) 26 % All types 33 % Large cities and municipalities near large cities 38 % Medium-sized towns and municipalities near medium-sized towns I have no knowledge of SGU 29 % Smaller towns/urban areas and rural municipalities 31 % BASE: All types (n=2046), Large cities and municipalities near large cities (n=782), Medium-sized towns and municipalities near medium-sized towns

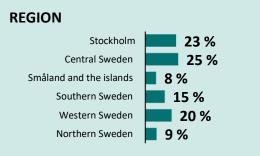
In your opinion, how important or unimportant is the Swedish mining industry for the creation of job opportunities?

(n=639), Smaller towns/urban areas and rural municipalities (n=625)

Background Questions

Background

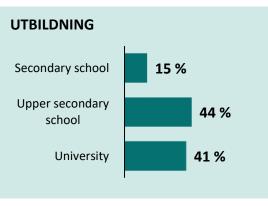




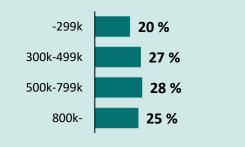
TYPE OF MUNICIPALITY



AGE 18-29 years 20 % 30-49 years 35 % 50-64 years 25 % 65-79 years 20 % 18-49 years 55 % 50-79 years 45 %



ANNUAL HOUSEHOLD INCOME (SEK)



BASE: Total (n=2046)

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About Novus Surveys



At Novus we love questions

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Explanation of Terms

In our Novus reports, we frequently show differences between results, which we call "statistically significant differences", "statistical significances", or that something is "outside the margin of error".

Confidence Level

The Novus standard is a confidence level of 95%. This means that there is a 95% probability that the true result for the population lies within the interval given by the sample result +/- the margin of error. Using a 95% confidence level corresponds to a significance level of 5%.

Margin of Error

The margin of error is a measurement of the uncertainty of a parameter result. For example, a sample of 1000 individuals with a 5% significance level will have the following margin of error:

20/80: +/- 2.5%

50/50: +/- 3.2%

Are the results statistically significant?

A difference is statistically significant if it is greater than the margin of error. A statistically significant difference between two values means that the difference is not random. It shows that there is a difference which cannot be explained by coincidence, but not the size of this difference.



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About the Novus grouping of municipalities

In the report, significant differences are shown between three main groups of municipalities: Large cities and municipalities near large cities, Medium-sized towns and municipalities near medium-sized towns, and Smaller towns/urban areas and rural municipalities. At Novus we use the 2017 classification of Swedish municipalities by the Swedish Association of Local Authorities and Regions (SALAR (in Swedish SKR)).

A. Large cities and municipalities near large cities

A1. Large cities: Municipalities with a population of at least 200 000 inhabitants with at least 200 000 inhabitants in the largest urban area. A2. Commuting municipalities near large cities: Municipalities where more than 40 % of the working population commute to work in a large city or municipality near a large city.

B. Medium-sized towns and municipalities near medium-sized towns

B3. Medium-sized towns: Municipalities with a population of at least 50 000 inhabitants with at least 40 000 inhabitants in the largest urban area.

B4. Commuting municipalities near medium-sized towns: Municipalities where more than 40 % of the working population commute to work in a medium-sized town.

B5. Commuting municipalities with a low commuting rate near medium-sized towns: Municipalities where less than 40 % of the working population commute to work in a medium-sized town.

C. Smaller towns/urban areas and rural municipalities

C6. Small towns: Municipalities with a population of at least 15 000, but less than 40 000 inhabitants, in the largest urban area. **C7. Commuting municipalities near small towns:** Municipalities where more than 30 % of the working population commute to work in a small town/ urban area or more than 30 % of the employed day population lives in another municipality.

C8. Rural municipalities: Municipalities with a population of less than 15 000 inhabitants in the largest urban area, very low commuting rate (less than 30 %)

C9. Rural municipalities with a visitor industry: Municipalities in rural area that fulfil at least two criteria for visitor industry, i.e. number of overnight stays, retail-, restaurant- or hotel turnover per head of population.

Types of municipality, the main groups:

Large cities and municipalities near large cities

Medium-sized towns and municipalities near medium-sized towns

Smaller towns/urban areas and rural municipalities



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About the Novus Sweden Panel

The Novus Sweden Panel comprises some 50 000 participants. The panel is randomly recruited (it is not possible to self-recruit to the panel in order to make money or to influence public opinion) and is representative for the country as a whole in terms of age, gender and region between the ages of 18-79 years. Any imbalances in the panel structure are addressed by extracting a representative selection from the panel, and by weighting the results.

We take good care of our panel through socalled panel management. This includes ensuring that it is not possible to participate in too many surveys within a short period, or in several similar surveys. We also have a rewarding system for the panel.

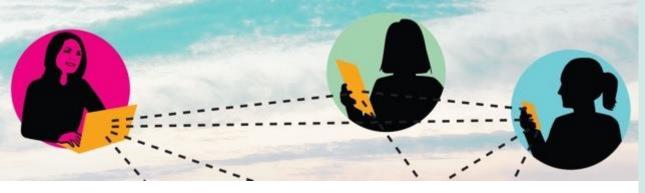


Survey Implementation

A representative selection is extracted from the panel. These receive an e-mail invitation to participate in the survey. The invitation contains information about the time required to reply, last reply date and a clickable link to access the survey. It is possible to choose to answer all the questions at once or to have a break and come back to the questionnaire at a later point.

The data processing starts once the data have been collected, and then tables are produced and a report is prepared.

Please do not hesitate to ask for more information about our panel management!



Web panel quality

The quality of the Novus Sweden Panel is high. We undertake regular quality controls and validations of both the panel and the responses obtained from the panelists.

In comparative studies (with other web panels) we have seen that the Novus panelists take a bit longer to reply to questions and that the answers follow logic (e.g. if someone likes chocolate and icecream, then that someone also likes chocolate icecream). In self-recruited panels this logic is not seen to the same extent. We have also seen that our panelists behave more like "the average person on the street" compared to self-recruited panels whose panelists e.g. are very internet-active.

On average, Novus panelists respond to 12 surveys annually, which is a significantly lower number than in other panels, which ensures higher quality responses. Another very important quality aspect is to provide information on the participation rate (response rate) which is a requirement of all the relevant professional organisations. Some important checkpoints in the implementation of web panel surveys:

- The panel must be randomly recruited in order to reflect reality.
- The survey company must be able to provide information on the participation rate for each individual survey.
- The panelists must not be "professional opinionists", i.e. they must not be replying to too many surveys. If you are requested to respond to more than two surveys monthly there is a risk that you are answering surveys for the wrong reason.
- Good panel management must be ensured, in terms of rewards, response validation etc.
- Information on the fieldwork (the survey implementation) time period must always be provided and should preferably include both weekdays and weekend days.





Publications rules

The Novus trademark provides a guarantee for a correctly designed and implemented survey and that the conclusions from it are correct in relation to the aims of the survey.

In accordance with international professional standards (ESOMAR), Novus is responsible for the correct interpretation of our surveys at the time of first publication.



In order to ensure that our surveys are presented in the correct way, we always request to see the text which is written for publication when our surveys are mentioned.

Novus reserves the right to correct erronous numbers and interpretations that have been published.

