

University of Ljubljana
Faculty of Mechanical Engineering



Survey of public opinion for »green electricity« production in Slovenia

University of Ljubljana, Faculty of Mechanical Engineering
Aškerčeva 6, SI-1000 Ljubljana

April 2005

1. SUMMARY

- If people had possibility to choice electrical energy from different energy sources the most of examinees (86 %) would decide for natural sources.
- 60.3 % of examinees are prepared to pay a higher price for electrical energy from renewable energy sources. Here are a quarter of those who are willing to pay a price which is higher just for 2 %, 37 % of examinees are willing to pay till 5 % higher price and 23.3 % of examinees till 10 % higher price.
- 28.7 % of examinees think, that investment costs are the main barrier for higher electrical energy production from RES in Slovenia, 17.7 % of examinees estimate that the main barrier is lack of technological know-how, 16.3 % of them see barriers in public opposition for construction and 13.3 % in administrative barriers.
- Most of examinees estimate, that the strongest trend of growth on the field of green electricity production in the next 5 years in Slovenia will have water energy (28 %), follow solar energy (22 %), wind energy (19.7 %) and energy from biomass (13.0 %).
- The electrical energy source of the future is for most of examinees (41.7 %) sun, 15 % of them see the future in water, 14 % in wind and ca. 10 % of them swear on biomass.

2. INTRODUCTION

A survey regarding “green electricity” production in Slovenia was carried out by the agency Ninamedia d.o.o. between 14th and 15th April 2005. Inquiry was carried out by the method of computer supported telephonic inquiry. 1440 coincidentally selected telephone subscribers were called from computer list. 506 of them were not reachable, 458 did not want to cooperate in survey and 176 of them did not suit to sample model. The person who celebrated one's birthday the last and was adult was selected inside of household. 300 persons were inquired.

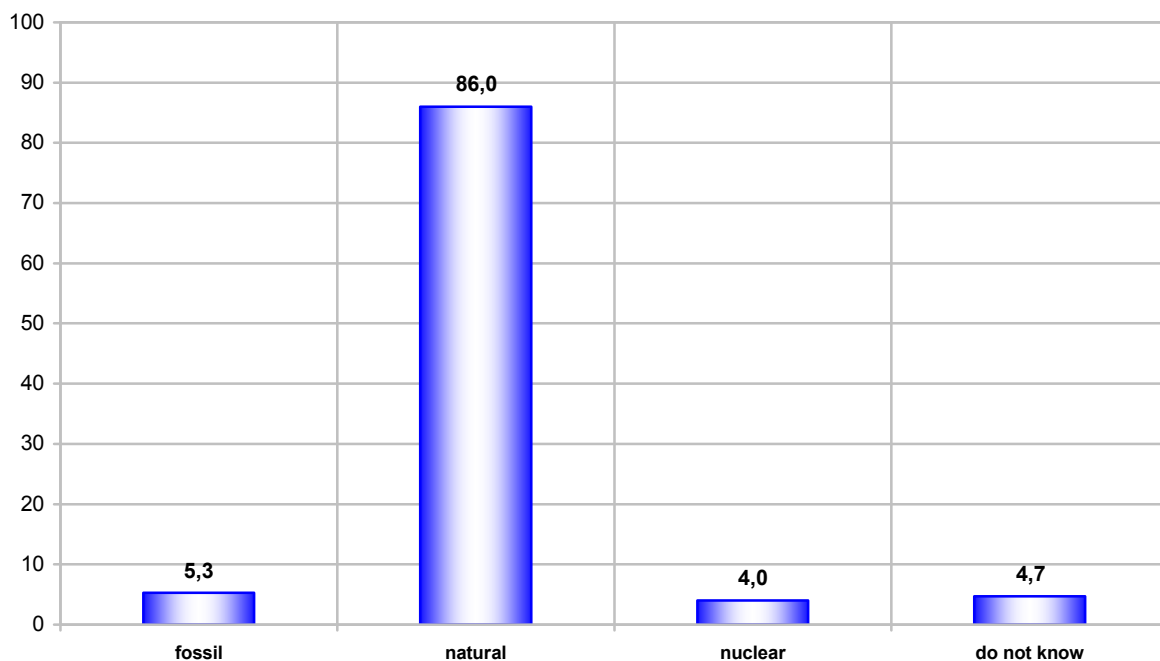
Inquiry was carried out in the telephonic studio of Ninamedia by CATI method. Treatment with data was carried out on SPSS program equipment, version 9.0.

3. PUBLIC OPINION

In the continuation results of statistical analysis of data from survey are presented. Results are presented with tables of frequency distribution by individual questions, graphical presentations and connection of individual questions by sex, age, education, type of settlement and region.

3.1. If you had a choice of sources for the electricity you use at home, would you prefer to have your electricity generated from?

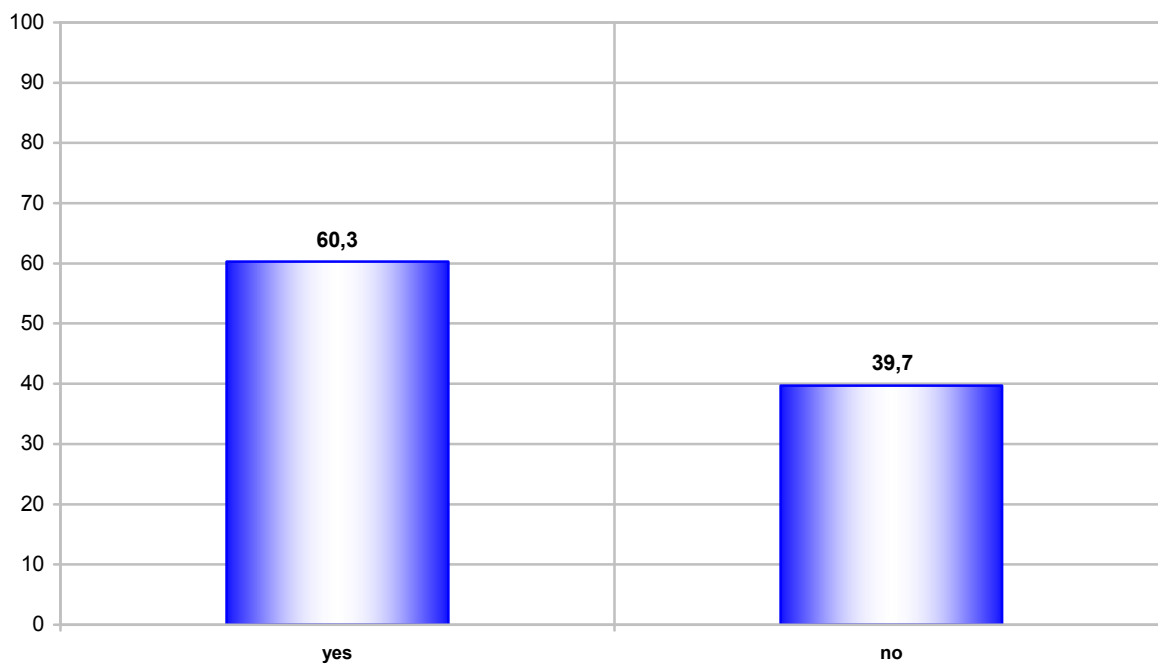
| | N | % |
|--|-----|------|
| fossil energy sources (coal, oil, gas) | 16 | 5,3 |
| natural energy sources (wind, sun, water, biomass, biogas) | 258 | 86,0 |
| nuclear energy | 12 | 4,0 |
| do not know | 14 | 4,7 |



If people had possibility to choice electrical energy from different energy sources the most of examinees (86 %) would decide for natural sources, 5.3 % would choose fossil energy sources and only 4 % a nuclear energy. For natural sources decided more women than men, the most examinees in the ages between 26 and 60 years, the most educated people and inhabitants of bigger cities and Maribor part of Štajerska.

3.2. Would you be prepared to pay slightly more to have all your electricity supplied from renewable energy sources?

| | N | % |
|-----|-----|------|
| yes | 181 | 60,3 |
| no | 119 | 39,7 |

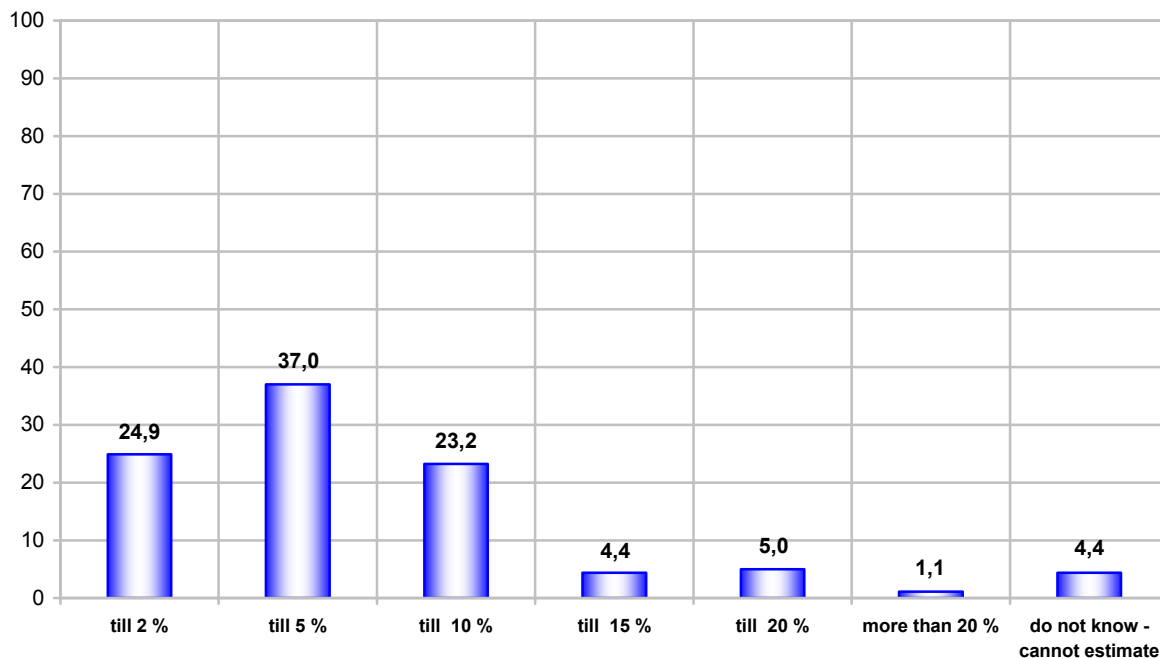


60.3 % of examinees are prepared to pay a higher price for electrical energy from renewable energy sources. Women, the youngest examinees, middle educated people, inhabitants of bigger cities and Gorenjska region represent the highest share. Old people, people with primary school education and inhabitants of countryside and Dolenjska region represent the lowest share.

The following question is for those, who are willing to pay a higher price for electricity.

3.3. How much are you willing to pay for green electricity?

| | N | % |
|------------------------------|----|------|
| till 2 % | 45 | 24,9 |
| till 5 % | 67 | 37,0 |
| till 10 % | 42 | 23,2 |
| till 15 % | 8 | 4,4 |
| till 20 % | 9 | 5,0 |
| more than 20 % | 2 | 1,1 |
| do no know – cannot estimate | 8 | 4,4 |

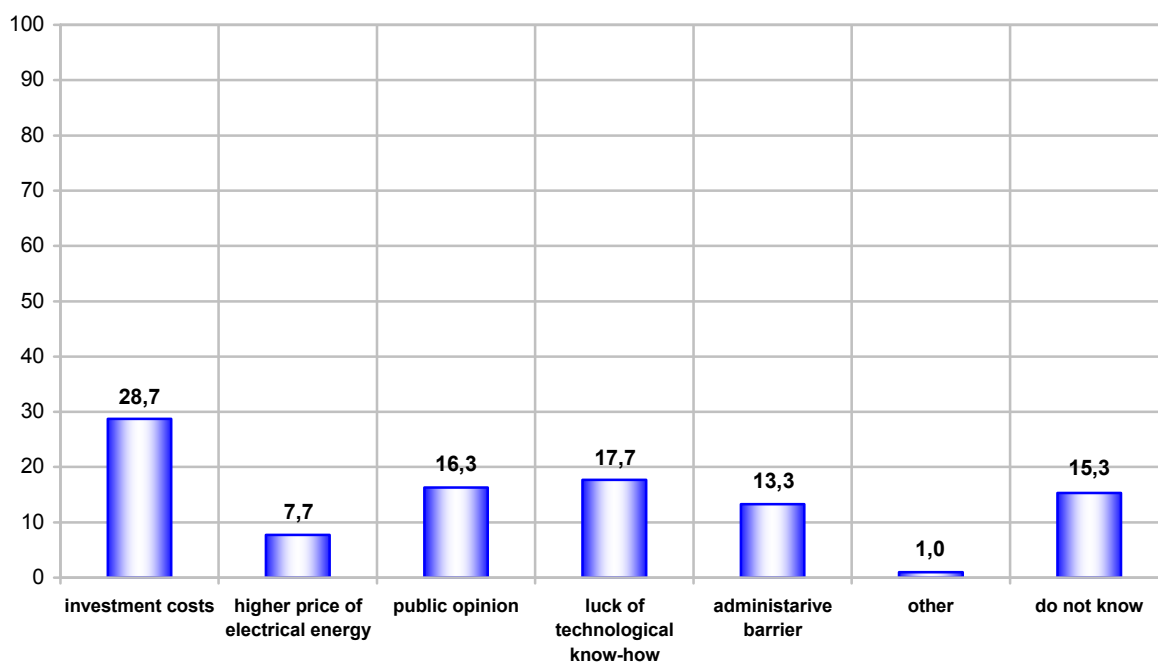


Among examinees, which are willing to pay a higher price for electrical energy from RES, there are a quarter of those who are prepared to pay a price, higher only for 2 percent, 37 % till 5 percent and 23.2 % till 10 percent. More than 10 % of them are prepared to pay still higher price. In average mostly men, examinees between 26 and 60 years, the most educated people, inhabitants of bigger cities and Ljubljana region are prepared to pay the most for that kind of energy.

3.4. In your opinion, which is the most important barrier to higher electricity production from renewable energy sources in Slovenia?

| | N | % |
|-----------------------------------|----|------|
| investment costs | 86 | 28,7 |
| higher price of electrical energy | 23 | 7,7 |
| public opinion | 49 | 16,3 |
| luck of technological know-how | 53 | 17,7 |
| administrative barrier | 40 | 13,3 |
| other * | 3 | 1,0 |
| do not know | 46 | 15,3 |

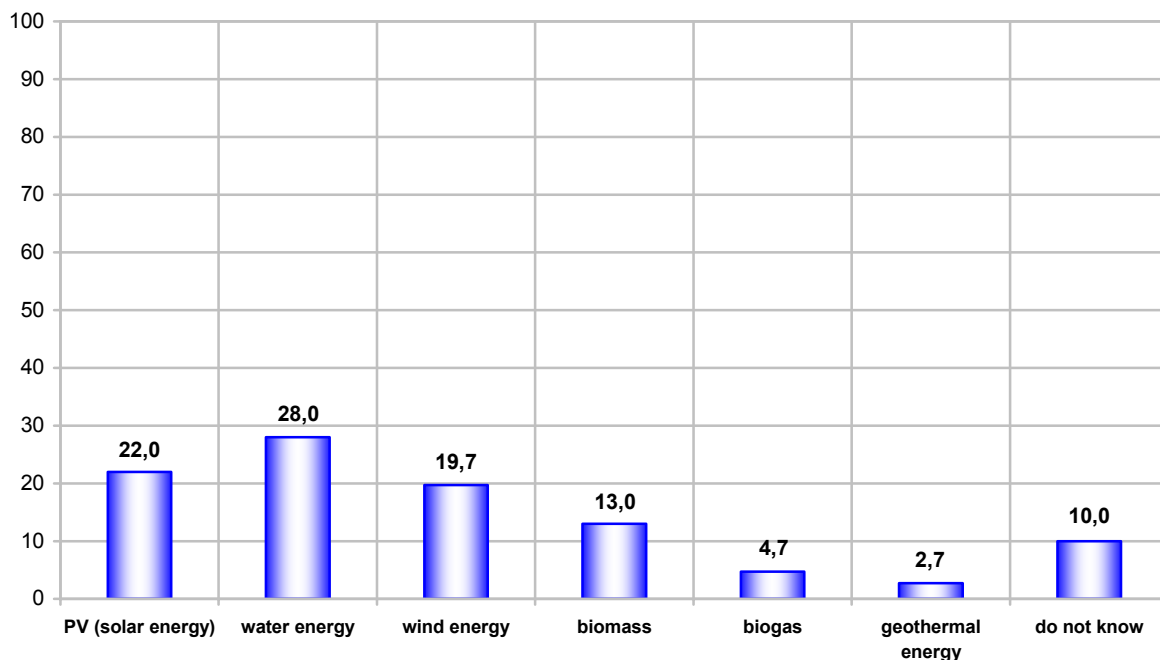
* Below other examinees stated: political background, to small awareness and it is hard to produce.



28.7 % of examinees think, that investment costs are the main barrier for higher electrical energy production from RES in Slovenia, 17.7 % of examinees estimate that the main barrier is lack of technological know-how, 16.3 % of them see barriers in public opposition for construction and 13.3 % in administrative barriers. Higher price is barrier only for 7.7 of examinees. The last ones are the most among women, the youngest and the least educated examinees, inhabitants of the biggest cities and Primorska region.

3.5. In your opinion, which source will have the strongest trend of growth on the field of electricity production in the next 5 years in Slovenia?

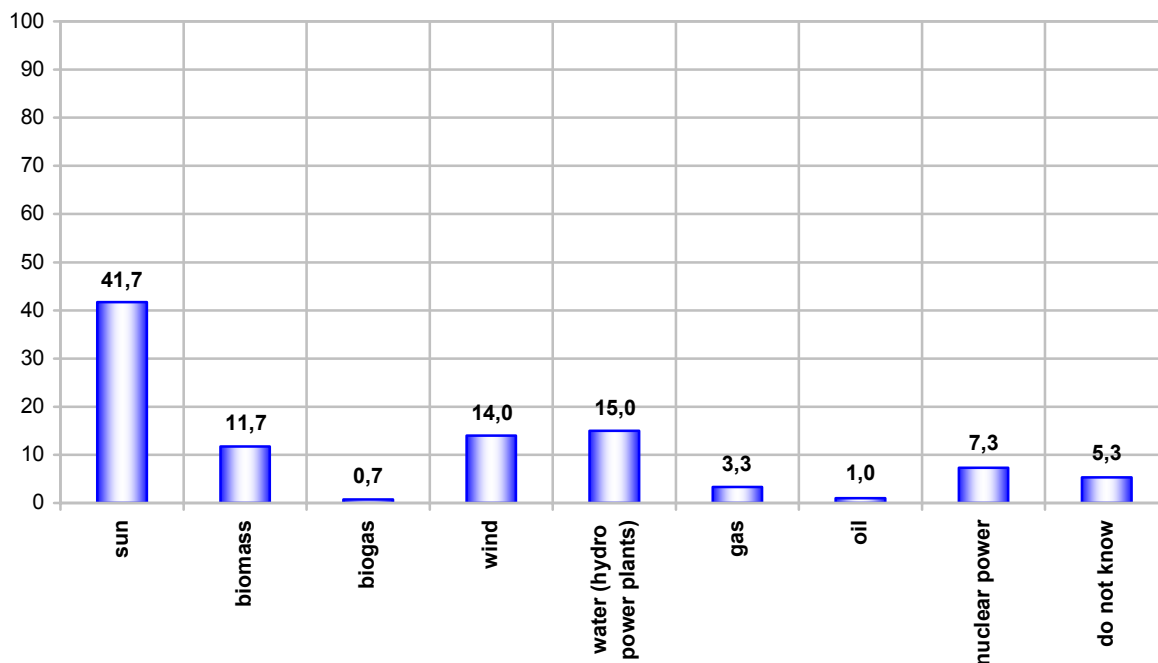
| | N | % |
|-------------------|----|------|
| PV (solar energy) | 66 | 22,0 |
| water energy | 84 | 28,0 |
| wind energy | 59 | 19,7 |
| biomass | 39 | 13,0 |
| biogas | 14 | 4,7 |
| geothermal energy | 8 | 2,7 |
| do not know | 30 | 10,0 |



Most of examinees estimate, that the strongest trend of growth on the field of green electricity production in the next 5 years in Slovenia will have water energy (28 %), follow solar energy (22 %), wind energy (19.7 %), energy from biomass (13.0 %), energy from biogas (4.7 %) and geothermal energy (2.7 %). Wind energy is the most perspective for the oldest and middle educated people, inhabitants of smaller places and Gorenjska region. Biomass is the most perspective energy source for women, the youngest and the most educated people and inhabitants of Dolenjska region.

3.6. What is for you the energy source of the future?

| | N | % |
|----------------------------|-----|------|
| sun | 125 | 41,7 |
| biomass | 35 | 11,7 |
| biogas | 2 | 0,7 |
| wind | 42 | 14,0 |
| water (hydro power plants) | 45 | 15,0 |
| gas | 10 | 3,3 |
| oil | 3 | 1,0 |
| nuclear energy | 22 | 7,3 |
| do not know | 16 | 5,3 |



The electrical energy source of the future is for most of examinees (41.7 %) sun, 15 % of them see the future in water, 14 % in wind and more than 10 % of them swear on biomass (11.7 %). Nuclear power is energy source of the future for 7.3 % of examinees. Other sources are humble evaluated. In solar energy see the future the most women, members of middle generation, the most educated people and inhabitants of smaller places and Primorska region. Biomass is stated mostly by men, younger people, people with high education and inhabitants of smaller places and Maribor part of Štajerska.