



Report on a survey
conducted among low-
income households in
historic buildings from the
late 19th and early 20th
centuries in the
Municipality of Centar

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1 INTRODUCTION

This report presents the results of a survey conducted among tenants of collective housing facilities (buildings) located in the area of the municipality of Centar Sarajevo, which were built in the late 19th and early 20th centuries. These buildings are also known as Austro-Hungarian buildings.

Based on available data from the Municipality of Centar Sarajevo, the Institute for Construction of Sarajevo Canton, and the Institute for the Protection of Cultural-Historical and Natural Heritage of Sarajevo Canton, it was determined that there are 195 buildings that were built in the specified period. At the same time, it is important to note that not all the buildings are under protection. A significant part of the space in these buildings has an administrative and business purpose, and they are home to lawyers' and notaries' offices, representative offices of companies, representative offices, but also state agencies and public institutions. In addition, part of the apartments are used for daily rent.

Out of 195 buildings, this survey covered 40 of them, i.e. slightly more than 20%. There are 595 apartments in them, whose representatives (tenants or users) were included in the survey. Tenants of 44 apartments (7.40%) were not present during the survey, the number of 12 apartments (2.02%) are not used or very rarely used, while a significant number of the apartments are rented, for example to students or tenants (data on the exact number is not known). This should definitely be taken into account when observing and analyzing the results of the survey.

A large number of tenants considered certain questions sensitive and did not answer them, or answered vaguely, for example "unknown", "don't know" or "not sure", regardless of the fact that the survey is completely anonymous and does not ask the tenant for any personal information data, and regardless of the fact that the results are presented only collectively at the level of residential buildings. This especially applies to the key questions of this survey regarding income, creditworthiness and current indebtedness, although there were cases where tenants answered all questions vaguely. It is important to note that this report does not go into the reasons for such a way of answering, but presents the results as they were received from the tenants, since the tenants are responsible for the accuracy and truthfulness of the answers.

The results are given in the order in which the questions appeared on the questionnaires, with a graphical display of the results where possible.

2 RESEARCH AND SURVEY RESULTS

Q1. How many members are there in your household?

The average number of household members is 2.72, while 151 households did not answer this question. The result of the research is shown in Figure 1.

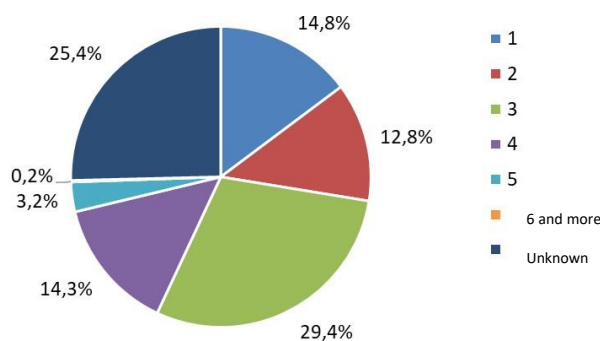


Figure 1: Number of household members

Q2. What is the number of employed members in your household?

The average number of employed household members is 0.88, while 220 households did not answer this question. The result of the research is shown in Figure 2.

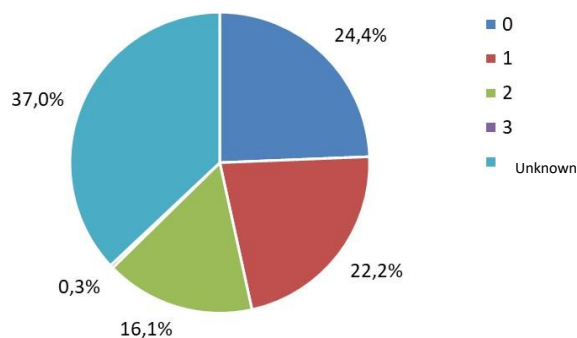


Figure 2: Number of employed household members

Q3. What is the average monthly income in your household?

The average monthly income per household is 1,131.39 KM, based on 368 households that provided data, while 227 of them did not provide data. The result of the research is shown in Figure 3. Among the households with the lowest income are pensioners, most of whom have a minimum pension.

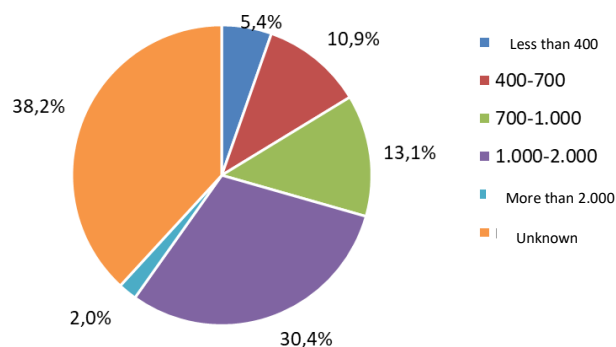


Figure 3: Average household income

Q4. What is the current credit status of your household?

A total of 379 households answered this question, while 216 did not. The result of the research is shown in Figure 4.

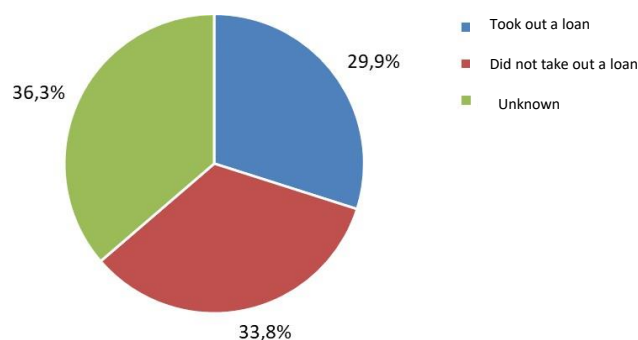


Figure 4: Credit status

Q5. Purpose of the current loan?

Among those who answered the previous question, 111 stated the purpose of the loan, while the rest did not answer this question. The result of the research is shown in Figure 5.

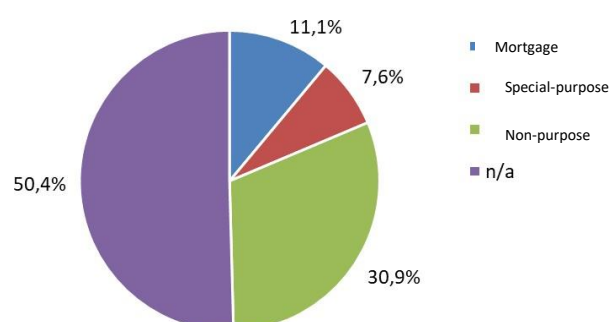


Figure 5: Purpose of the current loan

Q6. Are you familiar with the basics of energy efficiency?

The majority of tenants have basic knowledge about energy efficiency, which is expected, considering the media coverage of this issue in the last few years. The result of the research is shown in Figure 6.

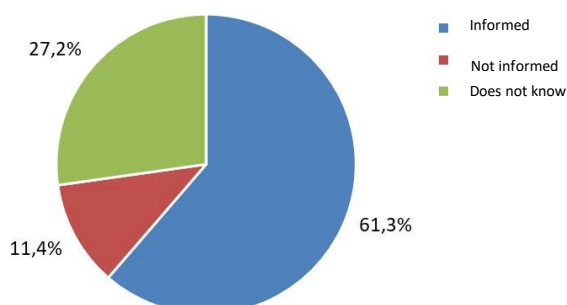


Figure 6: Knowledge of energy efficiency basics

Q7. Have you ever been involved in an institutionally supported energy efficiency program?

The majority of tenants were not included in programs to increase energy efficiency that were institutionally supported (the government of the Canton, the Federation of BiH or some of the funds). The result of the research is shown in Figure

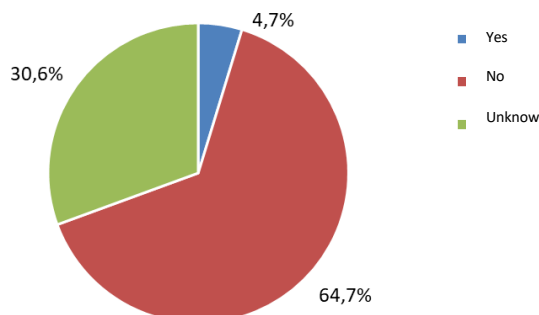


Figure 7: Participation in institutionally supported programs to increase energy efficiency

Q8. If not, what is the reason?

Most of the tenants did not participate in such projects because there were none, and there was neither any widely available information about such projects. The result of the research is shown in Figure 8.

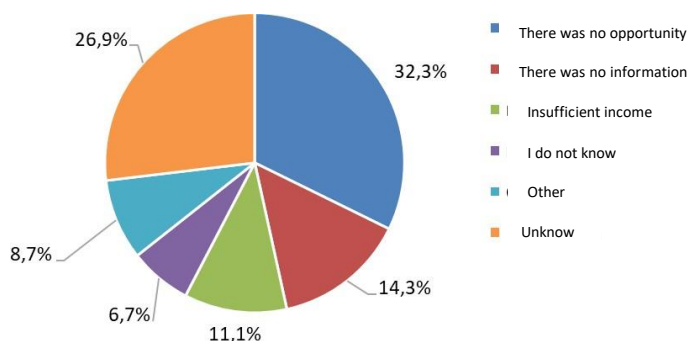


Figure 8: Reason for non-participation in programs

Q9. Have you ever invested in energy efficiency measures?

Most of the tenants replaced the old exterior joinery with new ones, while a significantly smaller number of them did the thermal insulation of the exterior walls or ceilings. The result of the research is shown in Figure 9.

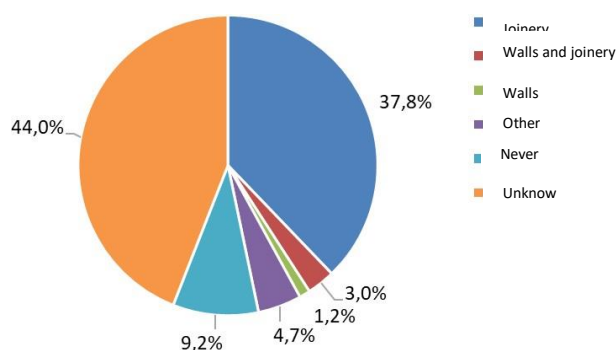


Figure 9: Energy efficiency measure in which tenants have invested

Q10. If so, how did you finance it?

Most of the tenants invested in measures to increase energy efficiency after saving a certain amount of money, or through loans taken from banks or microcredit organizations. The result of the research is shown in Figure 10.

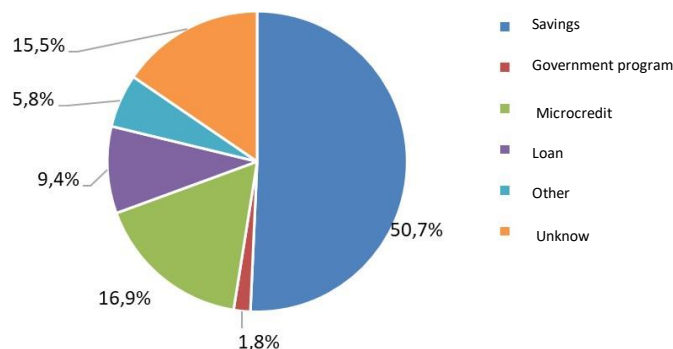


Figure 10: Method of financing measures to increase energy efficiency

Q11. If it is a loan, what type is it?

Most of the tenants took out a non-purpose loan to finance energy efficiency measures. The result of the research is shown in Figure 11.

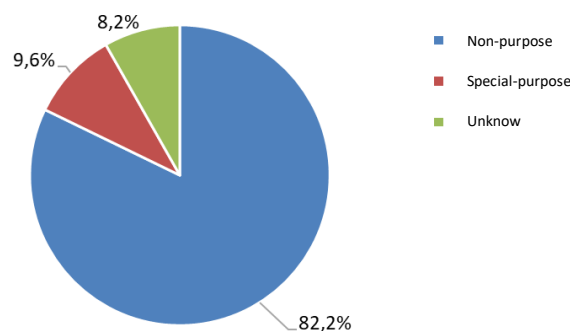


Figure 11: Type of loan taken for investing in measures to increase energy efficiency

Q12. What is the best way to finance measures to increase energy efficiency?

About a third of the tenants do not know or are not sure what would be the best way to finance measures to increase energy efficiency, while the same number did not answer this question. The result of the research is shown in Figure 12.

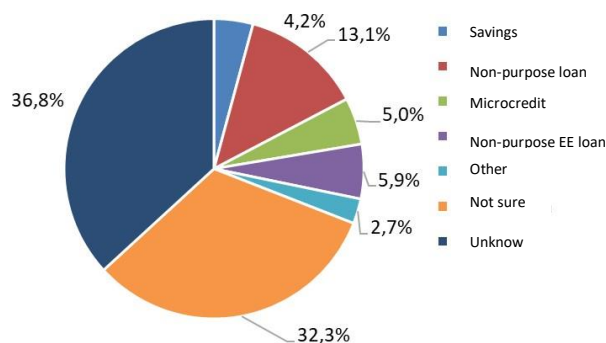


Figure 12: Number of household members

Q13. Would you implement measures to increase energy efficiency?

Most of the tenants would implement measures to increase energy efficiency, if they had the opportunity. The result of the research is shown in Figure 13.

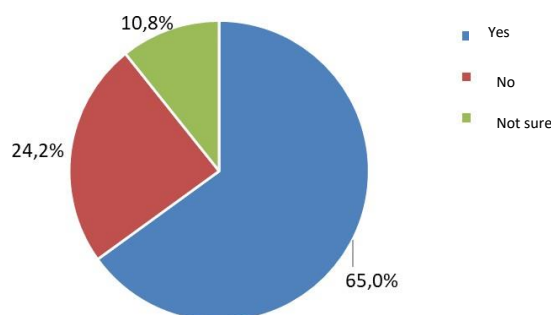


Figure 13: Would tenants implement measures to increase energy efficiency

Q14. Would you take out a loan to implement measures to increase energy efficiency?

Most of the tenants would not take out a loan for this purpose, regardless of its source. However, approximately the same number of tenants would take out a loan or try to find the necessary funds in other ways. The result of the research is shown in Figure 14.

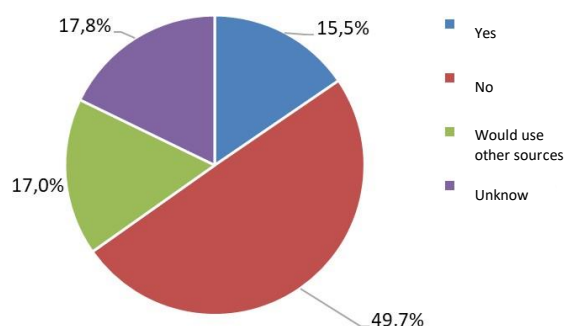


Figure 14: Would the tenants take out a loan for the implementation of measures to increase energy efficiency

Q15. What is the monthly installment amount that would be acceptable to you?

Only about 20% of tenants specified the amount that they would be able to allocate monthly for financing measures to increase energy efficiency, and on average it is 110.87 KM, with the answers ranging from 20 to 350 KM. The result of the research is shown in Figure 15.

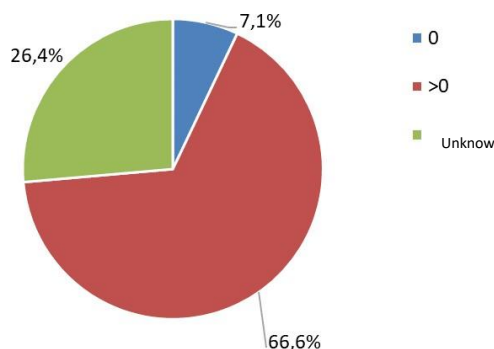


Figure 15: Amount of acceptable monthly installment

Q16. What energy source are you currently using for heating?

The majority of households use natural gas, which is used in wall furnaces and combined gas boilers. A smaller part of them uses electricity, i.e. they are heated by means of convectors and air conditioners, and a small part of them use pellets. The result of the research is shown in Figure 16.

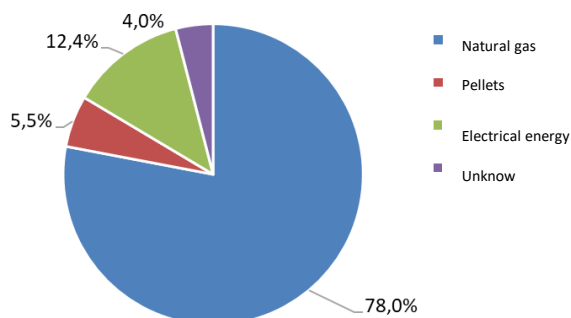


Figure 16: Energy source that is currently used in households

Q17. What is the average amount of monthly heating costs?

Part of the tenants who use natural gas for heating in most cases answered this question without any major problems, but a significant variation in the amount between comparable housing units is noticeable (based on an insight into the questionnaires), which is probably due to different heating regimes. Some of them use natural gas for heating the living space and for the preparation of domestic hot water, which should be taken into account. Part of the tenants who use electricity could not give a precise answer to this question, because they only have data on the total monthly price of energy, while pellets are generally purchased once for the entire heating season. Part of the tenants did not provide information.

Based on the data available in the questionnaires, it can be calculated that, for six months of the heating season, the average monthly cost for heating per household is 126.74 KM.

Q18. What is the area of your residential unit (apartment)?

A total of 71.80% of tenants indicated the area of the housing unit. The rest either did not specify or stated that they were not familiar with it. The information provided by the tenants was not verified, nor was the documentation requested to prove it (for example, a utility bill, an excerpt from the cadastre or land register). Based on the obtained data, the average area of the residential unit is 64.75 m².

Q19. Are you satisfied with the indoor temperature during the heating season?

The result of the research is shown in Figure 17.

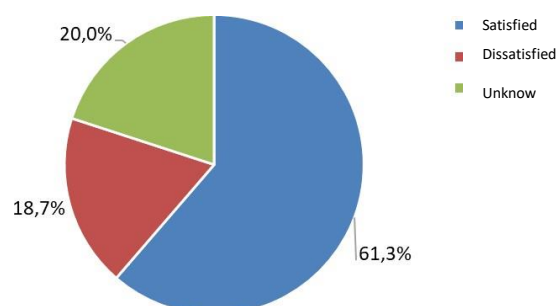


Figure 17: Satisfaction with the indoor temperature during the heating season

Most of the tenants are satisfied with the achieved indoor temperature during the heating season. This is expected, because most apartments are heated using their own heating system (individual furnaces or central heating), that is, they do not depend on the mode of operation of the district heating system.

Q20. What is the average indoor temperature of your apartment during the heating season?

This information was provided by the majority of tenants, since in most cases heating systems are used, the operation of which is controlled by a thermostat. Based on the information available through the survey, the average temperature achieved in the indoor space during the heating season is 21 °C.

Q21. How much area of your apartment is heated?

Through the analysis of the results of the survey, as well as through the conversation with the tenants during the survey, it turned out that around 30% of the tenants heat only part of the residential unit during the heating season. In other words, those 30% of tenants have a reduced living space during the winter period. A significant part of the tenants did not answer this question.

Q22. Who is responsible for maintaining common areas in your building?

All the buildings have a designated manager, that is, a company that performs regular maintenance of common areas (corridors, halls, staircases, basement, etc.). As a rule, the managers are in contact with the tenant's representative (president of the house council), with whom they coordinate the necessary maintenance activities.

Q23. Would you financially support the implementation of measures to increase energy efficiency?

The majority of tenants, over 75%, would be willing to financially support the implementation of measures to increase energy efficiency. A significantly smaller part, 20%, did not express this willingness, and 3% of tenants did not express their opinion. The result of the research is shown in Figure 18.

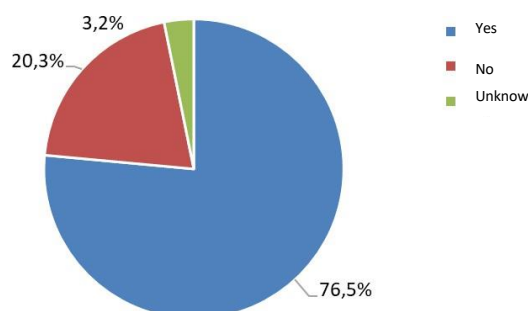


Figure 18: Would you financially support the implementation of measures to increase energy efficiency?

Q24. Would you allow the tenant's representative to supervise the implementation of measures to increase energy efficiency?

Approximately one third of the tenants would be willing to allow an authorized tenant representative, i.e. the president of the house council, to supervise the implementation of energy efficiency measures in buildings. An equal part of the tenants would not be ready for this possibility, while the rest is undecided. The possible reason for this result of the survey should be sought in the fact that the majority of tenants are not familiar with the rights and opportunities that the tenant association has, but also in the fact that tenants are more willing to support independent supervision over the entire process of implementation of measures, from elaboration to implementation. The result of the research is shown in Figure 19.

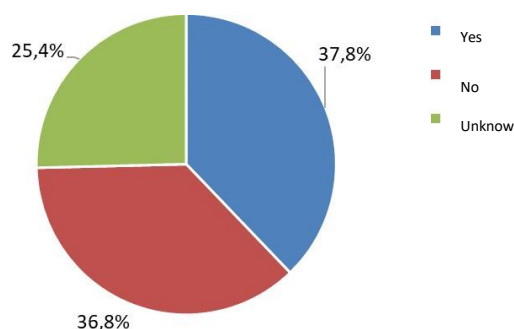


Figure 19: Would you allow the tenant's representative to supervise the implementation of measures to increase energy efficiency?

Q25. Which measure of increasing energy efficiency do you recognize as a priority?

Most of the tenants see the replacement of exterior joinery, i.e. old windows and doors, as a priority. This is surprising, considering that it requires a high investment and does not provide significant savings, compared to, for example, insulating external walls. A smaller number of tenants consider roof or ceiling insulation a priority, and only 15% consider insulation of external walls a priority. The result of the research is shown in Figure 20.

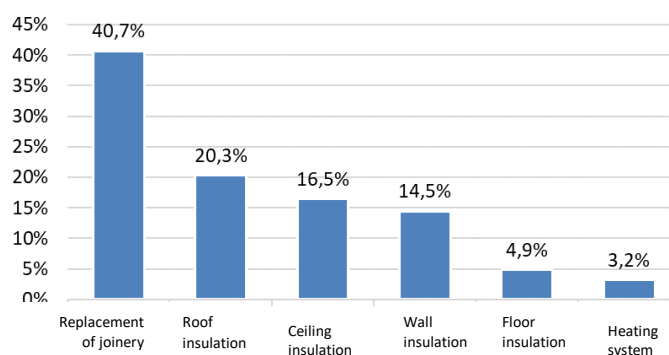


Figure 20: Priority measures to increase energy efficiency according to the opinion of tenants