

Report on the results of the study "Analysis of fuel supply for winter heating: a comparative study with the previous year"

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Key results

The most popular heating sources today are gas and wood. More and more people are now switching to heating their homes with solid fuel. The recent trend shows a shift towards stove heating and solid fuel boilers. Rising gas prices and frequent power outages are driving people to alternative heating methods, with many opting for firewood. This trend is most evident in areas without a centralized gas supply.

Residents of the surveyed oblasts – Kharkiv, Poltava, Sumy - have the opportunity to purchase fuel within their hromadas, but they may face delivery difficulties. This is in part due to shelling (Kharkiv) and in part due to additional costs associated with delivery and unloading of wood.

71% of respondents anticipate problems with heating their living space for the upcoming winter (2024-2025). According to the beneficiaries, the biggest problem will be the high price of fuel to maintain the optimal indoor temperature during the winter.

Compared to last year, the price of wood for heating has increased by about 200-300 UAH per cubic meter. While this increase is in line with what CUA anticipated, it does suggest we should provide a higher amount this year compared to last year.

Half of the respondents who received winterization assistance from Caritas Kharkiv last year indicated that the assistance they received was insufficient. As a result, they had to purchase solid fuel at their own expense to maintain a comfortable room temperature.

Methodology

Within the Kharkiv, Poltava, and Sumy oblasts, three hromadas were selected (total 9), with 10 to 15 beneficiaries interviewed per hromada. Three beneficiaries declined to participate in the survey. Interviews were also conducted with at least one key informant and two solid fuel suppliers from the hromadas.

| Oblast | Beneficiaries | KI | Suppliers |
|---------|---------------|----|-----------|
| Poltava | 45 | 3 | 3 |

| | | | |
|--------------|------------|----------|----------|
| | | | |
| Sumy | 32 | 1 | 4 |
| Kharkiv | 32 | 2 | 2 |
| Total | 109 | 6 | 9 |

Beneficiary survey

The majority of respondents in the study were women (88%) and 12% men. Individuals aged 18 to 59 constituted 51%, while those aged 60 and older accounted for 49%. No individuals under 18 participated in the study.

The majority of respondents (**67%**) live in private houses. **28%** live in apartments, and 4% (4 people from Poltava oblast) live in collective centers. Among the beneficiaries located in Kharkiv oblast, there is one person who lives in a summer kitchen next to a destroyed house that cannot be rebuilt.

During the winter period, people usually heat 3-4 rooms in their houses.

Since the beginning of the full-scale invasion, there have been changes in the choice of the heating source. According to the findings, more people started choosing firewood as the main heating source for their houses over gas. The respondents from Kharkiv oblast are the only exception, as they preferred wood heating even prior to the full-scale invasion. However, Kharkiv oblast demonstrates the most significant change in preferences. Previously, only 53% of beneficiaries used firewood for heating their homes, whereas now 72% of respondents prefer this type of heating.

The detailed results are provided in the table below.

| Heating source | Before the full-scale invasion | | | Last winter | | |
|----------------------------|--------------------------------|---------|------|-------------|---------|------|
| | Poltava | Kharkiv | Sumy | Poltava | Kharkiv | Sumy |
| Briquettes for heating | 0% | 0% | 3% | 0% | 0% | 3% |
| Coal | 0% | 3% | 0% | 2% | 3% | 0% |
| Gas | 51% | 44% | 59% | 40% | 22% | 50% |
| Wood | 33% | 53% | 34% | 38% | 72% | 44% |
| Electricity | 4% | 0% | 0% | 4% | 3% | 0% |
| Pellets | 0% | 0% | 0% | 0% | 0% | 0% |
| Heater or air conditioning | 0% | 0% | 0% | 4% | 0% | 0% |
| Central heating | 11% | 0% | 3% | 4% | 0% | 3% |
| Other | 0% | 0% | 0% | 7% | 0% | 0% |

When answering the question about the preferred type of heating before the full-scale invasion and after the escalation of the conflict, the "other" option was chosen by beneficiaries who lived in collective centers and did not know what type of heating was used in the shelters.

According to the respondents, the majority of beneficiaries, namely 76%, live in the same house as they did last winter. 24% have changed their place of residence. The largest number of people who have changed their place of residence is in Poltava region.

Most participants noted they plan to use either gas or solid fuel. Participant responses suggest that the demand for solid fuel heating will be similar to last year and is only increasing among the respondents in Kharkiv oblast, while it is slightly lower in Poltava and Sumy.

| What source of heating do you plan to use next winter as your primary heating source? | Poltava | Kharkiv | Sumy | Total |
|---|---------|---------|------|-------|
| Briquettes | 0% | 0% | 3% | 1% |
| Coal | 2% | 0% | 3% | 2% |
| Gas | 42% | 19% | 53% | 39% |
| Wood | 31% | 78% | 38% | 47% |
| Electricity | 2% | 0% | 0% | 1% |
| Pellets | 0% | 0% | 0% | 0% |
| Heater or air conditioner | 2% | 3% | 0% | 2% |
| Central heating | 9% | 0% | 3% | 5% |
| Other | 0% | 0% | 0% | 0% |
| I don't know | 9% | 0% | 0% | 4% |
| No answer | 2% | 0% | 0% | 1% |

Seventy-one percent of beneficiaries anticipate difficulties with heating their homes next winter (2024-2025), while only 29% do not foresee any challenges. No significant regional differences were observed in the responses.

According to the participants, regardless of the type of heating they plan to use, the greatest concern for next winter is the high cost of goods and services needed to maintain an optimal indoor temperature. This was indicated by 74% of respondents. The second most common concern, chosen by 36% of respondents planning to heat their homes with gas or electricity, is potential damage to the gas or electricity provision systems.

Among those planning to use solid fuel for heating, 26% expressed concern about finding a source of solid fuel, and 22% foresee potential delivery difficulties. These concerns were mostly voiced by respondents from Kharkiv Oblast. Some respondents selected the "other" option, indicating that they anticipate difficulties but are unsure of the specific challenges they might face.

More detailed information is presented in the table below.

| If so, what problems do you anticipate? | Poltava | Kharkiv | Sumy | Total |
|---|---------|---------|------|-------|
| High prices | 64% | 83% | 80% | 74% |
| Damage to gas or electricity provision system | 33% | 14% | 47% | 36% |

| | | | | |
|---|-----|-----|-----|-----|
| Irregular power supply/frequent power outages | 9% | 8% | 0% | 6% |
| Difficulty finding a source of solid fuel | 13% | 36% | 21% | 26% |
| Difficulty organizing transport of solid fuel | 20% | 28% | 14% | 22% |
| Debt from previous year | 3% | 0% | 0% | 1% |
| Other | 12% | 4% | 0% | 6% |

87% of beneficiaries withdraw cash from bank or ATM, 10% receive cash from post offices, 2% withdraw cash from cash desks in stores, and 1% do not withdraw cash but pay for goods and services by bank transfer.

According to the survey, the majority of the population in the surveyed regions has access to cash in their settlement. This was reported by 68% of respondents. 32% of individuals are unable to withdraw funds in their settlement. On average, they spend one hour traveling to another settlement where such access is available. Respondents pointed out the importance of distinguishing between travel time and the time spent waiting to withdraw cash. For instance, during power cuts, banks and ATMs are non-functional, causing delays of 4-5 hours in accessing cash until the power is restored. A similar problem arises because of air raid alerts, during which banks are unable to serve customers. Due to these circumstances, there's the issue of long queues and the risk that by the time your turn comes, the ATM may be out of money or the bank may close.

Although most respondents do not have problems with withdrawing cash, 11% reported such difficulties. Residents of the Kharkiv oblast face the most difficulties accessing cash due to the inability to withdraw it within their settlement or other restrictions. The main concern mentioned is the lack of public transportation. Other common responses were "Long lines to withdraw or receive cash," "Limited hours of bank or post office," and "Fear of shelling," which confirms the above statements.

Heating with solid fuel

A total of 57 people answered the questions in this section: 24 people from Kharkiv oblast, 18 people from Poltava oblast, and 15 people from Sumy oblast.

Last year, 10 people who heated their houses with solid fuel received heating materials from charitable foundations. Five respondents who heat 4 or 5 rooms in winter mentioned that the support they received from charitable foundations last winter wasn't sufficient, so they had to buy extra solid fuel themselves. The average amount of money spent on solid fuel was 9413 UAH. The median and mode amount to 7000 UAH.

Most residents purchased solid fuel from private sellers, but there were four individuals who gathered solid fuel themselves from forest areas. This need arose due to financial constraints, since all these individuals are either pre-retirement or retirement-age and their income is not enough to cover the cost of heating materials for the winter.

| Did you have any problems in procuring this fuel? | Poltava | Kharkiv | Sumy | Total |
|---|---------|---------|------|-------|
| Yes. | 27% | 52% | 0% | 32% |
| No. | 73% | 48% | 100% | 68% |

68% of respondents did not have any difficulties with the purchase of solid fuel last year, but 32% experienced problems. It should be noted that people living in Sumy oblast did not experience any challenges. However, more than half of the respondents from Kharkiv oblast faced obstacles in procuring solid fuel.

The problems faced by beneficiaries last year are similar to those anticipated this year. The main one is the high cost of solid fuel - 60%. In Kharkiv oblast, 45% of beneficiaries had difficulties finding a solid fuel supplier. A common challenge for Kharkiv and Poltava oblasts is difficulties with transportation of purchased materials, as reported by 27% of respondents.

| Amount of money spent on heating (last winter) | | | |
|--|---------|--------|------------------------------|
| Number of rooms heated in winter | Average | Median | Number of responses received |
| 1 | 20000 | 20000 | 1 |
| 2 | 12000 | 12000 | 3 |
| 3 | 17444 | 16000 | 9 |
| 4 | 15567 | 16000 | 15 |
| 5 | 14667 | 10000 | 3 |

People who received winterization assistance from charitable and non-governmental organizations were not included in these calculations. The obtained results are only approximate. The amount of fuel consumed and, consequently, the expenses on it will heavily depend on the insulation of the house, its size, and the individual's preferences regarding indoor temperature, that is, these figures are averages.

Heating with gas or electricity

A total of 34 people answered the questions in this section: 15 people from Poltava oblast, 12 from Sumy oblast, and 7 from Kharkiv oblast.

| Did you face any problems with heating your home last year? | Poltava | Kharkivskaya | Sumy | Total |
|---|---------|--------------|------|-------|
| Yes. | 40% | 57% | 33% | 41% |
| No. | 60% | 43% | 67% | 59% |

59% of beneficiaries did not face heating problems last year, but 41% had difficulties with it. Respondents in Kharkiv region experienced the most problems.

| If so, what problems did you face heating your home last year? | Poltava | Kharkivskaya | Sumy | Total |
|--|---------|--------------|------|-------|
| Damage to gas provision system | 17% | 25% | 0% | 14% |
| Damage to electricity provision system | 0% | 25% | 0% | 7% |
| Irregular power supply/frequent power cut | 50% | 75% | 75% | 64% |
| Debt | 0% | 25% | 0% | 7% |
| High prices | 33% | 25% | 25% | 29% |

| | | | | |
|-------|-----|-----|-----|-----|
| Other | 17% | 25% | 25% | 21% |
|-------|-----|-----|-----|-----|

The most significant problem faced by respondents is irregular power supply. This option was chosen by 64% of respondents. High utility prices are also a great challenge for people. Among "other" responses, respondents mentioned inability to receive pensions, poor heat retention in their houses, and insufficient power of gas convectors that make it impossible to heat the rooms for more than 15 degrees Celsius.

| Spent on utilities from October to February, excluding debt | | | |
|---|---------|--------|------------------------------|
| Number of rooms heated in winter | Average | Median | Number of responses received |
| 1 | 6833 | 8500 | 3 |
| 2 | 10636 | 10000 | 11 |
| 3 | 12944 | 15000 | 9 |
| 4 | 14375 | 15000 | 8 |
| 5 | 27500 | 27500 | 2 |
| 6 | 25000 | 25000 | 1 |

Only one person from Kharkiv region has a debt for utilities, but they refused to provide information about the amount of the debt.

Interview with Key Informants

According to key informants in areas with centralized gas supply, people mainly use gas for heating, but there is currently a tendency towards using wood. There are no disruptions with gas provision at the moment. However, there are significant power cuts, including both scheduled and emergency shortages that can last up to 10 hours a day.

Residents in hromadas do not face issues purchasing solid fuel. However, according to key informants, there are categories of vulnerable people, such as the elderly and people with disabilities, who have difficulty purchasing solid fuel on their own. Respondents also noted some challenges in transporting purchased solid fuel, especially to remote villages. If necessary, residents will be able to report on the targeted use of funds, as they usually purchase solid fuel from forestry and private organizations.

Respondents were not aware of any planned winterization assistance from the state or non-governmental organizations. There are only state subsidies for reimbursement of utility bills, but as a key informant noted, they are becoming increasingly difficult to obtain.

Among the key informants surveyed, only the Yemanska rural community in Sumy region allocated funds from the village council budget for solid fuel for vulnerable groups. This amounted to 7,000 UAH per person for people with disabilities (Groups 1, 2, 3) and elderly individuals aged 75 years and above.

Among other needs related to winterization, key informants from three oblasts highlighted the following: generators and heaters for municipal facilities such as hospitals, social care centers, etc. EcoFlow charging stations for individual households were also mentioned. There was also a need for thermal insulation and

repair of damaged houses to reduce heat loss in winter, which was emphasized by both local government representatives and solid fuel suppliers.

There is a need for financial assistance for the local population, especially pensioners. In addition to acquiring wood, the elderly also require assistance with stacking solid fuel in their yards.

Interviews with suppliers

Suppliers have confirmed the trend of people switching to solid fuel heating. A supplier from Sumy Oblast noted that while gas heating remains more popular, wood-burning stoves are increasingly being installed in private homes. Respondents expect that due to the unstable situation, people will only purchase the critically necessary minimum and not stockpile fuel.

The largest volume of orders for solid fuel is received from the end of summer to mid-autumn. Most of the surveyed companies indicated they could meet a 50% increase in demand for solid fuels. The majority of surveyed solid fuel suppliers accept bank and account transfers as payment methods, with only two businesses accepting payment exclusively in cash.

Most wood suppliers reported a slight price increase of around 200-300 UAH per cubic meter, while two suppliers indicated that prices have remained unchanged. The price increase is primarily linked to difficulties in accessing forest resources due to frequent fires caused by artillery shelling.

Most solid fuel suppliers do not offer delivery services for purchased materials. For example, the state enterprise "Kupiansk Forestry" in the Kharkiv region does not provide firewood delivery or loading and unloading services, leaving customers to handle these tasks themselves. Suppliers that do offer delivery services often face difficulties due to a lack of transportation vehicles and complications from poor road conditions or ongoing military operations. Typically, there is an additional charge of around 200 UAH per ton for delivery services. Deliveries are made to the village rather than directly to the purchaser's household, creating additional challenges for buyers.

Almost all surveyed companies are experiencing staff shortages as the active phase of mobilization has taken a significant portion of the workforce from logging companies.

Conclusions

Key Takeaways of Core Concerns

- **High Prices:** There is a general expectation of elevated costs for heating fuel.
- **Transportation Service Availability:** Concerns exist regarding the availability of transportation/delivery services.
- **Delivery and Stacking of Wood:** The potential unavailability of delivery and stacking of wood present some challenges.
- **Ability to Order:** Up to 30% of surveyed households may face difficulties in placing orders.

Key Conclusions

- **Logistics Risks:** There are potential risks related to logistics.
- **Operational Challenges:** These logistical risks must be balanced against the potential for operational problems, such as delays and increased organizational costs, when executing in-kind

distributions. The necessity of fuel delivery remains constant, so it must be decided whether the organization handles it or if individuals manage it through the market and with some support from the organization.

- **Market Trust:** The data indicates that markets are functional. This, combined with our trust in markets and human agency, supports the belief that individuals make the best decisions for themselves.
- **Cash as the Best Option:** Cash is the most suitable option for Poltava and Sumy. In Kharkiv, cash is viable but may require additional support from our team to work with households and suppliers to ensure delivery.

A cash approach is feasible, given that markets appear functional. This approach should be flexible, allowing households to choose between buying solid fuel or gas based on their needs and the uncertain situation. Providing a sum of money and letting households decide what to buy for their winter needs is recommended. The amount should include transport costs, as this was highlighted as a key challenge.

Additionally, it is crucial to have case managers check in on beneficiaries, offering support with the purchase and delivery process. Follow-up support is especially important for the elderly and people with disabilities, as they may face additional challenges.