Humanitarian Research Hub

Adaptive strategies of vulnerable groups of Kyiv citizens during winter energy crisis

(Brief report version)



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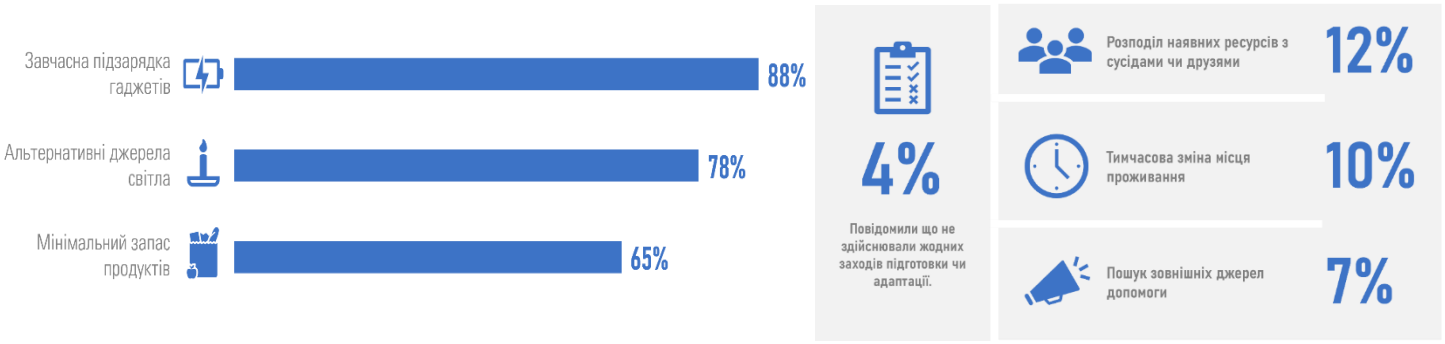
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Research question:

Which adaptation strategies are employed by vulnerable groups of Kyiv residents with limited resources to cope with prolonged electricity outages, which of these strategies prove effective, and at what point do their coping capacities reach their limits?

Synthesis of secondary data:



Kobo Inc / TJET (Harvard Humanitarian Initiative) – household survey:

Independent expert assessment (Deputy director for scientific and organizational affairs, Institute of General Energy, National Academy of Sciences of Ukraine):

Kyiv's heating networks are 70–80% worn out:

Mainly because of their age, rather than directly because of the war;

The sum of 4.5 billion UAH for decentralized generation has been deemed insufficient:

According to the expert's calculations, this would yield a maximum of ~150–180 MW, even if all of it were used for cogeneration – which would be 'very, very close' even for Kyiv only.

Scepticism regarding the claimed 200 MW of new generation capacity:

Each cogeneration system is 1–2 MW, meaning that 100–200 units are required; connecting that many facilities within the available timeframe is technically extremely difficult.

The 50 billion UAH deficit has been confirmed as not purely financial:

A hidden factor is the human resource aspect (certification of engineers for cogeneration equipment requires years of study abroad, and the number of specialists is 'plummeting'), as well as the time involved and bureaucratic approvals.

Targeted mechanisms for vulnerable groups (preferential tariffs, subsidies, energy efficiency programmes) have been confirmed as being in place and operational:

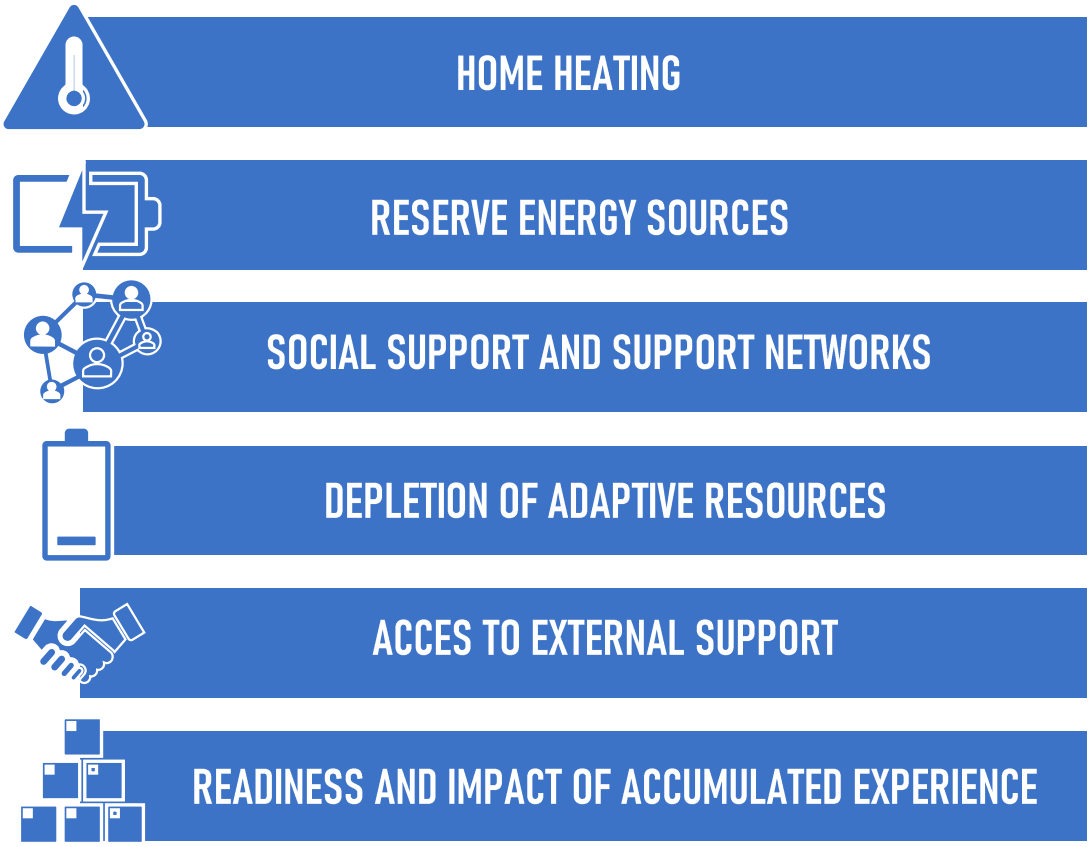
This contrasts with the widespread refusal to interview vulnerable groups of Kyiv residents, which highlights the gap between the existence of programmes and practical access to them.

Furthermore, the dangers of using makeshift heating methods have been confirmed and highlighted: As well as fire and carbon monoxide, there is a new, unforeseen risk posed by homemade lithium-ion batteries. These can cause a fire that is virtually impossible to extinguish (as confirmed in three interviews conducted with representatives of vulnerable groups).

Reserch metodology:

Based on a synthesis of the available sources, six expectations were identified:

:



A purposive sample was used, incorporating elements of the snowball sampling method based on the principle of maximum variation, with representatives from four vulnerable groups:

The sample size was determined on the basis of the information power principle: the research institute conducted 15 in-depth interviews with households and two interviews with experts – a representative of a humanitarian organisation that receives hundreds of families every week at its centres in Kyiv, and the deputy director for scientific and organisational work at the Institute of General Energy of the National Academy of Sciences of Ukraine.

The sample is not representative and does not claim to provide a statistical generalisation of the entire vulnerable community in the capital.

What did the interviews indicate?:

Heating without electricity:



Only 3–4% of Kyiv citizens were able to heat their homes sufficiently during the winter – the worst figure among all cities in Ukraine, according to the International Organisation for Migration (IOM).

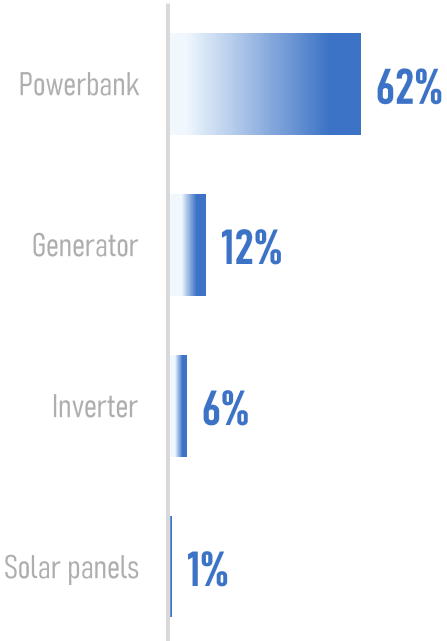
Interviews with households reveal that the reasons for this were varied.

In other cases, the dependence on electricity is direct and critical. A family forced to move from Kakhovka is living in a fully electrified home with no gas – meaning that as soon as the power goes out, any means of heating disappears. Two women with disabilities, independently of one another, recounted how they kept warm by lighting their gas cookers and surrounding them with firebricks to make the heat last longer.

Why is the heating system so vulnerable to power cuts, even when the house is connected to the central heating network?

According to an energy expert, it all depends on the age of the building: in older buildings, a power cut has almost no effect on heating. Newer buildings require an electricity supply to function – and it is in these that a power cut means a loss of heat.

A representative of the humanitarian organisation 'Community of Saint Egidio', who visits the most vulnerable groups of Kyiv residents in their homes every week, confirms that the main obstacle is not a lack of understanding or a willingness to prepare, but a lack of funds



Emergency power supply:

The following alternative energy sources are listed amongst internally displaced persons (according to IOM data).

This pattern was fully confirmed in all 15 interviews: practically everyone, without exception, has a power bank and a flashlight. However, the next step – something more powerful – depends almost entirely on the family's financial situation.

Only two families in the sample – both of whom are raising children with disabilities and are relatively more financially stable – have a fully-fledged portable power station (Ecoflow). One mother was forced to improvise using a car battery connected to a blender to prepare special therapeutic food for her child during power cuts.

The Deputy Director for Scientific and Organisational Work at the Institute of Energy considers the funds allocated by the state for the development of distributed generation across the country (over 4.5 billion UAH) to be insufficient. Targeted programmes for vulnerable groups do exist, but they provide support at the level of the building as a whole, rather than for individual vulnerable families, so they did not reach the respondents in this research.

Who's nearby?:

Only 12% of Kyiv citizens shared resources with their neighbours during the power cuts — a lower than in other major cities in Ukraine (data from Kobo Inc/TJET, Harvard Humanitarian Initiative). Among the Kyiv citizens surveyed, the situation was even more polarised: some received very strong support, whilst others received practically none.

According to the interview results, respondents identified social support as one of the most effective tools helping them in practice (among those who had access to it). Those surveyed reported significant difficulties and a deterioration in their standard of living in cases where they suddenly lost access to it.

A visually impaired woman, who lost her sight twelve years ago, shares a apartment with a young woman she does not know: the latter lives there rent-free in exchange for daily care — an informal arrangement that arose not out of family ties, but out of a practical need on both sides.

The humanitarian organisation 'Community of Saint Egidio' is so well aware of this that it has turned it into a practical tool: for every vulnerable person in its database, it records the contact details of a neighbour or friend who can be called upon to carry out periodic checks. According to the organisation's coordinator, this is "*a mechanism that might seem utterly simple, but it really does save people's lives and helps them react quickly in critical moments*".

When resource ends:

49%

Spent all savings during the first month of winter

14%

Forced to accept a lower standard of living

Most of the households surveyed confirmed that each following winter was harder to cope with than the previous one, with some even describing the winter of 2025–2026 as «horrible» and a «disaster».

But there is one exception, and it is telling: two families raising children with disabilities found last winter easier to cope with than previous ones — not because the winter was objectively milder, but because they had purchased a powerful generator in advance, had come to terms with the situation psychologically, and made use of the more precise power cut schedules introduced by the city.

The coordinator of a humanitarian organisation confirms the depletion of resources almost word for word: «Resources are definitely running low… we were recently talking with friends about how we're tired of being tired.» But she also described a powerful counter-mechanism that she observes every week: IDPs who once received humanitarian aid themselves eventually return as volunteers to help new families.

If 49% of people had used up their savings within the first month of winter, then amongst the single elderly people surveyed, the possibility of building up any savings is, in fact, non-existent. Consequently, many Kyiv citizens from this vulnerable group found themselves in a desperate situation during the winter of 2025–2026, with no means of coping on their own.

When support was requested and why it did not always work?:

Only 9% of internally displaced persons (IDPs) received government assistance to cover utility costs, while seeking external assistance was the least common coping strategy among Kyiv residents overall (7%, according to Kobo Inc./TJET data). This emerged as one of the most complex and nuanced themes in the entire study.

In several cases, the reasons for rejection were quite specific. One man was denied a one-time municipal assistance payment because his income, consisting of his pension and the displacement support payment, totaling approximately UAH 5,300 per month, exceeded the eligibility threshold of UAH 4,500. One respondent discovered that the humanitarian organization she had approached and the local Territorial Centre for Social Services could not provide her with a social worker simultaneously. This formal rule left her without support for several months.

Beyond outright denials of assistance, respondents who regularly relied on basic support in the form of food parcels and essential non-food items reported a decline in the volume of aid available. This was reflected in smaller food packages and in the reduction or complete discontinuation of assistance programmes offered by organizations from which they had previously received support

Informal and politically mediated channels appeared, somewhat unexpectedly, to be more reliable than official ones. Two respondents, independently of one another, reported receiving regular annual assistance through local council members and the mayor, while formal assistance mechanisms had denied them support.

Respondents provided different explanations for why they had not sought assistance. Some had previously been denied support and had given up trying. Others had already concluded that they would not meet the eligibility criteria:

"I can see that there is no point." Still others were reluctant to ask for help, believing that those around them were facing similar hardship. Others received assistance only passively, through a neighbour who applied on their behalf.

Four respondents independently confirmed another recurring pattern: a number of humanitarian programmes in Kyiv are exclusively targeted at internally displaced persons (IDPs), leaving some local residents, despite facing equally severe hardship, without access to support.

«I would say that they should also help Kyiv residents. Because whenever assistance is available in Kyiv, it seems to be only for internally displaced people» (humanitarian organisation).

However, the coordinator of the Community of Sant'Egidio offered an important qualification: her organization deliberately does not distinguish between people based on displacement status. As she explained, *"We do not categorize people; we welcome the person."*

She describes cooperation with the city and social services as working well: organisations exchange lists of the most vulnerable groups and coordinate visits. This stands in stark contrast to the individual refusals described by respondents — and is most likely explained by the fact that institutional interaction between organisations and the state simply operates according to different rules than when an individual makes a personal appeal to a specific service.

Why previous winter experience does not always help?:

More than half of Kyiv citizens acknowledge that they are either unprepared or only somewhat prepared for prolonged power cuts, despite having lived through three or even four consecutive winters marked by such disruptions (Kobo Inc./TJET data). At first glance, one might expect experience alone to lead to better preparedness. In practice, however, the primary barrier remains financial constraints rather than a lack of awareness. Yet the findings also point to another, less obvious reason.

The coordinator of the humanitarian organization described it this way:

"Our winters are difficult, but no two winters are the same. There is always an element of unpredictability.

Last year, there were almost no power outages; this year has been the most difficult winter so far."

This suggests that some respondents cannot rely on "accumulated experience" in the conventional sense, because the conditions they face change from year to year and remain inherently unpredictable.

Another notable finding is the sharp contrast in the severity of challenges experienced during the winter of 2025-2026 compared with the previous two winter seasons. Although regular power outages lasting 8-12 hours per day were common during those earlier winters, respondents generally perceived them as difficult yet still "within their capacity to cope with."

As a result, households gradually developed experience in preparing for such disruptions over the course of two years. A minimum preparedness standard emerged, typically consisting of several power banks for lighting and charging devices, as well as portable gas stoves with fuel canisters for heating food and cooking.

The winter of 2025-2026, however, marked a significant departure from this established experience. In Kyiv, electricity outages began lasting more than 18 hours per day, while interruptions to heating services and sporadic water supply disruptions further compounded the situation. These conditions fundamentally challenged the coping strategies that households had developed during previous winters.

Consequently, Kyiv residents, and especially vulnerable groups represented in this study, were largely unprepared for this new level of hardship and disruption.

At the same time, two families with children with disabilities show that exceptions are possible: when there are financial resources available for advance preparation, and the city provides more predictable power cut schedules, the approach really does start to work.

Key conclusions:

Conclusions confirmed by several independent sources.

Proactively inform existing beneficiaries about new and related support programmes:

Respondents who encountered not a refusal but a lack of information about available programmes described essentially the same mechanism: relevant support does exist, but it is not accompanied by further information for the recipient about related opportunities. This problem differs from the others in that it concerns not the quality of the programmes themselves, but the way in which they are communicated.

Strengthen the social support network for vulnerable people living independently:

The importance of a personal social network — neighbours and acquaintances who are able to check in on a vulnerable person from time to time — was confirmed by both the respondents and the humanitarian organisation, with both sides reaching this conclusion independently. Respondents described specific instances where help from neighbours proved to be lifesaving; the humanitarian organisation confirmed this at a systemic level, explaining that it deliberately records the contact details of neighbours of vulnerable people for this very purpose as part of its daily practice

Improve targeted awareness-raising about the risks of unsafe self-heating:

The practice of using a lit gas hob with firebricks for heating proved not to be an isolated incident, but one that was consistently reported by respondents from various categories and areas of residence. The Deputy Director for Scientific and Organisational Work at the Institute of General Energy of the National Academy of Sciences of Ukraine independently confirmed the reality of this risk — not only because of the threat of fire, but also because of carbon monoxide poisoning, which is colourless and odourless. The campaign should specifically warn of the risks posed by homemade lithium-ion battery systems.

Proposals for further pilot testing:

To trial a network of small warming centres within walking distance:

A humanitarian organisation representative pointed out that older people are not always physically able to make their way to a centralised warming centre, particularly in adverse weather conditions. This provides grounds for considering a pilot scheme involving small-scale warming centres within a few neighbouring buildings.

To test the rental and return system for expensive specialised equipment:

A specific instance of a prolonged refusal to provide a hoist for transferring a person from a bed to a wheelchair has been confirmed by a representative of a humanitarian organisation as an example of a wider gap in access to such equipment. Given the practices already in place within humanitarian organisations regarding rehabilitation aids, it is worth considering the possibility of piloting a similar scheme for specialised equipment.

To consider mechanisms for reimbursing transport costs for vulnerable groups and volunteers during the heating season:

A representative of a humanitarian organisation highlighted the significant increase in transport costs in Kyiv as a potential barrier for volunteers and aid recipients who need to travel to aid centres or support other people. This observation could form the basis for further pilot schemes to reimburse expenses during periods of increased demand.