

Lessons Learned

Winterization 2025-2026



**UKRAINE
SHELTER CLUSTER**

Coordinating Humanitarian Shelter and Settlements

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Introduction

These Lessons Learned were developed through a collaborative process within the **Shelter Cluster's Technical Working Group**, which included representatives from

23 national and international humanitarian organizations and UN agencies:

ACTED

Angels of Salvation

Avalist

Caritas Ukraine

CF "BLAGO"

CF " Kharkiv Station "

CO "CF Rokada"

DRC

ERC

Friends Hands

GER3

ICRC

IOM

PAH

Posmishka UA

Right to Protection

Solidar Suisse

Solidarites International

TGH

Unbreakable country

UNHCR

UNICEF

Unity for the Future

Thematic inter-agency coordination:

Cash Working Group

OCHA

Protection Cluster

Drawing on findings from monitoring visits and partner consultations, as well as data collected through the [Joint Shelter Cluster Post-Distribution Monitoring Tool](#), the process combined both qualitative and quantitative inputs to reflect operational experiences from the 2025–2026 winter period.

1. Executive Summary

The 2025-2026 winterization response was highly relevant and, generally, perceived by households as safe, useful, and well-administered. Across submitted PDMs, assistance reduced stress, helped households heat at least part of their dwelling, and limited the need to divert money from food, health, or debt repayment. However, the evidence also shows that the response was not consistently sufficient for the full heating season. The main operational gap was not only the nominal transfer value or quantity of fuel, but the interaction between late delivery, seasonal price increases, fuel delivery costs, housing heat loss, different heating systems, and unequal access to markets and payment points. In frontline and hard-to-reach areas, damage to key transport infrastructure, including roads and bridges, disrupted standard logistics routes and caused delivery delays. The need to use alternative routes increased transportation costs and raised unit costs for solid fuel assistance.

The following lessons should shape Winterization Recommendations 2026-2027. First, timing is a core quality standard. PDMs repeatedly show that assistance received before the heating season is more effective. In contrast, late cash payments force households to borrow fuel, reduce heating, use savings, or buy at peak prices. The next response should aim to complete most registration, procurement, payments, and in-kind deliveries by October.

Second, mixed modality remains necessary. Cash worked very well where markets, banking, postal services, and supplier networks were functional, and many households preferred it because it allowed them to choose between firewood, briquettes, gas, electricity, or debt clearance. At the same time, recipients of in-kind assistance often preferred this modality due to limited supplier availability, transportation constraints, and price-related risks. The relevance of in-kind support was particularly evident in rural and frontline areas, especially among older people and people with limited mobility.

Third, while the harmonized **UAH 19,400** transfer value provided a useful common planning benchmark across **Winter Cash for Utilities** and the cash modality of **Winter Energy**, its adequacy differed by activity, heating source, and household context. For **Winter Energy**, the amount was generally insufficient for households in hard-to-reach areas that rely on firewood, particularly where delivery, unloading, and poor housing insulation increase costs; households often reported seasonal needs of **UAH 25,000–30,000** for solid fuel. For **Winter Cash for Utilities**, the [Joint PDM Dashboard](#), although based on a relatively limited sample with heating-source data, indicates that the transfer was reported as fully sufficient by most respondents across the main heating types: **94.7%** for centralized heating, **88.4%** for gas heating, and **80.0%** for electric heating. These findings suggest that the transfer generally covered utility-based heating costs, especially for centralized/district heating, while adequacy was somewhat lower for households relying on gas and electric heating. This pattern is consistent with individual cases of high heating expenditures observed by the Cluster during monitoring missions with partners, particularly among households in detached houses with higher heat losses.

Fourth, targeting should verify the actual heating situation and household-level vulnerability, rather than rely only on administrative categories or pre-existing beneficiary lists. Exclusion risks were linked to outdated registers, documentation mismatches, self-declared vulnerabilities, non-standard housing, digital access, displacement, and household changes during the season. These risks were higher in dense urban areas, where beneficiary lists were harder to validate, and individual vulnerable households were more likely to be missed than in smaller rural communities.

Fifth, winter energy assistance should be more systematically linked to shelter and thermal-envelope interventions. Thermal insulation support showed measurable improvements in warmth and reduced

fuel use. At the same time, many households and collective sites remained exposed due to poor heat retention, damaged windows, dampness, or reliance on electricity for heating systems.

Sixth, accountability systems worked unevenly. Satisfaction and safety were high, but awareness of complaint channels was inconsistent, particularly among older persons and households that rely on local authorities for information.

Seventh, RAIS+, Winter Energy Master Database, winter energy tables, and government data exchanges improved coordination but need earlier configuration, clearer deduplication rules, and feedback loops with oblast and hromada authorities.

Eighth, winterization planning should explicitly integrate energy-shock preparedness. This includes contingency measures for blackouts, disruptions to centralized and district heating systems, gas supply failures, heating continuity in collective sites, and backup power solutions. Planning should also consider risks affecting key energy infrastructure, including thermal power plants, combined heat and power plants, high-voltage substations, electricity distribution networks, and gas infrastructure, with clear referral pathways across Shelter/NFI, WASH, Protection, and Energy coordination mechanisms.

2. Evidence Base and Methodology

The evidence base combines household-level PDM findings, partner lessons learned reports, operational monitoring, joint data compilation, market-related evidence, and contextual assessments. Core PDM evidence was drawn from partner submissions covering winter cash for utilities, cash for solid fuel, in-kind solid fuel, insulation, and collective-site fuel support. The [Joint PDM compilation](#) provided a cross-partner reference point, including 2,187 interviews on cash for utilities, 2,526 interviews on in-kind solid fuel, and 6,763 interviews on cash for solid fuel.

The analysis was structured according to the draft Lessons Learned template: strategic context, cross-cutting lessons, activity-specific lessons, data systems, and priority recommendations. Findings were triangulated across sources rather than treated as statistically equivalent. Where multiple PDMs showed the same pattern, the lesson is framed as sector-wide. Where the finding came from a smaller sample, a specific geography, or a qualitative source, it is used as indicative evidence requiring TWiG validation.

Partner PDM tools were not fully harmonized with the Shelter Cluster PDM template, and several datasets required substantial cleaning before consolidation. Some PDMs captured assistance shortly after distribution, while others measured end-of-season outcomes. Solid fuel quantities were sometimes reported in non-standard units, such as trucks, trailers, and cars, which limits direct comparability. For fuel price analysis, PDM findings should therefore be read alongside market monitoring and supplier checks.

Evidence source	Owner / contributor	Coverage/date
Joint PDM compilation/ dashboard	Shelter/NFI Cluster IM and partners	Cross-partner PDM data, 2025-2026 winter response
Partner PDMs	Partner's MEAL and program teams	Cash for utilities, cash/in-kind solid fuel, insulation, collective-site support

Evidence source	Owner / contributor	Coverage/date
IOM DTM, REACH surveys	IOM DTM, REACH	Winter affordability, power outages, protracted winter vulnerability, and heating needs. 2025-2026 winter response
Joint field missions/ monitoring visits	Shelter/NFI Cluster Hub coordinators, partners, donors	All winter-related SNFI Cluster activities
Market and procurement evidence	Partners and suppliers' documentation	Fuel prices, seasonal dynamics, supplier capacity, and delivery conditions

3. Strategic Context and Response Snapshot

The 2025/2026 winterization response was implemented in a highly volatile operating environment marked by continued attacks on housing and critical infrastructure, repeated disruptions to electricity, water, gas, and district heating systems, active frontline shifts, displacement, access constraints, and deepening household vulnerability. Winter-specific needs were shaped not only by low temperatures but also by the cumulative impact of four consecutive wartime winters on household coping capacity, housing quality, utility affordability, and local service systems.

The response appealed for US\$277.7 million to support 1.7 million people across sectors. By March 2026, 78 partners had reached approximately 738,154 people, representing 78% of the Shelter/NFI Cluster target, with strong participation from 51 national NGOs. US\$166 million was mobilized, representing 72% of the requirements. Assistance was delivered predominantly through cash-based modalities, representing 84% of the response, complemented by in-kind support at 16%. At the activity level, the response focused on winter energy and utility support, reaching 672,542 people, followed by shelter insulation, winter NFIs, winter clothing, and heating appliances.

The winter period unfolded under compounded shocks, including intensified attacks on energy infrastructure and harsher-than-anticipated conditions. Between October 2025 and February 2026, coordinated attacks reportedly caused an estimated 7 GW generation deficit, disrupting drinking water availability for over 1.3 million people due to power-dependent pumping failures.

Widespread electricity outages and heating disruptions affected essential household and public services, placed additional pressure on district heating and water supply systems, and accelerated the deterioration of residential infrastructure. These impacts exposed gaps in energy crisis preparedness, particularly for large-scale blackouts and communal infrastructure failures.

A key development compared to the 2024/2025 response was the introduction of Cabinet of Ministers Resolution No. 985, which enabled partners to deliver solid-fuel assistance to households that use solid fuel as their primary heating source across frontline zones (0-10 km and 10+ km). This included structured sharing of beneficiary lists and reciprocal data exchange with the Ministry of Social Policy, Family, and Unity of Ukraine (MoSP) and the Pension Fund of Ukraine (PFU) to support deduplication of state subsidies and benefits. Resolution 985 further standardizes the assistance amount of UAH 19,400 per household for winter energy.

Operationally, field experience showed that the most effective targeting approach combined community or hromada lists with in-person registration and additional household verification where feasible. Existing lists, including those compiled under Resolution 985 or from previous years, helped

accelerate outreach but required re-verification of needs, household composition, residence, and heating arrangements to reduce errors in exclusion and inclusion.

While the response achieved significant scale and demonstrated strong complementarity between Government and humanitarian systems, it also highlighted several strategic and operational challenges that will require improvements to further mainstream humanitarian principles into government frameworks. Clearer methodologies for geographic prioritization, greater flexibility in implementation approaches, broader vulnerability frameworks to reflect crisis-created vulnerabilities that often cannot be absorbed by the PFU, and integration clearer and earlier communication from regional administrations to hromadas, starostats, and other key local representatives on Resolution requirements, beneficiary-listing processes, and the division of responsibilities for winter assistance such as RAIS+ will further improve complementary coordination between Government and humanitarian systems.

4. Cross-Cutting Lessons

4.1 Policy, Government Engagement and Coordination Framework

Beneficiary lists submitted by oblast state administrations under Cabinet of Ministers Resolution No. 985 of 13 August 2025 helped achieve scale but also exposed limitations in local needs-collection and verification mechanisms. Discrepancies increased in larger hromadas and urban settings, where changes in household composition, displacement status, documentation, actual place of residence, heating arrangements, and social protection status were harder to verify. The Resolution-based mechanism did not fully capture several humanitarian vulnerability profiles, including non-registered IDPs, households in informal or unformalized housing, families hosting IDPs, households without civil documentation, unemployed people of pre-retirement age, people with injuries who could not qualify for disability status, and people facing practical barriers to accessing PFU services or completing pension-related procedures.

Several gaps also reflected a mismatch between government social protection rules and the logic of winter assistance. For example, disability-related benefits may be lower than old-age pension payments; the cost of formalizing housing in remote areas may exceed the market value of such housing; and the relationship between heating subsidies and one-time winter assistance was not sufficiently regulated. In some cases, households were reportedly at risk of losing regular subsidy payments after receiving one-time winter assistance. These issues show that Resolution-based eligibility criteria require stronger alignment with humanitarian vulnerability analysis and should be complemented by in-person registration, household-level verification, and local validation.

Partner experience, including DRC, also showed that oblast-level authority lists under Resolution No. 985 did not always reflect actual community-level needs, as direct visibility of household situations and implementation status often remained at the hromada level, particularly with starostats, social workers, and other local actors. Inconsistent partner engagement with hromada-level actors contributed to coordination gaps, delayed identification of unmet needs, and an uneven understanding of which households had been covered, excluded, or remained pending. This highlights the need for structured hromada-level validation and feedback loops before beneficiary lists are finalized and throughout implementation.

This was particularly relevant where information on the presence of solid-fuel heating appliances was recorded based on applicants' self-declarations, which, in several cases, did not reflect the actual situation.

Shelter Cluster partners initially relied on the needs information collected by hromada authorities in June 2025. However, the subsequent introduction of the Resolution lists reshaped geographic prioritization across the 0–10 km and 10 km+ zones. As the Resolution process progressed under a fixed geographic and beneficiary-listing approach, the baseline needs collected by hromada authorities in June 2025 were not systematically updated or consistently integrated as an additional source to confirm solid-fuel needs. In several locations, ongoing evacuations and changing household needs meant that some households identified by hromadas were not reflected in the Resolution lists or were not submitted in time. This created parallel datasets at the oblast level, making it difficult to establish a consolidated source of information on winter-related needs and gaps.

While the resolution was the primary priority due to the pressure applied by local authorities at national and oblast levels, other winter needs, mainly shelter thermal insulation, which are critical in achieving thermal comfort, were missing from the Resolution framework and pose a longer-term concern about the Ministry of Social Policy as the only government body for the transition of winter assistance.

The development and implementation of Resolution-related mechanisms showed that future policy instruments require earlier technical co-design between government counterparts, the Cluster, partners, and donors. Where policy parameters are finalized without sufficient operational consultation, implementation risks increase, including errors in exclusion, unclear program boundaries, and inconsistent interpretation at the oblast and hromada levels.

The [REACH Cold Spot Risk Assessment](#) was a key informant methodology that carried significant weight in donors' geographical prioritization, focusing on locations similar to the Resolution and excluding key IDP hosting areas with winter needs following extensive evacuations. Such studies should be consulted with the cluster before drawing final conclusions, as they may not align with human reading and may limit the comparative advantages of government programs relative to humanitarian criteria.

Recommendations:

- Establish early, structured engagement at hromada level (before oblast lists are finalized) as a mandatory step of needs assessment or project initiation phase; clear feedback mechanism for partners to report list discrepancies to oblast authorities.
- The development and implementation of Resolution-related mechanisms showed that future policy instruments require earlier technical co-design between government counterparts, the Cluster, partners, and donors. Where policy parameters are finalized without sufficient operational consultation, implementation risks increase, including errors in exclusion, unclear program boundaries, and inconsistent interpretation at the oblast and hromada levels.

4.2 Targeting, Prioritization, Coverage, and Exclusion Risks

Community-based registration, in-person verification, and engagement with local authorities improved the quality of targeting in the majority of partner responses. This approach helped partners verify actual household circumstances rather than relying only on static administrative lists, self-declared information, or broad eligibility categories. In-person registration also enabled real-time

eligibility verification and direct resolution of documentation issues, reducing beneficiary confusion and improving targeting accuracy. DRC emphasized that direct community-based operations improved inclusion and trust in low-connectivity areas. However, offline registration should be organized to avoid creating additional access barriers for beneficiaries in remote, frontline, or border communities, where public transport may operate only once or twice per day and travel to registration points can be logistically difficult. TGH and SI evidence also shows the importance of checking actual heating arrangements, including whether households use gas, electricity, solid fuel, or a mixed system.

The response showed that exclusion risks were not limited to households missing from government lists. They also affected households that were formally listed but could not complete verification due to documentation, mobility, communication, or access barriers, as well as households with clear winter-related humanitarian needs that were not fully captured by Resolution-based eligibility criteria. This underlines the need to treat exclusion error as both an administrative and humanitarian targeting issue.

Two main operational drivers of exclusion were observed. First, for partners operating under Resolution 985, beneficiary lists did not include income-based differentiation and, in some cases, included households with per capita incomes exceeding UAH 10,000. Since no national-level income threshold had been established, such issues were identified only during household-level document verification. Second, the timing of funding had different implications for cash and in-kind modalities. While the July 2024 UHF allocation enabled earlier cash distribution, late funding in the following winter seasons left insufficient lead time for in-kind procurement and delivery. As a result, partners procuring solid fuel faced high market prices in October and November, which reduced planned household coverage and, in some cases, delayed delivery of the full recommended quantity until late in the season.

Recommendations:

- Use a verified heating profile as a minimum targeting variable; keep heating-based vulnerability criteria alongside socio-demographic criteria; create a pathway for self-declared vulnerabilities and non-standard housing where humanitarian risk is clear; ensure low-connectivity and older households can register offline; and require hromada-level feedback on who was selected, who was not selected, and why.
- Under constrained funding, prioritize households with high exposure, low income, limited mobility, poor heat retention in their housing, and no alternative heating.
- Geographic targeting should be dynamic and combined with vulnerability and infrastructure-exposure criteria.

4.3 Modality Mix, Transfer Values, and Market Adequacy

The choice of modality was one of the key determinants of the relevance and adequacy of assistance during the 2025–2026 winter response. Evidence from the PDM reports shows that cash remained strongly preferred where markets and payment systems were accessible. In contrast, in-kind solid fuel support remained important for households facing constraints in delivery, procurement, mobility, or market access.

Among **cash recipients**, cash was clearly preferred: **84%** selected cash as the most suitable modality, compared with **10%** for in-kind, **5%** for mixed, and **1%** for vouchers. In areas at high risk of displacement or evacuation, in-kind firewood may become less relevant after distribution because households

cannot easily carry it. Cash may be more adaptive in such settings, provided that markets remain accessible, because it allows households to purchase fuel in portions and retain flexibility if they relocate.

Among solid fuel **in-kind recipients**, preferences were more balanced: **54%** preferred in-kind, **35%** preferred cash, and **11%** preferred a mixed approach.

The question of single versus multiple transfer values for solid fuel and utilities remains unresolved and warrants further discussion, as harmonized values may promote consistency but can create exclusion risks without strong heating-based vulnerability criteria.

Compared to the 2024–2025 winter season, both modalities (cash and in-kind) show a decrease in the actual duration of solid fuel coverage in the 2025–26 season. The largest decline is seen in cash assistance, where the main group shifted from 5–6 months / more than 6 months to 3–4 months (49%). In-kind assistance also deteriorated but appears somewhat more stable: in 2025–26, nearly equal shares of respondents reported coverage for 3–4 months (43%) and 5–6 months (40%). The 2025–2026 winter season **was colder** than at least two previous seasons, with the most sub-zero days and the lowest average temperature, which increased household heating needs and contributed to the insufficiency of the allocated winter assistance.

Beneficiaries chose the type of fuel based on market opportunities. In the Donetsk region, 25% of beneficiaries chose coal, while in the Kharkiv region, they chose firewood and did not purchase coal.

Looking at PDM data collected by Shelter Cluster partners in the East Hub, in-kind households were much more likely than cash recipients to report that assistance would last five to six months. Cash recipients were also more likely to adopt negative coping strategies related to heating, including reducing heating use, sharing living spaces, and cutting other essential expenditures. While income profiles were broadly similar across both groups, cash recipients included a slightly higher share of higher-income households. Thermal comfort was influenced more by housing conditions than by house size. Across similar structural or heating-related challenges, in-kind recipients reported higher comfort levels, possibly due to stronger community mobilization, more regular partner presence, and better referrals to repair or complementary support.

The PDM data also indicates that assisted households living in private houses reported an average total accommodation size of **65.92 m²**, while those in private apartments reported **52.04 m²**; however, these figures reflect the overall dwelling size, not the actual heated area.

Price monitoring for 2024–2026 indicates that solid fuel prices follow a seasonal pattern, but the scale of increase varies significantly by year, supplier, fuel type, and procurement timing. The most consistent increase was observed from the summer to early autumn, with firewood and briquette prices generally rising by around **10–20%**. During the active winterization period, prices increased further, particularly when procurement was delayed into late autumn or winter. For planning purposes, partners should apply a **seasonal contingency of approximately 20–30%** when transitioning from early-autumn prices to average winter procurement values. Where procurement or cash-value revision is exposed to winter peak prices, a higher risk margin should be considered, as observed peak increases of approximately **50–60% for briquettes** and **70–80% for firewood** were recorded compared to early autumn levels. Field evidence confirms that delayed funding decisions compressed the implementation timeline and pushed registrations into mid-winter, when solid fuel prices had already peaked. Although structured implementation processes enabled delivery under compressed timelines, delayed procurement reduced value for money compared with earlier-season procurement.

Holding tenders and concluding framework agreements for the purchase of solid fuel in the summer period allowed partners to fix the price of solid fuel in the low season and to secure price increases during implementation in the winter period.

Inflation affects annual price planning and has been taken into account by the Cluster each year. However, it does not appear to have been the main driver of the growth in solid fuel prices. Price increases were more directly linked to seasonal demand, procurement timing, raw material availability, production costs, transport constraints, and supply chain disruptions. In the next winter season, solid fuel prices are also expected to be affected by gasoline and diesel costs, not only through transport and delivery, but also through firewood harvesting operations, including machinery use, extraction, cutting, loading, and primary transport from harvesting sites.

Briquettes supplier feedback suggests that solid fuel price increases in the 2025-2026 winter season were driven by several operational and market factors, including higher energy costs, higher raw material prices for briquette production, and more complex logistics and supply chains. These factors contributed to higher production costs and delivered prices.

At the same time, partners noted a tendency for the solid fuel market to respond to the start of payments to beneficiaries of winter support funds. For instance, over the past 1.5 months since payments began, the cost of transporting wood in the Derhachi community of the Kharkiv region has increased by nearly 2.5 times.

Despite official assurances that SE “Forests of Ukraine” firewood remained available throughout the heating season, partners reported local access constraints, including queues and delayed availability toward year-end. Public sources do not confirm a formal nationwide closure of household quotas, but they do support evidence of increased demand and localized access challenges.

In frontline and other hard-to-reach areas, logistics became an adequate factor in its own right. Carrier refusals, driver shortages, route delays, waiting time, and disrupted transport corridors affected not only delivery timelines but also the final quantity of solid fuel that households could receive within the available budget.

Quality control and legality of firewood origin emerged as part of assistance quality, not only procurement compliance. Lower-cost firewood may be linked to weaker documentation, informal sourcing, lower calorific value, excessive moisture, or poor species selection. Price comparisons are therefore incomplete if they do not distinguish between documented/legal supply and informal or lower-quality supply.

Recommendations:

- For the next season, cash-for-utilities planning should be based on an analysis of authoritative sources of actual average heat losses and heating consumption to define an optimal cash equivalent. In contrast, the harmonized transfer value used in the previous season should be reviewed.
- Shelter Cluster partners emphasized the need for clearer, more predictable approaches to supporting heating needs in collective sites in future winter responses.
- Review transfer values separately for solid fuel and heating utilities, as the harmonized amount does not fully reflect differences in heating source, housing condition, and regional market constraints.

- Plan procurement (in-kind) and cash delivery earlier, aiming to complete registrations, framework agreements, payments, and in-kind deliveries before peak winter prices and seasonal access constraints.

4.4 Accountability, Communication, Protection, and Inclusion

PDMs reported high satisfaction, perceived safety, respectful treatment, and equal access, with no systematic concerns about misconduct identified. However, awareness and use of feedback and complaint channels remained uneven. Some beneficiaries did not know how to use formal mechanisms and relied instead on local authorities or starostats, suggesting that Feedback and Complaints Response Mechanism (FCRM) systems may not always be accessible, understood, or trusted. In areas with limited or absent mobile connectivity - particularly in frontline settlements - single-channel communication was insufficient for both outreach and coordination. Partners found that combining local leaders, community mobilizers, local authorities, and informal social networks significantly increased awareness and participation in registration. The recommendation is to build multi-channel communication into the program design rather than treat it as a contingency measure.

Key issues included limited access to banking, travel to payment points, difficulties transporting or unloading fuel, reduced mobility, low digital literacy, unclear selection criteria, and unsafe heating practices.

At the local self-government and registration levels, the definition of a household and the distinction between the registered address and the actual place of residence were not always applied consistently. In some cases, this created risks of duplicate or inaccurate household registration, including situations where members of the same family were registered at different addresses but actually lived together as one household. These inconsistencies affected the understanding of per-household assistance entitlements and highlighted the need for stronger verification of actual household composition, not only of the registered address.

Households were sometimes identified administratively without direct engagement, which reduced clarity on eligibility, payment timelines, fuel safety, and complaint channels.

Recommendations:

Strengthen FCRM communication through multiple channels; clearly explain selection criteria, assistance conditions, the definition of a household, and available feedback channels; provide simple beneficiary-facing information materials explaining the type of assistance, fuel type, quantity, measurement units, and key terminology, including the distinction between stacked and non-stacked firewood and how volumes are calculated; provide delivery or mobile payment options for high-risk households; and include heating safety messaging.

4.5 Preparedness for Energy Shocks and Dynamic Context

IOM and REACH evidence shows that heating disruptions, blackouts, damaged infrastructure, and poor heat retention in housing interact. Gas boilers may rely on electricity for pumps; centralized heating may be disrupted; electric heating may fail during outages; and multi-apartment residents can lose heat quickly when services stop. IDPs and renters are particularly constrained because they often cannot invest in insulation or building upgrades.

The response was adapted through flexible cash, in-kind fuel and insulation, collective-site solid-fuel support, and partner-level troubleshooting, but preparedness remained uneven. Collective sites and public facilities require clearer visibility in winter planning, including heating systems, backup power, water systems, and referral boundaries with Shelter, WASH, and Energy Coordination Group.

During acute energy shocks, PDM findings showed that collective sites, social facilities, and multi-apartment buildings are highly dependent on electricity for heating, water systems, connectivity, and basic services. Backup generators can provide only a short-term solution unless fuel supply, maintenance, safe operation, and operating costs are planned and budgeted in advance. Emergency procurement after an energy shock is often delayed by limited in-country availability of generators and related equipment, reducing the speed and scale of response. These findings highlight the need for pre-positioned contingency stocks, clear activation triggers, and pre-agreed funding and donor authorization mechanisms before the winter season.

Recommendations:

Include energy-shock triggers, indicators, and response scenarios in the Winterization Recommendations SOP 2026-27; define minimum preparedness stocks (focus on households and collective sites) and referral pathways for blackouts, heating failure, and sudden displacement; clarify which facility-level items should be reported under Shelter, WASH, or other activities; and link winter energy support with insulation, minor repairs, and housing-condition referrals where heat retention is poor.

5. Activity-Specific Lessons

Activity	Worked well	Did not work / why	Evidence	Action for 2026-2027
Winter Energy: solid fuel and liquified gas	Mixed modality remained relevant. In-kind solid fuel worked very well, first of all, for people with reduced mobility, households in rural and hard-to-reach areas, especially when fuel was delivered directly to the yard. Cash was useful where markets were functional, and households had mixed heating needs (e.g., solid fuel and natural gas).	Delayed procurement exposed partners and households to peak prices, while access to local firewood was uneven due to queues, high demand, limited local forestry resources, carrier refusals, and supplier constraints. In-kind fuel could become less relevant if households were later displaced.	GER3, TGH, Caritas Ukraine, AoS, Solidarités International	Define the modality decision criteria for solid-fuel support, including market functionality, household mobility, displacement risk, and supplier capacity. Complete procurement and framework agreements before the seasonal price peak.
Winter Cash for Utilities (heating)	Cash modality was convenient, flexible, and relevant for households using natural gas, electricity, or centralized heating. It reduced stress and helped cover winter bills in many cases.	A flat amount can overpay some central heating cases while under-covering high heat-loss or gas-dependent households; digital/bank	IOM DTM, Solidarites International	Differentiate utility and solid-fuel transfer logic; align with government reference values where appropriate.



Activity	Worked well	Did not work / why	Evidence	Action for 2026-2027
		access and feedback awareness remained unequal.		
Winter Heating Appliances and off-grid support	Electric heaters were the most used heating appliances in households in multi-apartment buildings, particularly when centralized or gas heating systems were disrupted. At the same time, heat guns were actively used in heating points and Invisibility Points, where rapid space heating was needed for temporary collective use.	Heating appliance support requires stronger differentiation between urban and rural settings, private houses and multi-apartment buildings, and electric, gas, solid-fuel, and diesel-based solutions. In some contexts, households using gas or electric boilers remained vulnerable because heating systems depended on electricity for pumps, controls, or circulation. Blackout and freeze damage also showed that internal heating systems may require recovery support after prolonged outages.	DRC, Solidar Suisse	Develop suitability criteria and minimum technical parameters for backup-power solutions. Assess the safety, ventilation, carbon monoxide, fuel storage, and fire risks of using diesel heaters in simple shelters and, if technically and operationally validated, consider scaling up this solution for frontline locations facing prolonged heating and power disruptions.
NFI for Winter and Winter Clothing	The initial use of vouchers for winter NFIs and winter clothing showed positive potential, as it allowed beneficiaries to select items according to their actual needs, sizes, household composition, and preferences. This approach was particularly relevant where standardized kits could not fully reflect individual needs and where local markets were functional.	Winter NFIs and winter clothing require clearer minimum technical parameters before reference prices can be meaningfully reviewed. Without agreed-upon specifications, price comparisons are weak, and partners may apply different assumptions about quality, durability, size, thermal performance, or beneficiary-specific needs.	Friends Hands, SNFI Cluster	Define minimum technical specifications for winter NFIs and winter clothing before setting reference prices. Refine the voucher modality, including clear rules on eligible items, unused balances, market monitoring, and safeguards to ensure quality, affordability, and beneficiary choice.
Insulation of Substandard Houses	Insulation showed strong evidence of outcomes: partners reported warmer homes, reduced fuel use, and thermal imaging evidence of reduced heat loss.	Eligibility, tenure, technical feasibility, and budget constraints limit scale. IDPs and renters often cannot afford to upgrade their housing.	GER3, Caritas Ukraine, IOM, REACH.	Combine solid fuel and heating appliances with thermal insulation where heat loss is high.
Other context-specific	Collective-site solid-fuel support and locally adapted assistance helped address facility-level needs	Collective-site fuel support remained operationally complex because fuel needs	Caritas Ukraine, Mondo-SC	Map collective-site heating risks before winter; clarify reporting

Activity	Worked well	Did not work / why	Evidence	Action for 2026-2027
winterization support	when residents could not resolve heating issues collectively.	depended on the type of heating system, actual occupancy, site management practices, and the capacity to procure, store, and manage fuel safely. Site manager requests were useful but required technical validation.	monitoring mission	and cost boundaries; pre-agree referral pathways for heating systems and backup power.

6. Data Systems, Reporting, Deduplication, and PDM

The combined use of winter coordination tables and the RAIS+ platform, used by over 70 partners and supported by more than 85 signatories to the data-sharing protocol, enabled coordinated assistance to more than 357,000 households, mitigating overlap and preventing an estimated US\$45 million in duplicate payments. This was further strengthened through the rollout of Cluster guidance tools, including Winter SOPs, FAQs, and RAIS+ support clinics, which contributed to more consistent implementation across partners.

The partners' PDMs confirmed the value of RAIS+ for transparency and deduplication, but also showed that system functionality requires support from an SOP and minimum data set standards for partners.

Resolution 985 created inefficiencies by leaving each Cluster partner to develop its own legal basis (e.g., an MOU) with each participating oblast. This proliferation also left agencies without MOUs (i.e., those undertaking registration and/or relying on existing databases) with no mechanism for deduplication against government lists (unless the partner had a pre-existing MOU/data-sharing agreement with the MoSP/PFU).

Recommendations:

- Priority areas for RAIS+ improvement include defining whether deduplication should be based on payment date (for cash) or on the coverage period; escalation and notification procedures for deleted or changed records; consistent use of household-level identifiers; and Cluster-level decisions on additional vulnerability categories or fields.
- Future PDM tools should use a short core module for all partners and optional activity modules. Priority improvements include: standardized fuel units; separate questions on fuel type, quantity, and delivery cost; clearer questions on housing condition and thermal comfort; a simplified income question or predefined brackets; and better questions on FCRM awareness and complaint use.
- The Cluster should clarify which data can be exchanged with PFU, MoSP, OVAs, and hromadas, and under what legal and operational safeguards. Where authorities collect or validate winter needs, they should also receive structured feedback on final coverage, exclusions, and referrals.

7. Priority Recommendations and Action Matrix for 2026-2027 Season

Priority	Recommendation	Responsible lead	Timing	Expected change
High	Create Winterization Recommendations SOP 2026-2027, including Resolution-related targeting, and modality decision criteria.	SNFI Cluster TWiG	June 2026	Clearer targeting, fewer exclusions, and faster implementation once funding is confirmed.
High	Winter response should remain a balanced, multi-component package, not only cash/in-kind solid-fuel/heating utilities support.	SNFI Cluster partners	June 2026	Winter response planning and funding better reflect the full package of winter needs, ensuring that heating appliances, thermal insulation, winter NFIs, and winter clothing are not deprioritized in favor of heating assistance alone.
Medium	Strengthen AAP and inclusive delivery by requiring standardized messages on selection, amount, use, delivery obligations, and feedback channels to be delivered via SMS, paper, local authorities, partner teams, and hotlines.	Partners with AAP Focal Point support	June 2026	Higher FCRM awareness.
Medium	Prepare an energy-shock contingency package for blackouts, heating disruption, and sudden displacement.	Cluster, partners, inter-cluster coordination	August 2026	Adequate adaptation to attacks, outages, and heating failures.
Medium	Shorten and harmonize the Joint PDM Template	Cluster IM, MEAL specialists (partners)	July 2026	Comparable evidence, lower burden on respondents and enumerators, and faster corrective action.

8. Evidence and Detailed Inputs

Annex item	Reference
PDM tables and charts	Joint PDM Dashboard 2025/2026
Detailed Cluster/partners case studies	Shelter Cluster East Hub Lessons Learned
Market price assessment	Solid fuel price monitoring 2025 2026 (May 2026).xlsx