

TECHNICAL
Community of Practice



GLOBAL
SHELTER CLUSTER

Coordinating Humanitarian Shelter and Settlements

TECHNICAL Sub-Community of Practice
Non-Food Items/Essential Household Items and
Emergency/Temporary Shelter Technical Specifications
(NFIs/EHIs-ETS)



**GLOBAL
SHELTER CLUSTER**

Coordinating Humanitarian Shelter and Settlements

**TECHNICAL
Community of Practice**



Emergency Shelter & NFIs/EHIs Winterisation, Challenges and Options

**NON-FOOD ITEMS/ESSENTIAL
HOUSEHOLD ITEMS AND
EMERGENCY/TEMPORARY SHELTER
TECHNICAL SPECIFICATIONS
(NFIs/EHIs-ETS) Technical Sub-CoP**

**1st webinar – 6 November 2025
13.00-14.30 (CEST)**

HOUSE KEEPING

- Uses the **Q&A chat** (*not the usual chat*) to share questions adding to whom it is addressed
- Use the **usual chat** to share **reflections, comments** or **relevant resources** and **links**
- Please keep your microphone muted when not speaking
- Please turn on your camera when you speak, if your connection allows
- Be mindful of time and keep your contribution concise

Please note the meeting is being recorded to be shared on GSC Technical CoP webpage

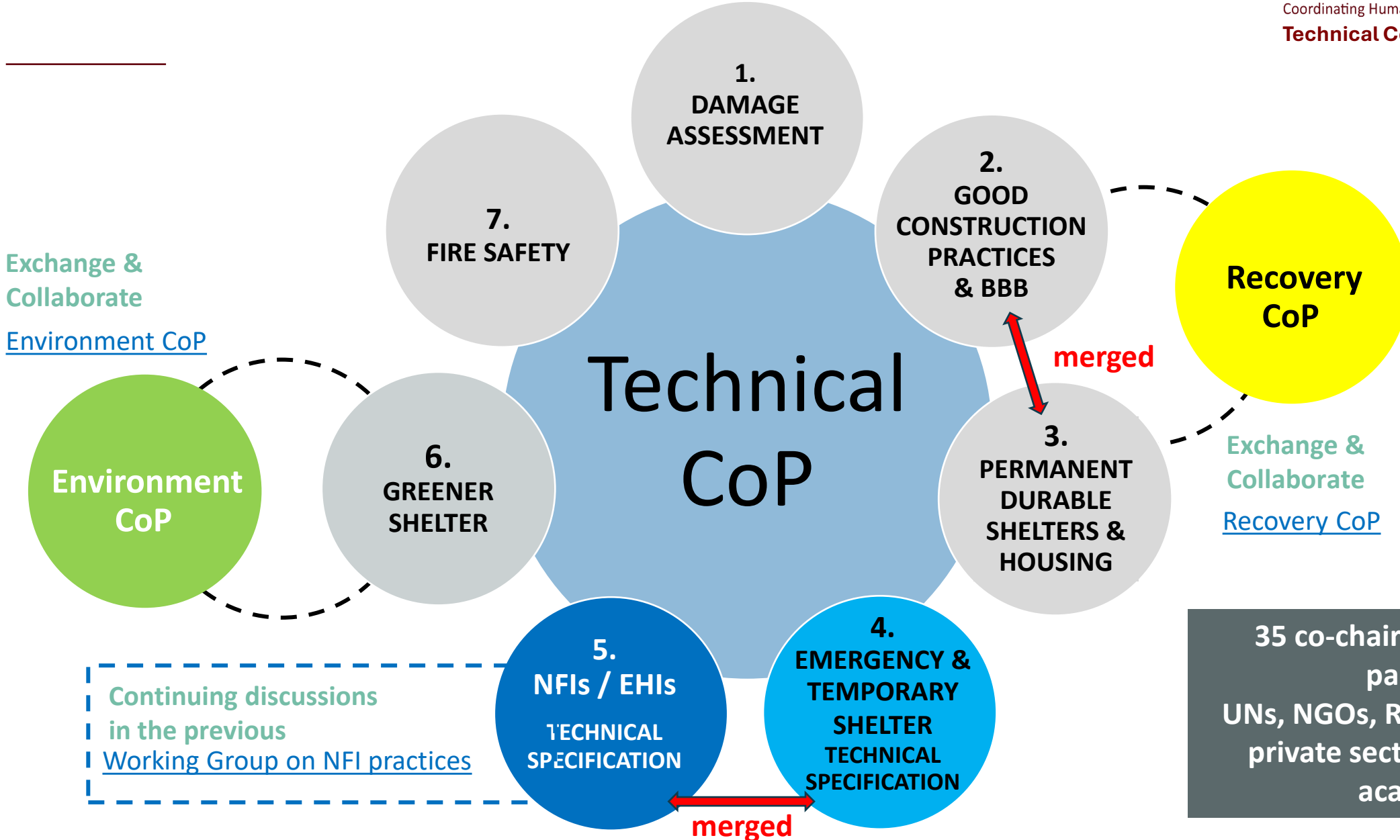
Agenda

Emergency Shelter & NFIs/EHIs : Winterisation, Challenges and Options			
Duration	Description	Speakers	Duration
13:00 - 13:05	Welcome and introduction	Pascal Panosetti - GSC / IFRC, Technical CoP moderator	5 min
13:05 - 13:10	Introduction to the NFI-EHI-ETS Technical Sub-CoP committee and the Term of Reference	Mathieu Gamba <i>Consultant</i> Permanent Shelter & NFI-EHI-ETS T.S-CoP chair	5 min
13:10 - 13:15	Survey Results Presentation	Mathieu Gamba <i>Consultant</i> Permanent Shelter & NFI-EHI-ETS T.S-CoP chair	5 min
13:15 - 13:25	The Neighborhood Approach - Ethiopia	Mamuney Legesse Sub-National Shelter Cluster Coordinator IOM	10 min
13:25 - 13:40	Thermal Comfort is a Necessity, Not a Privilege - Ukraine	Mykola Fadieiev Shelter Cluster Technical Focal Point UNHCR	15 min
13:40 - 13:55	Gaza Shelter Response Post-Ceasefire Context and Technical Updates - Palestine	Jehan Salim - Shelter Cluster Technical Coordinator - NRC Adil Marwah - Shelter Cluster Technical Coordinator - IOM	15 min
13:55 - 14:25	Exchange with Participants - Q. & A.	Plenary	30 min
14:25 - 14:30	Next Steps, Reminder & Conclusion	Pascal Panosetti, GSC / IFRC, Technical CoP moderator	5 min

Introduction: Technical CoP thematics



[Technical CoP webpage](#)



35 co-chairs from various partners
UNs, NGOs, RCRC, SDC, LINGO,
private sector, individuals,
academia

Deactivated WG on NFI practices

Working Group on NFI practices

[Link: Working Group on NFI practices | Shelter Cluster](#)

Technical Community of Practice NFIs/EHIs-ETS T.Sub-CoP

Subscribe to **notifications** about this working group by creating an account or logging in (recommended).

Sign up or log in

Or enter your email address to subscribe without a user account

Panosetti Pascal

CAPTCHA
Math question (4 + 2 =)

Solve this simple math problem and enter the result. E.g. for 1+3, enter 4. This question is for testing whether or not you are a human visitor and to prevent automated spam submissions.

Subscribe without an account

Dashboard
Documents (88)
Discussions (2)
Events (1)
Data Collection (3)
News (8)

- PAGES +
- Needs Assessment and Targeting
 - Contextualization of NFIs
 - Modalities of NFI Distribution
 - (Socio) Technical Assistance
 - Quality Control, Procurement and Logistics
 - Environmental Impact
 - Guidance
 - General

- USEFUL LINKS +
- Disaster Ready: Good Distributions
 - GIZ HERA Cooking Energy Compendium
 - Webinar Series: Sustainable Energy in Humanitarian Settings
 - WFP Handbook on safe access to firewood and alternative energy (SAFE)

OVERVIEW

Recent Meetings of the GSC NFI WG

- [April 2021: Classifying NFIs and Greening the Response](#)
- [January 2021: Linkages to Energy and Environmental Sustainability](#)
- [October 2020: Markets, Modalities, and Approaches](#)
- [August 2020: Fuel for Cooking and Winterization](#)

About the GSC NFI WG

Meeting household needs is part of the shelter response and in many contexts it constitutes a very important part of this response, particularly in conflict-related emergencies with repeated displacements. These households' needs are often met through the distribution of NFIs but other methodologies are also being used.

In late 2008, the cluster produced guidance on [selecting NFIs for shelter](#) which focusses on how to select and combine NFIs into packages. A number of country-level shelter cluster have had important NFI components and good lessons have been learnt on dealing with NFIs and meeting household needs through fairs, cash, and other tools.

A series of workshops were held [first in Nairobi in 2016](#) and [then in Bangkok in 2018](#) to enable stakeholders to gather together to discuss contextualisation of their responses and to feed into the strategy of the working group. Practitioners in these meetings reflected that in order to do better distributions, the NFI WG could play a central role in better sharing practices from the field which could be contextualised to other responses.

In [2019 during the GSC meeting](#), NFI Working Group Members elected to expand on the theme of building capacity to do better distributions. In 2020, [the NFI WG conducted a study which highlighted the main topics to be covered in a training curriculum](#) or in checklist features that could be used in responses. Resources are required to take this forward, while some partners have resources that they can feed into an overall training.

This Working Group will gather and disseminate good practices on NFIs and meeting household needs. More information can be found in [this summary](#).

This group is led by UNHCR and IFRC.



Collection of Non-Food Item Best Practices

Type of Best Practice	Measuring Social Technical Assistance in Nepal	Technical Assistance in Rohingya Response
(Socio) Technical Assistance	Afghanistan ESNFI Standard NFI Kit	NW and SW Crisis Cameroon Minimum NFI Kit
Contextualization	Chad ESNFI Standard NFI Kit	
Environment	Iraq Carbon Monoxide Awareness	Fiji Environmentally Responsible Timber Use
	Tonga Asbestos Disposal Options	

<p>GLOBAL SHELTER CLUSTER NFI WG MEETING APRIL 2021 14 Apr 2021 - English - Shelter Cluster</p> <p>PPPTX</p> <p>Coordination Management Meeting Management Meeting Minutes</p>	<p>ACTIVITY PLAN JOINT SUSTAINABLE HUMANITARIAN PACKAGING MANAGEMENT 14 Apr 2021 - English - Shelter Cluster</p> <p>XLSX</p> <p>Technical Support and Design Non Food Items Non Food Items Plastic Sheeting Clothing and Bedding</p>
<p>EMERGENCY SUPPLY PRE-POSITIONING STRATEGY SHELTER GROUP ITEMS EXCEL 14 Apr 2021 - English - Shelter Cluster</p> <p>XLSX</p> <p>Technical Support and Design Non Food Items Stock report IM reports and analysis Non Food Items Logistics</p>	<p>EMERGENCY SUPPLY PRE-POSITIONING STRATEGY SHELTER GROUP ITEMS NFI WG PRESENTATION 14 Apr 2021 - English - Shelter Cluster</p> <p>USAID ESUPS</p> <p>Technical Support and Design Non Food Items Logistics Environment Emergency</p>
<p>GLOBAL SHELTER CLUSTER ECHO PROJECT GREENING THE RESPONSE NFI WG 14TH APRIL 14 Apr 2021 - English - Shelter Cluster</p> <p>PPPTX</p> <p>Technical Support and Design Non Food Items Shelter Programming Environment</p>	<p>JOINT SUSTAINABLE PACKAGING INITIATIVE PRESENTATION 14TH APRIL 14 Apr 2021 - English - Shelter Cluster</p> <p>PPPTX</p> <p>Technical Support and Design Non Food Items Environment Clothing and Bedding Cooking and Eating Utensils</p>
<p>IOM ENERGY NEEDS ASSESSMENT FRAMEWORK 19 Jan 2021 - English - Shelter Cluster</p> <p>IOM Energy Needs Assessment Framework</p> <p>Coordination Management Information Management Assessment, Monitoring, and Evaluation</p>	<p>GLOBAL SHELTER CLUSTER NFI WG 2021 PLANNING MENTIMETER RESPONSES 19 Jan 2021 - English - Shelter Cluster</p> <p>4th observed in the field, what would be a series of work for the GSC NFI WG</p> <p>Coordination Management Information Management Terms of Reference</p>
<p>JANUARY 2021 FIRST NFI WG OF THE YEAR: ENERGY AND ENVIRONMENT LINKAGES AND ENVIRONMENTAL SUSTAINABILITY 19 Jan 2021 - English - Shelter Cluster</p> <p>PPPTX</p> <p>Coordination Management Technical Support and Design Meeting Management Non Food Items Agency Assessment</p>	<p>GLOBAL SHELTER CLUSTER MEETING OPEN SPACE SESSION ON ENERGY NOTES 26 Oct 2020 - English - Shelter Cluster</p> <p>PPPTX</p> <p>Coordination Management Technical Support and Design Non Food Items Meeting Management Non Food Items</p>
<p>SAMPLE STOVES YEMEN SHELTER CLUSTER 12 Oct 2020 - English - Shelter Cluster</p> <p>PPPTX</p> <p>Technical Support and Design Non Food Items Winterization Stoves, Fuel, and Lighting</p>	<p>YEMEN SHELTER CLUSTER WINTERIZATION RECOMMENDATIONS 2020-21 8 Oct 2020 - English - Shelter Cluster</p> <p>PPPTX</p> <p>Technical Support and Design Non Food Items Technical Guidance Design Specifications</p>
<p>ATTENDANCE LIST NFI WG 6TH OCTOBER MEETING 6 Oct 2020 - English - Shelter Cluster</p> <p>XLSX</p> <p>Coordination Management Meeting Management Attendance List</p>	<p>GLOBAL SHELTER CLUSTER NFI WG RECORDING OF SESSION: MARKETS, MODALITIES, AND APPROACHES 6 Oct 2020 - English - Shelter Cluster</p> <p>PPPTX</p> <p>Information Management Technical Support and Design Non Food Items Meeting Management</p>

Non-Food Items / Essential Household Items and Emergency/Temporary Shelter Technical Specifications T.Sub-CoP ToR

[Term of Reference : NFIs/EHIs and Emergency/Temporary
Technical Specifications Technical Sub-CoP - 2025](#)

CGP-BBB-PDSH T.Sub-CoP ToR



Technical Community of Practice
NFI/EHIs-ETS T.Sub-CoP

COMMITTEE MEMBERS

ETS - EMERGENCY AND TEMPORARY SHELTER TECHNICAL SPECIFICATION <i>merged with</i>				Position / Function
Mathieu	Gamba	chair	Independant	civil engineer with long fiel experience in e/t-shelters
NFI/EHI - NON-FOOD ITEMS / ESSENTIAL HOUSEHOLD ITEMS TECHNICAL SPECIFICATIONS				Position / Function
Emma Louisa	Matthews	co-chair	People in Need	SNFI coordinator
Doaa	Qutub	co-chair	Independant	Food Security and Livelihood Technical Advisor
Mamuney Legesse	Nigusse	co-chair	IOM	Shelter Cluster Subnational Coordinator
Pascal	Panosetti	<i>co-chair support</i>	IFRC/GSC	GFP for Technical Coordination - Architect

NFIs/EHIs-ETS T.Sub-CoP ToR



BACKGROUND

- The **Non-Food-Items/Essential Household Items and Emergency/Temporary Shelter Technical Specifications (NFI/EHI-ETS) Sub-Technical Community of Practice** is a **voluntary community** focused on technical aspects of shelter and settlements programming, with emphasis on construction practices.
- **Open to all individuals**, regardless of agency or organizational affiliation.
- The group's strength comes from **active member participation**.
- Members contribute **knowledge and experience** from relevant roles and subject areas within the T.S-CoP

NFIs/EHIs-ETS T.Sub-CoP ToR



BACKGROUND

Combined mandates

Non-Food Items (NFIs) / Essential Household Items (EHIs) WG



the Emergency and Temporary Shelter (ETS) Group

 **Critical role to** promote durable, resilient, safe, cost-effective, and
 contextually appropriate NFI/EHI - ETS solutions

NFIs/EHIs-ETS T.Sub-CoP ToR

OBJECTIVE AND SCOPE



Facilitate collaboration and knowledge-sharing among shelter practitioners:

Global network, Technical discussions, and supporting the co-development of improved construction practices.

Support harmonization of global NFI/EHI and ETS technical standards, and maintain contextual relevance and quality

Support the development of a shared resource library and improve/ensure accessibility to vetted/approved construction-related guidance, standards and other key materials.

Improve and facilitate the sharing, development and access of NFI/EHI, ETS information, good practice, lessons learned and technical knowledge

Promote equality, sustainability and environmental responsibility

NFIs/EHIs-ETS T.Sub-CoP ToR

FREQUENCY OF MEETINGS

- **Monthly meetings with the Technical CoP co-chairs:** to brainstorm, define topics to propose to the broader community and prepare and conduct the regular quarterly general meetings.
- **Regular quarterly general meetings** with the broader NFI/EHI - ETS Technical CoP members are proposed to share and exchange information and experiences. Based on membership interest and engagement, other activities and events, such as webinars, working groups, etc. would be scheduled as needed.
- **Technical CoP quarterly meetings** with the other Technical CoP thematic sub-group co-chairs, organized by the GSC Technical CoP moderator, held to exchange updates on progress, workplans, sub-topics that may interconnect with other themes, and other relevant information



Survey – Identifying Priorities for the NFIs/EHIs & Emergency/Transitional Shelter Technical Sub-CoP

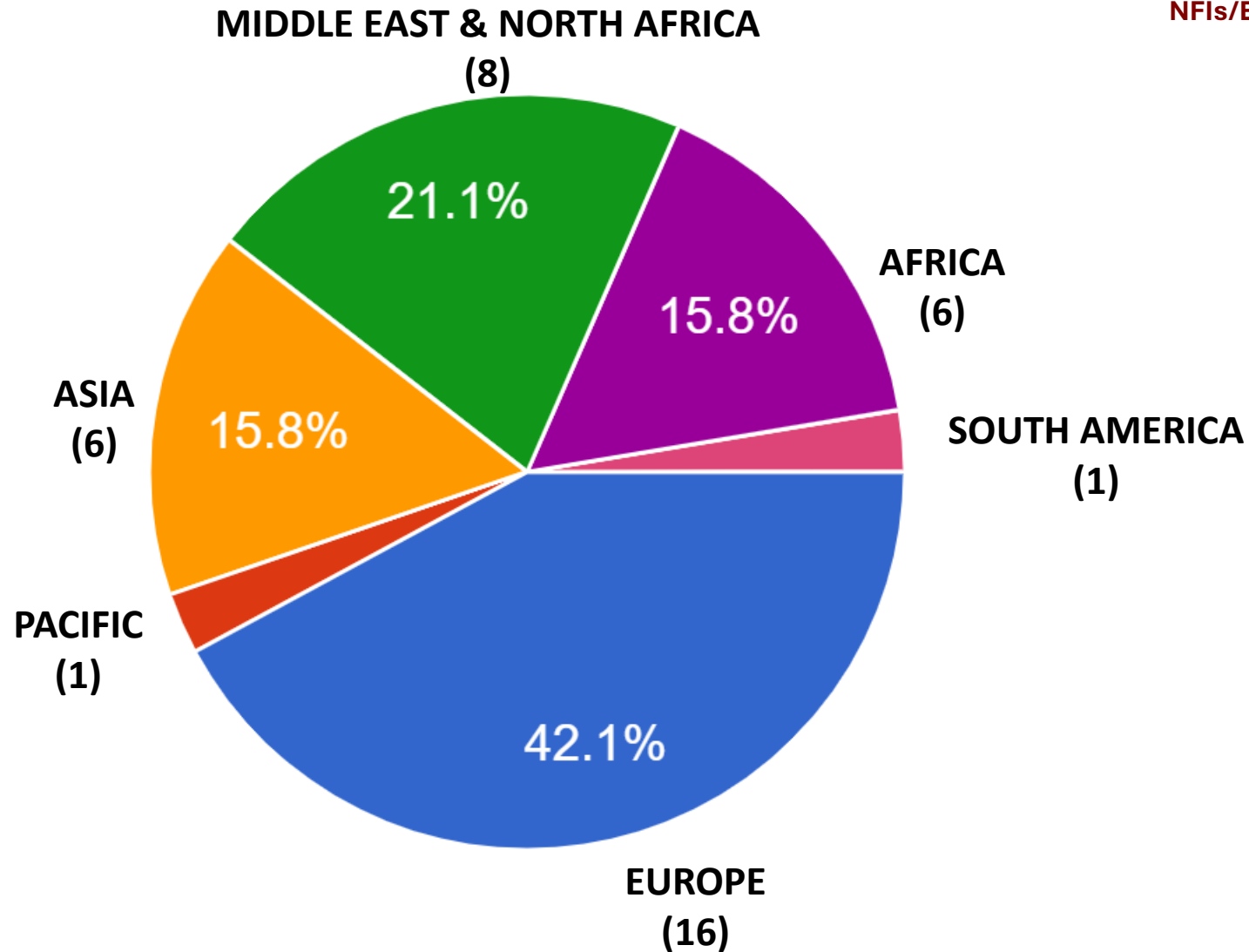
SURVEY RESULTS – 9 questions

38 Participants

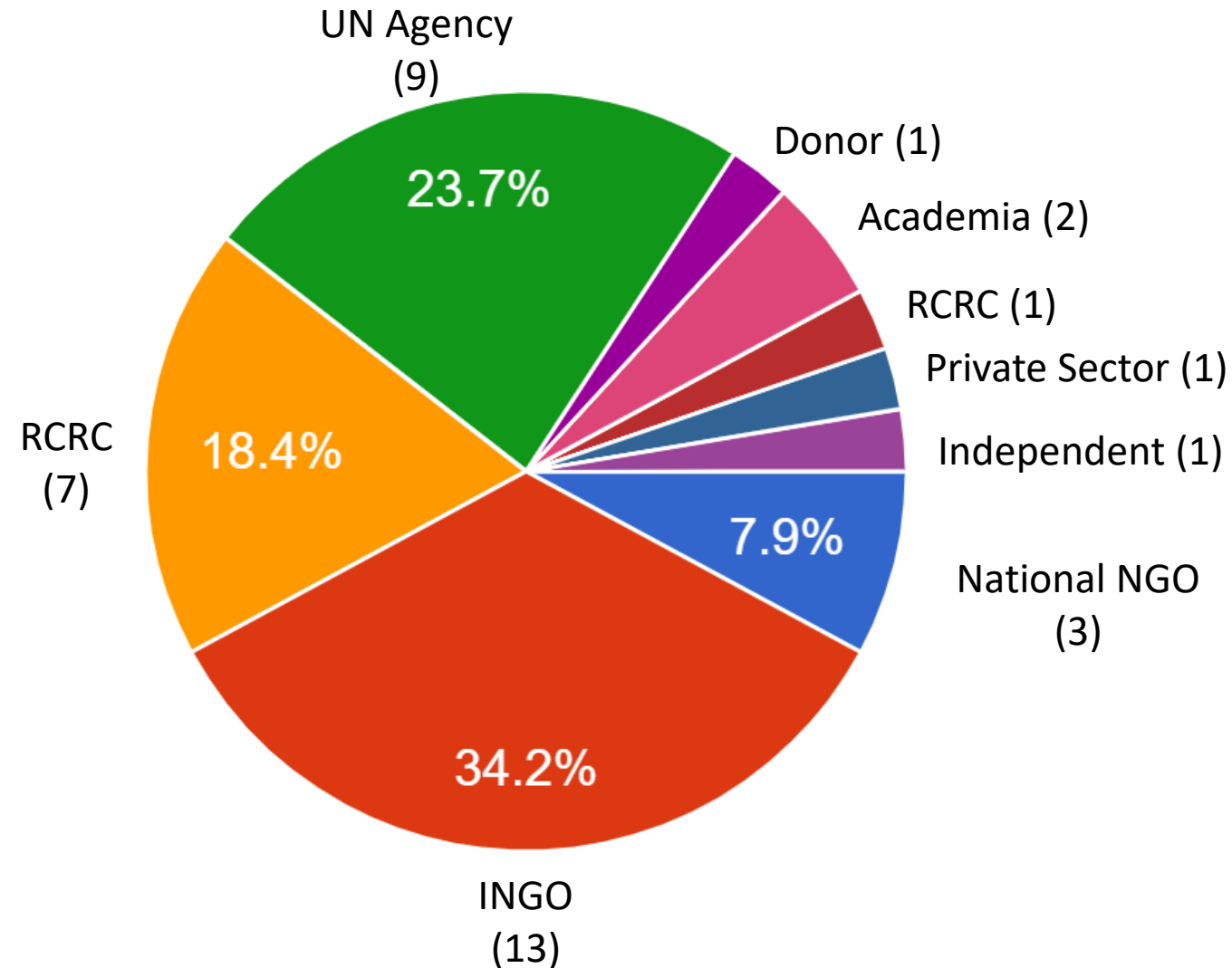
5 Continents

32 Countries

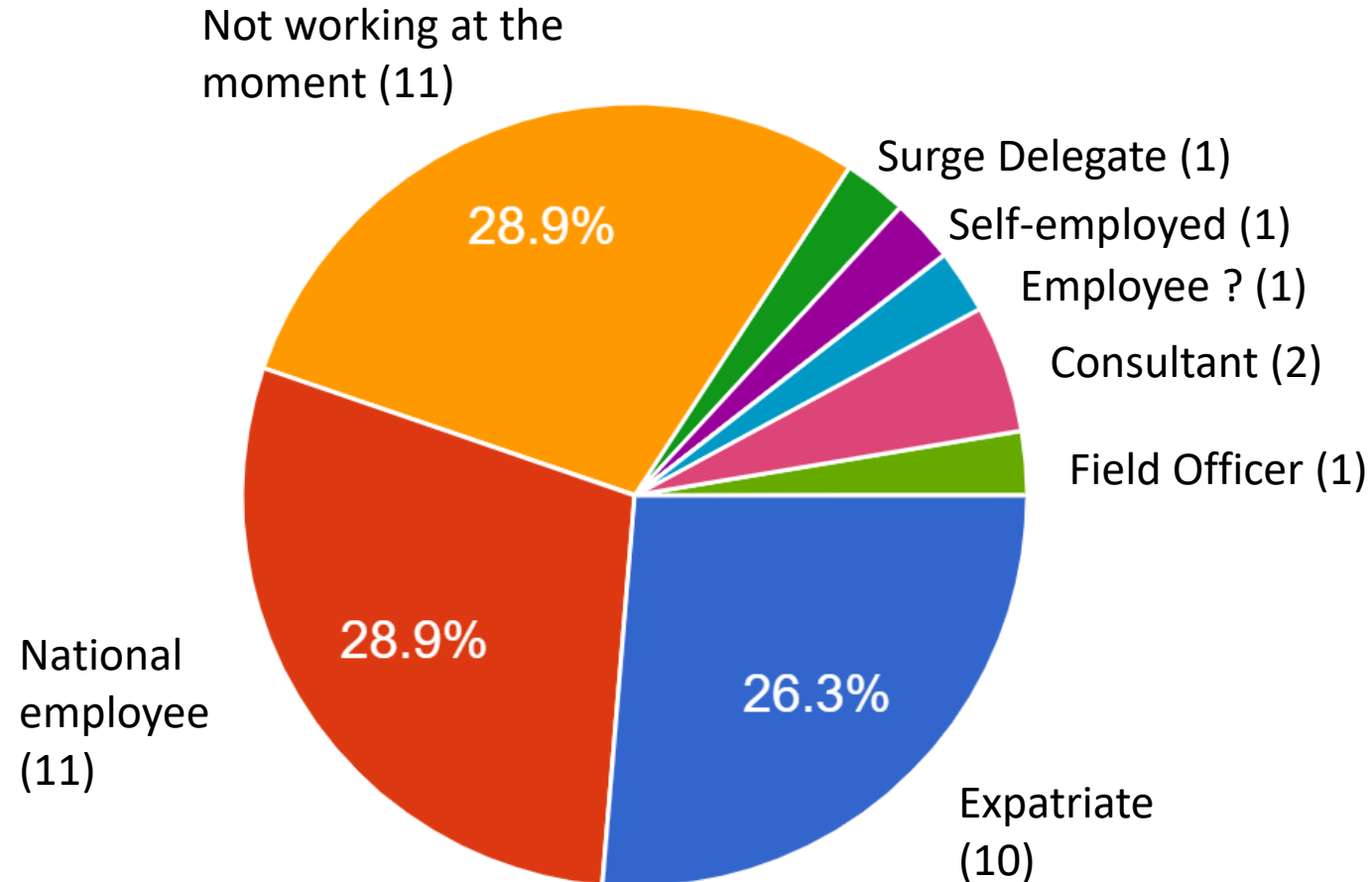
Where are you currently based?



What type organization do you work for?



What is your current employment status ?



1. Which stage of the NFIs/EHIs-ETS program cycle do you find the most challenging and want to learn more about?

Transition & Exit Strategies	62.2%
Rapid Damage & Shelter Needs Assessments and, Gap Analysis	48.6%
Forecasting Needs & Quantifying Required Stocks	43.2%

2. What is your biggest operational concern when it comes to distribution modalities?

Designing Distribution Strategy for highly remote or inaccessible areas	51.4%
Coordination between local, national and international actors	45.9%
Determining the optimal modality	37.8%

3. Regarding Minimum Standards and Quality Control (e.g., Sphere, CHS), which area requires the most clarity?

Environnemental and Sustainability Procurement Practice	54.1%
Defining and identifying the minimum essential items	51.4%
How to measure post-distribution impact and effectiveness	45.9%

4. With regards to Emergency Shelter (ES) and Transitional Shelter (TS), which stage of the ES/TS pipeline or programmatic aspect do you find most difficult to manage effectively?

Addressing Land Tenure, Housing, Land and Property Rights issues	64.9%
Emergency Shelter in Urban Settings	54.1%
Site Planning and Coordination with Land Authorities	51.4%

5. Which specific category of Non-Food Items (NFIs) or Essential Household Items (EHIs) would you like a deeper dive into?

Repair and Upgrade Kits for non-displaced /hots communities	63.2%
Shelter Kits	55.3%
Thermal Comfort Items	39.5%

6. Which Cross-Cutting/Thematic issue related to NFI/EHI-ETS is your highest priority for discussion?

Ensuring Environmental Sustainability	63.2%
Adapting Kits and Shelter to the Needs of the Most Vulnerables	47.4%
Designing Culturally Appropriate and Gender Sensitive NFIs/EHIs/Shelter Solutions	44.7%

7. In which specific humanitarian context or disaster type are you most interested in seeing case studies or tailored guidance related to NFI, EHI and ETS?

A mix	68.4%
Urban Displacement	42.1%
Protracted Crises	39.5%

THANK YOU

Mathieu Gamba

Consultant

Chair of the NFI/EHI - ETS and Permanent Shelter T.Sub-CoPs

gambamathieu@gmail.com



Emergency Shelter Option : The Neighborhood Approach

ETHIOPIA SHELTER CLUSTER



Mamuney Legesse
Subnational Coordinator
mnigusse@iom.int

Ethiopia ES/NFI Cluster Neighborhood Approach

Area-based shelter response in
displacement-affected communities



The Context: Displacement in Ethiopia

- Crises in Ethiopia have caused widespread displacement.
- An estimated **48% of IDPs**—around **1.8 million people**—live within host communities.

While this offers stability, it creates key challenges:

- Overcrowding and tension in shared shelter spaces.
- Limited capacity of basic services in affected neighborhoods.
- Increased protection risks for vulnerable groups.

Living conditions:

- IDPs stay in **host family houses, unfinished or damaged shelters, or temporary structures** made of mud, CGI, and plastic sheeting.



The Neighborhood Approach (NA): Core Objectives

The NA was introduced as an area-based shelter response, piloted in Mekelle (2022) and expanded to Adigrat (2024). It is designed to:



Immediate Shelter

Provide immediate and adequate shelter solutions for IDPs.



Social Cohesion

Strengthen social cohesion within displacement-affected communities.

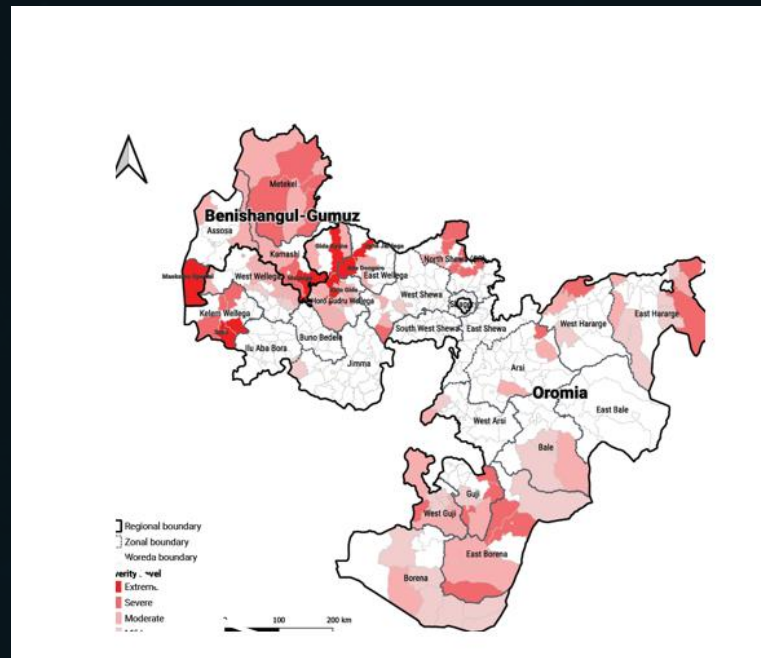


Reduce Relocation

Enable IDPs to remain within host communities, reducing the need for overcrowded sites.

By supporting **both hosted and host families**, the approach promotes shared benefits and strengthens local solidarity.

Key Considerations: Community & Area-Based Focus



Community Engagement

Requires active participation from IDPs and host communities at every stage to ensure ownership and sustainability.

Area-Based Approach

Focuses on localized solutions within defined geographical areas, leveraging existing infrastructure for sustainable outcomes.

HLP Considerations

Secured tenure is critical. HLP verification and documentation reduce eviction risks. Agreements must guarantee a minimum stay of 18 months.

Key Considerations: Tailoring the Response



Intersectoral Coordination

Seek to integrate other sectors where feasible, while ensuring protection and gender considerations are mainstreamed.



Mixed Modality

Use a flexible combination of in-kind materials (CGI sheets, cement) and cash-based interventions for skilled labor and local materials.



Tailored Response

Responses must be tailored to specific needs, household size, and the Bill of Quantities (BoQ), avoiding a one-size-fits-all package.



How materials and cash were used:

Households used cash mainly to hire masons, purchase additional supplies, and cover transport or repair costs.



Sourcing & Environmental Safeguards:

- Most materials were sourced from local suppliers to reduce delays.
- Environmental screening was conducted to mitigate risks such as overharvesting of EU poles and soil erosion.

Implementation Steps: Planning and Selection



1. Coordination

Jointly identify priority areas and activities with the ESNFI Cluster and local actors to ensure a harmonized approach.



3. Beneficiary Selection

Prioritize the most vulnerable (older persons, persons with disabilities, female-headed households) using a committee of IDP and host members.



2. Need Assessment

Gather data on demographics, vulnerabilities, immediate needs (shelter, WASH), and map local resources (materials, labor).



4. Hosting Identification

Registered beneficiaries identify a willing host. Conduct HLP due diligence and engage local authorities to validate voluntary, time-bound hosting arrangements.

Implementation Steps: Delivery and Monitoring

Quantify Need (BoQ)

Assess materials, estimate costs for labor/support, and coordinate procurement for timely availability.

Tenant Agreements

Sign formal tenancy agreements (minimum 18 months) between IDPs and hosts, ensuring legal recognition with Kebele authorities.

Construction & Supervision

Distribute materials/cash. Supervise construction to meet technical standards. Involve community members to promote ownership.

Relocation & Monitoring

Safely relocate IDPs. Conduct post-construction monitoring to assess quality, address needs, and ensure peaceful cohabitation.





Learning from the 1st Pilot to scale-up

- Scale-up: standardized BoQ, inclusion of sectors and HLP due diligence.
 - Improved coordination with local authorities and HLP due diligence
 - Standardized BoQs and better technical supervision
 - Enhanced community engagement and ownership
 - Environmental screening for local material sourcing
 - New challenges: Inflation, market fluctuation, and host fatigue
- Result: Stronger integration, sustainability, and community acceptance

Conclusion and Way Forward

The Neighborhood Approach has proven effective in **strengthening coexistence** and **improving shelter adequacy** in host community settings.



Key lessons include:

- The importance of **flexible mixed-modality responses** (cash + in-kind).
- **Early HLP verification** to secure tenure and prevent eviction.
- **Environmental safeguards** to reduce pressure on local resources.
- **Continuous engagement** of host and hosted families for social cohesion.

Next steps:

- Scale the approach to additional woredas.
- Enhance integration with **livelihoods, WASH, and protection sectors**.
- Institutionalize the model through **local authority capacity building**.

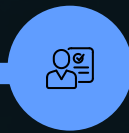
Resources

A clear exit strategy must transition interventions into self-sustaining, community-led initiatives, empowering local authorities and community representatives.



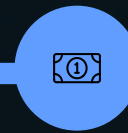
Tenancy Agreement

Formal agreement for tenure security.



Intention Survey

IDP and Hosting household intention survey.



Bill of Quantities (BoQ)

Detailed quantification of shelter needs and costs.

THANK YOU

Presenter's name

Organisation name

Presenter's email



Thermal Comfort Is a Necessity, Not a Privilege

SHELTER CLUSTER UKRAINE



Mykola FADIEIEV
Technical Focal Point
fadieiev@unhcr.org

Attacks on Ukraine's Energy Infrastructure: Harm to the Civilian Population



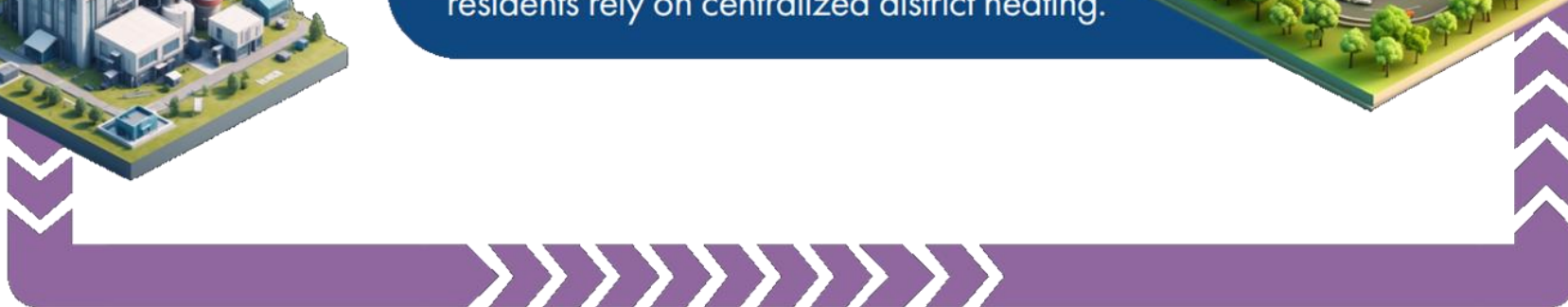
Since March 2024, HRMMU recorded:

- **36** strikes on power generation facilities (including 25 on thermal power plants, 7 on hydroelectric plants, 2 on renewable energy facilities, and 2 on heating plants);
- at least **101** strikes on power distribution and transmission facilities.



Centralized district heating provides heat and hot water to the vast majority of urban households.

Nearly **95** percent of Kyiv's three million residents rely on centralized district heating.

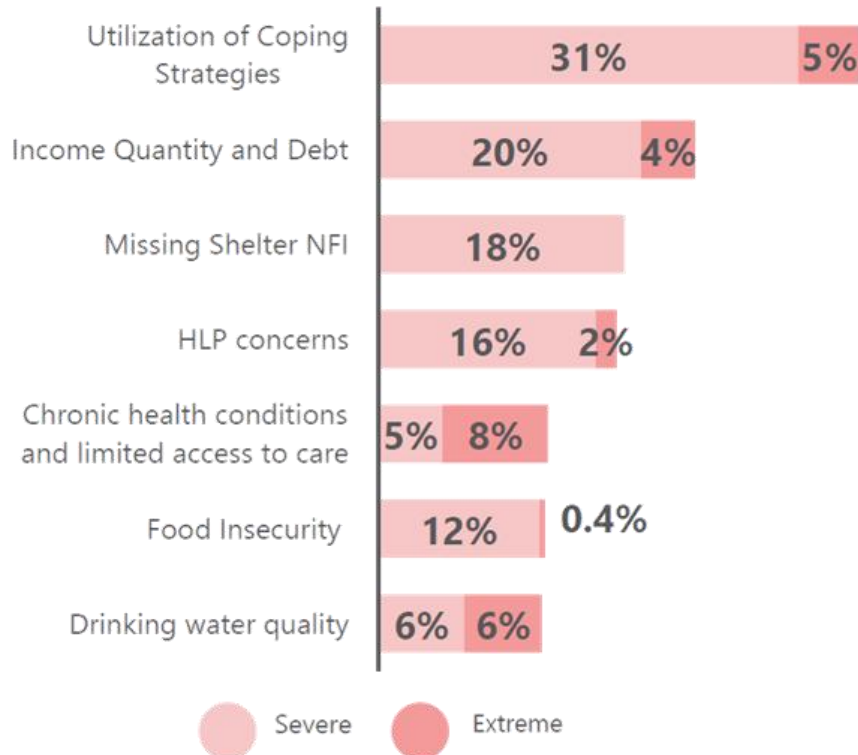


Overall results of the dimensional analysis

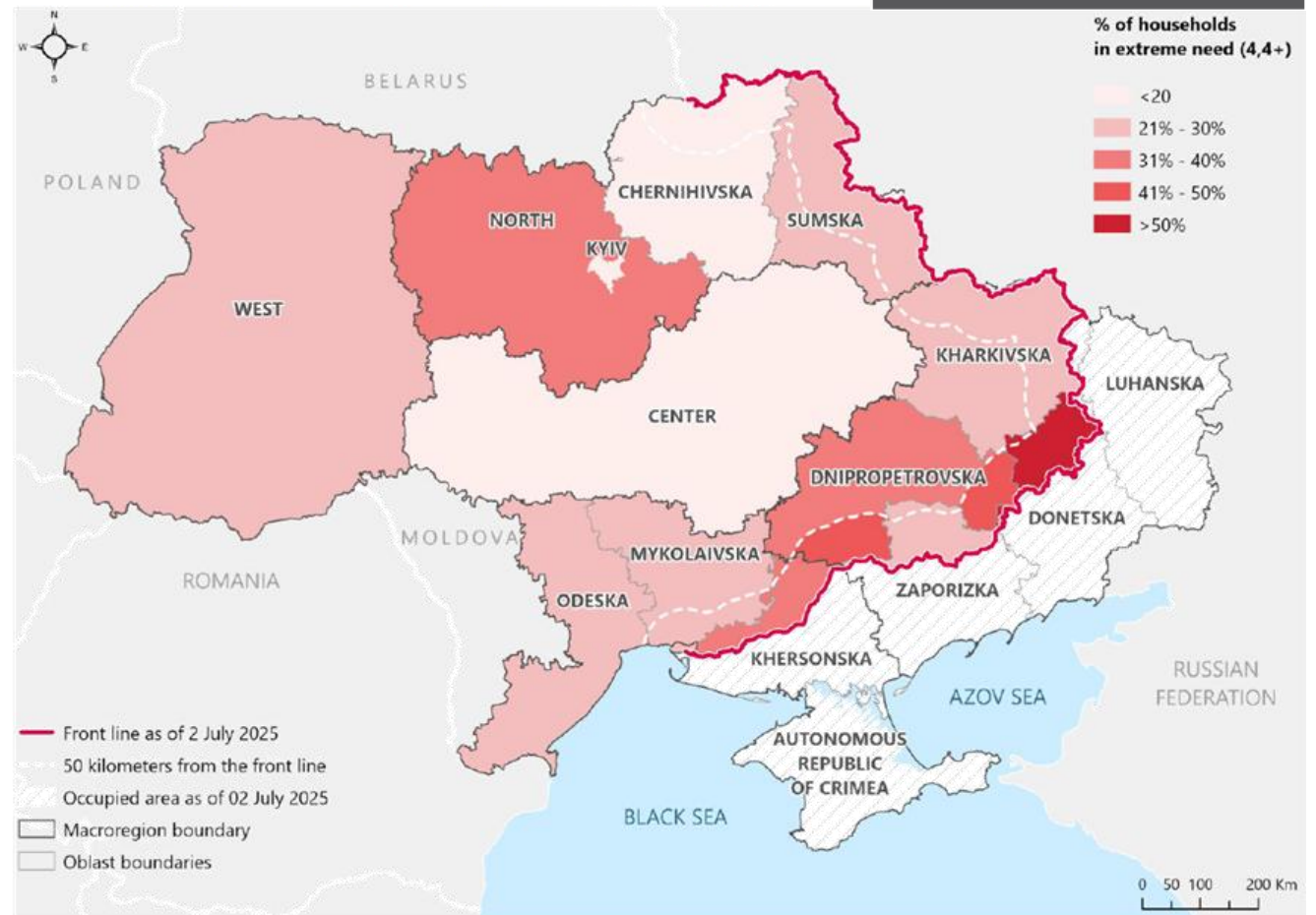
In 2025, the **dimensions** driving humanitarian need across sectors were:

- Utilization of coping strategies (36%)
- Income Quantity and Debt (24%)
- **Missing shelter NFI (18%)**

Proportion of households in severe and extreme need, by top dimensions driving humanitarian need (n=2813)



Percentage of households in extreme need, by sampling strata



Lessons Learned

For Winterization 2024-2025

Ukraine Shelter Cluster Winterization Recommendations 2025-2026

NFIs for Winter

16.1 NFI for Winter Composition (examples of items)

Mattress



Sleeping bag



High thermal blanket



Power bank



Rescue foil blanket



Thermos flask



Portable stove



Battery-powered flashlight



Winter Clothing

Distribution of warm clothes and thermal underwear:

Winter Clothing Set Composition	
Item	
Winter jacket	Winter hat
Winter boots*	Winter scarf
Thick socks	Thermal underwear

* for older persons - Velcro shoes



Winter Heating Appliances

Distribution of room-heating kits to households, including heating appliances:

- solid-fuel.
- electric.
- gas (propane-butane) heaters.

The Shelter Cluster recommends a complete set that includes all necessary installation accessories.









The installation of solid-fuel stoves, such as Burzhuika (similar to a potbelly stove), in basements or apartments of multi-storey residential buildings is significantly restricted by local regulations. However, in wartime conditions, this practice is used due to the lack of alternatives when centralized district heating, natural gas, and electricity supplies are completely cut off.



Winter Heating Appliances

16.3 Typical Set of Chimney Components for Solid Fuel Stove (Example Configuration)

Table A1 – Chimney set

	Chimney item	Specifications	1 set	Picture
1	Double-walled chimney pipe made of stainless steel in a casing made of galvanized steel 120/180, 0.5 mm	Material: AISI 304 stainless steel / galvanized steel Length, m: 1 Diameter, mm: 120/180 Steel thickness, mm: 0.5 Thermal insulation: basalt fiber	5 pcs	
2	Double-walled stainless steel chimney tee in galvanized steel casing 120/180, 0.5 mm	Material: AISI 304 stainless steel / galvanized steel Angle, degrees: 85...90 Diameter, mm: 120/180 Steel thickness, mm: 0.5 Thermal insulation: basalt fiber	1 pc	
3	Stainless steel unloading platform for double-walled chimney diam. 120/180	Material: AISI 304 stainless steel / galvanized steel Diameter, mm: 120/180 Steel thickness, mm: 0.5	1 pc	
4	Stainless steel chimney condensation drain diam. 180 mm, 0.5 mm	Material: AISI 304 stainless steel / galvanized steel Diameter, mm: 120/180 Steel thickness, mm: 0.5	1 pc	
5	Stainless steel chimney bracket 400 mm thick 2 mm	Material: AISI 304 stainless steel Length, m: 0.4 Steel thickness, mm: 2	1 pc	
6	Stainless steel chimney cap for the insulated pipe 120/180, 0.5 mm	Material: AISI 304 stainless steel Diameter, mm: 120/180 Steel thickness, mm: 0.5	1 pc	
7	Wall clamp for stainless steel chimney diam. 180 mm offset 0 - 100 mm thickness 0.5 mm.	Material: AISI 304 stainless steel Diameter, mm: 180 Steel thickness, mm: 0.5	1 pc	
8	Stainless steel chimney bracket diam. 180 mm, thickness 0.5 mm	Material: AISI 304 stainless steel Diameter, mm: 180 Steel thickness, mm: 0.5	5 pcs	



Heating sources - Equivalence table

Quantities for one household for one winter season (6 months) and indicative prices* 2025-2026

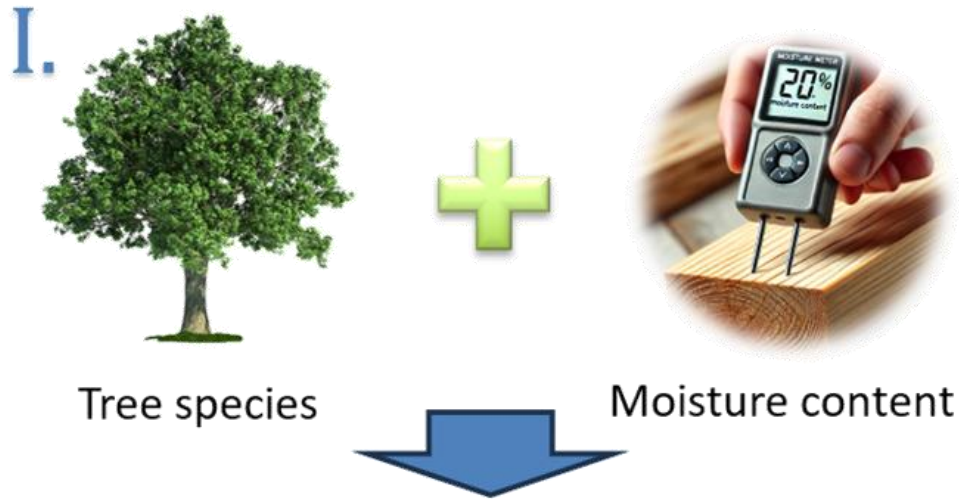
Heat amount for the winter season:	Type	Lower (working) calorific value	Reference amount		Unit price (UAH)	Unit price (USD)	Tot cost (USD/season)	Notes
			Unit	Qty**				
14.37 Gcal	Firewood	2.73 Gcal/m ³	$\frac{m^3}{\text{stacked } m^3}$ ***	$\frac{5.26}{7.51}$	- 3,290	- 79.5	- 596.3	Hardwood species (in this case, oak) are chopped into logs****. Wood moisture content is 20%. Generally, Burzhuika or Buleryan stoves are used.
	Briquettes	4.18 Gcal/ton	MT (metric ton)	3.44	8,900	214.5	738	High-quality wood briquettes, group I DSTU 8358:2015 (in this case, RUF type). The fragility of the briquettes should be taken into account during transportation and loading/unloading. Easier to handle than firewood. Special stoves are required for coal briquettes.
	Pellets	4.18 Gcal/ton	MT	3.44	9,065	218.5	752	High-quality wood pellets, group I (in this case, oak-based). Requires a special stove or loading device for the existing stove.
	Coal	5.7 Gcal/ton	MT	2.52	13,325	321	808.9	High-quality coal (in this case, gas coal grade "H"). Total moisture – 14%. Requires special stoves.
	LPG	-	L	483.00	35	0.83	400.9	Liquefied propane-butane gas.

Unified cash for solid fuel transfer value is UAH 19,400* (including transportation cost) for one winter (6 months)

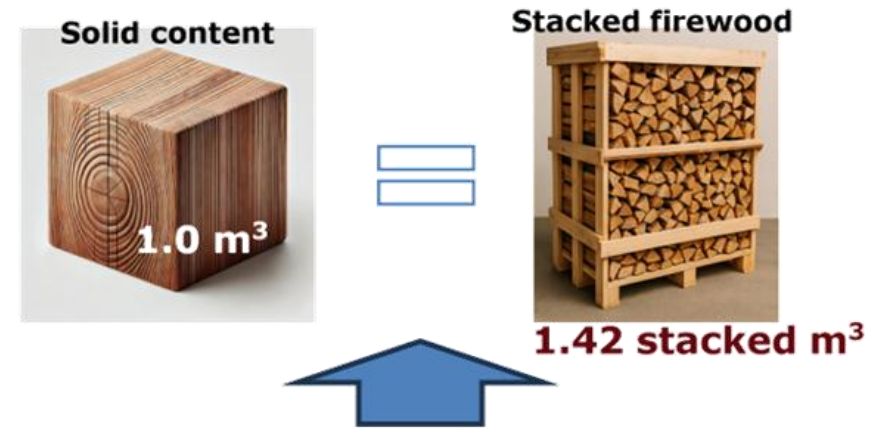
Winter Energy

16.6 Example of Calculation of Solid Fuel Amount for Heating the Household

3 steps for firewood



III. $4,79 \text{ solid m}^3 / 0.7 = 6.84 \text{ stacked m}^3$



Table²² - Specific calorific value of different wood species (12% and 20% - moisture content)

Wood species	Absolute (higher) calorific value, kcal/kg	Working (lower) mass calorific value Q, kcal/kg		Working (lower) volumetric calorific value, Gcal/m ³		Wood density, kg/dm ³	Wood density limit, kg/dm ³
		12%	20%	12%	20%		
<i>Hardwood</i>							
Oak	4,753	4,000	3,370	3.240	2.730	0.810	0.690-1.030
Ash	"	"	"	3.000	2.528	0.750	0.520-0.950
Beech	"	"	"	2.720	2.292	0.680	0.620-0.820
Birch	"	"	"	2.600	2.191	0.650	0.510-0.770
Alder	"	"	"	2.000	1.685	0.500	0.470-0.580
<i>Softwood</i>							
Pine	4,753	4,000	3,370	2.080	1.752	0.520	0.310-0.760
Aspen ¹	"	"	"	1.880	1.583	0.470	0.460-0.550
Spruce	"	"	"	1.800	1.517	0.450	0.370-0.750
Fir	"	"	"	1.640	1.382	0.410	0.350-0.600
Poplar	"	"	"	1.600	1.348	0.400	0.390-0.590

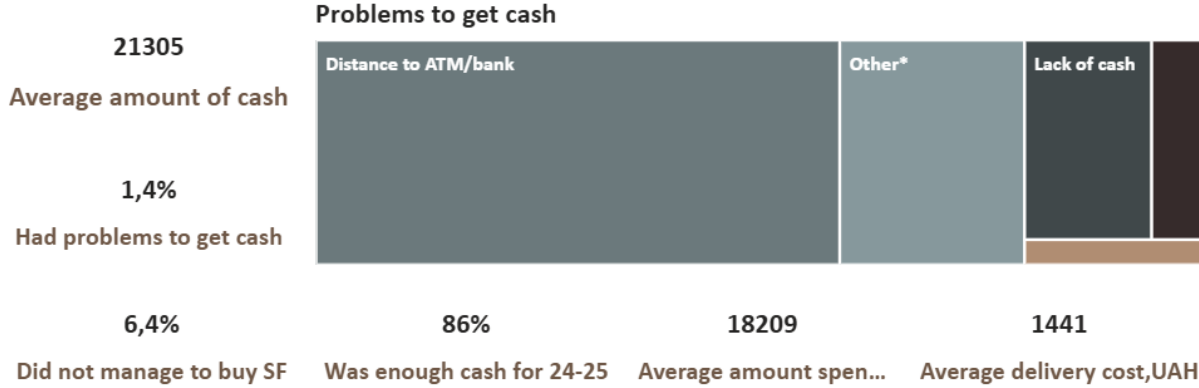
II. The formula for determining the amount of firewood in m³ for one winter season:

$$\text{Amount of firewood (m}^3\text{)} = \frac{\text{Amount of heat for the season (Gcal)}}{\text{Working (lower) volumetric calorific value (} \frac{\text{Gcal}}{\text{m}^3}\text{)}}$$

$$\frac{14.37 \text{ Gcal}}{3.0 \text{ Gcal/m}^3} = 4.79 \text{ solid m}^3$$

14,37 Gcal – minimum recommended amount of heat for one winter season for one household

Solid fuel in cash modality
5163 recipients



SF available at local market

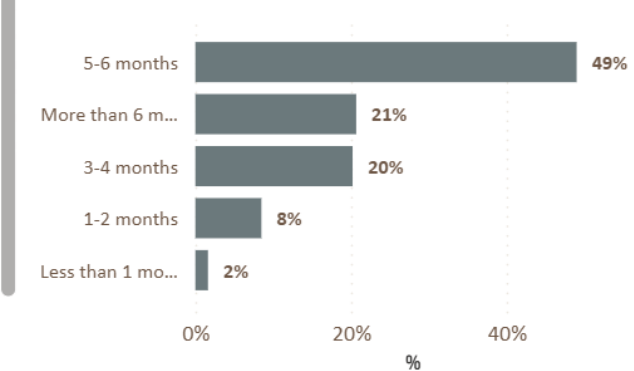
● Briquettes ● Coal ● Firewood ● Pellets



Reason not to buy SF/ Причина не придбання ТП	% out of 321 answers
Dangerous to access market	0,28%
Delivery is too expensive	0,28%
Had urgent need	30,23%
Market had limited capacity	2,82%
Market is far away	1,13%
Market is not functional	2,26%
Other**	61,30%
Solid fuel was very expensive	1,69%
Усього	100,00%

****83% of "Problem to buy other option"** informed that they did not buy SF because there was no need. Beneficiaries use gas or electricity heating.

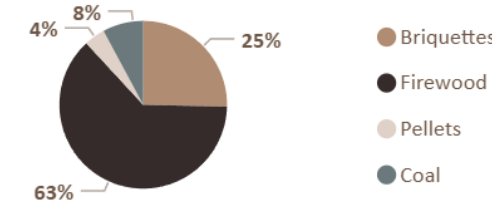
For how long cash assistance covered heat needs/Як довго допомога покривала потребу в опаленні (3442 answers)



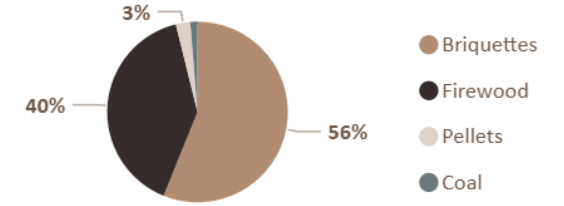
****"Other option"** related to **problems to get cash** - personal (illness, disability) and Ukrposta`s delay.

Solid fuel in in-kind modality
3598 recipients

Solid fuel that is commonly used/ Тверде паливо що зазвичай використовується

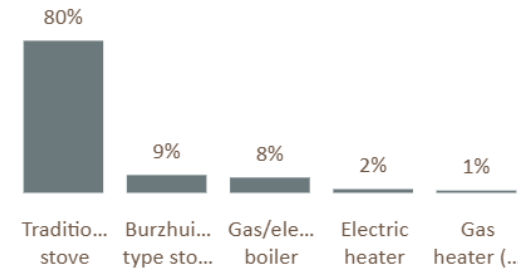


Solid fuel received/Отримане тверде паливо

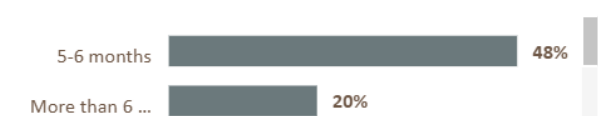


Solid_fuel_type_received	Avg_by_Fuel_Type	Avg_by_suffi_SF_type	Avg Accom,m2	Avg_by_Fuel_nb_pp
Briquettes	3,18	5	58,46	
Coal	3,20		58,84	
Firewood	5,79	12	63,73	
Pellets	3,62	5	59,57	

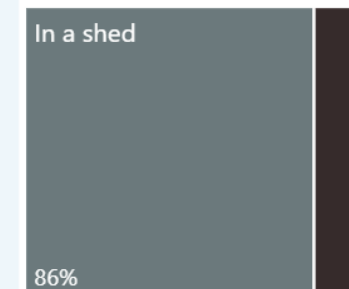
Heating appliances used (3270 answers)



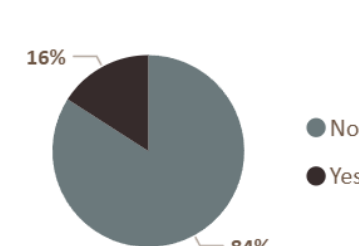
Was enough in-kind SF for ... Used SF for cooking
For how long in-kind assistance covered heat needs/Як довго допомога в натуральному вигляді покривала потребу в опаленні



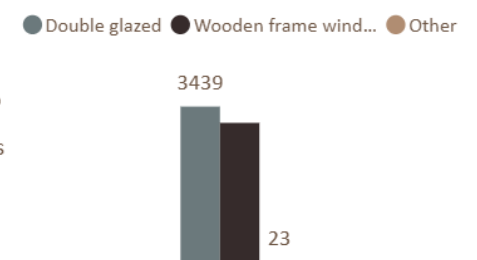
Fuel stored in (7992 answers)



Insulation of house (5592 answers)



Kind of windows on immediate living area





Welcome to RAIS+

Ukraine Assistance Monitoring System



Requests



Distribute

ID

Deduplication



Cash interventions



Donations



Reports

Distribution Data

Receivers' data

Enter the information about the head of the household

Receivers

Tax ID	Name	Place of Origin
1617763404	Balaban Tetiana Zlatomyrivna	Luhanska oblast
2686906003	Halatei Adelina Panteleimonivna	Poltavska oblast
1323422800	Lutskiv Bohuslava Myronivna	Odeska oblast
3679034515	Bozhen Mechyslavovych Stetskiv	Zakarpatska oblast
2100910106	Korniichuk Valeriia Vitaliivna	Cherkaska oblast
4277561406	Biloslava Hryhoriivna Plaksii	Zaporizka oblast
2776935110	Vladyslav Albertovych Nehoda	Ivano-Frankivska oblast
4236620007	Svydryhailo Liubomyra Azarivna	Luhanska oblast

TEST VERSION

Documents

Please indicate the person's tax ID or passport number

Tax ID
1955356205

 Person has no tax ID


Gender: Female
Birthday: 1953-07-14
Current age: 72

Deduplication results

This person has already received the support from humanitarian organizations

- Date:** 06.10.2025
- Assistance type:** Non-Food Items
- Oblast:** Cherkaska
- Raion:** Zolotoniskyi
- Locality:** Krupske
- Organization:** UNHCR
- Items:**
 - Adult diapers: 2
 - Baby diapers: 1
 - Bed linen set: 2
 - Blankets/Quilts: 3
 - Beds: 2
 - Buckets: 2

CANCEL SAVE

Deduplication

Please specify the necessary filter and provide the list of tax IDs to obtain information regarding the support provided

Show only one record per person

Type of support ▼

Modality ▼

Start of support 📅

End of support 📅

Results



RESET

EXPORT

Tax ID	Passport	Result	Date	Bundle name	Organization	Oblast	Raion	Hromad
1111111118		Unique						
1955356205		Duplicated ⓘ	06.10.2025	Non-Food Items	UNHCR	Cherkaska	Zolotoniskyi	Zoloton
3472524400		Duplicated ⓘ	06.10.2025	Non-Food Items	UNHCR	Cherkaska	Zolotoniskyi	Zoloton
4312559017		Duplicated ⓘ	06.10.2025	Non-Food Items	UNHCR	Cherkaska	Zolotoniskyi	Zoloton
3750669716		Duplicated ⓘ	06.10.2025	Non-Food Items	UNHCR	Cherkaska	Zolotoniskyi	Zoloton
1047683514		Duplicated ⓘ	06.10.2025	Non-Food Items	UNHCR	Cherkaska	Zolotoniskyi	Zoloton
380507746648		This tax ID is invalid						
3694357604		Duplicated ⓘ	06.10.2025	Non-Food Items	UNHCR	Cherkaska	Zolotoniskyi	Zoloton
2555674415		Duplicated ⓘ	06.10.2025	Non-Food Items	UNHCR	Cherkaska	Zolotoniskyi	Zoloton
2239671016		Duplicated ⓘ	06.10.2025	Non-Food Items	UNHCR	Cherkaska	Zolotoniskyi	Zoloton

TEST VERSION

Free online course: Winter Preparation and Energy Conservation

PROMETHEUS



[LINK TO THE COURSE](#) (AVAILABLE IN UKRAINIAN ONLY)

Home / Courses / Winter preparation and energy saving

WINTER PREPARATION AND ENERGY CONSERVATION

The online course will help Ukrainian household owners master practical tools for improving the energy efficiency of their homes.

You will be able to create a plan for effectively preparing your home for the cold season to stay warm in winter, improve living comfort, and reduce energy consumption.

Cover photo by Natalia Bohdan, ZOA

Free

PROMETHEUS



Enroll in a course

COURSE STARTS
06/17/2025

COURSE LANGUAGE:
Ukrainian

UPON COMPLETION:
certificate

DURATION: 4+ hours of video
footage

Course program

Module 1: Understanding the importance of energy conservation and energy efficiency

2 lectures ·



Module 2: Best practices for heat conservation

3 lectures ·



Module 3: Preparing your home for winter

3 lectures ·



Module 4: Insulation of houses that do not meet humanitarian standards

3 lectures ·



Module 5: Security Considerations

2 lectures ·



Module 6: Environmental aspects

2 lectures ·










Free online course: Winter Preparation and Energy Conservation

Відео



Склад набору для сезонного утеплення

№	Назва	Опис	Кількість	Зображення
1	Теплоізолюючий екран	Рулон шириною 50см довжиною 5м з вспіненого полімерного матеріалу з фольгованим покриттям	2	
2	Поліетиленова плівка прозора	1.5м x 10м	1	
3	Двосторонній скотч	Стрічка шириною 15мм Довжина: 10м	2	
4	Скотч	Стрічка шириною 40мм Довжина: 50м	1	
5	Скотч	Стрічка шириною 40мм Довжина: 40м	1	
6	Скотч	Стрічка шириною 2см x 2см	20	
7	Кабель		1	

Course developers

United Nations Refugee Agency (UNHCR)



Shelter and Non-Food Assistance Cluster in Ukraine



Course authors

Modan Akbarnazim



Mykola Fadeev



Bohdan Vozhdaenko



Anastasia Tlustyak



3.2 Використання та встановлення наборів для сезонного утеплення житла

Додати цю сторінку до закладок

Відео





The course includes videos on Window Replacement and Thermal Insulation of Attic in Detached House

Conclusion

Thermal comfort is not just about temperature. It means safe, efficient heating; proper ventilation; energy conservation; and protection from the cold through durable repairs and quality materials.

Our joint efforts – the coordination between Shelter/NFI partners, engineers, local authorities, and communities – transform technical actions into dignity and safety.



Useful links

1. [Winterization Lessons Learned 2024-2025.](#)
2. [Winterization Recommendations SOP 2025-2026.](#)
3. [SNFI Cluster Winter Response 2025-2026 Coordination Brief and FAQs](#)
4. [Winterization Post distribution monitoring 2024-2025 \(Power BI Dashboard\)](#)
5. [Free online course on Winter Preparation and Energy conservation \(Prometheus Platform\) - in Ukrainian only.](#)
6. [Guide to the Ukraine Assistance Monitoring System RAIS+.](#)

THANK YOU

Mykola Fadieiev

Shelter Cluster Ukraine

fadieiev@unhcr.org



Gaza Shelter Response Post-Ceasefire Context and Technical Updates

PALESTINE SHELTER CLUSTER – NRC / IOM



Adil Marwah
SC Technical Co-Coordinator
IOM



Jehan Salim
SC Technical Coordinator
NRC



Gaza Shelter Response

Post-Ceasefire Context and Technical Updates

06 November 2025

Agenda

- Gaza Shelter Conditions Overview
 - UNOSAT remote damage assessment findings
- Shelter Needs overview
- Limitations and challenges
- Winterization needs in Gaza.
- Transitional Shelter Assistance Technical Working Group
- Pipeline and Distributions Post Ceasefire
- Technical Strategy and Priorities

Gaza Shelter Conditions overview

- People live in overcrowded, unsafe, and inadequate conditions.
- In recent weeks: of 93 sites assessed (=25,000HH or 123,000 individuals)
- 1st priority: 20,500HH responded Shelter/Housing.
- 2nd priority: 20,000HH responded household items.



Gaza Shelter Conditions overview

Current sheltering conditions

- The crisis is in an acute and protracted emergency response.
- Large-scale housing and infrastructure damage, minimal stocks of housing.
- Families sheltering in streets, sidewalks, and partially or fully damaged buildings and structures
- People observed and reported sleeping in the open without any form of shelter
- Partners report critical unmet needs and worsening shelter conditions



Destruction is seen in Jabalia, Gaza Strip, March 10, 2025 - NRC

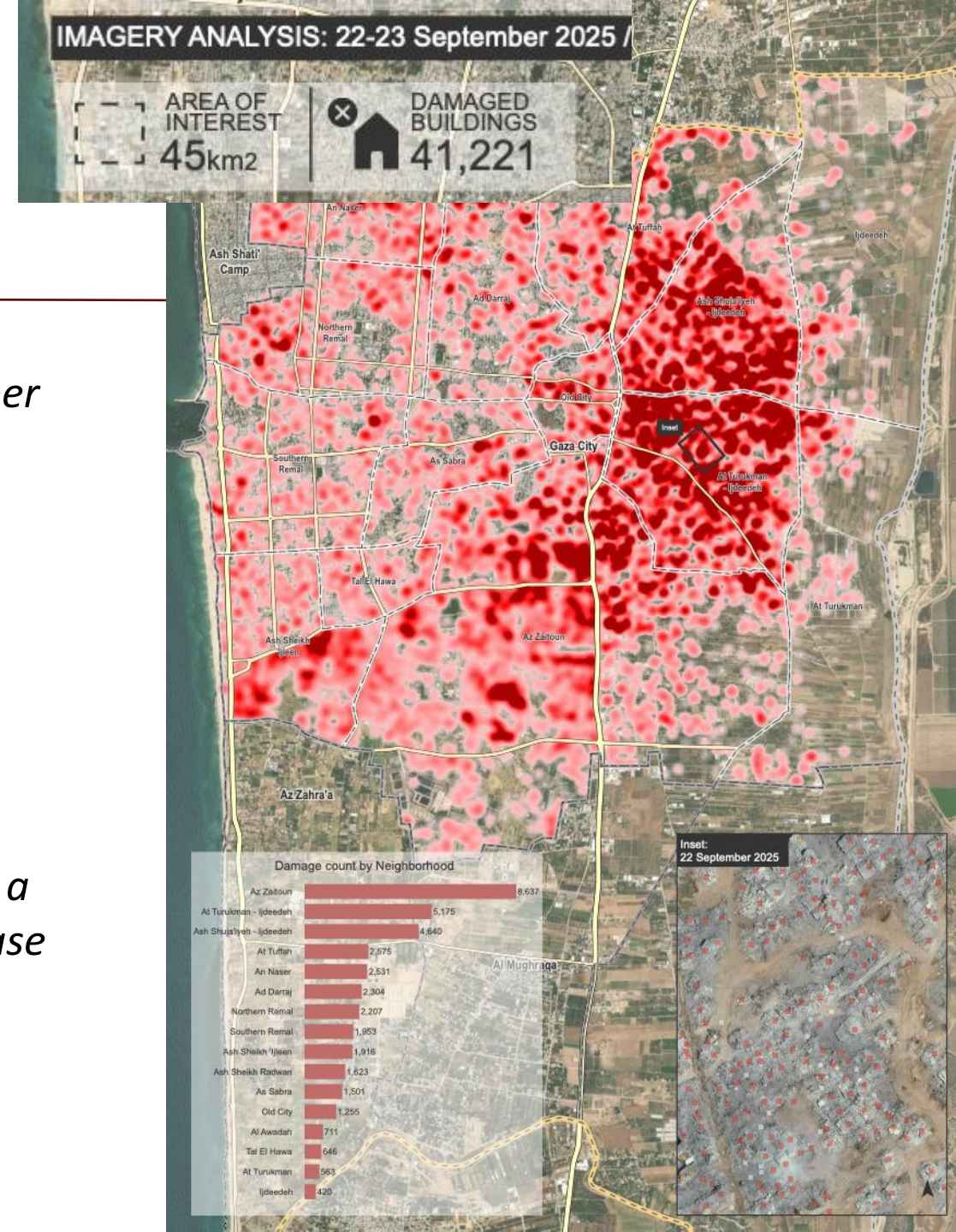
UNOSAT Remote Damage Assessment Findings: Gaza City

"According to satellite imagery analysis, as of 22-23 September 2025, approximately 83% of all structures in Gaza City are damaged."

Among the damaged structures, UNOSAT identified 17,734 destroyed structures, 4,345 severely damaged structures, 11,201 moderately damaged structures, and 7,941 possibly damaged structures for a total of 41,221 affected structures.

Compared to the 8 July 2025 assessment, this corresponds to a 7% increase of the total affected structures, and a 36% increase in destroyed structures, indicating worsening damage."

Source: UNOSAT



Gaza Shelter needs overview

1.40M people in need of emergency shelter –
Sealing Off Kit, Emergency Shelter Kit,
tarpaulin packages, tents

1.41M people in need of emergency
household items – bedding sets, kitchen set,
solar light, seasonal clothing
(Source: Shelter Cluster)



Damaged housing unit - Source: IOM.

Limitations and Challenges

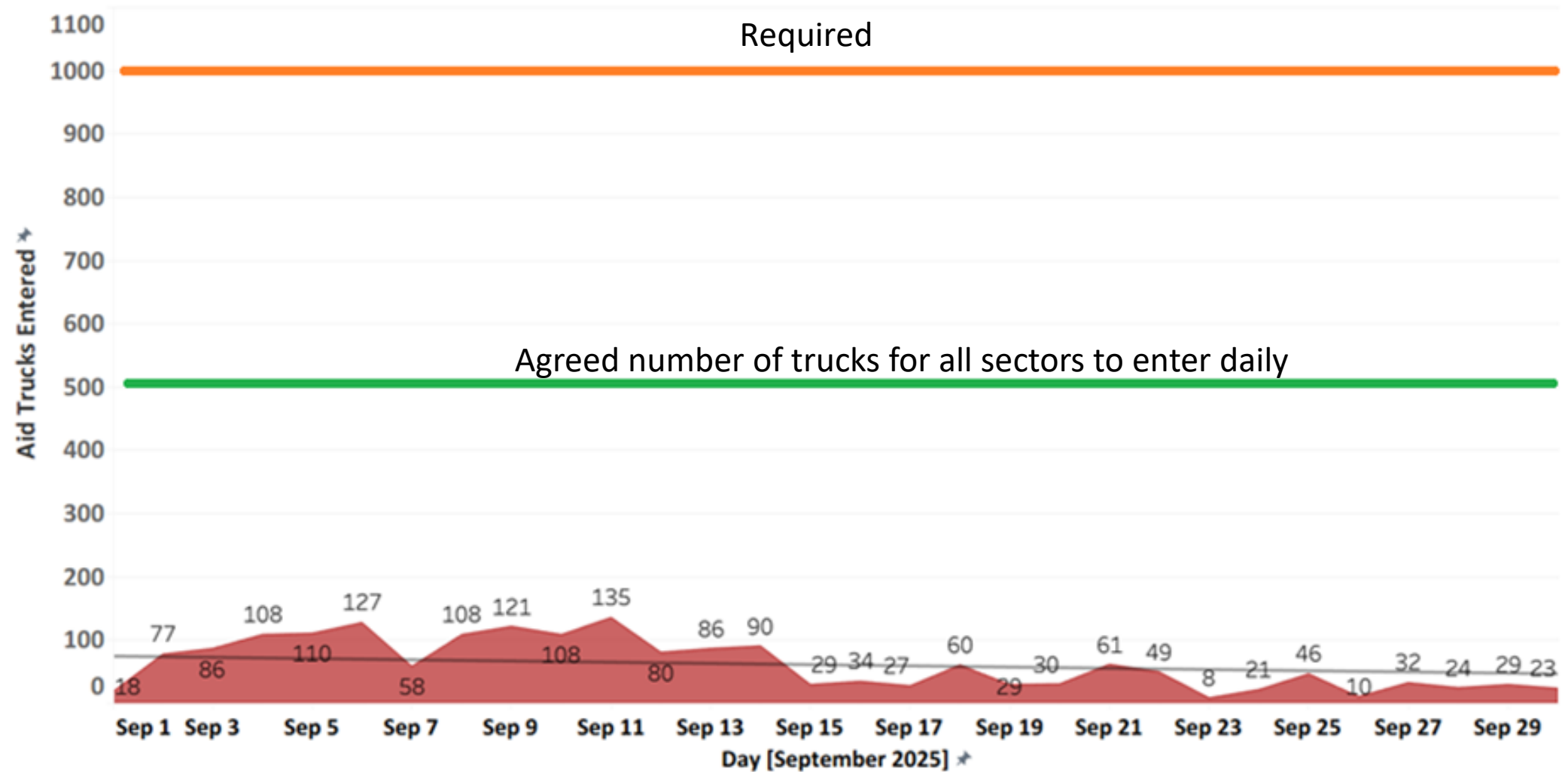
Access and Security constraints:

- Access is limited due to rubble, damaged roads, reduced land availability, inaccessible neighbourhoods, and UXO risks, Asbestos risks.
- Repeated displacement and movement, and lack of reliable data make it challenging to assess needs and verify damage.
- The scale of destruction and HLP issues complicate targeting and long-term shelter solutions.
- Limited operational capacity to assess housing unit damage, limited warehouse capacity and partners' reduced presence, especially in the north, constrain operational delivery.
- Entry of shelter materials is delayed by customs, vetting, and registration requirements. (Dual Item list)

Resources:

- [Handling Asbestos in Gaza link](#)

Pipeline and distributions of NFI and Shelter items



NFI and Shelter items since opening the entry of items August 2025

Internal Shelter Cluster Dashboard - IM updates

Latest update on 03/11/2025

Daily Gaza Tents Entry and Distributed - Sep - Oct 2025

Date

All

Organization

All

Is Committees

No

Yes

Press CTRL for multiple selection



40.28K

Tents Entered To Gaza Strip



13.6...

Tents Distributed



7.60K

Tents Intercepted



198....

Tarps Entered to Gaza Strip



38.67K

Tarps Distributed



120.8...

Bedding items Entered



107.42K

Bedding items Distributed

*Shelter Cluster internal tracking system
For all active actors including ones not
Registered in the cluster.
Currently there are Gulf committees
distributing directly to the community*

Winterization needs in Gaza:

- Sealing off partial damaged houses, sub-standard makeshift shelters, non-humanitarian tents, and deteriorated tents.
- Rise shelters at coastal areas using sandbags, as their relocation to a non-prone flooded location is not available.
- Provision of bedding sets, winter clothing, through voucher or in-kind based on market and entry of items.
- Distribution of solar light.
- No heating appliances were allowed for entry since the escalation of this war. People only are copying with burning wood (which is expensive, not always available), burning clothes, and trash.
- In coordination with site management some flooding risks are mitigated through the distribution of tool kits, and IEC materials.

Resources:

- [Winterization guidance](#)
- [A tip sheet for things to consider by people planning temporary sites in Gaza.](#)
- [Protect your Shelters from Rain and Flooding IEC](#)
(i.e. winterization IEC- currently under revision)

The key objective of the TSA TWG is to provide relevant, timely and diverse technical guidance to support affected households' pathway to recovery, considering the variations in land ownership, urban density, degree of damage, and households' evolving needs.

This TWG is chaired by CRS and Shelter Cluster Palestine.

Current and past Sub-TWGs

- [Local Coping Mechanisms](#), guidance has been released on this topic
Three topics: [Community based approaches for makeshift shelters](#), [Emergency repairs of partially damaged buildings](#) and [Shelter adaption for disability and limited mobility](#)
Status: completed
- [Targeting and prioritization](#)
Status: completed
- Damaged assessment for minor and medium buildings
Status: Underway
- Cash for shelter and NFI/market monitoring
Status: Underway

Shelter Response: Emergency Phase

PHASE 1: Ongoing acute emergency phase: (next 3 to 4 months, subject to access)

- Distribution of tents, tarpaulin packages, Sealing Off Kits (SOKs), ESK (emergency shelter kits including timber framing, SOKs and tools) and essential household and tools) and essential household items for sites and damaged buildings.
- Damage assessments for emergency response. And developing tools for damage assessments for durable repairs.

NOTE:

Phases are not linear, can overlap in Gaza's protracted emergency.

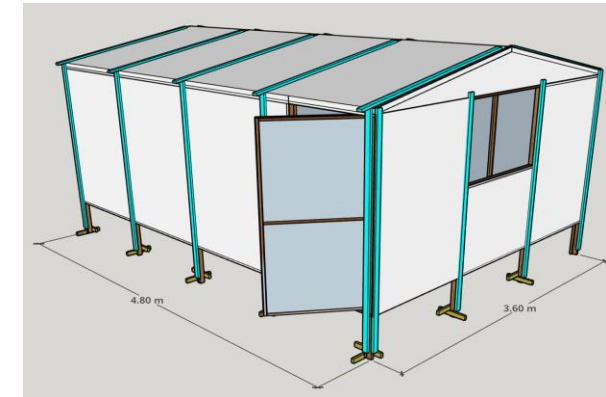
Phases include considerations on HLP, Protection risks, and in coordination with Site Management Cluster, WASH, Mine Action, and Debris Management Working Groups.

Shelter Cluster continues to carry out advocacy on access of items for emergency and transitional response phase.

Shelter Activities: Emergency Shelter Kits

Consists of timber framing, sealing off kit and tools.

- 1) Targeting based on technical assessments.
- 2) Could be contractor-led or household-led. Currently carried out through local procurements, access of timber and tools uncertain.
- 3) Incremental and versatile assistance, anecdotal findings indicate this assistance is preferred to tents, mainly due to flexibility, structural stability and internal height.



Source: CRS

Shelter Activities: Sealing off damaged buildings

SOK consists of plastic sheeting, 2 tarpaulins, duct tape, rope and IEC materials

- 1) Determining safety to assess the building in coordination with Mine Action.
- 2) Technical Assessment (includes assessing vulnerability based on SC criteria). Note: blanket assistance depending on material entry.
- 3) Distribution of SOKs and ESKs, complemented with distribution of technical messaging and awareness raising IEC materials.
- 4) To complement SOK distributions with essential household items.

WINDOWS

 Wear gloves & Carefully remove shattered glass

 Keep children away from insecure windows.

Cover the openings

Secure tarpaulin
Use timber & nails or ropes to tightly cover the opening.

Add barrier
Instal a railing to prevent accidents

  1m from the floor

Reuse old windows & doors
Adjust them to fit the size of the openings

 **BEFORE REPAIRS**

 **AFTER REPAIRS**

Note: This tool offers basic guidance only and is not a substitute for expert structural assessment.



Source: Heks Eper and IOM.

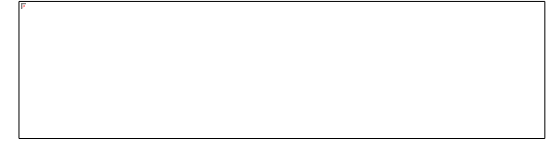


Sealing off kit used to create a temporary wall



Emergency Shelter Kits

Shelter Response: Emergency Phase



PHASE 2: After basic emergency shelter needs are met:

(months 4-6, subject to access)

- **Phase 1 continues: replenishing of emergency materials**
- Shift to improved ESK: decongestion, additional materials like plywood or Oriented Strand Board (OSB) for walling.
- Shift to cash approaches based on market conditions.
- Damage assessments for repairs: Starting of assessments for low-risk buildings in coordination with Mine Action.
- Repairs subject to access and market conditions.
- Transitional shelter pilot programs, if conditions are feasible.

Links to Resources

[Technical Guidance on Tents Assistance](#)

[Technical Guidance on SOKs and Tarpaulin Packages](#)

[ESK technical guidance](#)

[Emergency Assistance Packages](#) (2024 version. Revision for 2025 ongoing)

IEC Materials

[Fire Risk Mitigation for temporary shelters IEC](#)

[Family Tent Installation IEC](#)

Geodesic Tent Installation IEC (ongoing)

[ESK IEC](#), [ESK IEC Annexes](#)

[Temporary Occupancy of Damaged Buildings IEC](#)

Shelter Response: Transitional Phase

While the immediate priority for shelter cluster is to scale-up the response to meet emergency shelter and household item needs, the TWG has worked on some resources for transitional and durable shelter assistance and is currently developing technical strategies on transitional assistance through TSA TWG.

PHASE 3: Transitional Shelter and Durable Recovery

(months 5-6 onwards, subject to access. Phase 1 and 2 continue)

- Durable non-structural repairs of minor and medium damaged buildings, subject to market conditions
- Transitional shelters with timber, steel etc.
- Further coordination with development actors on early recovery (TBD in process of RDNA and Gaza Reconstruction and Recovery Strategy)

Resources

- [Module 2: Humanitarian Shelter Repairs](#)
- [Transitional Shelter Solutions for Gaza](#)
- [Key Considerations for Prefabricated Shelters](#)
- [SAG Position on Prefabricated Shelters](#)
- [SAG Position on Rental Assistance](#)

Shelter Activities: Sealing off and emergency repairs

Initial Visual Inspection



Do not touch unidentified objects, they may be unexploded ordnance, and ensure your family, including children, are warned not to approach or handle them.

✓ Contact Civil Defence to inform of the unexploded ordnance.

C. Inside Check

If the exterior seems sound:



- Enter the building **during daylight.**
- Wear sensible clothing**, or proper protective clothing if available. **Cover your mouth and nose** before entering.
- Check stability with your foot** before fully standing in a specific area.
- Always enter with someone else**
!! BUT NOT CHILDREN !!
- BE CAREFUL** of any exposed electrical cables or damaged appliances.
- LISTEN** for unusual noises such as creaking, cracking, popping.
- Check for signs of **water infiltration or soil erosion** around the base or foundations



Note: This tool offers basic guidance only and is not a substitute for expert structural assessment. (Partners to insert hotline or contact information)

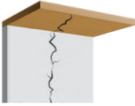





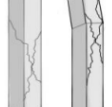
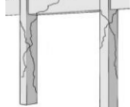
2

1. Check slab & beam

Consider the **whole building**, not just the rooms you want to occupy.

2. Inspect walls in each room

Especially at corners of doors or windows

- | | | | |
|--|---|---|---|
|  |  |  |  |
| <input type="checkbox"/> Wall to slab cracks | <input type="checkbox"/> Diagonal Cracks | <input type="checkbox"/> Floor and slab cracks | <input type="checkbox"/> Cracked Lintel |
|  |  |  |  |
| <input type="checkbox"/> Stairstep crack in brick or masonry | <input type="checkbox"/> Bowed wall | <input type="checkbox"/> Cracked or shifted column | <input type="checkbox"/> Column to beam cracks |

Carefully inspect the slabs, columns, beams, and walls. Do not occupy the space unless you are certain it is structurally safe.

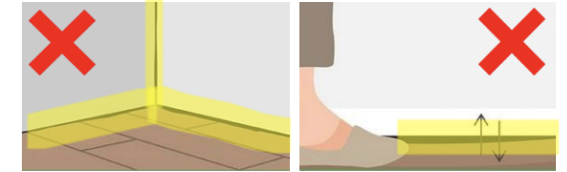
Note: This tool offers basic guidance only and is not a substitute for expert structural assessment. (Partners to insert hotline or contact information)

3

3. Check floors & roof



- Floor and wall gaps**
- Sagging floors**



They could collapse or crumble further if stepped on. Proceed only if you are confident that it is safe.

4. Check stairs



- Loose or broken steps.
- Cracks in the stair structure or supports.
- Signs of shifting or tilting.

Clear debris carefully, as they may pose a tripping hazard. Avoid stairs lead to upper floors of the building with visible damage

Note: This tool offers basic guidance only and is not a substitute for expert structural assessment. (Partners to insert hotline or contact information)

4

Shelter Activities: Emergency Shelter Kits



IEC Materials on basic ESK and improved ESK

Emergency Shelter Kit

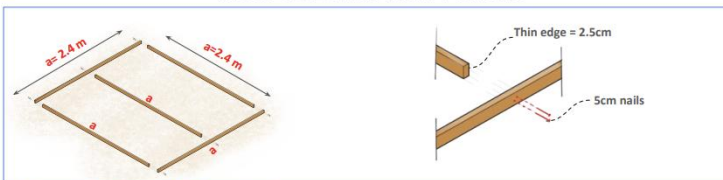


This IEC indicates techniques to assemble a shelter and does not prescribe a specific shelter design. **Partners are encouraged to modify the quantities below based on the materials, resources, and space available to them.**
For a video demonstration, refer to the [ESK: Shelter Kit Construction Video | Shelter Cluster](#)

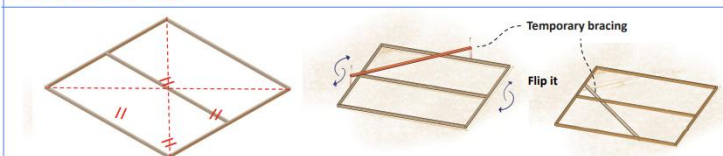
Essential Components			
Component	Unit	Quantity	Indicative Picture
Timber , untreated, essential for frame construction, required to be at least 2.4 meters in length. This IEC is for cross-sections of 5cm x 2.5cm	Pcs	114	
Tarpaulins , woven plastic, available in sizes of 6x4 meters, 5x4 meters, or as a roll of 4 meters width. They can be used for roofing, walls and flooring.	Pcs	3	
Nails , 5 cm nails for timber connections. Used for structural joints and fixing cover-battens.	Kg	1.6	
Rope , Minimum 30 meters length, in roll, 6mm thickness.	Lm	30	
Hand saw , total length 60 cm, for wood, good quality, tempered, hardened and set teeth. Unbreakable handle.	Pcs	2-3	
Measuring tape , 3 meters, graduated in centimeters.	Pcs	1	
Hammer , metal or fiberglass handle.	Pcs	1	

Optional Components			
Component	Unit	Quantity	Indicative Picture
Timber sheet (Plywood or OSB) , Approx. 1 cm thick, used for creating beams, trusses, doors, bracing, raised floors, and internal cladding.	Pcs	3	
Plastic sheet , 0.3mm thick, roll is up to 50 sqm per shelter. Minimum width 4 m.	Sqm	50	

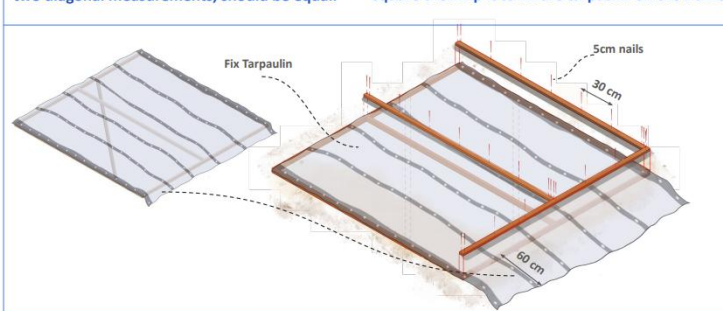
How to Build Wall Panels



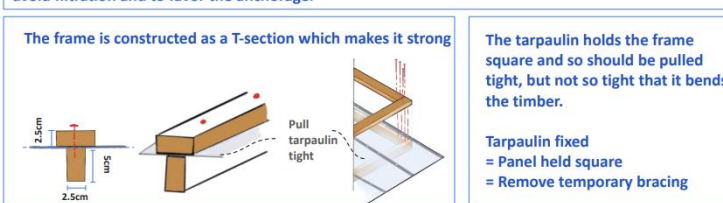
1. Lay out the pieces of timber, standing them up on the thin edge.
2. Nail the timber together using 5cm nails.



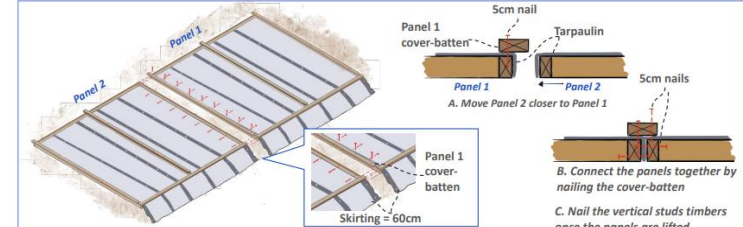
- To check if the panel is square: measure the two diagonal measurements, should be equal.
3. Add temporary bracing, of any size, to hold it square then flip it to fix the tarpaulin on the frame.



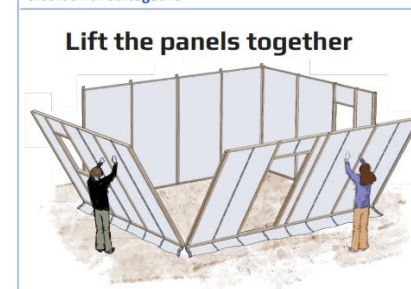
4. Lay the tarpaulin over the frame. Leaving a 60cm outside the bottom edge of the frame, to avoid filtration and to favor the anchorage.
5. Fix on the 5 x 2.5cm cover battens with 5 cm nails every 30cm.



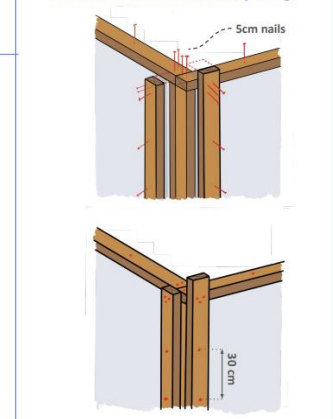
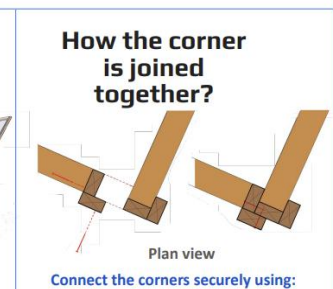
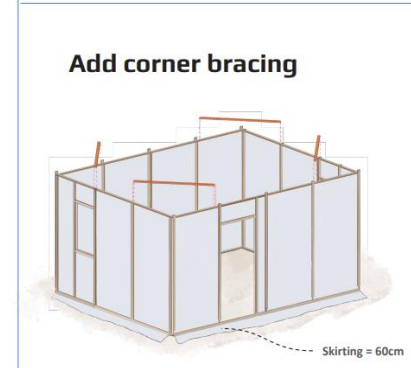
How to Connect Wall Panels



The panels are connected together while still flat on the ground. The cover-batten is used to make a strong connection. Once the wall panel has been lifted into position, then the two vertical studs must also be nailed together.



Is the shelter square? Measure the diagonals, should be the same.



Ongoing Technical Priorities

- Market monitoring and technical guidance on appropriate cash programming.
- Development of damage assessment tools (repair assistance subject to material access).
- Streamlining and scaling-up of ESK packages
- Monitoring technical standards of materials entering Gaza and regularly updating on needs and gaps.
- Winterization assistance prioritizing vulnerable households.
- Advocacy for dual-use materials.
- Technical Strategy for Transitional Shelter Phase.



Makeshift shelter - Source: IOM.



Thank You

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PLENARY DISCUSSION Q&A



NEXT STEPS

LINKS / REGISTRATION

&

CONCLUSION

NEXT STEPS

- **Next webinar in January or February 2026**
 - Collect member's interest to present and selection related to the sub-topics priorities
- **Resources / GSC Technical Toolkit**
 - Collect tools and resources from NFIs/EHIs-ETS T.S-CoP members
 - Publish the curated resources on the Technical Toolkit

If interested to present or share tools, please send an email to
gambamathieu@gmail.com & emmalouisamatthews@gmail.com
pascal.panosetti@ifrc.org

NFIs/EHIs-ETS T.S-CoP important links

Technical CoP and Technical Toolkit on the GSC website

- **Technical Community of Practice**
 - [NFIs/EHIs & Emergency and Temporary Shelter Technical Specifications - T.Sub-CoP webinars | Shelter Cluster](#)
- **Technical Toolkit**
 - [NFI/EHI Technical Specification Resources | Shelter Cluster](#)
 - [Emergency and Temporary Shelter Technical Specification Resources | Shelter Cluster](#)
- **Term of Reference : NFIs/EHIs and Emergency/Temporary Technical Specifications Technical Sub-CoP - 2025**

Technical CoP registration

BEST OPTION :
by creating a GSC
account

- Subscribe to the Technical CoP to receive **automatic** notifications, when new **Documents, Discussions, Events and News** are published.



[Technical CoP webpage](#)

without and account
not recommended !!

You can also follow also of the [Technical Toolkit](#) > Click 'Follow' on the left-hand side of the page

In group Global Shelter Cluster

Technical Community of Practice

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Panosetti Pascal

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MEETINGS +

- Webinars Technical CoP
 - Damage Assessment - T.Sub-CoP
 - Emergency and Temporary Shelter Technical Specifications - T.Sub-CoP
 - NFIs / EHIs technical specifications - T.Sub-CoP
 - Durable Permanent Shelter & Housing - T.Sub-CoP
 - Construction Good Practices / Build Back Better (BBB) - T.Sub-CoP
 - Greener Shelter - T.Sub-CoP
 - Fire Safety - T.Sub-CoP
 - Hosting Assistance - T.Sub-CoP

TECHNICAL TOOLKIT +

- Technical Toolkit

DAMAGE ASSESSMENT - T.SUB-COP

PARENT PAGE

- [Webinars Technical CoP](#)

All recorded meetings and webinars concerning **Damage Assessment** will be published on this page including the HNPW 2025 session : Striking the right balance: Rapid vs. Detailed Damage Assessments for Effective Shelter Programming.

Note: viewing the recording on YouTube allows you to select the chapters of the session.

All resources concerning this theme can be found on the [Technical Toolkit](#) page on the left menu.

Damage Assessment Technical Sub-CoP committee :

Pascal Panosetti - IFRC/GSC - pascal.panosetti@ifrc.org - chair

Regina Wenk - SDC/SHA, Shelter Expert Group - regina.wenk@aarau.ch - co-chair

Arnold Njogu - UNDP - arnold.njogu@undp.org - co-chair

Mamuney Legesse Nigusse - IOM Ethiopia - mnigusse@iom.int - co-chair

Showing 1–2 of 2 documents.



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HNPW 2025_SESSION REPORT_ STRIKING THE RIGHT BALANCE_ RAPID VS. DETAILED DAMAGE ASSESSMENTS_GSC

25 Mar 2025 · English · Shelter Cluster



HNPW 2025 SESSION PRESENTATION : STRIKING THE RIGHT BALANCE: RAPID VS. DETAILED DAMAGE ASSESSMENTS FOR EFFECTIVE SHELTER PROGRAMMING

25 Mar 2025 · English · Shelter Cluster

Technical Toolkit (resources)



In region Resources and in group Resources

Technical Toolkit [Technical Toolkit webpage](#)

Follow this toolkit

Dashboard

Documents (3)

TECHNICAL THEMES +

- **Damage Assessment Resources**
- Emergency and Temporary Shelter Technical Specification Resources
- Durable Permanent Shelter & Housing (Sustainable Solutions) Resources
- Construction Good Practices / Build Back Better (BBB) Resources
- NFI/EHI Technical Specification Resources
- Greener Shelter Resources
- Fire Safety Resources
- Settlement Planning Resources

ADDITIONAL RESOURCES +

- IEC Compendium
- Technical Resources curated
- Flood technical resources


DAMAGE ASSESSMENT RESOURCES


Documents related to damage assessment

Showing 1–10 of 10 documents.

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 **EVALUATION DÉTAILLÉE DES DOMMAGES HAÏTI 2020 - MANUEL DE TERRAIN**
Resources
1 Aug 2025 · French · Shelter Cluster and Miyamoto International
Technical Support and Design
Assessment, Monitoring, and Evaluati... Technical Guidance

 **HOUSEHOLD AND BUILDING DAMAGE ASSESSMENT (HBDA) OVERVIEW - 2025**
27 Jun 2025 · English · Shelter Cluster UNDP
Technical Support and Design
Assessment, Monitoring, and Evaluati... Technical Guidance

 **QUESTIONNAIRE HOUSING BUILDING DAMAGE ASSESSMENT (HBDA) - UNDP - VANUATU EARTHQUAKE 2024**
1 Jun 2024 · English · Shelter Cluster UNDP
Technical Support and Design
Assessment, Monitoring, and Evaluati... Curated

 **RDNA STATE QUESTIONS_UKRAINE CABINET OF MINISTERS - 2024**
Bangladesh Flash Flood 2022
1 May 2024 · English · Shelter Cluster
Technical Support and Design
Assessment, Monitoring, and Evaluati... Shelter Programming

 **REMOTE SENSING STRUCTURAL DAMAGE ASSESSMENT TO DETERMINE PROBABLE SHELTER NEEDS IN THE GAZA STRIP - 2024**
Palestine
7 Mar 2024 · English · Shelter Cluster and Miyamoto International
Information Management Technical Support and Design

 **★ SHELTER DAMAGE AND NEEDS ASSESSMENT - FLASH FLOOD 2022**
Bangladesh Flash Flood 2022
15 Sep 2022 · English · Shelter Cluster
Technical Support and Design

Technical
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Non-Food Items/Essential Household Items and
Emergency/Temporary Shelter Technical Specifications

THANK YOU



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Coordinating Humanitarian Shelter and Settlements

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