Elaborating a common reference methodology for monitoring carbon emissions associated with cash and voucher assistance (CVA) in the humanitarian sector

Final Report (March 2026)

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Summary for Practitioners

As humanitarian organisations are pursuing efforts to calculate and reduce the carbon emissions of their interventions, they are faced with methodological barriers for the estimation of their activities delivered through the Cash and Voucher Assistance (CVA) modality, representing a significant share of humanitarian funding[1]. The Greenhouse Gas Protocol (GHG protocol)[2] provides limited guidance, there are a variety of calculation methodologies used, leading to a lack of consistency in the way CVA emissions are estimated across the sector.

The project led by the Climate Action Accelerator (The Accelerator) in 2025 with support from the Swiss Development Cooperation and the Crisis and Support Centre of the French Ministry of Foreign Affairs[3] aimed at proposing a common frame for humanitarian organisations to use for the estimation of the carbon footprint of their CVA interventions. In addition, it sought to identify whether decarbonisation levers exist and could be actioned without compromising the dignity of people in need.

Why does it matter?

The humanitarian sector has committed to reducing its greenhouse gas emissions (GHG) by 40 to 50 percent by 2030[4]. Without a consistent way to measure CVA-related emissions, carbon footprints are not comparable across organisations. Current approaches range from no measurement at all to a variety of in-house methodologies, none of which are directly comparable. Each has significant limitations in data quality, representativeness of emission factors, or cost of data collection.

In consultation with the advisory committee which supported the delivery of the project[5], Climate Action Accelerator proposes the following recommendations:

[1] Approx 20% according to CALP, Cash of the World's Humanitarian Cash, 2023 https://www.calpnetwork.org/key-resources/the-state-of-the-worlds-cash/
[2] Greenhouse Gas Protocol https://ghgprotocol.org/
[3] Centre de Crise et de Soutien (CDCS)
[4] Climate and Environment Charter for Humanitarian Organisations, 2022https://www.climate-charter.org/understanding-the-commitments/
[5] See list of participants in appendix 1

Recommendation 1: CVA-related emissions should be reported on. In line with the GHG Protocol principles of relevance[6], materiality[7], and completeness[8], CVA emissions should be calculated and reported in humanitarian organisations' carbon footprints using a comparable methodology. With CVA representing around 20% of humanitarian funding on average[9], excluding it would fail to provide an accurate picture of an organisation's total emissions.

Recommendation 2: CVA-related emissions should be reported separately. CVA emissions should be reported separately from other emissions and excluded from organisations' baselines, decarbonisation trajectories, and progress reports. This reflects both the inherent limitations of CVA emissions measurement and the near-absence of actionable decarbonisation levers — particularly for unconditional cash transfers. Reporting them separately ensures that organisations' decarbonisation efforts on emissions with actionable levers are not diluted. It also reflects the conceptual similarity between CVA and income transfers such as welfare allowances, which further supports a distinct reporting treatment.

Recommendation 3: Vouchers and multipurpose cash should be treated similarly, with the exception of fuel vouchers. Despite the conditionality associated with voucher programmes, vouchers should be reported in the same category as cash distributions. Evidence suggests vouchers are not always used for their intended purpose — they may for example be exchanged for cash — introducing significant uncertainty into emissions measurement. The principles of simplicity and consistency further support a unified approach, given that the two modalities are functionally equivalent. Emission factors adapted to the goods and services intended for purchase should nonetheless be applied. Fuel vouchers are an exception: their emissions are direct, measurable, and covered by established emission factors, making them comparable to other energy-related expenditures already captured in the baseline.

Recommendation 4: A simplified, sector-wide methodology should be adopted. The humanitarian sector should agree on and consistently apply a single, simplified methodology to estimate CVA emissions. Costly approaches such as post-distribution monitoring (PDM) are accessible only to a limited number of organisations, and the Advisory Committee concluded that the cost of extensive surveys is not justified given the limited decarbonisation levers available. In line with the principles of simplicity[10] , the methodology currently integrated in the

[6] Relevance: Ensure the GHG inventory appropriately reflects the GHG emissions of the organisation and serves the decision-making needs of users—both internal and external to the organisation.
[7] Ensuring sources generating material emissions are included in the reporting. Information is considered to be material if, by its inclusion or exclusion, it can be seen to influence any decisions or actions taken by users of it
[8] Account for and report on all GHG emission sources and activities within the chosen inventory boundary. Disclose and justify any specific exclusions.
[9] State of the World's Humanitarian Cash report 2024, CALP https://www.calpnetwork.org/key-resources/the-state-of-the-worlds-cash/
[10] Aligning the measurement approach with organisational capability and resources

Humanitarian Carbon Calculator +(HCC)[11] — which applies an emission factor[12] to the total amount of CVA distributed — is proposed as the basis for a sector-wide standard. Further work is underway to refine the underlying emission factors and expenditure basket.

Going forward, and pending available funding, additional work would be undertaken by Climate Action Accelerator to finalise the calculation methodology used in the HCC+.

Decarbonisation levers are limited

Unlike in-kind assistance, organisations have limited direct control over how CVA is spent once it reaches recipients. Four categories of levers were identified — programme design, environmental screening, CVA delivery, and beneficiary access — but their overall impact is marginal, particularly for unconditional cash transfers. The potential is greater for specific voucher programmes (e.g. food, energy), and in longer-term programmes where there is more room to influence outcomes. Any lever activated must respect two non-negotiable principles: it must not question the relevance of CVA as a modality and must not place any additional burden on beneficiaries.

Fuel vouchers are a meaningful exception — their emissions are direct, measurable, and reducible, and alternatives often exist.

[11] https://www.climate-charter.org/humanitarian-carbon-calculator/

[12] Emission factors are coefficients that translate a given expenditure or activity into greenhouse gas emissions, based on the carbon intensity of the products or services purchased.

1. Background and objectives of the project

This section details the rationale for this review, the key questions the review thought to answer, and the approach taken.

A need for methodological guidance

In line with commitments made by the humanitarian sector and by donors,[13] cash and voucher assistance (CVAs) activities account for a significant share of humanitarian aid (on average 20% of the total humanitarian funding).[14] Benefits of CVA activities on programme efficiency, on local market dynamism and on the quality and acceptability of the response have been widely documented,[15] and a significant proportion of aid is set to be delivered through CVA over the coming years. In addition, the humanitarian sector has made strong commitments to reduce its environmental and carbon footprint[16] and emissions need to be reduced by 50% by 2030 and 60% by 2035 compared to 2019, in line with the scientific consensus and the commitments made in the Paris Agreement.[17]

The intersections between environmental/carbon footprint reduction and CVA is a largely unexplored theme and there is currently a mix of perspectives and practices underpinning this issue. While some organisations exclude CVA interventions from their overall carbon footprint, others consider that including CVA in the carbon footprint of their analysis is essential. Organisations that do measure CVA-related emissions are faced with methodological barriers for the estimation of these emissions. Given the lack of a harmonised sector-wide methodology, various organisations have developed different approaches to estimate CVA-related emissions (see appendix 2), making it impossible to compare emissions between organisations.

[13] Examples include : DG ECHO https://ec.europa.eu/echo/files/policies/sectoral/thematic_policy_document_no_3_cash_transfers_en.pdf and the Donor Statement on Humanitarian Cash Transfers, 2019 https://www.calpnetwork.org/wp-content/uploads/2020/03/190329cash-donor-statement-1.pdf

[14] State of World's Humanitarian Cash 2023, Chapter 2: Volume and Growth of CVA, Novembre 2023 https://www.calpnetwork.org/web-read/the-state-of-the-worlds-cash-2023-chapter-2-cva-volume-and-growth/

[15] Cash learning partnership (CALP) https://www.calpnetwork.org/cash-and-voucher-assistance/benefits-of-cash-and-voucher-assistance/

[16] Climate and Environmental Charter for Humanitarian Organisations, 2022 https://www.climate-charter.org/

[17] UNFCC, The Paris Agreement, 2015 https://unfccc.int/sites/default/files/english_paris_agreement.pdf

Project objectives

With funding from the Swiss Development Cooperation and the Crisis and Support Centre of the French Ministry for Europe and Foreign Affairs (CDCS), the Accelerator led a project aimed at better understanding the carbon profile of CVA and shaping a common approach for the sector. The intention of this work was not to take a position on the desirability or relevance of cash transfer and voucher activities for humanitarian assistance, but rather to better understand the carbon profile of CVA and the potential decarbonisation levers once a decision has been made to use this modality.

The project aimed at answering the following questions:

- What are the advantages and the limitations of the methodologies which have been piloted so far? Can these be harmonised across the sector?
- What are the main decarbonisation levers organisations may apply to CVA interventions?
- How could CVA-related emissions be accounted for, considering the GHG Protocol, the humanitarian specificities, and practices in other sectors (i.e. for example cash allowances by public institutions)?

Combining expertise and guidance to establish a sector-adapted approach

To support the delivery of this project, the Accelerator established an advisory committee comprising a broad range of professionals and organisations with humanitarian, emissions measurement and CVA expertise (see *Appendix 1* for full list of participants).[18] The role of the advisory committee was to provide strategic guidance and to validate findings along the project. It met on three occasions between March and December 2025. To guide the implementation of the project, the committee was driven by the following:

- **Objectivity:** Driven by the principle of objectivity, the ambition of the project was not to compare the carbon footprint of CVA and that of "in kind" nor to pass a judgement on the relevance of operational choices in different contexts.
- **Unconditionality**: Driven by a consensus that beneficiaries of CVA activities must not be adversely affected by decarbonisation efforts from humanitarian actors, nor subjected to additional conditions.

[18] Experts included members from the following organisations: the Cash Learning Partnership network (CALP), the International Federation of the Red Cross (IFRC), the International Committee of the Red Cross and Red Crescent (ICRC), the World Food Programme (WFP), the Food and Agriculture Organisation (FAO), the Norwegian Refugee Council (NRC), Centre for Humanitarian Logistics and Regional Development (CHORD), Action Contre la Faim (ACF), the WREC project as well as independent consultants.

- **Alignment with international standards:** Aligning practices with international standards and best practices (GHG protocol, etc.) through adapted methodological guidance.
- **Coherence:** Aiming for consistency between the carbon footprint analysis of CVA and that of in-kind assistance.
- **Comparability:** Striving to gain knowledge from approaches to similar activities in other sectors, while acknowledging the specificities of the humanitarian sector.
- **Diversity**: Recognising the diversity of organisations and mandates, and therefore of perspectives on this question.

2. Limitations of accounting for CVA emissions

This section describes the variety of approaches used to measure CVA emissions and outlines the key limitations of each approach.

A methodological gap: the GHG Protocol is not designed to account for cash and voucher interventions

The GHG Protocol[19] provides limited guidance for the measurement of CVA emissions. Category 1 "Purchased goods and services" is not adapted to the CVA emissions: CVA cannot be compared with a purchase of goods or services and rather represents a donation. Category 15 "Investments" has been designed for equity investments, debt investments and project finance. The GHG Protocol stipulates that: "*This category is applicable to investors (i.e., companies that make an investment with the objective of making a profit) and companies that provide financial services. This category also applies to investors that are not profit driven (e.g. multilateral development banks), and the same calculation methods should be used. Investments are categorized as a downstream scope 3 category because providing capital or financing is a service provided by the reporting company.*[20]*"* It is therefore not designed to account for donations and transfers of revenue, social allowances or funds such as CVA-related transfers.

A problematic inconsistency: from "no measurement" to multiple measurement approaches

The absence of clear guidance has obliged humanitarian organisations to define their own way to account for CVA-related emissions and has led to problematic inconsistencies across organisations. Some organisations have taken the decision not to include CVA in their carbon footprint assessment and decarbonisation trajectories. This decision rests on the assumption that actionable levers to reduce CVA-related emissions are limited. Investing resources in calculating emissions that cannot be mitigated is consequently deemed irrelevant. Another justification is the complexity of estimations: cash expenditures vary greatly their typology (there are many unknowns) and therefore no calculation method could accurately reflect the diversity of expenditure.

Other humanitarian organisations have developed their own, customised calculation methodologies for CVA (see below) given the absence of a standard framework for the sector to

[19] https://ghgprotocol.org/

[20] Category 15 Investments GHG protocol https://ghgprotocol.org/sites/default/files/2022-12/Chapter15.pdf

measure CVA emissions. These organisations had as key objective to transparently report their overall carbon emissions. These approaches treat CVA as a whole (i.e.: without differentiating between the different types of cash assistance such as multi-purpose cash, vouchers for goods and for services) and are essentially focusing on estimating the carbon footprint of the use of cash by recipients (ex: consumption of purchased goods).

Some identified limitations across approaches

The "no measurement" approach and its limitations

The decarbonisation trajectories of organisations which have chosen not to measure CVA emissions focus on the emissions that they *can* effectively calculate and reduce. For organisations with significant CVA activities, failing to account for CVA-related emissions is inconsistent with the GHG Protocol's principle of completeness[21]. The risk is therefore that the tracking of their overall emissions might be biased as they shift from direct distribution of goods and services to cash vouchers. It also seems complicated to justify that an organisation delivering 100% of its activities using CVA would have no "programmatic" emissions.

The different measurement approaches

A high-level summary of the three main measurement approaches is listed below, and a full analysis is provided in appendix 2.

- **Approach 1: Calculating the carbon footprint of CVA using the Gross Domestic Product (GDP).** Developed by ECO-ACt[22] in partnership with the International Committee of the Red Cross (ICRC) and CHORD, this methodology feeds into the **Humanitarian Carbon Calculato**r.[23] It estimates the carbon footprint of CVA by multiplying the total amount of cash distributed in a specific country by the country's economic emissions intensity (calculated by dividing the country's CO2 emissions by its GDP). It is driven by the often-false assumption that aid recipients have consumption patterns similar to that of the rest of society.

- **Approach 2: Calculating the carbon footprint of CVA using the Minimum Expenditure Basket (MEB).** With the support from the Citepa[24], Action Contre la Faim (ACF) estimated the carbon footprint of CVA interventions in 16 countries where it operates, using an estimation of beneficiaries' priority expenditures through projections

[21] Account for and report on all GHG emission sources and activities within the chosen inventory boundary. Disclose and justify any specific exclusions.
[22] https://eco-act.com/fr/
[23] https://www.climate-charter.org/humanitarian-carbon-calculator/
[24] https://www.citepa.org/

made in the MEB. Although MEBs include a large variety of items, Citepa/ACF's methodology essentially focused on estimating the carbon footprint of 10 food items in each of these countries. The main assumption behind this approach is that the MEB provides a reasonable approximation of how multi cash is spent.

- **Approach 3: Calculating the carbon footprint of CVA using Post Distribution Surveys (PDM).** This methodology is based on an analysis of the actual purchases made, as reported by cash recipients. This information is collected through post distributions surveys carried out by humanitarian organisations. Emissions are extrapolated to match the total amount of purchases, and emissions factors associated with each purchased item are then applied to obtain the overall carbon impact of these interventions. The main assumption behind this approach is that organisations carry out PDM surveys for all of their CVA operations, and responses to the PDM surveys are representative of how cash is actually spent.

It is also worth noting that the Accelerator and ARUP Group[25] developed a high-level methodology to measure CVA-related emissions as part of the "Roadmap for halving emissions in the humanitarian sector by 2030".[26] It concluded that the carbon footprint of CVA interventions represented approximately 29% of the overall emissions of the humanitarian sector. This initial sector-wide estimation was calculated using clusters' financial information and assumed that the expenditure of CVA recipients was similar to the expenditure of organisations. This approach presented high levels of uncertainty and limitations, as the recipients of CVA are likely to spend the cash on a wide variety of goods and services beyond those purchased directly by organisations (ex: payment of debt, transport, rent, etc.).

[25] https://www.arup.com/

[26] Roadmap for Halving GHG Emissions in the Humanitarian Sector by 2030», Climate Action Accelerator, June 2024, Sectoral analysis, https://climateactionaccelerator.org/wp-content/uploads/2024/06/Sectoral-analysis-1.pdf)

3. Decarbonisation levers remain limited

This section summarises the key lessons from the review of decarbonisation levers.

Decarbonisation levers must be considered carefully

With inputs from the advisory committee and building on existing literature[27], the Accelerator identified entry points for organisations to explore to reduce the carbon footprint of their CVA interventions. The committee expressed its commitment to the identification of decarbonisation levers, in line with the humanitarian sector's decarbonisation commitments. It also clearly indicated the importance for potential emission reduction strategies and related levers to respect the following principles:

- **Levers should not question the relevance of CVA**: CVA interventions represent a dignified way to support people affected by humanitarian crises by providing them with direct revenue, free of use in most cases, while boosting local economies. These benefits are recognised by the humanitarian community. Decarbonisation levers should therefore by no means lead to the questioning of the pertinence, relevance and feasibility of CVA interventions. They should come as a subsequent consideration, once the programmatic decision to use or not to use CVA has been made.
- **Levers should not put an extra burden on beneficiaries**: recipients of humanitarian assistance are experiencing crises, and therefore already in precarious conditions. It is therefore essential that potential decarbonisation levers for CVA should not put any additional burden on already stretched individuals and communities, by requesting them to make more sustainable choices for example.
- **Levers should therefore rather be directed at humanitarian organisations than beneficiaries** and help organisations to explore ways to reduce their carbon footprint when they plan and deliver CVA programmes.

Decarbonisation levers for CVA have a limited potential

With support from the advisory committee, The Accelerator identified the following decarbonisation levers. These include:

[27] CALP 2024-2025 annual report, https://www.calpnetwork.org/web-read/the-calp-network-annual-report-2024-25/

- **Adjusting program design:** organisations can consider greener options for vouchers at the design stage (example: vouchers for gas heaters rather than coal heaters, including environmental criteria in the selection of items such as long-lasting and repairable products, partnering with suppliers that produce with low-carbon energy).

- **Carrying out environmental screenings:** When used prior to the design of CVA interventions, environmental screenings can help identify key environmental concerns and risks which can be taken into consideration the design of the intervention (i.e.: areas particularly affected by deforestation to be considered in CVA interventions in the food or shelter sectors, water scarcity challenges to be considered in CVA wash interventions...).

- **Choosing Greener CVA delivery methods:** organisations can identify greener options to provide cash and vouchers (example: greener financial institutions for cash transfers).

- **Promoting the purchase of greener products among CVA recipients**: if relevant and appropriate, organisations may choose to raise awareness on and recommend greener purchases should market opportunities allow and if it fits with beneficiaries' preferences, but it is to be noted that such practices are generally not implemented in stable contexts when distributing social vouchers or allowances.

- **Reducing emissions related to access to CVA and purchases:** organisations can minimise beneficiaries' travel to distribution points (example: creation of additional distribution points).

- **Implementing market support activities:** This could include measures which would encourage the access, availability and the attractiveness of greener products on the markets (market-based programming). This would involve working with local markets and trade unions to facilitate access to low carbon products.

The committee also agreed that opportunities to activate decarbonisation levers might vary according to the types of programmes. Examples of factors impacting include:

- **the duration of the programme:** the longer a programme lasts, the more impactful some levers can become (ex: market support, awareness).

- **the type of contexts**: for example, displacement settings & acute emergency settings are contexts which are less adapted to implementing levers.

- **the type of CVA**: vouchers for specific goods provide more opportunities to act upon the climate and environmental footprint, given their restricted nature. By design, unconditional cash transfers are comparable to social allowances or revenue transfers without strings attached.

- **the sector of intervention** (other than multi purpose cash interventions): while levers might exist for food or energy interventions, for other sectors (cash for rent, wash, education, medical services) these are more difficult to identify.

The project concluded that while some decarbonisation levers exist for CVA, they **are considered marginal**, especially in comparison to in-kind assistance where organisations have more direct control over the supply chains leading to their emissions. The advisory committee also concluded that their potential impact in terms of emission reductions would be difficult to measure, and the effort disproportionate (except for fuel related vouchers when alternatives exist). It was nevertheless agreed that organisations could continue to explore opportunities to reduce CVA-related emissions on specific good-related vouchers such as food.

4. A simplified methodology will provide multiple benefits

The section below outlines the key principles guiding the development of the proposed methodology, and how the relevant principles shape this methodology.

Eight overarching principles provide the required framework

To support the delivery of the project, the Accelerator sought to develop a calculation methodology for CVA emissions which would be aligned with the reporting principles and the framework recommended by the internationally recognised GHG protocol[28] and the complementary Methodological Guide for Emissions Measurement in the Humanitarian Sector (the Guideline). The five GHG protocol principles are summarised below, followed by the three additions from the Guideline:

Reporting principles GHG protocol

- **Completeness**: Account for and report on all GHG emission sources and activities within the chosen inventory boundary. Disclose and justify any specific exclusions.
- **Accuracy**: Ensure that the quantification of GHG emissions is systematically neither over nor under actual emissions, as far as can be judged, and that uncertainties are reduced as far as practicable. Achieve sufficient accuracy to enable users to make decisions with reasonable assurance as to the integrity of the reported information.
- **Relevance**: Ensure the GHG inventory appropriately reflects the GHG emissions of the organisation and serves the decision-making needs of users—both internal and external to the organisation.
- **Consistency**: Use consistent methodologies to allow for meaningful comparisons of emissions over time. Transparently document any changes to the data, inventory boundary, methods, or any other relevant factors in the time series.
- **Transparency**: Address all relevant issues in a factual and coherent manner, based on a clear audit trail. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used.

[28] https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf

The following additions complete the GHG Protocol principles with **sector-specific principles:**

- **Simplicity**: Align the measurement approach with organisational capability and resources. The humanitarian sector is characterised by the diversity of its actors, from large international to small grass-roots organisations. It is accepted to use basic estimates and to aim for improvement when relevant and possible.
- **"Good enough" approach**: Adapt measurement to the quality of information and available data. The absence of quality information or a lack of knowledge are not sufficient reasons for not reporting: a simplified approach should be used in the case of missing knowledge.
- **Materiality**: Ensuring sources generating material emissions are included in the reporting. Information is material if, by its inclusion or exclusion, it can be seen to influence any decisions or actions taken by users of it.

Applying these principles leads to a series of recommendations for the measurement of CVA-related emissions

The Accelerator used the eight above-mentioned principles to guide its work and agreed on a series of practical recommendations.

Recommendation 1: CVA-related emissions should be reported on

The project has concluded that CVA emissions should be calculated and reported on in humanitarian organisations' footprints using a comparable methodology.

The main reason, in line with the GHG protocol principles of "Relevance", "Materiality" and "Completeness", is the significant volume of cash and voucher programmes in many humanitarian organisations and in the sector. Excluding CVA from carbon footprints would not provide an accurate picture of an organisation's total emissions if CVA represents a material part of its activities.

Recommendation 2: CVA-related emissions should be reported separately

The advisory committee nevertheless validated that CVA activities should be reported separately from the other emissions and therefore excluded from organisations' emissions baselines, decarbonisation trajectories and progress reports. Several reasons led to this recommendation.

Firstly, the advisory committee acknowledged the multiples limitations of the different measurement methodologies, and the impossibility to improve measurement accuracy inherent

to CVA. In the absence of accurate emissions measurement, it considered appropriate to separate CVA and non-CVA emissions.

Secondly, decarbonisation levers linked with CVA are limited, almost inexistant for unconditional cash transfers, and cannot be reliably quantified. Reporting CVA and non-CVA emissions together would therefore dilute the measurement of decarbonisation efforts.

It is also worth noting that cash and vouchers can be considered as a distribution of income, similarly to welfare allowances from public institutions for example. This conceptual difference between cash and vouchers on one hand, and usual humanitarian activities on the other hand, also suggests a separate reporting is a more adequate solution.

Recommendation 3: Vouchers and multipurpose cash should be treated similarly, with the exception of fuel vouchers

The advisory committee considered the option of distinguishing between cash distributions and vouchers when accounting for CVA emissions. The specificities of voucher programmes might indicate a greater potential for decarbonisation as they include an element of restriction and decarbonisation efforts are easier to track. It nevertheless concluded that vouchers should be included in the same category as cash activities and therefore reported separately – with the exception of fuel vouchers.

Firstly, experts in the field of CVA insisted that there is evidence that vouchers may not always be used to purchase the intended goods and services, as they could be, for example, swapped for cash. There is therefore a significant element of uncertainty in the measurement of emissions. Secondly, the committee also agreed that decarbonisation levers remain limited for vouchers in most humanitarian settings. Finally, the principles of “Simplicity” and “Consistency” support the use of a unified methodology for both cash and vouchers, given that the two modalities are functionally equivalent and can therefore be treated similarly from a carbon footprint perspective. The committee concluded that vouchers should- in line with cash distributions - be reported separately from the baseline and that despite the uncertainty around actual voucher use, emission factors adapted to the goods and services intended for purchase should be applied.

The case for fuel vouchers

Given that emissions associated with fuel vouchers are direct, measurable, and covered by established emission factors they should be reported in the carbon footprint baseline. Unlike general consumption vouchers, the end use of fuel vouchers is largely predictable and consistent, making them comparable to other energy-related expenditures already captured in the baseline.

Recommendation 4: A simplified methodology should be established and used across the sector

Going forward, it is recommended that the humanitarian sector as a whole agrees on and uses a single calculation methodology to estimate CVA emissions. The principles of "Simplicity" and "Good enough approach" were highlighted as relevant to guide the design of this future sector-wide methodology. Methodologies such as PDM are costly and can therefore only be used by a limited number of organisations. The advisory committee also stressed that the cost of extensive surveys would not be justified given the limited decarbonisation levers available to act on the collected data. In light of this data gap and in line with above mentioned principles it is recommended to use a simplified methodology to account for CVA emissions. An example of simplified methodology is currently integrated in the HCC+ tool. It allows to estimate emissions using an emission factor applied to the amount of CVA distributed. While it is recognised that this might not represent with accuracy the variety of CVA usages, types, nor expenditures (food, rent, health, education, energy etc...), it will bring consistency across the humanitarian sector. Additional work will be required to adapt the emission factors, as highlighted in the following section.

5. Minimal further research would allow to finalise the proposed methodology

This section summarises the work done to date, and the proposed improvements required to finalise the methodology, including the emission factors used in the HCC.[29]

A first analysis identified lessons and questions

The Accelerator reviewed 11 surveys[30] in multiple contexts, produced between 2018 and 2024, as well as a review by Action Contre la Faim of 14 CVA projects. The objective of this review was to understand insights about activity data across multiple contexts.

The detailed results of this research are detailed in appendix. The analysis of the reports led to a first categorisation of activity data, summarised in the table below.

Data collection	% spent by category	Min	Max	# of baskets w/o category	%
Food and water	37%	0%	77%	1	8%
Cooking fuel, gas, coal	1%	0%	6%	9	75%
Education	2%	0%	7%	6	50%
Housing	19%	0%	82%	2	17%
Utilities	4%	0%	11%	6	50%
Health	9%	0%	30%	4	33%
Hygiene	8%	0%	67%	5	42%
Variety, blankets and clothes	8%	0%	33%	3	25%
Telecommunication	1%	0%	4%	9	75%
Transport	2%	0%	6%	6	50%
Debt repayment, savings, donations, investments, livelihoods, others	9%	0%	24%	3	25%
Other	0%	0%	1%	11	92%
Total	**100%**				

[29] The Humanitarian Carbon Calculator tool is managed by the Climate Action Accelerator since 2025.
[30] See appendix 4 for details.

This first basket allowed to calculate an initial estimate of an average expenditure basket. This also paved the way for the identification of relevant emission factors.

But this first analysis also outlined some challenges, such as for example the very broad range of amount spent by category. It overall raised several questions, including:

- What estimation of a standard basket could be acceptable to start?
- Should some studies be removed from the standard expenditure basket calculations as they are clear outliers?
- What criteria could be considered to differentiate the standards expenditure baskets?

Some additional work is required

Additional funding will allow the Accelerator to refine the calculation of emissions related to CVA activities. It will also simplify these calculations. The below steps summarise the proposed approach.

Activity data[31]

The aim of this stage of the research will be to improve the activity data used to calculate the average expenditure basket while understanding its variations across contexts. The following approach is suggested, assuming resources are made available:

- Use the existing research to create a data collection tool for activity data from existing CVA reports
- Communicate about this tool during the upcoming CVA webinar (April – May 2026), and request any relevant report not included in the current sample
- Compile data in the analysis tool created by the Accelerator and identity key lessons from the analysis, including variability of activity data and levels of inaccuracy
- Validate the reviewed expenditure basket

This analysis would also provide an opportunity to identify variables which may impact the definition of the future expenditure basket. Potential variables include the presence or not of organisations providing food, shelter or health services, the variability of emission factors by category, and other factors emerging from research.

[31] Activity data refers to the amount of money distributed, and ideally, the breakdown of how that money is spent by recipients (goods and services categories).

Emission factors[32]

Using the activity data from the newly created expenditure basket, the aim of this next stage would be to identify how changes in emission factors impact the overall calculation of emissions, and if this impact is significant considering the overall inaccuracy of emissions measurement. The research team would run an iterative model combining activity data and related emission factors, testing whether some variables justify the use of specific emission factors. These may include the availability of meat or fish in a given context, the urban or rural context of CVA, the emissivity of local energy production, and other factors emerging from the research. This would also allow to refine the activity data included in the average expenditure basket: expenditure whose emission factors are close enough to have a limited impact on the overall calculation will be merged when relevant.

HCC+ update including options

The results of the research would be included in the HCC+, providing the sector with a simple calculation tool, an improved estimation of the emissions, and a consistent approach across the sector.

The new methodology may also include options to adjust emission factors based on variables deemed having a significant impact on the overall calculation of CVA emissions.

[32] Emission factors are coefficients that translate a given expenditure or activity into greenhouse gas emissions, based on the carbon intensity of the products or services purchased.

Appendices

Appendix 1: List of participants of the advisory committee

- **ACTED**, Erika Courteille, Sustainability and decarbonisation officer
- **Action Contre la Faim France**, Camille Evain, Head of the Environment and Climate Unit
- **Action Contre la Faim France**, Anne Lyse Coutin, Cash and Vouchers Assistance/Social Protection Technical Advisor (Cash Collaborative Delivery Network)
- **Calp Network**, Celine Sinitzky Billard, Facilitator of the environment and climate community of practice[9]
- **CHORD – Kuhne Climate Center**, Sarah Joseph, Post Doctoral Researcher
- **Climate Action Accelerator**, Hichem Demortier, Metrics team
- **Climate Action Accelerator**, Quentin Roques, Metrics team
- **Climate Action Accelerator**, Bruno Jochum, Director
- **Climate Action Accelerator**, Samantha Brangeon, Policy Engagement
- **EPFL (Ecole Polytechnique Fédérale de Lausanne)**, Damien Friot, Lecturer
- **Food Agriculture Organisation**, Ishaku Mshelia, Regional Cash and Voucher Advisor
- **ICRC**, Anna Maria Liwak, Environment and Climate Change specialist
- **IFRC**, Juan Galvez, Global Lead – Supply Chain Environmental Sustainability and Capacity Development
- **Oxfam International**, Julia Lewis, Sustainability and Carbon Footprint Analyst
- **Norwegian Refugee Council**, Jenny Archibald, Global Lead Reducing Environmental Footprint
- **Norwegian Refugee Council**, Lauren Stern, Decarbonisation Data Manager
- **Norwegian Refugee Council**, Julie Gassien, Global Climate Lead
- **Norwegian Refugee Council**, Nathan Stevens, Global Lead Cash Assistance
- **World Food Programme**, Nicholas James Finney, GHG accounting and decarbonisation
- **WREC**, Nora Steurer, Environmental Specialist, GHG Emissions, WREC coalition
- **Oxfam**, Louisa Seferis, CVA specialist
- **Independent consultant**, Thomas Ian Harrison Prentice, Carbon footprint specialist
- **Independent consultant**, Julia Lewis, CVA Analyst

Appendix 2: Comparative analysis of existing CVA carbon emissions calculation methodologies

In the absence of a standard framework for the sector to measure overall emissions (including both in-kind and CVA), some humanitarian organisations have developed **their own, customised methodologies**. These methodologies and their underlying assumptions are described below. A comparative analysis is then proposed, using a 3-star system (1 star being equivalent to a low score to 3 stars a high score) and the following 4 criteria:

- **Data availability**: Is the activity data necessary to feed into the methodology easily available?
- **Data representativity**: Is the data used representative of the realities of CVA?
- **Emissions factor availability**: Are the emissions factors available and accessible?
- **Emissions factor representativity**: Do emissions factors accurately represent the activity data and their specificities (geographical, precision)?

It should be noted that the three methodologies described below consider CVA as a whole and do not differentiate between the different *types* of cash assistance (e.g. multi-purpose cash, vouchers for goods and for services) These methodologies are also essentially focussed on estimating the carbon footprint of the use of the cash by recipients and do not take into account the way CVA interventions are being delivered (ex: upstream delivery mechanism such as paper voucher, bank voucher, card etc...).

1. Calculating the carbon footprint of CVA using the Gross Domestic Product (GDP)

Description: This methodology involves multiplying the total amount of cash distributed in a specific country by the country's economic emissions intensity (calculated by dividing the country's CO2 emissions by its GDP). This methodology - which was developed by ECO-ACt[4] in partnership with the International Committee of the Red Cross (ICRC) and CHORD (Center for Humanitarian Logistics and Regional Development)[5], is based on global World Bank data[6] and feeds into the Humanitarian Carbon Calculator[7].

Main Assumption: Emissions linked to goods and services purchased through CVA are estimated using an average emission intensity of the national economy. It is assumed that aid recipients have consumption patterns similar to that of the rest of society.

Analysis:

- **Data Availability: ★★★**

- This methodology has the advantage of depending on macro data (GDP & CO2 emissions per country) that is easily obtainable (from the World Bank).

- **Data Representativity: ★**
  - The data used is not very representative of the actual purchases of cash recipients as GDP takes into account activities and products which go far beyond the consumption of households.

- **Emission Factors Availability: ★★★**
  - Emissions factors have been calculated for 50+ countries including for a large number of countries where humanitarian operations are undertaken.

- **Emission Factors Representativity: ★**
  - The emissions factors used in this methodology reflect the country's economic emissivity. This indicator can be heavily influenced by the strong presence of a particularly emissive economic sector. Additionally, this indicator is based on each country's carbon emissions, which are not necessarily reliable data for all countries – particularly in those contexts where humanitarian assistance is taking place, due to their characteristic instability.

2. Calculating the carbon footprint of CVA using the Minimum Expenditure Basket (MEB[8])

Description: With the support from CITEPA[9], Action Contre la Faim (ACF) estimated the carbon footprint of CVA interventions in 16 countries[10] where it operates,[11] using an estimation of beneficiaries' priority expenditures through projections made in the MEB. Although MEBs include a large variety of items, CITEPA/ACF's methodology essentially focused on estimating the carbon footprint of 10 food items in each of these countries.

Main Assumption: The MEB provides a reasonable approximation of how multi cash is spent.

Analysis:

- **Data Availability: ★★**
  - The composition of the basket must be constituted for each country where humanitarian operations are carried out.

- **Data Representativity: ★★**
  - The MEB methodology allows for an estimation that is closer (than the GDP approach) to the reality of the purchases made by beneficiaries.
  - However, beneficiaries' spendings may vary over time and cash amounts distributed to beneficiaries do not always match the totality of the MEB. As such

they cannot be considered to reflect*exactly* how cash is spent. Some NGOs have noted significant discrepancies between actual purchases and the composition predicted in the MEB in the past.[12]

- **Emission Factors Availability: ★★★**
  - The emission **factors** used for each component of the basket are global factors which are easily available in Base Empreinte[13] or in Agrybalise[14], two French databases.

- **Emission Factors Representativity: ★**
  - These factors, being global, do not necessarily reflect the specificities of humanitarian contexts.

3. Calculating the carbon footprint of CVA using Post Distribution Monitoring Surveys (PDM)

Description: This methodology, which is currently been piloted by ACF, is based on an analysis of the actual purchases made, as reported by cash recipients. This information is collected through post distributions surveys carried out by humanitarian organisations.

Extrapolation is made to match the total amount of purchases, and emissions factors associated with each purchased item are then calculated to obtain the overall carbon impact of these interventions.

Main Assumption: Organisations carry out PDM surveys for all of their CVA operations, and responses to the PDM surveys are representative of how cash is actually spent.

Analysis:

- **Data Availability: ★**
  - Surveys must be set up, and a sufficient volume of responses collected in order to extrapolate the data with confidence. This is the weak point of this methodology. The difficulty of carrying out PDM in a systematic fashion strongly limits the feasibility of this methodology, especially on a large scale.

- **Data Representativity: ★★★**
  - This methodology is (in theory) the one that allows us to get the best picture of the purchases made by the recipients of CVA, although survey responses may not necessarily representative of the actual purchases made by beneficiaries (ex: answers provided by beneficiaries might be biased or wrong)

- **Emission Factors Availability: ★★★**
    - The emission factors used for each component expenditure are global factors.

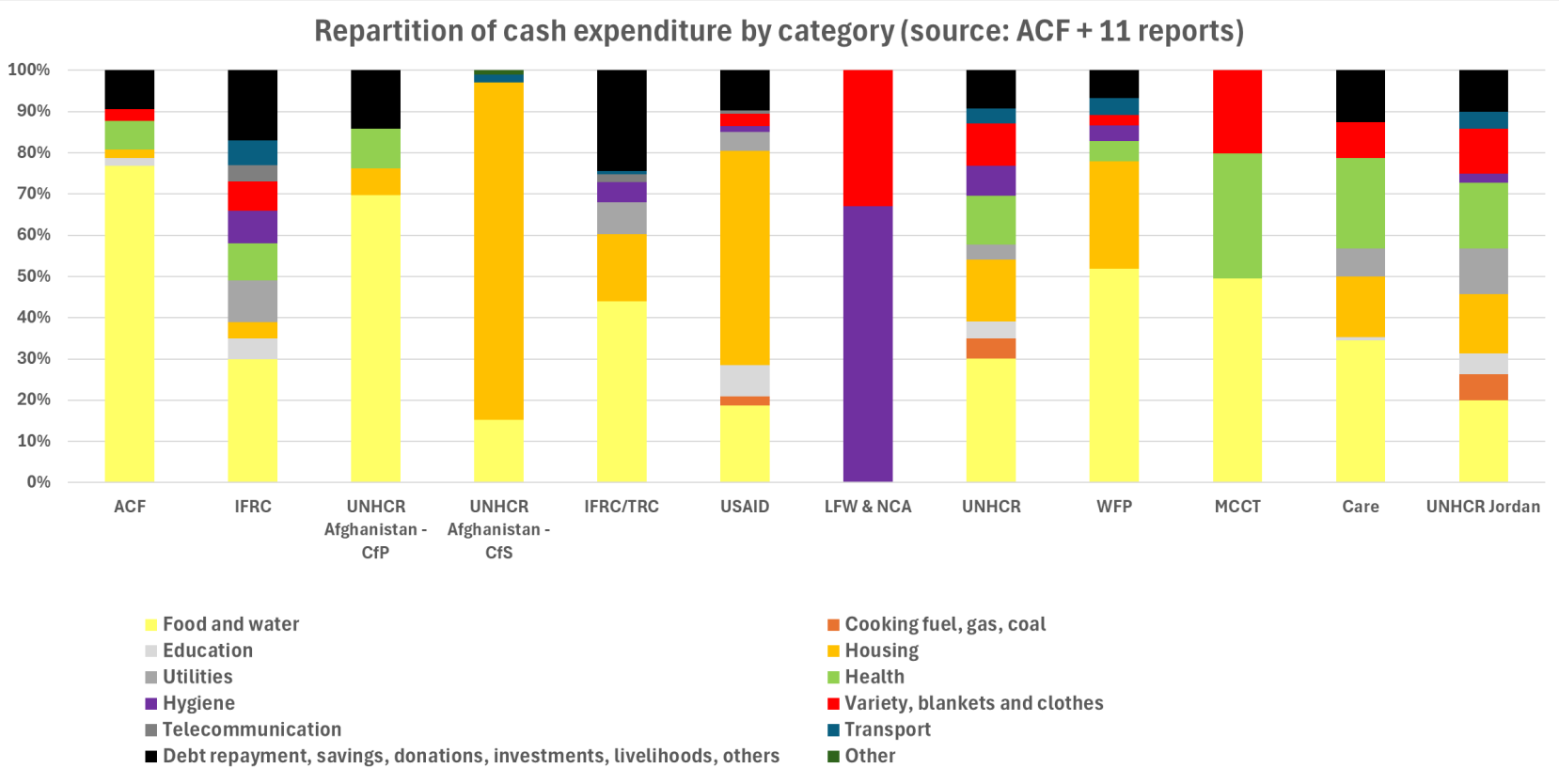
- **Emission Factors Representativity: ★**
    - These factors, being global, do not necessarily reflect the differences between countries

Appendix 3: Preliminary literature review

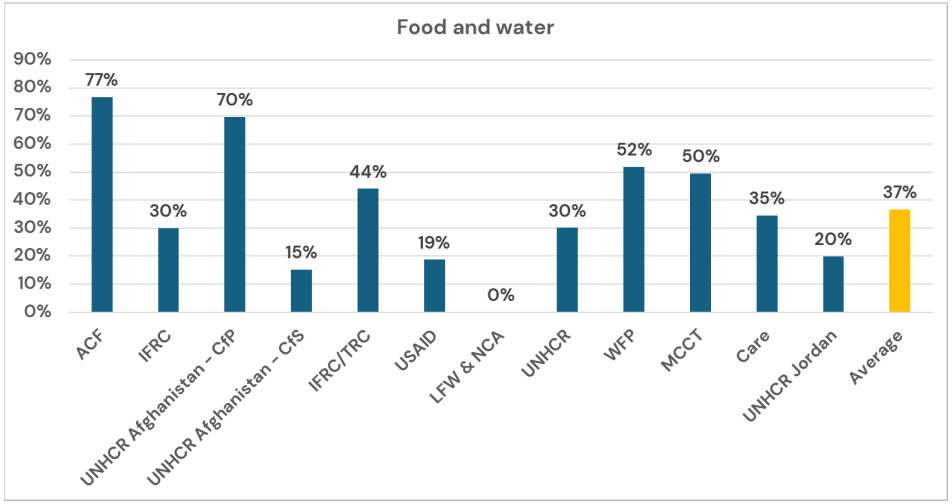
- Action Contre la Faim & Citepa, “Calculating the carbon expenditure of Minimum Expenditure Baskets” January 2024 https://www.actioncontrelafaim.org/en/publication/estimation-of-the-carbon-footprint-of-activities-using-cash-transfers/
- CALP Network, Environment and Climate community of practice, webinar, January 2024 https://www.calpnetwork.org/fr/publication/communaute-de-pratique-transferts-monetaires-climat-environnement-une-reponse-plus-verte/
- CALP Network, “The State of the World’s Cash 2023. Chapter 9: Climate Change and Environmental Considerations in CVA” 2024 https://www.calpnetwork.org/web-read/the-state-of-the-worlds-cash-2023-chapter-9-climate-change-and-environmental-considerations-in-cva/
- Climate Action Accelerator's sectoral roadmap “Roadmap for Halving GHG Emissions in the Humanitarian Sector by 2030”, June 2024, Sectoral analysis, https://climateactionaccelerator.org/wp-content/uploads/2024/06/Sectoral-analysis-1.pdf
- Groupe URD, The Environmental Implications of Cash transfers, 2020 https://www.urd.org/wp-content/uploads/2020/11/RapportENVCash_En_GroupeURD_2020.pdf
- HELP Logistics Humanitarian Carbon Calculator video https://www.youtube.com/watch?v=XklHIMuqxiU
- ICRC, Humanitarian Carbon Calculator, User Guide (ICRC & ECO Act), 2022 https://www.climate-charter.org/wp-content/uploads/2023/01/User-manual.pdf

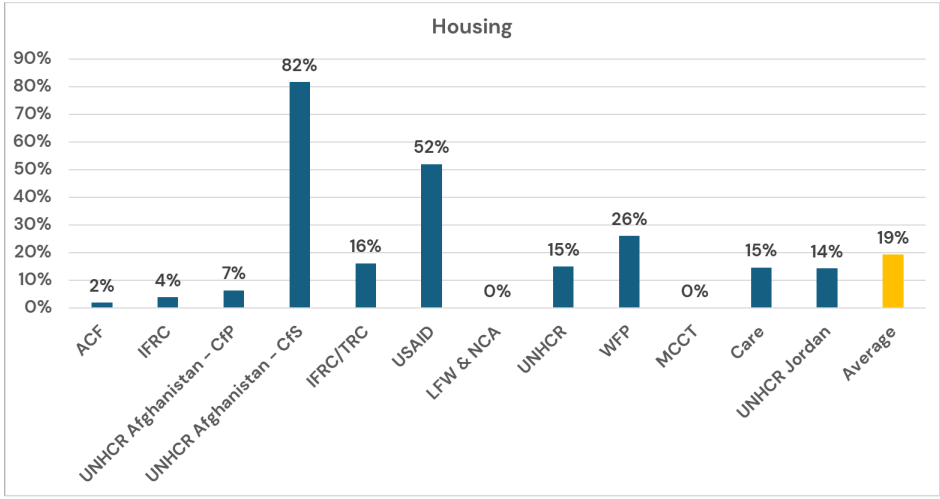
Appendix 4: findings from the review of 11 surveys and one meta-analysis

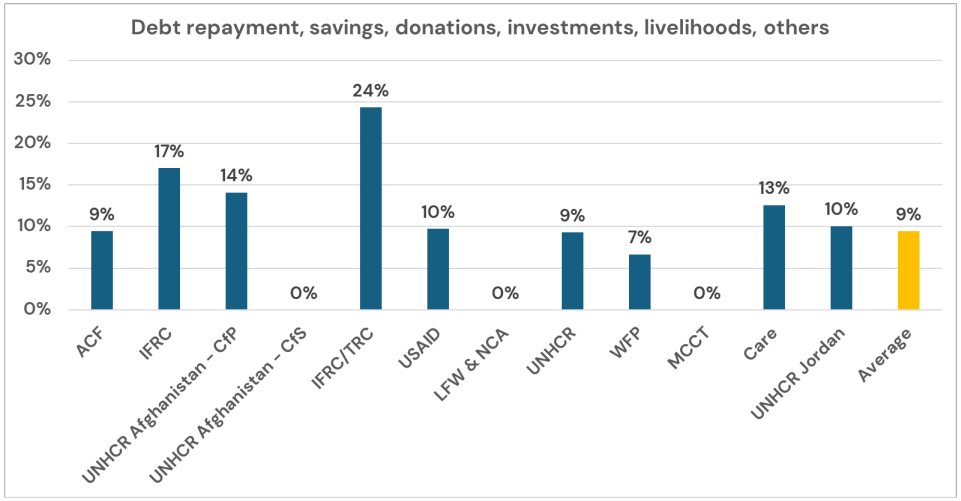
The following pages contain graphs summarising the use of cash based on the analysed reports.

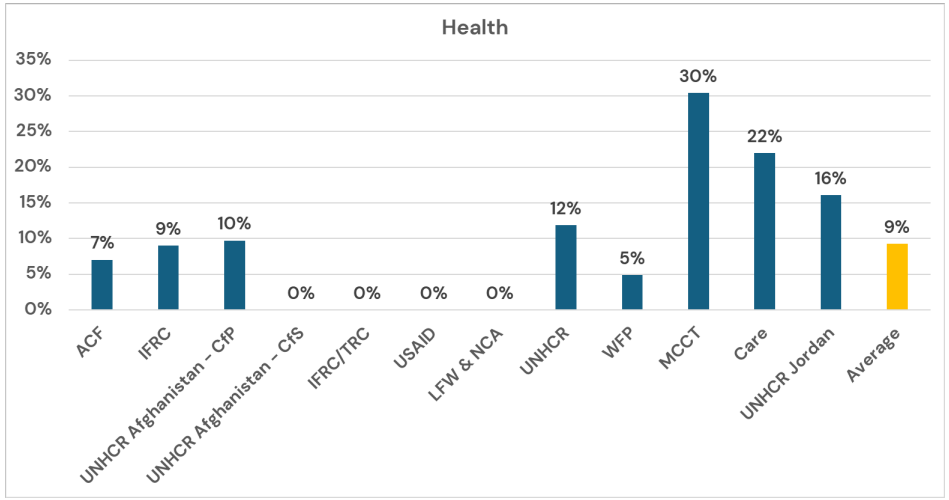


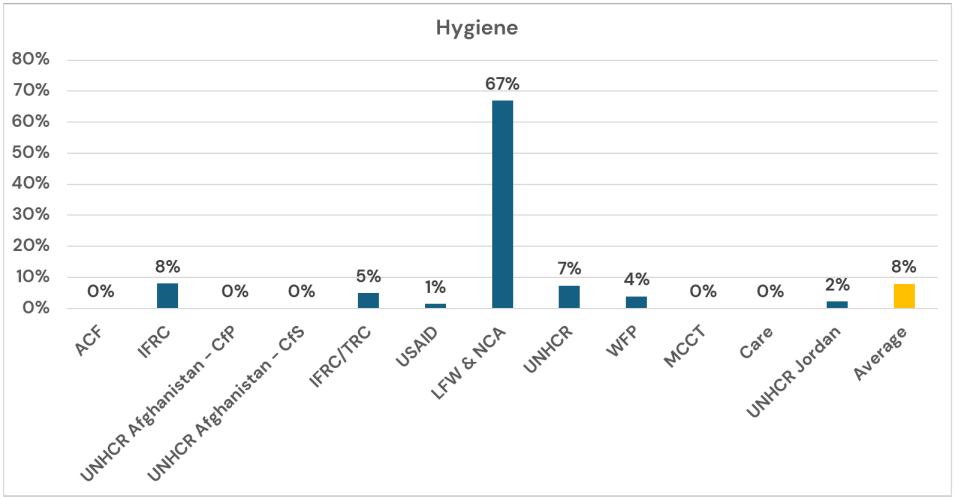
Detailed repartition of use of cash by category and report

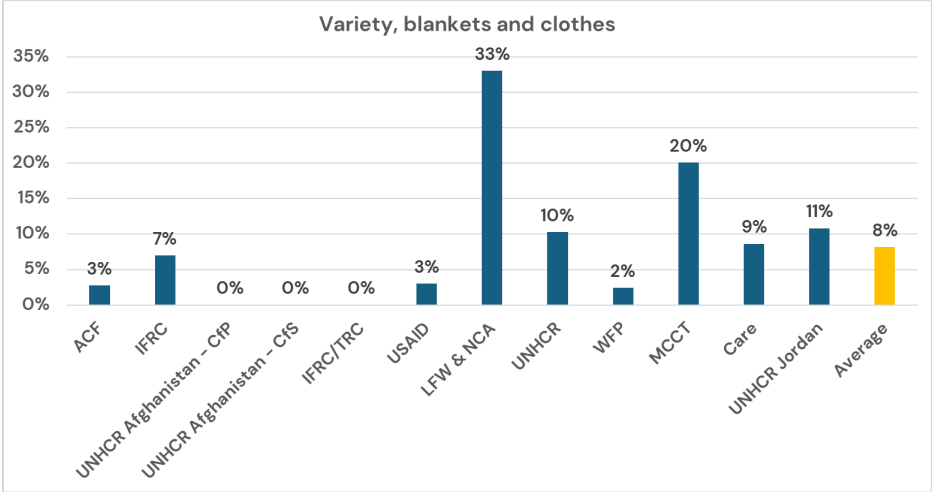









Hygiene
80%
70%
60%
50%
40%
30%
20%
10%
0%
0%
8%
0%
0%
5%
1%
67%
7%
4%
0%
0%
2%
8%
ACF
IFRC
UNHCR Afghanistan - CfP
UNHCR Afghanistan - CfS
IFRC/TRC
USAID
LFW & NCA
UNHCR
WFP
MCCT
Care
UNHCR Jordan
Average


Variety, blankets and clothes
35%
30%
25%
20%
15%
10%
5%
0%
3%
7%
0%
0%
0%
3%
33%
10%
2%
20%
9%
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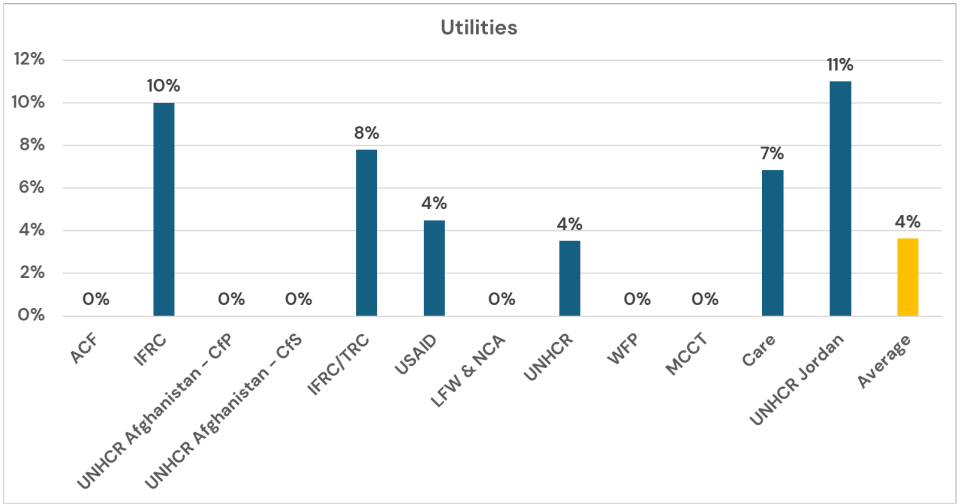
ACF
IFRC
UNHCR Afghanistan - CfP
UNHCR Afghanistan - CfS
IFRC/TRC
USAID
LFW & NCA
UNHCR
WFP
MCCT
Care
UNHCR Jordan
Average


Utilities
12%
10%
8%
6%
4%
2%
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8%
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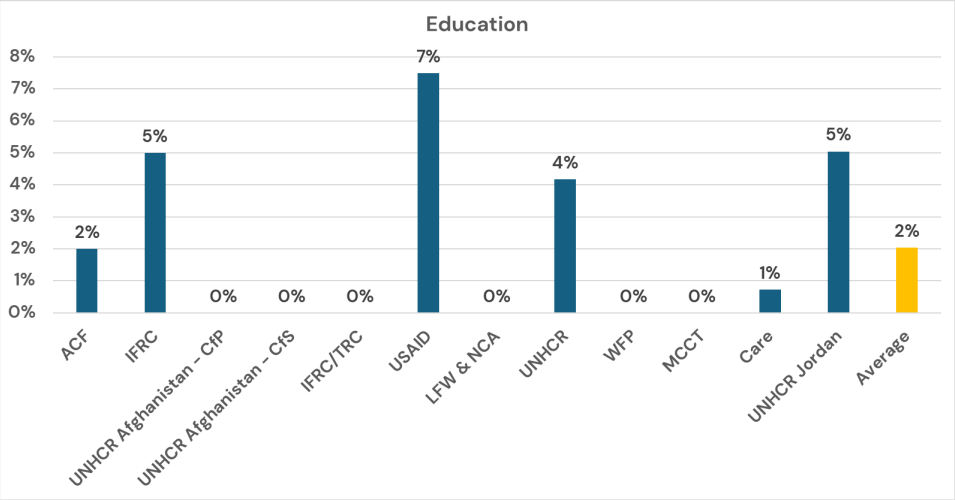
7%
11%
4%
ACF
IFRC
UNHCR Afghanistan - CfP
UNHCR Afghanistan - CfS
IFRC/TRC
USAID
LFW & NCA
UNHCR
WFP
MCCT
Care
UNHCR Jordan
Average


Education
8%
7%
6%
5%
4%
3%
2%
1%
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5%
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0%
0%
7%
0%
4%
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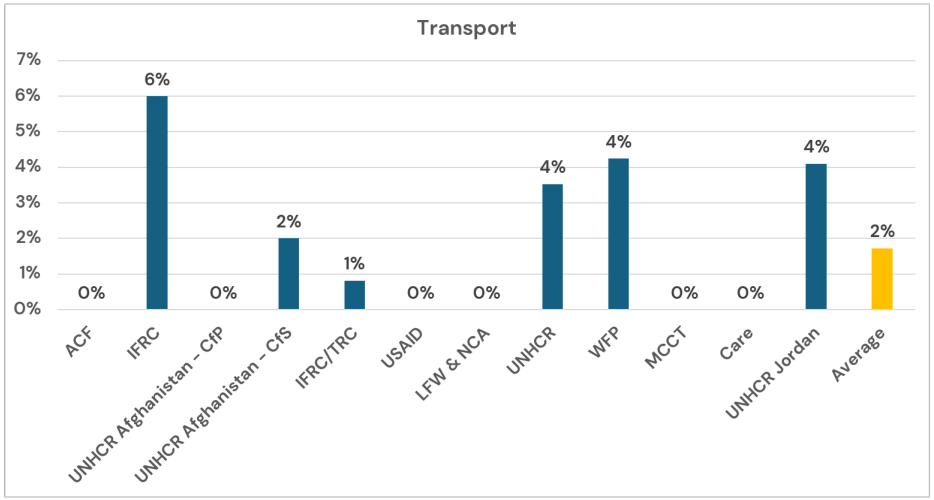
2%
ACF
IFRC
UNHCR Afghanistan - CfP
UNHCR Afghanistan - CfS
IFRC/TRC
USAID
LFW & NCA
UNHCR
WFP
MCCT
Care
UNHCR Jordan
Average


Transport
7%
6%
5%
4%
3%
2%
1%
0%
0%
6%
0%
2%
1%
0%
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4%
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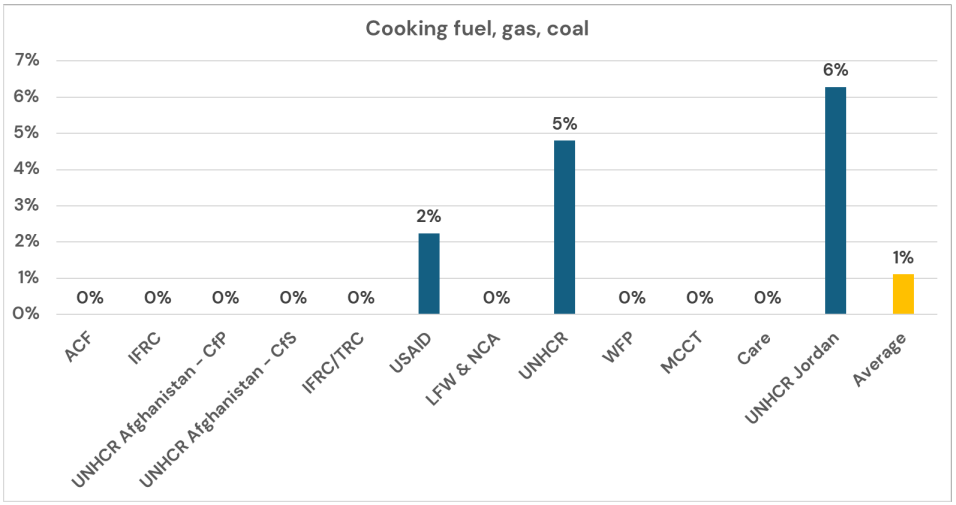
ACF
IFRC
UNHCR Afghanistan - CfP
UNHCR Afghanistan - CfS
IFRC/TRC
USAID
LFW & NCA
UNHCR
WFP
MCCT
Care
UNHCR Jordan
Average


Cooking fuel, gas, coal
7%
6%
5%
4%
3%
2%
1%
0%
0%
0%
0%
0%
0%
2%
0%
5%
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6%
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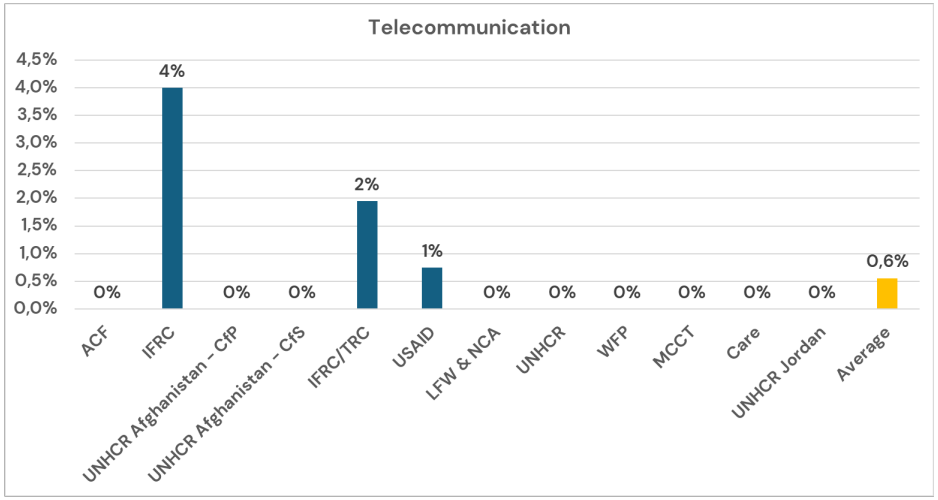
ACF
IFRC
UNHCR Afghanistan - CfP
UNHCR Afghanistan - CfS
IFRC/TRC
USAID
LFW & NCA
UNHCR
WFP
MCCT
Care
UNHCR Jordan
Average


Telecommunication
4,5%
4,0%
3,5%
3,0%
2,5%
2,0%
1,5%
1,0%
0,5%
0,0%
0%
4%
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ACF
IFRC
UNHCR Afghanistan - CfP
UNHCR Afghanistan - CfS
IFRC/TRC
USAID
LFW & NCA
UNHCR
WFP
MCCT
Care
UNHCR Jordan
Average

Potential emission factors for activity data groups

Proposed activity data groups	Potential EF
Food and water	Food
Cooking fuel, gas, coal	Fuel
Education	Education services
Housing	Housing
Utilities	Local energy
Health	Health services
Hygiene	Soap
Variety, blankets and clothes	Clothes
Telecommunication	Telecommunication
Transport	Local transport
Debt repayment, savings, donations, investments, livelihoods, others	Cash / unknown