

Decarbonising emergency humanitarian aid...not necessarily an unnatural move



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The counter-intuitive nature of decarbonising emergency services

By their very nature, emergency organisations are understandably relatively reluctant about including environmental constraints in their emergency response plans, putting lifesaving above all other considerations. It is true that slowing down rescue operations on the pretext of limiting CO² emissions, or using emergency equipment less reliable because it is made from recyclable materials, would be a prospect difficult to accept, both by the rescuers and by the people rescued.

The rhetoric of prioritising varying degrees of urgency is also prevalent among international aid and health organisations, which under no circumstances want to sacrifice the effectiveness of their response to acute humanitarian crises on the altar of global warming. This explains why initiatives aimed at structurally reducing the environmental impact of humanitarian action - the first of which were launched some 15 years ago¹ - have, for the most part, failed to have any significant effect due to a lack of political will to implement them.

Unrestricted growth

Over the last decades, the strategies of the largest international NGOs and multilateral agencies have been predominantly guided by the quest for double-digit annual growth in order to meet more humanitarian needs. Among the champions for growing at any costs, mandated organisations such as UN agencies and ICRC are likely to lead the race for expanding their operations based on an annual budget that has almost tripled over the last 10 years.

Unsurprisingly, the largest concern given by the short- and medium-term strategic priorities of these organisations is focusing on mobilising sufficient financial and human resources to support such expansion rather than limiting the environmental damage it might cause. The unrestricted growth dynamic of humanitarian aid has logically resulted in an exponential carbon footprint generated by

¹ The first [MSF EcoLog Guideline](#) on logistics eco-qualitative good practices was edited in 2009.

ever-increasing purchasing volumes, despite the increasing use of cash distribution², and mass logistical transport, much of which is organised by air in the early stages of a crisis.

In such a context, despite the growing number of victims of repeated climate shocks³, there are strong grounds to believe that the humanitarian actors' commitments to drastically reduce their carbon footprint will remain nothing more than wishful thinking unless they are tied by binding regulatory mechanisms or bounded by an operational sobriety framework. The first constraint will be imposed by the competent authorities, whereas the second, which presupposes a significant reduction in humanitarian interventions, should result from a proactive approach decided by the management of the international organisations.

While waiting for these hypothetical constraints to be put in place, humanitarian actors are rather focusing on the efficiency of their actions, through reduced carbon emissions associated to unchanged operational ambitions, turning, often wrongly, towards their respective logistics services to ensure this performance.

The limits of logistics decarbonisation

Although the logistics services responsible for supplying humanitarian operations are indeed the most energy-intensive support departments, the process of decarbonising procurement, warehousing and transport activities generally encounters three major obstacles which are difficult to overcome:

- Given the diversification and sophistication of humanitarian supply value chains, few suppliers are currently able to provide goods or services that meet the specifications required by the aid agencies. Adding an extra environmental requirement would therefore lead to an even greater saturation of the related markets. This shortage of services is even more obvious when it comes to renew the running engine fleet with on-board energy vehicles - hybrid or 100% electric - given the weakness of local infrastructures capable of supporting the production of low-carbon electricity in most humanitarian operations.

- With 83% of the global air traffic, the 300 members of the international association of air transport (IATA) are required since October 2021 to achieve net zero carbon emission by 2050⁴. In their wake, the major freight forwarders and 3 PL operators who are supporting the international humanitarian action had no other choice than engaging into a forced march decarbonation movement. However, they are all relying on sustainable air fuels (SAF⁵) - biofuels or hydrogen-based synthetic e-fuels – of which the availability is far from being proven yet. In addition to their limited availability, the high cost of alternative fuels explains why they currently account for less than 1% of the aviation sector's consumption, with a slight increase foreseen in long term perspectives (2% in 2025 and 5% in 2030).

- To ensure high performance, a logistics service must comply with the requirements imposed by its customers (expected quality and quantity, desired point of destination and delivery date, etc.). The same principle applies to humanitarian logistics, which cannot optimise its procurement, warehousing and shipping transactions without prior visibility of medium- and long-term needs from the programmes. Despite the introduction of specific software and ordering tools such as MRP and

² For the past six years, cash transfer programmes, included voucher programmes have increased from 3.3 to \$ 7.9 Bn.

³ Complex protracted crises are classified by UN agencies according to 3 combining factors of vulnerability: Armed conflict related, socio-economic related and climate change related.

⁴ See IATA [FlyNet0](#) resolution

⁵ According [to IATA definition](#), SAF should not compete with needed food production (like first generation biofuels) and no deforestation. SAF life cycle should be less harmful than fossil-fuel.

SRM⁶, the supply planning models used by most humanitarian agencies are far from the industry performance. In contexts of local markets that are often poorly supplied, this reality is generally translated into costly supply solutions with high CO² emissions in order to meet the desired ASAP delivery dates.

Considering a sector which is currently worthing almost \$47 billion (+27% in one year) and is characterised by fierce competition between the 10% of humanitarian agencies which account for 80% of dedicated funds, other impediments to the decarbonisation of humanitarian aid can also be highlighted. As a result, there are today little pooling initiatives for sharing supply services For visibility reasons, mainly towards private or institutional donors⁷. However, these obstacles are not directly linked to logistical constraints and can easily be overcome by a greater interest in the development of inter-agency collaboration set up by the Inter-agency Accounting Standing Committee (IASC) in the aftermath of the 2004 Tsunami.

Real room for manoeuvre

Although complicated, decarbonising the humanitarian sector is not an impossible mission to achieve for two main reasons.

The first is that the largest CO³ emissions are generated by the 10% of international agencies which are operating 90% of international procurement and transport transactions - passenger and cargo included. The WFP alone transported almost MT 5 million of food and 400,000 passengers in 2022, for record purchased contributions of \$17.5 million in cash or in-kind donation. Concentrating the sources of carbon emissions clearly makes it possible to target more relevant actions on grouped levels of accountability and facilitate the alignment with ISO 14083 standards for quantifying and reporting greenhouse gas (GhG) emissions applied to cargo and passenger transport.

Given the extreme dependence of local humanitarian actors on contributions from multilateral agencies, despite the commitments made by donors in Istanbul in 2016⁸, the latter can have a major influence on the process of decarbonising the last mile, which is reputed to be polluting because of less efficient vehicle fleets and low-quality fuel⁹.

The other reason is that there is a major difference between the emergency services deployed on national territory in the event of a major accident or incident, and international assistance operations in response to a major disaster or humanitarian crisis. Although most humanitarian agencies claim the emergency response to be their core business, characterised by a deteriorated operating environment with needs that are difficult to anticipate, most of their operations take place in stabilised contexts.

Firefighters, rescuers at sea or in the mountains, and mobile emergency and resuscitation services, all operate in unpredictable contexts that are limited in space and time. Admittedly, the handling of Covid cases during the deadliest waves, or the organisation of SAR operations for migrants in the

⁶ For non-insiders, MRP = Manufacturing Resource Planning, SRM = Supplier Relationship Management

⁷ To ensure maximum visibility for their international aid operations, some EU Member States prefer to operate bilaterally, in parallel with the [EU Civil Protection Mechanism](#) (UCPM), despite the free airlifts offered by DG ECHO.

⁸ Despite the commitment made by donors at the [Grand Bargain](#) in 2016 to allocate 25% of humanitarian aid funding to local actors by 2020, only 0.2% of the grants registered in 2022 (US\$80 million) have been directly allocated to national NGOs and civil society actors.

⁹ See [2016 report from Public Eye](#) on "Dirty Diesel" business in West Africa, which involves mixing fuels with highly toxic chemicals that emit large quantities of fine particles and sulfur content that is sometimes 1,000 times higher than European standards.

Mediterranean, have shown that certain humanitarian crises require large-scale emergency responses on a long run. Fortunately, however, the emergence of protracted crises with a high operational intensity remains exceptional, even in situations of armed conflict, as is currently the case in Ukraine.

This means that most deployments of emergency workers and equipment can be properly scheduled over time with no risk of affecting the quality of the aid and healthcare offer, provided that collaborative planning platforms are set up ahead of the requests. It is only through forecast supply patterns that logistics departments will be able to optimise procurement processes, enabling due diligence to be carried out on suppliers and sub-contractors, while relying on surface transport modes that are less polluting than air shipments.

Beyond global warming

In conclusion, even if humanitarian aid is relying more and more on sub-contracting to local players, mainly due to access constraints in certain high-risk areas, it is still possible to optimise its environmental efficiency if there is a will to define it as a *sine qua non* operating condition that goes beyond the horizon of good intentions.

As well as having a beneficial impact on global warming, the change in environmental culture expected from the humanitarian sector should also lead to significant reduction of the polluting effects, which are proving disastrous on the morbidity and mortality of living species, including the beneficiaries of its actions.

Finally, the decarbonisation of humanitarian organisations should be beneficial for their long-term financial sustainability, taking into account the gradual exhaustion of fossil fuels observed since 2008¹⁰, provided that the humanitarian leaders manage to resize their operational strategies based on the prospect of limiting rather than expanding their operations over the coming decades.

¹⁰ Considering the on-going exhaustion of conventional crude oil observed since 2008, the [International Energy Agency \(IEA\) 2018 report](#) is alerting on the limits of the unconventional oil such as tight oil, for halting the global supply crunch