

Inside the matrix - the underestimated environmental impact of emails

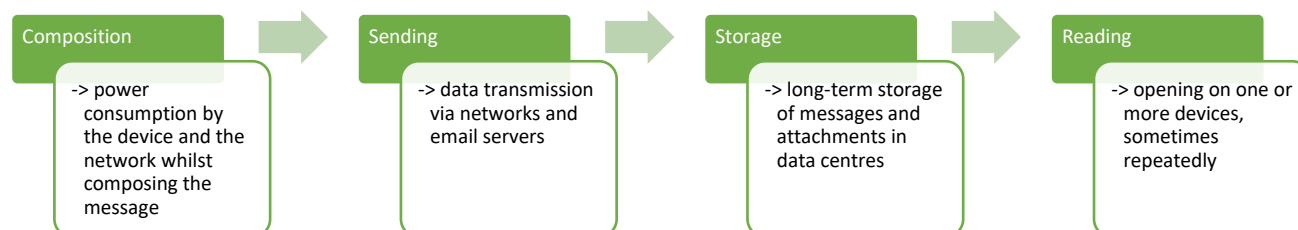
BACKGROUND AND CHALLENGES

In the face of worsening climate and environmental crises and their disproportionate impact on the most vulnerable populations, the [Humanitarian Environment Network](#) (REH) has, since 2020, been supporting a collective initiative involving international solidarity organisations. Adopted in December 2020 by 10 organisations, the [Statement of Commitment by International Solidarity Organisations on Climate and the Environment](#) has gradually brought together 15 signatory NGOs, committed to reducing their environmental impacts and transforming their operational practices. They have set a **target to reduce their operational carbon emissions by 50 per cent by 2030**, compared with a reference year defined individually by each organisation.

This raises the issue of digital technology, as it currently accounts for around **4 per cent of global greenhouse gas emissions** – an impact that is continuing to grow. Within humanitarian organisations, digital tools – and in particular email – have become **indispensable to day-to-day operations**: team coordination, communication between headquarters and the field, partnerships, and so on. And whilst the impact of a single email remains small, **the cumulative effect resulting from the volumes exchanged each day** makes this usage significant on a collective scale. The REH's Carbon Working Group (WG) therefore wished to explore this issue in order to identify potential avenues for reduction.

BUT WHAT EXACTLY IS THIS IMPACT?

An email consumes energy at every stage of its life cycle and from several sources:



Of course, not all emails have the same level of impact. Several types of issues have been identified:

- Sending large attachments, often in duplicate (including photos in signatures);
- Sending emails to a large number of recipients (CC / large mailing lists);
- Sending a barrage of very short '' emails (such as 'OK' or 'thank you');
- Newsletters that are unread but retained;
- Prolonged storage of obsolete emails (inbox, bin, spam folder).

These practices are rarely intentional: they result primarily from automatic processes and implicit organisational norms.

A few figures of scale help to illustrate this impact¹ :

- A simple email emits on average ~0.3 g of CO₂e
- An email with a 1 MB attachment, drafted on a computer via a Wi-Fi connection and sent to one recipient: 3.3 g CO₂e, or nearly *10 times as much*
- 10 unnecessary emails a day can amount to several kilograms of CO₂e per year on an individual basis!

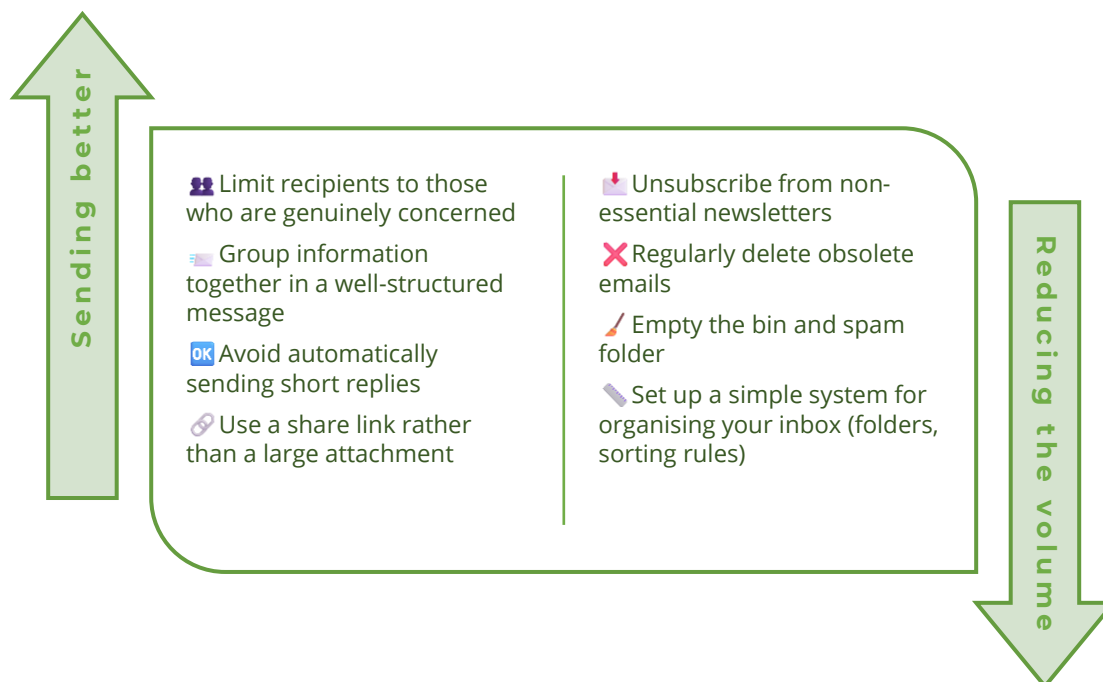
It is therefore not emails as such that pose a problem, but their accumulation, their volume and certain practices that are rarely questioned².

¹ <https://impactco2.fr/outils/usagenumerique/email>

² It is important to note that the majority of the carbon footprint associated with an email stems from the manufacture of the equipment used to compose and read it. It is therefore important not to view this issue in isolation, but in the context of a responsible digital policy. [See the factsheet 'Inside the matrix – What impact for our equipment?' from the same series.](#)

IN PRACTICAL TERMS, WHAT CAN BE DONE?

The courses of action identified by the Carbon Working Group are based on simple measures that are compatible with the constraints of the humanitarian sector:



These actions can be introduced through short workshops, internal awareness-raising campaigns or regular reminders to teams.

Organisational feedback – Digital Clean-up Week at CARE France

CARE France organises an annual 'Digital Clean-up Challenge'. The aim is to encourage CARE staff to tidy up their email inboxes and SharePoint in a fun way: deleting obsolete emails, removing large attachments, deleting multiple versions of a shared working document, and so on. CARE France's Green Team, which launched this initiative, selects the winner at the end of the challenge and offers practical advice on how to sort through files efficiently, as well as on implementing best practices to reduce the volume of emails sent.

BEYOND INDIVIDUAL REDUCTION, WHAT OTHER STRUCTURAL BENEFITS MIGHT THERE BE?

This approach offers several benefits specific to the sector:

- Measures that are low-cost, quick to implement and require no capital investment;
- A significant cumulative effect across an organisation or network;
- A tool for raising awareness across the organisation of the environmental challenges posed by digital technology;
- A first concrete step towards a more comprehensive strategy for digital frugality.

Beyond reducing the carbon footprint, it also helps to **streamline internal communications, reduce information overload and improve collective efficiency** – a problem often encountered within NGOs!

GOING FURTHER

In addition to the initial guidance outlined in this factsheet, the [GreenIT](#) website is an excellent resource for exploring certain topics in greater depth and accessing information and tools relating to the environmental footprint of our emails.

CONCLUSION

After nearly five years of sustained momentum, reflection and discussion amongst NGOs regarding decarbonisation targets and monitoring, organisations are now considering and seeking various ways to reduce their environmental

footprint. This best-practice guide therefore highlights the environmental impact of our email usage and how to reduce it both individually and collectively. The Carbon Working Group therefore conveys the following messages:

- It is not individual emails that have an impact on the environment, but **the sheer volume** of them! Reducing non-essential emails and better targeting our messages is a simple, collective and immediately actionable measure for humanitarian organisations
- This action forms part of a **digital frugality** approach: questioning our usage habits, reducing unnecessary volumes and adopting simple practices that are accessible to everyone

This factsheet forms part of a broader project on the digital footprint undertaken by the REH's Carbon Working Group. [Further factsheets on the footprint of digital equipment and artificial intelligence are also available.](#) If you have any questions, or if you are interested in working on this topic, please do not hesitate to contact: carbone@environnementhumanitaire.org