CLIMATE AND ENVIRONMENTAL ROADMAP

Towards a transformational reduction of MSF OCG’s footprint by 2030

Médecins sans frontières
Operational Centre Geneva
October 2022
Foreword

The environmental crisis and its associated challenges to our operations are not new to MSF Operational Centre Geneva, as evidenced by the ambitions set out in the Strategic Orientation 2020-2023 for Planetary Health:

“Humans are dramatically affecting our global food production system, the quality of the air we breathe and the water we drink, our exposure to infectious diseases and even the habitability of the places where we live. Faced not only with climate change, but also with declining biodiversity, shortages of arable land and fresh water, pollution and changing biogeochemical flows, such changes in the natural systems are already impacting our health and are projected to drive most of the global burden of disease over the coming century, hitting today’s most vulnerable people and future generations the hardest.

We recognise that changes to the planet’s ecosystem will increasingly challenge our operational responses. Global ecological changes lead to significant health and humanitarian impacts such as emerging and re-emerging diseases, both infectious and non-communicable, malnutrition, mental health problems, displacements and conflict. Health is defined not only by the absence of disease and infirmity through political, economic and social determinants of health, but also increasingly by ecological determinants. Understanding and acting upon these challenges calls for massive collaboration across disciplinary and national boundaries to safeguard our health.”

MSF OCG is tackling this enormous challenge in its planetary health strategic orientation under three pillars: operations, our ecological footprint and advocacy. This climate and environmental roadmap is the result of many months of a consultative and intense collaborative process that OCG undertook with the support of the Climate Action Accelerator. The actionable and concrete solutions contained within this roadmap will allow OCG teams around the globe to further learn, engage and demonstrate how each person’s actions contribute to OCG reducing its carbon emissions by 50% by 2030 and limit its local ecological footprint.

As we enter a “period of consequences”, the urgency to address our impact on the environment must not go unaddressed any longer. In the spirit of the Do No Harm principle, MSF has a social responsibility to seriously consider the way we are organised and manage our ecological footprint.
**Challenge & aims**

**The climate and environmental crisis and its health consequences**

Our global environment is changing profoundly and at an unprecedented rate due to human activities. The evidence from the Intergovernmental Panel on Climate Change (IPCC) reports is clear: *climate change and environmental degradation constitute a threat to all dimensions of our lives – from our physical and mental health, to the food we eat, the water we drink and our economic security.*

‘The climate crisis has arrived and is accelerating faster than most scientists expected. It is more severe than anticipated, threatening natural ecosystems and the fate of humanity’ (Ripple and al, Bioscience, 2019). As a medical humanitarian organisation, we cannot ignore this situation. A significant proportion of the health problems managed in MSF projects are climate-sensitive diseases, most of which are projected to increase over time. In addition, most humanitarian crises are occurring in the countries most vulnerable to and least prepared to adapt to climate change and environmental degradation. Consequently, the environmental crisis is generating additional threats for already vulnerable regions and is acting as an amplifier. The communities in countries where MSF works are among the first and hardest hit by the climate and environmental emergency.

Looking to the future, we need to care for our patients in a way that does not harm them or their communities. With that in mind, we need to take responsibility and do our part to reduce our greenhouse gas emissions, with the aim of limiting the global temperature rise to well below 2°C in line with the Paris Agreement and maximise the sustainability of our projects.

**What have we done so far? Our initiatives until now**

**In 2022, the Médecins Sans Frontières movement adopted an emissions reduction target of –50% by 2030 and signed the Climate and Environment Charter for Humanitarian Organisations.**

- The first carbon footprint initiatives were undertaken in 2009 through a Green Unit, following the adoption of the Green Motion at the General Assembly in 2007.
- As part of an MSF Transformational Investment Capacity (TIC) pilot project launched in 2018, OCG was audited on its carbon footprint. This partial assessment of the Geneva headquarters only estimated emissions at 3,747 tonnes of CO$_2$ equivalent, plus 13,117 tonnes for air travel at the field level.
- In 2019, MSF OCG included a Planetary Health approach as one of the key focuses of its 2020–2023 institutional strategy.
- Since 2021, experts at HQ and in the field have been assigned to implement sustainable solutions in the areas of energy, construction, medical materials and waste management.
- In 2021, MSF OCG committed to halving its CO$_2$e emissions by 2030 compared to the 2019 baseline, according to science-based targets. To reach this goal, MSF OCG launched a process of designing an environmental and climate roadmap, intended to guide the organisation through this transition.
Our vision

In light of global warming and the environmental crisis, MSF OCG endeavours to respond to the related growing humanitarian consequences and health impacts on the most vulnerable communities, while at same time reducing the organisation’s climate and environmental footprint. MSF OCG will bear witness to the consequences of the climate crisis on the health and wellbeing of our patient populations.

Our key commitments

**PROGRAMMES:** We will factor in climate and environmental risks and consequences in the analysis and planning of all of our medical humanitarian programmes by 2025.

**EMISSIONS:** We will reduce our greenhouse gas emissions by 50% by 2030, compared to the 2019 baseline, without purchasing carbon offsets.

**ENERGY:** Energy-related carbon emissions will be reduced by at least 45% by 2025 and by 70% by 2030 through efforts to limit our consumption and by increasing the share of renewable sources in the energy we use.

**SUPPLY CHAIN:** By 2025, sustainability will be embedded throughout our supply chain, as a default requirement in our daily planning, procurement and freight decisions and strategy. Our supply chain-related emissions will be reduced by 55% by 2030.

**WASTE:** As of 2025, all our projects will have effective waste management plans in place to reduce, recycle and responsibly dispose of waste. The waste we produce will be reduced by 50% by 2030, particularly by limiting the consumption of single-use plastic items.

**PEOPLE:** We ensure that all our staff members understand the environmental impacts of our humanitarian action and have the opportunity to contribute to the required change. We invest in training our members, giving them the tools and the means to act.

A collaborative process: building a roadmap to meet our climate goals

This roadmap, developed jointly in partnership with the Climate Action Accelerator, sets out MSF OCG’s direction until 2030 in terms of what needs to be done to meet its environmental and climate goals. It provides a detailed and strategic framework for measuring, planning and reducing our greenhouse gas emissions and impacts related to local environmental degradation.

It is the result of a thorough collaborative internal process at all levels of MSF OCG. Through ThinkUp, MSF’s innovation platform, all members were invited to contribute, in the spirit of collective intelligence (see Annex 1 for the methodology).
A comprehensive approach

Concerned about the health consequences of climate change and the environmental degradation affecting the patients it serves, MSF OCG included the concept of planetary health as a key focus of its Strategic Plan 2020–2023. MSF OCG’s Planetary Health approach is broken down into three central pillars:

- **Operational adaptation**: Strengthening the organisation’s capacity to anticipate and respond to growing climate and environmental threats and their impacts on the health of patients and MSF’s ability to operate.

- **Footprint reduction**: Significantly reducing the organisation’s carbon footprint and environmental impacts while continuing to carry out and reinforce its social mission.

- **Advocacy**: Alerting others to the health impacts and humanitarian needs of vulnerable and disproportionately affected populations, within a planetary health framework, to contribute to the call for responsible and environmentally sustainable action.

MSF OCG projects in climate-vulnerable countries

MSF OCG projects and climate vulnerability: MSF OCG presence 2022 – ND–GAIN Country Index which summarises a country’s vulnerability to climate change and other global challenges in combination with its readiness to improve resilience.

This map shows OCG project locations in climate-vulnerable countries. The white circles indicate locations of projects. The darker the colour, the more vulnerable the country is. It is evident here that many of our projects are located in countries experiencing high levels of climate vulnerability.
Towards a transformational reduction of our footprint

MSF OCG’s 2019 carbon footprint

Our footprint is estimated at 68,766 tCO$_2$e.

It was calculated for the year 2019 and quantifies the sources of greenhouse gas emissions for which MSF OCG is accountable in accordance with the Greenhouse Gas Protocol. The scope includes our headquarters in Geneva and 29 countries, our financial participations in different organisations and projects, and encompasses 6,700 employees and a budget of CHF 260M. Five key sources represent more than 95% of our total emissions: the purchase of goods and services; energy consumption; staff travel; freight; generation of waste.

Our footprint reduction strategy

To reduce our footprint, MSF OCG, with the support of the Climate Action Accelerator, has selected 32 tailored solutions. Together, they are the building blocks of a decarbonisation trajectory that will help us halve our carbon emissions by 2030 and reduce our impact on local environments.

The solutions in the roadmap are transversal and cover six key domains: transport (which includes freight); goods & services, medical practices, buildings & energy, waste & ecosystems and finally digital & transversal. These are presented in detail on the following pages.
Carbon footprint reduction target and trajectory

In a business-as-usual scenario, our emissions would continue to increase over the coming decade, in proportion to the growth of our operations. Reducing emissions by half means drastically decoupling the evolution of emissions from the growth of material activities.

With this trajectory, we plan to reduce our carbon footprint by 50% by 2030, compared to our baseline emissions in 2019 and excluding any resort to carbon offsets.

In intensity, meaning compared to our projected business-as-usual emissions (72,000 tCO₂e in 2030), we will reduce our emissions by 52%.

**MSF OCG’s decarbonisation trajectory: 2019 – 2030**

Which solutions are shown above?

The eight solutions with the largest impact on carbon reduction are shown in the graph above. The percentages indicated correspond to the reduction impact of each solution; in other words, how much it will contribute to the 50% reduction in emissions by 2030.

The 32 solutions selected all play a part in decreasing emissions, including structural effects, which are explained on the following page.
Opportunities, uncertainties and structural effects

A decarbonisation roadmap spanning multiple years includes many uncertainties. Growth in the volume of MSF OCG operations, structural effects of national decarbonisation policies on the productive apparatus and the pace of deployment of photovoltaics in the regions where we operate are some of the factors that will require adjustments to reality. In five to ten years, innovations may enable the kind of product substitution that is not yet possible today.

Our trajectory therefore includes ‘structural effects’ to take into account advancements occurring globally that may have an emissions–reducing effect on our footprint, in addition to our own efforts.

What are structural effects?

Structural effects are applied to carbon reduction trajectories in order to account for the fact that regardless of the individual choices of a given organisation, societies as a whole are decarbonising. The energy mix for electricity production is evolving towards more carbon–free sources; fuel efficiency gains impact the emissions of trucks, ships and planes; industry and manufacturing are upgrading towards less emissive production processes.

When calculating the projected carbon reduction pathway, i.e. the trajectory of MSF OCG, these factors are taken into account by assuming a certain annual reduction in emissions for selected categories. These structural effects, estimated at -17% by 2030, are added to the calculation of the expected emission reductions that result from low-carbon choices within the organisation.

Examples of structural effects applied by category:

- Electricity from the grid: - 1.13% per year (globally)
- International maritime transport: - 2% per year
- Aviation: - 2% per year

Summary of projected emissions, targets and reductions by 2030

---|---|---
68,700 tCO₂e | 71,900 tCO₂e | 34,380 tCO₂e -50% (compared to 2019 baseline)

Total avoided emissions 2022–2030: 176,000 tCO₂e
**Our solutions by domain**

**TRANSPORT**

36% of total footprint

**Why it matters:** Transport represents 24,756 tCO₂e, with travel being the largest single source of OCG’s emissions (28% of total emissions) and freight accounting for 8%. The aid sector relies on transport, whether for commuting, staff travel or freight transport, contributing to the 24% of direct CO₂e emissions for which global transportation is responsible worldwide.

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**SOLUTIONS**

**Reduce business air travel**
- Consolidate a responsible travel policy
- Review training locations and delivery modes
- Develop tools for employees to make low carbon choices

**Optimise fleet size, fleet composition and movements**
- Optimise vehicle usage in missions when possible
- Train drivers on eco-driving
- Purchase adapted lowest emission vehicles

**Reduce the carbon impact of staff commuting**
- Promote public transport and soft mobility
- Encourage part-time remote working, particularly at HQ

**Select transport service providers with lower footprint**
- Include the environmental criteria into the selection process

**Reduce air shipment of backorders**
- Align stock strategy with demand, improve follow-up and communication on lead time, and review missions back orders

**Increase sea and road freight through better planning**
- Limit air freight to absolutely essential situations and contexts
- Reduce stockouts leading to urgent replenishments

**Reduce transported goods by ordering only what is needed**
- Improve forecasting to avoid overstock situations

**Optimise container shipments to the same destination**
- Consolidate shipment between OCs and missions

**Increase sea and road freight through better goods positioning**
- Ensure storage locations are closer to use and distribution
- Increase direct deliveries from suppliers to hubs and missions

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**Example of expected results**

- Reduce business travel mileage by 35% by 2030
- Reduce vehicle fuel consumption by 40% by 2030
- Reduce backorders transported by air by 50% by 2030
- Reduce non-priority air shipments by 80% by 2030
- Reduce excess goods transported by 80% by 2030
- Reduce the kms by air freight by 5% by 2030
- Reduce the mileage transported by air for emergencies by 20% by 2030
Choose suppliers with a lower carbon footprint

- Request visibility on carbon value and life cycle information
- Include environmental criteria in the sustainable procurement guideline
- Identify lower carbon- or lower waste-generating alternatives for key items

Reduce and optimise packaging of goods

- Optmise packaging or use environmental friendly alternatives

Prioritise local or regional purchasing

- Prioritise local or regional purchase for heavy or large items (if quality is assured and carbon reduction confirmed)

Why it matters: Total purchases (goods and services) amount to 27,661 tCO₂e, representing 40% of OCG’s emissions. Reducing emissions from procurement can make a critical difference as emissions from goods are associated with extraction, production and processing as well as packaging, storage and transportation.
MEDICAL PRACTICES
within goods & services
14% of total footprint

Why it matters: Within goods and services, purchases of medical or paramedical goods and equipment amount to 9,230 tCO₂e in MSF OCG’s footprint, making this category one of the most emissive. As these goods are paramount to OCG’s work, it is important to identify and implement solutions that have less environmental impact while maintaining equivalent medical effectiveness and impact.

SOLUTIONS

Reduce unnecessary provision of medical items
• Rationalise the selection, ordering and dispensing of drugs, use of consumables and patient prescriptions
• Optimise the ordering, use and maintenance of medical equipment

Example of expected results
Reduce overuse of consumables by 70% by 2030

Switch to medical protocols with less environmental impact
• Train and inform medical practitioners on updated protocols and their environmental impact

Volume of purchased and transported medical items reduced by 5% by 2030

Identify and chose alternative medical material and products
• Switch to alternative medical materials such as the use of recycled plastic items, anaesthetic gas and inhalers with a lower warming potential
Why it matters: Energy, which generates 12,865 tCO₂e, is OCG’s third largest source of emissions. MSF OCG endeavours to better control and reduce its energy consumption and reduce its dependency on fossil fuels by investing in renewable energy across the organisation.

SOLUTIONS

Favor sustainable constructions
- Respect construction best practices to encourage sustainable design (techniques and materials)

Reduce the energy consumption of buildings
- Redefine temperature standards in all buildings
- Improve the energy performance of buildings through sustainable design and passive measures
- Favor the most energy efficient cooling/heating options

Reduce energy consumption and improve energy efficiency of electric installations
- Monitor energy consumption and production
- Install automated regulation of electric equipment
- Purchase energy efficient equipment
- Promote responsible choices and behavior in all domains requiring the use of energy

Decarbonise electricity & energy production
- Replace fossil fuel–based electricity with renewable energy
- Use solar energy for specific equipment
- Produce electricity or energy from waste or fatal heat
- Subscribe to decarbonated energy suppliers for buildings

Encourage the production, use and distribution of sustainable heat items in MSF compounds and programmes
- Use alternatives to fossil fuels, charcoal or wood in distribution or use of heat production items

Reduce emissions linked to gases with a high GWP
- Purchase AC equipment with alternatives to HFC gas
- Purchase cold chain equipment with alternatives to HFC gas
- Ensure responsible commissioning, maintenance and decommissioning
- Use recycling channels at local, national and regional levels

Example of expected results

Construction works managed and designed to decrease waste and energy consumption 80% by 2030

Reduce energy consumption by 40% by 2030

Replace fossil fuel generators with renewable energy by 70% by 2030

Reduce the quantity of charcoal and firewood used by 80% by 2030

Air conditioning equipment with non–HFC gases 100% by 2030

1 Global warming potential

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### Waste & Ecosystems

**3% of total footprint**

**Why it matters:** Waste emissions for OCG amount to 2,115 tCO$_2$e. Poor waste management has an impact on the environment and can also threaten public health. It is important to manage waste sustainably to avoid any risk to populations and the environment.

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### Solutions

<table>
<thead>
<tr>
<th>Ensure all steps for safe waste management are followed</th>
<th>Example of expected results</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Establish and implement a tailor-made waste management plan</td>
<td>Waste management plan in all MSF OCG missions by end of 2025</td>
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<table>
<thead>
<tr>
<th>Avoid and reduce waste generated</th>
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<tbody>
<tr>
<td>* Reduce consumption of single-use medical items and favour reusable and biodegradable</td>
<td>Reduce waste by 50% by 2030</td>
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<tr>
<td>* Find alternative to dispensary plastic bags</td>
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<tr>
<td>* Implement a strict donation policy that takes into account expiry dates</td>
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<tr>
<td>* Reduce consumption of single-use non-medical items and favour reusable and biodegradable items</td>
<td></td>
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<tr>
<td>* Promote repairing electronic and electrical equipment</td>
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<tr>
<th>Increase local or regional recycling</th>
<th>Recycling streams identified in all projects by end of 2025</th>
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<tbody>
<tr>
<td>* Improve sorting of domestic waste and evaluate local waste streams</td>
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<tr>
<td>* Promote recycling of electronic and electric equipment</td>
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<tr>
<th>Limit pollution of land, water and air</th>
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<tbody>
<tr>
<td>* Develop sustainable waste destruction systems</td>
<td>All missions have implemented BPEO$^2$ by 2030</td>
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<tr>
<td>* Responsible outsourced treatment of dangerous products</td>
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<tr>
<td>* Treat and monitor hospital wastewater discharge</td>
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<tr>
<td>* Engage in research on risk of hospital wastewaters</td>
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<tr>
<th>Preserve water resources</th>
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<tbody>
<tr>
<td>* Implement the best practicable options after a quick environmental impact analysis in each project</td>
<td>All projects implement best feasible options by end of 2025</td>
</tr>
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<table>
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<tr>
<th>Prevent and limit the environmental degradations</th>
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<tbody>
<tr>
<td>* Implement the best practicable options after an environmental impact analysis in each project</td>
<td>All projects conduct EIAs by end of 2025</td>
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<tr>
<th>Regenerate land and soils</th>
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<tbody>
<tr>
<td>* Promote tree planting, integrate gardens in premises and encourage composting</td>
<td>Encourage projects to create volunteer groups</td>
</tr>
</tbody>
</table>

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$^2$BPEO: Best Practicable Environmental Option.
Why it matters: Emissions related to digital services amount to 689 tCO₂e (or 1% of the footprint) and the purchase of IT equipment contributes another 383 tCO₂e (or 0.6% of the footprint). The environmental impacts of the growing use of digital technology are underestimated and represent a risk if not properly addressed in climate roadmaps. Besides digital, there are also transversal good practices that should be systematised to reduce emissions.

SOLUTIONS

Rationalise data storage and transfer
- Limit growth of data usage and storage with “cold storage policies”

Reduce carbon intensity of digital equipment
- Increase the lifespan of IT and telecom equipment and reduce turnover rate
- Pool personal and professional equipment where appropriate
- Purchase easily repairable equipment and repair locally
- Promote storage of data in low carbon eco-friendly data centres

Promote good internal practices and responsible behaviours
- Produce a good office/facility practices playbook for energy, waste, office procurement, food and more
The climate and environmental roadmap commits us to transforming our ways of working by 2030. To that end, we need to meet a number of internal and external conditions in order to achieve our goals.

Leadership
Our climate action is unambiguous and strongly anchored in our organisation. It aims to achieve ambitious results and engage the entire organisation and its members. Implementation of the roadmap is driven by MSF OCG’s leadership, which will regularly report on its progress and mobilise the resources for change.

Investing in our staff
Understanding the issues at stake, providing adequate staffing and building the capacity of MSF OCG’s staff are the critical success factors. With adequate skills and knowledge, it is expected that each staff member will be able to contribute to the individual and organisational behaviour changes needed to meet the objectives of the roadmap.

Integration into operations
Climate and environmental considerations will be systematically and fully integrated within our operational cycle and core activities and not addressed as a separate issue.

Resource mobilisation
Over the first three years (2023–2025), our initial cost estimate for implementing the carbon reduction component of the roadmap indicates a gross investment of between CHF 10.6M and 12.8M for a gross saving of between CHF 10M and 12.3M. Therefore, the net impact is expected to be between CHF 1.7M of potential savings and CHF 2.8M of costs.

Encouraging partners and peers for wider influence
Conscious of our social responsibility, we are determined to engage our partners and encourage them to adopt an ambitious environmental agenda, and to play a leading role in active coalitions in this field.
Over 90% of the emissions reduction goal over the next eight years relies on only eight main climate solutions. In addition to these priority solutions for carbon reduction, eight other solutions are considered critical to reduce local environmental degradation resulting from our field activities. A specific investment and project management effort will take place over the 2023–2025 period to accelerate the deployment of these key solutions in order to reach the first milestone of a 32% decrease in emissions by 2025.

### Priority areas of investment

Moving forward: assembling the means to succeed

8 key solutions for carbon reduction

- Establish green purchasing criteria
- Deploy renewable energy
- Reduce air travel
- Reduce energy consumption
- Optimise fleet size, fleet composition and movements
- Increase local or regional recycling
- Avoid and reduce waste generated
- Increase sea and road freight through better planning

8 key solutions to reduce local degradation

- Establish green purchasing criteria
- Reduce unnecessary provision of medical items
- Increase local or regional recycling
- Ensure waste management plans are followed
- Avoid and reduce waste generated
- Prevent and limit environmental degradation
- Limit pollution of land, water and air
- Preserve water resources

### Roadmap coordination, monitoring and reporting

From 2022 onwards, implementation of the roadmap will be coordinated by a Planetary Health Coordinator attached to MSF OCG’s General Directorate. A transversal Steering Committee will ensure involvement, ownership and accountability of all departments. Together they will lead, disseminate, guide and monitor actions with support from:

- Project leaders and technical focal points within MSF OCG identified by solution category to turn solutions into actionable projects and programmes.
- External experts associated to the action plan, notably those from the Climate Action Accelerator.
- OCG country project teams and coordinators who are on the frontline to put priority solutions into practice.

Ensuring that our monitoring mechanisms for both carbon emissions and waste are in place by 2023 will enable us to report transparently on our progress in a yearly progress report.
## Measuring our performance

### High level indicators: measuring our commitments

<table>
<thead>
<tr>
<th>Commitment</th>
<th>Expected outcome(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programmes</td>
<td>All country plan of actions include an analysis of climate and environmental risks and related health impacts and humanitarian consequences.</td>
</tr>
<tr>
<td>Emissions</td>
<td>Tonnes of CO₂e emissions are as close as possible to 46,800 Kt in 2025 and below 34,400 Kt in 2030 (−50% from 2019 baseline).</td>
</tr>
<tr>
<td>Energy</td>
<td>Tonnes of energy-related CO₂e emissions are as close as possible to 6,700 Kt in 2025 and below 3,700 Kt in 2030 (−70% from 2019 baseline).</td>
</tr>
<tr>
<td>Supply chain</td>
<td>Tonnes of supply chain-related CO₂e emissions including from freight are below 14,100 Kt in 2030 (−55% from baseline 2019).</td>
</tr>
<tr>
<td>Waste</td>
<td>Overall weight of waste has been reduced by 50% by 2030.</td>
</tr>
<tr>
<td>People</td>
<td>Essential training courses are provided for targeted staff.</td>
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</table>

### Key means to assemble

<table>
<thead>
<tr>
<th>Means</th>
<th>Expected outcome(s)</th>
</tr>
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<tbody>
<tr>
<td>Measurement: Measure the organisation’s carbon emissions and the quantity and type of waste produced.</td>
<td>In 2023, measuring and monitoring systems for carbon emissions as well as solid and liquid waste are in place for the entire organisation.</td>
</tr>
<tr>
<td>Coordination: Ensure steering, monitoring and reporting on the commitments and projects identified in the roadmap.</td>
<td>A Planetary Health Coordinator and Steering Committee are in place.</td>
</tr>
<tr>
<td>Responsibility: Integrate environmental responsibility into the job profiles of operational and technical managers.</td>
<td>By 2024, all new MSF OCG contracts will include a clause relating to planetary health commitments.</td>
</tr>
<tr>
<td>Competencies: Integrate the necessary technical expertise into the organisation and train staff so that they are empowered to put OCG’s environmental commitments into practice.</td>
<td>• Essential training has been provided to all targeted personnel. • External partnerships are in place where necessary, particularly for energy.</td>
</tr>
<tr>
<td>Procedures and policies: Incorporate the levers to achieve the expected outcomes of the roadmap in all relevant departmental policies and procedures.</td>
<td>Policies and procedures in the priority areas of travel, supply and procurement, energy, construction and rehabilitation are reviewed by 2024 to support achievement of the corresponding expected outcomes.</td>
</tr>
<tr>
<td>Accountability: Integrate environmental commitments and the means to achieve them into the operational and departmental programming cycle.</td>
<td>Each OCG annual activity report will include monitoring of the roadmap.</td>
</tr>
</tbody>
</table>
**KICKING OFF**
- Staff is trained starting in 2023
- Carbon and waste monitoring systems in place
- MSF OCG’s emissions pledge in 2021: 50% by 2030
- MSF makes Planetary Health a focus in 2019
- The Movement signs the Climate and Environment Charter in 2022
- Drop in emissions due to the impact of COVID-19 on OCG activities

**DELIVERING**
- All programmes factor in climate and environmental risks by 2025
- Waste management plans in place in all projects by 2025
- Energy consumption -30% by 2025
- Air mileage -20% by 2025
- Supply chain emissions -32% by 2025
- Energy consumption -30% by 2025
- Supply chain emissions -32% by 2025
- Waste produced is reduced by -50% by 2030

**SCALING UP**
- Air mileage -35% by 2030
- Vehicle fuel consumption -40% by 2030
- Energy consumption -40% by 2030
- Supply chain emissions -55% by 2030
- Renewables will replace generators by 70% by 2030

**RESULTS**
- 68,700 tCO₂e (2019)
- 46,800 tCO₂e (2023)
- 34,380 tCO₂e (2029)
Annexes

Annex 1  Methodology of construction: building a roadmap in one year

Steps in the Footprint analysis

1. Resources & Footprint Hypothesis
2. Scope definition
3. Data collection and results
4. Footprint report
5. Monitoring & continuous improvement

Steps in the Roadmap construction

October 2021
1. State of affairs
2. Solutions proposals
3. Feasibility study
4. Target setting
5. Roadmap modelisation

October 2022
1. Transversal Workshop 1
2. Transversal Workshop 2
3. Transversal Workshop 3
4. Roadmap narrative & indicators

through the MSF platform
ThinkUp
## Annex 2: Table of all solutions and actions

### Business travel
- **Reduce business air travel and develop sustainable travelling practices**
  - Consolidate a responsible travel policy addressing topics like field visits from HQ, briefings/debriefings, R&R, and promoting online international meetings within the movement and for HQ
  - Review trainings location choices and delivery modes (on-line vs in-person)
  - Develop tools and levers to facilitate employees to make climate friendly decisions regarding choice of companies and itineraries
  - Expected outcomes: Reduce by 20% the mileage related to business travel by air by end 2025 and 35% by 2030
  - Avoided emissions in 2030: -2976 tCO₂e

### Commuting
- **Reduce the carbon impact of home-office commuting**
  - Promote public transport and soft mobility in all offices
  - Encourage part-time remote working, notably for HQ
  - Expected outcomes: Reduce by 30% the km made by staff coming to the office with transport means using fossil fuel by end of 2025 and 60% by 2030
  - Avoided emissions in 2030: -142 tCO₂e

### Freight
- **Select transport service providers using means and routes with a lower carbon footprint**
  - Include environmental criteria into the selection process of transport service providers
  - Expected outcomes: By end of 2025, 20% of t.km freight is ensured through companies or boats using less emissive fuel, and 60% by 2030
  - Avoided emissions in 2030: -275 tCO₂e

- **Reduce air shipments of backorders (remaining order lines that are not available to meet the requested delivery date)**
  - Align the ESC stock strategy with the demand, improve order follow up and communication on lead time, and review missions back orders to confirm or cancel backorders
  - Expected outcomes: Reduce by 10% t.km of backorders transported by air originally foreseen by sea by end 2025 and 50% by 2030
  - Avoided emissions in 2030: -138 tCO₂e

- **Increase sea freight and road freight versus ASAP air freight thanks to better supply chain planning**
  - Limit air freight to cold chain, narcotics, shortshelf life products, pure operational emergencies or contextual constraints (not related to bad forecasting), and absence of critical volume that prevents sea freight
  - Reduce stockouts leading to urgent replenishment by air by improving supply chain planning (information, forecasting, demand, supply and transport planning, inventory management, product segmentation...)
  - Expected outcomes: End 2025, reduce by 30% of the t.km unjustified transported by air or qualified “high priority” resulting from poor planning and 80% in 2030
  - Avoided emissions in 2030: -432 tCO₂e

- **Reduce quantity of transported goods ordering only what is needed**
  - Improve forecasting to avoid overstock situation leading to losses (expired products, forced donations)
  - Expected outcomes: Reduce by 30% the t.km of excess goods bought and transported due to bad forecasting and poor needs estimation by end 2025, and 80% by 2030
  - Avoided emissions in 2030: -1106 tCO₂e

- **Optimise container shipments to the same destination to limit their number or limit airfreight due to unsufficient volume**
  - Consolidate shipment between OCs and missions through better supply chain planning
  - Expected outcomes: Reduce t.km by airfreight by 2% by end 2025 and by 5% by 2030
  - Avoided emissions in 2030: -111 tCO₂e

- **Increase sea freight and road freight versus ASAP air freight thanks to better positionning of the goods**
  - Optimize the supply network to make storage locations closer to use and distribution locations, including preposition of goods at suppliers facilities
  - Increase direct deliveries from suppliers to hubs/missions
  - Expected outcomes: End 2025, reduce by 10% of the forecasted tonne-kilometres transported by air for emergencies and 20% in 2030
  - Avoided emissions in 2030: -281 tCO₂e
## Annex 2 - continued

### Table of all solutions and actions

<table>
<thead>
<tr>
<th>Solution</th>
<th>Goods and services</th>
<th>Medical practices</th>
<th>Expected outcomes</th>
<th>Avoided emissions in 2030 (in tCO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goods and services</strong></td>
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</tr>
<tr>
<td>Purchase items and services from suppliers with a lower carbon footprint</td>
<td>• Request visibility on carbon value and life cycle information for better informed orders on relevant items</td>
<td>Reduce by 20% by end of 2025 and 50% by 2030 the level of over-prescriptions</td>
<td>Reduce by 5% by end 2025 the projected emissions related to the life cycle of goods and services purchased and by 30% by 2030</td>
<td>-5295</td>
</tr>
<tr>
<td></td>
<td>• Include environmental criteria for services and products in the sustainable procurement guideline to be developed in line with the global procurement policy</td>
<td>Reduce by 30% by end of 2025 and by 70% by 2030 the overuse of consumables dispensed in MSF programmes</td>
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<td></td>
<td>• Identify lower carbon or lower waste generating alternatives for most important items (quantity, weight, emission factors), including replacement of plastic items</td>
<td>Reduce by 30% by end of 2025 and by 70% by 2030 orders of unnecessary medical material in MSF programmes</td>
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<td></td>
<td>Reduce and optimise packaging of goods</td>
<td>Switch to medical protocols that have less environmental impact for equivalent medical effectiveness</td>
<td>Reduce by 2% the volume of purchased and transported medical drugs, consumables and equipment by 2025 and by 5% by 2030</td>
<td>-435</td>
</tr>
<tr>
<td></td>
<td>• Optimise the packaging or use environmental friendly alternatives for most important items (quantity, weight, emission factors)</td>
<td>Switch to medical protocols that have less environmental impact for equivalent medical effectiveness</td>
<td>Reduce by 2% the t.km transported by end 2025 and 6% by 2030</td>
<td>-183</td>
</tr>
<tr>
<td></td>
<td>Reduce number of km made by goods thanks to local or regional purchasing</td>
<td>Switch to medical protocols that have less environmental impact for equivalent medical effectiveness</td>
<td>Reduce by 3% by end 2025 and 5% by 2030 the tonne-kilometres transported by air or sea, through regional purchases</td>
<td>-119</td>
</tr>
<tr>
<td></td>
<td>• Prioritise local or regional purchase for heavy or large items if quality can be assured at the same level as international purchase and if carbon reduction can be confirmed</td>
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<tr>
<td><strong>Medical practices</strong></td>
<td></td>
<td>Reduce by 2% the volume of purchased and transported medical drugs, consumables and equipment by 2025 and by 5% by 2030</td>
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</tr>
<tr>
<td>Reduce the unnecessary provision of medical items, drugs and consumables related to lack of compliance with medical protocols</td>
<td>• Rationalise drugs selection, ordering and dispensing, use of consumables and patient prescriptions (OPD and IPD)</td>
<td>Reduce by 2% by end of 2025 the projected emissions related to the life cycle of goods and services purchased and by 30% by 2030</td>
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<tr>
<td></td>
<td>• Optimise medical equipment ordering, use and maintenance</td>
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<td></td>
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<tr>
<td>Switch to medical protocols that have less environmental impact for equivalent medical effectiveness</td>
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<td></td>
<td>• Train and inform medical practitioners on updated protocols and their environmental impact (protocols with less consumables, drugs and medical equipment, alternative conditioning, limited local pollutions...)</td>
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<tr>
<td>Identify and chose alternative medical material and products for an equivalent medical impact</td>
<td>• Switch to alternative medical material like the use of recycled plastic items, anaesthetic gas and inhalers with less high warming potential</td>
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</tbody>
</table>
### Buildings and energy

#### Favor sustainable constructions
- Respect construction best practices/standards to encourage sustainable design and appropriate buildings or infrastructure (including construction techniques and materials).

#### Reduce the energy consumption of buildings
- Redefine temperature standards in offices, guesthouses, medical facilities and pharmacies and restrict cooling inside pharmacies only to items needing it.
- Improve energy performance of the buildings through sustainable design, passive measures, including insulation and low carbon emissions materials, tree plantations and preservation of natural spaces.
- Favor the most energy efficient cooling/heating options where applicable (alternative to AC: Air cooler, fans,...).

#### Reduce energy consumption and improve energy efficiency of electric installations
- Monitor electric installations to understand consumption and optimise power set-up and usage.
- Install automated regulation of electric equipment.
- Purchase energy efficient equipment (AC, heaters, light appliances...).
- Promote responsible choices and behavior in all domains requiring use of energy: program and activity design, equipment ordering, facility management, daily office usage of equipment.

#### Decarbonise electricity and energy production
- Reduce fossil fuel produced electricity thanks to renewable resources (photovoltaic panels, wind turbines) and appropriate generators sizing.
- Use solar energy for specific equipment (hotwater production, water pumps for boreholes...).
- Produce electricity or energy from waste or from fossil fuel (co-generation installed on incinerators or generators, methanisation...).
- Subscribe to a decarbonated energy supplier for the buildings where relevant.

#### Encourage production, usage and distribution of sustainable heat items in MSF compounds and programmes
- Use alternatives to fossil fuel, charcoal, or wood in distribution or use of heat production items (e.g. biochar briquettes).

#### Reduce emission linked to gas with high global warming potential
- Purchase AC equipment with alternatives to HFC gas (ex. R32).
- Purchase cold chain equipment with alternatives to HFC gas (R600).
- Ensure responsible commissionning, maintenance, decommissioning.
- Use recycling channels at local, national and regional level.

<table>
<thead>
<tr>
<th>Solution</th>
<th>Expected outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favor sustainable constructions</td>
<td>By end of 2025, 50% of construction and rehabilitation works have been properly managed according to best practices and 90% by 2030.</td>
</tr>
<tr>
<td>Reduce the energy consumption of buildings</td>
<td>Reduce the forecasted consumption of kilowatts-hours by 30% by end 2025, and by 40% by 2030.</td>
</tr>
<tr>
<td>Reduce energy consumption and improve energy efficiency of electric installations</td>
<td>End 2025, 5% of energy consumed from the grid will come from, or be replaced by, renewable energy sources and 20% by 2030 targetting countries where the electricity mix comes mainly from fossil fuel</td>
</tr>
<tr>
<td>Decarbonise electricity and energy production</td>
<td>End 2025, 25% of the kilowatts-hours produced by fossil fuel generators will be replaced by renewable energy sources and 70% by 2030.</td>
</tr>
<tr>
<td>Encourage production, usage and distribution of sustainable heat items in MSF compounds and programmes</td>
<td>Reduce by 50% the quantity of charcoal and firewood used in MSF compounds and programmes by 2025 and 80% by 2030.</td>
</tr>
<tr>
<td>Reduce emission linked to gas with high global warming potential</td>
<td>By end 2025, 30% of the Air Conditioning equipment will be operated with non-HFC gases and 100% of the equipment will be decommissioned through responsible channels in 2030.</td>
</tr>
</tbody>
</table>
## Annex 2 - continued
### Table of all solutions and actions
#### Waste and ecosystems

<table>
<thead>
<tr>
<th>Solution</th>
<th>Actions</th>
<th>Expected outcomes</th>
<th>Avoided emissions in 2030 (in tCO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Waste</strong></td>
<td>Ensure all steps of waste management are followed in the best environmentally friendly way</td>
<td>Establish and implement a tailor-made Waste management Plan (WMP) based on In-Depth Diagnosis and waste sorting in every projects. Mutualise management efforts amongst OCs to reduce lo reduce local environmental degradations.</td>
<td>By end 2025, the headquarters and regional offices, all missions and regular projects will have a waste management plan in place and 100% of missions monitor and are able to quantify and qualify their waste.</td>
</tr>
<tr>
<td><strong>Avoid and reduce waste generated by MSF activities</strong></td>
<td>• Reduce usage of single use medical items and favor use of reusable, biodegradable material.</td>
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<td></td>
<td>• Ban drugs dispensary plastic bags and replace with reusable containers when applicable.</td>
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<td></td>
<td>• Favor products donations through better anticipation of expiration dates and a strict donation policy.</td>
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<tr>
<td></td>
<td>• Reduce usage of single use non-medical items in MSF offices and facilities and favor use of reusable, biodegradable material.</td>
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<td></td>
<td>• Promote repairing of electronic and electric equipment (WEEE).</td>
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<td>End 2025, overall weight of waste has been reduced by 20% and by 50% by 2030.</td>
<td>-874</td>
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<tr>
<td><strong>Increase local or regional recycling of MSF equipment and waste</strong></td>
<td>• Improve sorting of domestic waste from MSF facilities and evaluate the local waste streams.</td>
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<tr>
<td></td>
<td>• Promote recycling of electronic and electric equipment (WEEE) through sustainable and responsible decommissioning channels.</td>
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<tr>
<td></td>
<td></td>
<td>By the end 2025, 100% of the projects have assessed and identified viable recycling streams for their different type of waste (as part of their waste management plan).</td>
<td>-629</td>
</tr>
<tr>
<td><strong>Limit pollution of land, water and air through environment friendly treatment alternatives and policies</strong></td>
<td>• Develop sustainable waste destruction systems (e.g. efficient incinerators, pyrolysis, autoclave or microwave with integrated shredder...)</td>
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<td></td>
<td>• Promote responsible outsourced treatment of dangerous products.</td>
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<td></td>
<td>• Treat and monitor hospital wastewaters discharge with Best Environmental Option Possible to comply with national &amp; international regulations.</td>
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<td></td>
<td>• Engage into research related to hospital wastewaters environmental risk (antibio-resistance, bio-accumulation of chemical compounds...)</td>
<td></td>
<td>By the end of 2025, 80% of missions have installed or implemented the Best Environmental Possible Options (BEPO) to ensure proper destruction and final disposal of all categories of generated waste and 100% by 2030.</td>
</tr>
<tr>
<td><strong>Ecosystems</strong></td>
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<tr>
<td><strong>Preserve water resources</strong></td>
<td>• Implement the best achievable options after quick environmental impact analysis with regards to water resources preservation in each project.</td>
<td></td>
<td>By end 2025, 100% of projects have implemented the best feasible environmental options and practices related to water resource management.</td>
</tr>
<tr>
<td><strong>Prevent and limit the environmental degradations made by the projects</strong></td>
<td>• Implement the best achievable options after environmental impact analysis with regards to environmental degradation in each project.</td>
<td></td>
<td>By end 2025, 100% of projects conduct environmental impact assessments (EIA) from start to finish, and incorporate the best feasible options into their action plan.</td>
</tr>
<tr>
<td><strong>Regenerate land and soils</strong></td>
<td>• Promote tree plantations, integrate gardens in MSF premises and value composting of MSF non-medical organic waste.</td>
<td></td>
<td>Encourage projects to create volunteers groups involved into nurturing natural and garden spaces in MSF premise.</td>
</tr>
</tbody>
</table>
## Table of all solutions and actions

### Digital and transversal

<table>
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<tr>
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<tbody>
<tr>
<td><strong>Digital</strong></td>
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<tr>
<td>Rationalise amount of data storage and transfer</td>
<td>• Optimise growth of data usage and storage with “cold storage policies”, introduction of restrictive policies (quotas) and regular deletion of unused data</td>
<td>The volume of online stored data per user is reduced by 10% by 2024</td>
<td></td>
</tr>
</tbody>
</table>
| Reduce carbon intensity related to digital equipment | • Increase the lifespan of IT and telecom equipment and reduce turnover rate  
• Mutualise personal and professional equipment when relevant  
• Purchase easily repairable equipment and repair locally  
• Pursue storage of data in eco-friendly data centers | Increase the lifespan of IT equipment by 50% at the end of 2025  
By the end of 2025, 50% of employees use their personal telephone for professional use and 90% by 2030 | -73                                  |
| **Transversal**                               |                                                                         |                                                                                  |                                      |
| Promote good office/facility practices and responsible behavior | • Produce a good office/facility practices playbook allowing staff to implement key measures in the following areas: energy and resources consumption, waste management, office procurement, food catering... | Systematise good practice                                                    |                                      |
Annex 3  MSF OCG's carbon emissions flows

**PURCHASED GOODS**
- 18,649 tCO2e
- 27%
- Medical supplies & eq. 6,843 tCO2e 10%
- Other supplies & equipment (including camps) 4,669 tCO2e 7%
- Drugs & nutrition 3,968 tCO2e 6%
- Programme support 3,169 tCO2e 4%

**PURCHASED SERVICES**
- 7,375 tCO2e
- 10%
- Premises and land rental 2,988 tCO2e 4%
- Medical services 1,072 tCO2e 2%
- Other services 3,315 tCO2e 5%

**EMPLOYEE COMMUTING**
- 870 tCO2e 1%

**Electricity generators**
- 7,311 tCO2e 11%

**Electricity network**
- 4,555 tCO2e 7%

**Heating**
- 451 tCO2e 1%

**CONSUMED ENERGY**
- 12,317 tCO2e 19%

**FREIGHT**
- 5,426 tCO2e 8%

**EXTERNALLY PROVIDED SERVICES**
- 1,379 tCO2e 2%

**HOTELS & RESTAURANTS**
- 259 tCO2e 0.4%

**WASTE**
- 2,115 tCO2e 3%

**FUGITIVE GASES**
- 548 tCO2e 1%

**INVESTMENTS**
- 1,369 tCO2e 2%

**TRAVEL**
- 18,460 tCO2e 26%

**BY AIR**
- 13,235 tCO2e 19%

**BY ROAD**
- 4,205 tCO2e 6%

**PUBLIC TRANSPORT**
- 1,020 tCO2e 1.5%

**UPSTREAM ACTIVITIES**

**REPORTING ORGANISATION**

**DOWNSTREAM ACTIVITIES**
References

1. MSF OCG Carbon Footprint Report, 2022
   click here
2. MSF OCG Strategic Plan, 2020-2023
   click here

Acknowledgements

MSF OCG

We thank all MSF OCG staff and collaborators who participated in the joint development of the roadmap through interviews, questionnaires, workshops, proposing solutions on the participatory platform and giving their technical insights regarding the feasibility of solutions.

Climate Action Accelerator

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Under the direction of

Lai Ling Lee | Deputy General Director, MSF OCG
Dikolela KALUBI | Planetary Health Coordinator, MSF OCG
Bruno JOCHUM | Executive Director, Climate Action Accelerator

About Médecins sans frontières Operational Centre Geneva

Médecins Sans Frontières (Doctors Without Borders) is an international, independent medical humanitarian organisation providing medical assistance to people affected by conflict, epidemics, disasters or exclusion from healthcare. Since its creation by a few volunteers in 1981, MSF Operational Centre Geneva has grown considerably. Today, more than 60,000 employees, helped by volunteers, support OCG projects in the field. MSF OCG is the first of MSF’s five operational centres to set a carbon dioxide emissions reduction target. This follows the decision of the entire MSF movement in 2020 to reduce the environmental impact of its emergency medical projects by adopting an environmental pact.

About the Climate Action Accelerator

The Climate Action Accelerator, a non–for-profit initiative, aims to mobilise a critical mass of community organisations in order to scale up climate solutions, contain global warming below 2°C and avoid the risk of dangerous runaway climate change. The aim is to help shift the aid, health and higher education sectors towards a radical transformation of their practices, pursuing emissions reduction targets (~50% by 2030) and a ‘net zero’ trajectory, in line with the Paris Agreement.