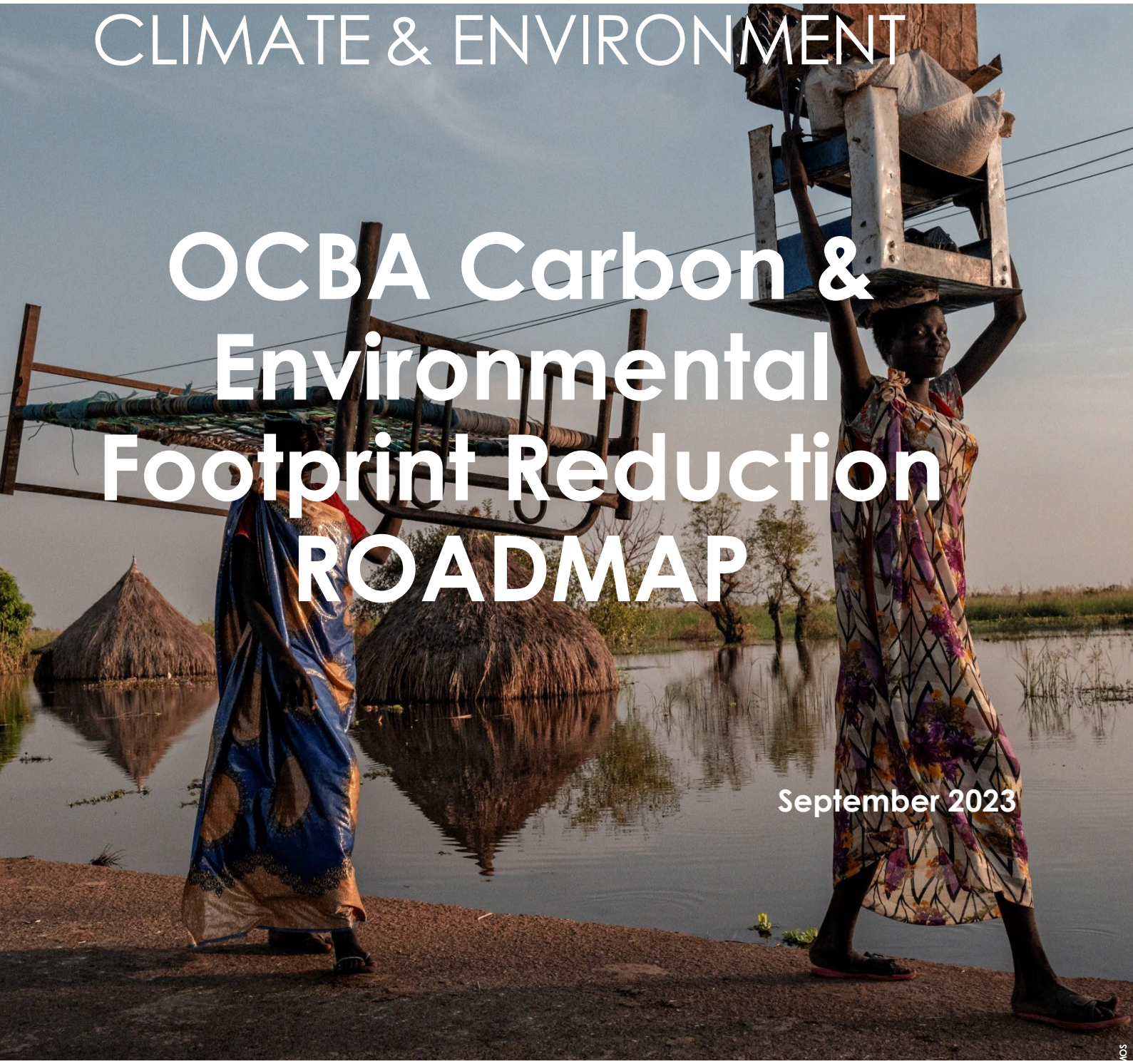
CLIMATE & ENVIRONMENT

OCBA Carbon & Environmental Footprint Reduction ROADMAP



September 2023

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0. Foreword

Since our inception, MSF OCBA has strived to respond to the **medical and humanitarian needs of the most vulnerable and neglected populations in the world**. Recognizing our limitations, we have constantly assessed and reassessed where our efforts should be placed according to social, political or environmental factors and with a focus on conflicts, natural disasters and epidemics. In our 2020-2025 Strategic Orientation, we were reaffirming our operational choice with those populations in conflict zones, affected by severe violence and with a clear emphasis on emergency response, convinced that is with them and close to them, where we can have the biggest impact and be more relevant.

Today, the evidence of the health and humanitarian consequences of climate and global environmental change is extensive, also the scientific consensus that global warming causes the growth in frequency and severity of extreme meteorological events. In the medical-operational analysis of our portfolio, we clearly recognize that **climate and environmental changes** are **influencing the type, scale, severity and dynamics of humanitarian crisis**. In parallel, the **same regions we are placing our efforts today, the most vulnerable in the world**, are and will be some of the most affected from these changes and the least prepared, therefore **acting as an amplifier to the already existing risks and vulnerabilities**. This is why, we have taken significant climate-based commitments in line with the movements over last years[1].

The future is uncertain, but what it is certain, is that as of today, our future is not built on solid ground. In fact, the **climate crisis is accelerating faster than most scientists expected**. It is **more severe than anticipated**, threatening natural ecosystems and the fate of humanity[2].

MSF OCBA is committed to respond to this enormous challenge and responsibility through **two key pillars** of work: **1. Medical and Humanitarian Action** (including Anticipation, Preparation, Response and Adaptation); and **2. Reducing our environmental footprint**, together with a transversal work on **advocacy and public communication**.

Regarding our first pillar, we are planning to do it through the **same vision reflected in our Strategic Orientations**, **focusing on the populations affected by violence and conflict, on which the effects of the changes are amplified**. We want to make sure, that the climate and environmental layer is integrated transversally in our operational approach: from the contextual analysis & capacity to understand and anticipate to changes, to the way we prepare, assess and finally, intervene. By taking this direction, we **reaffirm once more, our choice to prioritize proximity to the most vulnerable** amongst the vulnerable, living under conflict and violence, in the places where we are more relevant. This pillar will be further structured in a specific strategic framework.

In parallel, we are strongly committing, as it is clearly detailed through the chapters of this **Footprint Reduction Roadmap**, to **address our environmental impact and reduce by half our greenhouse gas emissions by 2030**. We are driven from a strong sense of responsibility and compassion with the communities with whom we work, seeking to preserve the do no harm principle, in a challenging global context. Therefore, the actions and solutions stated in this

[1]MSF has committed to mitigating its contributions to the climate emergency by setting a movement-wide carbon reduction target in December 2021.
MSF has signed the Climate and Environment Charter for Humanitarian Organizations
Movement wide commitment in the MSF 2020 Environmental Pact
[2] Ripple and al, Bioscience, 2019

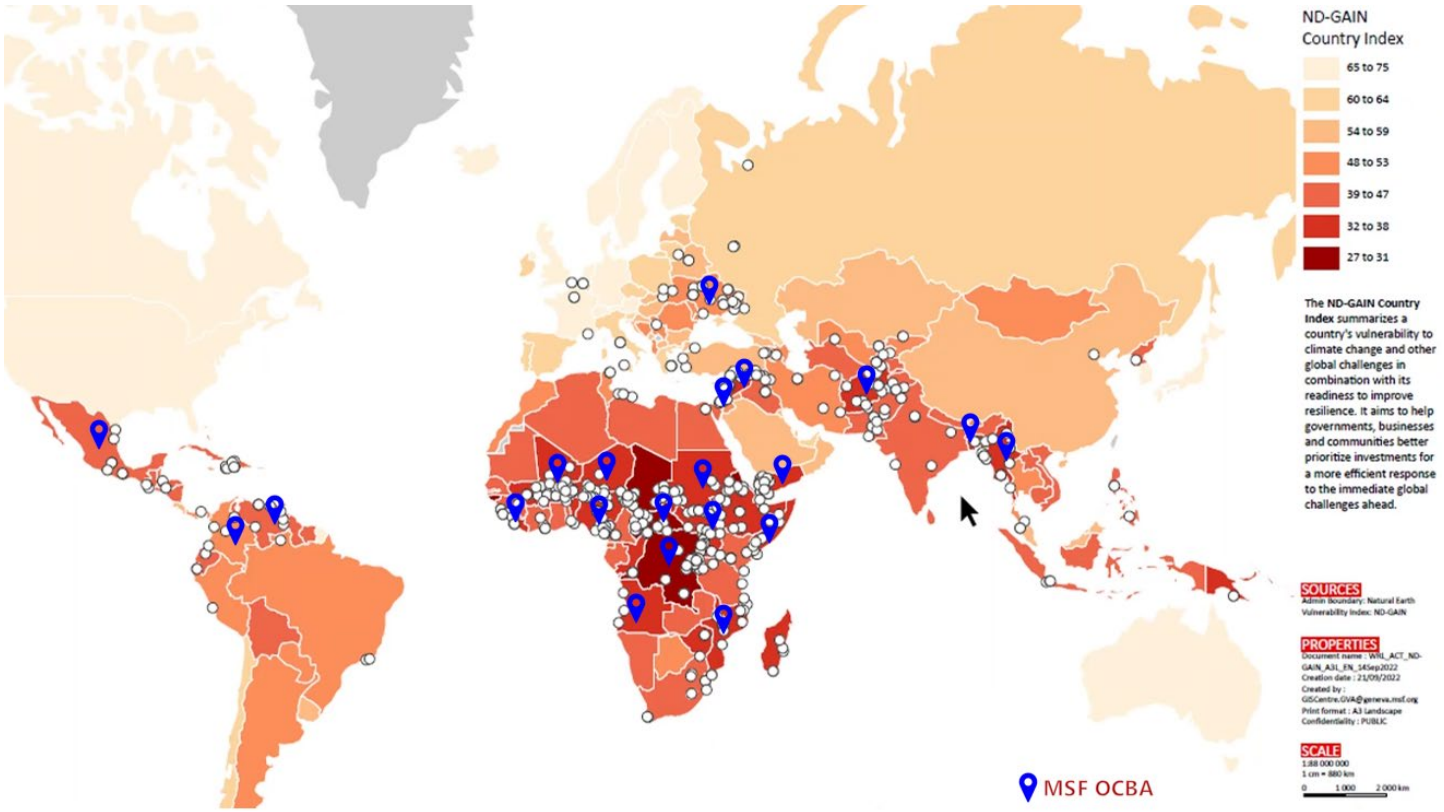
roadmap, **aim to become an existential element of the way we operate.**

At last, but not the least, we will transversally continue **bearing witness and alerting of the consequences of the climate crisis** on the health and wellbeing of our patient and populations, while **ensuring public accountability and contributing to more responsible and sustainable humanitarian action**.

1. OCBA Point of Departure

In 2021, the MSF movement collectively agreed to set an **ambitious movement-wide carbon reduction target of 50% by 2030**. MSF OCBA voted in favor, driven by our responsibility towards the communities with whom we work, and ensure our foremost concerns to do-not harm while also precising that this target should serve as "an aspirational target, aiming to boost our action regarding climate change and as an opportunity to align with global ambitions". Under this prism we have developed **this detailed Roadmap that must drive MSF OCBA to reduce our footprint in the years to come** and support to reach to the collective target.

The following world map portrays country's vulnerability to climate change (according to the ND-GAIN index) and MSF Movement projects[3] - white circles & OCBA project – blue dots, showing that many of our projects are located in the countries with higher levels of climate exposure and vulnerability, adding yet another layer to the already existing risks and vulnerabilities populations are facing. It is therefore, in these regions of the world where our efforts in terms of **operational response and adaption will focus**, also where our **responsibility to mitigate** our negative impact **is higher.**



[3] As of 2022

1.1. Not starting from 0.

On our commitment to reduce Climate and Environmental footprint, **we are not starting from 0.** Since 2009 and progressively intensified over the last decade, we have gone through a profound reinvention and reshape of our institution and operational model to attempt to deliver better operations, closer to those who needs us the most. Beyond the direct operational and structural consequences that these changes were seeking, it has, let's be clear, mostly indirectly, allowed OCBA to start to improve and reduce on some elements of **our carbon footprint** through the following categories:

Decentralization & Staffing Model

A key pillar of this reinvention process was the decentralization of substantial part of our HQ capacities to Operational hubs located in proximity to operations (see OCBA Operational Network). We wanted our management and support environment to be more attuned to environments where our operations are implemented. We started in 2009, and today, OCBA has its HQ staff distributed all over the world in Jordan, Spain, Kenya, Senegal and Colombia and four (out of six) cells based outside Barcelona in four operational hubs (Nairobi, Dakar, Bogotá and Amman), as well as an Asia Unit largely managed from Central and Southeast Asia. These cells manage 70% of the regular portfolio and 42% of the emergency portfolio.

Recruitment is becoming more and more decentralized, with 53% of the recruitment coming from the Global South in 2021. In our international staff pool, more than 50% come from countries in Africa, the Middle East and South America. As for coordination positions, almost 50% of our coordinators come from these three regions.

These efforts have direct impact on our Carbon Footprint, mainly through the reduction of effective travel worldwide, that accounts for over 26% of our Footprint, but also other aspects of our work such as procurement[4] and others our procurement (as more efforts are placed in the regions).

Efficient & Effective

In our efforts to improve efficiency and optimize resources made that back in 2012 and accelerated by COVID-19 reality, we already started to implement hybrid briefings and debriefings models only for coordination positions, that are briefed and debriefed face to face at the Desks of their missions, while the rest is done online. We have also strengthened staffing models that are emphasizing the recruitment of our Local Hired Staff or pushed to adopt learning solutions that make the most of our online solutions, complemented with more focused in Mission or Regional Face to Face trainings.

In this new digital era, we have invested efforts to consolidate and improve adapted digital solutions and Knowledge management, looking for more efficient way, more respectful with carbon footprint while providing the needed support to our teams. Other existing investment in high impact projects such as AKIBA, TrackMyStuff or Barcode scanning apps among others, must support efforts to improve efficiency what will directly impact our footprint.

On the other hand, the strong bet that OCBA took to improve our supply chain cycle must support the efforts to reduce our carbon footprint on domains that account for over 6% through

[4] We do not have yet measured impact on its impact on procurement

Freights or over 33% with Purchase of Goods on our footprint.

Other Technical projects

Our technical departments are also exploring and already investing on solutions that helps our operations to be more efficient and effective while impacting the reduction of our carbon footprint. We are investing on Solar Energy in several projects, promoting the adoption of reusable and biodegradable materials or progressing on our data collection and analysis to improve our decision-making process to name just a few.

This non-exhaustive list shows important carbon footprint reduction solutions and initiatives that MSF OCBA has already started to adopt in recent years based on different reasons and casuistic. These initiatives, however important**, are yet falling short to meet the needs,** therefore, we will be **speeding up the solutions and actions** defined in this ambitious roadmap, while being completely connected to the **efforts done in the movement and elsewhere** to capitalize on the collective experience and knowledge. ***The task is not easy and, also our commitment unnegotiable.***

2. Reducing our Footprint

2.1. Our strategy:

We have identified **seven domains** that cover all our key areas of operations: transport, procurement of goods and services, medical practices and models of care, energy and construction, waste & ecosystems, digital and other transversal elements. For each of these key areas, we have **developed specific solutions**, **31 in total**, that impact either the reduction of our **carbon footprint or of our environmental degradation**. Finally, for each of these solutions, we are outlying general recommendations that serve to indicate and orient our Field, Technical and support teams the line of action we want to take for each solution to reach our environmental objectives. We are presenting them in more detail in the coming chapter.

These solutions and actions must be embedded and integrated in the way we work. We are not changing our social mission, we continue with the **same strategic objectives**, supporting those in the world most affected by conflict, violence and emergencies. This Roadmap is guiding us to do it so, **in a way that is more respectful and less harmful to the environment and by consequence, more respectful and responsible with the populations we serve.**

The clock is set and guided by this Roadmap our teams will continue to integrate these solutions in our projects and activities. This integration is going to be done **through policies and guidelines and embedding actions into our annual plans and department plans**. We are all aware, that in order to succeed, resources are needed. Therefore, from an institutional standpoint, we will ensure that the **required means are available**, in terms of expertise and support, financial resources or personnel.

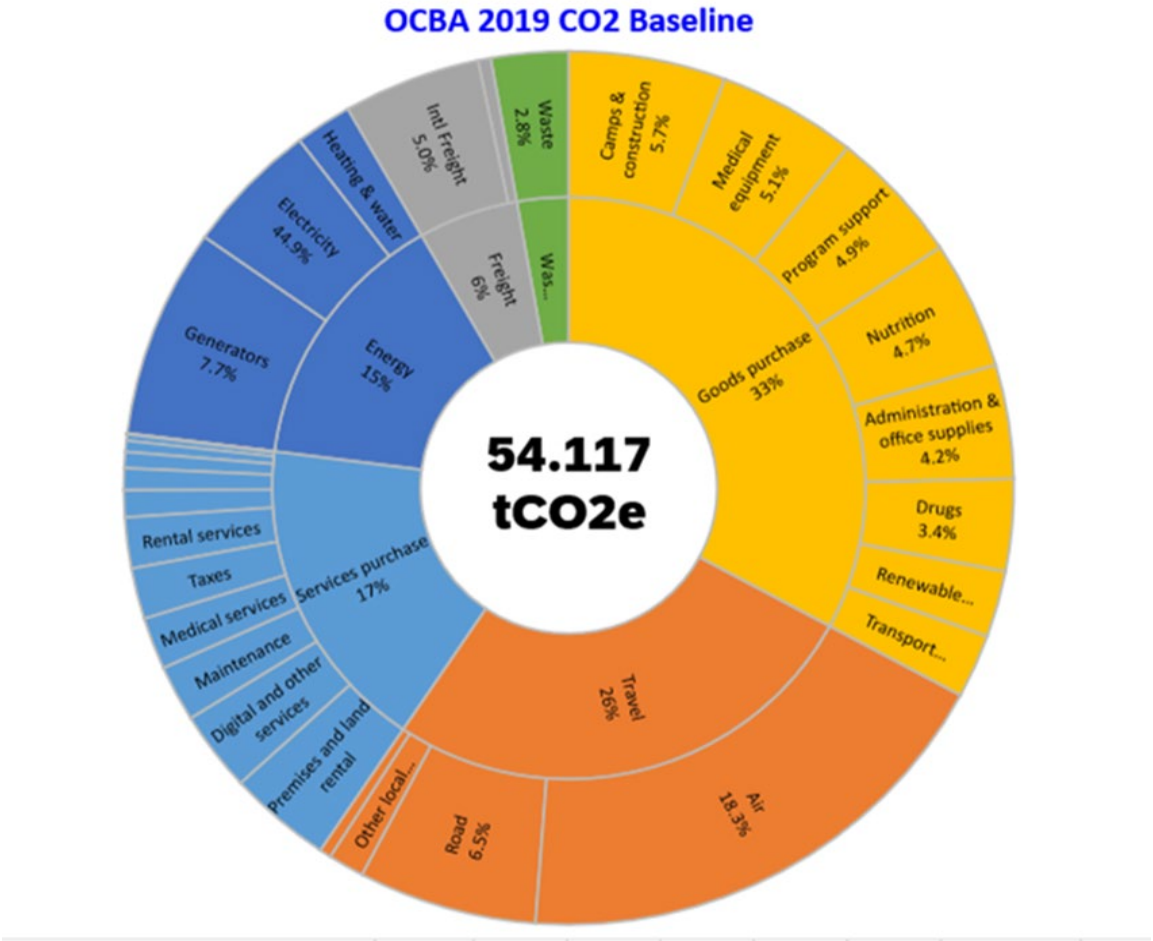
We are obviously at the beginning of the road. We have developed this Roadmap and its targets, through deep reflections with our technical experts and operational teams, bringing in expertise, and building on our experience and knowledge. Yet, we have still important elements of uncertainty and margin for improvement and evolution. Nevertheless, **this is a new exercise for all the movement,** often based on hypothesis and estimates, developed not with

the complete information, expertise or time. Therefore, this **Roadmap is considered as a living and evolving document** that will be fostered with our increasing knowledge and exposure, in **close collaboration with the rest of the movement**, that has started this same path and that allow us to build on synergies and shared experiences, but also, **together with the world**, that is indeed moving towards greener directions.

Finally, we have set a **governance system** that must support the implementation of our Climate and Environmental Health ambitions (see chapter 4). In it, a specific workstream on Footprint Reduction that includes key members with decision-making positions from key departments, will oversee the proper implementation of this roadmap while guaranteeing that challenges or pitfalls are resolved.

2.2. MSF OCBA's 2019 carbon footprint

Our footprint is estimated at 54.117 tCO2e (metric tons of carbon dioxide equivalent).



It has been calculated for 2019 and quantifies how many greenhouse gas emissions MSF OCBA is accountable for. The scope of this calculation includes our Headquarters, 27 missions, 103 projects (52 emergencies), 84% of them in unstable contexts and encompassing around 6.750 staff and €196M budget (2019).

The methodology used to evaluate our carbon footprint is in accordance with the Greenhouse Gas Protocol and include direct (fuel use and energy purchase) and indirect (all other purchase of goods and services) emissions. It's important to understand, that considering the carbon accounting's science is relatively new and in constant improvement, together with direct elements linked to the nature of humanitarian work, the "uncertainty factor" of the

estimation is fairly high (about 70%). This reality is common in all MSF movement and to the humanitarian sector. It does, however, allow organizations to identify their **major sources of emissions** and begin **to take and prioritize actions**.

When comparing OCBA results with other Sections, there is **clear homogeneity in the distribution** of emissions, as it is also with other organizations of the same sector[5]. The carbon footprint is concentrated in four overall categories of emissions: purchases of goods, travel, purchase of services and energy in this order.

Having a deeper outlook to the subcategory level, we can say that few subcategories are responsible for more than half of the total footprint:

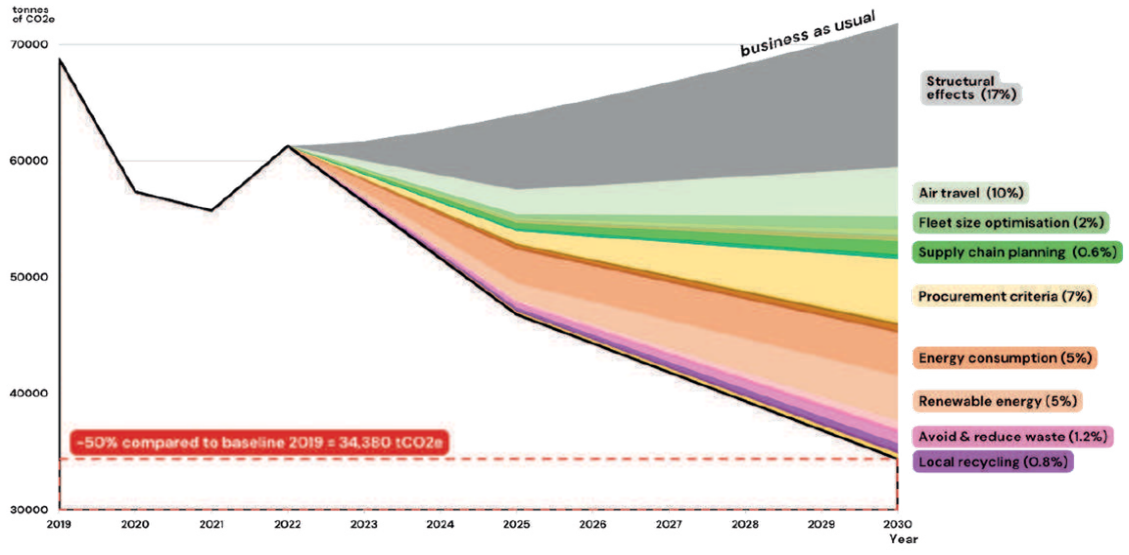
- Transport of Goods and People: 17.330 tCO2e (32%)
- Electricity generation and use: 7.965 tCO2e (15%)
- Purchase of medical and Paramedical Goods and Equipment: 8.480 tCO2e (16%)

This brings a total for these four items of 33.775 tCO2e or 63% of OCBA's total emissions. Transport of goods and people by air, road and sea, accounts for 32% of total OCBA emissions, while the purchase of medical and paramedical goods and equipment counts for 16%. The high proportion of these two families, is linked with the nature of our work based on medical and humanitarian operations over the world, in some of the most complex conflicts, and with services that are based on people.

2.3. Our Target and Trajectory

In this chapter, is explained the overall trajectory by categories of this Roadmap. First, in a scenario where neither MSF nor our suppliers or service providers takes any kind of action, our emissions would continue to increase over the coming decade, in proportion to the growth of our operations. This is portrayed in the graph with the Scenario "Business as usual". This scenario is then compared with a second scenario, in which MSF does not take any action, in a world, where actions are taken. This scenario is names " MSF No Action". Finally, we show how the different solutions defined in this roadmap are helping us to reduce our emissions by half.

Graph: OCG trajectory Graphic[6].



[5] Such as Alima or Acted

[6] This trajectory was calculated for OCG. Considering the similitudes between both sections (OCG vs OCBA), it's already a good approximative graphic to what OCBA trajectory is. This graphic will be calculated for OCBA and updated in this document in next stages.

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 category/solution; in other words, how much the category will contribute to the 50% reduction in emissions by 2030. The 31 solutions selected all play an important part in decreasing OCBA's emissions, including structural effects, which are explained on the following page.

Baseline emissions (2019 footprint)	Estimated "No Action" Scenario[7]	Projected Roadmap Emissions estimation[8]
54,117 tCO2e	**72,000** tCO2e	**27,500** tCO2e -50% (compared to 2019 baseline)

Therefore, with this Roadmap we aim for a 50% reduction trajectory by 2030, compared with our 2019 emission and excluding any resort to carbon offsets for now[9].

What are structural effects?

Structural effects are included in carbon reduction trajectories in order to account for the fact that regardless of the individual choices of a given organization, societies as a whole are decarbonizing through a mix of public policies, legislative structural initiatives aiming to optimize, electrify or decarbonize.

These structural effects – which some MSF partners estimated to be around -17% by 2030 and OCBA will be in similar line – are included in the calculated emissions reductions that are expected to result from the solutions explained in this roadmap. Examples of structural effects applied by category:

- Electricity from the grid: - 1.13% per year (globally)
- International maritime and air transport: - 2% per year
- Production of goods: 3.4% per year
- Services: - 2.3% per year

It must be highlighted that this Roadmap contains an important range **of uncertainties** linked to several aspects including the carbon accounting methodology explained above, the evolution of our operational volume until 2030, world-wide structural changes and other innovation and advances in the sector among others. Therefore, this Roadmap, needs to be considered as the paradigm of an **alive and in continued evolution document** that will need to be progressively updated and adapted to ensure is effectively responding to the evolving reality. Consequently, we are also defining targets that have a wide range of uncertainties, therefore, **they become inspirational and aspirational** targets that will also require progressive update and adapt. Nonetheless, what is **capital and unnegotiable**, is that without delay, we **speed up the pace in which the actions and solutions defined in this roadmap are implemented.**

[7] Both are rough estimations that will be updated with the final number together with the trajectory calculation
[8] Idem above
[9] This topic deserves further discussion and clear internal positioning as it has wider implications

3. Our Roadmap

3.1. Our Roadmap in a Nutshell:

In line with the categories identified as priorities in our Carbon footprint, we have set an **ambitious roadmap** to tackle them, prioritizing those actions that have bigger impact first but integrating in parallel a much wider range of actions and solutions in the medium-long term to progressively become a much respectful and greener organization.

The key targets and actions of our Roadmap are summarized in next table:

C.	Domain	Main Targets	Main Actions
TRANSPORT	Air Travel & Commuting	35% work-related air travel by 2030 70% travel ensured through companies with less environmental impact by 2030	▪ Reduce Business travel & Promote good practices & choices ▪ Continue Hybrid BRF/DBRF + Explore other options & Review training locations choices ▪ Explore other aviation technical solutions ▪ OCBA Positioning on key practices ▪ Promote greener home-office commuting
	Fleet Management	30% emissions related to vehicle fuel by 2030	▪ Optimize fleet size, fleet composition (according to Ops needs & Market options) and movements and follow up (my fleet)
	Freights	80% non-priority air shipment by 2030 60% of freight through less emissive companies by 2030 5% air freights by 2030	▪ Increase sea and road freights through better supply chain planning and better positioning of goods ▪ Select greener transport service providers ▪ Optimize shipments
GOODS & SERVICES	Sourcing & Procurement	25% life-cycle emissions goods & services by 2030 6% t.km transported 2030 5% tone km transported air-sea	▪ Choose suppliers with lower environmental footprint ▪ Prioritize locally and regionally produced items when feasible / effective ▪ Reduce goods packaging
MEDICAL PRACTICES&	Medical practices & Materials	50% Over-prescriptions & 70% unnecessary orders by 2030 5% volume medical items purchased-shipped by 2030	▪ Explore & Adopt medical protocols ▪ Reduce over / unjustified use of medical items ▪ Switch to medical materials with reduced footprint
ENERGY & CONSTRUCCTIONS	Construction & Thermal Efficiency	90% construction works according to best green practices by 2030	▪ Favor sustainable constructions & bioclimatic Architecture ▪ Increase thermal efficiency in buildings & reduction of energy consumption
	Consumption, Renewables & others	35% energy consumption by 2030 70% fossil fuel generators replaced by renewable energy by 2030 100% aircon & cold chain operated with non-HFC by 2030	▪ Reduce energy consumption and improve energy efficiency of electric installations ▪ Decarbonize electricity & energy production (renewable sources, solar solutions, others) ▪ Sustainable heating items/systems ▪ Reduce emissions high global warming gas
WASTE & ECOSYSTEMS	Plan, Avoid, Reduce, Recycle, Reuse, Dispose	100% projects with waste management plans & ops waste quantified 50% waste by 2030 100% projects identified viable-effective recycle streams by 2030	▪ Waste management Framework in place with monitoring systems. ▪ Avoid & Reduce Waste generated by MSF activities ▪ Increase local or regional recycling of MSF equipment and waste ▪ Limit land-wate-air pollution through

C.	Domain	Main Targets	Main Actions
			environment friendly treatment alternatives &policies
	Water, Land & Biodiversity	100% regular projects implement best feasible environmental water practices From 2024, systematically integrate plantation dimension into construction projects.	▪ Preserve water sources ▪ Prevent & Reduce damage to local environments ▪ Preserve the land & Soil around our facilities
TRANSVERSAL & DIGITAL	Digital	40% volume of online data storage by end 2025 Approach for cold storage in the cloud by 2025. Ensure 5 years average lifespan of IT equipment by 2025	▪ Rationalize amount of data storage and transfer ▪ Reduce carbon intensity of digital equipment & services (increase lifespan IT, explore options mutualize personal – professional equipment, others)
	Greener Offices & Facilities	Workstation optimitsation policy in place by 2025 Facility good practices playbook in all facilities by 2025	▪ Optimize office space/use in HQs ▪ Greening offices/facilities: Promote good office/facility practices and responsible behaviors, promote green-groups, others
	Awareness, Responsible Behavior & Adapting to changes	Awareness & Promoteing responsible choices Capitalse & build synergies with MSF movement initiative	▪ Promote & Intensively invest on group awareness, best practices and promotion of responsible individual greener choices and decisions transversally to all the relevant solutions. ▪ Promote, capitalize and build synergies with MSF movement wide experiences, research or practices

In next chapter, we explain each of the 31 Solutions in detail.

3.2. Solutions per Categories

TRANSPORT: TRAVEL	**26% of our carbon footprint** 14,369 tCO2e in 2019 → 7,000 tCO2e in 2030
Passengers movements - and particularly by air (18% of the total)- is OCBA's single larger source of emission. This is coherent with the fact that MSF relies on people to operate our Medico-humanitarian operations over the globe. In this category it's comprised all the movements by air, road and sea including the needed movement to operate our operations including referrals and staff commuting.	PICTURE TRANSPORT

Solution

1. **Reduce business air travel and develop sustainable travelling practices:**
   - ✓ Consolidate Responsible travel policy & actively promote good choices and practices

- ✓ Continue with Hybrid models briefings & Debriefings exploring additional options.
- ✓ Review training locations (promoting local and regional) & delivery models integrating climate lens
- ✓ Reduce business travel
- ✓ Explore other aviation technical solutions together with MSF movement

Commitments:

- ⇨ Reduce by **20%** the mileage related to business travel by air by end 2025 and **35%** by 2030
- ⇨ End 2025, **30%** of travel are ensured through compagnies with less environmental impact and **70%** by 2030.

2. Optimize fleet size, fleet composition, movements and follow up:

- ✓ *Motorized Fleet Management Basic implementation* in all projects (Log Basics)
- ✓ Optimize vehicles usage in the missions where context and security allow it
- ✓ Train drivers on eco-driving
- ✓ Purchase lowest emission vehicles adapted to needs & reflect on future standards
- ✓ Full adoption at field level of MyFleet monitoring and analysis tool.

Commitments:

- ⇨ Reduce by **15%** the forecasted emissions related to vehicle fuel consumption by end 2025 and **30%** for 2030

3. Reduce the carbon impact of home-office commuting

- ✓ Promote public transport and soft mobility in all offices where context allows it.
- ✓ Encourage part-time remote working, notably for HQ in line with OCBA policy

Commitments:

- ⇨ 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.

TRANSPORT: FREIGHT	**6% of our carbon footprint** 2.960 tCO2e in 2019 → 2,000 tCO2e in 2030
Operating medico-humanitarian operations requires medical and support products and equipment that many times must be purchased and transported from outside of our field operations to ensure standard quality. We ship those by air, road or sea contributing to our carbon footprint – particularly air shipments. Beyond the important efforts placed in recent years to optimize our supply chain and freights management, still margin for improvement is reflected in these solutions	PICTURE freight

Solutions:

4. **Select transport service providers using means and routes with a lower carbon footprint**
   - ✓ Include environmental criteria into the selection process of transport service providers
   - ✓ For international freight → support ESCs action
   - ✓ For local freight → explore the viability, when context allows

   Commitments:
   - ⇨ By end 2025 **20%** of tone km (tn. Km) t.km freight is ensured through companies or boats using less emissive fuel, and **60%** by 2030.

5. **Reduce Air shipments, thanks to better supply chain planning:**
   - ✓ Reduce irregular and high priority orders shipped by Air, and limit air freight to specific agreed goods.
   - ✓ Reduce stockouts leading to urgent replenishments by air by improving supply chain planning

   Commitments:
   - ⇨ End 2025, reduce by 30% the tn. Km unjustified transported by air or qualified "high priority" resulting from poor planning and 80% in 2030

6. **Support actions to consolidate cargos, when possible and when proven operational effectiveness**
   - ✓ Consolidate shipment between OCs and missions through better supply chain planning when operationally possible

   Commitments:
   - ⇨ Reduce t.km by airfreight by 2% by end 2025 and by 5% by 2030

7. **Increase sea freight and road freight versus ASAP air freight thanks to better positioning of the goods**
   - ✓ Optimize the supply network to make storage locations closer to use and distribution locations, including preposition of goods at suppliers' facilities
   - ✓ Support ESC to increase direct deliveries from suppliers to hubs/ missions, when no impact in operations due to increase of number of cargos

   Commitments:
   - ⇨ End 2025, reduce by 10% of the forecasted t.km transported by air and 20% in 2030

GOODS & SERVICES	**51% of our carbon footprint** 27,300 tCO2e in 2019 → 14,000 tCO2e in 2030
This category accounts for 50% of our carbon footprint and includes all goods and services purchased except for energy and transport. It's important to highlight the reduced information on the environmental impact of these too broad categories what forced us to apply financial proxies to calculate them. Regardless of this	PICTURE Goods and services

reality, this roadmap includes wide range of solutions not only at identification and selection of the goods and services but also, to optimize from Climate perspective, the usage of these goods and services through our activities.

Solutions:

8. Reduce unnecessary material purchases and, consequently, reduce losses and quantity of transported goods, by ordering only what is needed:

- ✓ Improve forecasting to avoid overstock situation leading to losses
- ✓ Improve local supply chain visibility

Commitments:

- ⇨ Reduce by **30%** the t.km of excess goods bought and transported due to non-accurate forecasting and poor needs estimation by end 2025, and **80%** by 2030

9. Purchase items and services from suppliers with a lower environmental footprint

- ✓ Request visibility on carbon value and life cycle information for better informed orders on relevant items (long term strategy)
- ✓ Include environmental criteria for services and products in the sustainable procurement guideline to be developed in line with the global procurement policy.
- ✓ Identify lower carbon or lower waste generating alternatives for most important items including replacement of plastic made items

Commitments:

- ⇨ Reduce **5%** by end 2025 the projected emissions related to the life cycle of goods and services purchased and **25%** by 2030.

10. Support ESC action on reducing and optimizing packaging of goods

- ✓ Optimize the packaging or use environmentally friendly alternatives for most important items

Commitments:

- ⇨ Reduce by **2%** the t.km transported by end 2025 and **6%** by 2030

11. Reduce number of km made by goods thanks to procurement of locally or regionally produced items.

- ✓ Prioritize local or regional purchase for heavy or large non-medical items if quality can be assured at the same level as international purchase and if carbon reduction can be confirmed
- ✓ Pursue medical supplies identification by ESCs of local or regional opportunities, in line with agreed quality assurance system and international procurement policy, in order to organize direct delivery from supplier/manufacturer

Commitments:

- ⇨ Reduce by **3%** by end 2025 and **5%** by 2030 the t.km transported by air or sea, through regional purchases.

MEDICAL PRACTIVES & MODEL OF CARE	**19% of our carbon footprint** 9,900 tCO2e in 2019 → 4,500 tCO2e in 2030
Medical practices, products, equipment or services are obviously capital to our medico-humanitarian operations. In this category, we are including solutions that while having less environmental impact maintains the quality and effectiveness of our medical services.	PICTURE OT or other medical activity

Solutions:

12. **Reduce the unnecessary provision of medical items, drugs and consumables/spare parts related to lack of compliance with medical protocols:**
    - ✓ Rationalize drugs selection ordering and dispensing, use of consumables and patient prescriptions
    - ✓ Optimize medical equipment and associated items (consumables & spare parts) ordering, use and maintenance

    Commitments:
    - ⇨ Reduce by 20% by end of 2025 and 50% by 2030 the level of over-prescriptions.
    - ⇨ Reduce by 30% by end of 2025 and by 70% by 2030 the overuse of consumables in MSF programs
    - ⇨ "Reduce by 30% by end of 2025 and by 70% by 2030 orders of unnecessary medical material in MSF programs

13. **Switch to medical protocols that lead to a reduced environmental impact whilst maintaining equivalent medical effectiveness & in coordination with other OCs**
    - ✓ Train and inform medical practitioners on updated protocols and their environmental outcomes

14. **Switch to medical materials with a reduced carbon / environmental impact whilst maintaining equivalent medical effectiveness**
    - ✓ Validation of alternative medical material like the use of recycled plastic items, anesthetic gas and inhalers with less high warming potential, equipment without lithium ion batteries among others

    Commitments for 13 & 14:
    - ⇨ Reduce by 2% the volume of purchased and transported medical drugs, consumables and equipment by 2025 and by 5% by 2030

ENERGY & CONSTRUCTIONS	**21% of our carbon footprint** 11.070 tCO2e in 2019 → 5,000 tCO2e in 2030
Energy transition and sustainable architecture it's a top priority for MSF OCBA. This category comprises two major aspects: on one side, the	PICTURE Energy & Constructions

attempt to improve our energy efficiency, reducing our consumptions; on the other hand, shifting progressively towards renewable energy sources & other technological innovations where feasible.

Solutions:

15. Favor new sustainable constructions / Bioclimatic Architecture

- ✓ Implement *Construction and Shelter Basics* in all projects (Log Basics).
- ✓ Respect construction best practices/standards to encourage sustainable design and appropriate buildings or infrastructure
- ✓ Ensure design elements and materials choice are taking in consideration the local climate.

Commitments:

- ⇨ By end of 2025, 50% of construction and rehabilitation works have been properly managed according to best practices and 90% by 2030.
- ⇨ By the end of 2025, 50% of all construction works are managed and designed to decrease construction waste and energy consumption and 80% by 2030.

16. Increase thermal efficiency in buildings /Reduce the energy consumption of buildings

- ✓ Apply passive cooling principles in all new facilities (with local/context approach).
- ✓ Improve energy performance of the buildings through sustainable design, passive measures, including insulation and low carbon emissions materials, tree plantations and preservation of green areas.
- ✓ When already implemented passive measures are not sufficient, implement low consumption active measures where applicable (alternative to AC: Air cooler, fans, …)

17. Reduce energy consumption and improve energy efficiency of electric installations

- ✓ Implement *Energy Basic* in all projects (Log Basics)
- ✓ Monitor electric installations to understand consumption and optimize power setup and usage - Assess alternative ways to sizing generators based on statistics and real consumption data.
- ✓ Campaign for and train staff to make responsible choices and behavior changes in all domains requiring use of energy.
- ✓ Install automated regulation of electric equipment adapted to mission possibilities & opportunities
- ✓ Purchase energy efficient equipment (AC, heaters, light appliances…)

Commitments 16,17:

- ⇨ Reduce the forecasted consumption of kilowatts-hours by 10% by end 2025, and by 35% by 2030

18. Decarbonize electricity & energy production

- ✓ Reduce fossil fuel produced electricity through renewable resources (photovoltaic panels, wind turbines and other emerging alternatives) & appropriate generator sizing
- ✓ Use solar energy for specific equipment (hot water production, water pumps…)
- ✓ Subscribe to a decarbonated energy supplier for the buildings where relevant

19. Integrate available market solutions & pilot new technologies if occasions arise

- ✓ Replace lead batteries to lithium
- ✓ Solar air conditioner and/or AC/DC solar hybrid air conditioner
- ✓ Generator paralleling // AC coupled solar installation without batteries

20. Encourage production, usage and distribution of sustainable heat items in MSF compounds and programs

- ✓ Use alternatives to fossil fuel, charcoal, or wood in distribution or use of heat production items (e.g. biochar briquettes)

Commitments 18, 19, 20:

- ⇨ End 2025 5% of energy consumed from the grid will come from, or be replaced by renewable energy sources and 20% by 2030 targeting countries where the electricity mix comes mainly from fossil fuel
- ⇨ End 2025, 25% of the kilowatts-hours produced by fossil fuel generators will be replaced by renewable energy sources and 70% by 2030."
- ⇨ Reduce by 50% the quantity of charcoal and firewood used in MSF compounds and programs by 2025 and 80% by 2030.

21. Reduce emission linked to gas with high global warming potential

- ✓ Purchase AC equipment with alternatives to HFC gas
- ✓ Purchase cold chain equipment with alternatives to HFC gas
- ✓ Ensure responsible commissioning, maintenance, decommissioning (including recycling at local, national and regional level) of equipment with high global warming potential gas

Commitments[10]:

- ⇨ By end 2025, 30% of the Air Conditioning & cold chain equipment will be operated with non-HFC gases and 100% by 2030.
- ⇨ 100% of the equipment will be decommissioned through responsible channels in 2030.

WASTE & ECOSYSTEMS	**3% of our carbon footprint** 1.520 tCO2e in 2019 → 800 tCO2e in 2030
Waste emissions accounts for 1.520 tCO2e in OCBA coming from weak or not adapted waste management procedures including relation with ecosystems that threatens public health and negatively impacts our environmental footprint.	PICTURE Waste & Ecosystems

Solutions:

22. Ensure all steps of waste management are followed in the best environment-friendly possible way.

- ✓ Implement the *Watsan – Wast Management Basic* in all projects (Log Basics).
- ✓ Establish and implement tailor-made Waste management Plans & mutualize management efforts amongst OCs (implement all Country Specific Policies related to waste – i.e. the Non-Medical Hazardous Waste CSP)

Commitments:

[10] Technical concerns on these commitment due lack of availability of needed resources in Global South at this stage

- ⇨ By end 2024 there is an understanding of the different types of waste and a framework to define the Waste Management Plan per country.
- ⇨ By the end 2025 we have quantified the waste in 50% of the projects and 100% of the projects in 2030.

23. Avoid and reduce waste generated by MSF activities

- ✓ Promote the adoption of reusable, biodegradable materials (i.e. menstrual sanitary pads & nappies, others) in the projects
- ✓ Favor products donations through better anticipation of expiration dates and a better enforcement of the donation policy
- ✓ Follow up other sections initiatives and incorporate new advances / innovations in terms to reduce waste in our projects and others.
- ✓ Promote maintenance, repairing & calibration of electronic and electric equipment when advisable and exploring local external solutions

Commitments:

- ⇨ End 2025, overall weight of waste has been reduced by 20% and by 50% by 2030.

24. Increase local and regional recycling of MSF equipment and waste

- ✓ Improve sorting of domestic waste from MSF facilities and evaluate the local waste streams
- ✓ Promote sustainable decommission of electronic and electric equipment through responsible channels.

Commitments:

- ⇨ By end 2025, 100% of regular projects have implemented the best feasible environmental options and practices related to water resource management.
- ⇨ By end 2026, 100% of the projects have assessed and identified viable recycling streams for their different type of waste (with special focus on Non-Medical Hazardous Waste).

25. Limit pollution of land, water and air through environment friendly treatment alternatives and policies

- ✓ Promote responsible outsourced treatment of hazardous waste
- ✓ Treat and monitor hospital wastewaters discharge with Best Environmental Possible Option
- ✓ Embrace recommendations from other OCs research initiatives related to hospital environmental risk and waste destruction systems.

Commitments:

- ⇨ 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.

26. Preserve water resources

- ✓ Implement the best achievable options after quick environmental impact analysis with regards to water resources preservation in each project.

Commitments:

- ⇨ By end 2025, 100% of regular projects have implemented the best feasible environmental options and practices related to water resource management.

27. Preserve the land and soil in and around our facilities

- ✓ Promote biodiverse solutions: tree plantations, integrate gardens in MSF premises, etc.

Commitments:

- ⇨ From 2024, systematically integrate a plantation dimension into construction and rehabilitation projects

DIGITAL & TRANSVERSAL	**3% of our carbon footprint** 1.600 tCO2e in 2019 → 900 tCO2e in 2030
The environmental impact of the growing use of digital technology is often underestimated and requires responsible actions to mitigate their effect. Beyond digital, there are additional good practices that if properly addressed will complement the global efforts of this roadmap. In this section we expose the agreed solutions on both categories.	PICTURE DIGITAL

Digital Solutions:

28. Rationalize amount of data storage and transfer:

- ✓ Optimize growth of data usage, "cold storage policies", introduction of restrictive policies (quotas) and regular deletion of unused data

Commitments:

- ⇨ Aspire to reduce the available volume of online data storage by 40% (OneDrive, E-mails) by the end of 2025
- ⇨ Approach for cold storage in the cloud by 2025

29. Reduce carbon intensity related to digital equipment and services:

- ✓ Increase the lifespan of IT and telecom equipment and reduce turnover rate
- ✓ Explore options to mutualize personal and professional equipment when relevant
- ✓ Work on awareness and best practices for reducing energy consumption at user level
- ✓ Fully leverage cloud technologies to increase efficiency of energy consumption and prioritize storage with eco-friendly data centers when optimal

Commitments:

- ⇨ Ensure average lifespan of IT equipment of 5 years at the end of 2025.
- ⇨ Approach for bring your own device in place by end of 2025.

Transversal Solutions:

30. Optimize office space/use in OCBAs Head Quarters over the globe.

31. Greening offices and facilities: Promote good office/facility practices and responsible behaviors

Commitments from 30, 31

- ⇨ By 2025, a policy for the use and optimization of workstations is established and implemented
- ⇨ From 2025, developed and systematically deployed a facility good practices playbook in all offices and facilities of the organization including green groups in main offices

4. Implement & Monitor

The implementation of this Roadmap requires **strong transversal commitments and coordinated efforts by all the departments** and levels of the organization. For this reason, and starting in 2023, a governance system has been agreed and endorsed by OCBA Management Team to guarantee the effective implementation of this roadmap (and to coordinate the implementation of the Medical and Humanitarian action pillar[11]).

For each pillar a workstream has been created composed of a short core group of 4-5 key decision makers representing each relevant department and Co-lead by the CEH Lead.

The Carbon Reduction Workstream has the responsibility to **guide, build ownership and accountability, monitor** and **ensure the right dissemination** of the solutions and actions included in this Roadmap with the support and supporting to:

- Department referents and technical focal points identified as responsible or focal points of each of the 31 solutions.
- Other operational and technical referents relevant to a particular solution or discussion topic (being them internal or external when needed).
- Field, Mission and Cell teams who are responsible to implement OCBA's activities.

Financial resources:

In MSF OCBA we have not yet an accurate estimation of what this Roadmap will entails in the short and long-term considering all elements raised in chapter 2 linked to uncertainty and unpredictability. Nevertheless, other sections are estimating to allocate between 1% and 3% of their annual budget to implement these solutions at least during the first years of the implementation. We can consider at this stage, this estimation as a good first approximate also for OCBA.

On the other hand, there are already several on-going initiatives and possibilities that must support our Field and HQ teams to implement these 31 solutions. There is an intensive work to build business cases for key investments that will support decision making. Together with Climate Smart TIC and intersectional efforts, it's being explored the possibility to coordinate push projects and explore specific and feasible funding streams. Earmarking, multiyear planning in terms of investments and other finance related solutions are being explored to facilitate implementation of key investments among others.

Monitoring and Accountability:

We have integrated monitoring and accountability commitments as integral part of the

[11] Refer to OCBA TOR CEH Governance: 2023.04. OCBA ToRs CEH Governance D4.docx

roadmap. We will quarterly monitor these initiatives through the systems and processes already existing in OCBA and referred in the Roadmap. We will have accountability sessions twice a year with the MT to identify achievements and challenges & gaps where support maybe needed.

Finally, we will ensure that our monitoring mechanisms for carbon emissions are in place by end 2023 and coordinated intersectionally what will enable us to monitor our progress on a yearly basis.

6. Annexes:

ANNEX 1 - Carbon detailed Footprint Roadmap: OCBA_Roadmap_Action Plan_2023.xlsx
ANNEX 2 - CEH Governance TOR: 2023.04._OCBA_ToRs_CEH_Governance_D4.docx
ANNEX 3 – 2019 Baseline Calculation: 2023 OCBA CO2 footprint calculation_v2.xlsx