REEFOLUTION

ANNUAL REPORT 2024

REEFOLUTION
PEOPLE FOR CORAL • CORAL FOR PEOPLE

COLOFON

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REEFolution Foundation

FOUNDED:
2015

CHAMBER OF COMMERCE:
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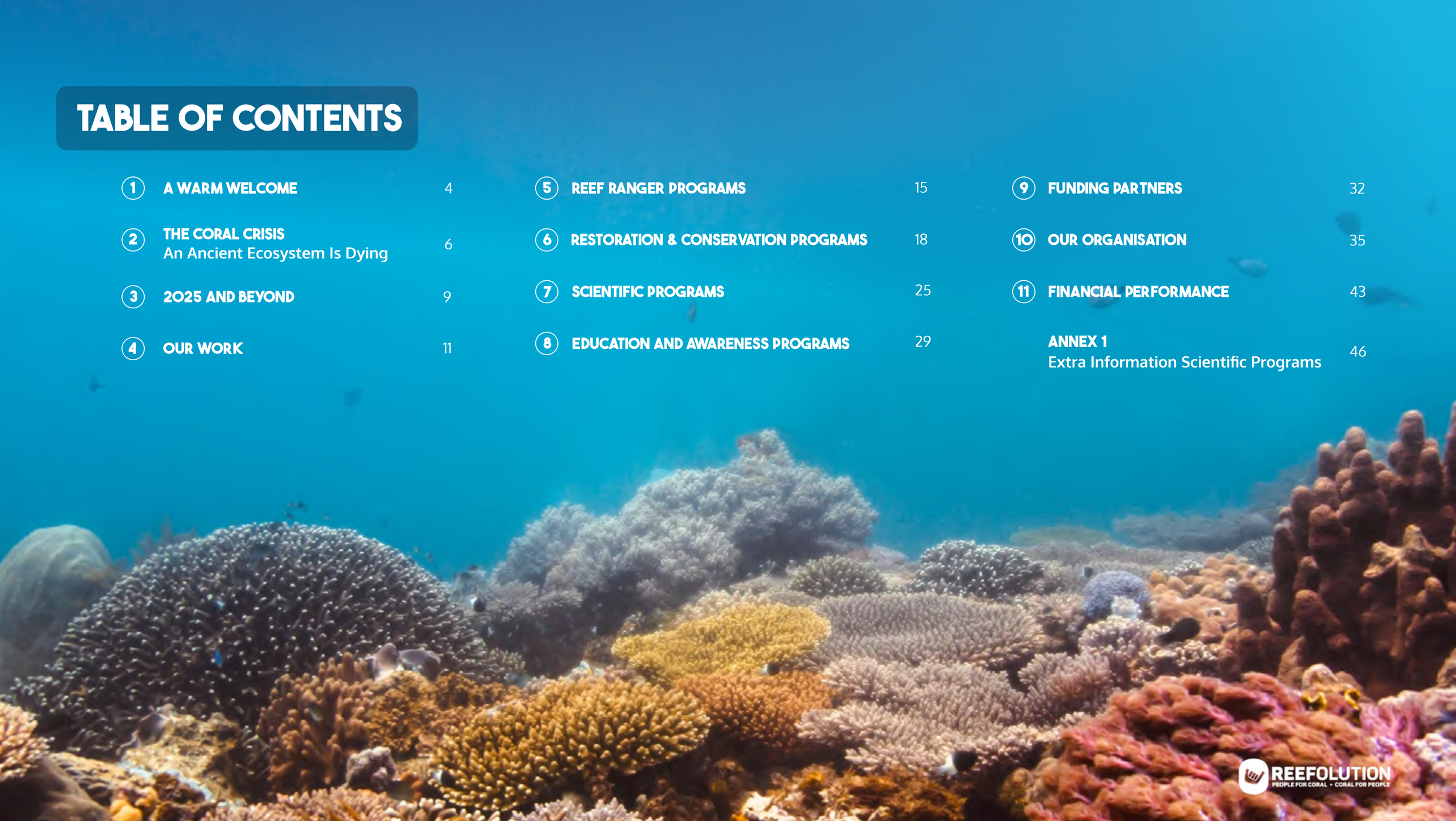


CHAPTER 1

A WARM WELCOME

A WARM WELCOME

TINKA MURK

CO-FOUNDER & PROFESSOR MARINE ANIMAL ECOLOGY

Over the past nine years, REEFolution has grown from a small group of Dutch volunteers and Wageningen students into a full-fledged organization, deeply rooted in both the Netherlands and Kenya. What began as a reef restoration project quickly evolved to include strong collaborations with local communities, training REEF Rangers and establishing protected zones. Through a dynamic exchange of knowledge REEFolution ensures that its work remains both effective and adaptable while creating opportunities for young conservationists to gain hands-on experience.

SERAH KIRAGU

TRUSTEE KENYA

"My name is Serah Kiragu and I joined as Chair of REEFolution Trust at the end of 2024. The mission of REEFolution resonates well with my over 20 years of experience in environmental conservation. Sustainability of conservation initiatives largely depends on meaningful engagement with communities who bring place-based knowledge and expertise.

In ten years, I wish to see REEFolution as the "go-to" organisation on community-centred coral conservation. Not only in Kenya, but on the African continent and beyond. And where there is a will, there is a way!"

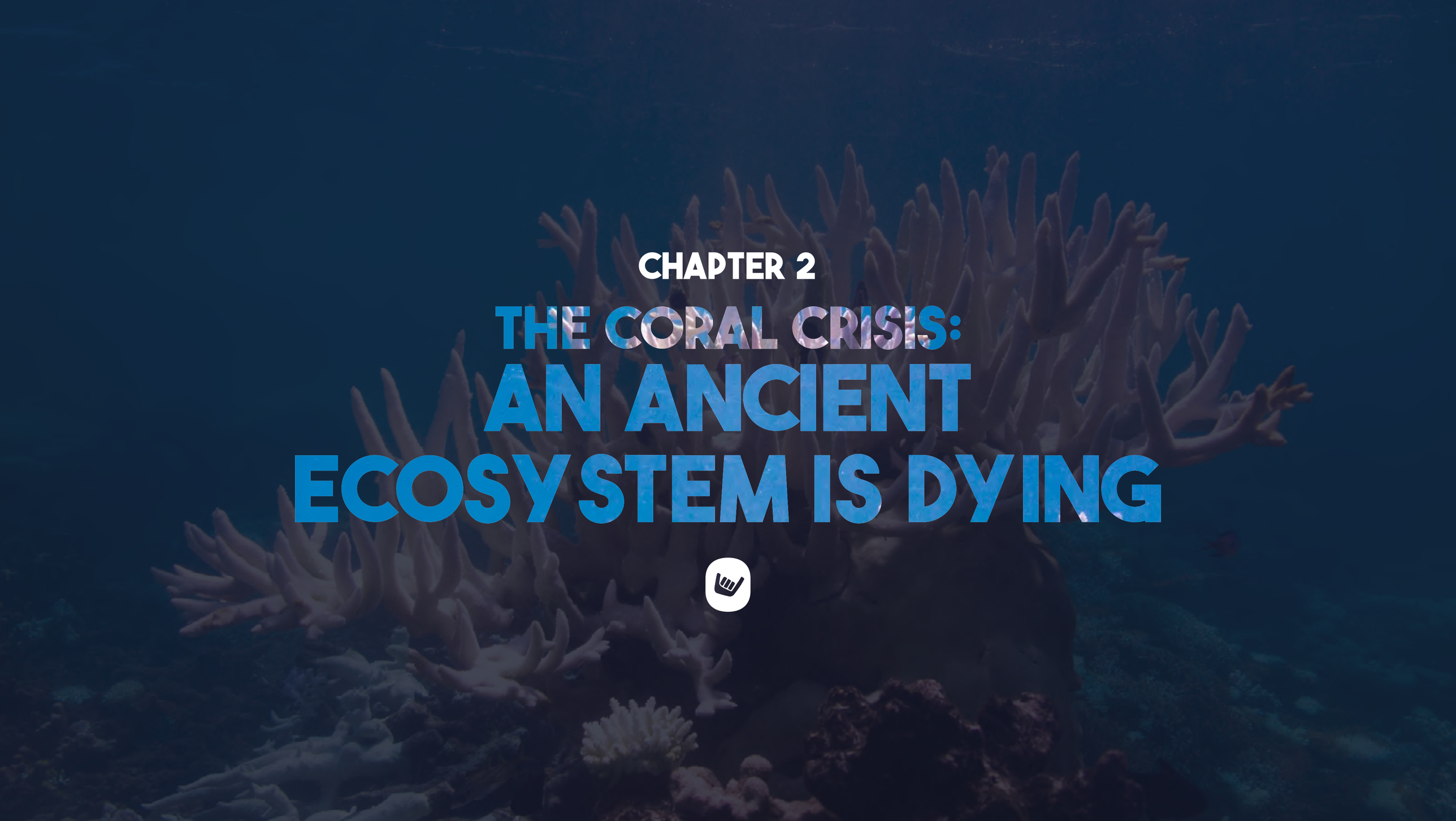
FLORIS VAN HEST

CHAIRMAN REEFOLUTION FOUNDATION

At the end of 2024, I had the honour of joining REEFolution as Chair of the foundation. When I first encountered REEFolution's story, I felt a deep concern: can we still save these ecosystems or are we already too late? However, as I got to know the people behind the mission, that concern gradually made room for something else: hope.

Through this mission we try to tackle one of the most complex conservation challenges of our generation, and we're doing so with energy, creativity, and a growing global community.

After speaking with the different teams, one thing became clear to me: this won't be easy, but something very meaningful is being built here. I'm excited to help REEFolution take its next steps in the coming years.



CHAPTER 2

THE CORAL CRISIS: AN ANCIENT ECOSYSTEM IS DYING

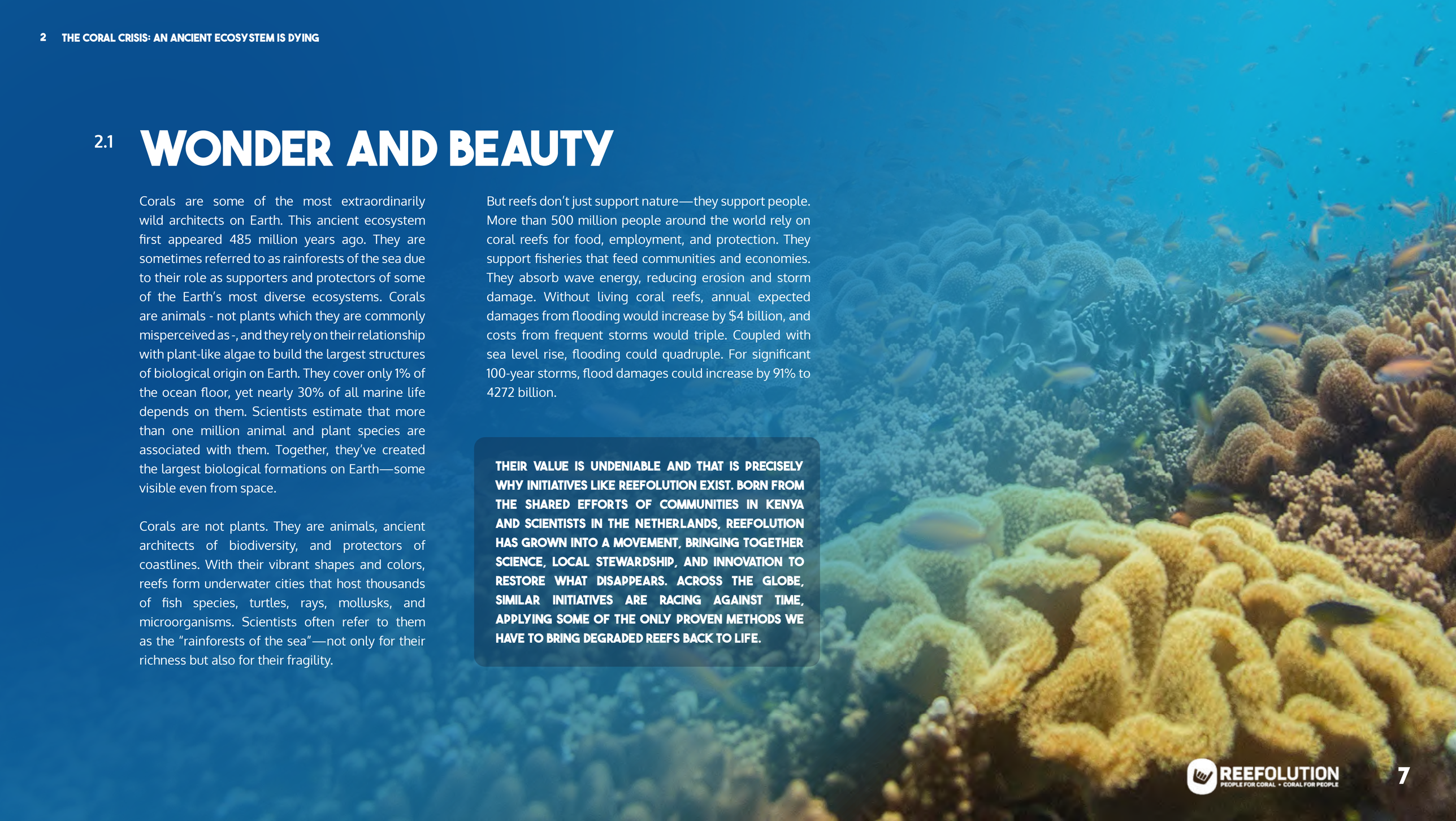
2.1 WONDER AND BEAUTY

Corals are some of the most extraordinarily wild architects on Earth. This ancient ecosystem first appeared 485 million years ago. They are sometimes referred to as rainforests of the sea due to their role as supporters and protectors of some of the Earth's most diverse ecosystems. Corals are animals - not plants which they are commonly misperceived as -, and they rely on their relationship with plant-like algae to build the largest structures of biological origin on Earth. They cover only 1% of the ocean floor, yet nearly 30% of all marine life depends on them. Scientists estimate that more than one million animal and plant species are associated with them. Together, they've created the largest biological formations on Earth—some visible even from space.

Corals are not plants. They are animals, ancient architects of biodiversity, and protectors of coastlines. With their vibrant shapes and colors, reefs form underwater cities that host thousands of fish species, turtles, rays, mollusks, and microorganisms. Scientists often refer to them as the "rainforests of the sea"—not only for their richness but also for their fragility.

But reefs don't just support nature—they support people. More than 500 million people around the world rely on coral reefs for food, employment, and protection. They support fisheries that feed communities and economies. They absorb wave energy, reducing erosion and storm damage. Without living coral reefs, annual expected damages from flooding would increase by $4 billion, and costs from frequent storms would triple. Coupled with sea level rise, flooding could quadruple. For significant 100-year storms, flood damages could increase by 91% to 4272 billion.

THEIR VALUE IS UNDENIABLE AND THAT IS PRECISELY WHY INITIATIVES LIKE REEFOLUTION EXIST. BORN FROM THE SHARED EFFORTS OF COMMUNITIES IN KENYA AND SCIENTISTS IN THE NETHERLANDS, REEFOLUTION HAS GROWN INTO A MOVEMENT, BRINGING TOGETHER SCIENCE, LOCAL STEWARDSHIP, AND INNOVATION TO RESTORE WHAT DISAPPEARS. ACROSS THE GLOBE, SIMILAR INITIATIVES ARE RACING AGAINST TIME, APPLYING SOME OF THE ONLY PROVEN METHODS WE HAVE TO BRING DEGRADED REEFS BACK TO LIFE.



2.2

2024 THE YEAR THE REEFS TURNED WHITE

2024 marked a turning point. Following over twelve months of record-breaking ocean heat, the world of coral conservation witnessed the **fourth global mass coral bleaching event**—the most widespread and devastating one in history.

Fuelled by climate change and intensified by El Niño, ocean temperatures rose beyond thresholds that corals can survive. When the ocean stays too warm for too long, corals eject the symbiotic algae they rely on. They turn ghostly white—bleached, starved, and deeply vulnerable.

Bleaching has occurred globally since the late 1990s. Yet this event was different in scale and severity. **90% of all coral reefs are now at risk of disappearing by 2050**, a collapse that threatens the biodiversity and food security of millions.

At REEFolution, we have never seen coral restoration as a quick fix. Since the very beginning, we've acknowledged that bleaching would come—we just didn't know when or how severely. That's why research has always been at the heart of our work. Every reef structure we've placed, every coral we've outplanted, has been part of a larger scientific effort.

Still, **2024 was worse than anyone had predicted.** In the region where REEFolution operates, **80–90% of corals showed signs of bleaching**, including artificial reefs. Initial estimates suggest that **about 65% of natural corals in Kenya died**. Yet, this crisis only reaffirms our direction.

Our team responded swiftly—intensifying monitoring efforts and collecting coral bleaching samples across our sites. The data gathered has informed our ongoing strategies and was shared at major scientific forums.

The year was a trigger to accelerate what we've already started: climate-smart restoration based on science, resilience and evolution.

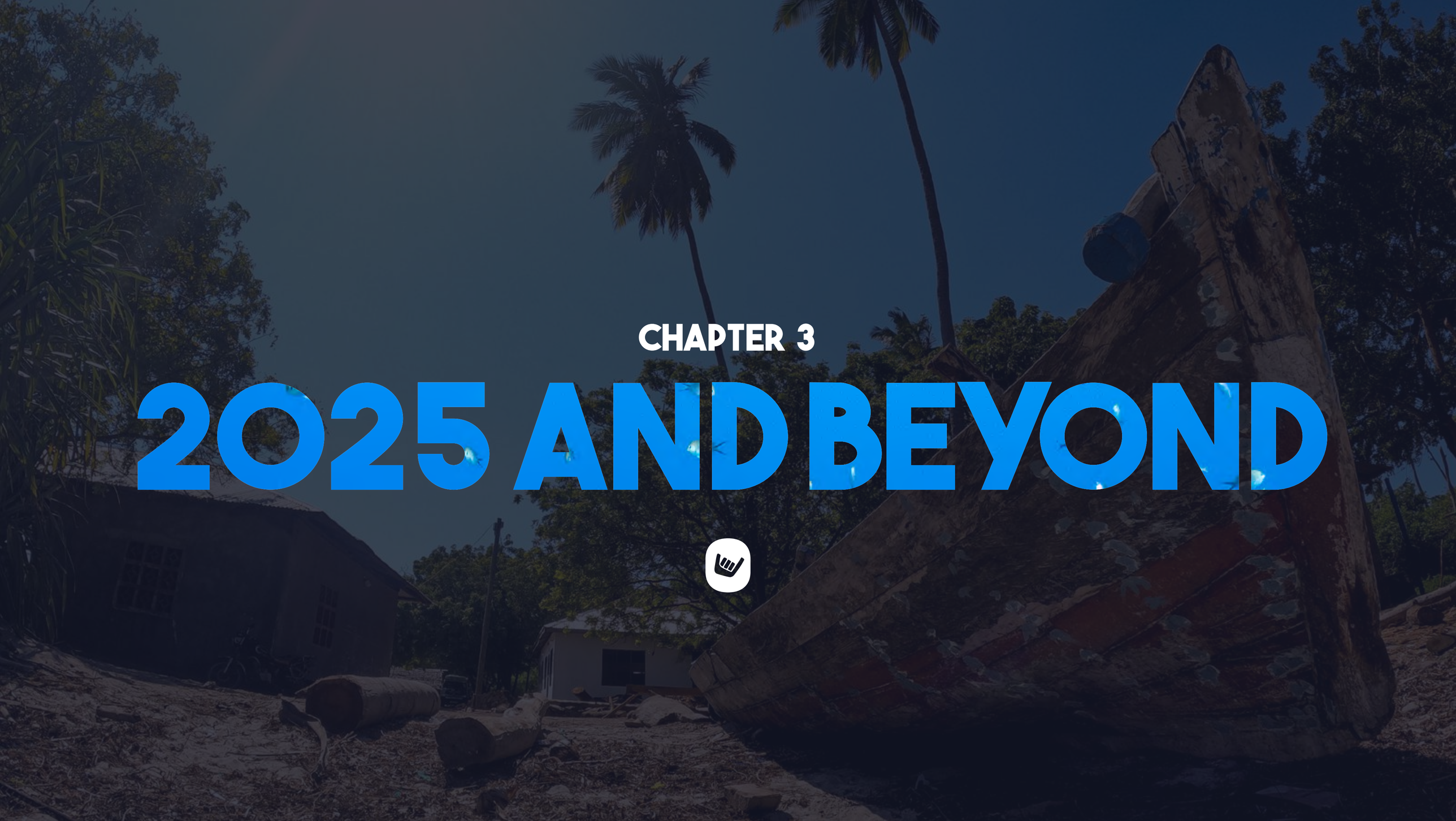
Global studies continue to validate this course. Coral nurseries remain one of the most effective strategies for restoration. Restoration itself can help mitigate sea-level rise and protect coasts. And assisted evolution—something REEFolution has already begun exploring—offers real hope.

Because reef restoration alone is no longer enough. We must help reefs adapt.

THIS IS WHERE OUR NEW CHAPTER BEGINS.

WHAT WE ARE FACING IS NOT A LOCAL EVENT.
IT IS A PLANETARY EMERGENCY.

This is why the work of REEFolution is more important now than ever. Potentially facing an entire wipe-out by 2050, this means we still have another 25 years to act.



CHAPTER 3

2025 AND BEYOND

2025 AND BEYOND: "A BOLD MISSION REQUIRES PROMPT ACTION"

VISION " REEFOLUTION ENVISIONS A WORLD WHERE CORAL REEFS AND PEOPLE LIVE IN HARMONY, FOSTERING BIODIVERSITY AND SUPPORTING LOCAL LIVELIHOODS."

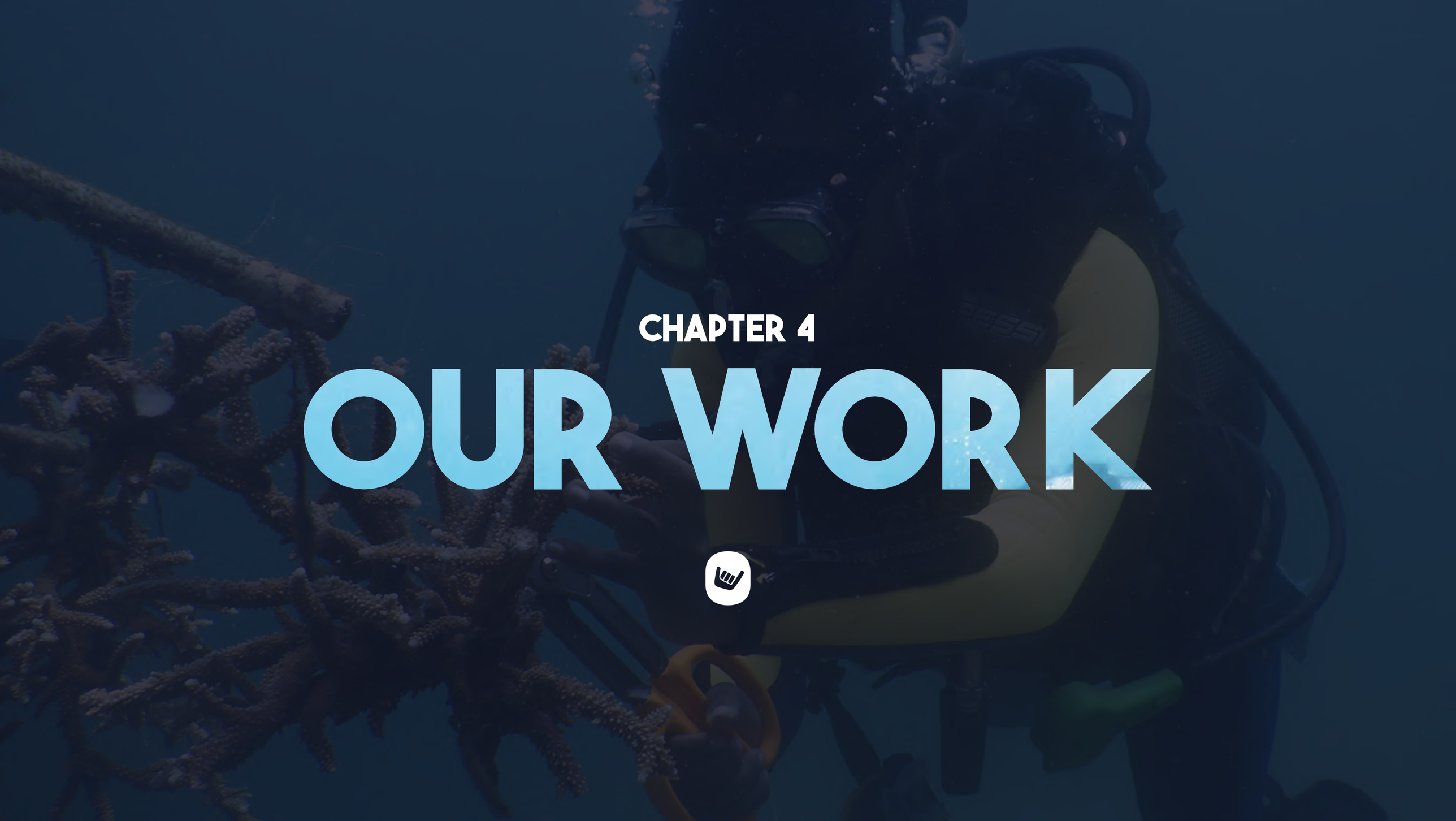
REEFolution aims to conserve and restore coral reefs together with local communities in developing countries. Backed by science, REEFolution has built the largest artificial reef of the African mainland. Like many other coral conservation partners around the world, we're becoming aware that the need for adaptation becomes more significant by the year, and may be one of the very few ways we can make corals survive.

"Corals have always adapted to change, but the pace of climate change, driven by human activity, is now too fast for them to keep up. At REEFolution, we may not be able to stop climate change, but we can help corals adapt to the very conditions we as humans have created."

CHRIS DE JONG, MANAGING DIRECTOR REEFOLUTION FOUNDATION

REEFolution is committed to doing everything within its power to ensure the survival and restoration of coral reefs. We are fully aware of the challenge ahead, and the risk of it; we may fail. Starting in 2025, REEFolution is devoting more of its resources into climate adaptation programs. Moreover, REEFolution is increasingly focused on multiplying partnerships with the best innovations. REEFolution currently works with seven local communities, key institutions and three acknowledged universities. Our network is increasingly expanding, putting us in the right place to contribute lastingly.

As we move on, the reefs themselves are entering their most critical hour. Climate change now threatens everything coral conservationists work for. More than ever, coral reefs need our commitment, our imagination and our courage to not give up on them.

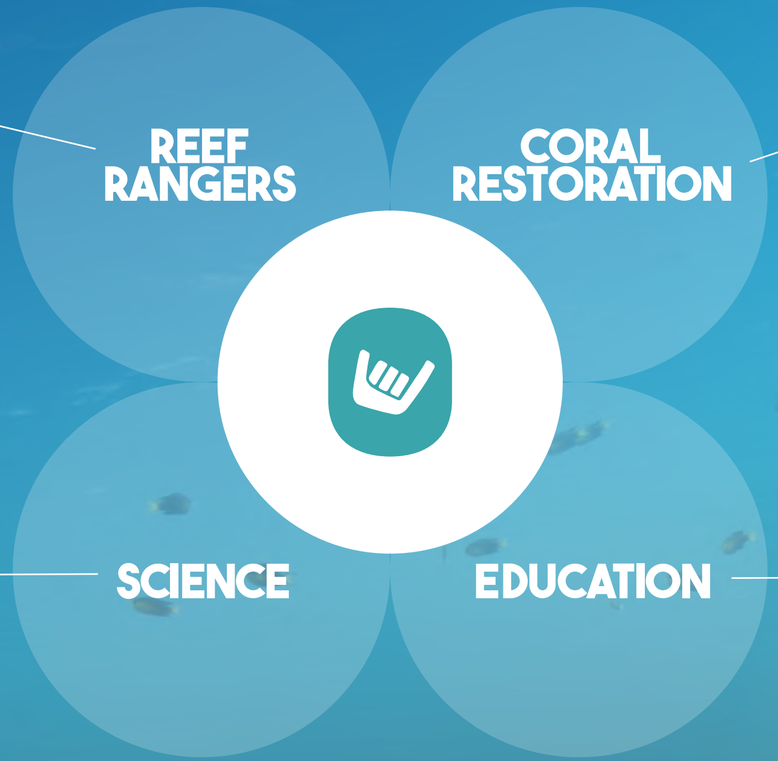


CHAPTER 4

OUR WORK

4.1 THE REEFOLUTION BLUEPRINT

REEFOLUTION APPLIES A BLUEPRINT OF FOUR PILLARS THAT INTERACT WITH ONE ANOTHER.



1. REEF RANGERS:
Local enthusiasts and recent graduates from Kenyan universities undergo a three-month training course to become marine conservationists at our projects. Upon completion, there are opportunities for paid positions as reef restoration practitioners.

2. RESTORATION & CONSERVATION:
REEF rangers use various science-based methods to work on restoration and conservation programs in the marine conservation landscape.

3. SCIENTIFIC RESEARCH:
We monitor restoration techniques, assess cost-effectiveness, and study coral species' health and (climate?) resilience to enhance worldwide restoration and conservation efforts. We explore methods to develop coral species that can adapt to warming temperatures.

4. EDUCATION AND AWARENESS:
We develop education programs to raise awareness of the need to protect the underwater world and improve international support for its conservation. Through marine education we empower local communities to engage in nature conservation.

REEF RANGERS

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RESTORATION AND CONSERVATION

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SCIENTIFIC RESEARCH

PAGE 25

EDUCATION AND AWARENESS

PAGE 29

4.2 OTHER PROGRAMS

REEFolution applies a holistic approach to marine conservation. Therefore, we are also highly engaged in programs with a wider focus than coral conservation. These programs do not necessarily fall directly under one of the four pillars of the REEFolution Blueprint, they are rather centered around two main themes:

1 MARINE CONSERVATION PROGRAMS:

If we want to manage the ocean sustainably, we should change how we treat the ocean. I.e. Until today, overfishing has been one of the key factors that cause an imbalance in coral reef ecosystems, making corals less resilient. By integrating new models of sustainable fishing in the regions where we operate, we work towards a decrease of detrimental factors causing coral mortality.

2 ALTERNATIVE LIVELIHOOD PROGRAMS:

When reducing the pressure on reefs through reduced impact on reefs, we need to make sure we offer an alternative. We can't just say people can use an area less, or reduce their fishing significantly, if no alternatives are offered. their fishing significantly, if no alternatives are offered.

CHAPTER 5

REEF RANGER PROGRAMS

REEF RANGER PROGRAMS

5.1 STATISTICS 2024

	2024	2023	SINCE START IN 2016
ACTIVE REEF RANGERS	25	20	-
REEF RANGERS TRAINED	6	2	29
TOTAL DIVE TRAININGS SPONSORED	9	2	53

11

11 NEW REEF RANGERS JOINED THE TEAM, OF WHOM 6 WERE FULLY TRAINED IN 2024.

29

THIS IS BRINGING THE TOTAL NUMBER OF REEF RANGERS TRAINED TO 29.

53

TOTAL DIVE TRAININGS SPONSORED TILL DATE: 53.

2024 REEF RANGER SPOTLIGHT:
NEW REEF RANGERS

SOFIA MKANDI

"My name is Sofia Mkandi from Mkwiro Village. Nine months ago, I joined Reefolution. From the start, I felt a strong connection to their mission, as the ocean has always been part of my life. As a community outreach Reef Ranger, I educate and inspire my own community about marine conservation. I am proud that REEFolution has entrusted me with responsibilities that allow me to turn my passion for ocean conservation into meaningful action."

OTHER HIGHLIGHTS 2024:

1

1ST REEF RANGER EVENT
Held the first ever REEF Ranger team event in Nanyuki, where REEF Rangers shared their experiences with Rangers in Nanyuki ranch.

2

TRAINED 30 YOUTH
Trained 30 youth from Wasini, Shimoni, Kibuyuni, and Mkwiro in ecological monitoring, providing them with essential snorkeling and monitoring gear.

3

PROVIDED SNORKELING EQUIPMENT
Provided snorkelling equipment to community groups to enhance monitoring efforts.

CHAPTER 6

RESTORATION & CONSERVATION PROGRAMS

CORAL REEF RESTORATION

6.1 STATISTICS 2024

METRIC	2024	SINCE INCEPTION
SQUARE METERS RESTORED	299 M²	5,929 M²
CORAL FRAGMENTS OUTPLANTED	2,560	46,730
ARTIFICIAL REEF STRUCTURES	979	5,347
TOTAL CMA ZONE (PROTECTED)	47 HA	-
CORAL FRAGMENTS IN NURSERIES	10,000	-
TOTAL NURSERY CAPACITY	17,700	-

CORAL REEF RESTORATION

6.1.2 **OTHER HIGHLIGHTS 2024:**

1. “ CONTINUED CORAL OUTPLANTING EFFORTS DESPITE THE BLEACHING CRISIS
2. “ RAPID SCIENTIFIC RESPONSE: MONITORING, GENETIC SAMPLING, AND INTERNATIONAL DATA EXCHANGE
3. “ FIVE PEER-REVIEWED PUBLICATIONS BASED ON REEFOLUTION'S REEF WORK IN KENYA
4. “ NEW SNORKEL-ACCESSIBLE NURSERIES DESIGNED TO REDUCE SCUBA DEPENDENCY

2024 REEF RANGER SPOTLIGHT: DOSA MSHENGA

"90% OF OUR COMMUNITY IS FISHERMEN. NOW IT'S OUR TURN TO GIVE SOMETHING BACK."

With over 15 years of fishing experience, Dosa has witnessed first-hand how coral degradation affects fish populations, and livelihoods. Today, as a Reef Ranger and treasurer of the Mkwiro Beach Management Unit, he plays an important role through leading activities ranging from site mapping and coral outplanting to growth monitoring and structure maintenance.

6.1.3 CORAL RESTORATION
PARTNERSHIP SPOTLIGHT

IN 2024, REEFOLUTION PARTNERED WITH ACCENTURE TO PILOT CUTTING-EDGE TOOLS FOR REEF RESEARCH. USING 3D IMAGING AND AI-ASSISTED BENTHIC SURVEYS, WE BEGAN AUTOMATING CORAL HEALTH ASSESSMENTS AND MAPPING SPECIES DIVERSITY AT SCALE.

GUIDO HOUBEN
Strategy Consultant Accenture

"We've been collaborating with REEFolution for three years now and are proud to contribute to their mission across various departments. Through co-creation, we strengthen impact together, from applying AI for coral monitoring to shaping strategy, optimizing marketing, and enhancing educational initiatives. Our joint contribution has continued to grow over the years and we look forward to what's next!"

6.2 SUSTAINABLE FISHERIES PROGRAMS

6.2.1 STATISTICS 2024

180+
Individuals involved

7
Coastal communities engaged

5
New BMU Committees trained

13
Community sensitization sessions held

75+
Fishers trained in sustainable practices

1
Octopus closure organized

6.2.2 HIGHLIGHTS 2024

2024 REEF RANGER SPOTLIGHT: ELIUD MWANGI

"After my training in Wildlife Management, I wanted to work on land. But now, I see how deeply the ocean is connected to our future." Eliud joined the Octopus Closures Program in 2024 and became a vital link between science and community. "Many fishers were skeptical at first. But after closures, they saw the difference—bigger octopus, better catches. Now, they're leading the planning themselves."

1. FULL ROLLOUT OF SUSTAINABLE FISHERIES PROGRAMS ACROSS SEVEN COMMUNITIES IN SHIMONI-VANGA
2. 3-YEAR STRATEGIC PARTNERSHIP WITH BLUE VENTURES ESTABLISHED, SUPPORTING GOVERNANCE, TRAINING, AND SCIENCE
3. TRAINING OF 75+ FISHERS IN SUSTAINABLE PRACTICES AND MARINE ECOLOGY
4. COMMUNITY-LED DESIGN OF CLOSURE CALENDARS AND CO-MANAGEMENT STRATEGIES
5. HIGH PARTICIPATION FROM LOCAL BEACH MANAGEMENT UNITS (BMUS)
6. EARLY DATA SUGGESTS A MEASURABLE INCREASE IN OCTOPUS SIZE AND CATCH AFTER REOPENING PERIODS

6.2.3 SUSTAINABLE FISHERIES

IN PARTNERSHIP WITH BLUE VENTURES

In 2023, REEFolution joined forces with Blue Ventures, a global leader in community-based fisheries management. What began as a one-year collaboration in **Mkwiro** focused on seasonal **octopus closures**—a locally-led strategy to regenerate marine resources while improving livelihoods.

The results were clear: within months, fishers observed larger catches, healthier octopus populations, and growing community support. Encouraged by this success, the partnership was extended by **three more years** and expanded to include **six additional villages** in the Shimoni-Vanga seascape.

Together, we are combining Blue Ventures' proven global expertise with REEFolution's deep local roots to implement training, governance tools, and ecological monitoring. The goal: to build resilient coastal communities who manage their marine resources sustainably.

CHAPTER 7

SCIENTIFIC PROGRAMS

7.1 STATISTICS
SCIENTIFIC PROGRAMS 2024

Thanks to our collaboration with Wageningen University and Pwani University, REEFolution is able to welcome a significant number of young scientists yearly. Together we run a dozen scientific studies which all play an important role in the broader picture of efficient coral restoration in the face of climate change.

	2024	TOTAL SINCE INCEPTION
INTERNATIONAL STUDIES	6	47
INTERNATIONAL INTERNSHIPS	4	29
KENYAN STUDIES	4	18
PHD STUDIES RUNNING	2	3
UNIVERSITY PARTNERSHIPS	3	3
PEER-REVIEWED PUBLICATIONS	5	10

Table: in the above table, noteworthy results are presented. Here, international studies refer to international scientists who have conducted research on-site, while Kenyan studies refer to Kenyan scientists who have visited on-site. Currently, two PhD studies are running.

7.2 HIGHLIGHTS 2024

In 2024, science took center stage at REEFolution. Our reef sites became platforms for experimentation, data collection, and innovation during one of the most extreme coral bleaching events ever recorded.

KEY FOCUS AREAS

1. **HEAT RESILIENCE:** Evaluation of intertidal vs. subtidal coral species for thermal tolerance.
2. **CORAL GENETICS & MICROBIOMES:** In partnership with Pwani University, we launched local genotyping and microbial research capacity.
3. **SPAWNING RESEARCH:** Monitoring of species-specific reproduction windows to guide restoration timing.
4. **ACOUSTIC ECOLOGY:** Use of hydrophones to explore the soundscapes of healthy vs. degraded reefs.
5. **COST-EFFECTIVENESS:** Ongoing study of reef structure design, fish impacts, and restoration ROI.
6. **SNORKEL-BASED METHODS:** New shallow-water nursery designs to reduce dependency on SCUBA.

MWANAISHA MUSA

Mwanaisha grew up in the coastal villages in the region and supports our researchers in monitoring of coral reefs. She is also a talent in the field of fish identification. Today, she knows 500 fish species by scientific name, which is extremely impressive.

7.3 PARTNERSHIP SPOTLIGHT

SCIENTIFIC KEY COLLABORATIONS

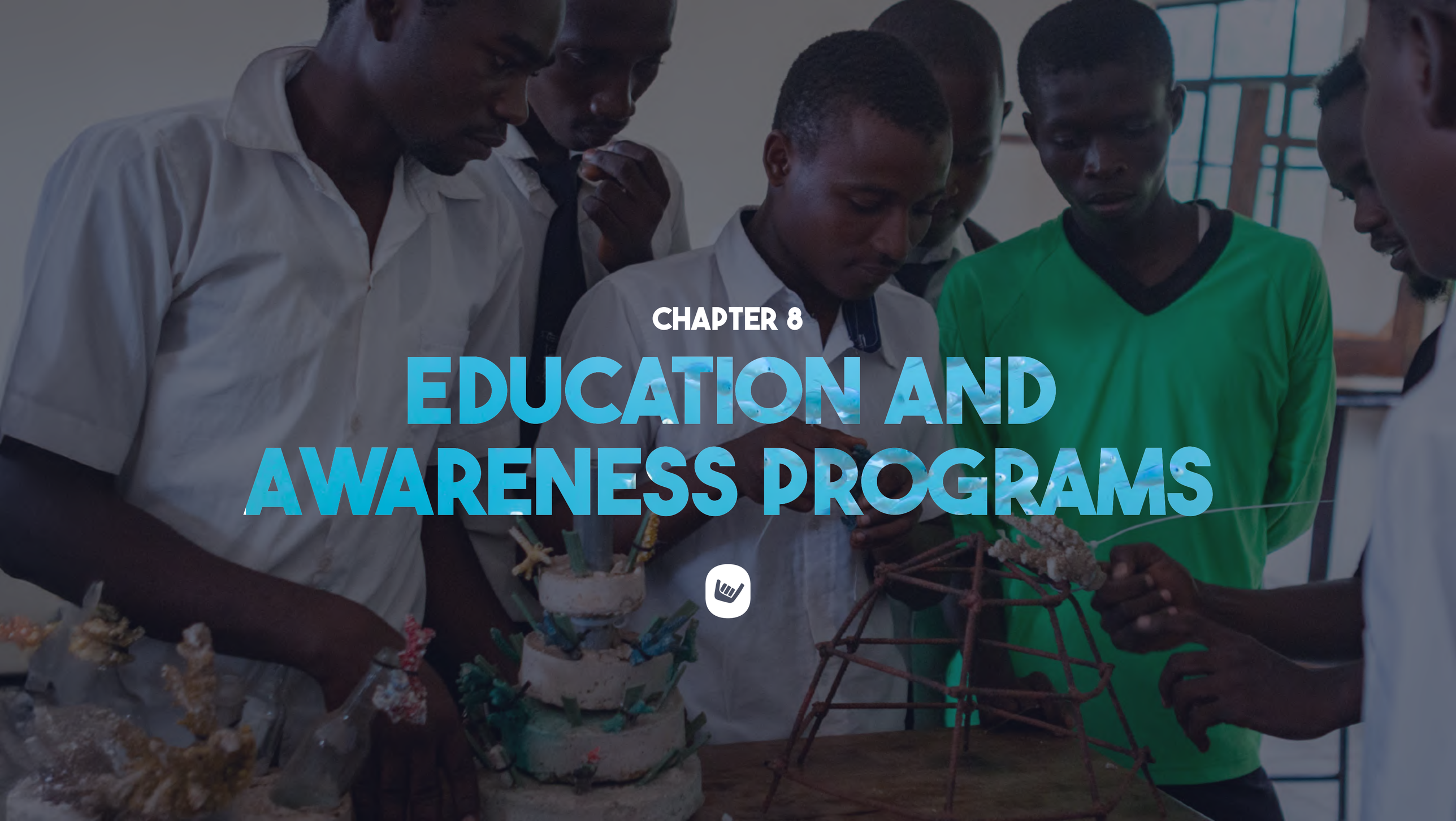
CORDIO	KMFRI
ACCENTURE	PWANI UNIVERSITY
SECORE	WAGENINGEN UNI

PERSONAL TEXT

RONALD OSINGA

Coral Expert and Member of the Scientific Advisory Board)

"REEFolution has shown to be very capable in motivating local people, scientists, funding bodies and other organizations to jointly make reef restoration happen. I expect that REEFolution can also bring together necessary stakeholders to work on these climate adaptation strategies to save coral reefs from extinction. Let's go for a second REEFolution!"



CHAPTER 8

EDUCATION AND AWARENESS PROGRAMS

STATISTICS 2024

	2024	SINCE INCEPTION (INCLUDING 2024)
STUDENTS REACHED THROUGH EDUCATION	300 STUDENTS	–
SCHOOLS AND UNIVERSITIES INVOLVED	6 SCHOOLS + 1 UNIVERSITY	8
PEOPLE REACHED THROUGH OUTREACH (KENYA)	1,500 PEOPLE	5,000 PEOPLE
VR HEADSETS OPERATIONAL	7 (NEW) HEADSETS	10 HEADSETS
GLOBAL AWARENESS REACH	MILLIONS	MILLIONS

AMBASSADOR

LUCIANA BLANCO VILLEGAS

ARGENTINIAN NATIONAL RECORD HOLDER – FREEDIVING

Luciana Blanco Villegas is Argentina's national freediving champion. She holds the national record in the constant weight discipline with a 65-meter dive. Currently ranked world no. 256, she combines elite performance with a deep passion for marine conservation and education.

I'm Luciana, a freediving instructor, ocean lover, and proud ambassador of REEFolution. The ocean has become my playground, therapy, passion, and purpose. Freediving allows me to connect with the sea in its purest form—silent, weightless, and deeply alive. But that intimacy also reveals fragility. Our reefs are under immense pressure, and I feel a responsibility to protect what gives me so much.

That's why I support REEFolution. Their hands-on, science-driven work in Kenya—restoring corals, creating habitat, and empowering communities—is inspiring. I've seen it firsthand, and it gives me hope.

The ocean gives us life, joy, and peace. Now it's our turn to give back. Whether you dive, surf, swim, or simply love the sea, your actions matter. Support coral conservation, raise awareness, and be part of the solution. The ocean needs us.

CHAPTER 9

FUNDING PARTNERS 2024

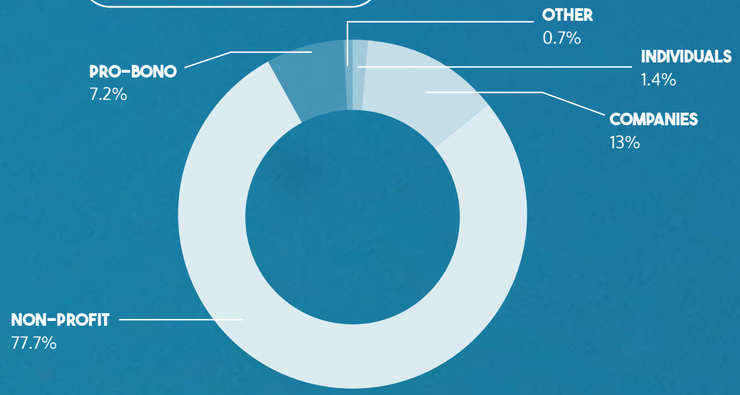
FUNDING PARTNERS 2024

In 2024, REEFolution recorded a consolidated total income of €626,451. The pie charts below provide a breakdown by funder type, and place this year's income in context by comparing it to previous years. The presented income includes an in-kind donation of €50,000.

INCOME 2023

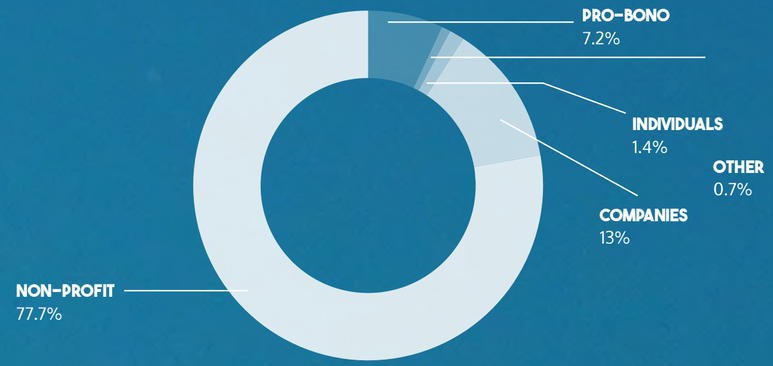
TOTAL INCOME 2023: 312.384 EUR

INCOME 2024



TOTAL INCOME 2024: 626.451 EUR

FORECASTED INCOME 2025



FORECASTED INCOME 2025: 926.520 EUR
CONTRACTED INCOME 2025: 576.520 EUR
FUNDRAISING TARGET 2025: 350.000 EUR

OUR PARTNERS

Funding partners are at the heart of everything REEFolution does. Thanks to their continued trust and support, REEFolution was able to sustain its operations and expand its team in 2024. Many of them have continued their support to our organization for which we are highly grateful.

FUNDING PARTNERS

BLACK WINCH N.V.

CLUB KAKATUA

DISCOVERY DIVERS

ACCENTURE

HET WERELD NATUURFONDS (WWF-NL)

STICHTING VIRTUTIS OPUS

FLYNTH ACCOUNTANTS & ADVISEURS

BLUE VENTURES

ZADELHOFF FAMILIEFONDS

LINKLATERS LLP

THE PERFECT WORLD FOUNDATION

TIMAFLOR

STICHTING FLEXIPLAN

STICHTING SUB3

REEF SYSTEMS

PADI AWARE FOUNDATION

STRATEGIC PARTNERS

PILI PIPA

FIREFLY ECO RETREAT

PWANI UNIVERSITY

KENYA FISHERIES SERVICE (KEFS)

CAMPS INTERNATIONAL

KENYA WILDLIFE SERVICE

ACCENTURE

COUNTY GOVERNMENT OF KWALE – DEPARTMENT AGRICULTURE, LIVESTOCK AND FISHERIES

KENYA COAST GUARD SERVICE

BMUS – MKWIRO, WASINI, BONJE, GUYA, MWADUMBO, TSUNZA AND MWAMDUDU

WAGENINGEN UNIVERSITY AND RESEARCH CENTRE

CHAPTER 10

OUR ORGANISATION

10.1 GENERAL OVERVIEW

In 2024, the REEFolution team comprised approximately 75 individuals across Kenya and the Netherlands. Together, they represented 37.4 full-time equivalents (FTEs), of which 28.4 were paid and 9 were unpaid, including interns, thesis students, and expert advisors. This steady growth reflects the organisation's evolving scope, including an increased focus on science, education, and community-based implementation of programs.

The REEFolution Foundation is a non-profit organisation registered under the Dutch Chamber of Commerce (KvK no. 64978168) and has held ANBI (public benefit organisation) status since 2016. The Foundation does not maintain a physical office in the Netherlands.

The Foundation is governed by a Board, an Advisory Board, and an Operational Team. In December 2024, the Board welcomed Floris van Hest as a new member. He will succeed Marck Feller as Chair, while Marck will continue to serve as board member. Eric Stokman, co-founder of REEFolution, stepped down at the end of the year. Karin Alfenaar (Secretary) and Ariëns Kruijt (Treasurer) continue to serve.

Operational management is led by Chris de Jong (Managing Director), together with Jack Menya (senior project manager) and Ewout Knoester (lead scientist).

The Advisory Board, consisted of Prof. Tinka Murk and Dr. Ronald Osinga.

In Kenya, governance was further strengthened with the appointment of three new Trustees to the REEFolution Trust: Serah Kiragu, Nancy Mwali, and Francis Kagema. Joshua Wambugu and Peter Leposo stepped down, while Eric Stokman continues to serve as a trustee. The Trustees play a vital supervisory role and help ensure local operations are run with integrity, alignment, and transparency.

12.2 FINANCIAL POLICY

The financial management of the REEFolution Foundation is overseen by the Managing Director and Treasurer. The Foundation operates in full compliance with Dutch regulations, including the Legal Entities Governance and Supervision Act (WBTR), and adheres to strict internal policies such as the four-eyes principle for financial decisions and contractual approvals.

The Foundation supports local implementation partners by providing financial guidance and helping to monitor expenditures. This ensures that donor contributions are spent effectively and in line with agreed project objectives. Information flows between field teams and the Foundation office—both financial and progress-related—are designed to safeguard transparency and enable sound decision-making.

As a non-profit entity, REEFolution is exempt from corporate income tax and VAT, except on income and related costs from the sale of goods or services.

12.3 RISK AND MANAGEMENT STRATEGY

In 2024, REEFolution conducted several structured risk assessments. A five-month internship resulted in a SWOT analysis identifying key internal weaknesses and external risks. The analysis now serves as a practical tool to guide mitigation and improve internal strategy.

Key areas of focus in 2024 included compliance (WBTR/ANBI), financial diversification, climate-related risks (e.g. coral bleaching), and international team coordination.

In parallel, **Accenture** facilitated five strategy workshops. Together with both Boards, REEFolution developed its **2030 Strategy,** which sets long-term priorities and will be used annually to reflect and adjust course where needed.

12.4 OUR PEOPLE

TEAM MEMBERS

EUNICE OGADA
Fisheries Technical Lead

INDY KOSTER
Operations Manager

CHRIS DE JONG
Managing Director

JACK MENYA
Senior Project Manager

YVONNE MUYIA
Project Coordinator

PUCK DE BONT
Operations

DENNIS KARPES
Funding

JAVIER DINTEN FERNANDEZ
Website

JIP SCHOUTETEN
Volunteer

ESTHER NIJDAM
Funding

SAMIRA BOGAARD
Social Media

CARLETTE NIELAND
Education

MAUD PERNOT
Operations Intern

EWOUT KNOESTER
Scientific Lead

HAMADI MWAMLAVYA
Scientific Assistant

JOSHUA WAMBUGU
PhD social sciences /
Operational Trustee

FIELD TEAM MEMBERS

DOSA MSHENGA

MWALIMU ATHUMAN

OMAR FAROUK

DZIVULA GUBE

IDRISSA ALI

ABDISALAAM OMAR

ABDULMALIK KHAMISI

AYUUB RASHIDI

ELIUD MWANGI

HAPPY KARISA

IDRISSA HARUN

JUMA JOGOO

KHADIJA ISSA

MBWANA FAHAMU

MWANAHAMISI BAKARI

MWANAISHA MUSA

MWANASITI SHAALI

PRISCAH ANYANGO

SADAM OMAR

SAID VUYAA

SOFIA MKANDI

TONNY OCHIENG

BOARD MEMBERS

ARIENS KRUIJT

SERAH KIRAGU

ERIC STOKMAN

MARCK FELLER

FLORIS VAN HEST

KARIN ALFENAAR

ADVISORS

TINKA MURK

RONALD OSINGA

NEW

AMBASSADORS

LUCIANA BLANCO VILLEGAS

SPECIAL THANKS TO

- HARM LUTJEBOER
- YATIN PATEL
- SELINA LUTJEBOER
- RODNEY OMOKUTI
- GUIDO PAAP
- PETER LEPOSO
- JOSHUA MAMBUGU
- PETER VODEGEL
- TINKA MURK
- RONALD OSINGA
- PETER RUYSENAARS
- LUNA BEEKER
- RODNEY OMOKUTI
- SALOME CHEMUTAI

THESIS STUDENTS

- **MARLOES VILIJN:**
  Intertidal corals during 2024 heatwave
- **KOEN CIRKEL:**
  Acoustic monitoring of fish communities
- **INGE FRANSE:**
  Video monitoring of fish communities
- **DANIELLE GESCHIERE:**
  3D Modelling of coral reefs
- **JUDY VAN SILFHOUT:**
  3D Modelling of coral reefs
- **PAULA CASADO:**
  Impact 2024 bleaching on fish communities

CHAPTER 11

FINANCIAL PERFORMANCE

11.1 FINANCIAL OVERVIEW 2024

In this chapter, we present the consolidated financial overview of REEFolution Foundation (NL) and REEFolution Trust (KE). Although separate legal entities are registered, the organisation operates as one and the same.

Income (consolidated)
The total consolidated income in 2024 amounted to **€626,451** (2023: €312,384). Of this, €488,951 was received through the REEFolution Foundation (further breakdown is provided in chapter 14). Also listed is €45,000 in in-kind contributions, valued at cost price.

While income nearly doubled compared to the previous year, it remained below the anticipated €828,800. The shortfall was primarily due to delayed infrastructure spending, caused by prolonged stakeholder negotiations. These expenditures are now expected to take place in 2025, which may result in a positive deviation next year. Additionally, such fluctuations are not unusual for a young and growing NGO, as there is limited historical data to base future projections on.

INCOME BREAKDOWN	AMOUNT (€)
Individuals	9.551
Companies	81.521
Non-Profits	393.680
Interest & other income	4.199
In-kind contributions	45.000
REEFolution Trust (Kenya)	92.500
Total	**626.451**

Table: This table reconciles all sources of consolidated income, including in-kind contributions and funds received directly via REEFolution Trust (Kenya)

Expenditures (consolidated)
The total consolidated expenditures in 2024 amounted to **€524,566**, representing a **68%** increase from **€312,384** in 2023. Of the total amount excluding in-kind contribution, **€402,312 (83.9%)** was directly spent on programmatic objectives, including coral restoration, sustainable fisheries, education and awareness, and scientific research. The remaining **€77,254 (16.1%)** was allocated to non-objective related spending, such as management, fundraising, and administration.

Compared to 2023, where 87.2% of spending was objective-related, this marks a slight shift. The difference reflects targeted investment in governance strengthening, team development, and organisational infrastructure. This increase in foundational investment supports REEFolution's long-term ability to scale impact effectively and accountably.

General remarks
As in previous years, the expenditure figures presented here differ slightly from those in Chapter 14, which focuses solely on the REEFolution Foundation (NL). This consolidated overview includes all costs related to REEFolution Trust (KE) and in-kind contributions, providing a more complete picture of the organisation's activities.

For example, various operational costs in Kenya were directly managed or co-funded by local partners, and do not appear in the Dutch Foundation's financial statements. In-kind support valued at €45,000 was also included in this chapter.

Such differences are a natural result of REEFolution's structure, which consists of two legally independent but operationally integrated entities. Consolidated reporting ensures transparency and enables more accurate impact analysis across our full footprint.

13.2 FINANCIAL PROJECTION (2025)

CATEGORY	BUDGET 2025 (€)
Income	
Income from individuals	10.000
Income from companies	175.000
Income from non-profit organizations	575.000
Interest income	2.000
Other income	4.000
Total revenue	**766.000**
SPENT ON OBJECTIVES	
Education and awareness	50.000
Conservation and restoration projects	300.000
Scientific projects	200.000
Local project management	63.750
Total spent on objectives	613.750
COSTS OF FUNDRAISING	
Fundraising	50.000
COSTS OF MANAGEMENT AND ADMINISTRATION	
Communication costs	20.000
General management	25.000
Total Management & Admin Costs	45.000
FINANCIAL INCOME AND EXPENSES	0
BALANCE OF INCOME AND EXPENSES	57.250

ANNEX 1

EXTRA INFORMATION SCIENTIFIC PROGRAMS

HEAT RESILIENCE

Reef Rangers Omar Farouk and Dzivula Gube continued monitoring intertidal corals throughout the 2024 heatwave. Earlier findings on this topic were published this year in Marine Biology, revealing that intertidal corals bleached at the same rate as subtidal corals but recovered faster. With assistance from Wageningen University students Selina Bos and Marloes Vilijn, along with Reef Ranger Sofia Mkandi, we are currently analyzing data from the 2024 heatwave to determine whether these resilience patterns hold for other species.

DEPTH GRADIENT

Omar Farouk and Dzivula Gube also monitored corals across a depth gradient during the 2024 heatwave, with data currently being quantified by Reef Ranger Tonny Odongo. Analysis of data from the 2020 heatwave by Wageningen University student Jelte van der Leij showed that *Acropora cf. formosa* was not prone to bleaching at any depth. However, field observations from the 2024 heatwave indicate that this same species experienced extremely high mortality across all depths. This finding suggests that predicting heat resilience is complex and influenced by factors such as heatwave duration, peak intensity, variability, and possibly the environmental memory of corals. Consequently, using depth (i.e., shading) as a heatwave refuge appears less reliable than previously assumed.

RESTORATION ECOLOGY

Three Wageningen University students completed reports evaluating the long-term effectiveness and cost-efficiency of reef restoration efforts: Anniek Leinenga found that most changes in fish abundance, biomass, and species composition occurred within the first two years of restoration, with only minor shifts in subsequent years over a four-year study period.

Paula Casado observed relatively higher fish abundance and biomass in smaller restored patches. Based on these findings, deploying multiple small to intermediate-sized patches, rather than a single large one, is recommended for cost-effective fish community support. Anna Berestova explored 3D modeling as a coral reef monitoring technique. While this method has great potential for high-detail monitoring, its current implementation proved less effective for highly diverse reefs. In collaboration with Accenture, we have begun developing a more detailed and automated 3D modeling approach based on Anna's study.

Two scientific papers were published on improving cost-efficiency in reef restoration: Ecological Engineering highlighted that manual cleaning of nurseries provides minimal benefits to coral health and growth. Reducing the cleaning interval is recommended for a more cost-effective approach, a practice already adopted by REEFolution. Royal Society Open Science examined the potential negative effects of curing concrete (which has a high pH) on coral performance and found none. This suggests that extended curing or the addition of pH-neutralizing supplements are unlikely to benefit restoration projects.

In 2024, monitoring of restored coral reefs and associated fish communities remained a high priority, particularly to assess the impacts of the 2024 bleaching event. This work was carried out by Wageningen University students Koen Cirkel, Inge Franse, Danielle Geschiere, Judy van Silfhout, and Paula Casado, with assistance from Reef Rangers Mwanaisha Musa and Dzivula Gube. The data is currently under analysis and will be published over time by our newly appointed PhD student, Hamadi Mwamlavya.

CORAL GENETICS

Our collaboration with Pwani University has gained momentum, with two master's students, Rodney Omukuti and Salome Chemutai, fully funded to dedicate their year-long theses to coral genetics and microbiome research. By developing genomic research capacity in Kenya, we are laying the technical groundwork for future projects aimed at enhancing coral heat resilience.

CORAL SPAWNING

Monitoring led by Dzivula Gube and analysis by Wageningen University student Sietske van der Heyde confirmed that corals around Shimoni do not mass spawn, as seen on the Great Barrier Reef. Instead, they reproduce asynchronously over an extended period from October to April. While this makes predicting exact spawning times more challenging, it also provides multiple opportunities per year for working with spawning corals. Interest in this research is growing regionally, as evidenced by SECORE establishing a spawning research hub in Mauritius and collaborating with REEFolution to synthesize spawning observations across the region.

SNORKEL SYSTEM

Through a collaboration between Guido Paap and Omar Farouk, we finalized the design of a significantly more cost-effective nursery structure that can be maintained by snorkelers instead of SCUBA divers. Coral performance data from this new design is currently under analysis and will be compared to traditional nursery structures.

MINERAL ACCRETION

Our research confirmed that mineral accretion does not enhance coral growth, health, or heat resilience. These findings were published in PLOS One, leading to the discontinuation of this research line.

THANK YOU FOR BEING PART OF THE