



مؤسسة محمد السادس لحماية البيئة
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FONDATION MOHAMMED VI POUR LA PROTECTION DE L'ENVIRONNEMENT
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ANNUAL REPORT 2022

All for the environment

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“

It is quite challenging to endeavor to change our lifestyles, our society, or our dreams. However, this is precisely what we have been trying to achieve for the last 20 years through the Mohammed VI Foundation for the Protection of the Environment, which I preside over. We have placed education and awareness as our top priority; our message is addressed to everyone, with emphasis on younger generations, as they will carry on the legacy of our planet. It is a fundamental necessity to teach the youth how to cultivate better environmental habits.

”

A word from HRH Princess Lalla Hasnaa

UNESCO World Conference on Education for Sustainable Development, New York, 17 May 2021

“

I have been passionate about the United Nations Decade of Ocean Science for Sustainable Development since the beginning. It is with real conviction and enthusiasm that I have accepted to be a patron of the Alliance, which is carrying out this very important project for the future of our seas and oceans.

For more than 20 years, together with the Mohammed VI Foundation for the Protection of the Environment, we have been mobilizing for them. We are active in multiple field and awareness-raising programs.

”

A word from HRH Princess Lalla Hasnaa

United Nations Ocean Conference, Lisbon,
27 June 2022.



Her Royal Highness Princess Lalla Hasnaa
Mohammed VI Foundation for the Protection
of the Environment

Activities of HRH Lalla Hasna

COP 27: Meeting with the Executive Secretary of the UNFCCC

On November 9, 2022, in Sharm Ech Sheikh, HRH Princess Lalla Hasnaa met with the Executive Secretary of the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations agency that organizes COPs.

The Foundation has been an observer member of the UNFCCC since December 2009, and signed a Memorandum of Understanding (MoU) with the UNFCCC in 2017 to cooperate, educate, train and raise public awareness on climate change.

Following this high-level meeting, the Foundation's representatives met on November 11th with Mr. Conor Barry, Manager Communications and Engagement, appointed by the Executive Secretary of the UNFCCC to strengthen the already existing collaboration.

The partners have set themselves the goal of formalizing the partnership in order to maintain and deepen close cooperation.

The Foundation has announced that it plans to bring its President, HRH Princess Lalla Hasnaa, to COP28 in Dubai at the head of a large delegation headed by HRH, so that HRH can co-chair high-level activities with the current Executive Secretary of the UNFCCC, as at COP22 and COP23.



COP 27: Congo Basin Blue Fund

On November 9, 2022 in Sharm Ech Sheikh, HRH Princess Lalla Hasnaa, Goodwill Ambassador of the Congo Basin Climate Commission (CCBC), attended a COP27 side event on "Climate Finance at the center of the operationalization of the Congo Basin Climate Commission and the Congo Basin Blue Fund".

This high-level event was co-organized by the Republic of Congo, which holds the Presidency of the CCBC, and the Kingdom of Morocco, Founding Partner of the three African Climate Commissions.

The Congo Basin Climate Commission (CCBC) aims to accelerate the implementation of the climate transition and economic transformation of the Congo Basin in a logic of sustainable development.



Inauguration of Ghabat Chabab in Marrakech

On Tuesday, October 4, 2022, Her Royal Highness Princess Lalla Hasnaa inaugurated Ghabat Chabab, a large urban park restored after several years of significant labor.

The restoration was undertaken with the Urban Municipality of Marrakech, the Wilaya of Marrakech Safi, the Directorate of State Lands, and the General Directorate of Local Authorities.

This olive grove was established on the outskirts of the city during the time of independence. Today, the 120 hectares of olive trees

are situated in the heart of the city. They serve as a green lung and a recreational space cherished by residents who come with their families to picnic, run, or play football.

The Foundation also contributed to making this renovated olive grove a space for environmental awareness through the establishment of an educational trail, by preserving the original khetaras irrigation system, and by planting native plant species, marked with signage.

Board Meeting 2022 in Marrakech

On October 3, 2022, Her Royal Highness Princess Lalla Hasnaa chaired the Board Meeting of the Mohammed VI Foundation for the Protection of the Environment in Marrakech, where it was held for the 2nd time.

During this board meeting, the first since the Covid-19 pandemic, she reflected on the activities of her Foundation and expressed her pleasure at its resilience, adaptability, and the strong support of the board members. HRH Princess Lalla Hasnaa reiterated her commitment to the oceans and her 2021 appointment as the patroness of the Alliance supporting the United Nations Decade of Ocean Science for Sustainable Development, a network of prominent global partners committed to oceanic initiatives.

She also highlighted the 2021 revival of the Qualit'air Pact, which has gained significant momentum in light of climate imperatives: the establishment of a task force to decarbonize the Moroccan economy and the updating of the Greenhouse Gas Emissions tool.

Lastly, she shared her delight with the board members about the restoration, thanks to the support of her partners, of two historic gardens: El Haboul in Meknes and Ghabat Chabab in Marrakech.

HIGHLIGHTS

The Foundation Mobilizes for the Oceans



Blue Talk

 **May 2022**  **Rabat**

In May 2022, the Foundation organized the Blue Talk in collaboration with the Portuguese Embassy in Morocco. The Blue Talk was an international conference aiming to mobilize Moroccan and African stakeholders in support of the oceans, ahead of the Ocean Conference [► See page xx.](#)

2nd Foundations Dialogue

 **June 1-3 2022**  **Bouknadel**

The IOC-UNESCO and the Foundation co-hosted the second meeting of the Foundations Dialogue from June 1-3, 2022, at the Hassan II International Environment Training Center in Bouknadel. Leaders from over 20 global philanthropic foundations and international experts attended this event. The “Bouknadel Declaration” was proclaimed during this event. The 2nd dialogue set the stage for the Blue Talk [► See page xx.](#)

Lisbon Ocean Summit

 **June 27 to**  **July 1, 2022**
Lisbon

On July 1st, 2022, the Mohamed VI Foundation attended the second United Nations Ocean Conference in Lisbon and presented its work conducted over the past 20 years on Seas and Oceans

[► voir page xx.](#)



...and for Air and Climate



AYCH Announces the 10 Projects for the Incubator

 **December 9 -10, 2022**

 **Hassan II International Environment Training Center**

On December 9 and 10, 2022, AYCH showcased the ten selected projects for the incubator at the Hassan II International Environment Training Center. 120 individuals attended the event, including 30 young entrepreneurs who traveled from their home countries ► [See page xx.](#)



Electric Mobility

 **November 11, 2022**  **Marrakech**

On November 11, 2022, 143 students received electric-assist bicycles to commute from their homes to Cadi Ayyad University in Marrakech. This pilot electric mobility project is part of the Voluntary Carbon Compensation program of the Air and Climate division. ► [See page xx.](#)

Update of the Bilan Carbone® tool

 **December 13st**  **Rabat**

The update and upgrade study of the Bilan Carbone® tool began on January 5th, 2022. The steering committee held 20 meetings, and on December 13, 2022, the Foundation unveiled the updated version of the Moroccan Carbon Assessment Tool®, which now includes 350 emission factors, of which 60% are tailored to the national context

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INTERNATIONAL COOPERATION

COP27

 **November 18, 2022**,  **Sharm El-Sheikh**

A significant delegation from the Foundation led by the Chairwoman, Her Royal Highness Princess Lalla Hasnaa

The Mohammed VI Foundation for the Protection of the Environment participated in COP27 with a significant delegation, led by Her Royal Highness Princess Lalla Hasnaa, the Chairwoman of the Foundation. She took part in two meetings on-site. On the sidelines of COP27, 12 parallel events were organized in different pavilions, along with bilateral meetings with UNDP, Bloomberg Philanthropies, and UNFCCC.



A Historic Breakthrough

COP27, held in Sharm El-Sheikh from November 6 to 18, 2022, concluded with a historic breakthrough to aid vulnerable countries in addressing the losses and damages caused by climate change. Discussions on climate financing were held, but the pledges weren't as high as anticipated. Developed countries did not meet their commitment to double adaptation financing by 2025, and the framework for the Global Goal on Adaptation was postponed to COP28. However, a fund was established.

Lastly, the general negotiations fell short, failing to adopt new significant measures to reduce emissions.

Three Bilateral Meetings

UNDP

On November 9th, 2022, the Foundation held discussions with the UNDP, represented by Mr. Achim Steiner, to consider strengthening the cooperation that has been in place since 2020. This collaboration would rely on the office covering the Arab geographic region.

These discussions resumed on November 30 in Rabat, with Ms. Sarah Poole, Deputy Director of the Regional Bureau for Arab States, accompanied by Dr. Edward Christow, the resident representative of the UNDP office in Morocco. They expressed the desire to support the African Youth Climate Hub (AYCH) and the African Green Universities and Youth Education Network (AGUYEN). They discussed the project "Enhancing Marrakech's sustainable development through innovative planning and financing." They finally agreed to position the Hassan II International Environmental Training Center as a Regional Center of Excellence on ESD.

Bloomberg Philanthropies

On November 9th, 2022, the Foundation met with Bloomberg Philanthropies during a session with Ms. Antha Williams, head of environmental programs, and Ms. Ailun Yang, head of international programs for climate and environment. The Foundation mentioned its attendance at COP28 in Dubai, for which Bloomberg Philanthropies is providing funds for non-state organization pavilions. They also discussed the Air and Climate, and Seas and Oceans programs.

Environment Agency — Abu Dhabi (UAE)

On November 10, 2022, the Foundation spoke with H.E. Dr. Shaikha Al-Dhaheri, Secretary-General of the Environment Agency of Abu Dhabi (United Arab Emirates). They discussed a potential twinning arrangement between the two organizations given the similarity of their activities. The Foundation proposed sharing its experience with the UAE agency for organizing the WEEC 2024.

Numerous Activities

Air and Climate

The "Air and Climate" division actively participated in several side events on decarbonization. The first was held at the Moroccan Pavilion focusing on resilient low-carbon transition in the face of climate change, on Friday, November 11th, 2022, alongside representatives from numerous partner organizations of the Foundation for decarbonization. The second was an official UNFCCC event entitled "Launching Just Transitions in Africa: Green Skills, Behavioral Change, and Social Dialogue Action", co-hosted by the IOE (International Organization of Employers), the CGEM, and the Foundation. This event



also served as a platform to introduce the “Skills for Climate” initiative launched by the IOE.

AYCH

The African Youth Climate Hub supported African youth by organizing and participating in several events in the UNFCCC space and the partner pavilions. Several AYCH ambassadors attended COP27, showcasing their commitment to climate action. The YOUNGO partner recognized AYCH’s efforts by awarding them, during the closing ceremony of the youth pavilion, the title of outstanding partner for mobilizing and engaging the youth.

Seas and Oceans

The Seas and Oceans division organized a parallel event at the Mediterranean Pavilion titled “Towards the establishment of a new plastic economy on the beaches of the Mediterranean” and another at the Oceans Pavilion entitled “Multi-stakeholder mobilization against plastic waste for the preservation of oceanic marine biodiversity”.

It participated in two parallel events, one on the roadmap of the Ocean Decade for Africa: “ocean sciences for climate action in Africa,” and the other on the financing of oceanography for climate action in Africa within the framework of the Ocean Decade.

Climate Weeks

Regional Climate Weeks are initiatives that aim to address climate issues at a more localized level. Recognized during COP26 in Glasgow, they serve as platforms to bolster credible and sustainable responses to climate challenges. As a geographical nexus, Morocco took part in both the African Climate Week and the Climate Week for the Middle East and North Africa in 2022.

Climate Week for the Middle East and North Africa 2022

 28 - 31 March 2022  Dubai

The inaugural MENA Climate Week (MENACW 2022) took place from March 28 to 31, 2022, in Dubai. It convened thousands of stakeholders to delve into topics like resilience against climate risks, the transition to carbon neutrality, and collaborative efforts to address pressing challenges.

The event kicked off with high-level sessions wherein ministers acknowledged the climate change risks the region faces and deliberated on the imperatives of climate action. Three days of thematic discussions followed, shedding light on potential actions. These topics were also explored in parallel events led by regional organizations, experts, and leaders.

The Foundation either attended or contributed to several parallel sessions, covering subjects such as «Strengthening systems to hasten the energy transition,» «Localizing climate finance,» «Climate education: from challenges to opportunities,» «The role of youth and their potential to enhance resilience for Nationally Determined Contributions (NDC) and the execution of National Development Plans,» «The role of youth in a just and inclusive energy transition in the MENA region,» and lastly, «The role of young people as national drivers of climate action. »

Semaine africaine du Climat (ACW)

 29 August - 2 september 2022  Libreville, Gabon

The 2022 African Climate Week gathered hundreds of participants to delve into resilience against climate threats, energy transition, and collaboration on urgent climate challenges. It underscored the significance of regional collaboration. Consequently, stakeholders made progress on decisions reached during the Glasgow agreement in 2021.

The Mohammed VI Foundation for the Protection of the Environment hosted two parallel events: «Highlighting Initiatives for Tackling Climate Change in Africa» and «Action for Climate Empowerment.» Ambassadors from the African Youth Climate Hub, Olumide Idowu and Elizabeth Gulugu, were among the participants.





Global Summit on Transforming Education for Sustainable Development (EDD)

 17 September 2022  New York

On September 17, 2022, the Foundation took part in the summit focused on the transformation of Education for Sustainable Development (EDD) in New York. This event was orchestrated in response to the global education crisis. With the Covid-19 pandemic disrupting education for over 90% of the world's children, this has been the most unprecedented disruption to educational systems. The summit aimed to elevate education to the top of global policy priorities. There's a pressing need for educational systems to adjust to changing professional skills, center learning around the student, making it more inclusive and collaborative, thus enabling their holistic development. Public investment in education is viewed as the most effective and socially responsible investment a nation can make.

In partnership with the Ministry of National Education, Preschool, and Sports, the Foundation showcased initiatives that have been underway for the past two decades in Morocco. These initiatives have gained momentum and expanded, incorporating new programs such as the African Youth Climate Hub (AYCH) and Global Schools, broadening their reach to Africa. The Foundation has been deeply committed to this cause, following the diplomatic footsteps of King Mohammed VI.

A young African ambassador from AYCH, Yarub Abera from Ethiopia, and a teacher, a representative of the civil society from Burkina Faso, were present to share their experiences with EDD in their respective countries.

World Environmental Education Congress (WEEC)

 14 - 18 March 2022  Prague

The Mohammed VI Foundation for the Protection of the Environment attended the 11th edition of the World Environmental Education Congress in Prague, Czech Republic. This biennial gathering serves as a pivotal juncture for environmental education experts from around the world. The Foundation consistently shares its insights on Sustainable Development Education. In this congress, the Moroccan model of Eco-Schools was highlighted, along with the best practices from the Young Reporters for the Environment program. The Foundation also introduced the Global Schools initiative, the African Green Universities and Youth Education Network, the #b7arblapastic campaign, Educational tools, and awareness-raising and capacity-building actions centered on the oceans.

With the support of the Ministry of National Education, the Foundation sponsored a trip to Prague for three young winners of the Young Reporters for the Environment competition, aged from 16 to 18, enabling them to participate in the Youth Environmental Education Congress, which runs in parallel to the official WEEC.

High Level Political Forum

 5 - 15 July 2022  New York

The 2022 HLPF theme was "Building back better post-Covid-19 while advancing the full implementation of the Sustainable Development Goals (SDGs) by 2030."

The HLPF contemplated how recovery policies can counteract the pandemic's adverse effects on the SDGs and steer countries towards their realization by 2030. It delved deeply into specific SDGs: Goal 4 (Quality Education), Goal 5 (Gender Equality), Goal 14 (Life Below Water), Goal 15 (Life on Land), and Goal 17 (Partnerships for the Goals). The HLPF considered the pandemic's varied impacts across all SDGs, recognizing their interconnected, indivisible, and interdependent nature.

During the HLPF, 44 countries conducted voluntary national reviews of their implementation of the 2030 Agenda for Sustainable Development.

At the HLPF, the African Youth Climate Hub co-organized an event on the theme "Covid-19 Recovery: Youth Taking Action for a Sustainable Future."



Convention on Biological Diversity (COP15)

 **July 2022**  **Bonn**

The Foundation participated in the 9th plenary session of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services as part of the Moroccan delegation led by the Ministry of Energy Transition and Sustainable Development, serving as a member of the national sub-commission on biodiversity. This meeting was in preparation for the COP15 on biodiversity in Montreal.

 **December 2022**  **Montréal**

The Foundation took part in the crucial negotiations of COP15 as an observer, supporting the delegation responsible for presenting the Moroccan position. It attended various events across different pavilions, parallel sessions on the Global Youth Biodiversity Network, IUCN, UNESCO, the Education Fair, and more.

European Climate Conference

 **7 - 8 March 2022**  **Nantes**

The Foundation participated in this European conference jointly organized with the Climate Chance Europe summit around the theme "Green Pact for Europe: Communities, Businesses, and Citizens at the Heart of the European Transition."

The conference explored ways to achieve the heightened goal of reducing net greenhouse gas emissions (by at least 55% by 2030) and attaining climate neutrality of the European Union by no later than 2050. It also addressed Europe's international climate action, including its decentralized cooperation with Africa, which was a reason for the Foundation's participation.

Decarbonization Mission

 **June 27 - 29, 2022**  **France**

Members of the Decarbonization Task Force, which the Foundation is a part of, participated in working meetings organized by ABC to further discuss the governance of the Moroccan Carbon Base and the Carbon Adjustment Mechanism at borders. During this mission, Task Force members met with representatives from ADEME, particularly from the international department, to discuss the governance of the carbon base, as well as CITEPA and the DGEC (General Directorate for Energy and Climate) to exchange views on the Carbon Adjustment Mechanism at the European borders.

RENEWAL OF NATIONAL COLLABORATIONS

Ministry of Culture, Communication, and Youth

Period: 2022-2024

Thematic Areas: Beach Libraries (Marine and Oceans Pole)

As part of the #b7arblaplastic initiative in 2022, in partnership with the Ministry of Youth, Culture, and Communication, libraries are set up on the beaches of the Kingdom during the summer season.

Cadi Ayyad University of Marrakech

Period: 2022-2026

Thematic Areas: Electric Mobility (Voluntary Carbon Compensation)

This pilot operation for electric mobility provided 143 electric bicycles for students of Cadi Ayyad University of Marrakech for their home-to-university commute.

This initiative is also a best practice of the Cadi Ayyad University within the Green Universities and Youth Education Network in Africa (Aguyen).

Moroccan National Tourism Office (ONMT)

Period: 2022 (annual)

Thematic Areas: Sustainable Tourism (Marine and Oceans Pole)

In the context of Clean Beaches and TLD

Educational tools and information materials:

- Beach monitoring and control mechanisms;
- Port and marina monitoring and control mechanisms;
- Support for the national #b7arblaplastic campaign;
- Establishment and development of promotional modules for the Lalla Hasnaa

- Sustainable Coast Awards (TLD);
- Development of support materials, tools, and platforms for TLD;
- Support and promotion of TLD project leaders;
- Participation in national and international congresses, workshops, and seminars;
- International meeting of national Blue Flag operators and FEE membership;
- Award presentation ceremony;
- Digitalization of awareness and ESD activities and capacity-building through webinars.

«Sustainable Tourism» Program

- Launch of a training cycle for the Sustainable Tourism community;
- Strengthening the capacities of teaching staff on Sustainable Tourism and related themes;
- Support for the B7harblaplastic campaign.

National Office of Water and Electricity (ONEE)

Period: 2022 (annual)

Thematic Areas: Sustainable Tourism (Air Climate Pole)

- Launch of a training cycle for the Sustainable Tourism community;
- Strengthening the capacities of teaching staff on Sustainable Tourism and related themes.

The Foundation is engaged in ongoing partnerships with public organizations:

1. Directorate General of Territorial Communities (Marine and Oceans Pole, Air and Climate, Hassan II International Environmental Training Center, Exotic Gardens of Bouknadel, Marrakech Palm Grove, educational paths, technical assistance).
2. Maroc Telecom and Barid Al Maghrib (Ana Boundif).
3. Ministry of National Education, Preschool, and Sports (Education for Sustainable Development, Eco-Schools, Young Reporters for the Environment, Global Schools, African Green Universities and Youth Education Network [AGUYEN], and local environmental training laboratories. Air and Climate, Voluntary Carbon Compensation).
4. Moroccan Foundation for the Promotion of Preschool Education (FMPS) (Education for Sustainable Development, Eco-Schools)
5. Moroccan Agency for International Cooperation (AMCI) (south-south cooperation, ESD, AYCH)
6. MICEVN, MEME, AMEE, IMANOR, and CGEM (Air Climate - Decarbonization).
7. Research Institute for Solar Energy and New Energies (IRESEN) and Green Energy Park (Air and Climate, air pollution).
8. Appendices.

RSA: A NEW HR ORGANIZATION



In March of 2022, the Foundation launched an initiative to revitalize its Human Capital management. Its goals were to:

- Strengthen the “Human Capital” culture and adopt a distinctive positioning by embracing best HR practices.
- Enhance the role of the HR function as a partner to operational entities.
- Empower employees to take charge of their own professional journeys while aligning with the Foundation’s objectives.

A comprehensive review of the HR function, actively involving all employees, identified areas for improvement and led to the definition of a new Human Capital management strategy. This strategy focuses on five pillars:

- Rooting the values and culture of the Foundation, in line with the spirit infused by Her Royal Highness Princess Lalla Hasnaa.
- Supporting employees in their skill development.
- Adopting a modern approach to human capital management.
- Creating a work environment conducive to employee well-being.

- Recognizing employees based on merit, individual performance, and collective achievements.

To achieve these goals, the Foundation relies on three keys to success: the strong commitment of managers to promote the new HR strategy, equipping themselves with the best tools and practices, and organizing this human resource management effectively.

As part of this initiative, the Foundation implemented a new performance assessment system, which was being piloted by the end of 2022.

This tool provided management support in monitoring employee performance and in developing their technical, cross-functional, and behavioral skills.

Evaluation grids or tools were developed to capture the discussions between evaluators and those being evaluated.

New practices for compensation and support of employees were also introduced to guide an employee’s journey from the point of hiring.

An event was organized in July 2022 by the Foundation’s General Secretariat to present the human capital strategy and the primary tools that were implemented. Participatory workshops were

organized to foster dialogue with employees.

In line with this momentum, the Foundation embarked on a second project, reviewing its organization and structure. The main goal is to provide clarity to employees about their roles and responsibilities and to ensure coverage of all links in the Foundation’s value chain.

This organizational review comes at a pivotal time, as the Foundation is experiencing broad expansion both within Morocco and internationally. Aligning the organization, consolidating achievements, and preparing a sustainable organizational structure for upcoming challenges are among the objectives sought in this initiative.

Both projects were led by the Foundation’s “Quality and Development” department, in collaboration with LMS, a Moroccan consulting firm specializing in organization and human resource management.

01

SUSTAINABLE DEVELOPMENT EDUCATION



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ECO-SCHOOLS

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AGUYEN

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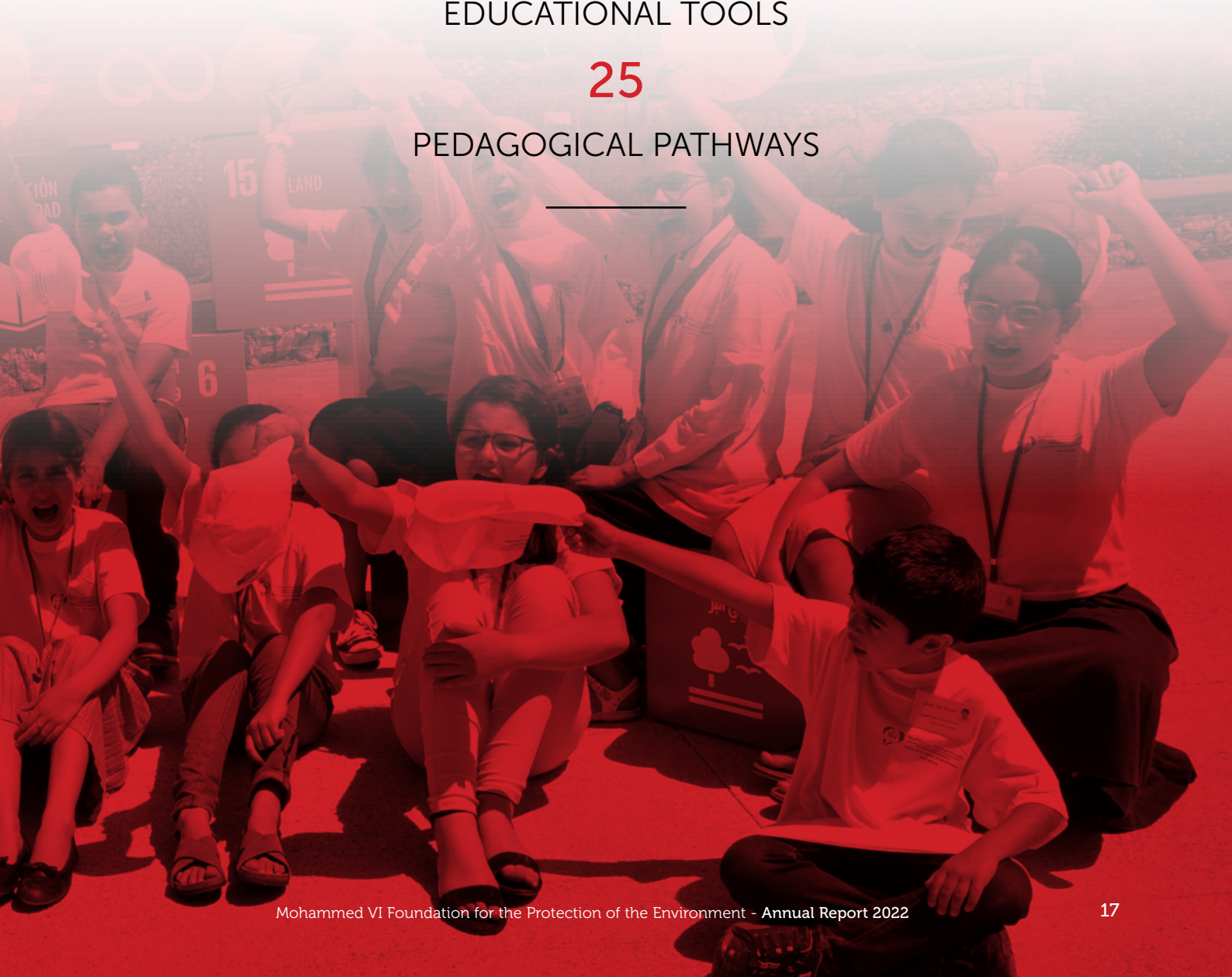
GLOBAL SCHOOLS

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EDUCATIONAL TOOLS

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PEDAGOGICAL PATHWAYS



ECO-SCHOOLS

191
Bronze Certificates

83
Silver Certificates

74
Green Flags



The Eco-Schools program, established by the Foundation for Environmental Education and implemented in Morocco by the Foundation in partnership with the Ministry of National Education, Preschool, and Sports, registered over 3,300 schools in 2022, up from 2,818 in 2021. Eco-Schools educate children on environmental protection through a seven-step progressive approach, focusing on three main themes: sustainable waste management, and the efficient use of water and energy.

Green Flag Award

The Green Flag recognizes the journey of the Eco-Schools within the program. This year, 412 schools aspired for the award and submitted their applications to the jury. Deliberations of the national jury, gathered at the headquarters of the International Hassan II Center for Environmental Training, lasted three days, from Monday, July 25th to Wednesday, July 27th, 2022. The applications had been previously assessed by regional committees, considering their volume.

Jury members divided the 412 applications for an initial review before a comprehensive jury examination, delving deeper into applications with complexities. The jury then decided on the following accreditations:

Eco-Schools Contest

The jury also reviewed videos from the contest "Once upon an eco-school," exclusive to Eco-schools awarded the Green Flag. These videos highlight the best practices adopted by the schools. For this second edition of the contest, the videos addressed biodiversity, in line with the GAIA 2030 international strategy of the FEE, which oversees the Eco-Schools program globally.

Of the 67 videos presented for their judgment, they honored 21 documentaries from 8 regional academies, produced by 115 students, 21 supervisors, under the guidance of 21 principals.

Regional Workshops 2022-2023

Throughout the 2022-2023 academic year, 12 regional training and experience-sharing workshops were organized in collaboration with the Ministry of National Education, Preschool, and Sports. These workshops took place in each of the regional academies, involving over 350 coordinators and 600 primary school students.

This year, all 12 regional academies also hosted training sessions in the 82 provincial directions, modeled after the regional workshops organized by the Foundation.

Each of these one-day workshops consisted of two segments: a plenary session introducing the program, followed by two concurrent workshops – one for school principals and coordinators and another for provincial and regional coordinators.

The regional workshops culminated in the traditional Green Flag award ceremony recognizing achievements from the previous year.



Regional Green Flag Award Ceremony

In 2022, tablets were awarded to the Green Flag winners during the ceremonies. Meanwhile, certificates were presented to schools that achieved bronze, silver, or gold levels. Encouragement certificates were also given to principals and coordinators of participating schools.



Capacity Building and Digital Infrastructure of the Center

Throughout the year, the Center organized a series of training, awareness, and informational workshops for the Eco-Schools program, as well as for the best practices competition titled "Once upon an Eco-School."



3300
Schools registered in 2022

12
Regional Academies and

82
Provincial Departments of the Ministry of National Education

12
Regional Coordinators and

82
Provincial Coordinators

+1,3 million
Students enrolled since the program's inception in 2006

+39 000
Teachers since the program's inception in 2006

YOUNG REPORTERS FOR THE ENVIRONMENT

Young Reporters for the Environment (YRE), an international sustainable development education (SDE) program championed by the Foundation for Environmental Education (FEE) and active in 43 countries globally, launched its 20th edition in Morocco in 2022.

In collaboration with the Ministry of National Education, Preschool, and Sports, this competition now welcomes middle school, high school, and university students aged between 11 to 25. Notably, 2022 saw the age cap extended from 21 to 25 years, expanding its reach to university students up to 25 years, in partnership with the Green Universities and Youth Education Network in Africa (AGUYEN).

Competition Deliberations: Concours

The national jury's deliberations for the 2020-2021 competition spanned three days, from May 5 to 9, 2022, at the Hassan II International Center for Environmental Training. The submitted reports – whether written,

photographic, or video – revolved around the theme "Sustainable Ecosystems for a Healthy Planet."

The jury, to assess the 168 written reports, 633 photo stories, and 236 video documentaries, benefited from an initial regional assessment and a fully digitized evaluation process. The 19th edition's National Jury recognized seven photo reports, six written reports, and six video reports.

Regional Award and Tablet Presentation Ceremonies:

Parallel to the regional workshops held in conjunction with the Eco-Schools program across the Kingdom's 12 regions, the Foundation honored the young winners and their mentors with competition prizes and certificates. Additionally, participation and encouragement certificates were presented to other participants.

Launch of the 21st Edition:

Since the 2019-2020 edition, FEE's new strategy has focused on three core themes: climate change, biodiversity loss, and pollution. Thus, the 21st Young Environmental Journalists competition has kicked off with an investigation theme: "Our Planet is Choking... Let's Act!"

YRE on the Global Stage:

The year 2022 also highlighted the recognition of the Moroccan YRE community at the international level. They marked their presence in various international congresses and events, either in person or virtually, such as the 2022 World Congress on Environmental Education (WEEC), Youth Congress on Environmental Education (YEEC) 2022, the ECOSOC Youth Forum, the UN High-Level Political Forum on Sustainable Development, and the COP27 under the UNFCCC.

AWARDS FOR WRITTEN REPORTS

NATIONAL JURY AWARD

« **Red Algae: El Jadida's Red Gold.**»

Blue Angel School (El Jadida, Casablanca Settat)

Age Category 15-18 years

PROMOTION AWARD

«**Oualidia Lake: A hotspot of biodiversity and productive natural wealth.**»

Oualidia Middle School (Sidi Bennour, Casablanca Settat)

Age Category 11-14 years

EXPOSÉ AWARD

«**Bouizguaren Oasis... Living day by day, is it dead or was it killed?**»

Hassan II High School (Guelmim, Guelmim Oued Noun)

Age Category 15-18 years

COMMUNITY AWARD

«**Dead arm of Oued Martil, a ticking time bomb and a terrifying nightmare threatening the ecosystem.**»

Moulay Abdellah Middle School (Fahs Anjra, Tanger-Tétouan Al Hoceima)

Age Category 11-14 years

ECOLOGICAL APPROACH AWARD

«**Thuriferaire of Tounfite: An international natural monument, its logging in the Atlas leads to desertification.**»

Moussa Ibn Nassir High School (Midelt, Drâa Tafilalet)

Age Category 15-18 years

AWARENESS AWARD

«**Moulouya... Consecutive environmental issues threatening the rapid deterioration of Morocco's most crucial wetland areas.**»

Houman El Fettouaki High School (Nador, Oriental)

Age Category 19-21 years

WRITTEN REPORT WINNERS



VALORIZATION AWARD

«Sustainable Development is No Longer Optional.»

Mohammed Ben Abdelkarim Khattabi High School (Benslimane, Casablanca Settat)
Aged 15-18 category



ECOLOGICAL APPROACH AWARD

«Producing Red Gold with Minimal Water.»

Al Khawarizmi High School — Tazenakht (Ouarzazate, Drâa Tafilalet)
Aged 15-18 category



EXPOSURE AWARD

«Mamora Forest: A Continuous Bleeding.»

Al Joulane Middle School (Rabat, Rabat Salé Kénitra)
Aged 11-14 category



AESTHETIC AWARD

«Silence Replaces the Buzzing due to the Mysterious Disappearance of Bees in Morocco.»

Ouled Hriz High School (Berrechid, Casablanca Settat)
Aged 15-18 category



HOPE AWARD

«Imasuna Mountain Forest Post-Fire.»

Cheikh Mohammed Asbane High School (Chefchaouen, Tanger-Tétouan Al Hoceima)
Aged 15-18 category



HERITAGE AWARD

«Profound Sadness Overwhelms Me.»

Hassan I High School — Oufouss (Errachidia, Drâa Tafilalet)
Aged 15-18 category



AWAKENING AWARD

«Cry for Help.»

Cadi Ayyad University — Higher School of Technology (Essaouira, Marrakech Safi)
Aged 22-25 category

VIDEO REPORT WINNERS

HERITAGE AWARD

«Vegetable dyeing: A cornerstone of sustainable economy, exemplified by the 'Zrabi Ozkit of Tazenakht.»

Al Khawarizmi High School — Tazenakht (Ouarzazate, Drâa Tafilalet)
Age Group 19-21

AWARENESS AWARD

«The ostrich... Back from the brink of extinction.»

Errazi Middle School (Oued Eddahab, Dakhla Oued Eddahab)
Age Group 19-21

AWAKENING AWARD

«Sea fish mortality phenomenon.»

Hassan I Middle School (Sidi Ifni, Guelmim Oued Noun)
Age Group 11-14

ENCOURAGEMENT AWARD

«Prudent waste management - Case of the Public Landfill in the Mohammédia Prefecture - Benslimane Province.»

Hassan II University of Casablanca (Mohammadia, Casablanca Settat)
Age Group 22-25

NATIONAL JURY AWARD

«Beehive collapse phenomenon.»

L'Ange Bleu School Group (El Jadida, Casablanca Settat)
Age Group 11-14

AESTHETIC AWARD

«Olive trees threatening the ecosystems in Oued Ardoum.»

Prince Moulay Abdellah High School (Sidi Slimane, Rabat Salé Kénitra)
Age Group 15-18

AGUYEN

The African Green Universities and Youth Education Network (AGUYEN) has experienced a year bustling with activities.



The AGUYEN initiative was launched in March 2021, following a letter of understanding signed between the Department of Youth, Education, and Advocacy of the United Nations Environment Programme and the Hassan II International Center for Environmental Training.

The Center, which hosts the Secretariat of the African Green Universities and Youth Education Network, made strides in 2022 to animate and expand the network. Today, the network encompasses 29 universities from nine African countries (Morocco, Tunisia, Senegal, Ivory Coast, Comoros, Kenya, Mauritania, Uganda, and the Democratic Republic of the Congo).

In 2022, both the Center and the Network organized five training workshops, bringing together over 300 participants from the 29 universities, and held three webinars with participation from more than 300 stakeholders. Eight national and international experts facilitated these workshops and webinars in conjunction with four international partners (the United Nations Environment Programme, the Alliance for Sustainability Leadership in Education, the United Nations Framework Convention on Climate Change, and the Carbon Balance Association), as well as ten national partners.

Composting Guide

AGUYEN released a composting guide aimed at universities and students. This manual outlines the steps to initiate and maintain successful composting and was the subject of specialized training. It's made available to network representatives and all training beneficiaries to help them spread and share the importance of this organic waste valorization method in their institutions. The guide is designed to be concise and basic, assisting facilitators in conducting micro-training sessions for their close circles and motivating them to kick-start their pilot composting projects.



"Little Book of Green Nudges"



The "Little Book of Green Nudges" is an educational tool crafted by the United Nations Environment Programme, serving as a compilation of environmental best practices for higher education institutions. It presents 40 exemplary practices to adopt in order to minimize environmental impact. To reach a broader audience, the Hassan II International Center for Environmental Training translated it from English to Arabic in partnership with Ibn Tofail University in Kenitra and distributed it during training sessions. Furthermore, the Hassan II International Center for Environmental Training oversaw the layout of the French version.

GLOBAL SCHOOL

The roadmap is set to incorporate the UN's 17 SDGs into curriculums.



The Sustainable Development Solutions Network (SDSN) was launched in 2012 to harness global scientific and technological expertise for the Sustainable Development Goals (SDGs), backed by UNESCO's Global Action Programme for Education for Sustainable Development. This network initiated the integration of the UN's SDGs into education through a program named Global Schools.

To create a global and universal program, three pilot countries were chosen, including Morocco, which began the program's implementation in 2020. The Foundation serves as the host organization for this program in Morocco.

To date, seven out of the planned eight work phases have been implemented. Morocco,

like each pilot country, has reported the results of the national pilot project to the SDSN secretariat for consolidation into a global report.

An updated version, incorporating all of Morocco's results, was shared with SDSN in 2022, paving the way for the creation of three other versions in Arabic, French, and Spanish.

The committee is crafting a roadmap for Morocco, for which it has conducted an international benchmark.

Awareness and Training Workshops

Awareness and training workshops have been organized by the Hassan II International Center for Environmental Training to educate and train youths about the Agenda 2030 and its 17 sustainable development goals.

Practical workshops were also held alongside the regional Eco-Schools and YRE (Young Reporters for the Environment) workshops, assisting the same children in drawing connections between the Eco-Schools program, the academic curriculum, and the SDGs.

Communication Brochure

A communication tool was developed for the Global Schools program. It also serves as a work and presentation tool for potential partners.

The tool is available in three languages: Arabic, French, and English.

EDUCATIONAL TOOLS

Eco-Schools Posters for Preschoolers

An update of posters designed for children aged three to five (preschool) on the seven themes of the Eco-Schools program was carried out. These posters aim to raise awareness among very young children about



the environment through simple and easy-to-understand actions. This update was done in close collaboration with the Moroccan Foundation for the Promotion of Preschool Education.

Platform on Marine Biodiversity

The platform on marine biodiversity, launched in 2022, provides scientific, technical, and technological knowledge on various environmental themes. It highlights the biological diversities of marine species (fauna and flora) and national marine ecosystems (coastal and shoreline areas), detailing the different marine spaces

(estuary, beach, ocean, etc.) and ways to protect them. This includes eco-friendly daily habits to which children are introduced. The educational platform is interactive and is designed in 3D to offer the most realistic representation of marine ecosystems. Quizzes are available, with score tracking to assess the progress of children in their learning as they explore the platform. To engage them further, accumulating points grants access to other games or advanced game levels. The platform has been tested with school groups, and workshops for its deployment will be launched in 2023. As a reminder, the first platform focused on energy was introduced in 2015, followed by another on water in 2016, and air quality and climate change in 2017.

YRE Traveling Exhibition

To commemorate the twentieth year of the Young Reporters for the Environment (YRE) competition, the Foundation introduced a roving exhibition titled "A Fresh Look at the Environment." This exhibition displays all the recognized photographs from the YRE program's inception. It's been meticulously designed for ease of movement throughout Morocco. The first iteration of this exhibition was unveiled in 2012, celebrating the competition's first decade.



Digital Game: The SDG Calendar

The center embarked on digitizing the "SDG Calendar", an engaging and interactive game designed to acquaint children with the 17 Sustainable Development Goals. It facilitates a connection between these goals, their academic syllabus, and the Eco-Schools' activities. Originally developed by Omori 6th Junior High School in Tokyo, this game made its Moroccan debut at an Eco-School in Rabat in 2019. It equipped the Eco-School with a mechanism to schedule SDG-related activities monthly, consolidating them into an academic year calendar (from September to June).



EDUCATIONAL TRAILS

The Foundation has established five educational trails since 2011 to educate children, with two new ones introduced in 2022.

Exotic Gardens Educational Trail

A maintenance contract for the Exotic Gardens educational trail, established in 2011, was initiated and finalized in 2022. The maintenance addressed the various existing modules and updated the content. The Exotic Gardens educational trails feature five loops: Biodiversity, Bird Migration, Natural Recycling, Water Cycle, and Ecological Gardening.

Arsat Moulay Abdessalam Garden Educational Trail

Maintenance of the Arsat Moulay Abdessalam educational trail, set up in 2015, began and was finalized in 2022, focusing on the eight existing modules (supports and content). The modules provide information about the history of the Palmeraie, the effect of palm tree planting on decarbonization, messages aiming to raise awareness among visitors about the threats to our environment, especially regarding the unreasonable use of water. Lastly, a new "tall palm tree" module was created, detailing best practices in the Palmeraie regarding water management, agroecology, and environmental education activities.

Hassan II Park Educational Trail in El Jadida

The creation and installation of 12 educational modules at Hassan II Park were completed in March 2022. The El Jadida educational trail, designed by students from the National School of Architecture in Rabat, focuses on the theme of water. A module titled "The Wave and Water Movements" consists of three wave-shaped structures explaining how wave movement is a dense source of renewable energy. These three structures also serve as benches.

The "water cycle" module consists of five panels depicting the water cycle and the journey of a water droplet. Corridors are created between each module component. The hidden side of each module features educational information.

The "water in the human body" module showcases three life-sized plexiglass figures representing humans at three different stages of life (child, adult, elder) and the water composition of each. These modules aim to emphasize the importance of drinking adequate water. The trail was inaugurated with the visit of students from the eco-school Atatbiqiya of the city, marking the International Earth Day celebrated in 2022.



Lahboul Garden Educational Trail in Meknès

The eight modules of the historic Lahboul Garden were completed in October 2022. These modules were designed by students from the National School of Architecture in Fès. Each module provides insights into animal and plant biodiversity, water management, as well as the history of the site.

Educational Stops at Ghabat Chabab in Marrakech



The educational trail at Ghabat Chabab was conceived by students from the National School of Architecture in Rabat (ENA) following an idea competition initiated by the Foundation.

Given the size and layout of the olive grove, the trail is organized into educational stops. Four of these stops were the subject of an idea competition among students of the National School of Architecture in Rabat in 2020. The six stops address the Ghabat Chabab Olive Grove, urban trees, the biodiversity of the Marrakech region, plant adaptation in arid environments, the insect garden and pollination, and the khetara. For broader dissemination, the material was translated from English to Arabic by the International Hassan II Environmental Training Center in collaboration with Ibn Tofail University in Kénitra and distributed during training sessions. Moreover, the International Hassan II Environmental Training Center was responsible for formatting the French version.

02 SEAS AND OCEANS



28

A DECADE OF OCEAN SCIENCE FOR SUSTAINABLE
DEVELOPMENT

30

CLEAN BEACHES

35

BLUE FLAG

STRONG FOCUS ON OCEANS

Following its commitment to the UN Decade of Ocean Science, the Foundation continues its dedication.

Over the past ten years, an international momentum has grown to address the concerning decline of our oceans. In 2021, the UN Decade of Ocean Science for Sustainable Development was launched, as well as the UN Decade for Ecosystem Restoration. The Foundation plays a significant role in the **UN Decade of Ocean Science** initiated by the Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO).

Her Royal Highness Princess Lalla Hasnaa has extended her leadership by becoming the

patron, while the Mohammed VI Foundation for Environmental Protection has become a founding member of the Alliance spearheading this Decade.

The Foundation's President has assured the IOC-UNESCO of her commitment and determination to act. As such, starting in 2022, the Foundation took action, actively participating in significant international meetings held under the Decade of Ocean Science for Sustainable Development program's banner.

UNEA-5 in Nairobi Aims to End Plastic Pollution

The Foundation attended the United Nations Environment Assembly (UNEA-5) on March 2, 2022, in Nairobi. The assembly unanimously decided

to commence negotiations for a binding global agreement to end plastic pollution. Currently, 11,000,000,000 metric tons of plastic are dumped into the oceans annually, a figure projected to double by 2030.

COI-UNESCO - 2nd Foundations Dialogue

The COI-UNESCO and the Foundation jointly organized the second meeting of the Foundations Dialogue from June 1st to 3rd, 2022, at the International Hassan II Training Center for the Environment in Bouknadel.

This second edition, following the one in Copenhagen in February 2020, brought together leaders from over 20 philanthropic foundations from around the world, as well as international experts. Together, they deliberated on strategies to mobilize global philanthropy in financing oceanic sciences. These transformative powers, with revolutionary solutions, could assist in achieving sustainable development goals and in managing the ocean sustainably. The 2nd dialogue was also a preparatory step for the Blue Talk, a discussion centered on the oceans, which in turn set the stage for the United Nations Oceans Conference that commenced in Lisbon on June 27, 2022.

The Mohammed VI Foundation for the Protection of the Environment, the host of this 2nd dialogue, advocated for resources to be mobilized for the Global South and Africa. Its concerns were echoed by the entire community present, culminating in "the Bouknadel declaration," which issued a call to mobilize greater resources, especially for the South, for the remaining eight years of the decade.



The Blue talk

In May 2022, as a precursor to the United Nations Oceans Conference scheduled to take place in Lisbon from June 27 to July 1, 2022, the Foundation collaborated with the Embassy of Portugal in Morocco to organize an international conference in Rabat, dubbed the Blue Talk. The objective was to rally Moroccan and African stakeholders in support of the oceans.

The Blue Talk revolved around the theme: "United Nations 2022 Conference on Oceans: What Roles for Science and Innovation in Morocco and Africa?" The event was graced by the presence of Mr.

Mohamed Sadiki, Minister of Agriculture, Maritime Fishing, Rural Development, and Water and Forests; Mr. José Maria Costa, Portugal's Secretary of State for the Sea; Mr. Vladimir Ryabinin, Executive Secretary of the Intergovernmental Oceanographic Commission of UNESCO; and Mr. Peter Thomson, Special Envoy for the Oceans of the United Nations Secretary-General. Numerous high-profile speakers and experts, representing both national and international institutions, participated in this gathering.

The 2nd United Nations Ocean Conference in Lisbon



On July 1, 2022, the Mohammed VI Foundation for the Protection of the Environment, journeyed to Lisbon to partake in the second United Nations Ocean Conference.

During the conference, the Foundation highlighted over two decades of commitment, in concert with its various partners, to the protection of beaches, coastlines, seas, and oceans. It showcased its initiatives in raising awareness and education and underscored its partnership initiated in 2021 with the IOC-UNESCO, which spearheads the United Nations Decade of Ocean Science for Sustainable Development.

Furthermore, the Foundation reintroduced "the Bouknadel Declaration", previously made public at the 2nd Foundations Dialogue on June 30. This declaration resonates with a clarion call for collective action to meet the aims of the Decade in the forthcoming eight years.

Parallel to the main conference, the Foundation facilitated meetings with global entities such as the Ocean Azul Foundation, the Gulbenkian Foundation, and the Prince Albert II of Monaco Foundation.

CLEAN BEACHES 2022: 106 BEACHES

Clean Beaches continues its dedication towards protecting the coastline and oceans, especially against plastic pollution.



The 23rd season of Clean Beaches, marked by a return to normalcy post-Covid-19, embraced 106 of the country's most frequented beaches, out of which 28 were awarded the Blue Flag label, ensuring visitors a clean, well-equipped, secure, and lively environment.

These beaches were managed by 68 local communities, backed by their supervising authority, the DGCT, coastal management-related administrations, 26 economic partners, and over a hundred local associations that rallied for almost three months to educate and raise awareness among beach-goers, ensure water and sand quality, equip the beaches, guarantee safety and health measures, and enforce order and regulations.

During the summer of 2022, coastal municipalities, economic partners, and civil society organizations successfully executed environmental education and awareness campaigns in person, which had been

hindered by Covid-19 in the summer of 2020 and partially in 2021. Such educational and awareness initiatives are the most effective tools to combat marine pollution, as cleanup efforts alone are insufficient against this menace.

Together with the municipalities and its partners, the Foundation reiterated for the third consecutive summer, from June 15 to September 15, its #b7arblaplastic campaign, whose excellence was recognized by the Foundation for Environmental Education (FEE). In 2020, they awarded it as the best practice among the 4425 beaches they label with a Blue Flag globally.

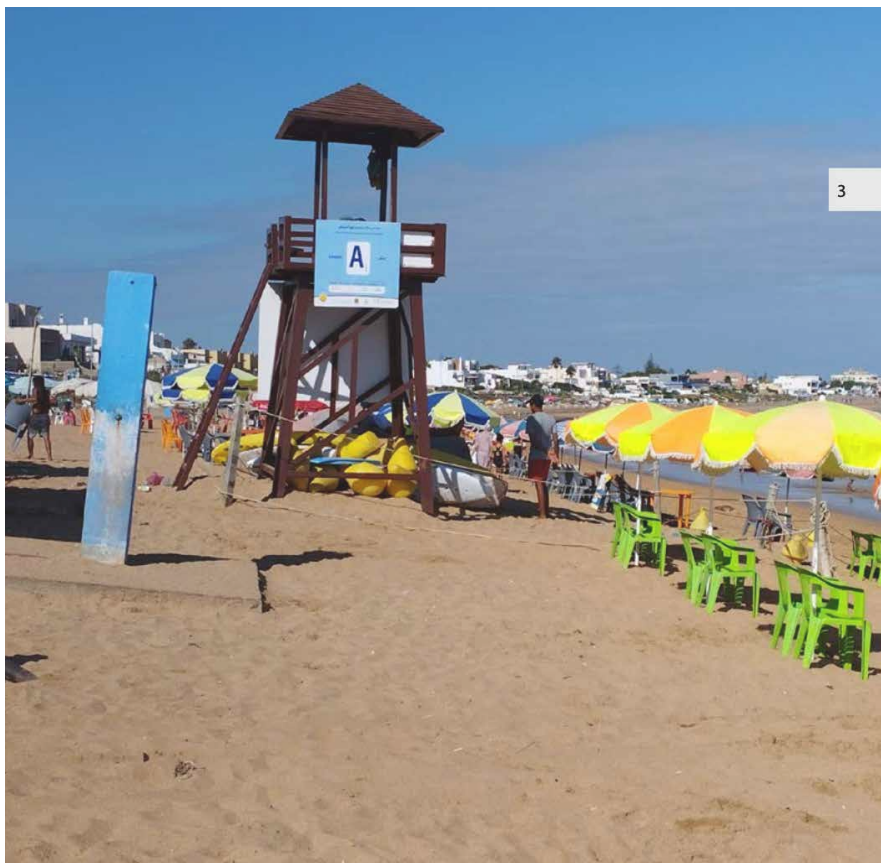
As in 2021, diving associations led the man-ocean awareness initiative, collecting plastic waste from marine depths across 17 of the Kingdom's beaches. Moreover, Clean Beaches witnessed the comeback of the National Federation of Moroccan Scouting, a historic partner, and holiday camps managed by the Ministry of Youth, Culture, and

Communication (MJCC). A new feature this year included beach libraries introduced at several locations to promote education on sustainable development.

This year also marked the return of the Lalla Hasnaa Sustainable Coastline Awards, which are also aligned with the Decade of Ocean Sciences for Sustainable Development, initiating its 4th edition.

Partner Mobilization

Before the commencement of the season, the Mohammed VI Foundation for the Protection of the Environment gathered its partners to prepare and collaboratively design the Clean Beaches operation. The Foundation executed the following three initiatives:



68

local communities, backed by their supervisory body, the DGCT

88,14 %

of water met swimming standards

- 1. Clean Beaches Partners Workshop 2022 on May 18th.** This workshop, which followed a preparatory online meeting on April 27th, aimed to synergize the Clean Beaches and #7arblaplastic campaigns. Round tables of the three thematic sessions were chaired by top-tier scientists. At the conclusion of this meeting, working groups issued recommendations for each addressed theme: Information, environmental awareness and education, Partnership and stakeholder mobilization, Research and innovation, and Training and capacity building.
- 2. On December 21st, 2021, a Blue Flag Workshop for coastal municipalities was held.**

The objective was to engage them more intensively in the beach labeling process, especially in an international context characterized by three dominant risks: pollution, particularly from plastics; climate

change impacts on ecosystems; and biodiversity decline.

- 3. On June 7th, 2022, a Blue Flag Workshop in partnership with the National Ports Agency** was organized to discuss waste management and effluents from all marinas and to consider the implementation of the Blue Flag label as an approach to environmental upgrading.

General Overview

The support for institutional partners has become more structured and strengthened over the years. With the guidance of the relevant ministerial departments and administrations responsible for coastal management, the Foundation and its partners have been able to initiate their annual efforts in infrastructure development, management, and raising awareness and educating about sustainable development on beaches that are monitored for Water Quality and sand. On these beaches, the

safety of beachgoers both in the water and on the sand is ensured, and health coverage is available. The results of the Clean Beaches program that follow are due to the commitment of the partners.

Monitoring of Bathing Water and Sand Quality

The National Laboratory for Pollution Studies and Monitoring (LNESE) of the Department of Sustainable Development (DDD) supervised the quality of bathing waters on 186 beaches, following the NM 03 7 199 standard. Out of 430 sampling stations, 379 were suitable for swimming, representing 88.14%. The laboratory regularly transmitted its monitoring bulletins throughout the season, either on its website or via an Android application.

By the end of 2022, 168 vulnerability profiles of bathing waters had been completed, and 31 were updated in 2022 according to the standard requirements. The profile is an essential tool that identifies sources of pollution that could impact bathing water

3208

seasonal lifeguards, supervised by 201 professional swim instructors



quality and affect swimmers' health. If a pollution risk is identified, the profile outlines the necessary management measures to be implemented.

The monitoring of sand quality also falls under the responsibility of the National Laboratory for Pollution Studies and Monitoring (LNESE), which collaborates closely with the Public Testing and Study Laboratory. The sand quality monitoring covered 60 beaches across the 9 coastal regions, including 23 beaches on the Mediterranean coast and 37 on the Atlantic coast. Among the samples, the most common waste items were plastic-polystyrene products (caps, cutlery, packaging), followed by cigarette butts and filters. The presence of non-pathogenic dermatophytes was detected in 39% of the monitored stations.

Beach Safety Swimmer Safety

From May 1st to September 30th, the safety of beachgoers is overseen by the Directorate General of Civil Protection. They recruit seasonal lifeguards, who are then supervised by trained professionals. To bolster beach safety, the Directorate deploys an array of rescue equipment. Notably, in 2022, an insurance policy for these seasonal lifeguards was secured by the Directorate General of Territorial Communities.

In that year, the Civil Protection team enlisted 3,208 lifeguards for the season, all of whom were mentored by 201 seasoned swim instructors. This collaboration saw the deployment of significant rescue tools and resources on beaches.

Nautical Safety

The Directorate of Ports and Public Maritime Domain of the Ministry of Equipment and Water established buoy markers on 124 beaches in 2022, which is 3 more beaches than in 2021.

Health Coverage

The Ministry of Health and Social Protection (MHSP) ensures the health coverage and hygiene of the beaches. They have equipped 65 primary care centers and provided 386 healthcare personnel (doctors, nurses, technicians). These professionals have conducted 6,504 consultations, administered 6,396 treatments, and transferred 202 cases to the hospital. They also took 834 samples for drinking water analysis, inspected 879 sanitary facilities, checked 392 healthcare establishments, and educated 15,745 individuals during 3,163 sessions.

Beach Management

The Directorate of Ports and Public Maritime Domain of the Ministry of Equipment and Water grants authorizations for the occupation of the public maritime domain for seasonal activities related to beaches and signs the provision agreements. 39% of the beaches have signed their agreement, due to financial and technical difficulties faced by some municipalities in assembling the necessary technical documents.

The Directorate had developed 103 beach usage and management plans by the end of 2022, with 21 still in progress.

Beach Monitoring and Assessment

Unscheduled visits, conducted by the National Committee on Beaches of the Clean Beaches 2022 program, resulted in both

Equipment deployed for swimmer safety during the 2022 bathing season.

Rescue and Lifesaving Equipment, Infrastructure	Nombre
Civil Protection Stations	128
Watchtowers	288
Ambulances	15
Personal Watercrafts "Jet-Skis"	52
Inflatable Boats	53
Quad Bikes	13
Lifebuoys	1219
Life Jackets	256
Pairs of Fins	1051
Boards	121
Megaphones	11
Binoculars	49
Umbrellas	74
Other resources	
Diving vehicles, ropes, stretchers, diving equipment, and oxygen tanks.	



national and regional assessments. These assessments highlighted the progress made as well as areas that need improvement. Technical evaluation sheets detail the status of each beach, emphasizing the efforts made, observed deficiencies in terms of bathing water quality, equipment, management, hygiene, safety, as well as in terms of implementing awareness and environmental education actions and development. The beach assessment procedure is based on the four sets of criteria for the Blue Flag label qualification.

The assessment of the equipment and management status of the 106 beaches in the Clean Beaches program has allowed the classification of beaches into three categories:

- The 28 Blue Flag beaches, on which no major issues have been reported.
- The 66 sponsored beaches that have an economic partner supporting them. 100% of these beaches have well-maintained toilets, 77% have showers, and 100% are cleaned (beach and back beach) by economic partners and municipalities.
- The 27 unsponsored beaches, which do not have an economic partner and

manage the summer season with their own means. 68% of them have toilets, 50% have showers, and 52% of the sanitary facilities are poorly maintained. 100% of the beaches are cleaned by municipal agents, and only 20% have first aid centers.

Despite the procedure for disseminating Bathing Water Quality results set up by the national Clean Beaches committee, the posting of these results is not yet widespread on all beaches.

All beaches open for swimming are overseen by the General Directorate of Civil Protection, and a marked improvement in the management of nautical activities on the beaches has been noted.

Significant efforts in health coverage were made by the delegations of the Ministry of Health and the Moroccan Red Crescent, supported by economic partners. All of the 28 Blue Flag beaches have first aid centers equipped and managed by medical or paramedical personnel. 72% of the sponsored beaches have nearby first aid centers, equipped and managed by medical or paramedical staff, and 20% of unsponsored beaches have first aid centers.

83 216

on-ground actions to raise awareness and engage 2,323,554 informed youths

Environmental Awareness and Education

Since the inception of the Clean Beaches program, the Foundation has supported its partners by providing them with educational and awareness tools and materials. In 2022, they decided to intensify their efforts to raise awareness and educate about the environment on the beaches.

This enhancement was undertaken in three aspects:

- A public-focused communication program (posters and an institutional spot promoting the preservation of seas and oceans),
- Awareness and education activities on sustainable development for the youth at the beaches, in partnership with diving associations,
- Utilizing interactive awareness and ESD (Education for Sustainable Development) tools developed by the Foundation (Facebook and Instagram pages, and the Ana Boundif app).

Economic partners and around a hundred local associations actively responded to the call made by the Foundation, conducting 83,216 on-ground actions to raise awareness and engage 2,323,554 young individuals.

36 sponsored beaches set up environmental awareness and education villages with the support of local associations (over 100 local associations participated in raising awareness and conducting activities on the beaches) or specialized agencies. These awareness activities were diverse: Education and Awareness workshops, artistic and scientific recycling workshops, beach radio, multimedia, beach libraries, sports tournaments, play areas, and visits to sensitive natural areas.

The National Federation of Moroccan Scouting (NFMS) participated for the 20th time in the "Clean Beaches" operation, mobilizing 7,200 scouts and guides. They obtained 15,500 commitments from beachgoers in favor of respecting the beach and its environment, and raised awareness among 84,000 beachgoers, including 6,000 children.

#B7ARBLAPLASTIC CAMPAIGN 2022

For the third consecutive year, the #bharblaplastic campaign was reinstated. Drawing from its 2019 concept, the 2022 edition aimed to amplify its impact through improved synchronization, enhanced tools, and stronger coordination. In this vein, the Foundation honed its facilitative role to galvanize and mobilize all partners towards a shared vision for the greater good.

The 2022 #b7arblaplastic campaign was anchored in three foundational pillars: a target group - the youth; a mission - eradicating plastic pollution; and a mode - digital. These guiding

principles evolved into four tangible challenges with measurable outcomes, rallying every stakeholder toward their achievement.

- Challenge 1: Decrease plastic waste by 10 tons for each beach,
- Challenge 2: Conduct 40,000 environmental outreach activities,
- Challenge 3: Educate and engage 2 million young individuals,
- Challenge 4: Ensure complete recycling of the collected plastic waste.

Every partner embarked on ground actions to tackle these challenges, yielding results that marked a considerable progression from past campaigns.

Complementing the 2022 b7arblaplastic campaign was the introduction of the mobile app 'anaboundif', receiving 22,869 downloads. Regularly augmented with fresh content - be it challenges, location-specific tasks, quizzes, and more - the Ana Boundif app underwent updates throughout its course, ensuring users had access to its evolving features.

CHALLENGE 1



10
tons

1138.67 tons of plastic removed from 66 beaches, averaging 17.25 tons of plastic per beach. This is an increase of 616.407 tons compared 2021, a rise of 54.13%.

CHALLENGE 2



40 000
actions

83,216 awareness activities related to plastic pollution, clean-ups, and recreational activities (workshops, animations, etc.) have been carried out. This represents an increase of 21,623 activities compared to 2021, a rise of 26%.

CHALLENGE 3



Engage
2 M
youths

2,323,554 youths were engaged, which is an increase of 519,294 compared 2021, a rise of 22.34%.

CHALLENGE 4



59,38 %

The recycling rate of the collected waste reached 59.38%, an increase of 22.27 percentage points compared to 2022.

The #b7arblaplastic 2022 Campaign on Social Media and the Web

For the #b7arblaplastic 2022 edition, the Foundation aimed to bolster its digital presence by promoting this initiative across its digital platforms, particularly on its social media channels and the Ana Bound-

if mobile app. The digital campaign achieved its set targets, transforming the #b7arblaplastic campaign into a sophisticated digital operation, through which the Foundation actively engaged its community.

Instagram

Followers: 1,781 as of mid-September.

Reach: 1,458,938 accounts.

Profile Visits: 10,722 to the @b7arblaplastic account.

Facebook

Likes: 48,230.

Reach: 4,773,528 accounts.

New Page Visits: 9,677 to the Facebook page.

BLUE FLAG

This summer, 28 beaches and two marinas proudly hoisted the international Blue Flag label, awarded by the Mohammed VI Foundation for the Protection of the Environment and the International Foundation for Environmental Education (FEE). This marks a significant increase from the summer of 2021, which saw 26 beaches and one marina earn the designation, and the summer of 2020, which was impacted by the COVID-19 health restrictions. Two new additions to the list of labeled beaches are Marina Smir Est and Al Minaa. With these 28 beaches, Morocco ranks first in the Arab world and second in Africa.

The Atlantic coast boasts 22 labeled beaches, while the Mediterranean coast has eight beaches and the two marinas. This year, Marina Smir joined Saïdia, a Blue Flag marina for four years, setting the standard for this demanding label, which requires compliance with 26 criteria across six categories, such

as water quality within the port area, information provision, and especially waste management.

A total of 46 beaches applied for this esteemed label, which is recognized by vacationers. However, only 28 met its rigorous criteria. The designation is granted to the municipalities, as they are responsible for the comprehensive management of the beaches within their jurisdiction, including maintenance, cleanliness, equipment, security, training, accessibility, and public awareness. In this substantial endeavor, they are supported by the Clean Beaches program of the Foundation and backed by the General Directorate of Territorial Communities and the relevant ministerial departments.

Territorial officials are trained in beach management, and environmental management and awareness tools are provided to ensure that beachgoers have the

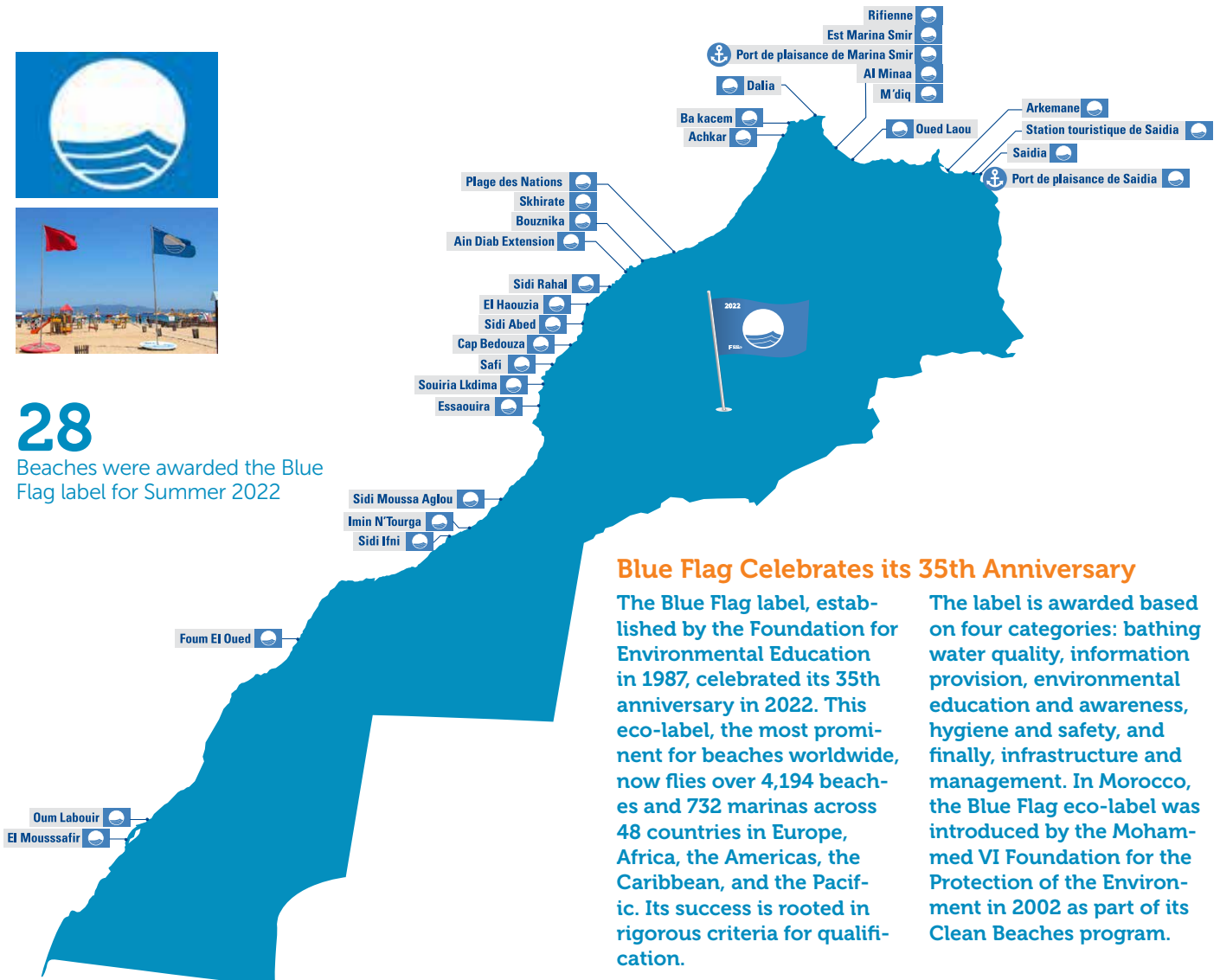
best possible experience. The Foundation assesses the Blue Flag applications and conducts surprise inspections during the summer to ensure all label criteria are maintained throughout the season. Furthermore, the municipalities receive support from the General Directorate of Territorial Communities and the business partners mobilized by the Foundation as part of the Clean Beaches program, which offers managerial expertise and financial support.

In 2022, two training workshops were organized for the Blue Flag initiative. The first, held on December 21, 2021, aimed to raise awareness about three major risks: pollution, particularly from plastics, the impact of climate change on ecosystems, and the decline of biodiversity. The second, held on June 7, 2022, in collaboration with the National Ports Agency, focused on the labeling of marinas.



28

Beaches were awarded the Blue Flag label for Summer 2022



Blue Flag Celebrates its 35th Anniversary

The Blue Flag label, established by the Foundation for Environmental Education in 1987, celebrated its 35th anniversary in 2022. This eco-label, the most prominent for beaches worldwide, now flies over 4,194 beaches and 732 marinas across 48 countries in Europe, Africa, the Americas, the Caribbean, and the Pacific. Its success is rooted in rigorous criteria for qualification.

The label is awarded based on four categories: bathing water quality, information provision, environmental education and awareness, hygiene and safety, and finally, infrastructure and management. In Morocco, the Blue Flag eco-label was introduced by the Mohammed VI Foundation for the Protection of the Environment in 2002 as part of its Clean Beaches program.

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DECARBONIZATION

Capitalizing on the progress achieved in 2021, the Foundation successfully realized its objectives for 2022.

A Carbon-Neutral Goal by 2050

The Mohammed VI Foundation for the Protection of the Environment has prioritized the nation's vision of achieving "Carbon Neutrality by 2050" as a core strategic objective within its Air and Climate division. Committed to this goal, the Foundation has taken upon itself to guide all the kingdom's actors in their journey towards a resilient and inclusive carbon neutrality, aligning with the United Nations' Sustainable Development Goals.

Recognizing the pressing nature of the climate crisis and its subsequent swift economic ramifications in 2021, the Foundation convened a task force to spearhead and accelerate the transition to a carbon-reduced economy. This collaborative effort encompassed the Ministry of Industry and Commerce, the Ministry of Energy Transition and Sustainable Development, the National Agency for Energy Efficiency (AMEE), the Moroccan Institute for Standardization (IMANOR), and the General Confederation of Moroccan Enterprises (CGEM).

United in their efforts, they laid the groundwork for comprehensive decarbonization initiatives by the close of 2021, particularly highlighted during the COP26 in Glasgow. This initiative bore fruit in 2022, materializing the action plans set the previous year.

Emission Quantification

The first step of this ambitious journey involved equipping businesses and organizations with a robust mechanism to measure their Greenhouse Gas (GHG) emissions. An enhancement and modernization of the GHG Inventory management tool, which the Foundation had pioneered back in 2013, was initiated. This tool, initially crafted with the expertise of the French Environment and Energy Management Agency (ADEME), underwent its transformation with the insights of the Low Carbon Transition Association (ABC). This renowned association, endorsed by the French Energy Management Agency (ADEME), is globally acclaimed for framing and promoting the Carbon Inventory® methodology across Europe and beyond.



ABC training for corporate signatories of the Qualit'Air Charter on Bilan Carbone®, conducted on June 16 and 17, 2022, at the Hassan II International Center for Environmental Training.

Upgrade and Elevation of the Bilan Carbone® Tool

On January 5, 2022, the initiative to refine and enhance the Bilan Carbone® tool was launched at the Hassan II International Center for Environmental Training. From January to December 2022, the steering committee convened 20 times, adhering strictly to the project's predetermined schedule. The mission concluded as planned, and on December 13, 2022, the Foundation, along with its partners, hosted a feedback workshop at the Hassan II International Center for Environmental Training. They presented the updated version of the Moroccan Bilan Carbone®, which now encompasses 350 emission factors, of which 60% are tailored to the national context.

Global Regulatory Alignment

The subsequent task, which aims to align with international regulations, remains ongoing. Notably, the European Union hasn't concluded its discussions on the Carbon Border Adjustment Mechanism, initially scheduled for January 2023 but now deferred to October

2023. Likewise, discussions regarding Article 6 of the Paris Climate Accord weren't finalized at COP27 in Sharm El Sheikh and have been postponed for COP28. As part of this ongoing effort, three training sessions on the Bilan Carbone®, intended for consultancy firms, corporations, and universities, are scheduled for the first quarter of 2023.

Carbon Accounting Workshops

In partnership with ABC, the Foundation organized a series of three webinars on carbon accounting:

- February 18, 2022: The inaugural session centered on the fundamental elements of carbon accounting, attracting 102 online attendees.
- March 24, 2022: The second session, focused on "The Transition Strategy: How to Craft a GHG Reduction Plan", was facilitated both on-site at the Hassan II International Center for Environmental Training and virtually via Zoom.

- June 13, 2022: The third and final module delved into ways to aid the Low Carbon Transition, particularly through Carbon Compensation.

Qualit'Air Charter

ABC experts led a training session for the companies that signed the Qualit'Air Charter on Bilan Carbone® (Module 1, which enables a mission leader to conduct a carbon audit within their company's scope). This session took place on June 16 and 17, 2022, at the Hassan II International Center for Environmental Training. Additionally, they facilitated an awareness workshop for universities in the AGUYEN network on June 15, 2022, at the same center.

Awareness Webinars

The action plan for 2022 included organizing a series of awareness webinars on decarbonization. The Foundation conducted three of these sessions:

- April 26, 2022: Focusing on energy efficiency as a lever for the low carbon transition, organized in collaboration with the Moroccan Agency for Energy Efficiency (AMEE).
- October 12, 2022: An awareness session on the SDGs and decarbonization for Royal Air Maroc staff.
- November 14, 2022: "Live from COP27", streamed directly from Charm Ech Cheikh in the blue zone, offering an inside look at the COP's behind-the-scenes activities,

negotiations, parallel events, pavilions, and more.

Regional Tours to Raise Decarbonization Awareness in Partnership with CGEM

The Foundation and CGEM, having jointly signed the Qualit'Air pact in 2016 and again in 2021, initiated awareness campaigns on decarbonization targeting businesses across various Moroccan regions. The inaugural event of this series was organized in partnership with the CGEM of the Rabat-Salé-Kénitra region. Held on October 18, 2022, at the Hassan II International Center for Environmental Training, this gathering attracted fifty representatives from businesses in the region. Subsequent events are slated for early 2023.

Training for Local Authorities

In 2021, the Mohammed VI Foundation for Environmental Protection, in collaboration with the Directorate General for Local Authorities, initiated a training program for local communities. The program's objective was to equip them with the necessary skills to draft investment proposals for climate-related projects. These proposals aimed to secure funding from either local or international financial markets, focusing on sectors such as energy, biodiversity, waste management, air quality, sustainable mobility, agriculture, water, and more.

Conceived in 2021, the training program was geared towards crafting conceptual notes for the Green Climate Fund and targeted 415 local stakeholders. The training cycle was

inaugurated with a national workshop on December 7, 2021. This initial session was succeeded by twelve regional hands-on training workshops, each spanning two and a half days, conducted across 12 regions:

- Rabat-Salé-Kénitra: December 14-16, 2021.
- Marrakech-Safi: December 21-23, 2021.
- L'Oriental: May 16-18, 2022.
- Fès-Meknès: May 23-25, 2022.
- Casablanca-Settat (First Session): June 27-29, 2022.
- Casablanca-Settat (Second Session): July 6-8, 2022.
- Souss-Massa: September 12-14, 2022.
- Guelmim-Oued Noun: September 26-28, 2022.
- Béni Mellal-Khénifra: October 12-14, 2022.
- Laâyoune-Sakia El Hamra and Dakhla-Oued Ed-Dahab: October 24-26, 2022.
- Tanger-Tétouan-Al Hoceïma: November 7-9, 2022.

The series concluded with a workshop on January 26, 2023, where outcomes from the training sessions were presented alongside a guide for drafting and managing projects that qualify for climate financing. To supplement the workshops, six webinars were held to enhance participants' understanding of climate change and the integration of climate projects into community action plans. Additionally, four more webinars were organized to introduce local stakeholders to the guide for developing climate-focused projects.

QUALIT'AIR

The Qualit'air program, championed by the foundation since its early inception, has entered a new phase. During its previous, extensive phase, the program established a National Air Quality Monitoring Network. In its current stage, the management of this network has been entrusted to the National Meteorology Directorate, while the Foundation has shifted its focus to raising awareness and environmental education, training, assisting in the implementation of territorial governance, research, and participation in national and international conferences. This division of responsibilities is now firmly established.

National Air Quality Monitoring Network

The National Meteorology Directorate is now in charge of the management and maintenance of the monitoring stations. Nonetheless, the Foundation still plays a role in its governance and oversight. Seven stations were

commissioned in 2022, located in Médiouna, Mohammédia, Sidi Othmane, Casablanca, Kénitra, Rabat, and Safi. The governance stakeholders (the Foundation, DGCL, MEDD, MEF) have collaborated to establish and fund a three-year development plan (2023-2025) for this network. The goal is to expand the network to 90 stations by 2025, and then to 140 stations by 2030.

Air Quality Training

A multi-target training program intended for both public and private sector stakeholders involved in air quality management has been finalized. Training materials and other support documents are currently being prepared by experts. The training covers four main themes:

- An overview of air quality, including related institutional and legal aspects,
- The connection between air quality and climate change,



- Monitoring air quality,
- Sectoral air pollution, focusing on areas like energy, transportation, industry, agriculture, urban planning, housing, and waste management.

VOLUNTARY CARBON OFFSET

The program has expanded to include other forms of offsetting, with results evident in 2022.

The Voluntary Carbon Offset initiative, launched in 2009, stands as one of the Foundation's longest-running programs. For over a decade, it offered partner companies the opportunity to offset their unavoidable emissions through two primary activities: palm tree planting and rural electrification.

Expansion of Offsetting

The scope of voluntary carbon offsetting has broadened. Previously limited to rural school electrification and palm tree planting, recent years have witnessed the introduction of four new offset avenues:

- **Planting:** This includes both date palm and other tree plantings.
- **Energy:** This encompasses the installation of low-consumption lighting (LED), rollout of photovoltaic kits, and solar water heaters in remote schools.
- **Electric Mobility.**
- **Raising Awareness:** Training private and public entities to implement greenhouse gas emission reduction strategies.

Tree Planting

The planting of palm trees in Marrakech commenced in 2009. By the end of 2022, 40,000 young palms planted as part of the offset initiative have rejuvenated the palm grove. In 2022 alone, 4,840 new palms were planted, corresponding to a sequestration of 169.20 CO₂-equivalent tons over the

palms' lifespan. Cumulatively, these plantings are projected to sequester nearly 100,000 CO₂-equivalent tons by the end of the palms' lifetimes. For the first time since the program's inception, other tree species were introduced: 1,500 trees were planted in Jérada, including Brachychitons, plane trees, pines, and poplars, species chosen for their adaptability to Jérada's harsh climate.

Rural School Electrification

In 2022, the Foundation and its partners provided electricity to 25 rural schools, previously not connected to the national grid, using 44 photovoltaic kits. These schools are located in the Casablanca-Settat, Draâ-Tafilalet, and Rabat-Salé-Kénitra regions. Additionally, 70 solar water heaters were installed in 14 schools across the Rabat-Salé-Kénitra, Béni Mellal-Khénifra, Fès-Meknès, and Marrakech-Safi regions, enhancing the comfort of both teachers and students. Since 2021, these installations have been managed by the Ministry of National Education with technical support from AMEE.

Since the program's inception, 1,125 schools have been electrified.

LED Equipment

In 2022, 5,413 LED devices were provided to students in 19 rural schools across the Oriental, Tanger-Tétouan-Al Hoceima, Marrakech-Safi, and Fès-Meknès regions. These devices illuminate classrooms and drastically



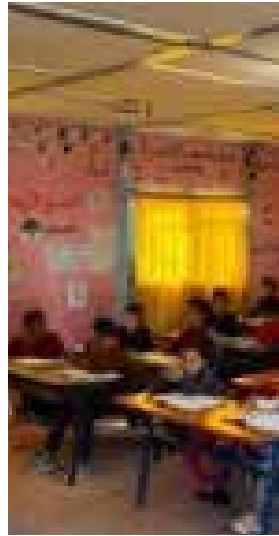
reduce the schools' energy bills. Additionally, standalone solar lampposts have been installed to enhance safety around the school premises.

Electronic Tablets

In collaboration with the Ministry of National Education, Preschool, and Sports, 560 electronic tablets were distributed to students in rural areas. These tablets are pre-loaded with the Ministry's curriculum, as well as educational content on sustainable development produced by the Hassan II International Center for Environmental Training. These devices grant students access to materials they previously couldn't obtain. Since the initiative's start, over 2,000 tablets have been handed out to students in rural regions.

Electric Mobility

On November 11, 2022, 143 students received an electric-assist bicycle to commute between





5413
LED devices for schools



their homes and Cadi Ayyad University in Marrakech. This pilot electric mobility project is part of the Voluntary Carbon Compensation initiative under the Air and Climate department. Launched in 2009, this program allows Moroccan companies to offset their greenhouse gas emissions by funding carbon sequestration or retention operations.

The 143 electric bicycles were supplied by a Moroccan start-up, Cloud Bike, located in the Tangier Free Zone, which has been exporting its entire production to Europe and North America since 2018. The students who received the bicycles were also educated about the environmental benefits of electric mobility, and more broadly, about the challenges of climate change. These training sessions were provided by Cloud Bike.

This initiative also enabled Cadi Ayyad University to showcase this best practice as part of the Green Universities and Youth

Education Network in Africa (Aguyen), supported by the Foundation and UN Environment, of which it is a member.

Finally, this pilot experience contributes to the reflection of the Marrakech-Safi region, which, in collaboration with the Foundation and its partners, is working on a Climate Plan to reduce its greenhouse gas emissions. This climate plan initially focuses on identifying and assessing the region's emissions using the Carbone® Tool, Morocco's national reference tool for the country's decarbonization strategy, in line with its 2030 emission reduction commitments.

143
Electric-Assist Bicycles
in Marrakech

25
electrified
rural schools

560
electronic
tablets

4840
palm trees in the
Palmeraie of Marrakech

1500
trees in Jerada



AFRICAN YOUTH CLIMATE HUB (AYCH)

In 2022, AYCH completed its third full year, most notably with the selection of the first batch of projects for the incubator.

Incubation Program

The aim of the AYCH incubator is to amplify and strengthen African youth leadership for climate action and to provide young African climate entrepreneurs with the resources and tools to develop their projects. A call for projects was launched in 2021, and 223 projects from 23 African countries (including Chad, Liberia, Mauritania, Niger, Togo, Zambia, Republic of Congo, Algeria, Malawi, Burundi, Zimbabwe, Egypt, Ethiopia, Rwanda, Ghana, Tunisia, Benin, Uganda, Côte d'Ivoire, Madagascar, South Africa, Senegal, Kenya, Nigeria, and Morocco) were received.

These projects are at various stages of development, ranging from the concept stage (26%) or prototype (21%), field tests (24%), full development (14%), and even revenue generation (15%). Half of these projects (51%) focus on adapting to climate change, while the other half (49%) work on mitigating it. Their impact is local (27%), national (38%), multinational (6%), regional (9%), or global (20%).

Evaluation Process

The 223 projects underwent a four-step evaluation process:

- **First Stage:** An automated filtering to sift through incomplete submissions, resulting in 218 shortlisted projects.
- **Second Stage:** Projects were evaluated by a group composed of young individuals (50% AYCH ambassadors and 50% representatives from YOUNGO).
- **Third Stage:** Projects were assessed by a panel of selected experts, narrowing down to 20 initiatives.



- **Final Stage:** Ten projects were chosen for incubation.

First Edition Incubation Program Winners

The ten projects chosen for the first edition of the incubation program cover a wide range of topics and hail from diverse origins.

1. **Institutional Solar Oven (Uganda):** An innovation to introduce solar-powered induction cookers to areas without electrical access, specifically for schools, hospitals and prisons. This project aspires to offer a cooking solution that is both economical and ecological to African institutions.
2. **Colex (Egypt):** An initiative to transform organic waste from cattle, buffalo and various bird farms into biogas. This process generates methane, an alternative energy source.
3. **SoCool (Multinational team from Madagascar, Nigeria and Uganda):** An innovative technology company behind the production of a solar-powered refrigerator, which integrates a filtering process that results in high-quality potable water.
4. **Ecovon (Ghana):** An approach to creating sustainable, ecological and formaldehyde-free wood, made from coconut waste and sugar cane bagasse.
5. **Farm School of Agroecology (Senegal):** An educational initiative aimed at training young farmers in sustainable and innovative agricultural methods.
6. **Lifebox from Noornation (Egypt):** A multifunctional solar device offering vital resources such as electricity and drinking water at affordable prices. This tool aims to support agricultural and tourism businesses in disadvantaged regions.
7. **Wastebazaar (Nigeria):** An innovative project for the digitalization of waste collection in densely populated

YOUTH PARTICIPATION IN INTERNATIONAL EVENTS

AYCH is at the forefront of preparing Africa's youth for environmental leadership. This is achieved by sending young ambassadors to global events, giving them a firsthand experience of major international negotiations.



UNEA 5

February 2021 - Virtual Attendance

Olumide Idowu, a passionate young ambassador from AYCH, marked his presence at the 5th United Nations Environment Assembly (UNEA 5). Discussions at the assembly were concentrated around environmental protection and combating climate change. Idowu actively contributed to the dialogues and was a part of several auxiliary events.

African Climate Week

August 29th to September 2nd, 2022 - Libreville, Gabon

Two AYCH ambassadors, **Olumide Idowu** and **Elizabeth Gulugu**, represented the

organization at this vital event, which was centered on «Showcasing initiatives for addressing climate change in Africa.» Both ambassadors contributed significantly to thematic discussions.

ECOSOC Youth Forum

April 19th–20th, 2022 - Virtual Attendance

This forum, jointly organized by the United Nations Department of Economic and Social Affairs (DESA) and the Secretary-General's Envoy on Youth (OSGEY), was primarily focused on post-Covid-19 recovery and the implementation of the 2030 Agenda for Sustainable Development. Young representatives collaborated with governmental and

political entities, sharing best practices for the Sustainable Development Goals' execution. AYCH played a pivotal role by co-hosting an event where its ambassadors, **Hatim El Otmani** and **Manal Bidar**, served as moderators.

UN Summit on Education Transformation

September 17th, 2022 - New York

Parallel events were the highlight of the AYCH's involvement during the summit, which spanned topics like learning methodologies and the digitization of education. AYCH was represented by its ambassador, **Yared Abera**, and the coordinator, both of whom actively participated in the discussions.

and underserved areas facing waste management challenges.

- 8. PlaVeg (Morocco):** An avant-garde technique for the production of biodegradable plastic from plant waste.
- 9. MonSapo (Tunisia):** An ecological initiative to recycle wood ashes and used cooking oils, by recovering their active components to develop cleaning products.
- 10. KAGE (Burundi):** An approach to making eco-responsible charcoal briquettes from domestic organic waste and agricultural residues, associated with the design of improved stoves made from metal waste.

In 2023, the visionaries behind these ten projects participated in an intensive incubation program, consisting of five "sprints" spread over a period of six months.

AYCH Annual Event

On December 9th and 10th, 2022, the annual gathering for the AYCH Hub took center stage at the Hassan II International Center for Environmental Training. Here, ten meticulously chosen projects were unveiled and showcased to the attendees. The event drew in 120 participants, among which were 30 budding entrepreneurs. These young visionaries traveled from their respective countries, their journey facilitated by the generous support of the OCP Group.

The inaugural day was structured into four distinct segments: An opening session to set the tone, A dedicated showcase of the ten selected projects, A heartfelt sharing from the project leaders, narrating their individual journeys, A detailed insight into the AYCH incubation program, culminating in a dynamic Q&A session.

The event's second day pivoted to a workshop format. Attendees were strategically divided

into two cohorts, immersing themselves in discussions centered on the multifaceted aspects of AYCH. This encompassed the incubation initiative, the forum, the learning hub, the observatory, and the dashboard. The rich takeaways from these deliberations found their platform in a plenary session. Here, the outcomes of COP27 were also dissected, paving the way for a lively dialogue spearheaded by the Young Environmental Journalists.

04 HISTORIC GARDENS



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PRESERVATION AND DEVELOPMENT OF THE
MARRAKECH PALM GROVE

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EXOTIC GARDENS OF BOUKNADEL

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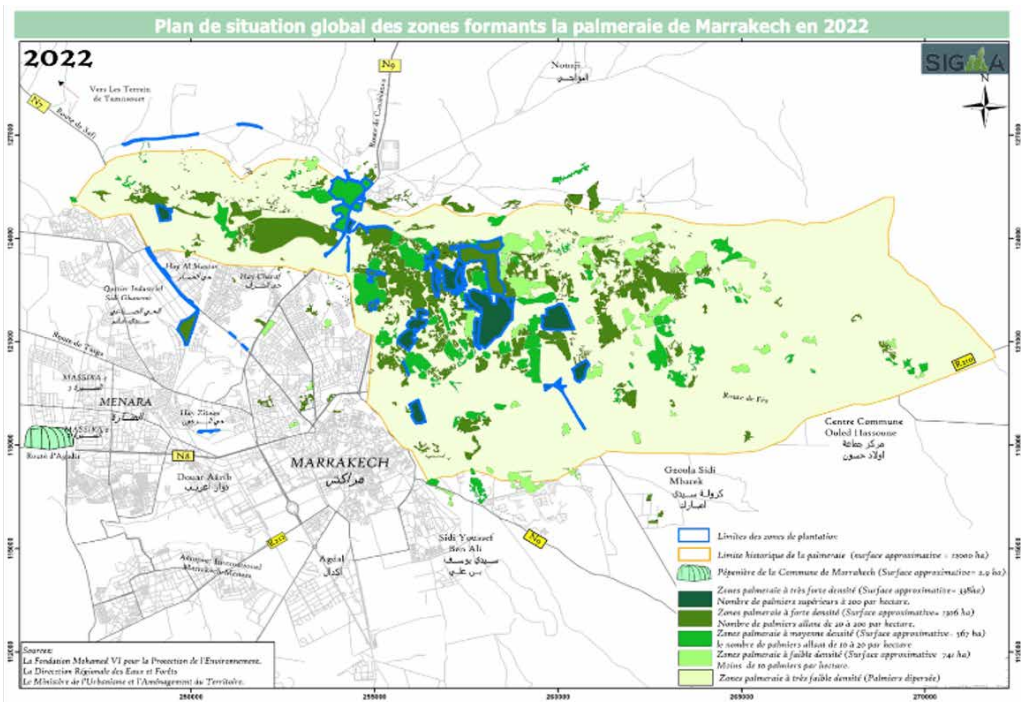
LAHOUL GARDEN OF MEKNÈS

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GHABAT CHABAB OF MARRAKECH



PRESERVATION AND DEVELOPMENT OF THE MARRAKECH PALM GROVE



A comprehensive topographical survey of the Palm Grove was conducted in 2022.

This flagship program of the Foundation in Marrakech, launched in 2007, has celebrated its fifteenth anniversary. Its history was detailed in a summary brochure published at the end of 2022. At this stage of its journey, the Foundation initiated an in-depth reflection.

Strategic Development of the Program

A study was initiated in 2022 to outline a new ecosystemic approach for the program, aiming to restore the ecosystem of the Palm Grove and rejuvenate its biodiversity. A research firm was commissioned for this purpose. The mission unfolds in three phases. The first focused on diagnosing the Preservation and Development program of the Palm Grove that the Foundation has been leading since 2007. The research firm conducted field visits, organized interviews, and workshops with all local stakeholders. The second phase focused on crafting

scenarios for program development. The first two phases have been completed, and the ongoing third phase is dedicated to action planning. The firm proposed three management scenarios with varying timelines: a reactive management to address dysfunctions over a span of four years; a differentiated management of the palm grove area spanning six years; and a proactive, inclusive, and integrated management of the palm grove over an eight-year duration.

Topographical Survey

To support the strategic study, a comprehensive digital topographic survey of the Palm Grove have been previously conducted. This survey, completed mid-2022, employed advanced methods of spatial remote sensing and artificial intelligence to refine the boundaries, list plantations, trace the irrigation network with the treated wastewater of the Palm

Grove, and its facilities. It helped estimate the area of the Palm Grove to be 12,000 hectares, categorized by different densities. This initiative provides a detailed map of the Palm Grove to inform future actions. The map has also been shared with Marrakech authorities for consideration in their urban planning.

Planting

Planting continued with 4,840 palm trees planted throughout 2022, leading to the sequestration of 169.20 tonnes of CO₂ equivalent over the trees' lifespan. By the end of 2022, the total number of delivered palm trees since the beginning of the planting operations stood at 613,478 palm trees, representing a 142.67% achievement of the set objectives.

The Marrakech Palm Grove still has some wild areas that shelter remarkable biodiversity, which the program aims to protect.



The program's recap brochure chronicles the program's fifteen-year history. It's available in three languages (Arabic, French, and English) on the Foundation's official website.



12 000
hectares of palm grove categorized by varying densities

613 478
palm plants

Irrigation

The new plantations are watered using systems established by the Foundation, notably through wells or with treated wastewater from the city.

To the east of the Palmeraie, given the unavailability of land to house the pumping station and the wastewater accumulation basin, an alternative solution was chosen. A connection will be made from the Wastewater Treatment Plant (STEP) near the North Exit of the highway. A pumping station, pipelines, and a storage tank will be built. These will feed two irrigation outlets. The storage tank will be a semi-underground reinforced concrete basin with a capacity of about 200 cubic meters.

School Community Awareness

On the International Day of Biodiversity on May 22, 2022, an awareness day was held on the biodiversity of the Palmeraie for about fifty students, from elementary to high school, from schools located within the Palmeraie itself. This initiative, in partnership with the International Hassan II

Environmental Training Center and experts from INRA, aimed to introduce the youth to the importance of preserving biodiversity and to Sustainable Development Goals (SDG) No. 4 (access to education), 13 (climate action), and 15 (life on land).

The participants engaged in a biodiversity game and then visited the forest plant nursery. They later met an agroecology farmer, a practice introduced by the Foundation in the Palmeraie as part of the program. This farmer explained agroecology, crop diversification, composting, water management, and the link between his activity, the preservation of palm trees, and biodiversity.

EXOTIC GARDENS OF BOUKNADEL

The ponds of the Exotic Gardens house numerous Koi carp, which are very popular with visitors.

The Foundation has concluded its eighteenth year of managing the Exotic Gardens of Bouknadel since their restoration and reopening to the public in 2005. From the outset, it has been supported in preserving this historical heritage by the General Directorate of Territorial Communities, the Prefectoral Council of Salé, the Prefecture of Salé, and a civil society association. The first three partners are connected to the Foundation through a triennial agreement for the management of the Exotic Gardens, an agreement that is regularly renewed.

In 2022, the Exotic Gardens welcomed 72,593 visitors, of which 41,882 were children. Some 225 guided tours were organized for school groups from 303 schools. Visitation has rebounded since the Covid-19 pandemic, especially for children. However, it remains below the potential of the Gardens as demonstrated in the past. The climatic conditions, with one of the worst droughts the country has ever experienced, combined with the economic difficulties that affected all social categories in 2022, but the Gardens were able to maintain their activity.

Maintenance and Developments

The maintenance of existing infrastructure (irrigation network, lighting network, bridges and walkways, buildings, huts, pagodas, visitor and educational circuits, aviaries, and vivarium) was carried out as every year according to the specifications set for the conservation and development of the gardens' heritage.

72 593
visitors in 2022



No major project was undertaken, and routine maintenance work was carried out, from repairing cracks, building low walls, drainage, equipping restrooms, replacing worn-out cables, pruning trees and palm trees, and so on.

Ecological Showcase

Every year, the gardens further strengthen their role in raising awareness and educating about the environment. The five interactive stations on the educational circuit have been recently updated and renovated. They represent simple actions that everyone can adopt in their daily lives to reduce their environmental impact. Young students from school groups who follow this circuit can read these recommendations and put them into practice.

The educational program offered to school groups and adults has been revised in collaboration with the Association of Friends of the Exotic Gardens of Bouknadel. An increasing variety of activities are now offered to visitors, such as treasure hunts, photography and painting contests, gardening initiation courses, demonstrations of essential oil distillation from flowers and aromatic plants, guided tours, carbon

offset initiatives, and greenhouse gas reduction efforts.

The organic vegetable garden created in the nursery allows for educational activities, and the vegetables grown there are provided to staff and members of the Friends of the Gardens Association. Composting and organic waste recycling are part of the gardening initiation course and allow the gardens to be self-sufficient in terms of fertilization. Environmentally friendly techniques such as wastewater recovery, drip irrigation, and the use of solar energy are presented as models of environmental action.

Life in the Gardens

Regarding births, ducks, golden pheasants, parakeets, lovebirds, diamond doves, and mandarin ducks have not deviated from their usual fertility, much like their aquatic counterparts, koi carp and gambusia, whose numbers continue to grow. These numerous aquatic species contribute to biological pest control, particularly against mosquitoes. Other new species have been introduced, such as the guinea pigeon and the Moringa tree, the African baobab...

LAHBLOUL IN MEKNÈS



4 he
in the heart of the city

Lahboul, the largest garden in Meknès, founded in 1906, with its century-old trees, was rehabilitated by the Foundation and its partners after extensive work that began in 2017.

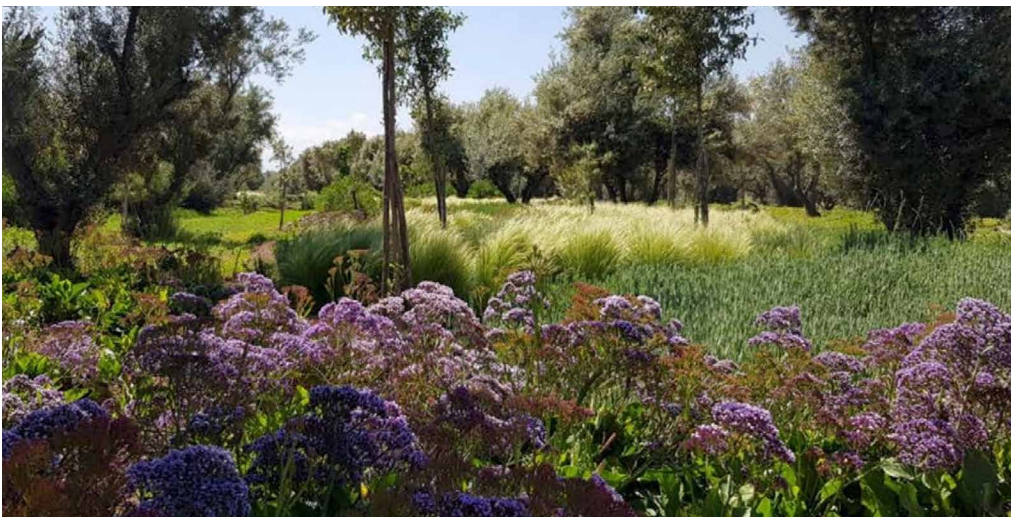
Following the final acceptance of the main rehabilitation operation on March 11, 2022, additional improvements were made to Lahboul Garden. The wall and the gate on the Medina side were reinforced and refreshed. The basement of the stage was rehabilitated. Video surveillance systems

were installed, and the administrative facilities in the technical area were completed.

All of these additional works, as well as the educational modules, were provisionally accepted on March 22, 2023.

At the end of 2022, Lahboul Garden, a vast five-hectare space in the heart of the city, was not yet open to the public.

GHABAT CHABAB IN MARRAKECH



Rehabilitation of
120 he
of Olive Groves

Ghabat Chabab, inaugurated by HRH Princess Lalla Hasnaa on Tuesday, October 4, 2022, in Marrakech, on the sidelines of the Foundation's board meeting, is now open to the public. This extensive olive grove, originally planted at the time of independence, has undergone a complete rehabilitation, thanks to significant efforts of the Foundation's partners in Marrakech.

The works were practically completed in 2021, with only a few finishing touches remaining, which were completed in early 2022. The park, now

located in the heart of the city and maintained by the Municipality, has been frequented since its inauguration. The people of Marrakech have reclaimed this urban forest, where they have resumed their picnic (nzaha), walking, and sports activities. They are taking advantage of the facilities put in place during the rehabilitation program.

Ghabat Chabab is open from 8am to 6pm, and it is well-visited. Sports activities are organized there in the Western area equipped with tracks and sports fields.

05

APPENDICES



50

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PARTNERS**



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- Maroclear
- Shem's
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- Popular Bank Foundation for Education and Culture
- ANAPEC
- Ministry of National Education
- Agency for the Promotion and Economic and Social Development of the Oriental Region
- LYDEC
- Agency for the Promotion and Economic and Social Development of the prefectures and provinces of the south of the kingdom
- MED Z
- Agency for the Development of the Bouregreg Valley
- Suez Environnement
- Tangier Mediterranean Special Agency
- Al Omrane
- Nestlé Morocco
- Agency for the Promotion and Economic and Social Development of the prefectures and provinces of the north of the kingdom
- UNDP (United Nations Development Program)
- UNEP (United Nations Environment Program)
- Amendis-Tangier
- Amendis-Tetouan
- ONCF (National Railways Office)
- Crédit Agricole du Maroc
- FEE (Foundation for Environmental Education)
- ADEME (Environment and Energy Management Agency)
- ADM (Highways of Morocco)
- Barid Al Maghreb
- CimENTS du Maroc
- MAMDA-MCMA Group
- ISESCO
- CDG Foundation
- Marchica MED Lagoon Development Company
- GIZ (German Corporation for International Cooperation)
- ADDOHA Group
- ONDA (Moroccan Airports Authority)
- SNEP (National Company of Electrolysis and Petrochemistry)
- AMEE (Moroccan Agency for Energy Efficiency)
- FNSM (National Federation of Scouting Organizations in Morocco)
- Jorf Lasfar Energy Company (TAQA)
- AGNELLI Foundation
- Asment Temara
- BMCE Bank Foundation for Education & Environment
- Marsa Maroc
- FUNCI (Islamic Culture Foundation)
- INRA (National Institute of Agricultural Research)
- Imperial Tobacco Morocco
- REDAL
- Lafarge Morocco
- Prince Albert II of Monaco Foundation
- GPM (Petroleum Group of Morocco)
- HCEFLCD (High Commission for Water, Forests and the Fight against Desertification)
- FOURTOU Foundation
- SNRT (National Society of Television and Broadcasting)
- FRMYV (Royal Moroccan Yachting Federation)
- FMSAR (Moroccan Federation of Insurance and Reinsurance Companies)
- INRH (National Institute of Fisheries Research)
- OFPPT (Office of Vocational Training and Employment Promotion)
- Société Générale
- Theolia
- IsDB (Islamic Development Bank)
- IUCN (International Union for Conservation of Nature)
- UNESCO
- Marrakech Palm Grove Observatory
- ANEL (National Association of Elected Officials from the Coast)
- Netherlands Embassy in Morocco
- Permanent Secretariat of WEEC
- Mediterranean Action Plan
- Conservatoire du Littoral (Coastal Protection Agency)
- AECID (Spanish Agency for International Development Cooperation)
- Secretariat of the United Nations Framework Convention on Climate Change
- Elche Town Hall
- Agrisud International
- Norsys Foundation
- MIOECSDE
- Citibank
- FNIH (National Federation of the Hotel Industry)
- CIH
- BMCI
- Attijariwafabank
- Holcim
- Hassan II Institute of Agriculture and Veterinary Medicine
- Ministry of Equipment, Transport and Logistics
- RMA WATANYA
- Jamain Baco Group
- Vivo Energy Morocco
- ONDE (National Observatory for the Rights of Children)
- "Green Apple" Awards
- AESVT (Moroccan Association of Earth and Life Science Teachers)
- RMC (Rhône Méditerranée Corse Water Agency)
- RADEEMA
- Alcatel
- SDS (Saïdia Development Company)
- ECOSOC (Economic and Social Council)
- FAO (Food and Agriculture Organization)
- ALSTOM Foundation
- Goi Peace Foundation

