

Hợp tác để giảm thiểu rác thải nhựa đại dương.



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Cùng hành động để giảm thiểu rác thải nhựa



PLASTIC SMARTCITIES

MÔI TRƯỜNG SẠCH



HÃY BỎ RÁC VÀO THÙNG

PLASTIC PROGRAM NEWS

Issue 11 - Q1/2023

Project Mitigating marine plastic debris in Viet Nam (BMU)

approved under Decision no. 1426/QĐ-BTNMT dated July 02, 2020, by the Minister of Natural Resources and Environment. The Project is funded by German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection. The project is expected to contribute tackling the incidence of negative impacts imposed by plastic waste on Viet Nam through facilitating the development of guidelines on policy advocacy and communication programs to capacity building, awareness raising and behaviour change, towards the mitigation of marine plastic debris. The project constitutes a potential contributor to the reduction of marine plastic debris in Viet Nam and the materialisation of the National Action Plan for Marine Plastic Debris Management in Viet Nam by 2030. The project is jointly implemented by the Viet Nam Agency of Seas and Islands, Ministry of Natural Resources and Environment, WWF-Viet Nam and local partners in 9 provinces/cities from October 2019 to December 2023.

Project “Hue - A Plastic Smart City in Central Viet Nam” (TVA) was built with the funding of WWF-Norway (through WWF-Vietnam) and received by the Hue City People’s Committee. The goal of the project is to support the city in protecting its rivers and the ecosystem of its wetlands and coastal areas from plastic waste pollution, through a series of interventions with the participation of stakeholders including private-public sectors, and local communities, with the aim of reducing 30% of plastic waste leakage by 2024. The project is implemented over 4 years, from 2021-2024 with the ambition of making Hue become a plastic smart city by 2030.



PROJECT “MITIGATING MARINE PLASTIC DEBRIS IN VIET NAM” (BMU)

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COMMUNICATIONS

(BMU)

Conducting training sessions on marine plastic waste management at Hanoi National University

Activity code: 1.3.2.2_2022 & 1.3.2.3_2022

In the first quarter of 2023, the marine plastic waste management module continued to be integrated into the Administrative Law curricula, following the successful lessons learned from previous thematic training on the management of marine plastic waste in two courses: International Public Law and International Environment Law in the bachelor's program at the University of Law, Vietnam National University, Hanoi. In addition, on February 24th 2023, the workshop on "The results of integrating marine plastic waste management module at Vietnam National University, Hanoi" was organised with the participation of 30 lecturers from the University of Law, the University of Diplomacy and the University of Internal Affairs. The lesson learnt, and training results proved that the modules had been well-developed, covered

comprehensive information on marine plastic waste, and were well-integrated into selected curricula. At the same time, Vietnam National University committed to continuing to develop and finalise the module through their training practice after this Project.

It can be said that this project successfully integrated and delivered the topic of "marine plastic waste management" into several compulsory and elective courses at the University of Law, VNU. This helped thousands of students in the university access information about marine plastic waste management, raising their awareness and changing their behaviour in plastic use; furthermore, equipping them with knowledge for their future careers.

Student survey on intergrating modules of marine plastic waste management into Vietnam National University's tertiary curricula

Activity code: 1.3.2.2_2022 & 1.3.2.3_2022

In order to evaluate the performance of integrating training and identify the university's demand to develop the module on marine plastic waste management, the Project collaborated with VNU to conduct a survey with nearly 400 students from different courses

who participated in the pilot modules of "marine plastic waste management". This module was integrated into the classes of "International Public Law", "International Environmental Law", and "Administrative Law" in the academic year of 2022-2023 at VNU.

When asked about the effectiveness of the module, the statement “This module has contributed to equip knowledge and enhance social responsibility on reducing plastic waste” was ranked highest by students (4.41/5), and there were 54.5% of respondents completely agreed with this statement. This result proved that students highly appreciated the meaning of this module. The result of open-ended questions also confirmed the importance of this module; students showed their awareness and interest in plastic pollution prevention. Besides, the interview result showed that nearly half of the respondents (48.7%) agreed with the necessity of integrating the topic of

plastic waste management into all three courses. International Law courses have the highest votes from students (39.8%) about having marine waste management content in their training. Interestingly, some respondents stated that this topic is helpful for all students in multi-disciplines, given that the plastic waste problem is challenging and affects all human aspects, not only in majors of environment and law. The survey result also can be used as a reference for universities to develop or expand their elective modules on “marine plastic waste management” and integrated it in other training courses of VNUs as the first example.

Promoting communication about Extended Producer Responsibility (EPR)

Activity code: 1.6.1.1 & 1.1.6.2_2023

In the first quarter of 2023, the Project collaborated with the Natural Resources and Environment Newspaper and the Natural Resources and Environment Magazine (the official agency news of the Ministry of Natural Resources and Environment) to continue conducting various communications activities about the Extended Producer Responsibility (EPR). A series of analytical articles on the proposal of determining the norms of product and packaging recycling cost (Fs) was published. This proposal is expected to be approved by the end of this year and under effectiveness from 1st Jan 2024. It is important to determine the recycling cost (Fs) to support to ensure the



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responsibility of producers, and importers (EPR); as well as support the feasibility of the EPR mechanism implementation under-regulated of Environmental Protection Law and Decree No. 08/2022/ND-CP dated January 10, 2022.

More detail at: [link](#).

Launching communication activities to reduce plastic waste in tours to Phu Quoc

The project has identified the tourism industry and travel companies as target groups that help to reduce plastic waste in Phu Quoc, particularly in Vietnam. Thus, in 2023, the Project shall conduct a communication campaign towards support travel companies to develop plastic-reducing tours. In 1st quarter of 2023, the Project in collaboration with experts develop the action plan, and conduct a survey with some leading travel companies in Hanoi including Viet Travel, Easia Travel,

etc. The survey aims to understand the difficulties, challenges and experiences of these companies in reducing plastic waste in their business, as well as to seek opportunities to work together in minimizing the amount of plastic waste from tourists in Phu Quoc island. The survey result initially also showed the willingness of travel enterprises in minimizing plastic waste in their tours, and a synchronous coordination mechanism needs to be considered to cut down the plastic debris in tourist areas.

Developing data interconnection system on marine plastic waste

Activity code: 1.2.2.4.6_2023_VASI

To develop a national database on marine plastic waste, the Project continues to support to create a digital platform connecting information from different systems and databases on marine plastic waste. This work allows the data from different systems and platforms to be linked and “directly communicated” to others.

This digital platform plays an interconnection role among different systems and platforms. The connection platform will call to each system to get information and resources needed to synthesise and implement the user’s

orders. The Project uses the WSO2 API manager, which includes an API management layer and an integration layer, allowing integrate APIs through a single platform. The integration layer (Micro Integrator) runs the integration APIs, developed using the WSO2 Integration Studio. The API management layer converts integration APIs into experiential APIs and makes them discoverable by developers.

Developing data visualization tool for marine plastic waste management and reporting

Activity code: 1.2.2.4.6_2023_VASI

As a contribution to National Report on Marine Plastic Waste Management, the Projects has launched a Dashboard tool which is integrated into the database system at <https://vasiopendata.com>. This is a kind of Graphical user interface that uses data visualisation to report progress. Information from data sources, attachment files, services and APIs have been connected and displayed as tables, figures, and diagrams, which helps report and manage works more effectively and conveniently.

- The Dashboard tool allows users to get a quick overview by presenting data visually, not only as numbers but also as graphs, comments, etc.
- Data have been analysed and presented concisely, probably within a page, which helps users save time in searching and processing data.
- The users themselves can customise the information displayed, which helps sort out data needed and shorten the time for making decisions.

Collaborating with RMIT University's students to develop ideas for a campaign to change behaviour on waste separation for high school students in Hue City

In Q1/2023, in collaboration with the project "Hue - A Plastic Smart City in Central Vietnam.", the Project worked with lecturers and final-year students from the Faculty of Communication and International Affairs, RMIT University, Hanoi. The idea of "Developing a communication campaign for changing behaviour on separating waste at source for high school students in Hue City." was selected to be implemented in the

student's intensive course for six weeks. The results of the first meeting on 7th March 2023 showed that the students are very interested in waste separation topics, the training program and communication works of projects.

The lessons learned from the project's communication activities will be a good reference for students implementing their ideas.



POLICY AND EXTENDED PRODUCER RESPONSIBILITY

(BMU)

Preparing for the 2nd session of the Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution

Activity code: 2.3.1.1_2023_VASI & 2.3.1.4_2023_VASI

The international negotiation on the global legally binding instrument on plastic pollution is ongoing and becoming a top concern of all countries, including Vietnam. After the first negotiation session, the next meeting of the Intergovernmental Negotiating Committee (INC) will take place from May 28 to June 2, 2023, at UNESCO headquarters in Paris, France. Towards this event, the Project actively shared information and documents (including WWF's written submission to the INC to develop an international legally binding instrument (see [link](#)), Draft Reports on problematic plastics and solutions on plastic pollution control...) as a reference for relevant stakeholders and

the Vietnamese delegation to refer and consider for a national statement on the international negotiation session.

The Project is with WWF international to express a goodwill gesture to promote multilateral and bilateral dialogues with Viet Nam and other countries in the region to create opportunities for useful discussion to support the outcomes at INC2, towards having a draft of the Treaty before the INC3 (scheduled on November 2023). As planned, the Project will continue supporting the Vietnamese delegation to attend international negotiations in May and November.

Developing the guidelines for applying and assessing the implementation of circular economy (CE) in the plastic industry

Activity code: 2.1.1.2_2022

From the end of 2022 to March 2023, the Project supported the Institute of Strategy, Policy on Natural Resources and Environment (ISPONRE) under the Ministry of Natural Resources and Environment (MONRE) to develop the guideline for CE implementation in the plastic industry in Viet Nam. Consultant teams of the Project had



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closely coordinated with ISPONRE to conduct surveys with authorities agencies and plastic enterprises on the applied CE models, as well as collected their opinions and recommendations to promote the CE models in the plastic industry. Motivations, models and guideline frameworks for implementing the Circular economy (CE) were discussed

at the consultation workshop on “Priority models in the national action plan on implementing circular economy in Viet Nam” organised by ISPONRE on March 21st, 2023. The research findings were highly recommended as an important reference for ISPONRE to develop the national action plan in implementing the CE in Vietnam. (More information at [link](#))

Consultation workshop on the Draft Report on State of Plastic Waste 2022

Activity code: 2.1.1.3_2022 & 2.1.5.2_2023



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A consultation workshop on the Draft Report on State of Plastic Waste 2022 was organised on the afternoon of March 9th 2023, in Hanoi and chaired by Mr Ho Kien Trung, Deputy Director of the Pollution Control Department (PCD)-MONRE and Dr Pham Manh Hoai Plastic Policy & Partnership Manager. The report was prepared as part of the collaboration between the PCD and the Project and the National Partnership Action Plan on Marine Plastic Debris Management. (See the full report at [link](#)).

Forty-one participants attended the workshop, including government agencies (under MONRE, MOIT), leading experts in plastic waste, and media. They gave comments on the process and method of estimating plastic waste components from domestic solid waste and the current status of treatment, recycling and reuse of plastic waste in Vietnam. Participants highly appreciated the importance of the research result and considered it as a necessary reference to recognise and assess the current status of plastic waste for environmental management as well as prepare for the negotiation of an international legally binding instrument on plastic pollution of the Vietnamese delegation later on.

Sharing and recommendation to promote the implementation of Extended Producer Responsibility (EPR).

Activity code: 2.1.2.1_2022 & 2.1.5.2_2023

“Regulations on Extended Producer Responsibility (EPR), domestic waste separation at sources, and a roadmap to limit single-use plastics have been promulgated in the Environmental Protection Law 2020 and Decree No. 08/2022/ND-CP. However, the detailed roadmap and guidelines for the implementation need to be issued as well as appropriate solutions align with the current situation of enterprises and households need to be applied.” - Dr Pham Manh Hoai, Plastic Policy & Partnership Manager in collaboration with VTV1’s Green Future report on February 11, 2023, shared the opinions and recommendations on enhancing recycling capacity to establish a roadmap, recycling regulations, and appropriate EPR costs to deploy an effective EPR mechanism for the plastic and packaging industry in Vietnam. See the reportage at [link](#).

The Project also continues to actively exchange information and discuss with organisations and agencies in supporting EPR implementation in Vietnam (including NPAP, IUUCH, GreenHub, UNDP, CCBO, Winrock, Chemonics, Vietnam Zero Waste Alliance, E-Policy) to join hand and synergize to promote EPR.

On March 23, 2023, the Project’s research on Recommendation on Fs cost norm for



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plastic and packaging industry continued to be shared at the consultation workshop on “Developing recycling cost norm for products and packaging (Fs)” organised by the Ministry of Natural Resources and Environment. (See information about the Workshop at [link](#)) Representative of the Project’s consultant team, Assoc. Prof. Dr. Nguyen Duc Quang, Hanoi University of Science and Technology, presented the result of the Project’s research (See policy summary at [link](#)), thereby suggesting that the coefficient of Fs can be considered on 02 types of morphology: basic Fs and advanced Fs (Fs changes with packaging types).

Basic Fs applies to all products and packaging, while, advanced Fs is the cost factor changes tươ different types of packaging (if the packaging is easy to collect and has a high recycling value, the coefficient is lower and vice versa). The analysis results show that if the Fs is low, it

will not motivate manufacturers to change the design of products and packaging towards a friendly environment and recycling.

Mr Phan Tuan Hung, Director of the Legal Department (MONRE) as the Workshop's Chairman, acknowledged the Project's

contribution and recommendations. He added that the Drafting Committee on the Fs coefficient would consider all the recommendations and continue to collect public comments before submitting the proposal to the Prime Minister for approval.



PLASTIC SMART CITIES

(BMU)

Issuing provincial action plan on reducing plastic waste in 2023

Activity code: 3.3.1.1_2023

In Q1/2023, a series of meetings to review activities in 2022 and develop action plan on plastic waste reduction and management was organised in Ha Tinh, Rach Gia, A Luoi, Thanh Khe and Phu Yen. All the meetings have recognized the active participation of local partners in the project, especially the leading role People Committee, the consultation and stakeholder engagement role of the Department of Natural Resources and Environment.

In addition, the Women's Union and Youth Union are the key actors in implementing communication activities to target groups, piloting waste separation models, reducing plastic waste, deploying waste treatment solutions, etc. It can be seen that, in the 3rd year of the Project implementation, the participation and capacity of local partners have been strengthened. This showed the project's performance in networking

and enhancing the participation of local partners from developing action plans to implementing and scale-up activities. The 2023's actional plans for local partners continue to focus:

1. Raising awareness to change community behaviour on using plastic waste, especially single-use plastic waste, by conducting communication and education activities
2. Improving the waste collecting system, promoting waste separation and waste treatment activities and increasing the recycling rate.
3. Controlling pollution, eliminating hot pots and avoiding leakage of plastic waste in the locality
4. Strengthening the monitoring and sanctioning of violations causing environmental pollution
5. Promoting the roadmap for reducing plastic and single-use plastic bags in shopping centres, supermarkets, local markets and the tourist industry.

Increasing collect pesticide packages at the project's localities

Activity code: 3.3.2.6_2023

To support the localities in reducing plastic waste, especially hazardous waste such as pesticide containers in the field after harvest seasons, in Q4/2022, The Project, in collaboration with the Department of Natural Resources and Environment (DONRE) and the Farmers'

Union of Ha Tinh city built 105 storage tanks with volumes of around 0,5-0,6m³ in the field; provide 80 sets of safety gear (including clothing, hats, boots, glasses, masks, and gloves); provide 08 safety equipment to transfer pesticide packaging to the gathering place for transportation



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and treatment. In the first quarter of 2023, the amount of waste collected reached 375kg in 4 communes, including Thach Binh, Thach Ha, Dong Mon and Dai Nai. Four communes, including Thach Trung, Thach Linh, Thach Quy and Thach Hung have not started collecting waste; therefore, the data is not available in these areas. Besides, the Project continued supporting the construction of 08 garbage tanks, with a capacity of 6-12m³/ tank, to gather pesticide containers before transporting them for treatment. The Farmers' Union was responsible for collecting packaging from decentralised tanks in the field to the main storage tanks and waste transshipment area. DONRE was responsible for collaborating with functional units to collect and process all pesticide containers aligned with legal regulations.

With the meaningful results achieved, the model continued replicating in Rach Gia with the participation of the Kien Giang Sub-Department of Crop Production and Plant Protection and the A Luoi district's DONRE.

The results from the plastic-free school model have been recognised and continued replicating in other areas

Activity code: 3.4.2.4_2021

The plastic-free school model in all project areas continued to be implemented and completed.

In Thanh Khe, with technical support from the Project and Center for Adaptive

Capacity Building (CAB), six schools have developed and implemented the Plastic Reduction Action Plan. In Phu Yen, there are thirteen schools with the support of the Center for Supporting Green Development (GreenHub), and in Ha Tinh,



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there are six schools with the participation of the Ha Tinh Center for Community Development (HCCD). Through the plastic-free school model, teachers and students were provided with helpful information and practical activities, including waste audits, waste separation and treatment, such as composting, indigenous microorganism (IMO) production, collecting and selling recyclables to raise funds to support underprivileged students, organising communication events and contests on environmental issues of plastic waste.

Until now, the Project has achieved the target of implementing extracurricular activities to reduce plastic waste at more than 100 schools in all project areas. The next coming time, the project's environmental education activities aim to change student behaviour in plastic use, consumption and plastic waste management with three followings:

1. Advocating to integrate criteria on waste classification and plastic reduction into the standard of "Green - Clean - Bright - Safe - Friendly School", which are promoted by local Departments of Education and Training annually;

2. Developing and issuing school rules for waste classification and plastic reduction in all schools;
3. Integrating environmental protection and plastic waste reduction into students' curricular and extracurricular activities.

With said orientation, the Project expects the efforts and positive changes from piloting the plastic-free school models will continue to be maintained and inherited by local Departments of Education and Training and replicated in all schools.

On March 31st 2023, the Project cooperated with the Phu Yen Department of Education and Training and GreenHub to organise a conference on the plastic-free school model and consult the criteria for waste classification and plastic waste reduction with representatives of the BODs from 139 primary, secondary and high schools in the province.

Through the discussion, the Projects got highly agreed from the schools. Most of the teachers and principals/Vice-principals recognised that plastic waste pollution is an urgent issue, in which schools

have significant roles in promoting and facilitating student behaviour change. Interestingly, even without the support of the Project and not having systematic approaches, some schools are gradually making positive changes. This showed their determination to implement the set of criteria of the Projects.

In the next period, the Project will work with relevant partners to continue to organise workshops on the model and complete the set of criteria to promote the plastic-free school model for the new school year of 2023-2024.

Continue replicating the model of waste separation at source and IMO treatment in Rach Gia City

Activity code: 3.3.2.3_2021

In 2022, the Project coordinated with the Women's Union (WU) of Rach Gia City to organise 22 training classes on reducing plastic waste and sorting and treating organic waste at source by IMO. This activity got support and active participation from the women's union members.

In addition to being provided with the negative impact of plastic waste on the environment and human health, and the law on waste classification, participants in the classes also learned how to use IMO to treat organic waste and apply it to their housework, for example, making bio-detergent water for cleaning livestock barn or garbage can.

To further promote this model, especially in the border areas with limitations in accessing the waste collection system, the Project continued to coordinate with the Women's Union to deploy another 15

training classes on plastic waste reduction, classification and treatment of organic waste at source for about 400 households in Phi Thong commune, in Vinh Hiep, Rach Soi, Vinh Quang, Vinh Loi, An Binh and Vinh Thanh wards. In March 2023, 05 training classes were delivered for 150 households in Vinh Thong, Vinh Hiep, Phi Thong and Vinh Thanh.

In the coming time, the project and the Women's Union collaboration results on these activities will be reviewed, evaluated and considered for maintenance and replication plan.

The competition on “Initiative to reduce plastic waste” in collaboration with the Women’s Union of Phu Yen province

Activity code: 3.3.2.3_2021

To effectively implement the communication program for changing the behaviour of coastal communities and fishermen in Phu Yen, under collaboration with the Women’s Union and the Center for Supporting Green Development (GreenHub), the Project carried out a series of activities to support grassroots organisation in the whole province since December 2022. Through training courses, members of grassroots organisations improved their capacity to conduct communication activities, and develop proposals and budgets for initiatives. In February 2023, in the first round of the competition, the Project received nine ideas from localities on communication activities and practices to reduce plastic waste and protect the environment. After consideration, there are three most appropriate and feasible ideas have been selected, including:

1. Refilling station and waste reduction in the residential area of Chop Chai Agricultural and General Service Cooperative (Hoa An commune, Phu Hoa district);
2. Join hands to protect Green - Clean - Beautiful coastal residential area (Xuan Hai commune, Song Cau town);
3. Join hands to protect Green - Clean - Beautiful coastal residential area (An Ninh Dong commune, Tuy An district).



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After nearly a month of implementation of these initiatives, on February 23, a workshop on “Summarizing and sharing results of implementing the plastic reduction initiative” was organised in Phu Yen. At the workshop, representatives of 03 pilot initiatives shared the implementation of these ideas, results and further improvements. After consideration, the initiative of the Women’s Union in Xuan Hai Commune, Song Cau Town, got awarded for its efforts in environmental communication and protection practices in Village 2, Xuan Hai commune, Song Cau Town. This initiative highlighted women’s

contribution to environmental protection and should be maintained and developed as an effective practical model for other localities.

In the coming time, the Project will continue to support the localities and

carefully consider the proposals and recommendations of the initiative to enhance waste management and reduce plastic waste leaking into the environment.

Commitment to reduce single-use plastic in Hon Yen, Phu Yen province

Activity code: 3.3.2.2_2022



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Hon Yen is a tourist destination in Phu Yen province. From 2020 until now, this area has received continued and inherited support from related plastic waste reduction projects, including the project “Mitigating marine plastic debris in Vietnam”.

With the support of the Project, Hon Yen’s environment has been significantly improved. To further strengthen environmental protection and plastic reduction, as well as promote tourism in Hon Yen, from November 2022 to March 2023, the Project collaborated with the Phu Yen province’s Women’s Union (WU) to implement a series of training on

raising awareness on the plastic reduction for 40 WU members and tourist small businesses in Hon Yen; advocated for waste reduction commitments from 20 small businesses; provided 28 trash bins of 240-litre capacity for waste collection; created a art wall on 100m² with purpose to advocate fishermen to bring their waste to shore, join hands to protect the environment and to reduce single-use plastics.

With these contributions, the Project expects Hon Yen to be a highlight example in Phu Yen province in its efforts to actively reduce plastic waste and keep the environment “clean and green”.

Positive initial results of the waste separation and treatment model at markets and households in Tuy Hoa, Phu Yen province

Activity code: 3.3.2.3_2023 & 3.3.2.6_2023

With the efforts of stakeholders, including the Department of Natural Resources and Environment (DONRE), Tuy Hoa City People's Committee, Phu Yen Urban Environment Joint Stock Company (Urenco Phu Yen), Centre for Supporting Green Development (GreenHub) and the Project, the model of sorting, collecting and treating organic waste in Ward 7, Tuy Hoa city was completed and widely spread through communication and training activities. The facilities for the model, including the organic waste composting area at Tho Vuc landfill, equipment for collection, transportation, and human resource for each stage of the model, have been implemented and completed in 2022.

By mid-February 2023, after conducting communication and training activities for 150 households and small businesses in the Truong Chinh neighbourhood, Ward 7, the waste separation and organic waste treatment officially went into operation. Through the work of the People's Committee of Ward 7, about 60% of small businesses at the market and households have separated their waste at source. Urenco Phu Yen collected the waste and classified organic waste in the specified area every day. The average volume of organic waste collected is 220 kg/day and



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then was treated by aerobic composting at Tho Vuc landfill.

Over a month of implementation, the model itself has seen some advantages and disadvantages to improve further. The assessment of the model is necessary and have been considered carefully to record data and compare the benefit and costs. Then, the results of implementing this model will be reported to the Tuy Hoa City People's Committee and Phu Yen Provincial Department of Natural Resources and Environment (DONRE), provide data to support maintaining and building a pricing mechanism for the implementation of waste separation model in a larger scale.

Efforts from stakeholders in Phu Yen are documented and widely shared

Activity code: 3.4.1.1_2023

To synthesise the efforts of stakeholders in Phu Yen on effective models and creative ways to improve domestic waste collection – management - treatment in domestic waste and, particularly plastic waste, the Project has collaborated with local partners to make videos and reporting on Phu Yen TV and other highly-interactive social media channel such as Phu Yen Local, Tuy Hoa Young. In addition to a 12 minutes length report on the collaborative efforts of different stakeholders broadcasted on Phu Yen TV, there are five short video clips on the following models:

1. Making plates and cups from sea almond leaves of Mr Tuyen Mo Cau – this model won the first prize in the Plastic Reduction Initiative contest organized by WWF-Vietnam in 2020- continues to be replicated by locals.
2. Making biological dishwashing liquid from fruit peels of the Women’s Union of Binh Ngoc Commune.
3. Organic waste treatment by worm farming method at An Phu market of Youth Union of An Phu commune;

4. Centralised organic waste treatment by compost at community level implemented by Dong Din Cooperative.

5. Green market: plastic-free market organized by the Women’s Union of Phu Yen province.

These models aim to increase waste separation and organic waste treatment, as well as replace and reduce single-use plastic. These models are all associated with developing people’s livelihoods, using available materials (seaweed leaves, organic waste, fruit peels...) and got supported by local communities.

This supportiveness enable sustainability and replicability and created a lot of motivation and encouragement to attract attention, support and companionship from other stakeholders in the future.

The report on TV has about 100,000 views, and five videos shared on social networks have nearly 160,000 views and 30,000 interactions after one month.

Organizing A Luoi Green Market in collaboration with the Women’s Union of A Luoi district, Thua Thien Hue

Activity code: 3.4.2.1_2023

On March 5, 2023, with the support from the Project, A Luoi District Women’s Union (WU) organised “A

Luoi Green Market 2023”, attracted the participation of staffs of the district’s agencies and departments, members of



© A Luoi Women's Union

the Women's Union of 18 communes/towns and local communities (more than 500 people attended the event, according to records of the district Women's Union). At the opening ceremony, Mr Ho Quyet Thang, head of the District's Commission for Mass Mobilization, represents district leaders to launch the movement of "Say no to plastic bags and single-use plastic products" at A Luoi district. He highlighted the role of businesses, small traders and customers at local markets.

At the Green Market, many distinctive activities reflecting A Luoi culture were held, including a competition on local agricultural products, a traditional cuisine contest, a demonstration and guidance on Indigenous Microorganisms (IMO) production and IMO application in organic waste treatment; environmentally friendly products; Ao Dai contest...The event requires all participants to follow the rules of "NO" plastic bags and "LIMITING" of single-use plastic at the events.

The supportive of participants and relevant stakeholders to A Luoi Green Market 2023 showed the efforts and commitment of A Luoi authorities and local people (especially the Women Union) in achieving the targets of reducing plastic waste under the plastic waste management action plan 2021 - 2025, with a vision to 2030 in A Luoi district.

Call for participation and commitment on plastic waste reduction in the tourism of A Luoi district, Thua Thien Hue

Activity code: 3.3.2.2_2022

Following the series of communication activities on reducing single-use plastic and plastic bags in A Luoi district, in the first quarter of 2023, the Project has coordinated with the District's Youth Union to design and construct 05 banners to promote plastic reduction at famous tourist areas of A Luoi including Anor Community Based Ecotourism Village, A Lin ecotourism site, Palre ecotourism site,



© A Luoi Youth Union

Hong Ha Homestay, and in front of Quoc Canh/Ho Tram homestay.

After determining the tourist services business and tourists as the target audience of the communication activity, the design of communication posters integrated creatively and attractively the outstanding values of A Luoi's nature and culture into the content. Thus not only do the panels promote single-use plastic reduction, but they also become popular check-in photo spots for tourists when in A Luoi.

During this time, the Project also coordinated with the District's Youth Union and other relevant stakeholders to conduct an initial survey on the

current status of waste discharge and management at source of tourist business; as well as assess the level of these business owners' attention and commitment to the plastic reduction activities/initiatives in A Luoi area. Accordingly, 100% of tourist business (11/11) showed thier interested and committed to participating in the Project's activities and the Plastic Waste Management Plan in 2023 issued by the District People's Committee.

The survey results are important to establish a core business group, motivating the local business communities to participate in the plastic reduction plan.



FISHERIES AND MARINE PROTECTED AREA

(BMU)

Research report and mechanism proposal to encourage plastic waste exchange and recycling in fisheries

Activity code: 4.1.5.2_2022

Within the framework of the Fisheries and Marine Protected Areas Component, the Project has been coordinating with the Directorate of Fisheries to carry out many activities to support the implementation of the “Action plan for marine plastic waste management in the fisheries sector, 2020 -2030 period.” issued by the Ministry of Agriculture and Rural Development on February 5, 2021, in Decision No. 687/QĐ/BNN-TCTS.

From Q4/2022, the Project implements the activity “Research and propose a mechanism to encourage the exchange and recycling of plastic waste in fisheries.” with the desire to support fisheries management organisations to develop an appropriate plastic waste management mechanism in order to support and encourage local fishermen to collect plastic waste at sea and brings back to shore for collection.

By March 2023, the research team has completed the primary tasks of the Study with the following principal contents:

- (i) an overview assessment of mechanisms, policies, and marine waste collection and recycling models around the world and Vietnam
- (ii) an assessment of the current status of waste emission, collection, recycling in fisheries; and assessment of the



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willingness of stakeholders in fisheries waste management including fishermen, scrap buyers, scrap recyclers, fishing port management, and regional fisheries management organisations

(iii) mechanism proposal to encourage plastic waste collection and recycling from fishing vessels.

The Study has drawn several main conclusions that serve as a scientific basis for building a suitable mechanism.

1) In the scope of the Study, fishing vessels’ waste includes consumption and production waste. According to the Study, the amount of recyclable plastic waste from production activities brought ashore is about 50.08 kg/trip, and the amount left in the ocean is 3.59 kg/trip.

2) Locals’ willingness to participate in collecting and transporting plastic waste to shore for treatment is very high in the Study’s area. The survey results show that the average rate of willingness to pay the plastic waste collection and handling fee

is 85% in all 3 study areas. In addition, income, education level, and gender significantly influence fee payment willingness. Meanwhile, factors such as age and location..., have negligible effects. The survey shows that, when deployed, the main target of the plastic waste reduction program, especially pilot models, is primarily men with good incomes and a high level of education. In addition, integrating plastic waste reduction into school programs shows initial positive results.

3) The Study has suggested that the price mechanism for the service of waste receiving, collecting and treating at the fishing port is the agreed-upon purchase price, which is the most appropriate direction for the fisheries industry to carry on research and determine an appropriate plastic waste management policy.

The Study also showed that fishermen, fishing port management, collecting and recycling facilities, and environment companies are suitable to participate directly in the fishing vessels' plastic waste receiving, collecting and treating model. In addition, the Study also proposes a mechanism to encourage the development of recycling businesses through capital and construction sites support policies. Formulate a mechanism for scientific research and recycling technology development, especially chemical technology development towards producing fuels and raw materials from plastic waste. Receiving

modern recycling technology from developed countries: recycling ocean waste into coca cola shells,... to develop domestic recycling technology.

On March 28, 2023, in Hanoi, the Project cooperated with the Directorate of Fisheries to organise a review conference on the final report of "Research and propose a mechanism to encourage the exchange and recycling of the plastic waste in the fisheries industry." to consult experts and relevant stakeholders on the research results, at the same time collect opinions on the orientation of management mechanism of the plastic waste collecting and recycling in the fisheries sector. At the conference, industry experts highly appreciated the research's results, commented on policy analysis, and proposed a roadmap and a plausible mechanism, gradually creating public support when the regulations on the mechanism are issued.

Link to articles related to the conference:
<https://vietq.vn/khuyen-khich-ngu-dan-thu-gom-rac-thai-nhua-ngu-cu-trong-khai-thac-thuy-san-d209278.html>

Phu Quoc and Con Dao issued Action Plan on Plastic Waste Management 2023

Activity code: 4.2.2.1_2023 & 4.3.4.1_2023

Phu Quoc

Following Plan No.545/KHUBND dated November 22, 2019, of the People's Committee of the district of Phu Quoc (now as a city) on the Action Plan on Plastic Waste Management in the district of Phu Quoc, Kien Giang province to 2025, Phu Quoc City People's Committee issued Plan No. 10/KH0UBND dated January 10, 2023, on the Action Plan on Plastic Waste Management 2023 with following main targets:

- (i) Reduce 30% of plastic waste discharged into the environment in the whole city area by the end of 2023.
- (ii) Collect and handle about 90 tons of existing plastic waste in the environment aligned with regulations.
- (iii) Raise awareness about waste classification and reduction of plastic waste and single-use plastic in 1000 households and 100 businesses and cruise ships.

To achieve the above goals, the City People's Committee has identified core activities to be implemented in 2023, including:

1. Policy: Research, develop and apply administrative sanctions for violations in the field of the environment; Organise study tours on the plastic waste management model.

2. Communication: Continue to organise communication activities on waste separation, plastic reduction, collection and recycling based on the Participatory Action-Oriented Training (PAOT) method piloted in 2022; promote propaganda activities at ports, on ships and vessels, and at the city's tourist attractions...

3. Preventing plastic waste leaking into the sea: Remove waste pollution hotspots; Research and propose solutions and plans to reduce waste discharge in Duong Dong River; Implement a plan to reduce plastic debris on Tho Chu island, Tho Chau commune.

4. Prevent and minimise marine plastic debris from marine discharge sources: Develop a fishing gear and plastic waste collection plan in The Phu Quoc marine protected area (MPA) and pilot some proposed solutions in the plan; continue to communicate with fishing vessels and cruise ships to reduce single-use plastic and dispose of domestic waste and used oil in the right places;

5. Increase socialisation and improve the efficiency of marine plastic debris collection and disposal: continue to implement the "Phu Quoc Day for the environment" event and continue supervising and cleaning up debris on beaches and coral reefs.

The City People's Committee has assigned functional units to develop detailed plans and implement activities. By the end of March 2023, seven relevant units have issued detailed plans for 2023, including the Public Works Management Department, Economic Department, Culture-Information Department,

Education & Training Department, Tho Chau Commune People's Committee, Phu Quoc Youth Union, Phu Quoc City Women's Union. The remaining units are in the process of reviewing and expect to issue their detailed plans in the second quarter of 2023.

Con Dao

Following Plan No. 218/KH-UBND dated 4/7/2022 on plastic waste management in Con Dao district to 2025 and vision to 2030, Con Dao district People's Committee has issued plan No. 80/KH-UBND dated 27/03/2023 to identify specific activities in 2023 on plastic waste separation at source and plastic waste management, as well as the mechanism for cooperation with the Project "Mitigating marine plastic debris in Vietnam".

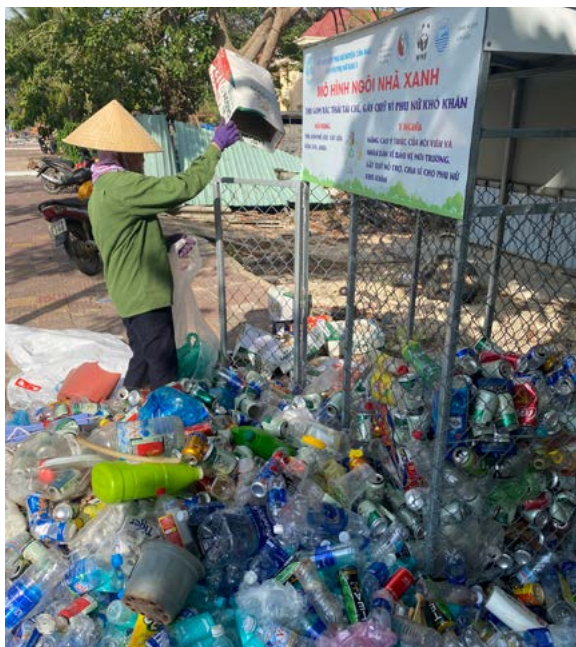
According to the plan, the activities of this year will be joint efforts of relevant stakeholders: Public Works Management Department, Con Dao National Park, Con Dao National Relic Conservation Center, Management Board of Con Dao National Tourist Areas, Management Board of Ben Dam Port, Residential Areas,... to perform the main tasks, including:

1. Develop and issue a policy for waste separation at source and waste reduction to ensure locals and tourists coming to Con Dao island follow plastic reduction solutions.

2. Raise Con Dao islanders' awareness of plastic reduction and waste separation at source through communication activities.
3. Implement a pilot model of Plastic Free Communities to encourage the behaviour of plastic reduction and waste separation;
4. Reduce marine plastic pollution by increasing marine debris collection and treatment at public beaches in Con Dao. From Q2/2023, the Project will work with other departments and agencies to implement the abovementioned activities.

Implement the Green House model by Con Dao's WU in residential area No. 5 and replicate it in other residential areas in the district

Activity code: 4.4.3.1_2022



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Since the end of December 2022, the Project has cooperated with the Women's Union (WU) of the Con Dao district to pilot the Green House model in order to collect recyclable waste: plastic bottles, and beer cans, aiming to reduce 30% of plastic waste released into the environment in Con Dao by 2025. Many practical solutions have been implemented, moving toward reducing plastic and raising people's awareness of waste segregation at source.

After three months, with active participation and positive response from locals and WU members, the Green House Pilot Model in residential area No. 5 has achieved positive results in plastic waste collection. Locals are getting used

to collecting and bringing recycled plastic waste and beer cans to the Green House of the Residential Area. The Green House Pilot Model in residential area No.5 has collected 94kg of recycled plastic and 28kg of beer cans. This result is achieved through the communication effort of the resident's Women Union.

At the same time, this model has been replicated by nine remaining residential areas in the Con Dao district to get people to join hands in collecting plastic waste on the island, moving towards the target of "Con Dao – a plastic reduction destination". Con Dao Women's Union sold the number of plastics and beer cans collected to raise funds for the disadvantaged people in the area.

Currently, the Women's Union in residential areas is continuing to maintain the Green House model to spread the message "Plastic less, love more" to tourists and locals.



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Deploy the plastic reduction models at schools in 03 marine protected areas of Phu Quoc, Con Dao, and Cu Lao Cham

Activity code: 4.3.4.1_2022 & 4.5.5.5

Following the series of activities last year, in the school year of 2022-2023, the Project has continued to coordinate with the Education and Training Department of Phu Quoc City, Con Dao district's Department of Education and Training, Cu Lao Cham Marine Protected Area Management Board to implement the plastic reduction in 05 schools including Nguyen Trung Truc Primary and Secondary School in Phu Quoc city; Cao Van Ngoc High School, Le Hong Phong Secondary School and Vo Thi Sau-Con Dao High School in Con Dao district; and Cu Lao Cham School.

Joining hands with local authorities to build a Plastic Smart City, 05 schools have collaborated with the Project to issue Action Plans to reduce 30% of single-use plastic waste as below:

1. Conduct educational and communication activities to raise awareness and change teachers' and students' behaviours towards waste separation at source and plastic waste reduction.
2. Conduct advanced training sessions for staff and teachers and soft skills sessions for students through the activities of the Environment Club.
3. Develop and implement specific regulations to promote waste separation at source and reduce plastic in schools.

Plastic Reduction School Models in Con Dao District

Activity code: 4.3.4.1_2022

Since the school year of 2022-2023, Cao Van Ngoc High School, Le Hong Phong Secondary School and Vo Thi Sau-Con Dao High School in the Con Dao district have received support from the Project to implement the plastic reduction model at school, to reduce 30% of single-use plastic waste in schools. This model aims to raise students' environmental protection awareness through communication activities, including reducing plastic and



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single-use plastic products and practising waste separation at school.

The Plastic Reduction Model at school was launched at Cao Van Ngoc High School on December 21, 2022, and at Le Hong Phong Secondary School on February 17, 2023, with the target of committing to plastic reduction and introducing practical activities to implement the model. Following the launching session, activities such as single-use plastic reduction, waste sorting and recycling were carried out monthly to provide more information to all students, teachers and staff.

In addition, an important activity in this model is to create an Environment Club in every school, with well-trained and knowledgeable core members on plastic reduction. The club members need to be trained to spread good behaviour of environmental protection and plastic reduction practices in schools and daily activities. By the end of March 2023, in Cao Van Ngoc High School, 23 members of the Environment Club had participated in 12 activities on plastic reduction, waste separation at source and plastic reduction competition.

Similarly, at Le Hong Phong Secondary School, the Project conducted a training session to improve knowledge about plastic and its adverse effects on humans and the environment, with the participation of 70 members of GreenClub.

Besides providing students with guidance on plastic reduction and waste separation, in order to help students create the good habit and practice of reducing plastic and

separating waste at school, the Project has visualised plastic reduction practices at Cao Van Ngoc High School, Le Hong Phong Secondary School and Vo Thi Sau-Con Dao High School through communication posters and provided them specialise bins for waste separation. At the same time, promoting the model of Green Canteen through these activities: organised a training session for the canteen staff, sanitation workers and security staff of the school, encouraged the canteen to replace single-use plastic products, including plastic cups and plastic straws. The cooperation of the School's Canteen staff will significantly help minimise plastic waste use at school.

Following up on the Plastic Waste Reduction School model activities, in April 2023, Cao Van Ngoc High School will carry out a series of waste recycling activities and organise the "Green Day" event. Also, at Le Hong Phong Secondary School, there will be a training session for Green Club members and a Green Speech contest for grades 8 and 9 students. Students will conduct the "Plastic Heroes" contest and "Green Debate" competition at Vo Thi Sau High School - Con Dao, as well as a training session to improve knowledge on plastic reduction and soft skills for core members of the Youth Union at the school.

Model of School to reduce plastic waste in Cu Lao Cham Island

As part of the Action Plan for plastic reduction at Quang Trung Primary and Secondary School in the school year of 2022 - 2023, on December 12th 2022, the Management Board of Cu Lao Cham Marine Protected Area coordinated with Quang Trung Primary and Secondary School to set up recyclable waste collection sites and information boards, aiming to raise awareness for students on waste separation and recycling to create a new life cycle for plastic waste instead of directly discharge into the environment.

In the coming time, the school will coordinate with the Management Board of Cu Lao Cham Marine Protected Area to operate the plastic waste reduction model, record data, and transfer the collected waste to the collection facility. At the same time, they will evaluate the effectiveness of the model and conduct communication activities.

In 2023, the school will coordinate with the Management Board of Cu Lao Cham MPA to maintain the monthly activities of the Club “I Love the Green Island - my hometown” established in May 2022 after a series of meetings with the communities operating Material Recovery Facility (MRF), fishermen, small traders and businesses. This collaboration aims to inspire students to learn about environmental protection, waste reduction and treatment, and biodiversity conservation in the Marine Protected Area. At the same time, the Management Board will support the school in developing and implementing a set of criteria that encourage garbage classification practices and single-use plastic reduction ((styrofoam boxes, plastic cups, plastic straws) for students and teachers, as well as a set of criteria that reduce plastic for the “Green Canteen” model, towards enhancing the effectiveness of the plastic reduction plan has been issued in 2022.

Study tour for experience learning from “The system of classification, collection and recycling of the organic waste in Hai Phong Urenco and models of plastic waste management, collection and treatment in Ha Long Bay, Quang Ninh”

Activity code: 4.3.5

Across the Project’s area, particularly, Phu Quoc, Con Dao and Cu Lao Cham, many core activities on the

development of policies/regulations on waste separation at source and single-use plastics reduction have been implemented



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at the district level. Simultaneously, plastic waste collection, management and treatment have been strengthened by piloting community models of sorting waste at source, reducing plastic, recycling and reusing single-use plastic.

On March 23 to March 25, 2023, the Project organised the activity “Visiting and learning experience from the organic waste classification, collection and recycling system at Hai Phong Urban Environment Company (Hai Phong Urenco) and models of plastic waste management, collection and treatment in Ha Long Bay, Quang Ninh.” The leaders of the Vietnam Administration of Seas and Islands, also known as concurrent directors of the Project Management Board and representatives of departments and organisations of Phu Quoc, Con Dao, and Cham Island attended the event. The objective of the study tour was to enhance the skills and experiences of staff and strategic partners in these 03 island districts/cities to implement project activities effectively in their hometowns and apply a new waste separation model at source, recycling and reuse of single-use plastic products; and finally, contribute to

reducing 30% of plastic waste released into the environment by 2025 and zero plastic waste by 2030.

Through the study visit, relevant partners learned and exchanged experiences on establishing and applying 4.0 technology in managing and operating the organic waste classification, collection and recycling system in Hai Phong Urenco and Trang Cat factory. At the same time, participants experimented with the communication practices of waste classification at source at wholesale markets, local markets, restaurants and residential groups in Hai Phong City. In Ha Long, the delegation was introduced to and experienced solid waste management practices in tourism activities of the Ha Long Bay Management Board. They were also introduced to and practised single-use plastic reduction in sustainable aquaculture and a model of using floating rafts to collect waste at Van Chai Cooperative.

In addition, the delegation also visited Greenlife Cooperative, a model of women starting a successful business by reusing and recycling single-use plastic products

such as Simili silver sheets, vehicle tires, and other single-use plastic.

The study tour ended with unforgettable experiences with successful models

applied in Hai Phong and Ha Long. It also opened up opportunities and challenges for Phu Quoc, Con Dao and Cham Island to successfully apply these models in their districts/islands.

Beach cleaning activities of Phu Quoc Clean and Green's volunteers

Activity code: 4.5.5.2

Phu Quoc is a coastal and island city that thrives on tourism services. Therefore collecting the garbage, and keeping the beach clean got a lot of attention and participation from relevant stakeholders, especially community volunteer groups such as Phu Quoc Clean and Green.

In February and March 2023, with the support of the Project, Phu Quoc Clean and Green has mobilised 225 locals and international tourists to participate in beach cleaning and plastic waste collection activities with specific information as follows:

- February 12: Rowing SUP to pick up trash on Cua Can River
- February 19: Cleaning and collecting waste at Bai Vong Port
- February 26: Cleaning up coral reefs and collecting waste on the beach of May Rut Trong island
- March 26: Cleaning and collecting waste at Xom Chai Tran Phu Beach.



© Phu Quoc Clean and Green

As a result, Phu Quoc Clean and Green volunteers cleaned up and collected 7,293kg (7.2 tons) of waste, of which 506kg of recyclable waste was brought to scrap collection facilities. These meaningful activities have given locals and tourists clean beaches, contributing to the city's overall goal of an Island without plastic waste.

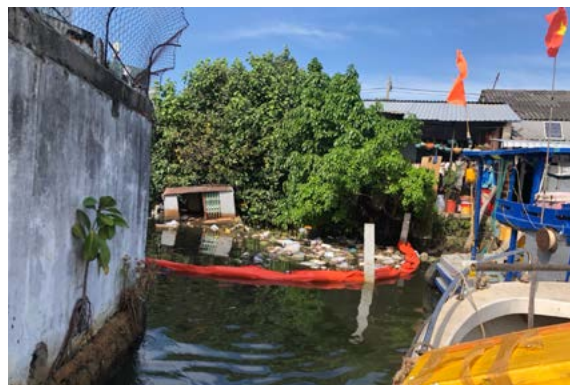
Preventing plastic waste leakage by trash trap on Duong Dong River, Phu Quoc

Activity code: 4.2.1.1_2023

The Project surveyed the plastic waste discharge rate, volume and components on Duong Dong River, Phu Quoc City, in early 2021. Accordingly, the estimated amount of plastic waste from human activities along the coast of Duong Dong River is about 231 kg/day, of which 54%, equivalent to about 125 kg/day, is discharged into the river through different ways. This is the most significant source of plastic waste pollution (PWP) on the Duong Dong River and contributes to increased plastic waste leakage into the sea of Phu Quoc City.

To minimise the amount of plastic waste leakage from the Duong Dong River into the sea, in Q3/2022, the Project coordinated with the Department of Natural Resources and Environment to hold a meeting with stakeholders to discuss and collect opinions to select some experimental solutions to prevent or minimise waste leakage. At the meeting, the parties agreed to pilot a floating barrier model, “Trash trap”, at Rach Ong Tri Outfall to increase the efficiency of plastic waste collection from households living along the canal.

Accordingly, the Project has coordinated with the Department of Natural Resources and Environment and the Management Board of Public Works to conduct a field



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survey to develop a plan and complete the Trash trap installation in December 2022. From December 26, 2022, the Management Board of Public Works began to collect garbage in the installed Trash Trap area every three days. In order to monitor and estimate the amount of garbage collected from the trap, the Project coordinated with the Management Board to conduct a waste audit for a week. The audit results have determined that the total amount of garbage collected in 3 days (1 collection) is about 85-95kg, of which plastic waste is about 17-19kg, accounting for 19-22% of waste collected. Thus, on average, the Trash trap prevents about 6kg of plastic waste leakage daily from Ong Tri Canal to Duong Dong River and then to the sea. As of the end of March 2023, the Management Board of Public Works has collected waste from the Trash trap's area 29 times, estimated at 2,610kg (2.6 tons), preventing approximately 500kg of plastic waste leakage.

The initial results of the trash trap showed that the model had met the immediate requirements of improving collection efficiency and reducing and preventing waste leakage. In 2023, the Project will coordinate with Phu Quoc City People's Committee and other functional units

to research and pilot more solutions for households, fishing boats, markets and restaurants to improve waste management along Duong Dong River, contributing to minimising plastic waste leakage.

A community-based model of domestic solid waste classification and recycling through Materials Recovery Facility (MRF) in Cham Island

Activity code: 4.4.3.2_2022

Material Recovery Facility (MRF) is a model of domestic solid waste segregation, collection and recycling piloted by the People's Committee of Tan Hiep Commune, Hoi An City, in collaboration with the Management

Board of Cu Lao Cham Marine Protected Area (MPA), with the support of the Project. The model was first deployed in Bai Ong village in 2021, and then, by the end of 2022, it was widely replicated in Bai Huong village.

The first MRF model in Bai Ong village: piloting a community-based process of collecting, sorting and recycling domestic waste

Activity code: 4.4.3.2_2022

MRF model in Bai Ong was the first working Material Recovery Facility on Cham Island since April 2021, with the participation of 30 pilot households, then gradually increased to 60 households in early 2022. Until December 2022, the number of participants has reached 120 households. During the operation, the process of collection and treatment were carried out correctly and achieved positive results. Especially, the composting of organic waste has brought practical value to waste treatment, helping to reduce the pressure on the landfill in Eo Gio, which

is currently overloaded. After nearly two years of operation, MRF Bai Ong has collected 27.4 tons of domestic waste, of which more than 12.6 (accounting for 46.2%) tons of organic waste is classified and treated through the MRF, about 200kg of recyclable waste and 500kg of low-value plastics. Thus, MRF has reduced nearly 50% of domestic waste with on-site treatment solutions.

Organic waste at MRF Bai Ong is classified as raw materials for aerobic composting mostly. Anaerobic composting and



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earthworm farming methods will be piloted from November 2023. By the end of 2022, this model produced about 500kg of compost from the organic waste collected. During the practical experience, the MRF Bai Ong operation team realised that the manual method produces unevenly finished compost, leading to a low rate of resource recovery (5-10%), and it also took longer to prepare input material for the treatment process; then, productivity was relatively low. Therefore, at the end of 2022, the Project provided MRF Bai Ong with a waste crusher with a maximum capacity of 1 ton/hour to improve the quality of input materials for composting and increase productivity to meet the demand of the whole village with 200 households in 2023. By February 2023, the organic waste crusher was officially put into operation. With the participation of 120 households, the amount of organic waste is still relatively small, and the machine will usually operate every two days. After more than one month of operation, 1.4 tons of organic waste were crushed. After grinding, the garbage is evenly tiny, thus, reducing the composting time.

Another by-product from organic waste treatment at the MRF is probiotics. With the discarded fruit peels collected in 2022, the MRF operation team sorted and fermented them into 220L of raw probiotics. Intending to produce biological cleaning products from fermentation, the Project supported the Management Board of Cu Lao Cham Marine Protected Area to organise a training program about detergent products at MRF Bai Ong from November 10 to November 16, 2022. During the training courses, the MRF operation team was guided and trained on the cleaning liquid production process, how to choose input materials to limit foul odours and create a natural fragrance from oranges, grapefruits, and lemongrass...as well as recipes, product preservation and some production process tips. At the end of the training course, the operation team successfully processed 40L of cleaning



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liquid from 220L of input materials. Those natural cleaning detergents were given to stakeholders and households for trial. According to the feedback, the product is concentrated, concentrated, fragrant, foaming and does not affect the hands' skin... In the coming time, the community

will continue to collect fruit peels at restaurants and markets to produce more cleaning products. After the product is tested and verified, the Project will host a launch event to reach more customers, aiming to sell this product on the island through the Refill model.

Second MRF in Bai Huong village: replicating the model

Activity code: 4.4.3.2_2022



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Recognised the positive results of the MRF model in promoting garbage classification and recycling, as well as contributing to reducing the burden of waste treatment, Tan Hiep commune authorities, in collaboration with the Management Board of Cham's Island, have installed a new MRF for 81 households in Bai Huong village, with the support of the Project.

Following the MRF Bai Ong pilot model, the Bai Huong MRF model was established to treat waste on-site for Bai Huong village. The MRF was built in November 2022, licensed by Tan Hiep Commune People's

Committee, on a land area of 32m². The construction area of MRF is 18m², with 1m high walls, a B40 grid surround, and with corrugated iron roof, iron frames and a concrete foundation. The site is fenced with a B40 grid and fully equipped with composting areas, landscape trees, electricity and water systems, and equipment and tools (such as compost bins, cleaning water, and trolleys). In addition, communication posters and guidance on the model were also set up.

On February 7, 2023, Tan Hiep Commune People's Committee, in collaboration with the Management Board of Cham Island MPA and the Public Service Team of Cham Island, held the launching ceremony of Bai Huong MRF and put the model into operation. This model will collect and treat organic waste for 81 households. After more than a month of operation, the results received as follows:

Initial monitoring results show that the total collected volume from February 8 to March 20 is 1,716.2 kg of waste, with

a collecting frequency of 7 days/week in February and 06 days/week in March, of which organic waste accounted for 47.5% with 815.5kg; non-organic waste accounted for 51.5% with more than 883.5kg and recycled waste about 17.2kg, accounted for 1%. After collection, debris will be reclassified; of which non-organic waste will be gathered and transferred to the Eo Gio landfill; organic waste, on the

other hand, will be used for composting. At the meaning time, the community is still getting used to the first stage of composting, so they are not making cleaning liquid yet. Besides, since the implementation, Bai Huong MRF has helped to reduce 09 trips of garbage transportation from Bai Huong to Eo Gio landfill.

Reducing marine plastic debris from fishing activities with Cham Island's fishermen

Activity code: 4.3.4.2_2022

To encourage the participation of fishermen in reducing plastic waste from vessels and fishing activities, and to motivate fishermen to collect floating marine debris, and discarded fishing gear and bring them to the gathering point for treatment, The Management Board of Marine Protected Area, in collaboration with the Farmers' Association of Tan Hiep Commune has implemented several waste collection models named "Ocean House" located along the beaches of 03 villages and Boat lock area. These models were launched and put into operation on February 17, 2023. Until now, there are 26 fishing boats actively carrying garbage to shore, including domestic waste from fishing boats, waste on beaches, and floating marine debris.



© Management Board of Cham Island Marine Protected Area

The total waste volume collected at 06 models from February 18 to March 18 is about 304 kg. Cham Island's Public Service Team collects waste at these 06 models 4-5 times/week (depending on the actual situation); of which inorganic waste (broken nets, bows, ropes,...) accounts for 96%, equivalent to nearly 292kg collected, and the rest 4% (about 12kg) of recycled waste (bottles and cans). According to the models, the Boat lock area collects the most waste, followed by Lang Beach and Huong Beach.



PROJECT
“HUE - A PLASTIC
SMART CITY IN CENTRAL
VIET NAM”

(TVA)

Launching the contest “Plastic Waste Reduction Initiatives - join efforts for Hue, A smart plastic city”

Activity code: 2.2.1

On the morning of February 23, 2022, at the conference room of Hue University (03 Le Loi street, Hue City), the project “Hue – A Smart Plastic City in Central Vietnam” and Thue Thien Hue Innovation Hub launched the contest “Plastic Waste Reduction Initiatives- Hue 2023.” to seek initiatives to reduce plastic waste in Hue city, this is one of the efforts to build Hue- A smart plastic city.

The contest “Plastic Waste Reduction Initiatives- Hue 2023.” is designed to create opportunities for individuals, organisations and start-ups across the country to show their talents, creativity, and environmental responsibility, especially in the era of digital technology. The technology factor, especially in waste management, will be essential to turning Hue into a plastic-reducing city.

The contest wants to find and support projects with specific models/proposals/ ideas related to the followings:

1. 3R solutions (Reduce, Reuse and Recycle): to help increase recycling activities, reduce plastic waste, and improve the management system.
2. Making plastic waste more environmentally friendly.



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The online application was closed on March 31, 2023. The contest’s final round will be held in Hue City in May 2023. Four to seven initiatives will be chosen for funding, with a maximum budget of about 500 million VND (21,000 USD) for each project.

See more contest information at: <https://www.sangkiengiamnhua.com>.

Hundreds of people in Hue City participated in the Earth Hour 2023 event with the theme “A Plastic-free Future”

Activity code: 2.1.6



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On March 25, 2023, the TVA Hue collaborated with the Thua Thien Hue Province Youth Union, Hue City Youth Union, Hue University Student Association, and HEPCO to organize the Earth Hour 2023 event with the theme “A Plastic-free Future”.

More than 100 young people, including students from Foreign Languages, Agriculture, and Forestry Universities and high school students, participated in various environmental activities from 1:30 pm to 9:30 pm. These activities included cleaning up the environment at the hot spot of Tran Huy Lieu alley in Dong Ba Ward, “Exchanging trash for gifts” and visiting Environmental Information Center (46 Tran Phu, Hue City). The highlight of the event was a music show, a Big Tic Tac

Toe game, and a mindfulness meditation activity with the theme “A Plastic-Free Future” with the participation of hundreds of people. From 8:30 pm to 9:30 pm, the letters “60 Hue” are formed using real people holding phone flashlights during the lights-off moment, creating eye-catching light effects.

Earth Hour is a time when each Hue citizen dedicates a full hour to show actions to protect the environment. The theme of the Earth Hour event in Hue this year is “A Plastic-free Future,” which is consistent with the city’s goal and action to reduce 30% of plastic waste leaked to the environment by 2024, contributing to the recognition of Hue as a “Plastic Smart City.”

Happy Children's Day and Preliminary workshop of Plastic Waste Reduction Models in Schools in Hue City for the academic year 2022-2023

Activity code: 2.1.7

On March 25th, 2023, the TVA project collaborated with Phu Binh Primary School to organize Happy Children's Day and a Preliminary workshop on Plastic Waste Reduction Models in Schools in Hue City for the academic year 2022-2023. The event was an opportunity for schools to connect and share plastic reduction practices, such as the composting model at Tay Loc Primary School and the cleaning activity at Ru Cha by Huynh Thuc Khang Secondary School. The event also spread the message of reducing plastic waste to the parents of the pupils.

In the 2022-2023 academic year, the TVA project has supported 17 schools in 6 wards/communes, including Dong Ba, Thuan Loc, Tay Loc, Thuan Hoa, Thuan An, and Hai Duong, to implement various activities to reduce plastic waste in these schools.

In the 2023-2024 academic year, the project commits to continue to support the schools in plastic reduction education activities, contributing to building awareness for Hue's future generation.



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For more information please contact:

**“REDUCING PLASTIC WASTES IN VIET NAM
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