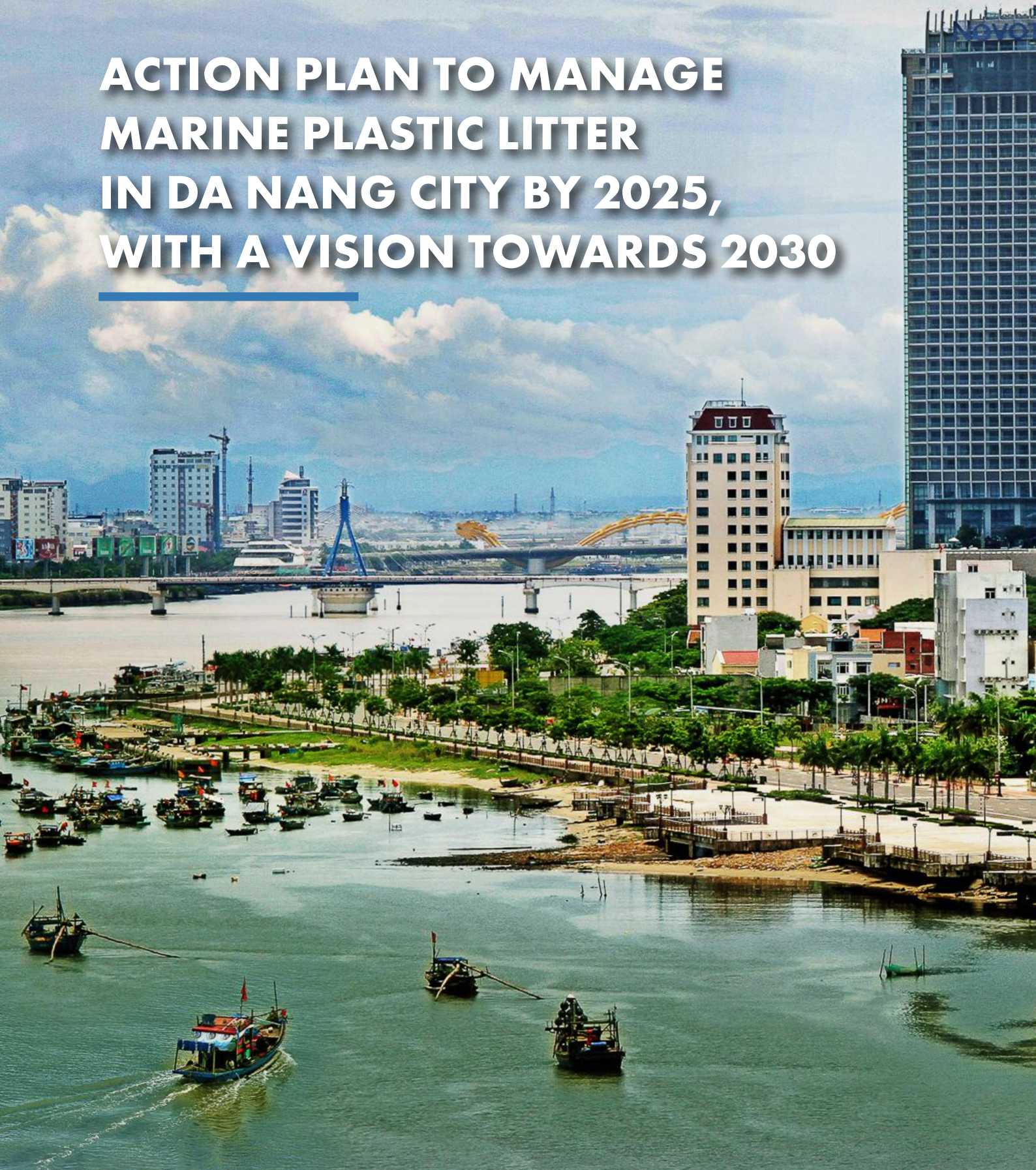




**CLOSING
THE LOOP**

ACTION PLAN TO MANAGE MARINE PLASTIC LITTER IN DA NANG CITY BY 2025, WITH A VISION TOWARDS 2030



ACTION PLAN TO MANAGE MARINE PLASTIC LITTER IN DA NANG CITY BY 2025, WITH A VISION TOWARDS 2030

Implementing the Prime Minister's Decision No. 1746/QĐ-TTg dated December 4th, 2019 on promulgating the National Action Plan on Marine Plastic Debris Management by 2030 and the Prime Minister's Directive No. 33/CT-TTg dated August 20th, 2020 on strengthening the management, reuse, recycling, treatment and reduction of plastic waste (abbreviated as Directive No. 33), Da Nang People's Committee issue the following action plan on reducing marine litter from and -based sources by 2025, with a vision towards 2030. According to Plan No. 123/KH-UBND dated 24 June 2021 of Da Nang City People's Committee.



This Action Plan was developed by the City of Da Nang City through the Closing the Loop project, implemented by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). The project is supported by the Government of Japan. Implementing partners include Institute for Global Environmental Strategies (IGES) and Japan Space Systems (JSS).



I. THE NEED FOR AN ACTION PLAN

- According to Prime Minister's Directive No. 33/CT-TTg, plastic pollution is one of the most significant challenges that nations face in protecting their natural environment and ecological systems. The high use of plastic products such as non-biodegradable plastic bags and single use plastics leads to a negative impact on environment. In 2017, Vietnam was officially added to the list of 127 nations who adopted the United Nations Environment Assembly on ocean plastic waste and microplastics. Furthermore, in 2018, the Prime Minister made a commitment calling for worldwide cooperation on reducing marine litter. Thus, in 2019, the Prime Minister launched the "Anti-plastic waste" campaign in Vietnam.
- Da Nang has experienced rapid economic growth leading to a dramatic increase in municipal solid waste (MSW) generation. MSW increased by 15% - 16% between 2016 and 2019¹ and it is estimated the city generated more than 1.177 tons per day on average in 2019. However, in 2020, the amount of MSW decreased approximately 8% in comparison with 2019. Due to the effects of the COVID-19 pandemic, the average waste generation was 1.087 tons per day. According to the forecast, under normal growth conditions, the city will generate more than 1.794 tons per day by 2030, and more than 2.450 tons per day by 2045.
- The percentage composition of plastic waste account for 12.7% to 18.3% of total MSW². Modelling waste generation from all economic and residential activities suggests approximately 140 - 200 tons of plastic waste are produced per day. The proportion of total waste collected at source and by the informal sector are from 90% to 95%; the amount of uncontrolled plastic waste leaking to environment is 6 tons per day, and the composition of plastic waste is as follows: (1) plastic bags - 5.48 tons (accounted 91.25%), (2) PET - 0.03 tons (0.55%), (3) PVC - 0.29 tons (4.89%) and multi-component plastics - 0.2 tons (3.31%). It is expected by 2030 that the total amount of plastic waste generated per day will be 228 tons and the total MSW generated will be 1,794 tons³. Without drastic measures and solutions to reduce and control the source, consumption and generation of MWS, this increase will have a huge impact on not only Da Nang's environment but also the regional marine litter problem.



- City waste management is directed by Resolution No. 204/NQ-HDND dated December 19th, 2018 by the People's Council of Da Nang City on domestic solid waste management in the city; and Decision No. 1577/QĐ-UBND dated April 11th, 2020 on promulgating the Plan to implement domestic solid waste (DSW) segregation at source in the city by 2025 (including plastic components). During this time, Da Nang has carried out numerous activities toward reducing plastic waste leakage including raising community awareness, promoting innovative waste management models, investing in waste collection infrastructure, and strengthening project-based cooperation with domestic and foreign organizations to reduce municipal and plastic waste. As a result, the amount of plastic waste segregated from MSW to be collected and recycled has gradually increased.
- Vietnam is feeling the pressure of plastic waste on its environment and especially on its marine ecosystems. The Prime Minister's guidelines and directions on the management and reduction of plastic waste need to be increasingly ambitious (this includes (1) Decision No. 1746/QĐ - TTg dated December 4th, 2019, promulgating the National Action Plan on Marine Plastic Debris Management by 2030; (2) Directive No. 33/CT-TTg dated August 20th, 2020 on strengthening the management, reuse, recycling, treatment and reduction of plastic waste). To support national and regional progress the People's Committee of Da Nang City promulgates an Action Plan on Marine Plastic Debris Management by 2025, with a vision to 2030; in order to strengthen the city's plastic waste management, in line with the national strategy and the goal of building an environmental city.

¹Draft report on the current state of Da Nang's environment in the period 2016 - 2020

²Consisting of multiple data: Prime Minister's Decision No.359/QĐ-TTg dated March 15th, 2021 on approving of the Adjusting general plan of Da Nang city by 2030, with the vision towards 2045; the database from WWF's report on Da Nang's current state of plastic waste generation in 2019 and; the database from UNESCAP's report on Da Nang's current state of plastic waste generation in 2021.

³Prime Minister's Decision No. 359/QĐ-TTg dated March 15, 2021, approving the general planning adjustment of Da Nang city to 2030, with a vision to 2045.

II. AIMS AND OBJECTIVES

1. Aims

- a) Strengthen the management and prevention of plastic waste from land-based waste sources and marine activities within Da Nang.
- b) Raise awareness, and change the behaviour and habits of individuals, communities, businesses and organizations to reduce plastic waste generation and promote the collection, recycling and reuse of plastic waste in the city.
- c) Achieve the goals of Prime Minister's Directive No. 33/CT-TTg dated August 20th, 2020 on the use of single-plastic products and non-biodegradable plastic bags.



Photo credit: DONRE

2. Specific objectives and targets

a) Medium-term objectives (2021-2025):

- 100% of state management agencies and relevant departments/ units in the city do not use plastic water bottles and plastic straws, also minimizing the use of plastic banner backdrops at meetings, conferences, seminars and events.
- 90% of households schools, businesses, offices and other sectors in the city carry out waste segregation at source.
- At least 80% of fishermen do not dispose of fishing gear and plastic waste into the sea.
- Over 90% of coastal households not to dispose of their waste into the river.
- At least 70% of resorts, tourist attractions, tourist accommodations, and other tourist service facilities do not use single-use plastic products or non-biodegradable plastic bags.
- At least 20% of food and beverage business do not use single-use plastic products or non-biodegradable plastic bags.
- Build and replicate two effective interventions: A market-focused project targeting reduction of plastic bags; and a school-focused model targeting all plastic waste.

b) Long-term objectives (2026 to 2030, with 2020 as baseline):

- Over 95% of fishermen will be encouraged to commit not to dispose of fishing gear and plastic waste into the ocean.
- At least 80% of food and beverage businesses commit not to use single-use plastic products in coastal tourist and service areas.
- Over 90% of households, schools, businesses, offices and other sectors in the city carry out waste segregation at source.
- Pilot activities and models which are successful in the period 2021-2025 will be institutionalized in written form and specific policies that can be replicated throughout all the city districts (e.g., "Reducing the use of nylon bags at markets" ; "Reducing plastic waste at schools" ; "Production facilities do not use single-use plastic products or non-biodegradable plastic bags"; or "Events without plastic waste" etc).

III. CONTENT OF THE ACTION PLAN

The plan consists of 4 main priority areas and specific tasks as follows:

1. Actions to raise public awareness and change people's behaviour to reduce single-use plastic products and ocean plastic pollution.

- Implement the People Committee's plan No. 110/KH – UBND dated June 8th, 2021 on developing a communications master plan on reducing plastic waste and single-use plastic products (integrating with the waste separation at source plan) in the city.
- Develop communications campaigns on the harmful effects of plastic waste, and highlight measures to reduce plastic waste and plastic bags in daily activities, (according to People Committee's plan No. 110/KH – UBND dated June 8th, 2021 and integrating the guidance of the Ministry of Natural Resources and Environment).
- Organize training, awareness-raising and responsibility programmes on plastic waste for management personnel at all levels including public officials and employees (integrating with training on waste segregation at source).
- Disseminate communication materials, implement plastic waste reduction activities and calls for action engaging organizations, socio-political organizations, civil society organizations and residential communities through meetings. Develop guidance documents, communications and training on the reduction of plastic waste and single-use plastic products (integrating with waste separation at source plans) in schools and educational institutions.
- Develop guidance documents, communications and training on reducing plastic waste and single-use plastic products (integrating with waste separation at source plans) in convenience stores, production facilities, industrial zones (ZI) in the city.
- Develop guidance documents, communications and training on the reduction of plastic waste and single-use plastic products (integrating with waste separation at source plans) in healthcare facilities with the following campaign: 'Hospitals, Medical Facilities and Clinics say NO to Non-Biodegradable Plastic Bags'.



2. Implement targeted actions to reduce plastic waste generation and leakage in the city.

- Update and complete the city waste segregation plan to effectively implement Decision No. 1577/QĐ-UBND dated April 11th, 2019 on the collection, segregation, transportation and treatment of plastic wastes to ensure the recovery of plastic products and plastic bags for recycling.
- Develop and implement a plan with defined objectives and activities promoting the reduction of single-use plastics in stores, markets, supermarkets, trade centers and convenience stores over time as stated in Prime Minister's Directive 33. /CT-TTg dated August 20th, 2020 and the solutions proposed in this plan (incorporating the guidelines of the Ministry of Industry and Trade).
- Develop and implement a plan to support plastic waste management at school sites with the campaign 'Schools say NO to Single-use Plastic' in the period of 2021-2025.
- Develop and implement a plan for the reduction, collection and recycling of plastic waste in agriculture, livestock and aquaculture. Promote solutions to recover fishing gear such as nets and buoys that are lost or forgotten; and collect packaging waste for pesticides, fertilizers and veterinary medicine after use in agricultural production activities. Communicate with small traders on limiting the use of foam floats in the fisheries industry in Au Thuyen and Tho Quang port. Strengthen waste management for boats (fishing boat, cruise ship, etc.) and improve handling and disposal of fishing gear.
- Develop and implement a pilot model for commercial establishments, tourist accommodation and other tourist services in tourist areas, attractions, mass and sports fitness facilities, training centers, sports competitions, and religious and creed institutions to reduce the use of single-use plastic products (which includes waste segregation at source). Implement a pilot 'Event without plastic waste'.



- Develop and implement a plan for industrial installations to reduce the use of single-use plastic products and support waste separation at source for production facilities and corporations with more than 150 employees.
- Develop a plan and implement the campaign 'Fishermen catch Fisheries' to obtain commitments to not dispose of fishing gear into the sea. Farmers to participate to build a collection place for fertilizer and pesticide packaging bags from agricultural production and make commitments not to dispose waste into rivers.



3. Prevent, reduce and control ocean plastic waste at land-based and marine sources.

- Support inspection of plastic packaging activities in city markets by individuals and organizations, with a view to mobilizing and guiding businesses toward environmentally friendly alternatives.
- Investigate, compile statistics, classify and evaluate sources of plastic waste from land and sea and in the Vu Gia-Thu Bon river basin.
- Strengthen the control and management of discharges into watersourcesfromtheentertainment activities at the beaches and lakes; and take measures to prevent the spontaneous garbage dumping, illegal burning and burying.
- Strengthen the enforcement and monitoring of legislation on the collection and treatment of plastic waste derived from Education, Commerce, Tourism, Industry, Health, and Agriculture Sector activities.
- Research into solutions for reduction of non-biodegradable plastic bags and single-use plastic products in public behaviour.
- Encourage and support enterprises, production establishments and companies to gradually change and implement solutions to limit the use of single-use plastics and replace them with environmentally friendly alternatives. Propose regulation for supermarkets, shopping malls, markets, etc. to introduce plans to reduce the use and generation of plastic waste.
- Research and build a multi-stakeholder network to promote and introduce environmentally-friendly packaging products.
- Research to support calls for greater investment in city projects and factories that recover and recycle plastic waste according to circular economic principles.

4. International cooperation, scientific research, and technological application, development and transfer for marine plastic waste treatment.

- Mobilize international resources for technical support and investment to control marine plastic waste. Adopt management models that support innovation to produce alternative products, improve recycling and transition to a circular economy and green growth.
- Promulgate the Municipal Plastic Waste Reduction Project sponsored by World Wide Fund For Nature (WWF) in Thanh Khe District in the period of 2021 – 2023; implementing the model “Reducing the use of nylon bags at markets” (People Committee’s dispatch No. 4501/UBND-STNMT dated July 10th, 2020).
- Promulgate the Municipal Plastic Waste Reduction - Local Solutions Project sponsored by USAID (People Committee’s dispatch No. 2666/UBND-STNMT dated May 5th, 2021).
- Implement the Closing the Loop project by UN ESCAP building an ocean plastic waste monitoring system based on remote sensing, aerial photography and satellite image interpretation with artificial intelligence in collaboration with local and international experts (People Committee’s dispatch No. 3658/UBND-STNMT dated May 6th, 2021).
- Mobilize human resources to carry out creative start-up activities, to develop the production and sale of environmentally-friendly products for economic growth and sustainable development.
- Research, develop, apply and transfer technologies and methods for the treatment and reduction of ocean plastic waste across the city.

IV. IMPLEMENTATION COST

Funding for implementation shall be used from allocated funds for environmental protection; and sponsors and socialization sources from domestic and foreign organizations. The relevant departments/units in the city and stakeholders are required to have planning and budgeting details, integrating the activities into the implementation phase of scheme "Building Da Nang – Environmental city" for the 2021 – 2030 period. This report will be adopted by People Committee (DONRE is responsible for appraising).

The agency is assigned to assume the prime responsibility for performing the tasks in the Plan (See Appendix). Actively arrange and allocate funds within the approved budget source and mobilize other support funding sources as prescribed by law to organize the implementation of the Plan.



V. ORGANIZATION OF IMPLEMENTATION

1. Heads of Departments and agencies and Chairmen of People's Committees of Districts, within the scope of their management responsibilities are to actively develop plans and implement assigned tasks in the Appendix, ensuring on-time, quality results. Every year and every five years to provide reports on implementation progress to the Department of Natural Resources and Environment and to summarize and report to the Ministry of Natural Resources and Environment and the City People's Committee as prescribed.
2. The Department of Natural Resources and Environment is responsible for acting as the focal point to advise the City People's Committee to organize the implementation of the Action Plan. To guide, monitor, inspect and urge the implementation of the Plan to ensure quality and efficient results on schedule. To promote and expand international cooperation on ocean plastic pollution management; and to annually and every 5 years summarize and evaluate the results of the implementation of the Plan and report to the Ministry of Natural Resources and Environment and the Provincial People's Committee according to regulations.
3. The Department of Finance advises the Provincial People's Committee to allocate funds to implement the Action Plan on marine plastic pollution management by 2030 in the province in accordance with current regulations on decentralization of state budget management.
4. The Ministry of Foreign Affairs coordinates with relevant agencies and units to mobilize international support for the city's response to climate change. Including advising the city to engage and effectively implement international cooperation agreements at the local level to address marine plastic pollution.
5. The Department of Information and Communications to cooperate with relevant departments to publish and communicate the Action Plan to departments in the city to support implementation.
6. The city police to cooperate with the Department of Natural Resources and Environment and relevant units to control and handle violations of the law related to the management of plastic waste and imported raw materials.

7. The Command of the Border Guard of Da Nang City in coordination with the Department of Natural Resources and Environment, the People's Committees of districts and relevant units to control and handle violations of the law related to the management of ocean plastic waste.
8. The Vietnam Fatherland Front Committee, and its member organizations (social organizations, and socio-professional organizations) to promote its roles and responsibilities, creating and actively implement activities on the control of plastic waste; Together with families, communities and society at large, to effectively implement guidelines, mechanisms and policies to reduce plastic pollution.
9. Report Regime:
 - The People's Committees of the districts is responsible for sending periodic performance reports to The Department of Natural Resources and Environment before October 30th every year for periodic review, new adjustments and ad - hoc reports.
 - The Department of Natural Resources and Environment is responsible for synthesizing the performance reports and sending to Da Nang People's Committee before November 15th every year for periodic review, adjustment and ad-hoc reporting.



Recipients:

- As in Section V;
- TTR TU DN (respectively bc);
- President of the City People's Council (regards bc);
- Member of the City Council; City National Assembly Delegation Delegation;
- City People's Committee, Vietnam Fatherland Front Committee;
- Office of the National Assembly Delegation, People's Council, City People's Committee;
- Departments, departments, branches and mass organizations of the city;
- District, district party committee; People's Councils, People's Committees, Vietnam Fatherland Front Committees of districts, People's Councils, People's Committees of wards and communes;
- Da Nang Newspaper, City Police Newspaper, Da Nang Radio and Television Station, City Portal;
- Save: VT, DT-DT, STNMT

Vice-Chairman of Da Nang People's Committee

Le Quang Nam

Appendix

LIST OF PRIORITY TASKS FOR THE IMPLEMENTATION OF ACTION PLAN ON PLASTIC WASTE MANAGEMENT IN DA NANG CITY FOR THE PERIOD OF 2021-2025

(Attached with the promulgated Action Plan No. 122/KH-UBND,
issued by Da Nang People's Committee dated 24th June 2021)

| No | Content mission | Time | Result, product | Monitoring and evaluation criteria | Advisory/ Implementing Agency | Coordinator Agency |
|----------|--|-----------------|---|---|--|--|
| I | Actions to raise public awareness and change people's behaviour to reduce single-use plastic products and ocean plastic pollution. | | | | | |
| 1 | Implement the People Committee's plan No. 110/KH – UBND dated June 8 th , 2021 on developing a communications master plan on reducing plastic waste and single-use plastic products (integrating with the waste separation at source plan) in the city. | In 2021, yearly | Published communication plan | Number of communication activities, carried out in the year, approved plan | Department of Information and Communications (getting opinions from branches stakeholders) | Department of Natural Resources & Environment, and branches stakeholders |
| 2 | Develop communications campaigns on the harmful effects of plastic waste, and highlight measures to reduce plastic waste and plastic bags in daily activities, (according to People Committee's plan No. 110/KH – UBND dated June 8 th , 2021 and integrating the guidance of the Ministry of Natural Resources and Environment). | In 2021, yearly | A series of communications documents on Plastic waste reduction in the city | Number of communication products achieved: Leaflets, films, billboards, stickers, ... | Department of Natural Resources and Environment | The Departments and branches stakeholders |
| 3 | Organize training, awareness-raising and responsibility programmes on plastic waste for management personnel at all levels including public officials and employees (integrating with training on waste segregation at source). | In 2021, yearly | Yearly training courses | Number of training courses; Number of trained people per year | Department of Natural Resources and Environment | Departments; People's Committees of districts |
| 4 | Disseminate communication materials, implement plastic waste reduction activities and calls for action engaging organizations, socio-political organizations, civil society organizations and residential communities through meetings. | In 2021, yearly | Communications activities are carried out at rural and urban districts, community social organizations, trade union | Number of people propagated/year/ agency, unit | The Fatherland Front Committee, People's Committees of districts, departments, branches | Political and social organizations |

| No | Content mission | Time | Result, product | Monitoring and evaluation criteria | Advisory/Implementing Agency | Coordinator Agency |
|----|--|-----------------|--|---|--|---|
| 5 | Integrating the communication documents on the reduction of plastic waste, single-use plastic products (integrating with waste separation plans at source) in schools, educational institutions, training in the city. Implementing the use of the environmentally friendly products replace non-biodegradable and single use plastic products in the educational institutions in order to support the 'Schools say no plastic waste' campaign. | In 2021, yearly | Guidelines for application in schools and education institutions | Number of students involved in communications activities/Total number of students | Department of Education and training | Department of Natural Resources and Environment, People's Committees of districts |
| 6 | Develop guidance documents, communications and training on reducing plastic waste and single-use plastic products (integrating with waste separation at source plans) in convenience stores, production facilities, industrial zones (ZI) in the city. | In 2021, yearly | Documentation for application at production facilities | Number of companies participating in communications / total number of companies | Industrial Park Management Board and the city's industrial zones | Department of Natural Resources & Environment, and branches stakeholders |
| 7 | Develop guidance documents and implement communications on reducing plastic waste, single-use plastic products (integrating with waste separation plans at source) in fishing and seafood activities within the city. | In 2021, yearly | Documentation for the conduct of fishing activities | Number of ships and boats participating in communications activities / total number of boats and establishments | Department of Agriculture and Rural Development. | Department of Natural Resources and Environment, branches stakeholders |
| 8 | Develop guidance documents, communications and training on the reduction of plastic waste and single-use plastic products (integrating with waste separation at source plans) in healthcare facilities with the following campaign: 'Hospitals, Medical Facilities and Clinics say NO to Non-Biodegradable Plastic Bags'. | In 2021, yearly | Documentation for implementation in medical activities | Number of health facilities participating in communications activities / total number of medical facilities | Department of Health Service | Department of Natural Resources and Environment, branches stakeholders |

| No | Content mission | Time | Result, product | Monitoring and evaluation criteria | Advisory/Implementing Agency | Coordinator Agency |
|--|--|--------------------------|---|--|--|--|
| 9 | Develop guidance documents and implement communications on reducing plastic waste, single-use plastic products (integrating with waste separation plans at source) in markets, shopping centres, convenience stores. | In 2021, yearly | Communication Documents | Number of published documents to the objects | Department of Industry and Trade | Branches stakeholders |
| II Implement targeted actions to reduce plastic waste in the city | | | | | | |
| 1 | Update and complete the city waste segregation plan to effectively implement Decision No. 1577/QD-UBND dated April 11 th , 2019 on the collection, segregation, transportation and treatment of plastic wastes to ensure the recovery of plastic products and plastic bags for recycling. | Yearly | The Action Plan for the Separation of Waste at Source is evaluated and updated annually, with the goal of reducing plastic waste. | Number of households carrying out waste separation at source; Volume of plastic waste collected and classified at source per year | Department of Natural Resources & Environment; People's Committees of Districts; | Departments and branches stakeholders |
| 2 | Develop and implement a plan with defined objectives and activities promoting the reduction of single-use plastics in stores, markets, supermarkets, trade centers and convenience stores over time as stated in Prime Minister's Directive 33. /CT-TTg dated August 20 th , 2020 and the solutions proposed in this plan (incorporating the guidelines of the Ministry of Industry and Trade). | In 2021, Yearly | The plan is approved by the Department of Industry and Trade, which enacts in accordance with the annual objective of achieving the city's overall goal | Number o establishments per year/total number of establishments; Estimated number/volume of plastic to be reduced annually; Number/volume of plastic waste collected and classified at source per year | Department of Industry and Trade | Department of Natural Resources & Environment, branches stakeholders |
| 3 | Develop and implement a plan to support plastic waste management at school sites with the campaign 'Schools say NO to Single-use Plastic' in the period of 2021-2025. | In 2021, a yearly update | The plan is approved by the Department of Education and Training, promulgating according to the annual target to achieve the overall goal of the city | Number of schools implemented/year/total number of schools; Estimated number/volume of plastic to be reduced/year; Number/volume of plastic waste collected and classified at source/year | Department of Education and training | Department of Natural Resources & Environment, branches stakeholders |

| No | Content mission | Time | Result, product | Monitoring and evaluation criteria | Advisory/Implementing Agency | Coordinator Agency |
|----|--|--------------------------|---|--|--|---|
| 4 | Develop and implement a plan for the reduction, collection and recycling of plastic waste in agriculture, livestock and aquaculture. Promote solutions to recover fishing gear such as nets and buoys that are lost or forgotten; and collect packaging waste for pesticides, fertilizers and veterinary medicine after use in agricultural production activities. Communicate with small traders on limiting the use of foam floats in the fisheries industry in Au Thuyen and Tho Quang port. Strengthen waste management for boats (fishing boat, cruise ship, etc.) and improve handling and disposal of fishing gear. | In 2021, a yearly update | The plan is approved by the Department of Agriculture and Rural Development, which enacts according to the annual objective to achieve the overall goal of the city | Number of establishments per year/total number of establishments (including ships and boats). Estimated volume of plastic to be reduced annually; Number of plastic wastes collected and classified at source/year | Department of Agriculture and Rural Development | Department of Natural Resources and Environment, branches stakeholders, People's Committees of districts |
| 5 | Develop and implement a pilot model for commercial establishments, tourist accommodation and other tourist services in tourist areas, attractions, mass and sports fitness facilities, training centers, sports competitions, and religious and creed institutions to reduce the use of single-use plastic products (which includes waste segregation at source). Implement a pilot 'Event without plastic waste'. | In 2021, a yearly update | The plans are approved by the Department of Tourism, the Department of Culture and Sports, enacting according to the annual objectives to achieve the city's overall goals. | Number of establishments/year/total number of establishments. Estimated number/volume of plastics to be reduced/year; Number/volume of plastic waste collected and classified in the source/year | Department of Tourism; Department of Culture and Sports | Department of Natural Resources and Environment, People's Committees of districts |
| 6 | Develop and implement a plan for industrial installations to reduce the use of single-use plastic products and support waste separation at source for production facilities and corporations with more than 150 employees. | In 2021, a yearly update | The plan is approved by the Board of Directors of Industrial Areas, promulgating according to the annual objective to achieve the city's overall goals. | Number of establishments/year/total number of establishments. Estimated number of plastic materials to be reduced/year; Number/volume of plastic waste collected and classified at source/year | Industrial Park Management Board and the city's industrial zones | Department of Natural Resources and Environment, branches stakeholders,; People's Committees of districts |

| No | Content mission | Time | Result, product | Monitoring and evaluation criteria | Advisory/Implementing Agency | Coordinator Agency |
|------------|---|--------------------------|--|--|--|---|
| 7 | Develop a plan and implement the campaign 'Fishermen catch Fisheries' to obtain commitments to not dispose of fishing gear into the sea. Farmers to participate to build a collection place for fertilizer and pesticide packaging bags from agricultural production and make commitments not to dispose waste into rivers. | In 2021, a yearly update | The plan is approved by Farmer's Union, promulgating according to the annual objective to achieve the city's overall goals | Estimated volume of plastic to be reduced annually; Number of plastic wastes collected and classified at source/year | Department of Natural Resources & Environment; People's Committees of districts; | |
| III | Prevent and reduce ocean plastic waste from land-based and marine sources (Control plastic waste at source) | | | | | |
| 1 | Support inspection of plastic packaging activities in city markets by individuals and organizations, with a view to mobilizing and guiding businesses toward environmentally friendly alternatives. | Yearly | Conversion to business forms of environmentally friendly packaging | Number of commercial establishments product or sale of environmentally friendly packaging materials/total number of establishments producing or selling plastic packaging bags | Department of Industry and Trade | People's Committees of districts, departments and branches stakeholders |
| 2 | Investigate, compile statistics, classify and evaluate sources of plastic waste from land and sea and in the Vu Gia-Thu Bon river basin. | In 2022, yearly | Survey and statistical reports are updated every two years | Percentage of plastic waste recovered and recycled achieved/year | Department of Natural Resources and Environment | Departments and branches stakeholders |
| 3 | Strengthen the control and management of discharges into water sources from the entertainment activities at the beaches and lakes; and take measures to prevent the spontaneous garbage dumping, illegal burning and burying. | Yearly | Report on management and supervision activities in local areas | Number of waste monitored points /year | People's Committees of districts | Departments and branches stakeholders |
| 4 | Strengthen the enforcement and monitoring of legislation on the collection and treatment of plastic waste derived from Education, Commerce, Tourism, Industry, Health, and Agriculture Sector activities. | Yearly | Report on management and supervision activities in target areas | Number of waste monitored points /year | Department of Natural Resources and Environment | Departments implement targeted actions |

| No | Content mission | Time | Result, product | Monitoring and evaluation criteria | Advisory/Implementing Agency | Coordinator Agency |
|----|--|---------|---|------------------------------------|--|---|
| 5 | Research into solutions for reduction of non-biodegradable plastic bags and single-use plastic products in public behaviour. | Yearly | Report on management and supervision activities in target areas | Number of violations handled | The Command of the Border Guard of Da Nang City, Police City | Departments and branches stakeholders |
| 6 | Encourage and support enterprises, production establishments and companies to gradually change and implement solutions to limit the use of single-use plastics and replace them with environmentally friendly alternatives. Propose regulation for supermarkets, shopping malls, markets, etc. to introduce plans to reduce the use and generation of plastic waste. | In 2022 | Proposal report | Research is implemented | Department of Culture and Sports | Da Nang Institute for Socio-Economic Development Research; Department of Natural Resources & Environment, Departments and branches stakeholders |
| 7 | Research and build a multi-stakeholder network to promote and introduce environmentally-friendly packaging products. | In 2022 | Proposal report | Research is implemented | Department of Industry and Trade | Da Nang Institute for Socio-Economic Development Research; Department of Natural Resources & Environment, Departments and branches stakeholders |

| No | Content mission | Time | Result, product | Monitoring and evaluation criteria | Advisory/Implementing Agency | Coordinator Agency |
|-----------|--|-------------------|---------------------------------------|---|--|---|
| 8 | Research to support calls for greater investment in city projects and factories that recover and recycle plastic waste according to circular economic principles. | In 2022 | Proposal report | Research is implemented | Department of Industry and Trade | Da Nang Institute for Socio-Economic Development Research; Department of Natural Resources & Environment, Departments and branches stakeholders |
| 9 | Research to call for investment in projects and factories to recover and recycle plastic waste according to the economic cycle. | From 2021 to 2025 | Proposal report | Research is implemented | Department of Natural Resources & Environment | Department of Planning and Investment, Da Nang Institute for Socio-Economic Development Research; Departments and branches stakeholders |
| IV | International cooperation, scientific research, and technological application, development and transfer for marine plastic waste treatment | | | | | |
| 1 | Mobilize international resources for technical support and investment to control marine plastic waste. Adopt management models that support innovation to produce alternative products, improve recycling and transition to a circular economy and green growth. | From 2021 to 2025 | New projects accepted and implemented | Number of new projects supported per year | Department of Foreign Affairs, Department of Natural Resources and Environment | People's Committees of districts, Departments and branches stakeholders |

| No | Content mission | Time | Result, product | Monitoring and evaluation criteria | Advisory/Implementing Agency | Coordinator Agency |
|----|--|-------------------|---|---|--|--|
| 2 | Promulgate the Municipal Plastic Waste Reduction Project sponsored by World Wide Fund For Nature (WWF) in Thanh Khe District in the period of 2021 – 2023; implementing the model “ Reducing the use of nylon bags at markets” (People Committee’s dispatch No. 4501/UBND-STNMT dated July 10 th , 2020). | From 2021 to 2025 | Project activities carried out every year | Number of activities implemented/ planned | People’s Committee of Thanh Khe District | Department of Natural Resources and Environment |
| 3 | Promulgate the Municipal Plastic Waste Reduction - Local Solutions Project sponsored by USAID (People Committee’s dispatch No. 2666/UBND-STNMT dated May 5 th , 2021). | From 2021 to 2025 | Two localities deploy | Number of activities implemented/ planned | People’s Committee of Cam Le District, People’s Committee of Hai Chau District | Department of Natural Resources and Environment |
| 4 | Implement the Closing the Loop project by UN ESCAP building an ocean plastic waste monitoring system based on remote sensing, aerial photography and satellite image interpretation with artificial intelligence in collaboration with local and international experts (People Committee’s dispatch No. 3658/UBND-STNMT dated May 6 th , 2021). | From 2021 to 2025 | Application of the system for monitoring plastic waste by remote sensing technology | Research is implemented | ESCAP Project | Department of Natural Resources and Environment, Science and Technology, |
| 5 | Mobilize human resources to carry out creative start-up activities, to develop the production and sale of environmentally-friendly products for economic growth and sustainable development. | From 2021 to 2025 | Research models are carried out | Research is implemented | City Socio-Economic Development Research Institute; | Department of Natural Resources and Environment, Departments and branches stakeholders |
| 6 | Research, develop, apply and transfer technologies and methods for the treatment and reduction of ocean plastic waste across the city. | From 2021 to 2025 | Research topics carried out | Research is implemented | Department of Science and Technology | Departments and branches stakeholders |

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