

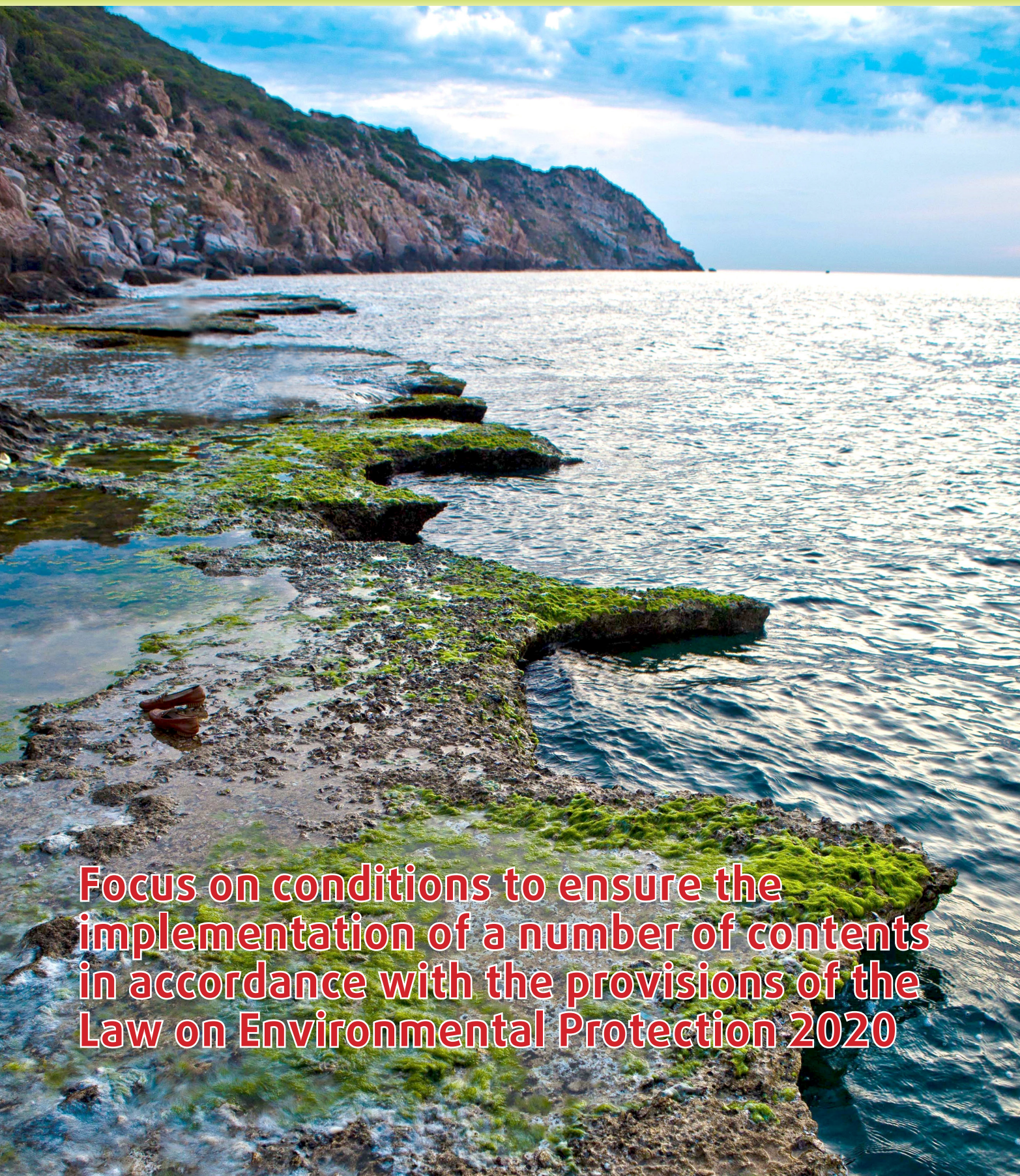


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Focus on conditions to ensure the implementation of a number of contents in accordance with the provisions of the Law on Environmental Protection 2020



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MONRE organizes training courses on provisions and policies of the Law on Environment Protection

In 3 days (from 29 to 31 March 2022) in Hà Nội, the Ministry of Natural Resources and Environment (MONRE) organized 3 offline and online training workshops on provisions and policies of the Law on Environmental Protection (LEP) and documents detailing the implementation for 63 provinces and cities across the country.

The LEP 2020 was approved by the 14th National Assembly at its 10th session and took effect from 1st January 2022 with many new breakthrough contents, related to many fields and many other laws, which are fundamentally different from the current provisions. Therefore, right after the Law was promulgated, the MONRE actively developed propaganda documents on the main contents of the Law; coordinated with a number of Ministries, sectors and local authorities to appoint officials to disseminate and propagate more deeply about the new provisions; widely published articles and publications to disseminate new important provisions on the mass media; especially opened a column “Receiving and responding to feedback and recommendations on policies and legal provisions on environmental protection” on the Portal of the Vietnam Environment Administration (VEA) to receive, answer and guide ministries and sectors, local authorities, people and enterprises in implementing new provisions of the Law as well as guiding documents.

Speaking at the opening of the workshop, Deputy Minister Võ Tuấn Nhân said that the training workshop has practical significance, helping local authorities update new provisions as well as better understand the goals and contents of the Law and other documents guiding the implementation, helping the implementation to be accurate and consistent. Therefore, the Deputy Minister wishes to continue to receive close coordination and active support of the local authorities in propaganda, dissemination and implementation of the legal provisions on environmental protection; ensuring the successful implementation of important goals set by the Party and Government in 2022 and the following years for environmental protection work.



▲ Deputy Minister Võ Tuấn Nhân delivers the opening speech of the workshop

On the basis of opinions exchanged and discussed at the workshops, Deputy Minister Võ Tuấn Nhân affirmed that the MONRE will summarize and post all contents of the Questions and Answers on the Ministry's Portal, progressing to issue a Manual on detailed implementation of the new provisions of the Law and guiding documents for implementation; develop publications, multimedia communication materials on environmental protection and organize communication on mass media, communication tools on social networks; continue to promote propaganda and dissemination of the legal provisions on environmental protection.

OUTSTANDING CONTENTS IN THE LEP AND GUIDING DOCUMENTS

Reporting on a general overview of the provisions of the LEP 2020 and guiding documents for implementation of the Law, Deputy Director General of the VEA Nguyễn Hưng Thịnh said that the LEP 2020 and its guiding documents have 8 outstanding contents: (1) The residential community is specified as a subject in environmental protection; strengthen the publicity of information, consult, promote the role of supervision and criticism, and also ensure the rights and interests of the residential community when participating in environmental protection activities; (2) Change the environmental management method for investment projects according to environmental criteria; strictly control projects with high risk of adverse impacts on the environment, carry out post-checks for projects with advanced and environmentally friendly technologies; reduce administrative procedures; (3) Provisions on environmental health; supplement many solutions to protect environmental components, especially air and water



▲ *Participants at the workshop*

environment; (4) Promote segregation of waste at source; orient how to manage and treat waste, contribute to promoting the circular economy in Việt Nam; (5) Provisions on State management competence based on the principle of general and unified management, one task is assigned to only one agency in charge of implementation; thoroughly decentralize the local authorities; (6) Concretize provisions on responding to climate change, promote the development of the domestic carbon market; (7) Improve the legal framework for protection of natural heritage in accordance with international Law on world heritage, meeting the requirements of the international integration process; (8) Formulate policies to develop sustainable economic growth models, promote circular economy, restore and develop natural capital.

According to Deputy Director General Nguyễn Hưng Thịnh, the LEP 2020 has promoted the role of people, enterprises and the whole political system in participating in environmental protection activities, from policy making to implementation organizing and monitoring, in which enterprises and people must play a Central role; The State plays the role of creating laws, mechanisms and policies on environmental protection; contributing to reducing compliance costs of enterprises through provisions on narrowing the



▲ *Participants attending the online workshop*

subjects required to carry out environmental impact assessment; integrating administrative procedures into an environmental license; synchronizing environmental management tools in each phase of the project, starting from the consideration of investment policy, project appraisal, project implementation until the project is officially put into operation and to the end of the project. For the first time, the Law designs a policy framework that aims to form a law on environmental protection that is comprehensive and in harmony with the socio-economic legal system. The spirit of administrative procedure reform is also reflected throughout in Decree No. 08/2022/NĐ-CP, Circular No. 02/2022/TT-BTN-MT, especially in terms of environmental licensing, attention has been paid to reducing the time, composition of documents and contents to be reported.

FOCUS ON EXCHANGING 5 GROUPS OF IN-DEPTH ISSUES

At 3 workshops, participants listened to 5 in-depth topics on: Classification of investment projects according to environmental criteria; environmental impact assessment (EIA); environmental license, environmental registration; management of domestic solid waste and



some other provisions on waste management; environmental zoning; environmental protection in the provincial planning and inspection, investigation of environmental protection; environmental protection of natural heritage.

In order for the LEP 2020 and its guiding documents to come to life, representatives of local authorities requested the MONRE to provide more specific and detailed instructions related to the settlement of administrative procedures in the field of environmental protection; dossiers, order and procedures for environmental licensing; EIA (responsibility of the project owner after the EIA report is approved for the appraisal results; time for the project owner to complete the EIA report...); waste management; environmental monitoring; inspection, investigation, economic instruments and resources for environmental protection; types of activities that are likely to cause environmental pollution; administrative sanctions in the field of environment; environmental protection of natural heritage...

Speaking at the conclusion of the workshop, Director General of the VEA Nguyễn Văn Tài assessed that the workshop had received many enthusiastic and valuable questions and opinions from both theoretical and practical aspects, thereby creating cognitive consensus for implementation. According to the Director General, in order to ensure the effective implementation of the LEP 2020, local authorities need to conduct research and advise on continuing to organize propaganda and dissemination activities extensively and strongly for the new provisions of the Law and guiding documents to relevant subjects with appropriate contents and forms; based on the actual situation of implementation of the Law at the local level, propose the competent authorities to promptly amend, supplement, replace, repeal or issue new legal documents, ensuring compliance with the provisions of the Law. Also continue to review, evaluate and ensure necessary resources and human resources to implement the Law, including technical infrastructure such as information systems and databases; synthesize, propose, and ensure adequate funding to carry out environmental protection activities...■

HƯƠNG MAI

The New Law promotes awareness of environmental protection

The 2020 Law on Environmental Protection (LEP), which took effect at the beginning of 2022, has introduced many new policies related to environmental protection. The Law is also gradually harmonized with international laws with amendments related to environmental quality management towards protecting people's health.

For the first time, the LEP defines a residential community as a subject of environmental protection, which promotes the role of residential communities in environmental protection activities. It also comprises new regulations on strict control for projects with a high risk of adverse environmental impacts; post-inspection for projects using advanced and environmentally friendly technologies; and cuts many administrative procedures.

In particular, the new Law also adds solutions to protect environmental components, promote waste separation at source and manage and deal with waste. Many localities nationwide have taken the initiative in implementing solutions to protect the environment and mobilizing the involvement of all-level authorities, people and businesses in the work.

In the Southern Province of Bình Dương, toward the goal of sustainable socio-economic development, local leaders have oriented industrial development in the direction of environmental protection. Since the LEP was approved at the end of 2020, the Provincial Department of Natural Resources and Environment has actively reviewed regulations to give related consultations to the Provincial People's Committee. Most industrial parks (IP) in Bình Dương have invested in building separate rainwater and wastewater drainage networks with a total investment of over VNĐ 2 trillion. Notably, a wastewater treatment plant with a daily capacity of 6000 corm was built in the Singapore Industrial Park II (VSIP II) in the locality. Bình Dương has prioritized attracting projects with modern and advanced technologies and restricts new projects outside IPs and industrial clusters. It also planned to invest in an automatic air quality monitoring system and apply forecasting models, compile pollution maps for localities with high urbanization rates and set up a warning system on air quality on the portal of the Provincial natural resources and environment sector.

The Northern Province of Phú Thọ has also actively inspected businesses and production units throughout the locality in order to guide them in installing automatic environmental monitoring stations. The installation of an automatic environmental monitoring systems helps businesses prove that their emissions to the environment are at an allowable level ■

CHÂU LOAN



Việt Nam considers setting up renewable energy center to realize net-zero carbon commitment

The Ministry of Industry and Trade has been asked to coordinate with the Ministry of Natural Resources and Environment (MONRE) on setting up a renewable energy center. The center will improve human resources training and technology transfer and share legal experience and national governance in adapting to climate change.

Meanwhile, the Ministry of Justice will work with the MONRE and relevant ministries and sectors to develop a technical assistance project to call on the UK and development partners to support Việt Nam in internalizing its international commitments on climate change, including those made at COP26. The Ministry of Information and Communications is responsible for coordinating with relevant agencies to build a communications project, including setting up websites on green growth, green energy transformation, digital transformation and climate change.



▲ A renewable energy project in Ninh Thuận Province

During the 26th United Nations Climate Change Conference of the Parties (COP26) in Glasgow, the UK, Prime Minister Phạm Minh Chính pledged Việt Nam would reach net zero carbon emissions by 2050 and agreed to gradually phase out coal-fired power plants, while calling for international partners' assistance, especially developed nations who have benefitted from long periods of industrialization in the past, to help realize the goals. The implementation of strategies and plans on green growth and climate change adaptation, including contents on Việt Nam's commitments at COP26, will be submitted to the Prime Minister.

The MONRE, the standing body of the Steering Committee, will partner with the Government Office, member ministries and agencies in organizing periodic and extraordinary meetings of the committee. A Government notice issued yesterday says that it is necessary to continue to raise awareness of the importance and urgency of the implementation of commitments made at COP26, in connection with promoting extensive international integration and cooperation with Việt Nam's strategic partners in order to attract more resources, especially in finance, technology, governance skills and human resources training to serve economic recovery and development, the implementation of the National Green Growth Strategy and Climate change Adaptation ■

NGUYỄN HẰNG

Some outstanding results in 2021 and orientations for environmental protection in 2022

Dr. NGUYỄN VĂN TÀI

Director General Vietnam Environment Administration

The year 2021 is a year of many difficulties and challenges due to the complicated developments of the COVID-19 pandemic, which comprehensively and deeply affects all aspects of the country's economic and social life, including the environment; at the same time is also an important year, focusing on preparing the necessary conditions for the implementation of the Law on Environmental Protection (LEP) in 2020 with many new mechanisms and policies of breakthrough nature. In that context, thanks to the drastic, timely and effective direction and management of the Government, the Prime Minister, the leaders of the Ministry of Natural Resources and Environment (MONRE), the efforts of the leadership team, civil servants, public officials and people. With the labor of the Vietnam Environment Administration (VEA), the close coordination of all levels, branches, localities, relevant agencies, units and each citizen, environmental protection work has achieved positive results in many aspects, in which notably:

Continue to perfect the system of policies and laws on environmental protection, nature conservation (NR) and biodiversity (BD); facilitate the necessary conditions and legal corridor to ensure the implementation of the LEP2020

In 2021, the VEA has advised and submitted to the Government for promulgation Decree No. 54/2021/ND-CP dated May 21st, 2021 on preliminary assessment of environmental impacts, Decree No. 55/2021/ND-CP dated 24th/2021 on amending and supplementing a number of articles of Decree No. 55/2021/ND-CP stipulating penalties for administrative violations in the field of environmental protection which is to create synchronization with relevant new laws passed by the National Assembly, does not create le-

gal gaps, contributes to improving investment and business environment, promoting administrative reform according to the policy of the Government; submitted to the Minister of Natural Resources and Environment (the Minister) for promulgation Circular No. 10/2021/TT-BTNMT dated June 30th, 2021 on technical regulations on environmental monitoring and management of environmental monitoring information and data. In particular, the VEA has highly focused all resources to develop and submit legal documents detailing the LEP 2020. In which, focus is on researching, consulting international experiences and consulting opinions of experts, scientists, managers; organized online seminars chaired by the Minister to gather opinions of sixty-three provinces and centrally run cities, related Ministries, branches, associations and enterprises to complete and unify Draft Decree before submitting to the Government for consideration and approval. On January 10th, 2022, the Government issued Decree No. 08/2022/ND-CP detailing a number of articles of the LEP; The Minister has signed and promulgated Circular No. 02/2022/TT-BTNMT detailing and guiding the implementation of a number of articles of the LEP. Besides, the VEA has also completed and submitted to the Prime Minister for promulgation 2 plans, 2 schemes, 1 directive; consider issuing 1 project, 2 directives to promote the work of environmental protection, nature conservation and biodiversity.

Promote the application of information technology in handling administrative procedures on the environment, creating favorable conditions for people and businesses

The VEA has completed and put into operation 29 online public services level 4; 1 online public service level 3; 2 online public services level 2 to oversee environmental administrative procedures on the Public Service Portal of MONRE. VEA also has submitted to the Minister of Natural Resources and Environment for promulgation internal procedures for administrative procedures, clearly specifying the order, time and responsibility of each focal point and each stage to monitor and evaluate the implementation progress. In 2021, the VEA received 1,760 administrative dossiers; handling and returning results of 802 dossiers, notifying the results of appraisal and examination for 607 dossiers; the remaining documents are being processed ac-



▲ Green city

cording to regulations. The handling of administrative procedures, licensing, accreditation and certification of the environment has been carried out in accordance with the order and procedures, ensuring quality, contributing to the prevention and control of adverse impacts on the environment, enabling conditions for people and businesses.

Be proactive and flexible in the inspection and supervision of the compliance of the LEP, while enabling conditions for enterprises to come back production in the context of the complicated development of the COVID-19 epidemic, while also protecting the environment, ensuring good control of environmental issues

In order to promptly remove difficulties and obstacles caused by the negative impact of the COVID-19 epidemic, support enterprises to stabilize production and business, recover and create momentum for development in accordance with Resolution No. 105/NQ-CP of the Government, VEA has actively reviewed and proposed to adjust the inspection plan in the direction of suspending the implementation of unnecessary inspections, focusing only on inspecting a number of establishments that are at high risk of causing environment pollution or

have signs of violations of the LEP as reflected by the public and the press. The VEA has closely coordinated with ministries, branches and localities to carry out inspection, timely fixing and handling of environmental hot spots, creating consensus and support of the community and public opinion. In order to improve the operational efficiency of the environmental protection hotline, the VEA has submitted to the leaders of the Ministry to consider and promulgate a regulation on receiving and processing information about the hotline on environmental pollution in the direction of connecting to the district level, using the software to receive, verify, process and respond. In 2021, the hotline has received 450 reports of environmental pollution nationwide, of which 93% of cases have been verified and handled by agencies, 7% of the remaining cases are being investigated, handled by localities according to their competence.

Strictly control waste sources; strengthen waste management, improve environmental quality; nature and biodiversity conservation

The VEA continues to maintain good environmental supervision, organizes meetings with projects and production facilities with high risk of environmental pollution and incidents in order to ensure environmental safety during the operation process; guiding localities to proactively prevent and respond to environmental incidents and pollution, perform well the management and treatment of medical waste, and improve environmental quality in the context of the COVID-19 epidemic. In 2021, there is no major environmental incidents which adversely affecting people and the ecological environment. At the same time, complete the review, assessment and report to the Prime Minister on the results of the implementation of the Plans and Schemes on environmental protection in the period up to 2020 such as: Plan to thoroughly treat pollution of establishments causing serious environmental pollution; Plan on prevention and treatment of environmental pollution caused by residual pesticides throughout the country; Environmental protection projects in Cầu River Basin, Nhuệ - Đáy River Basin, Đồng Nai River System and propose orientations, tasks and solutions to implement these plans and schemes for the next period. The VEA has also organized the development and publication of the National State of the Environment Report for the 2016 - 2020 period; complete the Environmental Protection Report in 2020 and send it to the National Assembly to serve the 11th session of the XIV National Assembly; For the first time, in collaboration with the Standing Committee, the Central Committee of the Vietnam Fatherland Front, completed the assessment and announced the ranking of the implementation of the set of indicators for assessing the results of environmental protection in 2020 of localities.

Up to now, 85% of establishments causing serious environmental pollution to have been thoroughly handled, the remaining establishments have been handled according to the provisions of law. 263/290 industrial parks in operation have centralized wastewater treatment works (increasing by 13.34% compared to 2016); For the remaining industrial parks, enterprises and secondary production facilities in industrial parks have been forced to invest in wastewater treatment systems that meet environmental technical regulations. Continue to promote and expand the network to monitor environmental quality and discharge activities of production, business and services establishments through the online technology system. Up to now, nationwide, 152 automatic and continuous ambient air monitoring stations have been installed and

operated; connect monitoring data of 1,221 automatic and continuous emission monitoring systems of enterprises. In 2021, UNESCO recognized two new world biosphere reserves, namely Núi Chúa Biosphere Reserve (Ninh Thuận Province) and Kon Hà Nừng Plateau Biosphere Reserve (Gia Lai Province) of Việt Nam The VEA nominates the title of Ramsar site for the wetlands of North Đồng Nai (Đồng Nai Province), the title of ASEAN Heritage Park for Côn Đảo National Park, Bà Rịa - Vũng Tàu; advising the MONRE to approve and honor 5 collectives and 7 individuals who have made great contributions to wildlife conservation in the period 2010 - 2020.

Initially forming a system of databases and environmental information with synchronous and interconnected connections

To prepare necessary conditions for implementing regulations on environmental information and data systems of the LEP participating in digital transformation, and building a digital Government according to the guidelines of the Prime Minister, VEA has proactively issued and implemented the Digital Transformation Program of the VEA for the period of 2021 - 2025; Up to now, it has initially integrated and updated data on results of environmental inspection on environmental protection of craft villages, appraisal and environmental impact assessment (EIA) dossiers, hazardous waste management, biodiversity; towards the formation of a database and environmental information that are synchronously and seamlessly connected to serve the enforcement of the LEP.

The year 2022 is an important year, creating a foundation for implementing the goals of the 5-year plan from 2021-2025; there is combination of advantages, opportunities, difficulties and challenges of international and domestic socio-economic situation, including environment sector. 2022 is also the first year of implementing the LEP in 2020 with many new mechanisms and policies, creating a foundation to promote the effectiveness and efficiency of environmental protection work in the coming time. Inheriting the important results achieved, determined to overcome difficulties and challenges, the VEA has determined an



overall goal: To focus on implementing the LEP in 2020 with a priority of protecting people's health; make new policies of the Law into practice. Reversing the trend of degradation and environmental pollution through reducing generation of waste, increasing classification, collection, reuse, recycling and making the most of the value of waste; promote the implementation of the circular economy in each branch, field and each locality and establishment. Mobilize, manage and effectively use resources to thoroughly treat, remediate and improve the quality of the environment in contaminated soil areas and polluted river basins. Strengthen the management of solid waste, improve the quality of the environment, nature conservation and biodiversity. Synchronously deploying environmental management tools for projects, production, business and service establishments based on classification according to environmental criteria; promoting the application of the best techniques available at projects, production, business and service establishments on the basis of screening and preventing early and remotely importation of outdated, fuel-consuming and environmental pollution production technologies into Việt Nam.

To meet the set goals, in the coming time, the VEA will focus on implementing a number of key tasks:

Firstly, organize the implementation to ensure the effectiveness and efficiency of legal provisions on environmental protection according to the LEP in 2020, especially new regulations, which are applied for the first time as environmental management for investment projects according to environmental criteria; apply best available techniques; environmental protection of natural heritage; environmental permits; segregation of domestic solid waste at source; policies to promote circular economy development, green credit, green bonds...

Secondly, synchronously and effectively combine tools and measures for state management of environmental protection from EIA, handling administrative procedures, granting environmental permits, inspecting; strengthen the capacity of monitoring and warning of environmental quality developments to proactively prevent, control, respond to and promptly handle arising environmental incidents and cases, ensure that facilities, environmental safety project.

Thirdly, develop and submit to the Prime Minister for promulgation the National Environmental Protection Master Plan, the National Biodiversity Conservation Master Plan, the National Environmental Monitoring Master Plan for the 2021 - 2030 period, with a vision to 2050. Developing and completing the system of national regulations and standards on environment according to the provisions of the LEP in 2020 such as regulations on

waste management, emissions of means of transport, limitation of pollutants persistent contamination in raw materials, fuels, materials, products, goods and equipment. Reviewing and development of technical processes and unit price norms to serve the state management of environmental protection.

Fourthly, strengthen solid waste management in a centralized and unified direction, in which focus on good management of solid waste collection and treatment, especially on collection and classification of solid waste at source. Strengthening measures to manage, improve and restore environmental quality (soil, water, air...), focusing on implementing Directive No. 03/CT-TTg on strengthening air pollution control and the National Plan on Air Quality Management for the 2021 - 2025 period which have been approved by the Prime Minister, and developing a plan for surface water quality management for inter-provincial rivers and lakes that play an important role for socio-economic development, environmental protection.

Fifthly, promote activities of nature conservation and biodiversity. Effectively implement regulations on environmental protection of natural heritage; promote activities to restore nature, important natural ecosystems, conserve and sustainably use of wetlands, conserve wild and migratory birds in Vietnam; implementing the project of inventory, monitoring, reporting and building the national biodiversity database.

Sixthly, improve the effectiveness of propaganda, dissemination and awareness raising about environmental protection, promote the role of socio-political organizations and communities in environmental protection in accordance with conditions of controlling COVID-19 epidemic. Focusing on propagating and disseminating the legal provisions on environmental protection under the LEP in 2020 to the beneficiaries in the appropriate forms; continue to discover and replicate good models and good practices, promptly reward and praise collectives and individuals with achievements and initiatives in environmental protection; promoting the participation of socio-political organizations, residential communities and people in environmental protection ■

Focus on conditions to ensure the implementation of a number of contents in accordance with the provisions of the Law on Environmental Protection 2020



▲ Mr. Nguyễn Hưng Thịnh
- Deputy Director General of VEA

The Law on Environmental Protection (LEP) in 2020 is an important legal framework, with many new, breakthrough points and orientations for environmental protection in the new period. For the LEP in 2020 to be implemented in a timely, synchronous, unified and effective manner, over the past year, the Ministry of Natural Resources and Environment (MONRE) has chaired and coordinated with other Ministries, branches, localities, agencies and experts to perfect legal documents guiding the implementation of the Law. On the occasion of the LEP 2020 officially taking effect from January 1st, 2022, Vietnam Environment Administration Magazine had an exchange with Deputy Director General of Vietnam Environment Administration (VEA) Nguyễn Hưng Thịnh about the implementation of propagation of the LEP in the near future.

The LEP in 2020 was approved by the National Assembly with many innovative contents, would you like to introduce the breakthrough and important points of the Law which guide environmental protection work in the new period?

Deputy Director General Nguyễn Hưng Thịnh: As we all know, natural resource protection and environmental protection is one of the three pillars of the country's socio-economic development; with the superiority of our socialist regime, our Party has paid great attention to environmental protection with the motto of not trading off the environment for economic growth and development. Therefore, the Party has always directed the State to have specific measures and policies suitable to each stage of the country's development. In that spirit, the LEP 2014 was born, creating an important legal corridor to contribute to economic growth in a sustainable way. However, after more than 5 years of implementation, the situation in the country and in the world has undergone profound changes, in which the position of the country under the leadership of the Party has reached new heights, in many aspects of which some can be compared with advanced countries in the world. Secondly, the achievements of the furth industrial revolution with the outstanding development of science and technology have created opportunities for innovation in thinking and method in environmental management and shaping new growth

models. Thirdly, international cooperation is changing according to new trends, many international commitments related to the environment, which Việt Nam is member such as CPTPP, EVFTA..., need to be institutionalized and internalized to create a legal corridor for implementation. Fourthly, climate change is becoming more and more serious, in recent times we have witnessed the impact of climate change which has had a great impact on the livelihoods of people in the Mekong Delta. Fifthly, under the drastic leadership of the Party and the administration of the Government, although our country's environmental protection has received great attention, there are still many shortcomings in new situations and challenges. On that basis, the Government submitted to the NA for consideration and approval the LEP 2020.

The LEP No. 72/2020/QH14 approved by the XIV NA at its 10th session, effective from January 1st, 2022, with 16 chapters and 171 articles (reducing 4 chapters and increasing 1 article compared to the LEP 2014). The Law is designed with a policy framework towards the formation of a LEP which is comprehensive and in harmony with the socio-eco-



conomic legal system; drastic reform, cutting over 40% of administrative procedures, reducing the time to carry out administrative procedures from 20 - 85 days, contributing to reducing compliance costs of businesses. The Law has 9 important new points: (1) The residential community is defined as a subject in environmental protection; strengthen public information, consultation and promote their role in supervision and criticism and at the same time ensure the rights and interests of the population community when participating in environmental protection activities; (2) Change the environmental management method for investment projects according to environmental criteria; strictly control projects with high risk of adverse impacts on the environment, carry out post-checks for projects with advanced and environmentally friendly technologies; reduce administrative procedures; (3) The content of environmental health has been regulated; adding many solutions to protect environmental components, especially air and water; (4) Promote segregation of waste at source; guiding how to manage and treat waste, contributing to promoting the circular economy in Việt Nam; (5) The regulation on state management competence is based on the principle of general and unified management, one task is assigned to only one agency in charge of implementation; thoroughly decentralize the locality; (6) Specific regulations on environmental audit in order to strengthen the capacity and efficiency of environmental management of enterprises; (7) Concretize regulations on climate change response, promote the development of the domestic carbon market; (8) Completing the legal framework for protection of natural heritage in accordance with international law on world heritage, meeting the requirements of the international integration process; (9) Formulate policies to develop sustainable economic growth models, promote circular economy, restore and develop natural capital.

It can be said that in the past year, the VEA has put all its resources and efforts into developing guiding documents to prepare the conditions for the implementation of the LEP 2020 coming into effect soon. Could you kindly share the results of these activities?

Deputy Director General Nguyễn Hưng Thịnh: When the Law was passed, deploying plan to develop legal documents to implement the Law as assigned by the Government, the VEA submitted to the Minister of MONRE to issue the plan for the implementation of the LEP 2020. During the past time, the VEA has focused all resources to develop, complete and submit to the Government to promulgate a Decree detailing a number of articles of the Law; submit to the Minister of Natural Resources and Environment for promulgation a circular detailing the implementation of a number of articles of the LEP 2020.

The development of Decrees and Circulars has been actively, urgently and promptly implemented by the VEA, ensuring compliance with the provisions of the Law on Promulgation of Legislation documents. I would like to talk more specifically about the process of developing a decree detailing a number of articles of the LEP as follows:

The Minister established a Drafting Committee and Editorial Team of the Draft Decree with the participation of representatives of the Government Office, representatives of Ministries and branches; representatives of associations (Vietnam Plastics, Vietnam Textile and Garment, Vietnam Seafood Processing and Exporting, Vietnam Craft Villages, Vietnam Pulp and Paper, Vietnam Steel, Vietnam Packaging) and many other experts and scientists in the field of environmental protection. At the same time, the MONRE has written requests to ministries and branches to participate in drafting and proposing contents to the Draft Decree because there are a number of contents directly related to Ministries and branches' state management functions and tasks.

The Ministry has conducted a review of legal documents related to the Draft Decree to ensure the consistency among the regulations. Studying international experiences of a number of countries in the world and in the region regarding new regulations in order to make recommendations suitable for environmental management in Việt Nam; conducted an administrative procedure impact assessment of the Draft Decree; consultation with target groups affected by the Draft Decree.

The Ministry has organized working with each relevant ministry and branch to consult relevant regulations in the Draft Decree. Organize meetings of the Drafting Board, Editorial Team and expert groups; organized dozens of seminars with the participation of representatives of many Ministries, branches, domestic experts and international organizations to consult on the Draft Decree.

The Ministry has sent documents to collect official opinions from Ministries, branches, 63 localities, a number of businesses, organizations and professional associations: Vietnam Chamber of Commerce and Industry. The Draft Decree has been posted on the Government Portal and the website of the MONRE to collect comments from the people, organizations, individuals and affected subjects, domestic and international experts and scientists. The Minister of Natural Resources and Environment directly sent a letter to ask for opinions of experts, scientists, directors of departments of natural resources and environment of 63 provinces and cities and related individuals on the Draft Decree.

The Ministry has organized online seminars, listening fully to the opinions of 63 provinces and centrally run cities; coordinate with VCCI to organize an online seminar to consult with associations and businesses; continued to organize a webinar with more than 100 businesses to discuss the process receiving opinions from businesses, associations as well as consulting for more opinions on content that is of interest to many businesses.

Based on the appraisal opinion of the Ministry of Justice, MONRE has reviewed, revised and completed the Draft Decree; continue to post the Draft Decree on the Ministry's web portal for further consultation with organizations and individuals. Implementing the direction of Deputy Prime Minister Lê Văn Thanh in Official Letter No. 6739/VPCP-NN dated September 22nd, 2021, and Official Letter No. 7741/VPCP-NN dated October 23rd, 2021, of the Government Office and at the request of the Ministry of Justice in the Appraisal Report, on 5th October 2021, the MONRE organized a meeting with relevant ministries and branches to exchange and agree on a number of contents of the Draft Decree. On October 18th, 2021, the Minister of Natural Resources and Environment directly met with representatives of 11 associations who sent written comments to the Draft Decree. The editorial team has directly worked with the Associations to have in-depth discussion on each issue that the Associations still had concerns and opinions; through which signed a minute of agreement on basic issues. On October 28th, 2021, the Minister directly worked with 10 ministries and branches to finalize the Draft Decree before submitting to the Government.

After receiving comments from Government Members, MONRE has continuously coordinated with the Government Office to review and finalize the content of the Draft Decree according to the opinions of Government members.

As we all know, on January 10th, 2022, the Government issued Decree No. 08/2022/ND-CP detailing a number of articles of the LEP; at the same time, the Minister of Natural Resources and Environment also issued Circular No. 02/2022/TT-BTNMT detailing the implementation of a number of articles of the LEP.

It can be affirmed that the issuance of these documents demonstrates the great efforts and determination of the MONRE, the close coordination of ministries, branches and localities, and the enthusiastic participation of many experts, scientists, associations and businesses who had regularly and continuously contributed ideas to MONRE in the process of developing legal documents.

In the process of finalizing the Decree detailing a number of articles of the Law, could you please tell us how to clarify a number of issues were of interest to the delegates such as: administrative reform; environmental permit; environmental impact assessment (EIA); extended producer responsibility (EPR) provisions; domestic solid waste management?

Deputy Director General Nguyễn Hưng Thịnh:

As we all know, the LEP 2020 has many provisions aimed at drastically reforming administrative procedures, contributing to reducing compliance costs of businesses through the following provisions: narrowing the subjects required to carry out EIA; integrating administrative procedures into 1 environmental permit; synchronize environmental management tools in each phase of the project, starting from the consideration of investment policy, project appraisal, project implementation until the project is officially put into operation and finished. With the aim of detailed guidance on the contents as prescribed by the Law, Decree No. 08/2022/ND-CP was formulated in accordance with the policy directed by the Prime Minister to reduce pre-inspection, strengthen post-inspection, enabling maximum convenience for people and businesses when implementing administrative procedures on the environment; thoroughly decentralized to the locality. This spirit has been expressed throughout the entire Decree, especially the regulations on EIA and environmental permit, specifically:

Regarding EIA: By specifying environmental criteria to classify investment projects and promulgating a list of investment project groups, there will be many projects that, if implemented in accordance with current laws, will have to carry out EIA and applying for a certificate of completion of an environmental protection project. Then, in accordance with the new regulation, these projects only have to do one procedure to issue an environmental permit.

Regarding environmental permits: The Decree stipulates the main contents of the report on proposals for issuance of environmental permits for each specific case, thereby simplifying the dossiers of application for issuance of environmental permits according to each group of subjects (contents of the proposed report of project group III is simpler than the rest). For a report on proposal for re-issuance of environmental permits, it is only required to report changed contents in cases of changes in scale, capacity, technology and changes in waste sources; reduce 2 contents to be reported for expired licenses or add industries that attract investment in centralized production, business and service zones, industrial clusters... Specific regulations in cases of re-issuance environmental permit; adjusting environmental permits at the request of project owners and adjusting environmental permits according to the provisions of Law to ensure transparency and ease of implementation.



▲ MONRE consults associations and businesses on the Draft Decree detailing a number of articles of the LEP

Time for issuance of environmental permits for cases of granting environmental permits in accordance with simple procedures is 15 days which is 30 days less than the provision of the Law. The simple procedures apply for projects without waste treatment facilities must be tested for operation; projects that are not in the type of production, business or service that are at risk of causing environmental pollution to invest in industrial zones and clusters. Also, the issuance of environmental permits of these subjects is done through the appraisal team without fact-check that will lead to reduce the time for re-issuance of environmental permits in some cases to 30 days at the ministerial level and 20 days at the provincial and district levels (decreased from 10 - 15 days compared to the time limit specified in the Law). In order to clearly show the viewpoint of reducing pre-inspection and enhancing post-inspection, the Decree specifically stipulates cases in which an appraisal council, inspection team, appraisal team or actual inspection organization is established in accordance with regulations. Size and nature of each type of investment project. Accordingly, in the case of investment projects that have carried out EIA, there is no fact-check and the appraisal team is only needed if the investment project uses scrap imported from abroad as raw production materials and the investment

project provides hazardous waste treatment because the inspection and adjustment of environmental permits are carried out during operation testing. The appraisal and issuance of environmental permits at the district level is carried out through a simple procedure of an appraisal team or fact-check.

Regarding EPR regulations: This is one of the issues that receive great attention from the business community, therefore Editorial Board carefully considered after consulting and receiving opinions from a large number of management agencies, experts, scientists and the business community on regulations about who must perform the responsibility for recycling or waste treatment and the specific implementation roadmap for each target group. Accordingly, the Decree specifically stipulates the subjects, the roadmap for implementing the responsibility for recycling and waste treatment. For 6 groups of products and packaging (electronics; batteries; lubricating oil; tires; vehicles; packaging), manufacturers and importers will have to recycle products from the beginning of 2024, 2025 or 2027 (depending on product type). For a number of other products and packages, such as: plant protection products; gums; diapers; cigarettes; products using plastic materials, manufacturers and importers will have to support waste treatment from the beginning of 2023.

Thus, we can see that the Decree has brought a strong spirit of administrative reform from the object, content, process and implementation roadmap. These regulations will enable favorable conditions for people and businesses to implement the new provisions of the Law.

In order for the propaganda and dissemination of the LEP 2020 and its guiding documents to come into effect in the near future, how does the MONRE plan to implement this work?

Deputy Director General Nguyễn Hưng Thịnh:

In order for the LEP 2020 to come into effect soon and create a high consensus in the whole society, units in the MONRE have closely coordinated to develop a propaganda plan for each topic which is specific to each target group. In 2021, the VEA has also participated in many seminars, training conferences, training and fostering legal knowledge on environmental protection under the LEP 2020 in many provinces/cities across the country and at Ministries. Accordingly, important new points and contents related to the responsibilities of ministries, branches and localities were disseminated.

In 2022, the VEA has planned to train and improve the capacity and communication skills for staffs of environmental protection propagandists of ministries, central branches, localities and social and political organizations, thereby building a network of propagandists on environmental protection from central to local levels; at the same time, renovate and diversify forms of communication through coordination with social and political organizations, press agencies and media agencies to organize propaganda on environmental protection legislation in accordance with LEP 2020 and its guiding documents.

incerebly thank the Deputy Director General!

CHÂU LOAN

Developing circular economy (CE) models to effectively use the outputs of the production process is one of the tasks indicated in order to implement the orientation of efficient management, use of resources, environmental protection and response to climate change of the Socio-economic Development Strategy 2021 - 2030. The Law on Environmental Protection (LEP) in 2020 with many new provisions, in line with international experience is expected to change the behavior of actors in society, creating new motivations to encourage investment in environmental protection according to a market-based approach. Some typical instruments such as provisions on waste segregation at source, provisions on extended producer responsibility, environmental audit; Also for the first time, the LEP 2020 has a separate Chapter with many provisions on economic instruments, policies and resources for environmental protection such as taxes, fees, payment for ecosystem services, carbon market, circular economy, development of environmental industry, environmental services, green credits and green bonds... Especially, Việt Nam is one of the first countries in ASEAN to institutionalize provisions on CE in the Law in Article 142 on the CE and many other provisions are considered as policy instruments to promote the CE implementation from the stages of resource extraction, processing, production, distribution, consumption, disposal and waste conversion into resources.

AWARENESS OF THE CE

The CE A new issue, the institutionalization of legal provisions on the CE must reflect its characteristics and be consistent with international experience and Việt Nam's institution. Here are some key points to be summed up when the institution stipulates the circular economy, specifically:

Accelerating the transition from a linear economic model - which is concerned only with resource extraction, production and post-consumer disposal, resulting in the generation of a huge amount of waste, to a model that focuses on the management and regeneration of resources in a closed loop to avoid creating waste - the CE model.

CE is an industrial system restored and regenerated by design, based on three key principles of preserving and enhancing natural capital; optimizing resource productivity and promoting system-wide performance by minimizing negative externalities at all different effort levels. Accordingly, in the CE the value of products, materials and resources is maintained in the economy for as long as possible with minimal waste”.

Measures to implement the CE are diverse through many different forms such as refusing to use products that are harmful to the environment, applying repair, reuse, remanufacturing and recycling measures, industrial symbiosis to achieve the goal of reducing raw material and fuel consumption, extending product life cycle and minimizing waste to the environment.

CE operates in a systematic approach with all 5 stages including design, production, consumption, waste management and waste conversion into resources. CE is not only waste management, waste utilization but waste management is at the heart of CE. CE can be identified and evaluated at many different levels, including the macro level (a country, a region), the spatially intermediate level of an urban area to form a circular urban area, at the micro level for each specific enterprise, business establishment or each product level.



Introduction of the legal framework to implement circular economy in Việt Nam

Dr. MAI THẾ TOÀN, Dr. LẠI VĂN MẠNH

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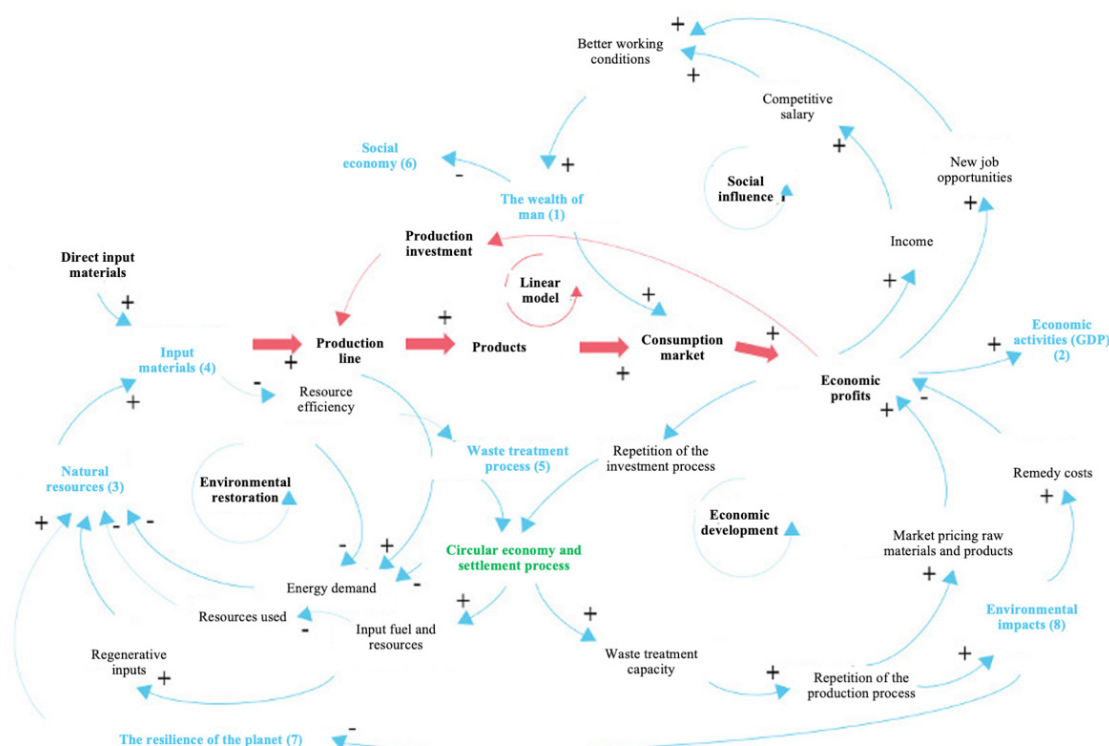
Economic, environmental and social benefits are the main drivers to promote the application of CE. The application of CE measures to the governance process at all levels, building business projects, designing each product of each enterprise will contribute to the formation of new business models in the direction of CE.

CE requires systematic thinking to design economic development activities that bring benefits to enterprises, society and the environment to foster actors to promote innovation. Implementing CE requires the participation of all stakeholders from the Central and local public sectors, mining and raw material enterprises, processors, manufacturers, distributors, retailers, consumers, garbage collectors... However, the public sector plays an important role in creating and promoting cyclic ecosystems, encouraging innovation in the application of measures, developing CE models.

Respect the principles and laws of the market economy in institutionalizing provisions to promote the CE implementation. Therefore, the system of legal provisions, mechanisms and policies aims to create a legal corridor for the formation and development of market factors, market types and activities of market actors; reg-

ulating the behavior of actors, thereby regulating the activities of the economy and intervening to solve the shortcomings of the market... on the basis of respecting principles and laws such as value, competition, supply - demand of the market economy so that enterprises, prices and production can operate naturally according to the laws of supply - demand of goods and services rather than the intervention of the State.

The design of legal provisions for the CE implementation must fully consider the factors that play a role in promoting the CE implementation such as: institutions, policies; the infrastructure; the development of science and technology, the internet of things; social responsibility, culture, consciousness and behavior... to minimize barriers to the CE implementation such as culture, provisions, finance and vision are outstanding issues to make the transition to a CE that Governments of all countries face, including culture, institutions, financial resources, comprehensive vision, complete information, unclear provisions, risks on finance, awareness, scale, technology,



▲ Figure 1. Systematicity in the formation of cyclic ecosystems

Source: Bettina, 2020

human resources, private sector involvement, institutional readiness and technological solutions. Along with that, provisions on CE need to create space to stimulate innovation of all organizations and individuals in society, promoting the roles and specific characteristics of each sector, field and locality to implement CE.

PRACTICAL CE IN VIỆT NAM

Applying the systematic approach of an economy, according to different approaches to consider the operation of socio-economic activities, shows that under each approach, the CE development ability will be expressed as: Recognized in terms of production areas, consumption areas or intermediate areas (industrial zones, clusters, urban areas, residential areas).

Practice shows that Việt Nam does not have a CE model with full content, but in terms of goals and content, there are business models or methods with manifestations of this model quite early. For sectors classified at level 1, CE can be applied to the operation process in the value-added chain or indirectly plays a supporting role in the application of CE theory. Table 1 shows the actual manifestations of the application of the CE measures in some sectors and fields in Việt Nam.

In general, in Việt Nam, every sector, field and locality has aspects that have been, are and can be applied with the principles of CE towards common goals. The important actors in the chain towards CE must first be mentioned within the sectors, followed by companies providing environmental services (intermediaries), establishments and craft villages collecting, recycling, shops selling and exchanging second-hand goods... Therefore, it is necessary

to have appropriate policies to strongly promote the activities and deeply participate in the circulation process of these actors, continue to take policy measures to encourage initiatives and models that have been, are and will be applying solutions to implement CE. Along with that, in order for the CE to truly become a popular trend, it is necessary to rely on a systematic approach with the participation and close coordination of all parties. Therefore, it is necessary to have provisions defining the responsibilities of state agencies, organizations and individuals in the CE implementation.

CE IN THE LEP 2020

Along with the process of researching and proposing content on the CE in the 10-year Socio-economic Development Strategy 2021 - 2030; The 5-year Plan 2021 - 2025, legal provisions on CE are also studied and institutionalized into provisions in the LEP 2020.

In Clause 11, Article 5 of the LEP 2020, the State's policy on environmental protection affirms that "Integrating and promoting CE and green economy models in the formulation and implementation of socio-economic development strategies, master plans and plans, programs, schemes and projects". Next, in Article 142 of the Law, there is a separate provision on CE.

Table 1. CE manifestations by some sectors and fields in Việt Nam

No.	Sectors, fields	Some manifestations of circular economy
1	Agriculture, forestry and fishery	- Garden-Pond-Stall model, Forest-Garden-Pond-Stall model in agriculture...) towards making full use of Biomass...; model of collecting agricultural wastes such as plant trunks, straw, rice husks; bioaquatic model in aquaculture.
2	Mining	- Mining activities have the potential to apply the principles of CE right from the design stage of mining projects to make efficient use of wastes from the mining process, minimizing adverse impacts on the environment; circulating right during the operation of mining and mineral extraction activities.
3	Manufacturing and processing industry	- Circulation of water, raw materials... in production and business establishments has been applied; production of environmentally friendly products; activities in the field of electrical and electronic repair; secondhand shops; model of turning from products to services such as in the field of batteries, electric vehicle batteries...
4	Water supply, waste and wastewater management and treatment	- Waste collection, classification and treatment units act as intermediaries in promoting waste recycling, reuse and minimization caused by economic and people's activities. In fact, there have been many models that have been implemented in this direction such as models of plastic waste treatment, composting and processing of manure from waste, development of electric energy from waste...
5	Construction	- Waste utilization, reuse and recycling in the construction process such as soil, stone, solid waste from building materials such as bricks, tiles, mortar, concrete and adhesive materials that are past their expiry date recycled as building materials or reused as leveling materials for construction works.

Source: group of authors, 2019



Accordingly, CE in Việt Nam is defined as “an economic model in which design, production, consumption and service activities aim to reduce the exploitation of raw materials and materials, prolong the life cycle of products, limit waste generation and minimize adverse impacts on the environment”. In addition to the concept of CE, the Law stipulates responsibilities to Ministries, Ministerial-level agencies and provincial-level people’s committees for integrating the CE right from the stage of formulating development strategies, master plans and plans, programs, schemes and projects; waste management, recycling and reuse”; “manufacturing, business and service establishments are responsible for establishing a management system and taking measures to reduce resource exploitation, reduce waste and raise the level of reuse and recycling of waste immediately from project development, product and goods design to production and distribution. In particular, the Law assigns the Government to stipulate criteria, roadmap, and mechanisms to encourage the CE implementation in accordance with the country’s socio-economic conditions.

In addition, comparing with policy measures to implement CE of countries around the world, it shows that thinking about the transition to CE is also expressed in many other instruments and policies. Comparing policies in strategic orientations and legal provisions on promoting the application of CE of Việt Nam with typical countries in the world in transitioning to CE such as China, the European Union (including typical member countries such as France, the Netherlands, Germany, Norway...) shows that Việt Nam has developed a fairly adequate legal and policy foundation to promote the CE implementation according to different sectors, fields and areas of the economy such as waste classification at source; green public procurement (GPP); extended producer responsibility (EPR); promotion of recycling markets; incentive and supportive measures; environmental industry development, environmental services, green procurement, green credits, green bonds....

CRITERIA, ROADMAP AND INCENTIVE MECHANISM FOR CE DEVELOPMENT

General provisions on CE

On the basis of the concept stated in the LEP 2020, the Decree guiding the implementation of the Law also has more detailed provisions on criteria, roadmap and incentive mechanism for the CE implementation in Việt Nam. Accordingly, 3 pillars are identified representing 3 groups of common criteria for CE, including:

The first group: Reducing exploitation and use of non-renewable resources, water resources; increasing efficiency in the use of resources, raw materials, materials; saving energy;

The second group: Prolonging the use time of materials, equipment, products, goods, components;

The third group: Limiting waste generation and

minimizing adverse impacts on the environment, including: Reducing solid waste, wastewater, gas emissions; Reducing the use of harmful chemicals; Recycling waste, recovering energy; reducing single-use products; green procurement.

Based on the groups of priority measures for the CE implementation, the priority measures for the CE implementation for investment project owners, production and service establishments are prescribed according to the following priority order: (i) Group of measures to limit the use of environmentally unfriendly products; optimize the use of equipment and products; increase production efficiency, effective use of resources, raw materials and materials; (ii) Group of measures aimed at prolonging the life cycle of products and their components such as reuse, enhanced repair or maintenance of defective products to prolong their use, refurbishment through restoration and upgrading of old products; remanufacturing by increasing the use of ingredients, components of waste products for similar functions, or by reusing products or components of waste products for new products with different functions; (iii) The third group is to reduce waste generated through recycling waste to treat and process waste to convert it into useful raw materials, fuel and materials; recover energy through waste incineration.

In addition, provisions applicable to owners of investment projects, establishments, concentrated production, business and service zones and industrial clusters shall, based on action plans, take one or more of the following measures to achieve CE criteria: Have optimal overall layout design, linkages between investment projects, production, business and service facilities to improve efficiency and reduce consumption norms of land, water, minerals and energy resources; improve the recycling rate and reduce the total amount of waste generated; other solutions specified in Clause 3 of this Article; develop and use clean energy and renewable energy in accordance with the Law; collect, store for reuse of rainwater; collect, treat and reuse wastewater; carry out industrial symbiosis activities in accordance with the Law on Management of Industrial parks and Economic zones. Then, project owners investing in urban areas, concentrated residential areas, design, organize, manage and implement the following measures to achieve CE criteria: Have optimal overall layout design

to improve efficiency and reduce consumption of land, water and energy resources; apply environmentally friendly transportation solutions, reduce greenhouse gas emissions; develop and use clean energy, renewable energy in accordance with the Law; take other measures on environmental protection as prescribed by Law.

About the roadmap, responsibility for implementing CE

The Ministry of Natural Resources and Environment (MONRE) is responsible for: (i) Assuming the prime responsibility for, and coordinating with Ministries, ministerial-level agencies and provincial-level people's committees in formulating and submitting to the Prime Minister for promulgation of a national action plan to implement the CE; (ii) Developing and operating an information connection and data sharing platform on the application of the CE model; (iii) Developing and issuing a framework to guide the application and assessment of the CE;

Ministries and ministerial-level agencies, based on their assigned functions, tasks and fields of state management, are responsible for: (i) formulating and approving action plans to implement CE of sectors and fields and products in accordance with the national action plan; (ii) organizing propaganda and dissemination of legal knowledge, education and training on the contents of CE; (iii) integrating specific criteria for the CE implementation in the process of formulating development strategies, master plans, plans, programs and schemes; waste management, reuse and recycling; (iv) managing and updating information and data to implement CE and integrate with the information and data system of MONRE; (v) organizing the pilot application of the CE model to the energy, raw materials and waste sectors according to the action plan; (vi) performing other responsibilities related to CE in accordance with provisions on environmental protection.

Provincial people's committees are responsible for: (i) formulating, consulting with relevant Ministries and ministerial-level agencies and approving action plan to implement CE at provincial level in accordance with the national action plans to implement CE; (ii) organizing the pilot application of the CE models to the energy, raw materials and waste sectors according to the action plan; (iii) implementing measures to propagate, disseminate and share information and data on the CE implementation and other provisions.

The National Action Plan for the CE implementation includes the following main contents: (i) An overview analysis of the current status of resource exploitation and use; production and consumption; situation and forecast of waste generation; the domestic and international context of CE implementation; (ii) Formulating viewpoints, general objectives, specific objectives and targets for the CE implementation in the period of the 10-year national action plan; (iii) Identifying tasks and roadmap for implementing CE for sectors and fields, in which priority sectors and fields are identified in each period; developing a list of specific sectors and fields that must have guidance on the application of the CE; (iv) Identifying the types of investment projects, production and business establishments, services and products that must be designed to achieve the CE criteria; applying cleaner production, producing environmentally friendly products, using in recycled materials in production, managing the life cycle of chemicals and waste; (v) Orienting solutions to implement the circular economy, including: propaganda, education, training, knowledge and Law dissemination; science and technology development; human resource development; technical infrastructure development; connecting and sharing information and data; mobilizing capital sources; international cooperation and other solutions; (vi) Organization for implementation including: assignment of responsibilities of the lead agency and coordinating agencies; monitoring and reporting regime; allocating resources for implementation.

In particular, in order to promote the participation of the whole society in the CE implementation, the owners of investment projects, concentrated production, business, service establishments and industrial clusters in addition to having responsibilities for implementing CE according to the action plan, the draft Decree has introduced open provisions in the direction of encouraging the application of CE earlier than the roadmap identified in the action plans. Owners of investment projects, establishments, investors in construction and infrastructure business of concentrated production, business and service zones, and industrial clusters that operate before the effective date of this Decree are encouraged to continue to maintain the application of one or more measures to implement CE (if any).

Incentive mechanism for the CE implementation

On the basis of the awareness of the principles, measures and requirements of the CE in the process of perfecting the market economy institution, the proposed mechanisms to encourage the CE implementation include:

Regarding the investment policies of the State, which are formulated in the direction of prioritizing investment in the development of the CE for the following activities: scientific research, application development, technology transfer and equipment production, human resources training to implement CE; providing a platform to share information and data on CE.



- Regarding incentive policies applied in accordance with provisions on incentives and supports according to the provisions of the LEP and other relevant laws. Accordingly, organizations and individuals that implement the CE belonging to investment activities in environmental protection works; environmental protection production, business and service activities under investment incentive projects, sectors specified in the Decree will be entitled to corresponding policies on land, investment capital, taxes, fees and charges, subsidies on products and services, green public procurement. Along with that, organizations and individuals implementing CE on the list of green projects may apply the policy of granting green credits and issuing green bonds.

In addition, other incentive measures are given such as: (i) Encouraging activities to develop CE such as technology research, development, technical solutions, provision of consulting services, design, evaluation and implementation of circular economy; (ii) Encouraging the development of linkage models, sharing the use of products and waste recycling; establishing cooperative groups, cooperatives, unions of cooperatives, recycling alliances, models of regional linkage, urban-rural linkage and other models as prescribed by Law to implement investment, production, business and service activities that meet the criteria of the CE; applying industrial symbiosis measures in accordance with the Law on management of industrial parks and economic zones; (iii) Encouraging the development of the market for reuse of discarded products and waste recycling; mobilizing resources in society for the CE implementation according to the provisions of Law; international cooperation, exchange of experience, knowledge and technology in CE in accordance with the provisions of Law.

CONCLUSIONS AND RECOMMENDATIONS

Applying CE is a strong trend in many countries around the world because of the economic, environmental and social benefits that it is expected to bring such as: creating economic growth opportunities, creating jobs and minimizing environmental impacts, implementing 17 sustainable development goals. Implementing CE can be considered as one of the breakthrough

solutions to solve the relationship between economy and environment in the context of industrial and urban development, changes in consumption and lifestyle. In particular, in the context that the supply of raw materials and fuel is being disrupted due to social distancing, the CE implementation is also being considered as one of the solutions to contribute to the post-COVID-19 economic recovery. The early recognition and institutionalization of the concept and provisions of the CE within the policy and legal framework of Việt Nam has received strong support from the international community, consensus from the scientific community. There have been signals of support and response by specific actions of the business community to this potential economic model. However, in order to put the CE into practice, it requires the efforts of all levels and sectors to guide and create conditions to promote innovation and enhance the responsibility of society in implementing circular economy. In the short term, Việt Nam needs to soon implement measures to propagate, train on CE in particular and the LEP in general. In the long term, it is necessary to continue to study and improve other legal provisions to form a comprehensive institutional framework to promote the application of CE principles and measures in combination with innovation and achievements of science and technology, the internet of things to form systematic cyclic loops, connecting interdisciplinary, inter-regional, urban and rural areas to successfully implement CE in Việt Nam ■

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Implementation of extended producer responsibilities: Applying market principles towards the goal of sustainable development

NGUYỄN THI

Ministry of Natural Resources and Environment

1. LOOKING BACK ON 15 YEARS OF IMPLEMENTATION OF EXTENDED PRODUCER RESPONSIBILITY

Since 2004, in Resolution No. 41-NQ/TW dated November 15th, 2004, of the Political Bureau on environmental protection in the period of accelerating industrialization and modernization of the country, our Party has adopted the policy of “Step by step applying mandatory measures to force production and import establishments to recall and handle used products that they manufacture or import”. This is a policy to apply the extended producer responsibility (EPR) model, which is institutionalized in the Law on Environmental Protection (LEP) in 2005 with regulations on recalling and handling expired or discarded products (Article 67) and specified in Decision No. 50/2013/QĐ-TTg dated August 9th, 2013, of the Prime Minister prescribing retrieval and disposal of discarded products.

Continuing to implement the above Resolution, the Central Committee issued Resolution No. 24-NQ/TW dated June 3rd, 2013, on proactively responding to climate change, strengthening natural resource management and environmental protection. Accordingly, the LEP 2014 continues to stipulate the retrieval of discarded products and energy from waste (Article 87), which is detailed in the Decision No. 16/2015/QĐ-TTg dated May 22nd, 2015, of the Prime Minister on the retrieval and treatment of discarded products; Circular No. 34/2017/TT-BTNMT dated October 4th, 2017, of the Ministry of Natural Resources and Environment (MONRE) regulating the retrieval and treatment of discarded products. According to the regulations, products subject to post-disposal retrieval include product groups: batteries, electrical and electronic equipment, lubricants of all kinds, tubes, tires and vehicles. Regulations that manufacturers and importers must establish themselves or coordinate with manufacturers, importers or distributors to establish points of retrieval. It is the responsibility of the consumer to direct himself to the point of retrieval. There are no regulations on mandatory recycling rates and mandatory recycling specifications.

Thus, the EPR model over the past 15 years was a voluntary EPR model. Therefore, from 2005 to 2020, EPR regulations have not been effectively implemented. Accordingly, companies are considered to have fulfilled their responsibilities for retrieving discarded

products when establishing points of retrieval and announcing on condition for retrieval. The survey showed that some companies have set up retrieval points and announced the retrieval. However, the established retrieval points are few and conditions for retrieval are very high. For example, Panasonic set up 2 retrieval points in Hà Nội and Hồ Chí Minh City and at the same time set conditions including: the retrieval point only accepts genuine and intact products without broken or missing components; the customer is solely responsible for transporting the product to the point of retrieval; do not apply preferential gift policy to exchange products. In addition, the retrieval process is also regulated quite complicated, as Toyota Company has 10 stages in retrieval process and reporting retrieval activities to the Vietnam Environment Administration (VEA). As a result, in more than 15 years of implementing regulations on responsibility for retrieval of discarded products, manufacturers and importers have not been able to retrieve any discarded products.

2. SOLUTION TO CHANGE FROM VOLUNTARY EPR MODEL TO COMPULSORY EPR MODEL

The voluntary EPR model did not promote the desired effect and create a sustainable financial mechanism for the retrieval and treatment of discarded products and packaging. The model also had no impact on material usage, product design, maintenance policy, product maintenance to reduce recycling costs by using environmentally friendly materials, easy-to-collect product design, recycling, prolonging product life cycle... Therefore, facing the inevitable trend of the development of a circular economy model, it is necessary to apply EPR in the form of mandatory model to achieve the sustainable development goals. So, to switch from voluntary EPR to compulsory EPR, the LEP 2020 has been based on the following principles and measures:



Firstly, regulations on mandatory recycling rates and recycling specifications.

Article 54 of the LEP in 2020 stipulates that the organizations and individual producing and importing products and packages with recyclable value must recycle according to the obligatory ratio and specifications of recycling. Accordingly, Decree No. 08/2022/ND-CP detailing a number of articles of the LEP in 2020 (Decree No. 08/2022/ND-CP) defines: Compulsory recycling rate is the ratio of the minimum volume of products and packaging that must be recycled according to the mandatory recycling standards to the total volume of products and packaging produced and put on the market, and the volume of products, packaging importing in the year of responsibility.

The compulsory recycling rate in the first 3 years is specified in Decree No. 08/2022/ND-CP and is adjusted every 3 years in an increasing direction. The highest mandatory recycling rate is applied to aluminum packaging, PET bottles at 22% and the lowest for vehicles at 0.5%. This rate only equals to 1/3 of the recycling rate of countries in Europe from the 80s and 90s of the twentieth Century, for vehicles, it is only 1/5 of Europe at the beginning of applying EPR.

Regarding the recycling specifications, Decree No. 08/2022/ND-CP stipulates that retrieved raw materials and materials must be at least 40%, this rate is not the compulsory recycling rate as mentioned above. For example, when recycling a computer, the plastic, metal... materials in that computer must be retrieved to recycle at least 40% of the volume of the computer's materials, the rest will have to be disposed in accordance with regulations. This recovery rate is 15 - 30% lower than Europe at the beginning of EPR implementation. This minimum recovery must ensure the recycling standards as prescribed in Decree No. 08/2022/ND-CP. For example, plastic packaging must be recycled in one of three ways: Producing recycled plastic beads used as production materials for industries; Manufacture of other products (including PE fibers); Chemical production (including oil).

Secondly, prescribing the manufacturer's method of carrying out recycling responsibility, applying market principles thoroughly.

According to the provisions of Clause 2, Article 54 of the LEP in 2020, manufacturers and importers can choose to organize the recycling of products and packages or make financial contributions to the Vietnam Environment Protection Fund (VEPF) for support product and packaging recycling.

The Decree specifies the form of organizing the recycling of products and packaging into four ways, including: Self-implementation of recycling; Hire a recycler to do the recycling; Authorize an intermediary to organize the recycling; Combine the above methods.

The form of (self) organizing the recycling of packaging products is a form of thoroughly applying market principles in fulfilling the manufacturer's responsibilities, whereby, if the manufacturer finds it beneficial, then choose to carry out their responsibilities. To fulfill their responsibilities,

manufacturers and importers must register their recycling plans and report their recycling results before March 31st every year with the MONRE.

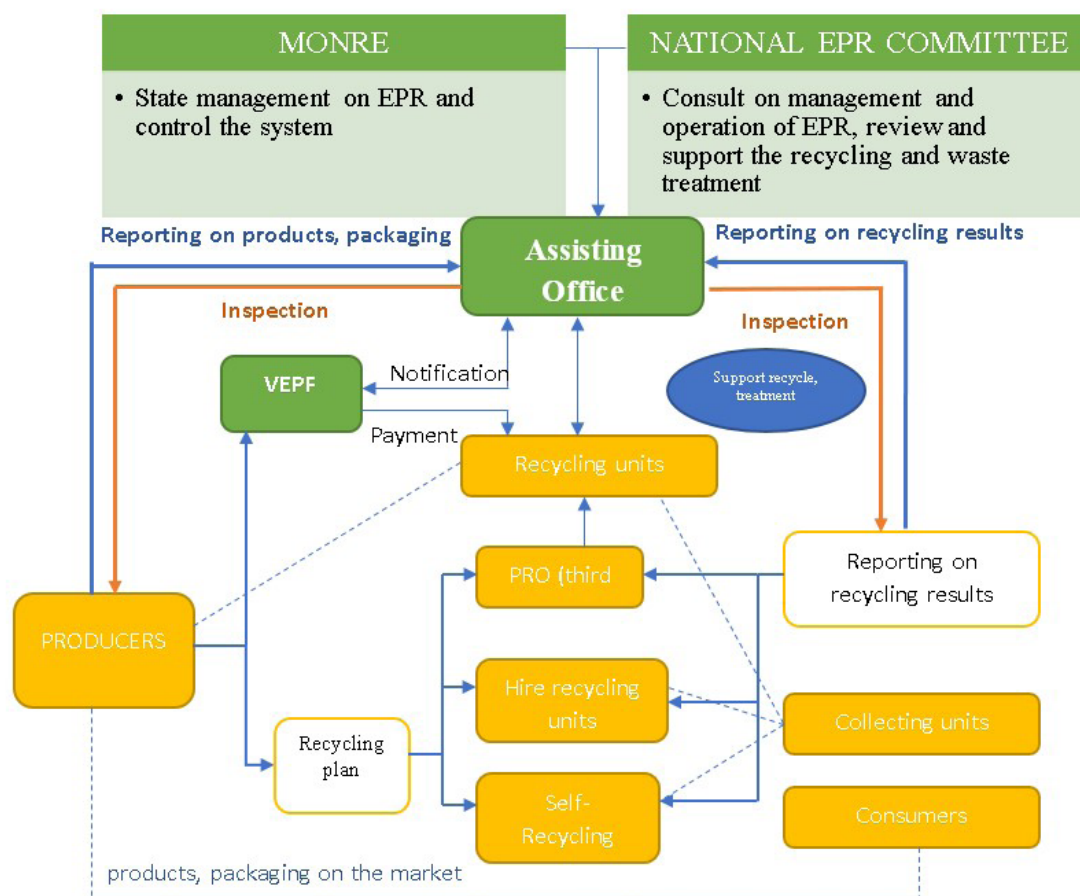
In cases where the manufacturer or importer finds that recycling is not profitable or has no conditions to do so, they have the right to choose a form of financial contribution to the VEPF to support product and packaging recycle. When contributing to the VEPF, the manufacturer fulfills its recycling obligation. The VEPF uses this fund to support the collection, transportation, recycling, processing of packaging products and administrative costs to support the implementation of recycling responsibilities of manufacturers and importers. The financial contribution depends on the required recycling rate, the amount of product and packaging put on the market, and the cost norms for recycling.

Thirdly, stipulate the organization of implementation to ensure consensus according to a tripartite mechanism: the State, enterprises and social - environmental organizations.

MONRE is the state management agency for the implementation of recycling responsibilities of manufacturers and importers. The agency that advises and supports the Minister of Natural Resources and Environment to manage, supervise and support the performance of responsibilities of manufacturers and importers is National EPR Council, its composition includes the Ministries: Natural Resources and Environment, Finance, Industry and Trade, Health, Agriculture and Rural Development; representatives of manufacturers and importers; representatives of recycling units, waste treatment units and representatives of relevant social and environmental organizations. The National EPR Council has an assisting office located at MONRE, working part-time. The establishment of an agency to assist the National EPR Council is necessary to carry out professional activities in operation of the EPR system, such as performing work of registration of recycling plans and reporting of recycling results, taking measures to monitor, ensure the implementation of recycling according to the required rate and specifications, manage EPR data, etc. Assisting Office is an indispensable requirement of management and operation model of EPR system in the world, in which for Europe is Clearinghouse, in Korea is Korea Environment Corporation (KECO); in Taiwan is the Taiwan Recycling Fund.

The establishment of the National EPR

MECHANISM FOR EPR



Council and the National Assistance Office to implement Resolution No.18 of the Central Government (transfer some public administrative tasks and services that the State does not necessarily perform to enterprises and social organizations to undertake); implement Resolution No. 19 of the Central Government (promoting socialization in the provision of public services). This regulation also aims to implement the PAR Master Program for the 2021 - 2030 period (transferring jobs that state administrative agencies should not do or do with low efficiency for social organization or NGOs to undertake).

The operating model of the EPR system in Việt Nam is as follows:

Fourthly, the regulation on determining the price of collection and treatment of domestic solid waste by volume in order to promote the classification of solid waste at sources (main source of products and packaging after use).

Regulations on solid waste arising from households and individuals are classified according to at least 3 categories, including: (1)

Solid waste capable of being reused and recycled; (2) Food waste; (3) Other solid waste. Households and individuals must store and contain solid waste after sorting into packages for recycling or treatment, specifically: solid waste capable of being reused, recycled will be transferred to organizations and individuals to reuse, recycle or facilities with the function of collecting and transporting domestic solid waste; for food waste and other solid wastes, it must be contained, packed in packages according to regulations and transferred to establishments having the function of collecting and transporting domestic solid wastes; food waste can be used as organic fertilizer or animal feed.

Service charges for collection, transportation and treatment of domestic solid waste from households and individuals are calculated in accordance with legislation on prices; based on the weight or volume of the sorted waste; solid waste that can be reused, recycled, and hazardous waste generated from households and individuals that have been classified separately are not required to pay collection, transportation and treatment service charges.

The regulations have assigned the Provincial People's Committee to decide the pricing of domestic solid waste collection, transportation and treatment services by weigh or volume of waste through price of selling sol-



id waste packaging. The selling price of the packaging includes the production cost of the packaging and the service price of the collection, transportation and treatment of solid waste or through the volume of the device containing the solid waste or weighing solid waste (for agencies and organizations) or other forms prescribed by the locality as appropriate.

Thus, with the regulation to determine the price of solid waste collection, transportation and treatment services, it will promote the classification of waste at the source, creating a source of recyclable materials (mainly products and packaging value for recycle) is relatively stable to help manufacturers and importers carry out recycling smoothly.

Fifthly, continue to prescribe and develop policies to develop solid waste collection and treatment infrastructure, develop the recycling industry, and provide incentives to support environmental protection activities; promote circular economy.

The policy of developing solid waste collection, transportation and treatment infrastructure has been regulated by the LEP and is increasingly being improved with preferential policies, supporting environment protection activities, in which, recycling activities with highest incentives include: land incentives (priority shall be given to the arrangement of available land associated with technical infrastructure works and items (roads, electricity, water supply and drainage, telecommunications, energy) outside the project scope connected to the general technical infrastructure system of the area, without auction of land use rights; incentives for exemption or reduction of land use fee, land rent); Investment incentives and support (can borrow capital with a maximum preferential interest rate of not more than 50% of the State investment credit interest rate announced by the competent authority at the time of lending, the total amount of the loan shall not exceed 50% of the total investment in construction of works; priority is given to post-investment support from the annual revenue and expenditure difference; Incentives on taxes, fees and charges; Subsidies on products and services on environmental protection; Applying green procurement to investment projects and tasks using the state budget...

The development of the environmental industry and environmental services is also a new provision of the Law and is also an area of incentives, support and encouragement for implementation, according to which the State invests and has policies to support organizations and individuals developing the environmental industry, implementing the roadmap to open the market for environmental goods in accordance with international commitments; adopt a policy to develop the market for environmental services; promote the liberalization of trade in environmental services according to a roadmap consistent with international commitments; encourage organizations and individuals to invest in research and to provide environmental services. To encourage organizations and individuals to participate in providing environmental services,

including waste collection, transportation, recycling and treatment services. This is an important basis for the State to have solutions to rapidly develop solid waste collection, recycling and treatment infrastructure in our country, promoting an important factor for successful implementation of EPR.

Circular economy is regulated for the first time in the legal system, in Article 142 of the LEP 2020 and detailing the criteria of the circular economy; orient the application of measures to achieve the criteria of circular economy, the roadmap to apply the model of circular economy and stipulate mechanisms to encourage and give incentives for the development of circular economy. EPR with the main role is to create a financial mechanism for product handling and packaging after use, but it has a very effective impact on all stages of production and consumption of products and goods. The use of EPR is an effective tool to achieve the criteria of circular economy, therefore, the development of the model of circular economy is one of the important policies that have an impact on the development of EPR in Vietnam as well as the development of EPR as an important tool for the sustainable formation of the circular economy in Vietnam.

EPR with three times specified in the Law, twice guided by the Prime Minister's Decision and most recently specified in Decree No. 08/2022/ND-CP, all face challenges in construction and implementation in practice. Vietnam is in the process of forming the determination to "not trade off environment for economy". For more than 15 years, even though it was prescribed by the LEP as mandatory, the implementation mechanism mainly depended on the voluntary business. Therefore, it can be said that Việt Nam has missed the opportunity to form a necessary premise for the early realization of the model of the circular economy, an important factor for faster achievement of the goals of sustainable development. Up to now, along with the determination to "not trade off environment for economy", EPR has been fully applied in the sense that it is a mandatory implementation mechanism. This will help Việt Nam achieve both economic development goals and environmental protection goals as soon as possible and also contribute to solving labor and employment problems when EPR policy is applied as fully as the current regulations ■

Some main contents of Decree No. 08/2022/ND-CP of the Government detailing a number of articles of the Law on Environmental Protection

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The Law on Environmental Protection (LEP) in 2020 comes into force. The Law has timely institutionalized many new policies of the Party and State at the 13th National Congress of Delegates on Environmental Protection. In order to ensure that the provisions of the Law are implemented in a timely, synchronous, consistent and effective manner and implementing tasks assigned by the Government, the Ministry of Natural Resources and Environment (MONRE) has presided over and coordinated with the ministries, branches and localities to develop and submit to the Government for promulgation Decree No. 08/2022/ND-CP dated January 1st, 2022 detailing a number of articles of the LEP (hereinafter referred to as the Decree).

With the role of guiding contents as prescribed by the Law, the Decree has been constructed in accordance with the policy that the Prime Minister has directed, which is to reduce pre-inspection, strengthen post-inspection, and create maximum convenience for people and businesses when carrying out administrative procedures on the environment, thoroughly decentralizing the locality. The Decree includes 13 chapters 169 articles and 34 annexes, stipulating many contents on environmental protection, here are some main contents:

1. PROTECTION OF ENVIRONMENTAL COMPONENTS AND ENVIRONMENTAL PROTECTION OF NATURAL HERITAGE

Environmental protection of water and air: The Decree details a number of main contents, order and procedures for promulgating a plan to manage surface water environment quality for inter-provincial rivers, lakes and intra-provincial rivers and lakes which play an important role in socio-economic development and environmental protection; national and provincial plans on air quality management; responsibility of MONRE and provincial people's committees in formulating, approving and implementing investigation, evaluation, promulgation or submission of these plans. The Decree also specifies the implementation of emergency measures in case the air quality is seriously polluted, the determination of seriously polluted air environment at inter-regional, inter-provincial and provincial levels.

Land environment protection: Decree stipulates responsibilities for land environment protection of agencies, organizations, residential communities, households and individuals using land; areas must be investigated, assessed and classified the quality of the soil environment; the investigation and assessment of potentially contaminated areas is carried out at a preliminary level and the polluted areas are detailed; Responsibilities of MONRE, provincial people's committee in handling, improving and restoring land environment in polluted areas by unidentified organizations and individuals who caused pollution infection; responsibilities of organizations and individuals who caused pollution in handling, improving and restoring the land environment; responsibilities of ministries, branches and localities in handling, improving and rehabilitating land environmental pollution areas of particularly serious.

Environmental protection of natural heritage: The Decree has detailed criteria for two other natural heritage objects, namely biosphere reserves and geoparks (which are natural heritages that have been formed in reality and recognized by international law) associated with a level of positive and meaningful influence on community, local, nation, region and global; detailing the order, procedures and competence to establish and recognize other natural heritages; order, procedures and competence to nominate for recognition of natural heritage recognized by international organizations; regulate the investigation, assessment, management and environmental protection of natural heritage in line with the general policy of the Party, the Government and the Prime Minister on strengthen the decentralization of management by locality for localities as well as the characteristics of natural heritage.



2. ENVIRONMENTAL ZONING, ENVIRONMENTAL IMPACT ASSESSMENT, ENVIRONMENTAL PERMIT, ENVIRONMENTAL REGISTRATION

Environmental zoning: The Decree stipulates that the zoning of the environment into strict protection zones, emission-restricted zones and other zones is carried out according to the criteria of environmentally sensitive factors and vulnerable to environmental pollution with the aim of minimizing the impact of environmental pollution on the life and normal development of humans and organisms; specifying the determination of environmental zoning in the national environmental protection planning, the provincial planning to set forth environmental protection requirements for the regions; stipulates the responsibility of the people's committee of the province to issue the implementation roadmap for establishments, production, business and service areas operating in strict protection zones and defined emission restricted zones in the area should be managed in accordance with environmental protection requirements for each region.

Environmental criteria and classification of investment projects: The Decree details each group of environmental criteria, specifically: Scale of investment projects (approach according to classification criteria of the law on public investment); scale of land use area, land with water surface, use of the project's marine area (approach according to

decentralization of management authority of the Law on Resources and Environment of Sea and Islands); scale of exploitation of natural resources (approach according to decentralization of management authority of legislation on water and mineral resources); type of production, business and service of the project (classified into 2 types with and without environmental risks); In particular, each group of types and characteristics of the project has been specified to be associated with each environmentally sensitive element specified at Point c, Clause 1, Article 28 of the LEP. The Decree stipulates a list of types of production, business and services that pose a risk of causing environmental pollution and classified according to 3 capacity levels: large, medium and small in Appendix 2; detailing the list of projects belonging to group I, group II and group III in Appendices 3, 4 and 5 based on a combination of environmental criteria as prescribed by the LEP.

Environmental Impact Assessment (EIA): The Decree specifies the form of consultation on EIA reports through posting on the website of the appraisal agency; detailing the responsibilities of the project owner in the process of project implementation before operation in case of changes compared to the decision approving the appraisal results of the EIA report.

Environmental Permit: The Decree stipulates the main contents of the report proposing the issuance of an environmental permit for each specific case, including: The investment project has already had a decision approving the appraisal results of the EIA report; investment projects that are not subject to EIA; concentrated establishments, production, business and service zones, and industrial clusters in operation and simplify the dossier of application for environmental permits according to each group of subjects (content of the proposed report of group III

project is simpler than the rest of the subjects). For a report on proposal for re-issuance of environmental permits, it is only required to report changed contents in cases of changes in scale, capacity, technology and changes in waste sources; specifying cases of re-issuance of environmental permits; the adjustment of the environmental permit at the request of the project



▲ The Decree stipulates specific objects, roadmap for implementing responsibilities, recycling rate of organizations and individuals



owner and the adjustment of the environmental permit according to the provisions of Law must be adjusted to ensure transparency and ease of implementation; reduce the time for issuance of environmental permits for cases of issuance of environmental permits according to simple procedures (projects without waste treatment facilities that must be tested for operation; projects that are not in the category of production, business or service with risks of causing environmental pollution to invest in industrial zones and clusters). The reduction of pre-inspection and enhancement of post-inspection are carried out through specific regulations on the establishment of an appraisal council, inspection team, appraisal team or actual inspection organization corresponding to the size and nature of each type of investment project.

Environmental registration: The Decree details the subjects exempt from environmental registration based on the principles specified in the LEP and is in sync with legislation on enterprises.

3. WASTE MANAGEMENT

The Decree stipulates general requirements for prevention, reduction, classification, collection, transportation, reuse, recycling and treatment of solid waste to promote the application of circular economy; prevention, reduction, collection, reuse and treatment of wastewater, works, equipment for prevention and response to environmental incidents with respect to wastewater.

The Decree stipulates the roadmap for treatment of domestic solid waste by direct landfill technology; responsibilities of people's committees at all levels in domestic solid waste management; a roadmap to limit the production and import of single-use plastic products, non-biodegradable plastic packaging and products and goods containing microplastics; stipulating the responsibilities of ministries and branches in promulgating regulations related to the reuse, direct use and treatment of ordinary industrial solid waste; responsibilities of waste source owners, waste collectors and transporters in ordinary industrial solid waste management; specifying the identification, classification, collection, storage, transportation and treatment; responsibilities of waste source owners, waste treatment facility owners...

The Decree also stipulates policies on incentives, supports and encourages the development of public transport, means of transport using renewable energy, low fuel consumption, low emission or no emission as well as the conversion and elimination of vehicles using fossil fuels, vehicles that pollute the environment.

4. RESPONSIBILITIES FOR RECYCLING AND HANDLING DISCARDED PRODUCTS AND PACKAGES OF PRODUCING OR IMPORTING ORGANIZATIONS AND INDIVIDUALS

Recycling responsibilities of manufacturers and importers: The Decree details the objects and roadmap for implementing recycling responsibilities; recycling rate,

recycling specifications and financial contributions to the Vietnam Environmental Protection Fund (VEPF) (in the absence of self-organizing recycling). Manufacturers and importers who self-organize recycling can choose from three forms (self-implementation, hire or authorization); in the absence of self-organizing recycling, they can choose to declare and pay money to the VEPF to support recycling.

Responsibility to support waste treatment: The Decree details the beneficiaries and levels of contributions for each type of product and packaging containing hazardous substances, which are difficult to collect and recycle, must pay money to the VEPF to support waste treatment; at the same time, clearly stipulate the receipt and use of contributed funds to support waste treatment activities to ensure transparency, right purposes and subjects.

5. ENVIRONMENTAL MONITORING

Decree stipulating conditions for participating in environmental monitoring activities; provide and publicize environmental quality monitoring information and detail regulations on objects, parameters, and frequency of monitoring wastewater and emissions; Technical requirements for environmental monitoring organizations and individuals to provide and disclose information on environmental quality. To support businesses to overcome the COVID-19 pandemic, the Decree stipulates to extend the time required to complete the installation of automatic and continuous monitoring systems for all cases until the end of December 31st, 2024. In cases that automatic and continuous monitoring systems have been installed according to regulations, they are exempted from conducting periodic monitoring during this time.

6. SOME ECONOMIC TOOLS IN ENVIRONMENTAL PROTECTION

The Decree stipulates the areas where the payment is applied, the organizations and individuals providing and receiving payment, the cases in which payment of services is payable or exempted; main contents of the scheme, form and level of service payment; the use and management of payments, rights and obligations of organizations and individuals providing and using services, obligations to publicize, inspect and supervise payments for natural ecosystem services.

Regarding incentives and support for environmental protection: The Decree stipu-



lates various forms of incentives and support, including support for land, investment capital, taxes, fees and charges; price subsidies, green public procurement; Support to promote environmental protection activities are encouraged.

Circular economy: The Decree stipulates general issues in the implementation of the circular economy, including general criteria for the circular economy, the principles for implementing the circular economy; stipulating the roadmap and responsibilities for implementation of the local economy of Ministries, ministerial-level agencies, provincial-level people's committees, owners of investment project, production, business and service establishments; investors, concentrated service businesses, industrial clusters; urban areas, concentrated residential areas; prescribe mechanisms to encourage the implementation of the circular economy, including investment measures, support incentives and other incentives directly related to the implementation of the circular economy.

Green credits and green bonds: The Decree stipulates that investment projects in the field of environmental protection and investment projects that bring environmental benefits according to the provisions of the LEP and the Decree may be granted green credits and issued green bonds; The certification of projects falling under this regulation is done at the request of the investor of the investment project, the green bond issuer needs to certify in order to enjoy the state's preferential policies and support on green credit, green bonds according to regulations.

Development of the environmental industry, environmental services: The Decree prescribes the list of technologies, equipment and products of the environmental industry; responsibilities of relevant ministries and branches as well as policies to develop the environmental industry; clarify the object of environmental services, ensure that there is no overlap or interference with the environmental industry, thereby stipulating policies to encourage the development of these services.

Environmentally friendly products and services: Decree stipulates on certification of Vietnamese eco-labels for environmentally friendly products and services and regulations on implementation to promote these products and services.

7. INSPECT, EXAMINE AND PROVIDE ONLINE PUBLIC SERVICES ON ENVIRONMENTAL PROTECTION

Inspection and examination of environmental protection: The Decree clearly stipulates specialized inspection activities on environmental protection to suit the characteristics of the environmental field, including regular inspection and unscheduled inspection; stipulating cases in which the inspection decision, order, procedures and powers of the head of the unscheduled inspection team without powers of the head of an unscheduled inspection team without prior announcement in order to increase

the operational efficiency of the inspection team; detailed regulations on inspection of compliance with the LEP, in which specific provisions on competence, form, order and procedures for conducting inspection; process inspection results. The Decree also stipulates a mechanism for close coordination between MONRE, people's committees at all levels and Environment Police in carrying out inspection and examination on environmental protection, ensuring no overlap nor affect the normal production, business and service activities of organizations and individuals and is coordinated by the state management agency in charge of environmental protection, Environment Police and other relevant agencies.

To promote online public services to meet the provisions of the LEP, the Decree prescribes the principles of providing online public services on the environment; building, connecting, integrating, providing online public services on the environment, specifying the responsibilities of several Ministries, branches and localities to ensure the interoperability of online public services on the environment.

Besides the main contents mentioned above, to ensure consistency in the system of legal documents, the Decree stipulates amendments to a number of legal documents on water resources; irrigation; managing sand and gravel in riverbeds and protecting riverbeds and riverbanks; import and dismantle used ships; drainage and wastewater treatment. To stipulate the transitional terms for the application for grant, extension and adjustment of the License to discharge wastewater into water sources; Dossier of application for grant, extension and adjustment of the License to discharge wastewater into irrigation works; application for grant, extension or modification of the certificate of eligibility for environmental monitoring services; application for appraisal and approval of EIA report, plan for environmental improvement and restoration in mining activities; transitional regulations to handle cases where projects and establishments have come into operation with environmental criteria equivalent to those subject to EIA report or environmental permit issuance but these documents are not available; regulations on handling cases where projects and establishments do not have an environmental protection plan; regulations on extension of component environmental permits for establishments importing scrap for use as raw production materials and hazardous waste treatment facilities ■

Introduction of the Circular detailing the implementation of a number of articles of the Law on Environmental Protection

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1. STANDPOINT ON THE DEVELOPMENT OF THE CIRCULAR

On January 10th, 2022, Ministry of Nature Resources and Environment (MONRE) issued Circular No. 02/2022/TT-BTNMT detailing the implementation of a number of articles of the Law on Environmental Protection (LEP) (hereinafter referred to as Circular No. 02). Circular No. 02 was built on the basis of the following viewpoints: Ensuring compliance with the LEP 2020, Decree No. 08/2022/ND-CP dated January 10th, 2022 and other relevant legislation documents, guidelines and policies of the Party and State; ensure the consistency and synchronization with other legal documents in the current legal system; be consistent with international treaties to which Việt Nam is a contracting party; Ensuring conformity with reality, reasonableness, enhancing transparency, clarity and accessibility; simplify administrative procedures and cut business conditions, change the state management method from pre-inspection to post-audit; Inheriting and developing the provisions of circulars that are also consistent with the LEP in 2020; supplementing new regulations to fundamentally overcome difficulties and obstacles arising in the actual implementation of the current LEP; Develop regulations to ensure the completeness, detail and feasibility for the implementation of the LEP, ensuring the conformity and consistency with relevant legal documents such as the Law on investment, construction Law, water resources, land, planning, information, cultural heritage, forestry... Thereby, creating favorable conditions for business investment activities, at the same time innovating and improving the effectiveness and efficiency of state management; promote online public services and digital transformation.

2. SCOPE OF ADJUSTMENT

Circular No. 02 detailing a number of articles assigned in the LEP and Decree No. 08/2022/ND-CP of the Government detailing a number of articles of the Law, including: Contents, implementation order, forms, document samples, decision forms, report forms related to environmental protection of water, land and natural heritage; environmental protection content in provincial planning, strategic environmental assessment (SEA), environmental impact assessment (EIA), environmental permit and environmental registration; management of domestic solid waste, ordinary industrial solid waste, hazardous waste (HW); on-site wastewater management, specific wastes; assessment of conformity with environmental technical regulations for scrap imported as raw production materials; management of persistent pollutants and raw materials, fuels, materials, products, goods and equipment containing persistent pollutants; environmental monitoring, environmental information, database and environmental reports; report on the current state of the environment; environmental recovery after environmental incidents; payments for natural ecosystem services; evaluate products and services that meet Vietnam's eco-label criteria; responsibility for recycling products, packaging and waste treatment of manufacturing and importing organizations and individuals; inspecting the compliance with the LEP, making statistics, monitoring and announcing resources for environmental protection spending.

3. LAYOUT AND MAIN CONTENT

Circular No. 02 includes 7 chapters 85 articles and 10 appendices, specifically:

Chapter I prescribes the scope of regulation, subjects of application, and interpretation of terms.

In Circular No. 02, waste source owner is understood as an organization or individual who own or are assigned to manage and operate waste-generating facilities; Bulky solid waste is large-sized discarded household items such as cabinets, beds, mattresses, tables, chairs or other similar items or stumps, trunks, and branches.



Protection of environmental components and natural heritages is specified in Chapter II, including contents on assessment of carrying capacity of surface water environment; environmental protection of underground water; principles and criteria for identification and classification of areas of land environment pollution; preliminary investigation and assessment of the quality of the soil environment; investigate and evaluate in detail the area of land environment pollution; application form for appraisal, report on establishment project and report on investigation and assessment of natural heritage; formulating and approving regulations and plans on management and environmental protection of natural heritage.

The protection of underground water environment in underground water surveying and exploitation activities is carried out in accordance with the provisions of Circular No. 75/2017/TT-BTNMT dated December 29th, 2017 of the Minister of Natural Resources and Environment on underground water protection in drilling, digging, surveying and exploitation activities.

Contents of environmental protection in provincial planning, SEA, EIA, environmental permit and environmental registration are specified in Chapter III, including: Environmental protection content in provincial planning; SEA content; contents of the EIA report and the minutes of the consultation meeting; organization and operation of the council to appraise the EIA report, the council to appraise the plan for environmental improvement and restoration in mineral exploitation; publicize the list of councils appraising the EIA report; sample forms of documents and dossiers for appraisal of EIA reports; form of decision on approval of the results of appraisal of the EIA report; time limit for collecting opinions and approving results of appraisal of EIA reports for investment projects that discharge wastewater into irrigation works; sample forms of documents, dossiers of appraisal, decision on approval of appraisal results of environmental improvement and restoration plan and technical instructions for environmental improvement and restoration; working principles and responsibilities of the appraisal council, appraisal team, inspection team for issuance of environmental permits; sample documents for

The appendices include Appendix I. Forms on protection of environmental components, natural heritage (with 10 forms); Appendix II. Forms on SEA, EIA, environmental permit and environmental registration (with 47 forms); Appendix III. Forms on waste management and control of other pollutants (with 15 forms); Appendix IV. Forms on environmental monitoring (with 10 forms); Appendix V. Forms of information and environmental data (with 3 forms); Appendix VI. Forms of reports on environmental protection work (with 8 forms); Appendix VII. Payment form for natural ecosystem services (with 8 forms); Appendix VIII. Forms of assessment of products and services that meet Vietnam's ecological criteria (with 5 forms); Appendix IX. Form of responsibility for product recycling, packaging and handling of products and packaging of manufacturers and importers (with 10 forms); Appendix X. Form of decision on inspection of compliance with the LEP.

granting environmental permits, withdrawing environmental permits, inspecting the actual the process of trial operation of waste treatment works; monitoring waste during the issuance of environmental permits to establishments in operation; monitoring waste during trial operation of waste treatment works of projects and facilities; environmental registration dossiers and procedures; receive environmental registration.

In this Chapter, the environmental registration dossier is specified simply and clearly, including: The environmental registration document of the investment project and facility owners as prescribed in Form No. 47, Appendix II of Circular No. 02; A copy of the decision approving the appraisal results of the environmental impact assessment report of the investment project and establishment (if any).

The owner of the investment project or the establishment shall send an environmental registration dossier to the people's committee of the commune where the investment project is implemented. Commune-level people's committees receive and update environmental registration data into the national environmental information system and database.

Regarding the content of waste and imported scrap management and control of pollutants, Chapter IV stipulates the list of hazardous wastes, the list of industrial wastes subject to control and the list of common industrial solid wastes; waste volume calculation unit; technical requirements on environmental protection for solid waste collection points and transfer stations; technical requirements on environmental protection for domestic solid waste transport vehicles; criteria on domestic solid waste treatment technology; service

charges for domestic solid waste collection, transportation and treatment; method to collect fee for services of collection, transportation and treatment of solid waste according to the weight or volume of waste; method of pricing domestic solid waste treatment services applicable to investors and service providers of domestic solid waste treatment; close the solid waste landfill after the end of operation; technical requirements on environmental protection for normal industrial solid waste storage; technical requirements on environmental protection for ordinary industrial solid waste transport vehicles and the sample form of ordinary industrial solid waste handover minutes; sample form of declaring, classifying, collecting and storing hazardous wastes by hazardous waste source owners and hazardous waste vouchers; technical requirements on packaging, storage equipment, hazardous waste storage area for hazardous waste handlers; technical requirements on environmental protection for hazardous waste transport vehicles; register for transboundary border transport of hazardous wastes under the Basel Convention on control of transboundary transport of hazardous wastes and their disposal; criteria on hazardous waste treatment technology; activities other than hazardous waste transportation and treatment and not subject to a license for hazardous waste treatment; On-site wastewater and gas treatment facilities and equipments for household-scale production, business and service establishments; transportation and treatment of medical waste; collect and process plant protection product's packages arising in ag-

ricultural activities; waste management for oil and gas activities at sea; assess the capacity of organizations assessing the conformity of environmental technical regulations with respect to imported scrap for use as raw production materials; organize the assessment of actual capacity of register who participates in the assessment of conformity with standards for imported scrap for use as raw production materials; inspecting and evaluating registration dossiers for exemption from persistent organic pollutants (POPs) as raw materials for direct production; labeling, information disclosure, conformity assessment and testing for persistent pollutants and raw materials, fuels, materials, products, goods and equipment containing persistent pollutants.

For environmental monitoring content, information, environmental database and environmental reports, Chapter V provides for appraisal of conditions for operating environmental monitoring services; duties and powers of the standing appraisal agency; working principles of the appraisal council for granting and adjusting the contents of the certificate of eligibility for environmental monitoring services; report on meeting technical requirements for automatic and continuous environmen-



▲ Circular on technical requirements on environmental protection for domestic solid waste collection points and transfer stations



tal monitoring before disclosing information; environmental monitoring for oil and gas exploitation activities; written notice of exemption from periodical monitoring of the project or facility; notify the monitoring results of the project or facility in excess of environmental technical regulations; general requirements of the environmental information system and environmental database; basic functions of the environmental information system; technical requirements for the environmental information system; requirements on connection, sharing and interoperability between national environmental databases, Ministries, branches and provinces; ensure the integrity and legality of environmental information and data in environmental databases at all levels; basic information and data of the environmental database; shared directory data in environmental database; default shared data of the environment database; the content of the report on environmental protection; prepare reports on environmental protection and evaluate the results of environmental protection work; forms and methods of sending reports on environmental protection; content, form and time of sending reports on environmental protection in production, business and service activities; methods of making reports on the current state of the environment; responsibility and funding for making reports on the current state of the environment; organize the preparation of reports on the current state of the environment; structure and content of the report on the current state of the environment; submit and approve environmental status reports.

A number of other contents are specified in Chapter VI on formulation and approval of plans for environmental restoration after environmental incidents; contents of the environmental restoration plan; inspect, supervise and accept the completion of the environmental restoration plan; written form of payment for natural ecosystem services; decision to promulgate criteria for Vietnam Eco-label; evaluate products and services that meet the set of criteria of Vietnam's eco-label; the form for performing the responsibility of recycling, handling products and discarded packaging of the importing organization or individual; receive registration of recycling plan, report on recycling results, declaration of financial contribution; accounts for receiving financial contributions to support recycling and waste treatment activities; sample form of decision on checking the compliance with the LEP; statistics, monitoring and publication of budget spent for environmental protection.

Regarding implementation, Chapter VII clearly states, amends and supplements a number of articles of the Circular No. 76/2017/TT-BTNMT dated December 29, 2017, of the Minister of Natural Resources and Environment, stipulating assesses the capacity of receiving wastewater, the carrying capacity of river and lake water sources; transitional provisions (on the use of hazardous waste codes); enforceable effect; implementation responsibility.

The content on assessment of carrying capacity of surface water environment in Circular No. 02 inherits from Circular No. 76/2017/TT-BTNMT with few changes in technical and management contents such as: several parameters to evaluate the carrying capacity, which are "nitrate and phosphate" to "total nitrogen, total phosphorus"; Adjusting the general formula to calculate the carrying capacity, making the scientific basis more complete, which clearly shows the need to calculate and determine the pollutant load from waste sources; Amending and supplementing Clause 2, Article 15 of Circular No. 76/2017/TT-BTNMT, that is: "The Department of Water Resources Management shall assume the prime responsibility for, and coordinate with the Vietnam Environment Administration in, advising and assisting the MONRE in organizing investigation and assessment of wastewater receiving capacity..." into "MONRE organizes investigation and assessment of wastewater receiving capacity, carrying capacity..."; Amending Clause 2, Article 15 of Circular No. 76/2017/TT-BTNMT (for regulations on organizing the assessment of wastewater receiving capacity, load capacity, replacing every 5 years with the period of the surface water quality management plan).

Effectiveness, in order to promptly handle arising practical issues and detailed documents together with the LEP in 2020 to come to effect, Circular 02 was issued in accordance with abbreviated order and procedures in accordance with the provisions of Clause 1, Article 146 and Article 147 of the LEP of Legal Documents in 2015 (amended and supplemented in 2020). Circular No. 02 takes effect from the date of signing (January 10th, 2022) ■

National Strategy on Biodiversity to 2030, vision to 2050

On 28th January 2022, the Prime Minister issued Decision No. 149/QĐ-TTg approving the National Strategy on Biodiversity to 2030, vision to 2050.

Accordingly, the overall objective of the Strategy is, by 2030, to increase the area of protected and restored natural ecosystems and ensure their integrity and connectivity; biodiversity is conserved and used sustainably in order to contribute to socio-economic development in the direction of a green economy and proactively adapt to climate change. In which, the area of nature reserves on the mainland strives to reach 9% of the land area; the area of conserved sea and coastal areas accounts for 3 - 5% of the national natural sea area; 70% of nature reserves and natural heritage sites are assessed for management effectiveness; the national forest coverage rate remains stable from 42% to 43%; recover at least 20% of the degraded natural ecosystem. Along with that, effectively conserving wild species, especially endangered, precious and rare species prioritized for protection, and migratory species; no more wild species go extinct; the population status of at least 10 endangered, precious and rare species prioritized for protection is improved; wild genetic resources, plant and animal varieties preserved and conserved achieve the goal of collecting and preserving at least 100,000 genetic resources; limit negative impacts on biodiversity. With a vision to 2050, important natural ecosystems, endangered species, precious and rare genetic resources will be effectively restored and conserved; biodiversity and ecosystem services are fully assessed, used sustainably and bring essential benefits to all people, contributing to ensuring ecological security, proactively responding to climate change, developing country sustainability.

To achieve the above objective, the Strategy sets out a number of key tasks such as: Strengthening biodiversity conservation and restoration; Conserving and restoring endangered wild species, especially endangered, precious and rare animals prioritized for protection, and migratory species; Strengthening conservation of genetic resources, managing access to genetic resources, sharing benefits and protecting traditional knowledge about genetic resources; Evaluating and promoting the benefits of biodiversity for sustainable development, natural disaster prevention and adaptation to climate

change; controlling activities that have negative impacts on biodiversity. In which, the Strategy implements the expansion and improvement of the efficiency of management of the system of natural heritage sites, nature reserves and biodiversity corridors; consolidation and expansion of natural areas of national and international importance; restoration of degraded important natural ecosystems; expansion of and strengthening the gene fund network...

Regarding implementation solutions: Perfecting policies, laws, management institutions, strengthening law enforcement capacity on biodiversity; raising awareness of nature and biodiversity conservation; promoting the integration and implementation of requirements on biodiversity conservation in policy making and public investment projects; promoting scientific research, development, transfer and application of advanced technologies in conservation and sustainable use of biodiversity; ensuring financial resources for biodiversity conservation; strengthening international integration and cooperation on conservation and sustainable use of biodiversity...

Decision No. 149/QĐ-TTg also specified solutions to ensure financial resources for biodiversity conservation. Accordingly, the state budget capital is balanced and allocated to perform the prioritized tasks, solutions, schemes and projects of the Strategy in accordance with the Law on State Budget and Public Investment; prioritize the mobilization of ODA sources to implement the National Strategy on Biodiversity; improve the efficiency of investment capital for biodiversity conservation.

In addition, encourage and mobilize the participation of communities and businesses to make financial investments for biodiversity conservation; implement public-private partnership models in conservation and sustainable use of ecosystem services and biodiversity; study and promulgate financial policies to support the development of livelihoods of communities living in the buffer zones; encourage the development of legal forms of finance for community conservation in order to mobilize and effectively use resources for biodiversity conservation, livelihoods development activities for the communities, especially people legally living in the buffer zones of nature reserves.

New financial mechanisms have been researched and applied to mobilize resources for conservation and sustainable use of biodiversity in accordance with international treaties that Việt Nam has signed and international practices such as: Biodiversity credits scheme, debt swap mechanism for nature and biodiversity conservation, green bonds, green credit... additionally, it strengthens the support of organizations and individuals for biodiversity conservation activities ■

MAI HƯƠNG



Business community - An important factor in the cause of environmental protection



▲ Mr. Nguyễn Quang Vinh - Vice President of VCCI

The Law on Environmental Protection in 2020 (LEP 2020) passed by the 14th National Assembly at its 10th session, effective from 1st January 2022, has identified the business community as a very important factor in the cause of environmental protection. The good implementation of environmental protection is not only the responsibility of enterprises but also helps enterprises improve their competitiveness, penetrate international markets and ensure sustainable development. Promoting the role of enterprises in environmental protection is the key solution to improve the effectiveness of environmental protection, contributing to the sustainable development of the country. To better understand this issue, the Vietnam Environment Administration Magazine (VEM) had an interview with Mr. Nguyễn Quang Vinh - Vice President of the Việt Nam Chamber of Commerce and Industry (VCCI), Director of Office for Business Sustainable Development.

The LEP 2020 orients to shift the role of the State to the central role of enterprises, the community and the people, do you have any comments on this issue?

Mr. Nguyễn Quang Vinh: The LEP 2020 has added “residential community” right into the scope of regulation (Article 1) and the subjects of application (Article 2) in order to confirm the position and role of this important target group in environmental protection as well as implementing one of the cross-cutting goals is to protect people’s health and ensure that people live in a healthy environment. This is also the first time that the residential community is regulated as a subject in environmental protection.

For the first time, the content of the project owner’s responsibility in consulting with the residential community is prescribed right from the time of making the environmental impact assessment (EIA) report, as well as clearly defining the responsibility for carrying out the consultation, the subjects and content of consultation of the appraising agency in the process of appraising the EIA report through many forms. In addition, the Law also stipulates to increase information disclosure, consultation, promote the role of supervision and criticism, and also ensure the rights and interests of the residential community when participating in environmental protection activities.

In particular, the LEP 2020 has identified the business community as a factor that plays a very important role in the cause of environmental protection. The good implementation of environmental protection is not only the responsibility of enterprises but also helps enterprises improve their competitiveness, penetrate international markets and ensure sustainable development. Promoting the role of enterprises in environmental protection is the key solution to solve current environmental pressures. Based on the Socio-economic Development Strategy 2021 - 2030 with a vision to 2045 approved at the 13th National Party Congress of the Communist Party of Việt Nam, obviously once again, Việt Nam affirms the development of a socialist-oriented market economy. This development model ensures transparency, accountability, fairness of the actors involved in the economy, and this becomes the orientation for the Law to regulate responsibility, transform the role of the State into the central role of enterprises and people.

The LEP 2020 has many provisions aimed at drastically reforming administrative procedures, contributing to reducing compliance costs of enterprises. What do these provisions mean for production and business activities of enterprises?

Mr. Nguyễn Quang Vinh: The LEP 2020 has many provisions aimed at drastically reforming administrative procedures, cutting administrative procedures by more than 40%, reducing the implementation time of administrative procedures from 20 to 85 days, contributing to reducing compliance costs of enterprises through provisions such as: Narrowing the subjects of EIA; integrating



administrative procedures into an environmental license; synchronizing environmental management instruments in each phase of the project, starting from the consideration of investment policy, project appraisal, project implementation until the project is officially put into operation and finished. The LEP 2020 also has amended and supplemented a number of administrative procedures and issued a number of new administrative procedures. Specifically, there are 4 administrative procedures reduced and integrated, including: Appraising strategic environmental assessment reports; Issuing licenses for discharge of wastewater into water sources; Issuing licenses for discharge of wastewater into irrigation works; Integrating many types of environmental licenses (Confirmation of completion of environmental protection works; hazardous waste treatment licenses...) into one type of environmental license.

The number of licenses required for enterprises to operate shows the spirit of strong administrative reform from the Government. Instead of having to do small and odd environmental licenses related to different authorities, now enterprises only need a single environmental protection license and only have to work with a single specialized agency in the locality. When the LEP 2020 gradually comes to life from 2022, it will create an impetus for localities to attract more investment as well as create favourable conditions for enterprises when there is a need to expand production and business. However, there is also an issue that should be mentioned here that the authorities need to have specific instructions for enterprises while their licenses are still valid in order not to cause unnecessary administrative procedures for enterprises during the transition period

Some new contents such as best available techniques, circular economy, development of environmental industries, environmentally friendly services, restoration and development of natural capital... have been included in the LEP 2020, in your opinion, what are the role and responsibility of enterprises to implement these policies well?

Mr. Nguyễn Quang Vinh: Sustainable economic development through the promotion of green economy, circular economy, low-carbon economy models, investment in natural capital is the main trend in economic development of countries in the world today, especially developing countries. These mod-



▲ *Online workshop to consult associations and enterprises on the Draft Decree detailing a number of articles of the LEP 2020 organized by the MONRE in collaboration with VCCI in 2021*

els focus on investment in production, consumption, import and export, distribution and trading of products, goods and services towards optimizing the use of raw materials, materials, energy and wastes environmentally friendly; invest in natural capital.

In Việt Nam, many guidelines and policies of the Party and State on promoting green growth, developing a circular economy, towards sustainable development have also been issued but still lack a legal basis to create a foundation for promoting these economic models. To solve the above problems, and also create a driving force for sustainable development and improve the quality of growth and national prosperity, the LEP 2020 has added a chapter on economic instruments and resources for environmental protection. In which, policies on development of environmental industry, environmental services, environmentally friendly products and services have been added; giving priority to green procurement for projects and tasks using the state budget; promoting the exploitation, use and development of natural capital; especially promoting the circular economy. The LEP also supplemented policies on green credits and green bonds to mobilize diverse social resources for environmental protection.

Meanwhile, enterprises are the subjects of implementing the above contents. Therefore, this is the role and responsibility of enterprises themselves. In addition, recently, during the COP26, Prime Minister Phạm Minh Chính pledged to the whole world that Việt Nam will achieve net zero emissions by 2050. This is an ambitious plan, however it will be possible if the business community applies the circular economy model, applies science and technology, uses advanced low-emission technologies, as well as invests in restoring the ecosystem for sustainable development.



To improve the effectiveness of the implementation of the LEP 2020, how does VCCI plan to propagate to enterprises across the country?

Mr. Nguyễn Quang Vinh: VCCI is the national representative agency of the Vietnamese business community and entrepreneurs, therefore VCCI has been closely participating with the MONRE in the process of finalizing the Draft Decree and Circular guiding the implementation of the LEP 2020 in order to be close to Việt Nam's production and business practices. In addition, thanks to specialized departments and branch systems across the country, in the annual work plan, VCCI has carried out communication activities to raise awareness, provide training for enterprises to actually bring the Law into life, production and business process.

With the goal of expanding and improving the quality of activities to support business development in a green and sustainable direction, implementing digital transformation, improving labour productivity and competitiveness in integration, effectively exploiting opportunities from the process of implementing new generation of FTAs, moving to a higher position in the global value chain, in the coming time, VCCI will organize an annual evaluation and ranking of the Provincial Competitiveness Index (PCI), promoting the improvement of the business environment in the provinces and cities; attracting 5,000 enterprises and business associations nationwide to apply the Corporate Sustainability Index (CSI), focusing on the footwear, handbag, seafood industries; developing and implementing the Green Index, promoting environmental protection, adapting to climate change in localities, enterprises...

Sincerely thank you!

VŨ NHUNG

Many new and breakthrough points in the Law on Environmental Protection 2020 contribute to promoting the circular economy in Việt Nam



▲ **Mr. Hồ Hữu Huy** - Coordinator, EPR and Global Plastics Policy of WWF - Việt Nam

In recent years, WWF - Việt Nam has accompanied the natural resources and environment sector in the fields of environmental protection, biodiversity conservation, sustainable use of natural resources, adaptation to and mitigation of impacts of climate change. In particular, WWF - Việt Nam has made many active contributions to commenting on legal policies and documents, such as the Law on Environmental Protection (LEP) in 2020 and guiding documents to improve the legal policy system on environmental protection. On the occasion of the beginning of 2022, when the LEP officially took effect, the Vietnam Environment Administration Magazine (VEM) had an interview with Mr. Hồ Hữu Huy - Coordinator, Extended Producer Responsibility (EPR) and Global Plastics Policy of WWF - Việt Nam.

The LEP 2020 officially takes effect from 1st January 2022. From the perspective of a representative of an international nature protection organization in Việt Nam, would you please tell us WWF's views when the Law comes to life?

Mr. Hồ Hữu Huy: The LEP 2020 has quite detailed provisions and clearly shows the cross-cutting goal of protecting environmental components, protecting human health, considering this as the key content, deciding for the environmental protection policies. The Law has many new and breakthrough points, such as in the field of solid waste, domestic waste management. The Law has introduced provisions to promote waste separation at source, orient how to manage and treat waste, effectively use waste as a resource, contributing to promoting the circular economy in Việt Nam. Accordingly, Decree No. 08/2022/NĐ-CP detailing a number of articles of the LEP 2020 (Decree No. 08/2022/NĐ-CP) has just been promulgated on 10th Janu-



ary 2022 as an important milestone for Việt Nam to take one step closer to realizing the new orientations stipulated in the Law, effectively implementing the strategy of integrated solid waste management, developing the circular economy and domestic environmental industry.

WWF highly appreciates the efforts of the natural resources and environment sector in bringing the provisions of the LEP 2020 into life, the provisions have closely followed the requirements of state management, defining clear roles, positions, tasks, powers and ensuring clear assignment and decentralization of state management agencies on environmental protection; strengthening decentralization for local authorities, as well as enhancing the central role of enterprises and people in environmental protection - especially reflected in provisions on classification of domestic waste at source, and responsibility for waste collection, recycling, treatment of organizations and individuals.

These provisions have many similarities with the trends in environmental protection and management policies globally in recent years. The orientation to transition from a linear economy to a circular economy, in which waste is considered a resource, has been integrated and implemented by many countries around the world, most of which are developed countries with recorded successes in socio-economic development associated with environmental protection. Approaching this orientation in the LEP 2020 and Decree No. 08/2022/NĐ-CP also plays a particularly important role, as Việt Nam will actively prepare and participate in the development of a global agreement on ocean plastic pollution, according to Decision No. 1407/QĐ-TTg of the Prime Minister.

As discussed above, enterprises are one of the factors that play a central role in environmental protection. The participation of enterprises and industries, especially in innovation in circular production and responsibility for post-consumer products and packaging is extremely important. The LEP 2020 and guiding documents have now specified many detailed provisions to ensure this role, not only with provisions on responsibility for recycling, treating waste products and packaging of organizations and individuals producing and importing, but also with incentive mechanisms and implementation roadmap for enterprises to transition to a circular economy.

An important lesson from international experience in implementing the new orientation of the circular economy is to approach in a systematic and holistic manner and avoid discrete implementation, but at the same time, it is necessary to ensure that the implementation process is flexible, based on the specific reality of each locality. The success of enforcing these separate provisions depends on each other:

segregation of domestic waste at source; carrying out the responsibility of recycling and treating waste of organizations and individuals; and circular economy development - so coordination and smooth collaboration are required between ministries, sectors and state management agencies in different management fields. Central agencies also need to pay attention to the differences and specific conditions of each locality, creating conditions for each locality to be flexible in implementing the new provisions of the LEP 2020 and Decree No. 08/2022/NĐ-CP, ensuring that the actual situation of the locality is carefully considered during the implementation process across the country.

It is known that WWF has accompanied the MONRE in developing the LEP and guiding documents to implement the Law, can you tell us about the issues that WWF has paid attention to in recent years?

Mr. Hồ Hữu Huy: Based on the areas of work of WWF, we have through consultation meetings provided written comments to MONRE. Some of the contents that we comment on are related to protection of water environment, natural heritage, consultation in environmental impact assessment, mineral exploitation, environmental protection in production, business, service and urban, rural activities and some contents related to payment for natural ecosystem services.

In the field of solid waste management, we are especially interested in provisions related to waste management, new provisions on responsibility for waste treatment and recycling of organizations and individuals and orientation of circular economy development in Việt Nam. Specifically, the recommendations of WWF focused on provisions to limit the treatment of domestic solid waste by direct landfill technology, strengthen the role and responsibility of solid waste emitters and decentralize responsibility for implementation for local authorities, including people's committees of wards and communes. Importantly, WWF emphasized considering the long-term goals of the LEP 2020 in developing detailed provisions in Decree No. 08/2022/NĐ-CP on upgrading, expanding the scale, capacity for recycling and using waste as a resource to develop the circular economy.



With specific comments, as well as cooperation activities and participation of experts in researching, reviewing and proposing amendments to the contents, WWF expects to have contributed to realistically concretize the trend of systematic approach and integrated management of the circular economy and waste-based resources according to the global trend; incorporate multiple perspectives - especially from the recycling industry - into provisions, ensuring separate provisions are aligned with the long-term goal of upgrading the recycling and environmental industry in Việt Nam. In addition, WWF also hopes to continue to contribute to providing international experiences, theoretical, scientific and practical foundations in the process of implementing the LEP 2020, through cooperation activities in the development of guiding documents under laws and decrees, especially the content of the roadmap and mechanism to encourage circular economy development, mostly for the plastic and packaging industry in Việt Nam.

From that, WWF hopes that the LEP 2020 and Decree No. 08/2022/NĐ-CP can provide instruments to encourage model transformation, promote market investment and create a transformation of the economy in the direction of adaptation, creating business investment opportunities and at the same time bringing common benefits in terms of regeneration, protection, conservation and development of natural capital. This is an important basis to increase the adaptability of the economy and reduce risks in the context of the current climate crisis, pollution and resource scarcity risks, that helps bring specific benefits not only for the environment but also for the National Socio-economic Development Strategy

To implement the LEP 2020 effectively, what solutions do you have to propose in the near future to bring the Law to life?

Mr. Hồ Hữu Huy: First of all, it is necessary to ensure the participation of stakeholders in the implementation process, especially enterprises and local state management agencies, during the upcoming implementation process. This will help ensure transparency as well as the reasonableness of provisions compared to reality.

Detailed guidelines need to be quickly disseminated and trained to relevant stakeholders, so that effective and synchronized participation of different target groups can be achieved at different levels of management from Central to local.

Communication, especially with new provisions such as segregation of waste at source, responsibility for treating and recycling of discarded products and packaging of individuals and organizations, plays an important role in this process. WWF believes that the work of information, communication, propaganda and connection with stakeholders related to these provisions is the key factor for effective implementation of the LEP 2020 and Decree No. 08/2022/NĐ-CP.

We also expect that the implementation and promotion of technology application, knowledge management, information sharing, and participation of parties in accessing and responding to environmental information will be the foundations for effective implementation of the LEP 2020.

With more than 20 years of experience in Việt Nam and 60 years in the world, WWF's strength is a global network of experts and experiences, applied to local practices. WWF in Việt Nam implements replicable models with all sectors of society such as communities, schools, enterprises, social organizations and local authorities. We aim to make decisions based on scientific research, helping stakeholders move towards common goals. WWF is also an important bridge with multilateral, bilateral and private donors to increase investment in ecosystem protection and restoration activities as well as create sustainable financial sources.

WWF's activities aim to realize the provisions of the LEP 2020 based on an integrated approach with the participation of many stakeholders. The legal framework is the LEP 2020 as an important foundation for WWF and stakeholders to accompany the Government and people of Việt Nam (including enterprises) to implement Việt Nam's commitments at COP 26 and adapt to climate change. WWF can contribute with recommendations and models in GHG reduction such as afforestation planning, models of agriculture, aquaculture, ecosystem-based forestry, climate change adaptation and natural recovery, sustainable energy solutions, electricity saving, management models and policy making to manage strategic mineral resources such as river sand, models for ecosystem and species restoration, new approaches such as circular economy, treating waste as a resource, together with measures to reduce waste, promote environmentally friendly products and processes. WWF is also assisting Government and communities in connecting with stakeholders at the international level in an effort to address environmental protection issues. For example, supports to promote the formation of a global commitment on plastics of which Việt Nam is one of the active, leading members.

Sincerely thank you!

NGUYỄN HẰNG



75% of people worldwide support single-use plastic bans

According to Global Survey Discovers, three in four people worldwide want single-use plastics to be banned as soon as possible, according to a poll released recently, as United Nations members prepare to begin talks on a global treaty to rein in soaring plastic pollution.

Most people know about the ballooning plastic waste program our planet is facing. As plastic waste visibly clogs the oceans, fills landfills, and endangers sea life, reusable glass bottles and other plastic alternatives have become popular. Countries such as France, Spain, and India have moved to ban certain single-use plastics in recent years. The Global Advisor Survey was conducted between August 20th and September 3rd, 2021 via the IPSOS Online Panel system among 20,513 adults aged 18 - 74 in Canada, Malaysia, South Africa, Turkey and the United States, and 16 - 74 in all 21 other countries, suggests that such changes are globally popular - a whopping 75% of people want single-use plastics banned globally. About 5.25 trillion pieces of plastic are currently estimated to be in the world's oceans. Solving a problem of that magnitude will take concerted international efforts. Some are hopeful that new data from IPSOS survey will provide the spur many Governments need. IPSOS found that 75% of 20,000 survey participants across 28 countries support banning single-use plastics. This is an increase from 71% in 2019. And 82% of people also say that they now support less plastic packaging for products, generally.

Activists say the results send a clear message to Governments meeting in Nairobi to press ahead with an ambitious treaty to tackle plastic waste, a deal being touted as the most important environmental pact since the Paris Agreement on climate change in 2015. "People worldwide have made their views clear. The onus and opportunity are now on Governments to adopt a global plastics treaty... so we can eliminate plastic pollution".

Nearly 90% of those surveyed said they supported a treaty, but it remains to be seen whether any such deal will focus on waste collection and recycling or take more radical measures such as curbing production and use of throwaway plastics. Unfortunately, big oil and chemical industry groups were devising strategies to persuade conference participants to reject any deal that would limit production of plastic, which is made from oil and gas and a key source of their revenues.

According to a WWF study released this March, If the United Nations cannot agree on a deal to put the brakes on plastic pollution, there will be widespread ecological damage over the coming decades, putting some marine species at risk of extinction and destroying sensitive ecosystems such as coral reefs and mangroves. It is likely to take

at least two years to finalize any treaty.

The biggest support for single-use plastic bans in the poll came from the likes of Colombia, Mexico and India, developing countries at the sharp end of a waste crisis. The IPSOS poll also showed that 85% of respondents globally want manufacturers and retailers to be held responsible for reducing, reusing and recycling plastic packaging, up from 80% previously ■

AN VI



▲ Three in four people world wide want single use plastics to be banned as soon as possible



New plastic separation technology a breakthrough for recycling process

Researchers at Aarhus University have developed a new camera technology that can differentiate between twelve different types of plastics. Published in the Scientific Journal *Vibrational Spectroscopy*, the study used unsupervised machine learning on short wave infrared hyperspectral data to build a model for the classification of plastics.

The model could successfully distinguish between twelve different plastics (PE, PP, PET, PS, PVC, PVDF, POM, PEEK, ABS, PMMA, PC, and PA12) several of these commonly found in households. The technology was also able to identify three further unknown samples, the researchers stating that this further proves its utility. Typically, the plastics recycling process involves downsizing the material, which is then processed via density tests (separation through floating/sinking in water), or mechanical sorting, which traditionally uses near-infrared technology (NIR) to distinguish between plastic types. The resulting plastic purity varies between 75 - 95%, but industry requires plastic purities of at least 96%.

The new technology, led by Associate Professor Mogens Hinge, is able to identify a greater range of plastic types than NIR technology, additionally classifying the chemical purity in the composition, a promising breakthrough for the plastics recycling industry. Asso-

ciate Professor Mogen Hinge broke down the technology's process: "Fundamentally, it is a camera that images a conveyor belt. The plastics are then transported past the camera. When the camera has taken the images, we employ unsupervised machine learning to analyse the images and detect and distinguish between the individual plastic types. The camera is special, as it records images within the infrared area and with multiple channels. For reference, a mobile phone has three channels - red, blue, and green - making up an image. Our NR camera has ninety channels. I would like to note that we have intentionally only used industrial components - this includes all components and systems in our setup. This means that we have not used highly sensitive, dedicated, specialized and delicate research equipment for our work. This restriction is done to ensure the industrial relevance of our work".

Continuing, he explains that the system is directly transferable to industries: "Aside from the camera, all you need is a stand to position it over a conveyor belt in the production line. Due to its ability to detect a range of plastic types, the technology enables the sorting of unwanted impurities or unwanted materials from the plastic waste stream. This will deliver recycled plastic fractions with a higher purity, which then can be applied in more demanding products. Hence, enabling more recycling (and in some cases enabling recycling at all) of plastic waste. We have a special focus on the purification of household collected plastics and ghost nets from the fishing industry".

On the next steps for the technology, Mogens said: "We will install the cameras in two plastic recycling companies, Plastic and Dansk Affaldsminimering, where we will then need to properly adjust and adapt the source code and machine learning training algorithms, in order to ensure maximum performance in the new environment". The research was developed as part of the Re-Plast Project, funded by the Innovation Fund Denmark with DKK 22.7 million ■

DUY BACH



▲ The camera can differentiate between 12 different types of plastic



Chemical recycling application should be “carefully” considered

In a recently published report, the World-wide Fund for Nature (WWF) outlined its position on the implementation of chemical recycling technologies. The NGO urged that such techniques should be applied in line with circular economy principles, noting that they are surrounded by “significant concerns”.

In the plastics context, chemical recycling – also known as advanced or molecular recycling – refers to chemical, thermochemical, and combustion processes whereby a proportion of the treated plastic waste is turned into chemical building blocks. This material is then able to be recycled into other plastics, including plastic that can be used for food-grade applications. The position paper, released as part of the NGO’s “No Plastic in Nature” project, states that chemical recycling technologies should be applied in line with circular economy principles, with “reduction and reuse” prioritized as ‘our top strategies’. Where materials lack a viable reuse system, recycling processes will ‘be critical in keeping materials and value circulating in the system’, and divert plastic from landfill, incineration, or littering.

Proponents of chemical recycling technologies highlight their potential to address the dual issues of fossil fuel dependence and global plastic pollution, pointing to their ability to ‘fill the gap’ in current recycling by providing an alternative waste management option for items not currently recycled, and recycle material back to virgin-like quality. Trade association Plastics Europe is amongst those advocating for the implementation of chemical recycling technologies. In a statement last year, the association claimed that scaling up such technology was ‘essential’ in achieving EU targets on recycled content for plastics packaging, affirming that members were ‘already working towards’ the target by investing in ‘new technology solutions’.

However, WWF warns that, based on currently available evidence, there are “significant concerns” that these technologies are ‘energy-intensive, pose risks to human health, and/or will not be able to practically recycle plastic beyond what mechanical recycling already achieves.’ The available evidence, WWF asserts, also fails to robustly verify claims of environmental performance, and “lacks transparency”, with the NGO calling for claims to be ‘true, clear and relevant’.

The position paper states that, if these risks are not addressed, the implementation of such techniques could ‘increase carbon emissions and fail to ‘fundamentally increase current recycling rates, potentially undermining current recycling infrastructure and circular economy development’.

WWF’s paper recommends that, if applied, chemical recycling technologies should be complementary to existing waste management systems, and not compete for feedstocks with mechanical recycling. Plastic waste streams should also be matched to the ‘most environmentally efficient technology available’, which the NGO asserts would ‘ensure the whole system operates with the smallest environmental footprint possible’.



The paper also notes that only “material-to-material applications should be considered recycling, with ‘plastic-to-fuel’ activities, which ‘do not offset virgin plastic entering the system’, falling outside circular thinking. Chemical recycling technologies, WWF urges, should not be used to transform recyclable material into non-recyclable material.

Commenting on the position paper, Director of Plastic and Material Science at WWF Alix Grabowski stressed that the design and implementation of chemical recycling technologies should be carefully considered: “Even as technologies advance, we can’t recycle our way out of the growing plastic waste crisis. Instead of just focusing on recycling, we should prioritize strategies like reducing our overall single-use plastic consumption and scaling up reuse, which offer the best opportunity to achieve the widescale change we need”.

For a technology like chemical recycling to be part of a sustainable material management system, we must carefully look at how its designed and implemented and whether it offers environmental benefits over the status quo, adheres to strong social safeguards, and truly contributes to advancing our circular economy. These principles are designed to do exactly that ■

NAM VIỆT



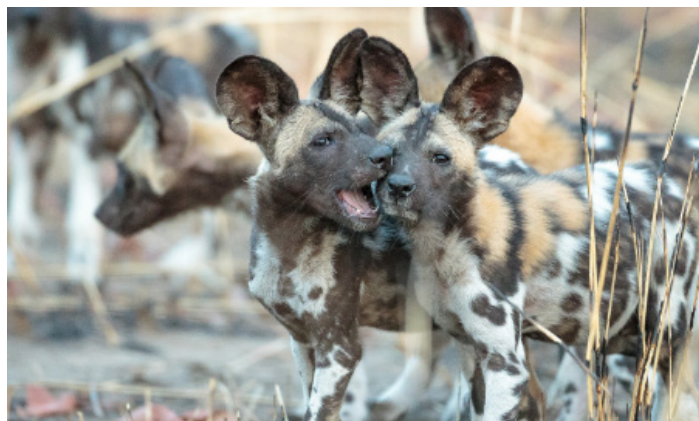
IUCN's great successes in 2021

Following the outbreak of the COVID-19 pandemic, the world settled into a new normal. Many projects of the (International Union for Conservation of Nature) (IUCN) were impacted by the fallout and had to operate within certain limitations. However, they were still able to deliver great results thanks to the hard work of the grantees. In 2021, IUCN Save Our Species' active projects operated in 101 countries and protected 99 threatened species, thanks to the three-legged approach to conservation that consists of focusing on Species, Habitat and People. Below are some of highlights from 2021.

Species

1. *Zambian Carnivore Program*

One of projects in Zambia achieved incredible results in trying to protect the wildlife of Luangwa Valley: 48,155 km were covered on foot patrols, 1'307 person-days were spent monitoring carnivore groups, 309 anti-snaring patrols were conducted, 87 illegal firearms were confiscated and 157 suspects were apprehended with an 80% conviction rate.



2. *Blue swallow*

A project monitoring Vulnerable blue swallow population in South Africa recorded a 38% increase in breeding success rate in the 2020-2021 breeding season compared to the previous one.



3. *Tiger*

The Integrated Tiger Habitat Conservation Program (ITHCP) reported earlier this year that through their efforts, there has been an average increase of tiger populations within project sites by 40%. The entire portfolio-wide population grew from 770 individuals to 966 between 2015 and 2021.

In Kazakhstan, one of projects recorded an increased presence of Vulnerable goitered gazelles, with population increasing from 0.24 individuals per 1000 ha in early 2020 to 0.85 individuals per 1000 ha in 2021. This was achieved thanks to a significant reduction of poaching in the area.



4. *Crowned sifaka lemurs*

One of projects in Madagascar recorded 46 total births of Vulnerable red brown lemurs and Critically Endangered crowned sifaka and mongoose lemurs. Their habitat is gravely affected by forest loss and degradation, but increased patrolling in the area has allowed population numbers to grow.



Habitat

At one of project sites in Uganda, 60 community members planted 1'900 organic fruit seedlings and 2'800 organic woodlot trees species in 15 km of degraded chimpanzee corridors. This will not only increase the natural habitat of this endangered primate, but it will hopefully also act as a barrier to stop chimpanzees from invading community settlements, ultimately reducing human-wildlife conflict in the area.

The ITHCP reported in July, 2021 that, within 53'917 km² of tiger habitat covered by 12 projects, 6'717 km² have been restored over the course of seven years. 482'000 native trees have been planted during this period as well, efforts which will improve the habitat of the tiger in the long run.

In an effort to save the natural habitat of the Vulnerable African manatee from a fern infestation in Cameroon, 5,000 weevils have been released in Lake Ossa earlier this year. Weevils are insects that feed on this fern, and this project hopes to reduce their coverage on the Lake by 20% by 2022.



People

In Madagascar, one of projects found a great way to both generate revenue for a local community living next to lemur habitats and to protect biodiversity at the same time by employing vulnerable community members. This included the elderly, people with no income or who had lost their jobs. While the initial goal was to provide temporary employment to 300 people, the project ended up employing 2,513 community members.

One of our projects in Kyrgyzstan worked with 18 schools and over 300 children in order to raise awareness on the Vulnerable snow leopard. Due to the ongoing COVID-19 pandemic, it mostly consisted of virtual learning. However, over the summer, 58 students from 15 schools attended eco camps that introduced them to conservation and connected them to nature.

81,778 beneficiaries were impacted by the ITHCP during their seven-year effort, 54% of which were women. They received alternative resources such as improved cooking stoves, were taught how to increase their capacity to manage existing resources in a sustainable way or simply generated new revenue streams thanks to the help from the Program. 440,000 local community members were also reached by the Program in order to raise awareness on tiger conservation ■

NHẬT MINH

On 2nd March 2022, Heads of State, Ministers of Environment and other representatives from 175 nations endorsed a historic resolution at the UN Environment Assembly (UNEA-5) in Nairobi to End Plastic Pollution and forge an international legally binding agreement by 2024. The historic resolution, titled “End plastic pollution: Towards an internationally legally binding instrument” was adopted with the conclusion of the three-day UNEA-5.2 meeting, attended by more than 3,400 in-person and 1,500 online participants from 175 UN member states, including 79 ministers and 17 high-level officials.

“This is the most significant environmental multilateral deal since the Paris accord. It is an insurance policy for this generation and future ones, so they may live with plastic and not be doomed by it”, said Executive Director of UNEP Inger Andersen. Plastic production soared from two million tons in 1950 to 348 million tons in 2017, becoming a global industry valued at US\$ 522.6 billion and it is expected to double in capacity by 2040.

Plastic pollution is causing immense harm to our planet. There is no corner of the Earth, from mountaintop to sea trench, left unsullied by plastic. We see it everywhere: disposable bags drifting underwater, pale plastic imitations of jellyfish; crumpled and fading bottles strewn along roadsides; takeout dishes and shampoo bottles spilling from the guts of dead whales. Eleven million tons of plastic waste flow annually into oceans. This may triple by 2040. More than 800 marine and coastal species are



UN adopts historic resolution aimed at ending plastic pollution



▲ A delegate looks at a 30-foot installation dubbed “Turn off the plastic tap” by Canadian activist and artist Benjamin Von Wong, made with plastic waste collected from Kibera slum in Nairobi

affected by this pollution through ingestion, entanglement and other dangers. Chemicals in plastics can radically change the normal functioning of our hormones. Exposure to plastics can harm human health, potentially affecting fertility, hormonal, metabolic and neurological activity and open burning of plastics contributes to air pollution.

Microplastics are posing threats to coastal communities where marine species are the main food. A 1 percent decline in marine ecosystem services could cause an annual loss of US\$500 billion in global ecosystem benefits. Plastic is comprised of polymers, mainly from oil and natural gas. It is a huge driver of global warming.

“We need a system change that addresses the full life cycle of plastics, from the extraction of raw materials to alternatives to improved waste management. We need to be innovative and eliminate products that are unnecessary, avoidable or problematic. Design products for reuse and recycling and ensure this happens. Remove hazardous additives. By doing this we could reduce the volume of plastics entering our oceans by over 80 per

cent by 2040 and reduce virgin plastic production by 55 per cent. We could reduce greenhouse gas emissions by 25 per cent and create 700,000 additional jobs, mainly in the global south”, Andersen added. The resolution, based on three initial draft resolutions from various nations, establishes an Intergovernmental Negotiating Committee (INC), which will begin its work in 2022, with the ambition of completing a draft global legally binding agreement by the end of 2024. It is expected to present a legally binding instrument, which would reflect diverse alternatives to address the full lifecycle of plastics, the design of reusable and recyclable products and materials and the need for enhanced international collaboration to facilitate access to technology, capacity building and scientific and technical cooperation.

The UN Environment Program (UNEP) will convene a forum by the end of 2022 that is open to all stakeholders in conjunction with the first session of the INC, to share knowledge and best practices in various parts of the world. It will facilitate open discussions and ensure they are informed by science, reporting on progress throughout the next two years. Finally, upon completion of the INC’s work, UNEP will convene a diplomatic conference to adopt its outcome and open it for signatures ■

ĐỖ HƯƠNG

Conservation highlights of 2021

Like 2020 before it, 2021 has been a year of tumult, uncertainty and angst. But it has also been one of hope: tech companies came together to help eliminate trade for prohibited wildlife and wildlife products; the US Government made major strides toward reducing food loss and waste and people working in fisheries gained easy access to online tools to make their practices more sustainable. WWF continues to work to halt the destruction of nature - and restore it where we can - to help people and wildlife thrive. Here's a look at some conservation highlights from 2021.

Tech companies remove or block 11.6 million listings for prohibited wildlife and wildlife products

Forty-seven of the world's biggest e-commerce, social media, and technology companies, like Google, eBay and Facebook, have come together as members of the Coalition to End Wildlife Trafficking Online to eliminate trade for prohibited and endangered species and associated products from their platforms. And they've been successful: the companies reported removing or blocking more than 11.6 million such listings since 2018. Illegal wildlife trade, both online and in physical markets, decimates populations of wild species and contributes to the catastrophic biodiversity loss seen globally, so having these companies working to end the practice is crucial to protecting wildlife.

WWF helps Mississippians resolve land title issues that disproportionately affect Black families

The Mobile Basin Heirs' Property Support Initiative will help families in the Mobile Basin of Mississippi protect and keep their forestland. The two-year project was launched in October 2021 by the Center for Heirs' Property Preservation™ and the Mississippi Center for Justice, with support from WWF and Kimberly-Clark. The new initiative provides a combination of legal services, information, and access to financial and forestry resources to help Mississippians resolve land title issues that disproportionately affect Black families and often lead to loss of property, wealth and forest resources. Hutter stock.

WWF develops a plan to cut United States food waste in half

In the US, up to 40% of the food we produce is unsold or uneaten, and that waste results in more greenhouse gas emissions than are emitted by the entire US airline industry. In search of solutions, WWF convened a coalition of food waste experts, businesses, non-governmental organizations and local leaders from around the country. Together, we unveiled a visionary new Food Waste Action Plan to help the US address its food waste problem. In Congress, the Plan led to Representative Julia Brownley (D-CA), Senator Cory Booker (D-NJ) and others introducing the Zero Food Waste Act, which would give state Governments, Native nations, and local community leaders much-needed resources to scale up infrastructure for food waste prevention, measurement and recycling - and put the nation on a path to reducing food loss and waste 50% by 2030. It has also influenced legislation on food date labeling and school food recovery efforts.

Renewable Thermal Collaborative wins grant to slash industrial thermal greenhouse gas emissions

The Renewable Thermal Collaborative won the 2030 Climate Challenge Award, a competition hosted by Lever for Change and received US\$10 million to slash industrial



▲ Industrial thermal energy emission is the third - largest source of greenhouse gas emission in US



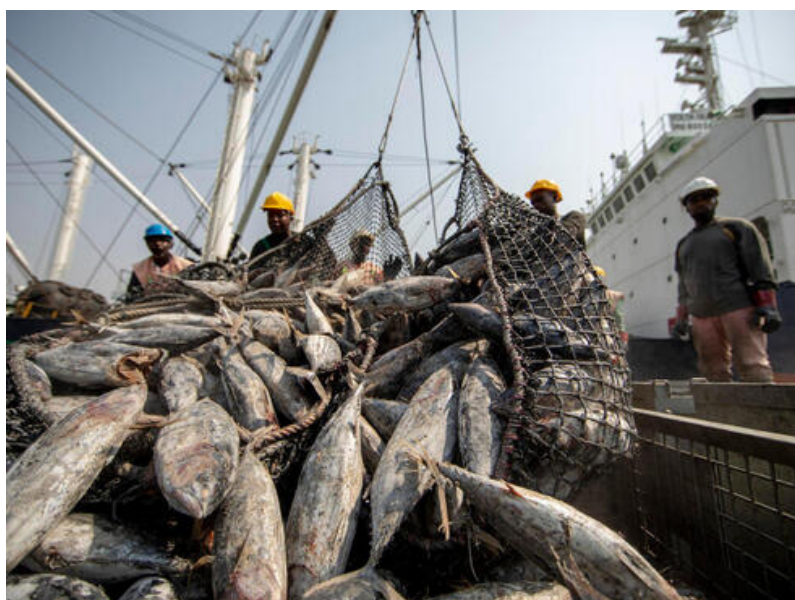
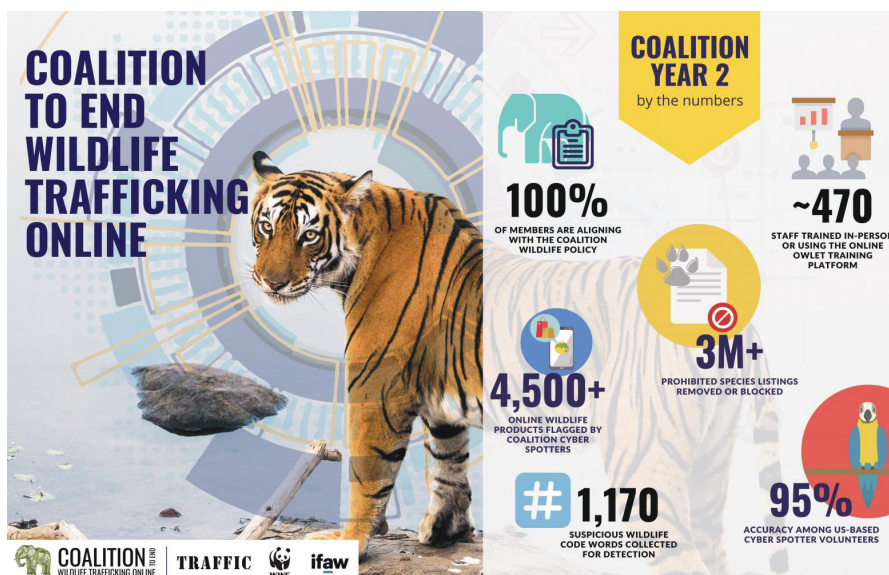
thermal greenhouse gas emissions - the third-largest source of greenhouse gas emissions in the United States. The collaborative, which WWF co-founded with the Center for Climate and Energy Solutions and David Gardner and Associates, brings together the combined power of major businesses to help break market, policy and technological barriers preventing the growth of renewable thermal energy. Addressing industrial thermal energy emissions is key to keeping global warming to 1.5 degrees Celsius.

Forests Forward: engaging big players to protect forests

Forests are under threat. In 2020, the tropics lost more than 30 million acres of tree cover, and an emergency of this magnitude needs an all-hands-on-deck approach. So, WWF launched Forests Forward, a new program that engages and advises major companies on how to use nature-based solutions and responsible sourcing to meet sustainability goals while protecting forests and the rights of forest communities. To date, five companies have signed on as Forests Forward participants in the United States: HP Inc.; International Paper Company; Kimberly-Clark; Lowe's Companies, Inc. and Williams-Sonoma, Inc.

New platform helps build local capacity for improving fisheries

A fishery improvement project is a step-by-step approach to improve fishing practices and management. WWF has reached more than 300 people as part of on-the-ground training workshops that began in 2015. These seminars taught local stakeholders how to develop, implement and monitor the progress of improvement projects. In 2021, WWF launched online training tools to foster virtual learning in a time of restricted travel. The program - available in English and Spanish to anyone, anywhere in the world - includes seven courses along with case studies to reinforce learning and resources to help participants along the way. There's no quick fix for unsustainable fishing, but online training makes local capacity building faster and more efficient.



▲ A fishery improvement project is a step-by-step approach to improve fishing practices

The Coca-Cola Company and WWF extend their partnership after 14 years of freshwater conservation

WWF and The Coca-Cola Company renewed their partnership for three more years - adding to 14 years of progress made to conserve freshwater resources for communities, nature, and businesses in more than 50 countries. This new phase will focus on climate and water resilience, the sourcing of agricultural ingredients and transforming packaging to prevent waste, all by engaging hundreds of additional stakeholders around the world. So far, the partnership has improved the management of nearly 4,000 square miles of river basins and monitored the health of 700,000 square miles of watershed ■

HÔNG NHUNG



Tons of COVID - 19 health care waste expose urgent need to improve waste management systems

Tens of thousands of tons of extra medical waste from the response to the COVID-19 pandemic has put tremendous strain on health care waste management systems around the world, threatening human and environmental health and exposing a dire need to improve waste management practices, according to a new WHO report.

The WHO Global analysis of health care waste in the context of COVID-19: status, impacts and recommendations base its estimates on the approximately 87,000 tons of personal protective equipment (PPE) that was procured between March 2020 - November 2021 and shipped to support countries' urgent COVID-19 response needs through a joint UN emergency initiative. Most of this equipment is expected to have ended up as waste. The authors note that this just provides an initial indication of the scale of the COVID-19 waste problem. It does not take into account any of the COVID-19 commodities procured outside of the initiative, nor waste generated by the public like disposable medical masks.

They point out that over 140 million test kits, with a potential to generate 2,600 tons of non-infectious waste (mainly plastic) and 731,000 liters of chemical waste (equivalent to one-third of an Olympic-size swimming pool) have been shipped, while over 8 billion doses of vaccine have been administered globally producing 144,000 tons of additional waste in the form of syringes, needles, and safety boxes.

As the UN and countries grappled with the immediate task of securing and quality-assuring supplies of PPE, less attention and resources were devoted to the safe and sustainable management of COVID-19 related health care waste. "Executive Director, WHO Health Emergencies Program Michael Ryan said: "It is abso-

lutely vital to provide health workers with the right PPE. But it is also vital to ensure that it can be used safely without impacting on the surrounding environment".

This means having effective management systems in place, including guidance for health workers on what to do with PPE and health commodities after they have been used. Today, 30% of healthcare facilities (60% in the least developed countries) are not equipped to handle existing waste loads, let alone the additional COVID-19 load. This potentially exposes health workers to needle stick injuries, burns and pathogenic micro-organisms, while also impacting communities living near poorly managed landfills and waste disposal sites through contaminated air from burning waste, poor water quality or disease carrying pests.

"COVID-19 has forced the world to reckon with the gaps and neglected aspects of the waste stream and how we produce, use and discard of our health care resources, from cradle to grave", said Dr. Maria Neira - Director, Environment, Climate Change and Health at WHO. "Significant change at all levels, from the global to the hospital floor, in how we manage the health care waste stream is a basic requirement of climate-smart health care systems, which many countries committed to at the recent UN Climate Change Conference and, of course, a healthy recovery from COVID-19 and preparedness for other health emergencies in the future".



▲ Tons of COVID-19 health care waste expose urgent need to improve waste management systems



The report lays out a set of recommendations for integrating better, safer, and more environmentally sustainable waste practices into the current COVID-19 response and future pandemic preparedness efforts and highlights stories from countries and organizations that have put into practice in the spirit of “building back better”.

Recommendations include using eco-friendly packaging and shipping, safe and reusable PPE (e.g., gloves and medical masks), recyclable or biodegradable materials; investment in non-burn waste treatment technologies, such as autoclaves; reverse logistics to support centralized treatment and investments in the recycling sector to ensure materials, like plastics, can have a second life.

The COVID-19 waste challenge and increasing urgency to address environmental sustainability offer an opportunity to strengthen systems to reduce and manage health care waste safely and sustainably. This can be through strong national policies and regulations, regular monitoring and reporting and increased accountability, behavior change support and workforce development, and increased budgets and financing.

“A systemic change in how health care manages its waste would include greater and systematic scrutiny and better procurement practices”, said Dr. Anne Woolridge - Chair of the Health Care Waste Working Group, International Solid Waste Association (ISWA). “There is growing appreciation that health investments must consider environmental and climate implications, as well as a greater awareness of co-benefits of action. For example, safe and rational use of PPE will not only reduce environmental harm from waste, but it will also save money, reduce potential supply shortages and further support infection prevention by changing behaviors”. The analysis comes at a time when the health sector is under increasing pressure to reduce its carbon footprint and minimize the amount of waste being sent to landfill - in part because of the great concern about the proliferation of plastic waste and its impacts on water, food systems and human and ecosystem health ■

NAM HUNG

Billions to support the circular economy in the EU

The European Investment Bank (EIB) in tandem with Europe’s largest National Promotional Banks and Institutions have launched a 10 billion Euro initiative to accelerate the transition to a sustainable and circular economy. The Joint Initiative on Circular Economy (JICE) is to support the development and implementation of circular economy projects and programs in the European Union (EU). This flagship partnership will target at least 10 billion Euro of investments over five years (2019 - 2023). The aim is to prevent and eliminate waste, increase resource efficiency and foster innovation by promoting circularity in all sectors of the economy. The five national promotional banks and institutions are: Bank Gospodarstwa Krajowego (BGK - Poland), Groupe Caisse des Dépôts (CDC - France) including Bpifrance, Cassa Depositi e Prestiti (CDP - Italy), Instituto de Crédito Oficial (ICO - Spain) as well as Kreditanstalt für Wiederaufbau (KfW - Germany).

According to EIB, the six partner institutions will combine their expertise, experience and financial capacity to better support the implementation of viable circular projects and program approaches. JICE will provide loans, equity investment or guarantees to eligible projects and develop innovative financing structures for public and private infrastructure, municipalities, private enterprises of different size as well as for research and innovation projects. It would base on the ongoing initiatives led by the European Commission to build knowledge through dedicated working groups and develop financing schemes.

The joint initiative will focus particularly on investments in the EU member states that will help accelerate the transition to a circular economy. It will target all stages of the value chain and lifecycle of products and services: Circular design and production: applying “reduce and recycle” strategies to design out waste at the source, prior to commercialization; Circular use and life extension: enabling the reuse, repair, repurposing, refurbishing or remanufacturing of products in use phase; Circular value recovery: recovering materials and other resources from waste, recovering waste heat and/or reusing treated wastewater; Circular support: facilitating circular strategies in all lifecycle phases, for example with the deployment of key ICT technologies, digitalization and services supporting circular business models and circular value chains ■

PHƯƠNG LINH



Việt Nam to preserve vulnerable wildlife amid climate change

Scientists have studied, evaluated and predicted the impact of climate change on wildlife species in Việt Nam. The studies conducted by the National Science and Technology Program on natural resources, environment and climate change for 2016 - 2020 showed that 18 out of 51 evaluated animal species were classified as seriously affected by climate change. Primates are the group suffering the most. An assessment of 50 bird species also revealed that 16 species, distributed in areas at high risk of changes in temperature and rainfall, were feeling the impact of climate change.

Climate change seriously affected 93 out of 288 plant species examined. Đà Lạt pine is a precious and rare genetic resource categorized as a near-threatened species by the International Union for Conservation of Nature (IUCN). According to scientists, climate change adaptation-related activities in Việt Nam are still limited. Knowledge about biodiversity conservation in the context of climate change is still relatively new for staff of protected areas and national parks.

Although there are several conservation action programs for important species groups, such as the one for pan-



▲ Rare langurs kept under care at Cúc Phương National Park (Ninh Bình Province)

golins, turtles, elephants, primates and tigers, there is none on protection for species that are vulnerable to climate change. Given the limited resources for preservation, it is necessary to identify priority conservation areas to focus on technical, financial and technological resources to achieve high efficiency.

Twenty-six out of 105 protected areas, including the nature reserve and habitat conservation areas, are high priority. Most of them are located on the Trường Sơn Mountain Range, from Lâm Đồng Province in the Central Highlands to the North-Central region.

According to Deputy Director of the Department of Nature Biodiversity Conservation (VEA) Hoàng Thị Thanh Nhân, Việt Nam must enhance protected area management capacity for the effective implementation of adaptation plans. Agencies should set up action plans to preserve biodiversity in the context of climate change for important and sensitive protected areas as a foundation for determining the priority or for fundraising, she said.

It was essential to devise a national conservation action plan for endangered, precious and rare species vulnerable due to climate change and submit it to the Government for approval, laying the foundation for securing investment. Support should be provided for residents living near forests, in buffer zones of protected areas and national parks to help them overcome the adverse impact caused by climate change ■

TRẦN TÂN



Ngọc Island (Pearl Island): A new picturesque destination in Huế

It takes about 30 minutes by canoe to Ngọc Island (also known as Chảo Island, Sơn Chà Island) from Lăng Cô Beach. This Island has rare wild beauty, which there has never been a massive development to exploit tourism. There are natural beaches with clear blue water, long sandy beaches; Along with the woods, rocky mountains and rocky terraces, this Island has stunning natural scenery. Sơn Chà - Ngọc Island has a rich ecosystem, creating a place for diving and watching coral and catching fish.



▲ Lăng Cô Beach (Thừa Thiên - Huế Province)



▲ Coming to Ngọc Island, visitors will have many experiences

Ngọc Island is located between Đà Nẵng sea and Huế sea, near Lăng Cô town, Phú Lộc District, Thừa Thiên - Huế Province. You can go to Lăng Cô Town from Huế City (about 70 km) or from Đà Nẵng (about 35 km); Then take the canoe to Ngọc Island for about 30 minutes. Visitors can use the services of Lăng Cô Blue Sea Company at Lăng Cô Town, including canoe tours, swimming, diving with equipment: diving clothes, eye-glasses, tubes breathing... and have a lunch at Bãi Chuối.

Coming to Ngọc Island, visitors will have many memorable experiences. After about 15 minutes walking through the steps and winding road in the forest, visitors will reach the top of the lighthouse at an altitude of over 200m above sea level. Then, the boat will take visitors to the diving spot to watch the coral. The water is so clear that you do not need diving but just watch many beautiful and colorful fish and coral reefs from above.

Bãi Chuối is a natural sand beach at the foot of the Hải Vân Pass, which is an interesting stop where you can relax after scuba diving, enjoying fresh seafood while watching the trains to Hải Vân Pass. Otherwise, you just simply relaxing on the white sand...

For those who love water sport games, there are water motor-bikes, banana boats, high speed canoes... In the summer of 2018, there will be more services such as fishing, kayaking, camping overnight on the beach... ■

MINH CHÂU - NHÂM HIỀN

Center of Global Green Network

KEITI creates a clean and green world by disseminating eco-friendly technologies and establishing global cooperation networks so that every country can enjoy the benefits that the environment offers.

Vietnam - Korea Environmental Cooperation Center - VKECC is an agency established by the Ministry of Environment of Korea that assigned Korea Environmental Industry and Technology Institute (KEITI) the following functions and tasks:

- Promote and enhance the cooperative activities in the field of environment between Vietnam and Korea;

- Manage funding sources to support cooperation and investment promotion, technology transfer in the field of environmental infrastructure development and new energy (water supply, wastewater treatment, renewable energy, emissions management, ...);

- Support Korean and Vietnamese enterprises to promote investment in the field of environmental industry in Vietnam;

- Research and explore the technology market in order to serve the promotion and cooperation development, investment and technology transfer in the field of environment and sustainable development.



For more information about our activities, please refer to:

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