

## CHAPTER 9 GREEN GROWTH

### OVERVIEW

The Green Growth Sector Committee (GGSC) was established in May 2014 to help develop the conditions for environmentally sound and sustainable businesses to prosper in Vietnam. Representing the private sector, GGSC works closely with public stakeholders, including the Government of Vietnam and its agencies, as well as donors and multilateral organisations.

### I. CIRCULAR ECONOMY

Relevant authorities: Ministry of Finance (MOF), Ministry of Industry and Trade (MOIT), Ministry of Natural Resources and Environment (MONRE), Ministry of Planning and Investment (MPI), Ministry of Health (MOH), Ministry of Construction (MOC), Ministry of Transport (MOT), Vietnam Environment Administration (VEA), Ministry of Agriculture and Rural Development (MARD)

The “Circular Economy” is a new model of production and consumption. It involves sharing, leasing, redesigning, recovering, reusing, repairing, refurbishing, recycling and upcycling<sup>1</sup> existing materials and products for as long as possible. It is a more sustainable model of growth than the linear economy of “produce – use – discard” as it reduces waste to a minimum and uses discarded materials productively again and again in a different form. In doing so, it reduces the need for new raw materials and removes most waste and pollution from production.

We appreciate the progress of the new Law on Environmental Protection, especially the introduction of Extended Producer Responsibility (EPR). The role of the new Environmental Protection Fund (VEPF) is still to be clarified and we recommend that the Government enable more participants (the private sector, NGOs, and Producer Responsibility Organization (PROs)) to organise efficiently the move toward circularity. In particular, we recommend that the private sector is involved in decisions prepared and taken by the EPF.

#### 1. Waste management

##### Issue description

Vietnam’s Law on Environmental Protection operates under the principles of minimisation, re-use, collection, and treatment meeting environmental standards.<sup>2</sup> However, most waste is still dumped into landfill without further processing, with 89 per cent of all solid waste in Hanoi and 70 per cent in Ho Chi Minh City being disposed of in this way.<sup>3 4</sup> Unsanitary waste disposal not only causes environmental hazards and nuisance. It also wastes materials that could be recycled or, at least, used for energy generation. While we need to quickly devise a system to segregate dangerous waste to be treated in cement kilns, other waste can, for a time, also be burned to generate electricity or heat. This is better than landfill, and could be a bridge to help reach the next phase. On the other hand, Vietnam generates over 20 million tons of organic waste per year, accounting for 60 per cent of the municipal solid waste in Vietnam. Organic waste can pollute the air and water, attract pests, and contaminate soil and water. Composting would help solve the landfill crisis, while at the same time producing biogas and clean fertilisers. We welcome Decision 491<sup>5</sup> setting clear targets for the management of waste towards 2025 with a vision to 2050 and Decision

1 Upcycling waste is the process of transforming by-products, waste materials, useless, or unwanted products into new materials or products perceived to be of greater quality, such as artistic value or environmental value. Upcycling differs from recycling in that it involves the creation of a new product with a higher value, rather than the breaking down of materials into their raw components to be used again.

2 Law 72/2020/QH14 of the National Assembly on environmental protection (Law on Environmental Protection).

3 “Modernising solid waste treatment technology: Turning waste into real resources”, *Natural Resources and Environment*, 12 November 2019. Available at: <<https://baotainguyenmoitruong.vn/hien-dai-hoa-cong-nghe-xu-ly-chat-thai-ran-de-rac-thuc-su-la-tai-nguyen-295645.html>>, last accessed on 8 December 2020.

4 “Hanoi running out of landfill site”, *Natural Resources and Environment*, 9 July 2019. Available at: <<https://baotainguyenmoitruong.vn/ha-noi-sap-het-cho-de-do-rac-249535.html>>, last accessed on 8 December 2020.

5 Decision 491/QĐ-TTg dated 7 May 2018 of the Prime Minister adjusting national strategy for general management of solid waste to 2025 with vision towards 2050 (Decision 491).

849<sup>6</sup> setting action plans and timelines to ensure the integrated State management of solid waste from central to local levels. However, until now, the implementation process has not involved the private sector. This is, in our view, paramount to the success of, for example, combatting plastic waste. We suggest establishing a public-private partnership committee to discuss and direct green growth projects to put the revision of the legal framework into practice.

Multinational corporations (MNC) already have their own recycling and renewable energy targets and are ready to support Vietnam to achieve its goals. For this, a supportive regulatory framework is required. This would involve completing the legal framework on waste management, especially waste classification and segregation at source. It is essential that all dangerous and harmful waste be destroyed with no spillage into the environment and no cross-contamination. It is also important to increase public awareness of solid waste management, especially segregating discarded materials at household or company level, as is done in the EU, and to promote reduce – reuse – recycle. To do this, it would be relevant to legalise the secondary material marketplace, so it is done responsibly.

### Potential gains/concerns for Vietnam

The goals of Decision 491 and action plans in Decision 849 are ambitious. To achieve these, all ministries and authorities will need to cooperate in implementing a regulatory framework that incentivises the public and private sectors. Regarding the legal framework, many of these goals require existing laws to be amended. Therefore, it is important to identify these laws and draft a plan to ensure their compliance as soon as possible. Besides, regulations need to differentiate solid waste from ordinary waste and state whether recycled material should be classified as waste (e.g., fly ash or recycled plastic for use as raw material in construction).<sup>7</sup>

Rapid urbanisation means that Vietnamese households – particularly in big cities – are discharging increasing amounts of waste into the environment. Municipal Solid Waste (MSW) generation per capita will reach 1.6 kg/person/day in 2025.<sup>8</sup> The most basic components of solid waste are organic and inorganic waste.<sup>9</sup> We believe that incentivising the compliant waste treatment sector would have positive results. On the contrary, actors who claim that they provide recycling and other waste treatment services at low cost and in accordance with the law – but then dump collected waste into the rivers, seas, and the general environment – must be held accountable. This is necessary to create a successful and compliant waste management industry. We appreciate how the Government has dealt with violations until now. However, there is always room for improvement.

### Recommendations

- Continue strict enforcement of waste regulations and fair results-oriented prosecution for non-compliance;
- Complete the legal framework on waste management, especially waste classification and segregation at source;
- Legalise the secondary material marketplace;
- Continue to provide a conducive business environment for compliant waste management businesses;
- Increase public awareness of solid waste management;
- Set up a public-private committee to propose solutions; and
- Provide clear guidance and support infrastructure for waste segregation-at-source at household and companies.

6 Decision 849/QĐ-BTNMT dated 8 April 2019 of the Ministry of Natural Resources and Environment on the plan to implement Resolution 09/NQ-CP on consistent State management on solid waste (Decision 849).

7 “Lack of regulations on plastic waste classification”, *Ministry of Natural Resource and Environment*, 23 October 2019. Available at: <[www.monre.gov.vn/Pages/thieu-quy-dinh-ve-phan-loai-rac-nhua.aspx](http://www.monre.gov.vn/Pages/thieu-quy-dinh-ve-phan-loai-rac-nhua.aspx)>, last accessed on 8 December 2020.

8 “State of the 3Rs in Asia and the Pacific”, *United Nations Centre for Regional Development*. Available at: <[www.uncrd.or.jp/content/documents/5696\[Nov%202017\]%20Vietnam.pdf](http://www.uncrd.or.jp/content/documents/5696[Nov%202017]%20Vietnam.pdf)>, last accessed on 4 March 2021.

9 Inorganic waste includes, for example, glass, porcelain, metal, paper, rubber, plastic, nylon plastic, fabric, and electronics. Organic waste includes mostly left-over or spoiled food, falling leaves, spent grain, bran, manure, cadavers, etc.

## 2. Addressing plastic pollution

### Issue description

Plastic pollution remains a major issue. Unfortunately, Vietnam is the fourth-largest contributor to marine plastic pollution globally.<sup>10</sup> Only 27 per cent of plastic in Vietnam is recycled. Meanwhile, the amount of plastic waste is increasing by up to 200 per cent each year.<sup>11</sup> This situation poses serious impacts not only to marine life but also to sustainable economic development, the livelihoods of coastal residents, and potentially to food security. This is further complicated by containers of imported waste being sent for recycling to Vietnam and its neighbours.

Recycling alone is not a complete solution. The majority of plastics dumped are of too low value. Therefore, they would need to be compacted and used as cheap and long-lasting material, for example, to make roads or as construction materials. Furthermore, most plastics in Vietnam are non-compostable, called OXO plastic. Under the sun and wind, they break down into smaller and smaller fragments and can persist for hundreds years. Those smaller than 5mm, known as micro-plastics, can be found in the air, water, soil, can be ingested by wildlife and block the digestive systems of animals and create problems in the ecosystem and threats to human health.<sup>12</sup> It is notable that OXO biodegradable plastic and biodegradable plastic are not clearly differentiated in the market, when products from OXO biodegradable plastic are still listed on the label as “biodegradable”. Meanwhile, reality shows that disposable items made from OXO-degradable plastic when put into the environment, the plastic is still plastic, even if it disintegrates into small pieces. In Vietnam, many companies produce disposable products made from plastic and sold in supermarkets, most commonly are bags, cups, spoons, forks, etc. However, they are ambiguous when labeling those products as “biodegradable” with no distinction between completely biodegradable plastic and OXO plastic. This has led consumers to mistakenly believe that OXO biodegradable plastic is environmentally friendly, but in fact, it is harmful to the environment<sup>13</sup>. Many countries have banned or are considering banning the use of oxo-degradable plastic, such as the United Kingdom, France, the United States, and Germany. Thus, reducing the production and use of single-use plastic items, or recycling those that have economic value, is key. It would also be useful to promote and have supporting policies for innovative materials and technologies, i.e., compostable plastics and innovative compostable packaging materials. Vietnam could refer to the Sustainable Packaging Guidelines of the World Packaging Organization and relevant EU policies when building the legal framework for packaging. The conditions for recycling plastics, such as differentiated disposal and no contamination, make more worthwhile the recycling of other materials as well, such as paper, wood, clothes, and electrical items.

In light of the EVFTA, it is important that Vietnam complies with EU regulations, especially with new revisions in the EU Green Deal<sup>14</sup> on technical standards, safety, etc. to ensure that products originating from Vietnam can enter the EU markets as well as the international supply chains and support the Circular Economy globally. The first step would be to evaluate the practical impact of these rules and their implementation. Vietnam has targeted a complete ban on single-use, non-compostable plastic packaging products in the period of 2025-2030 under the Law on Environmental Protection. Stringent regulations are required to achieve this and, as a gradual approach, we suggest Vietnam finalises policies and mechanisms to limit the production and use of these items and develops the production of compostable plastic that can be certified using EU and US standards. This can be encouraged, initially, via increased taxes for the use of single-use plastic bags and the promotion of outreach programmes to raise public awareness. Experience in other countries, such as Rwanda<sup>15</sup>, has shown that a complete ban of these products, supported by widespread behavioural change, will contribute significantly to tackling plastic pollution. Vietnam has now developed to such a level that it can follow suit.

10 J.R. Jambeck, R. Geyer, C. Wilcox, T.R. Siegler, M. Perryman, A. Andrady, R. Narayan and K.L. Law (2015), “Plastic waste inputs from land into the ocean”, *Science*, Vol. 347, Issue 6223.

11 “Plastic waste increasing by 200%, Vietnam faces risk of becoming global landfill”, *Tuoitre Online*, 28 September 2019. Available at: <<https://tuoitre.vn/rac-thai-nhua-tang-200-viet-nam-doi-mat-nguy-co-thanh-bai-rac-toan-cau-20190928164354037.htm>>, last accessed on 8 December 2020.

12 Op cit. Plastic waste inputs from land into the ocean p.14.

13 “Nhựa tự hủy OXO - Đừng nhập nhèm mang danh “Nhựa tự hủy sinh học””, Ministry of Resources and Environment Online Newspaper, 22 May 2022. Available at <<https://baotainguyenmoitruong.vn/nhua-tu-huy-oxo-dung-nhem-mang-danh-nhua-phan-huy-sinh-hoc-340359.html>>, last access on 20 October 2023.

14 Waste, Electrical, and Electronic Equipment (WEEE), the Restriction of Hazardous Substances (ROHS), and Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH).

15 E. Clavel, “Think you can’t live without plastic bags? Consider this: Rwanda did it”, *The Guardian*, 15 February 2014. Available at: <[www.theguardian.com/commentisfree/2014/feb/15/rwanda-banned-plastic-bags-so-can-we](http://www.theguardian.com/commentisfree/2014/feb/15/rwanda-banned-plastic-bags-so-can-we)>, last accessed on 20 December 2020.

Under Law on Environmental Protection Tax,<sup>16</sup> it is already possible to raise tax. However, this has not yet achieved its objective.<sup>17</sup> We believe that the tax rate should be increased for using single-use plastic bags. Pilots can be used before this is implemented on a national scale. All plastic bags, regardless of size or thickness, should be imposed tax to people to bring their own reusable bags when shopping or the use of eco-friendly solutions. This should also apply to plastic packaging to encourage businesses to use less packaging and to choose more sustainable packaging materials. The next step will be a complete ban on these products. Household domestic waste should be classified and segregated at source to enable cost-effective recycling and treatment, accompanied by comprehensive policies that favour private investment. If waste is separated into two groups (organic and inorganic), or three groups (organic, plastics, and glass/metal), it will enable more cost-effective treatment of domestic waste and allow for private investment. In the EU, electronics, paper, used oil, and clothes are other “differentiated” collection categories. The classification of domestic waste can be piloted in one or two big cities before being replicated more widely. Besides single-use plastic bags, other products such as straws, cups, and other packaging materials that are currently made with non-compostable plastic should be made fully compostable after a transition period. The private sector and relevant government authorities should work hand in hand to implement the EPR.

### Potential gains/concerns for Vietnam

Decision 491 states that, by 2025, “100 per cent environmentally-friendly plastic bags will be used in trade centres and supermarkets for the purpose of replacing persistent plastic bags to serve daily-life activities”. Vietnam’s National Action Plan on Ocean Plastic Waste Management by 2030<sup>18</sup> aims to reduce plastic waste discharged into the sea and ocean by 75 per cent, end the use of disposable plastic products in coastal tourist attractions and resorts, as well as the disposal of fishing gear into the sea by 2030. The goals of Decision 491 and Decision 1746 are ambitious. However, they have been challenging in practice. Hence, to achieve these objectives, it is important to step up implementation. If this does not happen, it will impact the lives of people, animals, and the overall environment. Moreover, it will impact the role Vietnam can play in global supply chains.

### Recommendations

- Implement existing regulations and ensure strict enforcement;
- Promote legislation to incentivise Vietnamese and multinational companies to comply with EU regulations to allow the country to enter global supply chains;
- Ban OXO-degradable technology and introduce compostable plastic that can be certified under international standards to prevent greenwashing;
- Promote investment in composting facilities and dedicated recovery supply chains to reduce the use of single-use plastics linked to organic waste;
- Incentivise cost-effective recycling and treatment of domestic waste at the household level through classification to facilitate the implementation of the EPR law;
- Set up the EPF as a public-private committee to propose solutions;
- Provide tax-incentivized mechanic for compostable plastics packaging and recycled plastics packaging to encourage transition to environmental-friendly materials and promote local recycling industry; and
- Ban single-use plastic and promote an alternative solution. Work with businesses to develop a plan for phasing out single-use plastic products. This would give businesses time to adjust their operations and to find alternative products to offer their customers.

16 Law 57/2010/QH12 of the National Assembly dated 15 November 2010 on Environment Projection Tax (Law on Environmental Protection Tax).

17 “Loopholes and evasion limit success of plastic bag tax”, *Vietnam News*, 27 September 2018. Available at: <<http://vietnamnews.vn/environment/466610/loopholes-and-evasion-limit-success-of-plastic-bag-tax.html#pLV6B5o3VZtgPBtS.999>>, last accessed on 8 December 2020.

18 Decision 1746/QĐ-TTg dated 4 December 2019 of the Prime Minister approving National Action Plan on Ocean Plastic Waste Management by 2030 (Decision 1746).

### 3. Water supply and Wastewater issues

Declining water quality has become a global issue as populations grow, industrial and agricultural activities expand, and climate change threatens to cause major alterations to the hydrological cycle. Over the last decade, the Government has taken action to deal with water-related challenges and has achieved remarkable results.

#### Issue description

Despite undeniable progress in water and sanitation, Vietnam's future development is threatened by severe challenges arising from climate change, rapid industrialisation, and "home-made" environmental problems.

#### Potential gains/concerns for Vietnam

Vietnam's development comes at a cost. The country's natural resources are under immense pressure, resulting in water-stress and subsequent threats to human well-being and biodiversity. In the long run, Vietnam will face severe financial losses if no action is taken to mitigate the current water and environmental crises. If the water sector is to continue supporting the nation's rapidly-expanding economy, it will need to overcome critical challenges. Water management will need to be more efficient to meet rising demand; income per unit consumed will need to increase; the quality of construction and public awareness will need to rise; and threats from "too dirty, too little, and too much" water will need to be reduced. At the same time, policies, institutions, law enforcement, and financing will need to be improved, and international commercial participation will need to be allowed in water and sanitation services.

#### Recommendations

Make the water crisis a top-level issue and embark on an all-inclusive journey to protect Vietnam's water resources, aquatic life, and biodiversity. In particular:

- Synchronise existing environmental policies to ensure a coherent political framework by better integrating the existing legal basis;
- Improve the situation on the ground by increased transparency and controlling the implementation of environmental policies on provincial and local levels; strengthen law enforcement and the willingness to take regulatory action;
- Listen to grass-root levels and encourage local environmental groups; support the actions of citizens to control the implementation of the State's policies;
- Introduce and endorse water-sensitive urban design and take advantage of Blue-Green Infrastructure, including modern storm water management;
- Information – Communication – Education is key for a cleaner environment, so improve and adjust school and university curricula by integrating "green" issues; public awareness, in general, needs to be improved;
- Take advantage of the knowledge and experience of international water companies through open, transparent, and fair public tenders;
- Encourage the reuse of wastewater by providing legal frameworks, guidelines, and standards to share quality water for applications like irrigation and industrial production;
- Adjust domestic and industrial wastewater fees to full cost recovery, implementing the "polluter-pays-principle";
- Foster sustainability-driven, water-wise tourism that will attract wealthy and nature-minded tourists; prevent the destruction of valuable ecosystems by uncontrolled tourism development;
- Consider Blue-Green infrastructure for dealing with climate change; and
- Consider and endorse green financing to increase capital flows from the public, private, and non-profit sectors to sustainable development priorities.

## 4. Air quality control

### Issue description

The air quality in Vietnam's major cities has reached dangerous levels and become a critical health concern<sup>19</sup>. Sulphur dioxide, dust, dioxide, carbon monoxide and nitrogen dioxide are emitted from transportation, industry, and construction, as well as from coal power plants and cement factories. The Vietnam National Economics University found that air pollution has cost the Vietnamese economy US\$10.8-US\$13.6 billion per year since 2012. Meanwhile, the number of days where the air quality index reached hazardous levels in 2019 and 2020 was higher than in previous years. According to IQAir, Hanoi ranked 11st in the most-polluted cities in the world<sup>20</sup>. It is, therefore, important to revise the Law on Environmental Protection, particularly with regard to air pollution. Furthermore, specific policy targets and regulations for air quality control and emissions should be introduced. This should happen alongside the introduction of a higher and additional tax for coal power plants, cement factories, and other major polluters according to the estimated socio-economic and health impact. Finally, investment in filters and other devices in, for example, power stations that reduce pollution is required together with the acceleration of the development of a non-polluting public transportation sector.

### Potential gains/concerns for Vietnam

Vietnam is lacking specific regulations for air pollution. We note that, in 2019, the Government launched a national action plan for air quality management by 2020 with a vision to 2025<sup>21</sup> (Decision 985a). Also in 2019, MOH issued a 14-step guide to help deal with air pollution, the first-ever public advisory on this subject.<sup>22</sup> The Vietnam Environment Administration is required to set emissions targets<sup>23</sup>. However, there is a lack of clarity on Government policies on specific targets for air quality control. Moreover, Vietnam has no odour regulations against strong smells from landfills, factories, and aquaculture. The significant improvement of air quality during COVID-19, especially during "lock downs", indicates that there are ways to improve air quality.

### Recommendations

- Accelerate the revision of the Law on Environmental Protection, particularly with regard to air pollution;
- Introduce specific policy targets and regulations for air quality control and emissions;
- Increase tax for coal power plants, cement factories, and other major polluters according to the estimated socio-economic and health impacts;
- Introduce clean air as a high-level KPI for energy companies, starting with EVN;
- Invest in filters and other devices that reduce pollution, starting with power stations; and
- Accelerate the development of a non-polluting public transportation sector.

## II. GREEN AND ENERGY-EFFICIENCY BUILDINGS IN A SUSTAINABLE CITY

Relevant authorities: Ministry of Construction (MOC), Ministry of Finance (MOF), Ministry of Industry and Trade (MOIT), Ministry of Natural Resources and Environment (MONRE), Ministry of Planning and Investment (MPI)

19 "Minister Tran Hong Ha: Air pollution resulted from external causes", Government Newspapers, 19 December 2019. Available at: <<http://baochinhphu.vn/Hoat-dong-Bo-nganh/Bo-truong-Tran-Hong-Ha-O-nhiem-khong-khi-do-nguyen-nhan-chu-quan/383018.vgp>>, last accessed on 27 November 2023.

20 World Air Quality Ranking", IQAir. Available at: <[www.iqair.com/world-air-quality-ranking](http://www.iqair.com/world-air-quality-ranking)>, last accessed on 27 November 2023.

21 Decision 985a/QĐ-TTg dated 16 September 2022 by the Prime Minister on the national aquaculture development program for the period of 2021-2030 (Decision 985a).

22 Health ministry issues first public advisory on air pollution", VnExpress, 16 December 2019. Available at: <<https://e.vnexpress.net/news/news/health-ministry-issues-first-public-advisory-on-air-pollution-4028017.html>>, last accessed on 26 November 2023.

23 "Vietnam sets 2020 emissions targets as nation chokes on smog", VnExpress, 23 September 2016. Available at: <<https://e.vnexpress.net/news/news/vietnam-sets-2020-emissions-targets-as-nation-chokes-on-smog-3472995.html>>, last accessed on 26 November 2023.

## Issue description

In recent years, urbanisation in Vietnam has accelerated and its population continues to grow. Urban development has become a key factor in the socio-economic development of Vietnam, with over 70 per cent of the nation's GDP coming from cities and metropolitan areas<sup>24</sup>. In 2022, Deputy Prime Minister Le Van Thanh has signed Resolution 148<sup>25</sup>, setting the target of raising the urbanisation rate to over 50 per cent and the number of urban areas nationwide to about 1,000-1,200 by 2030. By 2045, Vietnam aims to have at least five international urban areas connected with regional and global networks. According to this action program, the urban economy is expected to contribute some 75 per cent of the national GDP by 2025 and about 85 per cent by 2030. The Ministry of Construction has also set a target of raising the urbanisation ratio of the country to 53.9 per cent in 2023<sup>26</sup>.

As a driver of environmental degradation and climate change, urbanisation in Vietnam for residential dwellings and industrial expansion focuses on flatland, coastal, and flood-prone areas. Cities play a significant role in climate change as urban activities are significant contributors to greenhouse gas emissions. According to estimates, cities produce 75 percent of the world's CO2 emissions, with transportation and construction making up two of the biggest sources<sup>27</sup>.

The construction industry is predicted to gain more focus and investment, in light of the increasing demand for buildings in Vietnam. However, this industry is unarguably one of the main contributors to global warming and the largest polluter affecting the environment. According to the Ministry of Construction, Vietnam's housing demand will increase by 70 million square meters each year, equivalent to 17,500 buildings with 30 floors by 2030<sup>28</sup>. As part of efforts to decrease greenhouse gas emissions, the country has issued a range of policies and programmes, including the National Determined Contribution (NDC) where Vietnam has committed to reducing greenhouse gas emissions by 9 per cent by 2030.

Promoting green, energy efficient buildings is essential. Investors, project owners, and enterprises must also take responsibility for investing in, constructing, managing, and operating projects according to standards on energy-efficient and green buildings and urban areas. The ultimate aim should be to increase quality and convenience, ensure user health and energy efficiency, and protect the environment. We welcome the development of smart cities, as this shows that the country is moving toward green growth and sustainable development. However, by September 2023, Vietnam has just over 300 green building projects, LEED certified, but no construction projects designed, built, managed and operated that meet the criteria of net-zero emission<sup>29</sup>. This is a small amount to pursue the ambitious targets of the NDC. Vietnam should aim much higher, while making sure it is on target even for that level. There are, however, challenges that Vietnam needs to address to make buildings greener and cities more sustainable.

### 1. Green Building's Legal Framework

Compared to the current growth rate of the construction sector, the number of recognised green buildings in Vietnam is modest compared to other countries in the region. Besides, the legal policy is also a significant barrier that deters many businesses from setting up green buildings. The draft law submitted by the Institute of Architecture of the Ministry of Construction, to approve the "Development of green and energy-efficient buildings to 2030", includes a policy that all new construction or renovation projects must meet the National Technical Regulations on Energy Efficient Buildings. This includes apartment buildings, offices of other agencies and public buildings invested in and operated by the State budget with a gross floor area greater than 2,500 sqm.

24 Vietnam Country Report 2023, United Nations Human Settlements Programme (UN-Habitat), 2023. Available at: <[https://unhabitat.org/sites/default/files/2023/06/7\\_vietnam\\_country\\_report\\_2023\\_final.pdf](https://unhabitat.org/sites/default/files/2023/06/7_vietnam_country_report_2023_final.pdf)>, last accessed on 28 November 2023.

25 Resolution 148/NQ-CP dated 11 November 2022 on the issuance of the action programme that was devised to implement the Politburo's Resolution No. 06-NQ/TW dated 24 January 2022, which covers urban planning, construction, management and development by 2030 with a vision towards 2045 (Resolution 148).

26 "Urbanisation ratio expected to reach 53.9% in 2023", Vietnamplus, 25 January 2023. Available at: <<https://en.vietnamplus.vn/urbanisation-ratio-expected-to-reach-539-in-2023/247084.vnp>>, last accessed on 27 November 2023.

27 "Cities and climate change", UN Environment Programme. Available at: <<https://www.unep.org/explore-topics/resource-efficiency/what-we-do/cities/cities-and-climate-change#:~:text=At%20the%20same%20time%2C%20cities,being%20among%20the%20largest%20contributors.>>>, last accessed on 27 November 2023.

28 "Increased housing demand, apartment complex price cannot be reduced", Government News, 6 February 2023. Available at: <<https://baochinhphu.vn/nhu-cau-ve-nha-o-tang-gia-chung-cu-tai-cac-do-thi-lon-kho-ha-nhiet-102230206093134945.htm>>, last accessed on 27 November 2023.

29 Nhi Anh, "Vietnam only has 300 green building projects", *VNEconomy*, 19 September 2023. Available at: <<https://vneconomy.vn/viet-nam-moi-chi-co-300-cong-trinh-xanh.htm>>, last accessed on 27 November 2023.

This has been rejected due to a lack of provisions on “Green Building” in the subsidiary and ancillary regulations that back up it. To promote the development of green buildings in Vietnam, it is necessary to quickly complete and/or update the legal framework and raise awareness of relevant stakeholders, mainly Government agencies, as the current legal system in Vietnam is almost devoid of incentives for developers.

## 2. Passive Design and Building Certification

Construction and buildings are the main users of electricity, accounting for up to 40 per cent of national consumption. As such, buildings in Vietnam need to become more energy-efficient. This would increase construction costs by only around 3 per cent. However, it would also help reduce operational costs by up to 36 per cent. Integrating energy-efficient devices, ideally during construction, will complete the transition and have a durable impact on the sustainability of the city where it is implemented. In this process, architects ensure that it can be applied from the design phase, with passive design and environmentally-friendly materials, to energy-efficient devices during construction. This process also applies to urban master planning. We encourage all buildings to achieve the minimum standards of the Vietnam Energy Efficiency Building Code (or a simplified version) in order to receive the Building Licence at the Basic Design Stage. Furthermore, EVN could impose a tariff scheme that rewards low-energy-consumption buildings with lower prices and imposes higher prices on high-consumption buildings.

We recommend that the Government provide effective encouragement. This could include a commitment that at least 75 per cent of existing Governmental buildings will be Green Building certified up to 2030, rising to all new buildings from 2024 onwards. Many certification options are available in the market.<sup>30</sup> We support a move to recognise multiple systems in Vietnam, letting the market determine which are practical. These could be licensed for operation based on a set of simple criteria such as transparency, reliability, and coherence according to recognised norms. However, a clear urban planning showcase should be produced, including not just green buildings but also water, waste, traffic and environmental livelihood improvement solutions. What the public and local government can do at an individual building level should be integrated into a holistic urban vision. Linking all of it together in a smarter and more liveable environment helps reduce temperatures and absorb emissions. This macro-level programme of incentives and policies could support Vietnam in developing smart and sustainable cities. The Vietnam Energy Efficiency Building Code (VEEBC), amended and published in 2017, provides a basis to resolve difficulties in localities in applying standards. MOC has organised several training sessions for officials at Departments of Construction to improve their capacity. However, the code could be more widely shared and applied. Due to a lack of enforcement of regulations, global corporate guidelines seem to be the only drivers as there is no need to reduce operating expenses due to low energy prices. Green buildings investments remain far too low to address current environmental concerns.

Policies encouraging the development of energy-efficient and green buildings should be developed and include construction with public investment. They should promote the application of planning, architectural, material, technical, and project management solutions to use energy economically and efficiently. A comprehensive life-cycle approach should be applied, while green labels and Environmental Product Declarations (EPDs) should be further promoted.

### Potential gains/concerns for Vietnam

The absence of proper policy backing, a dearth of green building expertise, and higher initial investment are the main barriers to the adoption of green buildings in Vietnam. According to the Vietnam Green Buildings Council, misinformation about the cost of developing green buildings has contributed to Vietnam’s earlier adoption of them being delayed.<sup>31</sup>

<sup>30</sup> These include the United States Green Building Council’s Leadership in Energy and Environmental Design (LEED), the International Finance Corporation’s Excellence in Design for Greater Efficiencies (EDGE), and Vietnam Green Building Council’s LOTUS.

<sup>31</sup> Thu Nguyen and Siddharth Bhatla, “Green Buildings in Vietnam: How sustainable are they?”, *Vietnam Briefing*, 28 March 2022. Available at: <[https://www.vietnam-briefing.com/news/green-buildings-in-vietnam-how-sustainable-are-they.html/#:~:text=As%20per%20VGBC%2C%20misinformation%20was,up%20to%20five%20percent%20more](https://www.vietnam-briefing.com/news/green-buildings-in-vietnam-how-sustainable-are-they.html/#:~:text=As%20per%20VGBC%2C%20misinformation%20was,up%20to%20five%20percent%20more;)>, last accessed on 28 November 2023.



**Recommendations:**

- › Integrate “Green Building” wording in subsidiary and ancillary construction laws;
- › Enforce and promote the application of sustainable building materials solutions through the Vietnam Association for Buildings Materials;
- › Apply a comprehensive life-cycle approach;
- › Promote green labels and EPDs;
- › Provide greater transparency on the timing of the introduction of market-based pricing for electricity;
- › Remove subsidies on fossil-fuel-based electricity;
- › Publish a Roadmap to Retail Electricity Tariffs for commercial and industrial power consumers;
- › Make buildings more energy efficient;
- › Make minimal certification a precondition for the licensing of certain types of buildings regardless of their use and incentivise higher levels of certification; and
- › Prepare a clear urban planning showcase, including not just green buildings but also water, waste, traffic, and environmental livelihood improvement solutions.

**3. Circularity in Construction**

One way to limit the use-dispose linear approach is to replace it with a reduce-reuse-recycle circular approach. The building’s design, operation and deconstruction maximize value over time using:

- Durable products and services made of secondary, non-toxic, sustainably sourced, or renewable, reusable, or recyclable material;
- Space efficiency over time through shared occupancy, flexibility and adaptability;
- Materials with longevity, resilience, durability, easy maintenance and reparability; and
- Disassembly, reuse or recycling of embedded material, components and systems.

**Recommendations**

- › Create regulations to remove barriers and facilitate market entry of secondary building materials from demolition/deconstruction;
- › Provide incentives to promote materials and building recovery and reuse, including using financial mechanisms, e.g., planning fee rebates, and reduction in development cost charges where reuse thresholds are met; and
- › Create a Circular Economy Roadmap for Buildings that outlines the tools needed to deliver these policies, including the development of local supply chains with material reclamation facilities, databases, and capacity building across the value chain.

### III. EXTENDED PRODUCER RESPONSIBILITY

(The text below reflects the collective comments from four EuroCham Sector Committees, including Green Growth, Nutritional Foods Group, Mobility and Wine & Spirits).

Relevant authorities: Ministry of Natural Resources and Environment (MONRE), EPR Council, EPR Office, Vietnam Environment Protection Fund (VEPF)

#### Issue description

EuroCham always supports and highly appreciates the Government and the Ministry of Natural Resources and Environment's efforts to protect the environment, promote recycling of products and packaging towards green growth and the development of circular economy in Vietnam. We highly appreciate relevant authorities' endless efforts in developing and defining legal frameworks as foundation for enterprises to fulfill Extended Producer Responsibilities (EPR) for products and packaging. To ensure manufacturers and importers to effectively implement the EPR as regulated in the Decree 08<sup>32</sup>, we, EuroCham Sector Committees, including Green Growth, Nutritional Foods Group, Mobility and Wine & Spirits would like to give some proposals contributing to the implementation of EPR effectively and sustainably, while harmonizing the goals of environmental protection and business development.

#### Potential gains/concerns for Vietnam

##### The proposed Fs<sup>33</sup> rate

The current proposed Fs is still high compared to the actual recycling situation in Vietnam, and haven't followed the circular economy principles by not deducting recoverable materials value, which in turn shall lead to increased product costs and negatively impact consumers. While we understand that MONRE had used several studies when drafting Fs, we urge that the ministry continue to engage and consult with impacted stakeholders to have concrete empirical evidence, transparent benchmarks and understand more deeply the practical conditions in Vietnam. We also support conducting studies on countries with similar socio-economic conditions as Vietnam to have a more accurate and comprehensive view.

*Regarding materials that have higher recoverable value than the recycling fee, recyclers are, at the moment, having big profits such as aluminum, iron, cardboard packaging.*

The formula for calculating Fs does not follow circular economy principles because it has not deducted the value of recovered materials. In the proposed recycling rates, the Ministry of Natural Resources and Environment has introduced rates for materials with high recovery value such as iron, aluminum and cardboard, which has recognized the principle of circular economy but has not yet fully receptive.

In fact, iron, aluminum and cardboard recyclers are all making big profits. The cost of recycling iron as calculated by the Ministry of Natural Resources and Environment is VND 9,000/kg, the current steel price on the market is about VND 13,000-14,000/kg<sup>34</sup>, but iron packaging rate is 0.4 and manufacturers must contribute an additional VND 3,672/kg. Aluminum has a recycling cost of VND 12,000/kg, the current market price of aluminum is about VND 57,000/kg<sup>35</sup>, but aluminum packaging still has 0.2 rate and the manufacturer must contribute an additional VND 2,448/kg. Cardboard has a recycling cost of VND 9,500/kg, the current market price of pulp on the market is about VND 13,680/kg<sup>36</sup>, but paper packaging still has 0.2 rate and the manufacturer must contribute an additional VND 1,938/kg. These contributions to support recyclers increasing profits are not consistent with the circular economy.

32 Decree 08/2022/ND-CP dated 10 January 2022 of the Government elaboration of several articles of the Law on Environmental Protection (Decree 08).

33 EPR fees are determined by multiplying volume of plastic waste (V), compulsory recycling rate (R), and reasonable recycling cost for a unit volume of packaging (Fs)

34 "Steel price today October 10: Increase 3 Yuan/ton on the trading floor", Kinh te Do thi, 10 October 2023. Available at: <<https://kinhthedoithi.vn/gia-thep-hom-nay-10-10-tang-3-nhan-dan-te-tan-tren-san-giao-dich.html>>, last accessed on 23 December 2023.

35 "Aluminum price today", Thi trung Hang hoa. Available at: <<https://www.thitruonghanghoa.com/gia-hang-hoa/gia-nhom-the-gioi?period=3m&notation=3&compare=2023>>, last accessed on 23 December 2023.

36 Monthly Newsletter June 2023, VPPA. Available at: <[http://rippi.com.vn/files/assets/TapchiBantin/bantinhang\\_so\\_6-2023.pdf](http://rippi.com.vn/files/assets/TapchiBantin/bantinhang_so_6-2023.pdf)>, last accessed on 23 December 2023.

Therefore, with aluminum, iron, and cardboard packaging, because the value of recovered materials is higher than the cost of recycling, the Fs rates should be recalculated according to circular economy principles. We recommend that the rate be set at 0.1 to support collection in remote areas, not to support recyclers that are making large profits.

#### *Regarding glass packaging*

One notable point is recycling glass packaging. This would require the existing infrastructure for glass packaging collection and recycling in Vietnam as well as the specific characteristics of glass packaging. Without first conducting a thorough impact assessment along the supply chain and considering the state of Vietnam's glass packaging collection and recycling ecosystem, the EPR framework will become overly difficult for producers and importers to implement. Consequently, it would have a minimal impact on reducing landfill waste while imposing sharp and significant costs to producers and importers. To address this, the industry is conducting in-depth studies on glass recycling in Vietnam and stands ready to share the findings with MONRE in its development of the EPR framework.

#### *Regarding battery electric vehicles (BEV)*

Furthermore, the current Fs rate for the batteries in Battery Electric Vehicles (BEV) is still high. Promoting E-vehicles is one of the main objectives until 2030, as stated in Decision No.876<sup>37</sup> of the Prime Minister, thus putting high cost shall negatively affect the market for electric vehicles and defer Vietnam's green transition in transportation. With the same rationale, the timeline to implement recycling and the Fs rate for the batteries in BEV should be similar to vehicles and motorcycles (1 January 2027) so producers and importers have enough time to make appropriate preparations.

### **Timeline**

*Article 77 of Decree 08 stipulates: "Manufacturers and importers shall be responsible for recycling packaging and battery products; lubricants; tires and tubes: from 1 January 2024", after that the EPR office has instructions "Before 31 March 2024, manufacturers and importers shall declare the contribution amount for 2024 calculated by total actual product, packaging which were marketed and imported in 2023."*

In practices, considering the tough economic times, paying an advance contribution (estimated at many trillions) to the Environmental Protection Fund from the beginning of 2024<sup>38</sup> while this money will be in the fund until the end of 2025 before being actually disbursed shall cause huge burdens to businesses.

In legal terms, we believe that the guidance from the EPR office is not in line with Decree 08, as products manufactured or imported in 2023 are not obligated to fulfill recycling responsibilities yet. If considered as an advance submission, it is also not reasonable, as the Law on Environmental Protection and Decree 08 do not have any provisions regarding the declaration and advance submission for the volume to be produced and traded in the same year.

Therefore, we propose that businesses should start to submit the contribution by 2025 based on the actual import and production finalisation of 2024 to facilitate businesses to overcome difficulties, (similar to the method of submitting corporate income tax), in line with Decree 08 regulations.

### **Incentives to eco-friendly or recycled packaging**

The existing legal framework in Vietnam focuses on legalize responsibilities of recycling only while there haven't been clear mechanism to encourage the usage of recycled materials. Once EPR takes effect, the local recycling sector will experience rapid growth, leading to the introduction of a substantial quantity of recycled materials into the market. However, currently, no regulations have been established to incentivize the adoption of recycled materials in product and packaging. One of the two important elements of EPR policy is an incentives mechanism

<sup>37</sup> Decision 876/QĐ-TTg dated 22 July 2022 of the Prime Minister on Approving the action program for transition to green energy and mitigation of carbon dioxide and methane emissions from transportation.

<sup>38</sup> According to the regulations of the Ministry of Natural Resources: before 30 September 2024, promulgate support criteria; by 30 December 2024 to review the level of support; Disbursement according to the actual annual recycling volume, ie until the end of 2025, will be disbursed, while the money to support enterprises has started to close from April 2024.

for manufacturers who have considered environmental protection factors in product design. This view is recommended by the OECD, widely recognized and applied in the implementation of EPR policy in the world.

The current framework may lead to a fact that the recycling industry will focus mostly on the stages of collecting and recycling only, without paying adequate attention to the stages of developing the output market for recycled materials, developing technology and solutions to use more of recycled content to bring them back to the cycle of manufacturing and consumption.

### **EuroCham involvement in the EPR progression**

We appreciate that the National EPR Council has representatives from the government authorities, environment protection organization and business community<sup>39</sup>. However, foreign enterprises are not involved as such, despite of the fact that imported goods will also be impacted. Looking at the model of Taiwan, which shares the same mechanism, we observe that their Recycling Management Committee, the counterpart of Vietnam's National EPR Council, consists of government departments, NGOs, responsible industries and experts. We strongly recommend this model to get more insights from the impacted industries and stakeholders for a more comprehensive EPR framework.

EuroCham stays committed to supporting Vietnam in sustainability effort in general, and to support MONRE in the EPR development progression in particular. We hope to be involved in any further process of implementing EPR and/or revising the Law on Environment by providing our European insight and expertise.

### **Vietnam Environment Protection Fund (VEPF)**

We appreciate that MONRE is preparing a Circular on the activities of VEPF, and believe that this shall be an important document in the implementation stage. We urge for greater clarity in the usage of the VEPF: the distribution of funds to recycling facilities, capacity building, technology investment or other supporting activities, should be publicized fully and regularly on EPR Portal for increased transparency to all parties. An independent auditing agency is also recommended to increase transparency – we recommend MONRE to have a clear set of criteria to choose a suitable auditor, and the auditing results should be shared with the public. We understand that companies need governmental support in recycling, thus the fund should follow a cost-covering principle.

### **Recommendations for effective implementation of EPR**

#### *For automotive industry*

For the automotive industry to be officially designated as a recognised solid waste collector and recycler, suitable waste collectors and recyclers need to be recognised based on the size of the ageing vehicle fleet countrywide.

The current recycling approach for intricate items like automobiles and motorcycles, which relies on the proportion of “reusable parts or usable scrap as production materials of industries” divided by material types, is inefficient and costly to manage.

Details about the efficient execution of the waste disposal credit mechanism and potential penalties for non-compliance are still pending discussions with automotive companies. Vietnam's authorities have yet to establish a framework that obliges all stakeholders in the circular economy to undertake the collection and recycling of discarded product. This includes purposes, objectives, roadmaps, legal frameworks, constituent elements and stakeholders. Drawing from European experiences, such initiatives can take some time.

Vehicle ownership in Vietnam fluctuates over time, with only commercial vehicles having a defined end-of-life. Financing the recycling or disposal through financial contribution, whether targeting producers, retailers, or customers, is challenging due to the evolving ownership of vehicles.

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<sup>39</sup> The National EPR Council was established according to the Decision 252/QĐ-BTNMT.

## Recommendations

- Fs rate should be re-calculated to better reflect the practical recycling situations in Vietnam, and haven't followed the circular economy principles by not deducting recoverable materials value, especially materials which has higher value of recovered materials than the cost of recycling, such as aluminum, iron, and cardboard packaging, because We recommend conducting a new study with clear criteria and/or consult more studies to have a comprehensive view.
- EPR framework should be implemented in phases, beginning with a transitional period of at least 2 years from 2024. Under this trial period, enterprises should not be subjected to administrative penalties if they fail to meet their required recycling rate. Focusing on trial implementation without any penalties to strengthen the legislative framework and effective guidelines for businesses.
- Fs rate and implementation time for batteries in BEV should be similar to that of vehicles and motorcycle.
- For automotive industry, we suggest collaborate with the auto industry to build an apt ecosystem. 2030 is a feasible year to apply recycling norms for automotive and motorcycle-related discarded products, inclusive of an enforcement mechanism for compliant companies and penalties for breaches. Drawing inspiration from Europe, the regulation should pivot on the ratio between the total material volume and reusable value after product disposal compared to the product's original volume. In addition, preliminary dialogues with automotive assemblers and importers about vehicles' battery recycling and management guidelines for seamless implementation should be engaged.
- Have preferential policies in recycling contributions for packaging and products using recycled materials to create output for recycled materials, specifically for the part using recycled materials calculated with a coefficient of 0 for Fs.
- The distribution of VEPF should be publicized for transparency.

## ACKNOWLEDGEMENTS

EuroCham Green Growth Sector Committee

For Extended Producer Responsibility section:

- Green Growth Sector Committee,
- Nutritional Foods Group,
- Mobility Sector Committee, and
- Wine & Spirits Sector Committee