CHAPTER 2 GREEN GROWTH

OVERVIEW

EuroCham established a Green Growth Sector Committee (GGSC) in May 2014 to help develop the essential 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, donors and multilaterals. This chapter focuses on two main topics which GGSC believes should be prioritised by the Government: firstly, the circular economy, including air quality management, water and waste management; and secondly, sustainable buildings and energy efficiency. 1

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), Vietnam Environment Administration (VEA),

In this year's report, GGSC emphasises the "Circular Economy" as the new reference model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products for as long as possible. This is a more sustainable model of growth that implies reducing waste to a minimum and using discarded materials productively again and again in a different form, reducing the need for new raw materials and taking most waste and pollution out of production methods.

We recommend that Vietnam formulates a sound basis to enable the adoption of this growth model in the future, which has already been applied in the EU for several years. Moving towards the Circular Economy will deliver benefits such as reducing pressure on the environment, improving the supply security of raw materials, increasing competitiveness, stimulating innovation, boosting economic growth and creating jobs.

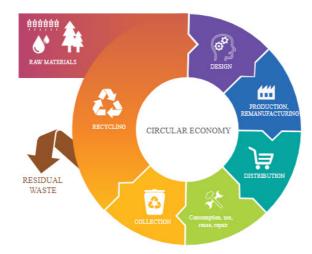


Figure 4: Circular Economy

Source: European Parliament²

Please note that GGSC's comprehensive position on energy is covered in the Energy and Electricity chapter of the Whitebook.

European Parliament. Available at: , last accessed on 8 December 2019.

To ensure the Circular Economy can be widely applied, the Government must take charge of coordination and encourage the support of the private sector. The Government and relevant Ministries are revising the Law on Environmental Protection 2014 and other relevant legislative documents. It is highly recommended that these reflect the shift towards a Circular Economy in the upcoming legislative changes. A good example could be the textile sector where the Circular Economy could be implemented in the whole life-cycle of textile producers. It is not excluded that the EU in the upcoming action plan will likely focus on textiles.

1. Waste management

Issue description

Vietnam's Law on Environmental Protection operates under the principles of minimisation, re-use, collection and treatment meeting environmental technical regulations.³ However, most waste is still dumped into landfills without further processing, including 89 per cent of all solid waste in Hanoi and 70 per cent in Ho Chi Minh City.^{4 5}

Unsanitary waste disposal not only causes environmental hazards and infuriates local residents, but also wastes valuable materials that could be recycled or at least used for power generation; a less desirable but effective remedy to landfills.

In our previous reports, we recommended that authorities set and implement clear collection goals and raise public awareness about waste management. In this respect, we welcome Decision 491⁶ of the Government setting clear targets for the management of waste up to 2025 with a vision to 2050, including collection and recycling quotas as well as awareness-building activities. We also note Decision 849⁷ of the Ministry of Natural Resources and Environment setting action plans and timelines to ensure the integrated and unified State management of solid waste from central to local levels.

It would be appreciated if the plan and its implementation process strongly engage the private sector. Multinational corporations are setting their own recycling and renewable energy goals and stand ready to support Vietnam to achieve these goals, but a supportive regulatory framework is required for them to do so.

Potential gains/concerns for Vietnam

The goals set in Decision 491 and action plans in Decision 849 are ambitious, and we hope that all Ministries and authorities involved will cooperate in implementing a regulatory framework that will incentivise the public and private sectors to help achieve these goals.

Regarding the legal framework, many of these goals require that existing laws be complied with. Therefore, lawmakers and regulators need to identify the reasons why compliance with the existing laws is currently lacking and find effective solutions. Besides, regulations need to define more clearly and separately solid waste from ordinary waste.⁸

With the rapid urbanisation process, Vietnamese households – particularly in the big cities – are discharging increasing amounts of waste into the environment. The most basic components of solid waste are organic and inorganic waste. 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, spoiled fruits, spent grain, bran, manure, and dead bodies of animals.

Encouraging, rewarding and incentivising the activity of conducting business in the waste treatment sector that

- 3 Law on Environmental Protection 2014 and guiding documents.
- 4 "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 2019.
- 5 "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 2019.
- 6 Decision 491/QD-TTg dated 7 May 2018 of the Prime Minister adjusting national strategy for general management of solid waste to 2025 with vision towards 2050.
- 7 Decision 849/QD-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.
- 8 "Lack of regulations on plastic waste classification", *Ministry of Natural Resource and Environment*, 23 October 2019. Available at: http://www.monre.gov.vn/Pages/thieu-quy-dinh-ve-phan-loai-rac-nhua.aspx, last accessed on 8 December 2019.

are in compliance with the relevant laws would help encourage more positive actions. Bad 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 and environment must be held accountable. A compliant waste management industry will not develop if non-compliant businesses are allowed to compete unfairly (and possibly dominate) the market.

Recommendations:

- > We appreciate that the Government has consistently strictly handled violations of environmental laws and regulations, and we recommend to continue applying strict enforcement of waste regulations and fair prosecution for non-compliance with them;
- **>** Effectively implement Decision 491 and Decision 849 by:
 - · Completing the legal framework on waste management, especially waste classification, and legalising the secondary material marketplace; it is essential that all dangerous and harmful waste be destroyed with no spillage in the environment and no contamination with other waste.
 - · Continue providing a conducive business environment for compliant waste management businesses;
 - Increasing public awareness on solid waste management especially segregated discarding of materials at household/company level, as it is done in the EU - and promoting reduce - reuse - recycle.
- > Engage the private sector in revising the legal framework and implementing a plan to combat plastic waste.

2. Addressing plastic pollution

Issue description

Plastic pollution has remained a major issue over the past few years and unfortunately Vietnam is the fourthlargest contributor to marine plastic pollution globally.9 Only 27 per cent of plastic in Vietnam is recycled while the amount of plastic waste is increasing by up to 200 per cent per year.¹⁰ The situation poses serious impacts not only to marine life but also to economic development, the livelihoods of coastal residents, and potentially to food security. This is further complicated by containers of waste to be recycled being received by Vietnam and its neighbouring countries.

Recycling alone is not a complete solution, as about 80 per cent of plastics dumped are too low value. Furthermore, the majority of plastics used in Vietnam are made of non-compostable materials, and under the sun's ultraviolet light and weathering agents like current or wind, they are broken into smaller and smaller fragments over time. Plastic fragments smaller than 5mm, known as micro-plastics, can be ingested by wildlife and create many problems in the ecosystem and threats to human health.¹¹ Thus, reducing the production and use of single-use plastic items like food packaging, bags, bottles or drinking straws or recycling those that have economic value (made of PET and HDPE) is key. Additionally, it would be also useful to promote and have supporting policies for the use of innovative materials and technologies i.e. compostable plastics and innovative compostable packaging materials.

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 and wood or clothes, electrical and electronics material.

Potential gains/concerns for Vietnam

Decision 491 provides that, by 2025, "100 per cent environmentally-friendly plastic bags [be] used in trade centres, supermarkets for the purpose of replacing persistent plastic bags to serve daily-life activities". Vietnam's National

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.

^{10 &}quot;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 2019.

¹¹ Ibid. p.14

Action Plan on Ocean Plastic Waste Management by 2030¹² (Decision 1746) aims to reduce plastic waste discharged into the sea and ocean by 75 per cent, totally end the usage of disposable plastic products in coastal tourist attractions and resorts as well as the disposal of fishing gear into the sea by 2030. These are all laudable goals but the issue is their implementation in practice.

In addition, regulations and subsequent implementing guidelines should be expanded to include single-use plastic straws, cups, packaging, utensils, bottles, and other non-compostable plastic products. In this regard, we welcome Decision 1746 which has expanded the context in previous legislative documents from "plastic bags" to "plastic waste", "single-use plastic item" and "persistent plastics". We look forward to other regulations being revised in this direction.

From international experience, the EU and many of its Member States have successfully introduced a ban on non-compostable polythene products, and this measure should be seriously considered in Vietnam. In addition to previous efforts, the European Parliament in March 2019 approved a ban on single-use plastic items by 2021 which covers up to 70 per cent of all marine litter items. Experience in developed countries indicates that the entire ban of these products, supported by widespread behaviour-change of the general public, will contribute significantly to tackling plastic pollution. Vietnam has now developed to a level that can enable the ban of noncompostable polythene bags. We recommend consulting the case of Rwanda, where non-compostable plastic bags were banned in 2008, which shows that this is achievable in developing countries.¹³

The European business community in Vietnam has taken various steps to tackle Vietnam's plastic problem, such as:

- > In 2017, EuroCham launched its own Sustainability Initiative, including eliminating single-use plastic bottles and plastic straws in offices, which is now supported by EuroCham member companies and the secretariat;
- In recent years, an increased number of EuroCham members are reducing, reusing and recycling noncompostable plastic and replacing these with recycled materials in their manufacturing, packaging and good distribution, daily operation and even road construction.
- > EuroCham members also led and actively participated in international and domestic initiatives to reduce plastic pollution, such as the Alliance to End Plastic Waste (AEPW) and Packaging Recycling Organization Vietnam (PRO Vietnam), both launched in 2019.
- > We also support the EU program of "Rethinking Plastics Circular Economy Solutions to Marine Litter" operating in Vietnam from May 2019 to April 2022, which aims at a significant reduction of marine litter, a smooth transition towards sustainable production and consumption of plastic in Vietnam and strengthening EU cooperation with Vietnam in circular economy areas.

Recommendations:

We appreciate that MONRE, in coordination with other Government bodies, has continued to implement legislation to address these plastic waste issues. However, we believe that more comprehensive actions could be taken:

- > Implement the existing regulations as promulgated and ensure strict enforcement of punishments on cases infringing waste regulations;
- Promote legislation that would incentivise Vietnam to comply with EU regulations on Waste, Electrical and Electronic Equipment (WEEE), Restriction of Hazardous Substances (ROHS) and Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as a way of ensuring that the products originating from Vietnam can enter global supply chains and can actually support the uptake of the Circular Economy globally;
- Stringent regulations are required to meet Vietnam's target of a complete ban on single-use non-compostable polythene products by 2025. As a gradual approach to that ban, we suggest Vietnam completes policies and mechanisms to limit the production and use of non-compostable plastic items and develops the production of compostable plastic. This can be implemented with increased taxes for environmental protection in the

¹² Decision 1746/QD-TTg dated 4 December 2019 of the Prime Minister approving National Action Plan on Ocean Plastic Waste Management by 2030.

¹³ E. Clavel, "Think you can't live without plastic bags? Consider this: Rwanda did it", The Guardian, 15 February 2014. Available at: https://www. theguardian.com/commentisfree/2014/feb/15/rwanda-banned-plastic-bags-so-can-we>, last accessed on 20 December 2019.

use of plastic bags and the promotion of outreach programs to raise public awareness. Currently, the tax rate for plastic bags is promulgated under Law 57/2010/QH12 of the National Assembly dated 15 November 2010 on Environmental Protection Tax. To create the basis for increasing the tax rate for using plastic bags in order to limit their use, we recommend the Government and relevant Ministries study and submit a proposal to the National Assembly. Pilot models can be used before these are applied on a national scale. The next step of this policy will be a complete ban on these products. Vietnam does have a tax on plastic bags, but it is not very successful.¹⁴ In our view, the fundamental issue is that the country's tax collection system is inefficient.

- > Domestic waste at the household level should be classified to enable cost-effective treatment, accompanied by comprehensive policies that favour private investment. If wastes are separated into two groups i.e. organic and inorganic, or three groups i.e. organic, plastics and glass/metal at the household level, it will enable much better cost-effective treatment of domestic waste and allow for the involvement of private investment into this sector. In the EU, electronics, paper, used oil and clothes are other "differentiated" collection categories. The classification of domestic waste can be applied on a pilot project in one or two big cities before being multiplied on a national scale. This work, in fact, has long been undertaken in Europe and many countries in the EU can share their experience in this field.
- > Besides single-use plastic bags, other products, such as straws, cups, and packaging are that are currently made with non-compostable plastic, should be made to switch to fully compostable;
- > Cooperation opportunities should be enhanced with the private sector and international organisations who are actively addressing plastic pollution.

3. Wastewater treatment solutions

Water quality, especially in urban areas, has deteriorated to the point where it is threatening the health and livelihoods of the population.¹⁵

I. Wastewater regulations

Issue description

Vietnam has 49 wastewater treatment plants mostly in class-3-and-above cities, with a total designated capacity of 1,183,380 cubic meters of wastewater per day. However, only 13 per cent of urban wastewater is treated while most untreated wastewater is dumped into the environment.¹⁶ Regarding industrial wastewater in particular, MONRE reports that 88.3 per cent of industrial zones operating in Vietnam have centralised wastewater treatment systems but the capacity of using those systems was limited at 48 per cent.¹⁷ The lack of coordinated supervision of wastewater treatment can cause massive environmental and socio-economic disasters affecting the livelihoods of millions of people.

Chapter 19 of Vietnam's new Criminal Code¹⁸ does include sanctions for wastewater offences that could lead to the permanent closure of a business in serious cases. However, the legal sanctions cannot be an effective deterrent if they are not enforced in practice or if the fines are too low compared to the cost of implementing effective wastewater treatment measures.

We welcome the issuance of Decree 53/2020/ND-CP dated 5 May 2020 of the Government on environmental protection fee for wastewater, which replaces Decree 154/2016/ND-CP and strengthens wastewater regulations. We look forward to seeing the effective implementation of Decree 53/2020/ND-CP from 1 July 2020.

^{14 &}quot;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.99>, last accessed on 8 December 2019.

^{15 &}quot;Recycle wastewater to reduce water pollution", Vietnam Clean Energy Association, 18 October 2019. Available at: http://nangluongsachvietnam.vn/ d6/vi-VN/news/Tai-su-dung-nuoc-thai-de-giam-o-nhiem-nguon-nuoc-6-1953-4874>, last accessed on 8 December 2019.

^{16 &}quot;Rate of collecting and treating urban wastewater in Vietnam only reaches 13%", Natural Resources and Environment, 6 October 2019. Available at: https://baotainguyenmoitruong.vn/ty-le-thu-gom-xu-ly-nuoc-thai-do-thi-o-viet-nam-chi-dat-khoang-13-293930.html, last accessed on 8 December 2019.

^{17 &}quot;Low efficiency of centralised wastewater treatment systems at industrial zones", Industry and Trade Newspapers, 29 December 2019. Available at: https://congthuong.vn/hieu-suat-su-dung-he-thong-xu-ly-nuoc-thai-tap-trung-tai-cac-khu-cong-nghiep-dat-thap-130777.html, last accessed on 29 December 2019.

¹⁸ Criminal Code 12/2017/QH14 of National Assembly amending, supplementing a number of provisions of Criminal Code 100/2015/QH13.

Recommendations

- > Apply serious sanctions to industrial parks that dump untreated wastewater into the environment to deter others:
- Develop standard guidelines and procedures on re-using treated water for irrigation and other industrial needs: and
- Encourage the re-use wastewater by providing legal frameworks, guidelines and standards to support those entities that have A+ treated water to share quality water for other uses like irrigation and industrial production.

II. Engaging the private sector to ensure water security

Vietnam's fast economic growth has placed unrelenting pressures on water resources, which in turn lead to economic stresses. The World Bank reported in 2019 an emerging mismatch between supply and demand in certain locations and seasons, as well as competition between needs that require greater scrutiny of water resource management and allocation. Investments in the water sector are largely contributed by the public sector. However, there is a shortfall in water sector investment and financing.¹⁹ Meanwhile, the Ministry of Construction (MOC) estimated that Vietnam will require investment of over US\$10 billion for water supply and drainage by 2020.²⁰ These targets will be difficult to reach this year without accelerating investment from the private sector.

On the other hand, Vietnam could generate far greater economic benefits from a sustainable water industry than at present. Donors and multilaterals have been willing to support Vietnam in terms of financing, technical support and capacity building. However, these measures are no longer sustainable or sufficient.

Clean water and wastewater treatment prices are too low for private investors to invest in financially viable businesses. Vietnam's wastewater prices are calculated based on percentages of the clean water supply price, despite the fact that wastewater treatment costs are higher than the costs for clean water supply.

The Government has laid out a schedule to privatise Hanoi Water Corporation (Hawaco), Saigon Water Corporation (Sawaco) and 51 other water utilities by 2020.²¹ Besides the need to improve the pricing mechanism, decisionmaking processes and other technical factors with respect to the equitisation process of State-Owned Enterprises (SOEs), no significant private investment will flow into these companies if the underlying business conditions are not financially viable and economically sustainable.

Recommendations:

- **)** Move toward a demand-driven pricing model for wastewater treatment;
- Coordinate the implementation of wastewater treatment and environmental protection fee regulations to remove uncertainties; and
- **>** Provide sustainable conditions to call in investment in water SOEs.

4. Air quality management

Issue description

The air quality in Vietnam's major cities, namely Hanoi and Ho Chi Minh City, has relentlessly deteriorated to dangerous levels and become a critical health concern from 2013 to 2019.²² 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.

^{19 &}quot;Vietnam: Toward a Safe, Clean, and Resilient Water System", World Bank Group's Water Global Practice, 2019. Available at: http://documents.worldbank. org/curated/en/589341559130979599/pdf/Vietnam-Toward-a-Safe-Clean-and-Resilient-Water-System.pdf>, last accessed on 29 December 2019.

^{20 &}quot;Over 10 billion USD needed for water supply, treatment projects", VietnamPlus, 7 November 2017. Available at: https://en.vietnamplus.vn/over-10- billion-usd-needed-for-water-supply-treatment-projects/120753.vnp>, last accessed on 8 December 2019.

²¹ Annex II, Decision 58/2016/QD-TTq dated 28 December 2016 of the Prime Minister providing criteria for classification of wholly State-owned enterprises partially State-owned enterprises and list of State-owned enterprises undergoing restructuring in 2016-2020.

^{22 &}quot;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 19 December 2019.

Research from the Vietnam National Economics University reports air pollution has cost the Vietnamese economy US\$10.8-US\$13.6 billion per year since 2012. The number of days where the air quality index reached hazardous levels in 2019 was higher than that of previous years.

Potential gains/concerns for Vietnam

Vietnam is lacking specific regulations for air pollution. We note that the Government, in 2019, launched a national action plan for air quality management by 2020 with a vision to 2025 (Decision 985a). In December 2019, the Ministry of Health issued a 14-step guideline to help deal with air pollution, the first-ever public advisory on air pollution.²³

The Vietnam Environment Administration (VEA) is reported to set emissions targets.²⁴ However, Vietnam lacks clarity on Government policies on specific targets for air quality management. Moreover, Vietnam has no odour regulations against strong smells from landfills, factories and aquaculture.

Recommendations

- > Accelerate the revision of the Law on Environmental Protection 2014, particularly on air pollution. The private sector is willing to contribute expertise to draft revisions to the existing Law and share international practice from the EU;
- > Introduce specific policy targets and regulations for air quality management and emissions;
- > Consider increasing tax for coal power plants, cement factories and other major polluters according to the estimated socio-economic and health impacts apart from the current prevailing tax and fees; make adequate investment in filters and other devices that reduce pollution starting from power stations; and
- **>** Accelerate the development of a non-polluting public transportation sector.

II. GREEN AND ENERGY-EFFICIENT 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)

Issue description

We welcome Vietnam developing smart cities, as this shows that the country is moving toward green growth and sustainable development.²⁵ Buildings, which account for a majority of every city's carbon emissions, will become increasingly important to economic, social, and environmental development in sustainable cities. Some Green Buildings (GB) have been certified in Vietnam but their development remains modest. More than 100 buildings have certification and the growth rate is low compared to neighbouring countries in ASEAN.²⁶ The National Program on Energy Efficiency targets 150 GB by 2030.²⁷ Considering the rapidly increasing demand on buildings, Vietnam could aim higher than that.

There are, however, challenges that Vietnam needs to address to make buildings greener and cities more sustainable.

ministry-issues-first-public-advisory-on-air-pollution-4028017.html>, last accessed on 16 December 2019.

^{24 &}quot;Vietnam sets 2020 emissions targets as nation chokes on smog", VN Express, 23 September 2016. Available at: http://e.vnexpress.net/ news/news/vietnam-sets-2020-emissions-targets-as-nation-chokes-on-smog-3472995.html>, last accessed on 8 December 2019.

²⁵ Decision 950/QD-TTg dated 1 August 2018 of the Prime Minister approving plan on sustainable development of smart cities during 2018-2025, with a vision toward 2030.

²⁶ Official letter 1455/BXD-HTKT dated 30 March 2020 of the Ministry of Construction to EuroCham.

²⁷ Decision 280/QD-TTg dated 13 March 2019 of the Prime Minister approving the National Energy Efficiency Programme (VNEEP) for the period of 2019-

Sustainable construction materials

Environmentally-friendly construction materials substantially reduce the environmental and energetic impact of building construction and operations. We appreciate that the Government and the Ministry of Construction have introduced measures to reduce the use of clay bricks: Decision 567²⁸ targets 30-40 per cent Non-Fired Brick (NFB) usage by 2020; Decree 24a²⁹ regulates NFB as an environmentally-friendly material to receive investment incentives from the State. The Government has also introduced Decree 139³⁰ which sets the fines for non-compliance at between VND20-30 million. However, we look forward to seeing proper and effective implementation of these regulations, both on a central and local scale.

Energy efficiency in buildings

Construction activities and buildings are the main consumers of electricity, accounting for up to 40 per cent of national electricity consumption.³¹ Buildings in Vietnam need to become more energy efficient. Making buildings more energy efficient only increases construction costs by approximately 3 per cent but will help reduce operational costs by up to 36 per cent.³² Integrating energy-efficient devices, ideally already during construction, will complete the transition and have a durable impact on the sustainability of the city where it is implemented.

The Vietnam Energy Efficiency Building Code (VEEBC), amended and published in 2017 by MOC,³³ is a premise to resolve difficulties in localities in applying the standards. The Ministry of Construction has organised several training sessions for officials at Departments of Construction to improve their capacity. However, the business community notes that the code still needs to be more widely disseminated and applied in practice.

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, the GB investments remain far too low to address the current environmental concerns.

Recommendations:

EuroCham GGSC would like to provide recommendations on the principle of developing policies to encourage the development of energy efficient buildings and green buildings, including construction with public investment; and on promoting the application of planning, architectural, material, technical and project management solutions to use energy economically and efficiently. In detail, our recommendations are:

- > The MOC is drafting a revised Law on Construction 2014. We recommend integrating detailed regulations on NFB and energy efficiency into the revised law. Our members are willing to contribute our international and operational expertise to the drafting process;
- > The application of NFB solutions should be enforced and promoted through the Vietnam Association of Building Materials (VABM);
- > Greater transparency on the timing of the introduction of market-based pricing for electricity and the removal of subsidies would stimulate immediate and widespread investment in energy efficiency measures. The Ministry of Industry and Trade (MOIT) should publish a Roadmap to Retail Electricity Tariffs for Commercial and Industrial power consumers, indicating the likely inflation in electricity tariffs for building owners to 2025. EuroCham members who are significant power consumers have requested a clearer pricing framework than the average retail electricity pricing framework issued by the Prime Minister for each period in order to

²⁸ Decision 567/QD-TTg dated 28 April 2010 of the Prime Minister on approval of the program of development of non-baked materials until 2020.

²⁹ Decree 24a/2016/ND-CP dated 5 April 2016 of the Prime Minister on building material management.

³⁰ Decree 139/2017/ND-CP dated 27 November 2019 of the Government on penalties for administrative violations against regulations on investment and construction; extraction, processing and trading of minerals used in construction, production and trading of building materials; management of infrastructural constructions; real estate business, housing development, management and operation of apartment buildings and office buildings

^{31 &}quot;Promoting policies on energy efficiency in construction sector", Natural Resources and Environment, 14 September 2019. Available at: https://baotainguyenmoitruong.vn/thuc-day-cac-chinh-sach-ve-tiet-kiem-nang-luong-trong-nganh-xay-dung-293312.html, last accessed on 8 December 2019.

^{32 &}quot;Energy saving in buildings: Huge potentials", *Ministry of Industry and Trade*, 6 February 2017. Available at: https://www.moit.gov.vn/web/guest/tin-chi-tiet/-/chi-tiet/tiet-kiem-nang-luong-trong-toa-nha-tiem-nang-con-rat-lon-109147-801.html), last accessed on 8 December 2019.

³³ QCVN 09:2017/BXD dated 28 December 2017 of the Ministry of Construction on the National technical standards on buildings adopting energy efficiency.

- allow them to anticipate electricity price inflation and to mitigate the impact on their businesses by reducing consumption of electricity and/or start auto production with renewable sources (rooftop solar);
- Buildings should become more energy efficient. This process can be applied from the architecture phase, with passive design and the use of environmentally-friendly construction materials, to the implementation of energy-efficient devices during construction. We would encourage all buildings to achieve the minimum standards of the VEEBC (or a simplified version) in order to receive the Building Licence at Basic Design Stage. Furthermore, Electricity of Vietnam (EVN) could impose a tariff scheme that rewards low-energy-consumption buildings with lower prices and impose higher prices on high consumption buildings;
- > We recommend the Government provide effective encouragement for building owners to certify their buildings as GB. Many options are available in the market, such as United States Green Building Council's Leadership in Energy and Environmental Design (LEED), International Finance Corporation's Excellence in Design for Greater Efficiencies (EDGE) and Vietnam Green Building Council's LOTUS. We support a move to recognise multiple systems for use in Vietnam, letting the market determine which are practical and useful. These systems could be licensed for operation based on a set of simple criteria such as transparency, reliability and coherence according to recognised norms;
- > There are many individual sustainable building solutions and best practice case studies available in the market. However, we believe that 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 the local government can do at an individual building level has to be integrated into a holistic urban vision and from city green, to water bodies, to public-use buildings. Linking all of it together in a smarter and more liveable environment helps reduce temperatures and absorb emissions. This macro-level program of incentives and policies could support Vietnam's target of developing smart and sustainable cities.

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EuroCham Green Growth Sector Committee