CHAPTER 3 **GREEN GROWTH**

OVERVIEW

EuroCham established a Green Growth Business Sector Committee (GGSC) in May 2014 to mainstream and develop the essential conditions for Green Business to prosper in Vietnam. Representing the private sector, the GGSC work closely with public stakeholders, including the Government of Vietnam and its agencies, donors and multilaterals.

This Chapter focuses on the following topics.

- Water and waste management, air quality control and waste-to-energy.[1]
- Sustainable buildings and energy efficiency.
- Green Growth and the EU-Vietnam Free Trade Agreement (EVFTA).

I. WATER AND WASTE MANAGEMENT, AIR QUALITY CONTROL AND WASTE-TO-ENERGY

Relevant Ministries: Ministry of Natural Resources and Environment (MONRE), Ministry of Construction (MOC), Ministry of Finance (MOF), Ministry of Planning and Investment (MPI) Vietnam Environment Administration (VEA)

1. Water and Waste Management and Enforceability

Issue description

In 2016, Vietnam has painfully experienced that the lack of coordinated supervision of waste water treatment can cause massive environmental and socio-economic disasters, such as the massive fish deaths along the cost of central Vietnam and the worst drought causing salination.

Potential gains/concerns for Vietnam

Vietnam has conflicting regulations on environmental impact assessment (EIA) 'the Law on Investment (LoI) and the Law on Environmental Protection (LEP), and poor-quality EIA reports', are the main causes of growing environmental pollution according to MONRE.[2] In addition these regulations are not enforced, often because local authorities prioritize economic growth over the protection of the environment.

MONRE reports that 'more than 2,000 investment projects have insufficient environmental impact assessments, while hundreds of industrial zones (IZs) have no adequate waste water treatment systems'[3] as required by law.[4] 'Industrial parks nationwide discharge more than a million cubic meters of wastewater each day, 75 percent of which is untreated and harmful'.[5]

Recommendations

- Create a framework for effectively enforcing current water treatment standards.
- Suspend operating licenses in case of severe violations.
- Align conflicting regulations on environment impact assessment.
- Accelerate private investment into waste water treatment facilities.

1 Note that the GGSC's comprehensive position on Energy is covered in Chapter 2: Energy and Electricity
2 'Unclear laws contribute to environmental crisis,' *VietnamNet*. Available at <http://english.vietnamnet.vn/fms/environment/164584/unclear-laws-contribute-to-environmental-crisis.html> [last accessed on 6 October 2016]
3 'Environment Ministry's report shows serious environmental problems'. Available at: http://english.vietnamnet.vn/fms/environment/163554/environment-ministry-s-report-shows-serious-environmental-problems.html [last accessed on 6 October 2016].
4 Article 37, Decree 38/2015/ND-CP dated 24th May 2015 on waste and salvage management
5 'Over 1 mln cu.m of industrial wastewater dumped every day in Vietnam,' *VietNamNet*. Available at <http://english.vietnamnet.vn/fms/environment/148243/over-1-mln-cu-m-of-industrial-wastewater-dumped-everyday-in-vietnam.html> [last accessed on 6 October 2016]

2. Waste Management and E-Waste Recycling

Issue description

Vietnam's Law on Environmental Protection operates under the principles of minimization, re-use, collection, and treatment meeting environmental standards.[6] However, most waste is still dumped to landfills without further processing. Unsanitary landfills are not only causing environmental hazards and infuriate the residents surrounding them,[7] but also waste valuable materials, that could be recycled or used for power generation. Multinational corporations are also setting their own recycling and renewable energy goals, and need a supportive regulatory framework to implement these in their Vietnam operations.

The Prime Minister's Decision 16/2015/QĐ-TTg[8] regulates the collection, recycling, and disposal of products, including batteries and accumulators, civil and industrial electric and electronic equipment (EEE), lubricants, tubes and tires, as well as vehicles (Decision 16). The Vietnam Environment Administration (VEA) is working on a draft Circular to guide Decision 16 among other regulations.[9] These regulations are steps in the right direction, but they would be more effective if they set clear collection goals, so that manufacturers and consumers can plan and adapt in advance.

Potential gains/concerns for Vietnam

Vietnam already has introduced a regulatory framework for power generation from solid waste (waste-to-energy or WTE).[10] However, as of October 2016, only one, small pilot WTE project is in operation in Hanoi.[11] Despite completed comprehensive feasibility studies and lengthy negotiations with the authorities, prolonged decision making on part of the involved Vietnamese authorities and burdensome licensing procedures have prevented larger WTE projects from proceeding to implementation stage.

Recommendations

- Disposal of products: set a mandatory collection quota beginning with 10% (or more) of the yearly put-to-market volume and increase on a clear timeline.
- WTE: provide clear, enforceable guidelines and timelines for the approval of waste-to-energy projects and accelerate implementation.

3. Air Quality Control

Issue description

There is an urgent need for air quality control, as Yale University has listed Vietnam among the top 9 countries with the worst air quality in the world.[12] Sulfur dioxide, dust, particulate matter, dioxide, carbon monoxide and nitrogen dioxide are emitted from transportation, industry and construction.

Coal power plants are major air polluters. Vietnam Business Forum (VBF) estimates the costs of health and environmental impacts of the current power development plan with its reliance on coal could be as high as USD15 billion annually by 2030.[13]

Potential gains/concerns for Vietnam

Although, the VEA is reported to set emission targets,[14] Vietnam lacks clarity on government policies with specific policy targets on air quality control. In addition, Vietnam has no air odor regulations against strong smells from landfills, factories, and aquaculture.

---

6 Law on Environmental Protection 2014; Decree No. 80/2014/ND-CP; Decree No. 19/2015/ND-CP; Decree No. 179/2013/ND-CP; Decree No. 03/2015/ND-CP; Decree No. 38/2015/ND-CP

7 'PM calls for joint environmental efforts,' *Vietnam News*. Available at <http://vietnamnews.vn/society/342513/pm-calls-for-joint-environmental-efforts.html#W8sAKJ1ivcUXDrtZ.97> [last accessed on 6 October 2016]; 'Ho Chi Minh City finally traces source of foul smell,' *Tuoi Tre News*. Available at <http://tuoitrenews.vn/society/37179/ho-chi-minh-city-finally-traces-source-of-foul-smell> [last accessed on 6 October 2016]

8 Decision No. 16/2015/QD-TTg dated 22nd May 2015 of the Prime Minister on regulations on recall and treatment of discarded products

9 Collecting comments on Draft Circular regulating management of normal solid waste and retrieval of discarded products, non-hazardous liquid waste and destruction of vehicles entitled to privilege treatment and exemption,' *Vietnam Environment Administration*. Available at <http://vea.gov.vn/vn/vanbanphapquy/layykiengopy/LayYKienGopy/Pages/LayykiengopyTTveQLCTvaTHXUDMT.aspx> [last accessed on 6 October 2016].

10 Mainly, Prime Minister's Decision 31/2014/QD-TTg and MOIT's Circular 32/2015/TT-BCT.

11 'Vietnam's first waste to power system launched in Hanoi,' *VietnamNet*. Available at <http://english.vietnamnet.vn/fms/environment/163837/vietnam-s-first-waste-to-power-system-launched-in-hanoi.html> [last accessed on 6 October 2016]

12 'Air Quality, Environmental Performance Index', *Yale University*, 2014. Available at <http://archive.epi.yale.edu/epi/issue-ranking/air-quality> [last visited on 6 October 2016]

13 Page 3, 'Made in Vietnam Energy Plan', Vietnam Business Forum, October 2016.

14 'Vietnam sets 2020 emissions targets as nation chokes on smog', *VNExpress*. Available at <http://e.vnexpress.net/news/news/vietnam-sets-2020-emissions-targets-as-nation-chokes-on-smog-3472995.html> [last accessed on 6 October 2016].

Recommendations

- Introduce specific policy targets and regulations for air quality control and emissions.
- Tax coal power plants, cement factories, and other major polluters according to the estimated socio-economic and health impact.
- Accelerate development of the public transportation sector.
- Push vehicle producers and importers to focus on electrical technology.

4. Plastic bags pollution

Issue description

As much as 60% of plastics waste dumped in the world's oceans each year come from only five countries. Unfortunately, Vietnam ranks 4th discharging a huge amount of plastic waste into the ocean, after China, Indonesia and the Philippines.[15] In a recent survey conducted by researchers of the HCM City Urban Development Management Support Centre (PADDI) on *Life cycle of floating debris in the canals of Ho Chi Minh City, pollution levels with plastic waste in the canals of Ho Chi Minh city* was found to be 50 to 100 times higher than that of the Seine river crossing Paris megacity in France with a comparable population of 10 million inhabitants.[16]

Potential gains/concerns for Vietnam

The majority of plastics used in Vietnam are made of non-biodegradable 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 5 mm, i.e. called micro-plastics, can be ingested by the wildlife and impose many problems on the ecosystem.[17]

Recommendations

EuroCham recommends that there should be strict enforcement of waste and water treatment regulations and the violations shall be fairly prosecuted. The Government should initiate more coordinated action both nation-wide in Vietnam as well as within the region in order to curb the plastic waste. A ban of non-biodegradable polythene bags should be seriously considered. Many European countries have successfully introduced such a measure. The case of Rwanda, where non-biodegradable plastic bags were banned in 2008, shows that even in developing countries this is achievable.[18]

II. SUSTAINABLE BUILDINGS AND ENERGY EFFICIENCY

Relevant Ministries: Ministry of Natural Resources and Environment (MONRE), Ministry of Construction (MOC), Ministry of Planning and Investment (MPI), Ministry of Finance (MOF)

Issue description

Buildings are and will remain the largest consumers of electricity. The rapid development of the middle class and its associated lifestyle, which includes intensive air conditioning use, accounts for a considerate proportion of the energy consumption growth in the main cities of Vietnam. Proper building design can reduce this growth for the next 25 years of building lifetime. The development of green buildings in Vietnam is still at an infancy stage with approximately only 40 buildings with certifications, the majority of these being in the industrial sector.

Potential gains/concerns for Vietnam

First, due to a lack of enforcement of regulations, global corporate guidelines seem to currently be the only drivers. As there is no need and incentives to reduce operating expenses due to low energy prices, the green building investments remain far too low to address the current environmental concerns.

---

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

[16] The global annual amount of collected plastic waste in the canals is 1,300 tons to 2,100 tons from 2013 to 2015 respectively. This is a first global estimation that requires to be specified and deepened in the future investigations. Considering the low density of plastics, i.e. light weight, the annual amount of estimated collected plastics in the canals in Ho Chi Minh city is huge. In fact, in the Seine River, the Department of Development and Prospective intercept annually between 22 and 36 tons of floating plastic debris in its boom network is two orders of magnitude lower than in Ho Chi Minh city canals. Life cycle of floating debris in the canals of Ho Chi Minh City, *Centre de Prospective et d'Études Urbaines,* 11/2016. Available at: <http://paddi.vn/wp-content/uploads/WP4_PADDI_Chung_ENG.-Final-221116-2.pdf, page 14>]

[17] Life cycle of floating debris in the canals of Ho Chi Minh City, *Centre de Prospective et d'Études Urbaines,* 11/2016. Available at: <http://paddi.vn/wp-content/uploads/WP4_PADDI_Chung_ENG.-Final-221116-2.pdf, page 14>]

[18] 'Think you can't live without plastic bags? Consider this: Rwanda did it', *The Guardian, 15/2/2014. Available at <https://www.theguardian.com/commentisfree/2014/feb/15/rwanda-banned-plastic-bags-so-can-we>.*

Secondly, every year by using clay brick, Vietnam destroys 3.000 ha of rice fields and consumes over 6 million tons of coal. There are already several measures from the Government and Ministry of Construction (MOC) since 2010 such as Decision 567/QD-BXD[19] (30-40% non-fired brick usage by 2020 with 15-20 million ton of industrial waste; Directive 10/CT-TTg[20] and Circular 09/2012/TT-BXD[21] (100% state projects and other projects over 9 floors to have over 50% usage of non-fired brick materials) and Decree 121/2013/ND-CP[22] (VND 20-30 million fines for non-compliance). However, the enforcement of these laws is not properly implemented.

Finally, Vietnam Energy Efficiency Building Code (VEEBC) published in 2013 by the Ministry of Construction (MOC) is legally mandatory. The VEEBC code is comprehensive and reflects international norms as well as local norms. However the code is poorly disseminated and buildings are not currently required to follow this code in order to obtain a construction license. Even a simplified version of this code would require owners to build much more efficiently, and would require engineers to achieve basic knowledge about energy efficiency building materials and technologies.

Recommendations

- Promotion of Green Building standard usage: Many building owners have now been introduced to the concept of green building, and organisations such as the Vietnam Green Building Council (VGBC) report a significant uptick in interest over the past two to three years in comparison with previous years. Over 100 buildings are now already Green Building certified or are undergoing certification in Vietnam. EuroCham recommends the Government to provide effective encouragement for building owners to certify their buildings. In addition to international green building certifications already being used in Vietnam such as Leadership in Energy and Environmental Design (LEED) of the U.S Green Building Council (USGBC) and the Excellence in Design For Greater Efficiencies (EDGE) of the International Finance Corporation, among the locals emerges VGBC's certificate LOTUS. EuroCham supports a move to recognise multiple systems for use in Vietnam, letting the market determine which systems 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.
- Reinforcement of non-fired brick solutions application: EuroCham recommends effective enforcement, and promotion through the Vietnam Association of Building Materials (VABM) since compliance may reduce carbon footprint from 40% to 70%.
- Increase Energy Efficiency in building: Energy efficient building doesn't mean higher investment cost and can be applied from the architecture phase with passive design and using environmentally friendly construction materials to finally implementing energy efficient devices. We would encourage all buildings to achieve the minimum standards of the VEEBC code (or a simplified version of the code) in order to receive the Building License at Basic Design Stage. Another aspect is regarding the Electricity of Vietnam (EVN) who could impose a tariff scheme that rewards low energy consumption buildings with lower prices and impose higher prices to high consumption buildings.
- Showcases: We believe there is already a lot of sustainable building solutions from the market and best practices from companies. The solutions are already applied in some green building case studies. However from the micro perspective, EuroCham believes in a macro perspective showcase to define incentives and policies reinforcement to use these solutions, to have a clear urban planning design including not only green building but as well, water, waste, traffic and environment livelihood improvement and implementation towards a vision of a Smart City.

III. GREEN GROWTH AND EU-VIETNAM FREE TRADE AGREEMENT (EVFTA)

Relevant Ministries: 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

EuroCham's Green Growth Sector Committee advocates for renewable energy, an efficient and sustainable energy market and sustainable, energy-saving and environmentally friendly buildings. These topics are covered

[19] Decision 567/QD-TTg of the Government dated 28th April 2010 of the Prime Minister on approval of the Program of development of non-baked materials till 2020.
[20] Directive 10/CT-TTg dated 16 April 2012 of the Prime Minister on increasing the use of non-baked building materials and limiting the production and use of clay brick
[21] Circular 09/2012/TT-BXD dated 28th November 2012 of the Ministry of Construction on the of non-baked building materials in construction
[22] Decree 121/2013/ND-CP dated 10th October 2013 of the Government providing regulations on sanction of administrative violation in construction activities, real estate business; operation, production and business of building materials; management of technical infrastructure management of housing and office development.

by Chapters 14 and 15 of the EVFTA.[23]

Potential gains/concerns for Vietnam

The EVFTA is expected to be implemented in 2018. In order to well prepare for the implementation, the Government should raise the awareness among the authorities and society on the issues related to the GGSC recommendations as follows.

Recommendations

- Article 1, Chapter 14 of EVFTA regulates that 'To this effect, the Parties shall cooperate towards removing or reducing non-tariff barriers and fostering cooperation, taking into account, where appropriate, regional and international standards'. We recommend the Government, first to remove non-tariff barriers and foster cooperation in accordance with EVFTA commitments.
- The Government or the National Assembly should also introduce clear and practical legislation, as to facilitate and incentivize investment in renewable energy. The general principles with respect to renewable energy found in the EVFTA should be addressed in a new and comprehensive Renewable Energy Law (e.g. the definition of 'renewable energy' in accordance with Article 2(f), Chapter 14, EVFTA). The new Law should supersede current conflicting regulations, which are very scattered over several laws and a myriad of secondary legal documents.
- Article 4(1)(e), Chapter 14, EVFTA provides that 'A Party shall ensure that the terms, conditions and procedures for the connection and access to electricity transmission grids are transparent and do not discriminate against suppliers of the other Party.' We recommend the Government to adopt a faster timeline for the implementation of the competitive wholesale market (CWM), so that EU suppliers can participate in the market. Adapting renewable energy in this CWM as equal or even provide preferential treatment as opposed to coal, fossil fuels, gas and oil.
- Article 5(2), Chapter 15, the commitments on climate change include that Vietnam and the EU agree to engage in a dialogue and share information and experience in, inter alia, the promotion of energy efficiency, of low-emission technology and of renewable energy.
- Article 15, Chapter 15, EVFTA: 'The Parties shall establish a Specialised committee on Trade and Sustainable Development. The Specialised committee on trade and sustainable development on Trade and Sustainable Development shall comprise senior officials from the relevant administrations of each Party or officials they designate. [. . .] Each Party shall convene new or consult existing domestic advisory group(s) on sustainable development with the task of advising on the implementation of this Chapter.' We suggest overseeing mechanism and institutional set-up in accordance with EVFTA commitments. This could work by appointment of a 'higher authority' of the Vietnamese government to supervise and rule on investments involving sustainable development (e.g., renewable supplier and off-taker issues). The higher independent authority would be in charge of coordinating regulations and implementation between the ministries and EU partners. It would help to secure objective, transparent, non-arbitrary, non-discriminating procedures and capacity building with respect to the renewable energy market. Moreover, foreign direct investors should have the right to directly appeal decisions from local authorities to this higher authority, which should have the power to overrule the decisions of local authorities. EuroCham's GGSC would be pleased to cooperate, support and be part of this new authority.
- Article 2.2, Chapter 16 on 'Cooperation and capacity building', EVFTA states that 'to achieve the objectives referred to in Article 1, the Parties attach particular importance to cooperating in the following areas: [. . .] (e) Sustainable development, notably in its environmental and labour dimensions'. The Government shall provide such capacity building activities and organize joint workshops and seminars between the Ministry of Industry and Trade, Ministry of Planning and Investment, Ministry of Finance, Ministry of Construction, Ministry of Natural Resources and Environment and other related Vietnamese governmental bodies with EuroCham's GGSC. EuroCham is also keen to exchange information on other levels, such as providing studies and investor surveys on renewable energy and direct meetings with Vietnamese governmental agencies and regulators.

ACKNOWLEDGEMENT

EuroCham Green Growth Sector Committee

[23] The agreed text as of January 2016 of EU-Vietnam Free Trade Agreement. Available at <http://trade.ec.europa.eu/doclib/press/index.cfm?id=1437> [last accessed on 14th December 2016]