WATER IN VIETNAM

Position Paper

European Chamber of Commerce in Vietnam (EUROCHAM) Green Growth Sector Committee

Ho Chi Minh City April 2022





Issues and statements as mentioned in this document are based on recent publications from the World Bank [1], the European Chamber of Commerce in Vietnam (EuroCham) [2] and EuroCham members' experiences and findings with regards to environmental and waterrelated matters in Vietnam

Introduction and Rational

Declining water quality has become a global issue of concern as human populations grow, industrial and agricultural activities expand, and climate change threatens to cause major alterations to the hydrological cycle.

Vietnam is no exemption. The country is rapidly moving further into middle- income status. Over the last decade the Vietnamese Government (GoV) has taken numerous actions in order to deal with water-related challenges, and has achieved remarkable results:

- Water supply has been able to keep up with the pace of development, resulting in stable and round-the-clock water supply in most urban centers.
- Dozens of municipal wastewater plants are operational, many more being designed or under construction.
- More than 90 percent of households using septic tanks as a means of on-site treatment.

- In urban areas the majority of households disposing of wastewater are using a public sewerage system.
- Framework laws and legislations referring to water supply and wastewater management (such as Decree 80/2014/ND-CP) are in place.
- GoV is committed to increase the connection to centralized and decentralized wastewater treatment facilities.
- Private and state-owned wastewater generating facilities such as hospitals are aware of the importance of proper wastewater management, being equipped with treatment systems step by step.

We appreciate and acknowledge these recent efforts and the Government's dedication towards an improved water and sanitation sector. We believe that the basis has been created for a cleaner and healthier life of Vietnam's population, and the protection of biodiversity.

The Challenges

Despite the undeniable progress made in water and sanitation, the future development of the country is threatened by severe challenges arising from climate change, the rapid industrialization process and "home-made" environmental problems.

Vietnam's development comes with a heavy price tag. The country's natural resources including aquatic and marine ecosystems are under immense pressure, resulting in water-stress and subsequent threats to human wellbeing and the country's biodiversity. Although biodiversity brings direct benefits to humans, contributes to the national sustainable development strategy, and protects the environment, Vietnam is experiencing rapid biodiversity loss due to population growth, overexploitation of natural resources including water, illegal logging, and the expansion and intensification of agriculture [6].

In the long run, Vietnam is facing severe financial losses [5] if no action is taken to mitigate the current water and environmental crisis.

If the water sector is to continue to support the nation's rapidly expanding economy, it will need to overcome critical challenges: boosting efficiency in water management to meet rising demand and increase income per unit of water consumed, reducing threats from "too dirty, too little, and too much" water [1]; improving governance policies, institutions, law enforcement and financing, and allow international commercial participation in water and sanitation services.

Being European invested or owned companies and organizations operating in Vietnam, we have identified the following water-related issues and potential threats to our businesses in the country that urgently need to be addressed:

There is a deterioration in water quality, and pollution loads are mounting. Pollution is fouling surface and groundwater. Streams and rivers are increasingly used for water supply, but eutrophication and pollution including microplastic, chemical micropollutants from personal care products and pharmaceuticals including hormones and non-degradable substances are putting water

supply at risk. Technologies as currently applied in Vietnamese water treatment systems are not fit for treating those contaminants. A direct threat to water supply, human health and aquatic life is foreseeable.

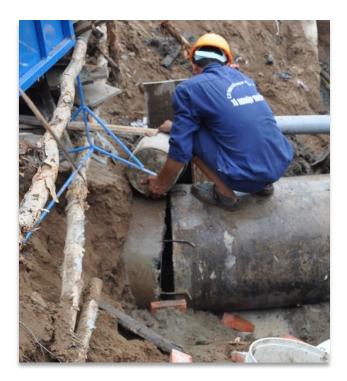


Very little municipal and industrial wastewater is treated, and the gap is widening. Most sewage, industrial effluent and solid waste find their way into watercourses. Some rivers - once clean - in and around major cities have turned into contaminated streams, and beaches are infested by numerous sorts of waste.

- Rising sea levels, coupled with declining river flows, have led to the intrusion of saltwater into surface water and groundwater, putting many companies' operations at risk. Unregulated abstraction of groundwater is causing land subsidence in many areas.
- Climate change is increasing the risks and costs from droughts and floods, with recent disasters revealing infrastructure gaps and low levels of resilience. Current urban development planning apparently does not act on the present and future threats from climate change impacts.
- The rapid growth of urban areas and related sealing of surfaces results in flooding, loss of assets and even lives during and after storms. Blue-Green Infrastructure and harvesting stormwater are still widely ignored concepts and not yet supported by regulations and technical norms.
- Vietnam's marine and aquatic biodiversity is severely threatened, due to a wide range of reasons. Most of them are directly linked to Vietnam's environmental weaknesses such as pollution control, law enforcement and the lack of willingness to make polluters pay for the damages they are inflicting.
- Uncontrolled touristic developments are damaging or even destroying fragile and unique ecosystems. Aquatic and marine life and biodiversity in general is at risk even inside or adjacent to National Parks (Tam Dao, Cat Ba, Con Dao, Sa Pa, etc.). International, wealthy tourist are already turning away from Vietnam since dirty beaches and the loss of biodiversity are widely communicated in the international travel scene - this development must be stopped.
- Non-compliance with national environmental policies is hardly ever sanctioned as far as Vietnamese institutions and organizations are concerned: state-owned and operated hospitals, landfills, power plants, wastewater treatment plants etc. are often severely polluting the environment without facing adequate consequences. International companies, however, are thoroughly regulated, controlled and often fined for reasons that are not comprehensible. Law enforcement still appears to be selective and biased.

- The water (and particularly the sanitation) sector is seriously underfinanced. Water and sanitation fees often do not cover even the most basic operation costs, let alone allow for investments into innovative solutions that would make a difference with regards to climate change or the protection of water resources.
- Private sector participation and PPP in water supply and wastewater management are frequently used buzzwords, but we rarely get to see transparent and fair tenders that are publicly announced and inviting international water companies. Ignoring the potential roles that international water companies are able to play implies obstructing the development of the Vietnamese water sector.
- Supporting climate change mitigation and adaptation in Vietnam's water sector is still an unknown concept. Energy efficiency options in water supply and wastewater treatment are often neglected, technical solutions for minimizing methane and N₂O emissions are not supported.
- The agricultural sector has a huge impact on Vietnam's water sector, contributing to the pollution of ground and surface waters by overexploiting of water sources, deforestation and overuse of pesticides and fertilizers. Little to no activities to curtail those adverse effects have been observed so far.

The quality of construction works - particularly in wastewater conveyance and treatment - gives reason for concern. Huge amounts of money are being invested into mostly invisible water infrastructure, but with very limited life spans and hence rendering investments unsustainable. Poor construction quality resulting in infiltration and exfiltration in sewer system is furthermore jeopardizing the functionality of treatment facilities and threatening groundwater quality and water supply.



The Worldbank has summarized Vietnam's water-related challenges in a 2019 report which reads like a wake-up call before it is too late [1].

European companies are herewith expressing their concerns about the status of Vietnam's water bodies, the loss of biodiversity and related environmental issues that are affecting the quality of life and our companies' operations.

Recommendations for Action

European companies and institutions wish to recommend the following actions for dealing with the prevailing water crisis:

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. Particularly,

- Synchronize existing environmental policies in order 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 on the ground.
- Listen to grass-root levels and encourage local environmental groups. Support actions of citizens to control the implementation of the state's policies.
- Introduce and endorse water-sensitive urban design, take advantage of Blue-Green Infrastructure including modern stormwater management.
- Information Communication Education is key for a cleaner environment. Improve and adjust school and university curricula by integrating "green" issues. Public awareness in general needs to be improved.
- Take advantage of the potential of international water companies and their knowledge and experiences through open, transparent and fair public tenders.
- Strictly enforce relevant legal regulations, such as Decree 80, QCVN 14:2008/BTNMT, etc., particularly in the provinces, and apply serious sanctions to industrial entities that dump untreated wastewater into the environment to deter others.
- Encourage the reuse of wastewater by providing legal frameworks, guidelines and standards to support those entities that have A+ treated water to share quality water for other applications like irrigation and industrial production.
- Adjust domestic and industrial wastewater fees to full cost recovery, implementing the "polluter-pays-principle".

- Foster a sustainability driven and water-wise tourism that will attract again wealthy and nature minded tourists. Prevent destruction of valuable ecosystems by uncontrolled touristic development.
- Consider Nature-Based Solutions in Infrastructure. So far, the default choice is for the grey option rather than making a balanced assessment of the grey, green and mixed options. This would not only save costs, but most nature-based solutions also have additional benefits.
- Consider and endorse Green Financing to increase level of financial flows from the public, private and not-for-profit sectors to sustainable development priorities, to be promoted through changes in Vietnam's regulatory frameworks, harmonizing public financial incentives, use of green bonds, etc.

For EUROCHAM's GREEN GROWTH SECTOR COMMITTEE

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Sources

Information provided in this Position Paper has been taken from:

- [1] The Worldbank (2019): VIETNAM: TOWARD A SAFE, CLEAN, AND RESILIENT WATER SYSTEM
- [2] EuroCham's Whitebook 2021
- [3] Friedrich Ebert Stiftung (no year): Vietnam's Environmental Policies at a Crossroads [4] <u>http://www.wepa-db.net/policies/state/vietnam/surface.htm</u>
- [5] Thang P, Tuan H, Hang N and Hutton G. 2009. Economic impacts of sanitation in Vietnam. World Bank, Water and Sanitation Program.
- [6] Thuaire B, Allanic Y, Hoang Viet A, Le Khac Q, Luu Hong T, Nguyen The C, Nguyen Thi T (2021). Assessing the biodiversity in Vietnam - Analysis of the impacts from the economic sectors. WWF-Vietnam, Ha Noi, Vietnam.

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