Building a monitoring and evaluation system for water security

Strengthen supervision of exploitation and use of surface water, underground water, and discharge of wastewater into water sources. Closely monitor and supervise inter-country water sources.

Science and technology

Promote research, development and application of new, breakthrough, advanced, modern, smart scientific and technological solutions, artificial intelligence, especially achievements of the Industrial Revolution 4.0, step by step implement digital transformation to proactively respond to water-related disasters and adapt to climate change; actively develop, create new water sources, collect, store, regulate, transfer water, link water sources; treat saltwater and brackish water into fresh water on the spot serving the domestic water supply in coastal and island areas; control saltwater intrusion, keep freshwater and store water in rivers, especially in 5 large river basins including Red River, Mã River, Cả River, Đồng Nai River and Mekong River.

International cooperation

Effectively implement international commitments and agreements to which Vietnam participates; actively participate in and expand effective international cooperation on water security, dam and reservoir safety management, with a focus on cooperation in prevention, combat and mitigation of water-related disasters; research and establish mechanisms to settle disputes and conflicts over transboundary water sources, especially in the international river basins of the Mekong, Hồng - Thái Bình.

Communication, awareness raising

Disseminate and educate the legislation to raise awareness and participation of leaders at all levels, the people, and the whole society on ensuring water security and safety of dams and reservoirs, promote the supervision role of people, the participation of stakeholders in proactively storing and using water economically and efficiently.

Renovate the contents and methods of propaganda, combine the traditional methods with propaganda through social networks, integrate into some training curricula ▪

The plastic value chain faces two critical challenges: curbing plastic waste and reducing greenhouse gas emissions. Cohesive regulations are needed to eliminate unnecessary plastics and reuse plastics, develop new delivery models and ensure circularity.

The perspectives in this article, which range from business to supply and demand and youth activism, highlight the significant role of the informal waste sector in addressing plastic pollution.

Global coordination is essential, as plastic use is projected to triple by 2060, requiring a 3% reduction in annual fossil plastic use to meet climate targets. On the World Environment Day, 5th June 2023, it is important to recognize that cohesive regulations are needed to eliminate unnecessary plastics and reuse plastics, develop new delivery models and ensure circularity. Voluntary actions alone are insufficient. A robust treaty with globally binding rules is necessary to combat plastic pollution effectively.

The plastics and chemicals industries will require the most support to build markets for low-carbon products and intermediaries. Currently, there is a high supply scarcity risk for near zero plastic products, based on decarbonization commitments and announced capacity to 2030. At the same time, recycling volumes and demand are projected to skyrocket with growing pressure on industry to reduce the carbon footprint of recycled material. A robust treaty with globally binding rules is necessary to combat plastic pollution effectively.

The perspectives in this article, which range from plastic suppliers to buyers and youth activism, highlight the need for collaboration across industries and sectors. Together, we can drive transformative change and create a sustainable future, where plastic pollution and climate change are effectively addressed. This cannot happen without acknowledging the significant role of the informal waste sector in addressing plastic pollution in regions such as Africa and Southeast Asia. Investors in these regions should prioritise their needs, integrate them into municipal structures and enhance their capacity for collection and value addition.

The plastics value chain is complex and there is a need for collaboration across industries and sectors. Together, we can drive transformative change and create a sustainable future where plastic pollution and climate change are effectively addressed.

Plastic pollution and climate change: Three leaders chart the path forward

THE PLASTIC VALUE CHAIN FACES TWO KEY CHALLENGES

Dr. Bob Maughon - Executive Vice-President, Sustainability, Technology and Innovation, Saudi Basic Industry Corporation (SABIC)

The plastic value chain faces two key challenges: curbing plastic waste and reducing greenhouse gas emissions. The chemical industry has a unique role to play in addressing these challenges. Collaboration between upstream and downstream partners is essential to develop solutions that reduce plastic pollution and emissions in plastic production. SABIC is at the forefront of these efforts.

SABIC has set concrete goals, including a commitment to achieve carbon neutrality by 2050. To realize this goal, the company has outlined a Carbon Neutrality Roadmap that focuses on five pathways: Energy efficiency; Renewable energy; Electrification; Carbon capture, utilization and storage (CCUS); Green/blue hydrogen.

Recognizing the scale of the challenges, SABIC understands that progress cannot be made alone. The Company actively collaborates through initiatives, such as the Low-Carbon Emitting Technologies (LCET) initiative, where chemical companies work together to accelerate the development of technology solutions for carbon neutrality.

Partnerships are also pivotal in tackling plastic waste. SABIC is a founding member of the Alliance to End Plastic Waste, an organization that brings stakeholders from across the value chain together to take collective action on the ground. The Alliance works towards a future where plastic products never end up in landfills or oceans, but instead are reused or transformed into new products. SABIC is also actively involved in driving the transition from a linear to a circular carbon economy.

As responsible plastic producers, SABIC recognizes the importance of offering sustainable materials to customers. We have found ways to increase recycled content, explore alternative feedstocks, design recyclability into products and foster closed-loop initiatives through collaborations across the value chain.

▲ *The plastics value chain is complex and there is a need for collaboration across industries and sectors*

Although the chemical industry has made significant progress, there is still more work to do to achieve our goals. SABIC is already making headway on the complex, long-term effort required and will continue to partner with others to scale up the solutions needed to drive meaningful change.

THE MASS PRODUCTION OF SINGLE-USE PLASTICS HAS LED TO THE DESTRUCTION OF ECOSYSTEMS

The Founder of Green Africa Youth Organization (GAYO) Joshua Amponsem

At the production level, the production of short-lived plastic products (mostly single-use plastics) has been a new gold reserve for the fossil fuel industry. Whilst the industry increased its profits, the mass production of single-use plastics has led to the destruction of ecosystems, such as wetlands, that provide essential environmental services, including carbon sequestration. At the consumer level, recycling has been sold as a solution to prevent pollution, however, over 90% of plastics produced since 1950 have not been recycled. From our observations in the field, this is mainly due to the lack of consideration of the role of waste collectors in the plastic value chain.

In the last decade, the majority of private-sector and philanthropy investments towards sustainable waste management have heavily focused on digital and technology innovations; leaving out key stakeholders at the collection phase - particularly informal waste pickers and informal waste aggregators.

Across all African cities, it is informal waste workers who are fueling the recycling industry. Without them, recycling does not work! Most importantly, they are the ones cleaning up our cities and preventing pollution of our functional ecosystems, as well as reducing flood risks in densely populated areas, where single-use plastics clog drainage systems increasing the occurrence of floods and water-borne diseases during the rainy season. Lastly, it's proven, through projects such as Zero Waste Cities implemented by GAYO and platforms such as Global Plastic Action Partnership, that informal waste collectors are our best chance of empowering households to start segregating at source, to reduce their usage of single-use plastics and to commit to reuse, which is by far one of the most effective ways to solve the pollution crisis.

New investments towards sustainable waste management should prioritise the needs of the informal waste sector, support their integration into municipal structures and increase their capacity to increase collection, as well as adding value to the collected plastics.

PLASTIC POLLUTION IS A SYSTEMIC CHALLENGE

Mrs. Jodie Roussell - Global Public Affairs Lead, Packaging and Sustainability Nestlé and Co-Chair, Policy Working Group of the Business Coalition for a Global Plastics Treaty

Packaging is essential for food and beverage companies; it ensures product quality and safety and prevents food waste. Globally, the amount of packaging that is inappropriately created or managed at the end of its life is a serious and persistent environmental problem. While packaging recycling schemes in many countries have helped to start a circular economy for recovered materials, many regions are not yet at this stage.

Plastic pollution is a systemic challenge. The plastics value chain involves multiple interconnected and interdependent stages. No player or country can solve plastic pollution on its own. We need a harmonised regulatory framework from governments, the implementation capacity of business and the vision and knowledge of academia and civil society to address this together. A comprehensive circular economy approach can address the root causes of plastic pollution and contribute to the global efforts to combat the climate and biodiversity crisis, while delivering economic, environmental and social benefits. A legally binding treaty is the single most important opportunity to accelerate progress towards a circular economy for plastic, building on the lessons learned from existing initiatives.

On the sidelines of the Intergovernmental Negotiating Committee (INC) on Plastic Pollution, actors along the plastics value chain, civil society and government stakeholders have deepened their collaboration to advance the circular economy. An example of such collaboration is the Business Coalition for a Global Plastics Treaty, which gathers over 125 members. The coalition supports three key goals: (i) Reduction of virgin plastic production and use through a circular economy approach, (ii) circulation of all plastic items that cannot be eliminated and (iii) prevention and remediation of remaining, hard-to-abate micro- and macro-plastic leakage into the environment.

Improving packaging design, production processes, reuse and recycling rates, along with end-of-life management can, therefore, make a notable impact. Packaging is essential to us, let us unleash innovation and work towards keeping plastics in the economy and out of the environment ▪

PHẠM ĐÌNH *(Soure: Weforum.org)*