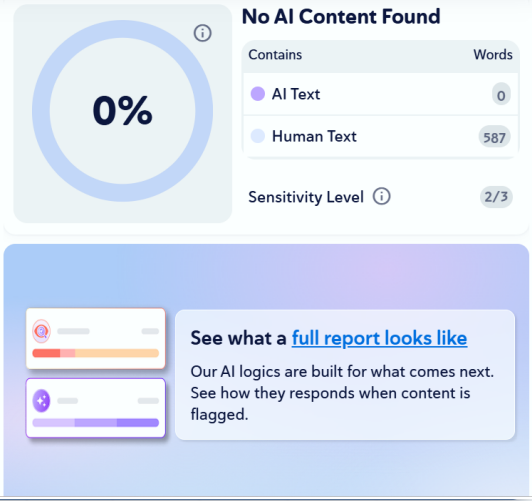
Plastic pollution is a characteristic environmental issue of the 21st century that has penetrated deep into ecosystems, human health, and economies of the world. Although plastics are durable and convenient, they tend to persist in the environment as garbage, and in microplastic form, these plastics cause persistent contamination in the marine, freshwater, and terrestrial environments. Plastic pollution has been scientifically shown to cause biodiversity loss, ecosystem degradation, and possibly have human health effects, leading to a variety of policy responses by different governments in most countries to curb and manage it. An expanding literature shows that plastic pollution cannot be meaningfully tackled at a local or national level because it is transboundary and remains within a global system, such as oceans and the atmosphere. The United Nations Environment Programme (UNEP), chairing the Global Plastic Pollution Treaty, strives to deal with the problem of plastic pollution at the lifecycle. In March 2022, 175 nations created the Intergovernmental Negotiating Committee (INT) to create a legally binding treaty. The treaty is supposed to control plastic design, manufacturing, disposal, and recycling, which include extended producer responsibility, production threshold, handling of toxic chemicals, and support to developing countries. Lifecycle governance, multilateral financing, technology transfer, and frequent reporting were discussed as the main priorities during the initial steps of the INC (Arora et al., 2024). However,



meantime, the review of hundreds of policies across the world suggests that most countries have established bans on some macroplastics and restrictions on textile bags, but very few policies address any meaningful issues on microplastics or lifecycle problems (Diana et al., 2022). It is also highlighted in academic literature that proper policy must be based on science-based evidence that is founded on well-established monitoring and evaluation systems. The risk assessment, life cycle analysis, and ecological monitoring policies are found to be more justified in supporting preventive and precautionary strategies. Besides treaty talks, there is cooperation on the regional action plan, trade policy modifications, and financing mechanisms, which also seek to integrate plastic reduction objectives into larger sustainable development agendas. As an example, global projects involve circular economy schemes that focus on reuse, refill schemes, and extended responsibility schemes that have been proven to minimize plastic pollution and other emissions linked with plastic pollution. In general, the global policy towards plastic pollution is transitioning into less local responses based on nation-level action to global governance. However, it is still unclear how to make a strong treaty. It is evident by both scientific research and policy analysis that to fulfill this challenge, it will be necessary to have binding international commitments, political commitment, and incorporation of environmental justice to achieve a fair result at the national level.