Reducing air pollution can lower rates of 12 types of cancer, all of which are related to smoking. Let that sink in. As reported by the Environmental Health News organization, air pollution has been an ecocide, tapping into the safety of US citizens, especially as the toxic chemicals released have been linked to not only cancer, but also heart attacks, bronchitis, and even premature mortality according to the EPA. Steps towards tackling the impending issue have led to the **development of systems, tools, and practices** implemented by not only the EPA but through a variety of companies that fall under sectors that have been linked in contributing towards the toxic pollutants. Notably, the TRI P2 tool has quantified pollution prevention measures enveloped by companies, as a means of continuing the overall decrease in emissions as indicated by the trends analyzed by the EPA. But that's not to say the fight is not over, and though the EPA and US have consistently enforced policies such as the Clean Air Act, sectors continue to industrialize, most notably the Food Sector.

According to Forbes, articles published two years ago, close to 890,000 people pass away from the toxic pollutants released behind food production, with a majority of deaths resting in the United States. Considering that companies within the sector are in constant production to meet the demand, more so the necessity, of US citizens, toxins such as Nitrate Compounds, Hydrochloric Acid, Methane, and Ammonia slip into the environment with volumes extending to millions of pounds. Dominated specifically in the Meat sector, potent chemicals such as Ammonia are often tied behind the manufacturing process of such foods, and hence, a breadth of pollution prevention methods have been implemented as a means of addressing parts of the manufacturing process. As Animal Food Manufacturing, Dairy Product Manufacturing, and Animal Slaughtering and Processing (Meats) make up the largest subsectors, current source reduction methods are set in stone including Good Operating Processes, Spill and Leak

Prevention, Cleaning and Degreasing, and Process Modifications according to the EPA.

Depending on the company's manufacturing process, along with the industry the company works within, factors behind the combination of reduction methods used. Namely, process modifications, though broad, may apply in changing the manufacturing equipment in producing/processing the food; or good operating process, which may entail ensuring that the process behind producing the food meets the standards of not only the FDA but also environmental policies and procedures set by the specific company, along with the government. Nonetheless, a general theme reflected across the Food Sector is that such companies implore simple, yet effective strategies behind pollution prevention, including Wastewater Treatment, Process and Technology Modifications, and or Recycling Food/Organic Waste. Coupling source reduction methods with sustainability practices ensure pollution rates continue to decrease and using such strategies, the Pilgrims Pride Corporation at the Natchitoches Processing Plant was able to drastically reduce the release of toxic chemicals in the environment over the past years.

Working within the Poultry Processing industry, Pilgrims Pride is a company designed to process butchered meats which are safe to sell and eat. Moreover, Pilgrim's Pride over the past decade has consistently implemented and improved upon pollution prevention methods, highlighted through the overall decrease in emission levels from one of its processing plants located in Natchitoches, Louisiana. As demonstrated by the data collected by the EPA through the TRI P2 tool, from 2017 to 2020, the processing plant released over **5000 pounds of**Ammonia, with **7,390 pounds** released in 2018. However, in 2021, the emissions within the processing plant dropped significantly from **6,561 pounds released to 0, marking a 100%**

decrease in emissions! The reason for the decrease: an introduction of a quality monitoring system.

Described in the P2 Reporting Guide as \$43, the Pilgrims Pride Processing Plant implemented an analysis system to monitor the production line of the plant, ensuring the system maintains the integrity of not only food standards but also prevents toxic chemicals such as Ammonia from entering into the food or the environment. As indicated on their website, the prevention method implemented follows the Environmental Management System.

Furthermore, by following the ISO 14001, Pilgrims Pride is able to make big strides toward decreasing its emission footprint as the robust analysis system ensures the machines being used are not contaminating toxic chemicals. Additionally, the company strives to keep track of orders and perform weekly inspections of basins and containers, implementing yet another system of prevention methods listed by the EPA. Hence, by consistently using and improving sustainability measures in the processing plant, Pilgrims Pride, along with other companies within the Food Sector, are able to make substantial improvements in cutting down their emissions footprint.

With more and more companies implementing P2 methods has resulted in a decrease of emissions for toxic chemicals, a system which has benefited a number of communities. As the EPA recognizes the P2 methods to be beneficial to a community for a number of reasons, reflected in the Pilgrim's Pride Processing Plant. As recorded on their website, implementing methods such as monitoring the production line allowed for a nearly 11% decrease in emissions from 2019-2021, which is significant realizing that this happened in the span of nearly 2 years! On that note, the 100% decrease in Ammonia emissions confirms the effectiveness of implementing the specific prevention methods, urging other companies within the Poultry Processing Industry, in general, the Food Sector to use them. As this has been an ongoing goal

for the Pilgrims Pride company, they are on track to invest in more emission-reduction projects till 2030 and beyond, allowing for their community along with thousands of others to breathe cleaner air.

In light of the company's goals, actions towards P2 have been increasing in the past years, especially as we transition into a more digitalized era. Notably, websites and social media accounts have been an effective way of sharing strategies towards P2, seen through companies such as Pilgrims Pride. For example, their website lists out official goals and strategies implemented as a means of cutting down on their emissions, which is beneficial for other companies within the Food Sector considering they can implement similar strategies. Aside from companies, sharing P2 strategies with the general masses has begun to take place as more agencies, such as the EPA, stress the importance of being cognizant behind an individual or group's carbon footprint. Hence, over recent years social media accounts, such as the "environmentalworkinggroup" on Instagram, or nation-wide organization such as Sierra Club, have taken strides in sharing methods toward P2. This is significant because organizations or social media accounts can capture the attention of millions through posts or videos, contributing to the movement behind P2, but conservation in general.