## FOREWORD

By Lewis Freeman, former vice president of government affairs for the Society of the Plastics Industry (1979 to 2001)

Plastics have become one of the most common and versatile materials in our society. Indeed, many uses of plastics, particularly in medical applications, are not currently possible with any other material. But, as the use of plastics has grown tenfold over the last 50 years, so have the challenges created for the environment.

In 1980, the first full year in which I was associated with the plastics industry, plastic waste accounted for less than 5% of the municipal solid waste (MSW) stream — 6.8 million tons, according to statistics compiled by the U.S. Environmental Protection Agency (EPA).<sup>1</sup> By 2018, the most recent year for which official EPA statistics are available, plastics were 12% of the 300 million tons of MSW.

As former vice president of government affairs for the Society of the Plastics Industry — a plastics lobbying group now known as the Plastics Industry



Association — I remember the conversations that prompted aggressive advertising campaigns around plastic recycling. Plastics executives wanted SPI to advertise its way out of plastic's growing public relations problem as society began realizing the environmental pollution created by the material.

Despite knowing that plastic recycling couldn't realistically manage a significant amount of plastic waste, companies spent millions of dollars convincing the public otherwise. Today, less than 10% of plastic is actually recycled, leading to public confusion and yet another PR issue for the industry.<sup>2</sup>

Public concern over plastics has been particularly heightened by the increasing presence of plastic waste and plastic raw materials (e.g., resin pellets) in the environment, particularly in waterways and the oceans, where it presents a serious danger to aquatic species and birds. This is a waste problem for which recycling is not a suitable response.

More recently, the plastics industry has begun promoting what it calls "advanced recycling," which the industry defines as turning "used solid plastic into its gas or liquid raw materials to be remade into brand new plastic for use in virtually any plastic product or packaging."<sup>3</sup> The industry goes on to state that the "plastics recycling industry is investing heavily in these technologies as part of efforts to meet the goal of reusing, recycling, or recovering 100% of plastic packaging in the U.S. by 2040."

"Chemical Recycling: A Dangerous Deception" reviews the lack of success of the mechanical recycling of plastics waste, but its main focus is an in-depth evaluation of the industry's efforts to implement chemical (so-called "advanced") recycling. The report's meticulous examination in case studies of existing "advanced recycling" facilities does not produce optimism about the industry's potential for success with this approach in addressing its solid waste problems.

It has been 35 years since the plastics industry began prominently responding to public concerns about plastic waste. That's more than a third of a century. In that time, the industry has focused its response to waste issues on promoting recycling. It has taken the industry 35 years to increase the recycling rate of its waste from less than 1% to just under 9%. It now claims that in just half that time — 17 years — the plastics industry will be able to recycle 100% of its waste. This report makes a compelling case for doubting the plastics industry's seriousness and ability to achieve its stated goal.

"Chemical Recycling: A Dangerous Deception" is an important contribution to the public dialogue about plastics waste. It deserves wide attention, particularly from the plastics industry itself.