Committee on Environmental Improvement

Mr. President-Elect and Members of the Council,

The Committee on Environmental Improvement (CEI) continues to function as a central hub of thinking and support for sustainability and sustainability-related topics for the Society.

In addition to our regular work, such as developing and writing policy statements, sustainability education efforts, and collaboration with the ACS Green Chemistry Institute, we continue to identify places and spaces where ACS can and should be a leader in environmental thinking.

[Slide 1: SDGs]

As many of you likely know, in 2015, the United Nations General Assembly adopted a set of 17 Sustainable Development Goals (SDGs) as part of a new sustainable development agenda. The SDGs provide a framework to fundamentally change our world for the better, offering an agenda for all countries to address world-wide challenges of poverty, protecting the planet and ensuring prosperity.

It is the opinion of CEI that the chemical enterprise must play a key role in achieving these goals.

[Slide 2: SDG #10]

CEI is developing a plan to prioritize work in the near future on Goal #10: Reduced Inequalities. The conversations and effort in this area, we hope, will provide some critical contributions to bring together all the various sectors of the chemical enterprise which must collaborate to do something impactful on this topic.

We believe that this project can drive the future direction of ACS by serving as the lens by which chemists view the SDGs and provide a framework for how the chemistry enterprise can have an impact in achieving these goals. This project is aligned with ACS strategic priorities, and the technological contributions are consistent with the principles of green and sustainable chemistry.

[Slide #3: CEI email address]

We strongly welcome participation from all of you to shape work around these goals in support of the ACS mission. We encourage other ACS units to work with us on this effort and you can reach out to me at CEI@ACS.ORG.

One particular environmental challenge that CEI is wrestling with today is single use plastics and their negative impact on the environment. The scale of this problem requires us to think differently about chemical pathways, how we teach chemistry, and how we develop new products.

[Slide #4: Screenshot of 10/17 C&EN Comment column]
CEI continues to put a great deal of time and effort into thinking through the role of ACS in addressing this challenge. If this topic is of interest to you, we encourage you to read the Comment published in this week’s Chemical & Engineering News magazine, which articulates the scope of our effort and articulates a number of specific topics on which we seek help from other ACS units in investigating.

Interested partners should reach out to us at CEI@ACS.ORG. This is not a topic that CEI can address alone, and the society should collectively play a leadership role to meet this challenge.

CEI is excited to engage on these and many other topics in the future. Mr. President-Elect, this concludes my report.

Christopher Avery, Chair
Report from the Committee on Environmental Improvement

Christopher Avery
Sustainable Development Goals
SGD #10: Reduced Inequalities
cei@acs.org
CEI seeks input on environmental impact of single-use plastics

by Chris Avery, Chair, ACS Committee on Environmental Improvement

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ACS’s Committee on Environmental Improvement (CEI) has the following statement as its guiding vision: “A sustainable world enabled through the sustainable practice and use of chemistry.” As part of our mission to advance sustainability thinking and practice across ACS and the broader society for the benefit of Earth and its people, CEI regularly evaluates future sustainability challenges.

With that in mind, CEI is reviewing the impact of single-use plastics in the environment. Naturally occurring polymers have been used by humanity for millennia, but the way we use plastics for modern applications began during the Second Industrial Revolution in the 1900s and took off during and after World War II. Developments in chemistry were central to the growth of those new applications and their broad usage.

Plastics were synthesized from inexpensive petrochemical-derived feedstocks and evolved to generate a large class of commercial and commodity materials. Thanks to a broad range of material properties, including chemical stability, excellent barrier properties and tailored viscoelastic properties, single-use plastics became an increasing share of the plastics produced and used worldwide.