

Statement of the GC3 Sustainable Chemistry Alliance Regarding Revitalizing American Leadership in Advanced Manufacturing

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The members of the GC3 Sustainable Chemistry Alliance believe sustainable chemistry is central to American innovation in advanced manufacturing. As chemical and biochemical developers and producers, commercial and consumer product makers and retailers, Alliance members are committed to accelerating development and use of more sustainable chemistry.

As chemistry is intrinsic to virtually all products, a very broad segment of the U.S. economy is implicated in sustainable chemistry development, including startups, chemical and biochemical producers, small to large commercial and consumer products companies and retailers. The GC3 Sustainable Chemistry Alliance represents this entire value chain and is focused on policies that can accelerate the pace of private sector investment in the development and scale of new sustainable chemistry processes and products and the high value jobs such development creates.

Companies throughout the value chain are seeking more sustainable chemicals to incorporate into products in response to growing market pressure and regulatory attention to chemistry used in everyday products. More sustainable chemicals can offer improved human health profiles, improved environmental health profiles, reduced environmental emissions and lower lifecycle energy consumption and greenhouse gas emissions. Global competition will be fierce for the development of the sustainable chemistry market, which is projected to exceed \$100 billion worldwide by 2022.

There has been considerable effort within the private sector to drive US development of sustainable chemistry. The Green Chemistry and Commerce Council (GC3), the parent organization of the Sustainable Chemistry Alliance, has provided a business-to-business collaboration space to foster chemistry innovation for a decade. Despite progress, companies point to the lack of adequate sustainable chemical alternatives as a major barrier to timely adoption of more sustainable chemistry in their products. Sustainable alternatives must have the same functionality of the chemistry they are replacing, must have adequate economics and be free of undesirable health, environmental, energy or process safety attributes. These overlapping criteria present a significant challenge for chemical developers and developing more sustainable chemical alternatives can require extensive time and financial resources. For a more sustainable chemical

alternative to be viable in the market, it must also be manufactured at sufficient scale to allow companies to transition large product lines to the new chemistry. These challenges can be addressed through focused research, development and deployment incentives that encourages and de-risks private sector R&D investments in more sustainable chemistry and the subsequent scale up of the resulting innovations.

Given its robust chemical industry and inherent innovation strengths, the US has a natural competitive advantage in sustainable chemistry development. However, there is ample global competition for this exciting emerging market. Sound public policy can help accelerate the rate at which we seize this opportunity, and it will translate into growth in US advanced manufacturing and jobs.