American Chemistry Council | Nanotechnology Panel

*Submitted via email to* 2016NNIStrategy@nnco.nano.gov.

September 23, 2016

The Nanotechnology Panel of the American Chemistry Council[1] (Panel) appreciates the opportunity to offer comments on the draft *National Nanotechnology Initiative Strategic Plan 2016*.[2] The Panel supports the critical role the National Nanotechnology Initiative (NNI) plays in coordinating the efforts of federal agencies to advance U.S. leadership in nanotechnology.

The Panel agrees with the four goals articulated in the draft strategic plan. A world-class research and development program (Goal 1); purposeful efforts to promote commercialization (Goal 2); and federal efforts to enhance and sustain the technical capacity of the U.S. workforce (Goal 3) are essential to realizing the promise of nanotechnology. We also agree that the responsible development of nanotechnology through research in environmental health and safety, including the ethical, legal, and social implications of nanotechnology (Goal 4), is critical to ensuring nanotechnology-enabled products minimize potential adverse impacts and maximize benefits to people and the environment. We offer these specific comments on the goals section of the draft strategic plan:

**Goal 1.** The Panel strongly supports Objective 1.3 (page 6, lines 4-11). It is important to assess the performance of the U.S.'s interdisciplinary nanotechnology research and development program against innovation-oriented metrics. The Panel requests that the assessment report be made available to the public. The Panel strongly supports the use of Signature Initiatives and Grand Challenges as means for focusing federal investments in high-reaching scientific programs that will, by design, result in tangible outcomes (page 7, lines 12 and 17).

**Goal 2.** The Panel generally agrees with the objectives of Goal 2. However, we recommend that an item be added to Objective 2.1 (page 10, line 26) to cover the dissemination or regulatory information. Small business stakeholders at the NNI's September 2013 risk workshop identified a regulatory road map as a priority need, and such a resource is consistent with Objective 2.1. The Panel strongly supports the participation of NNI agencies in international standard-setting bodies (page 11, line 11).

**Goal 3.** The Panel believes that human capital is critical for U.S. leadership in nanotechnology. The Panel supports enhanced NNI activity related to the development of a skilled work force and an informed public. The Panel also supports development of an informatics system that can support research and development, particularly with regard to environment, health, and safety matters.

[1] Members of the ACC Nanotechnology Panel are 3M, BASF Corporation, Cabot Corporation, Chemours, DuPont, Evonik Corporation, Lockheed Martin Corporation, and Procter & Gamble.

[2] National Science and Technology Council Committee on Technology Subcommittee on Nanoscale Science, Engineering, and Technology. National Nanotechnology Initiative Strategic Plan. Draft for public comment. Available at http://www.nano.gov/sites/default/files/2016_nni_strategic_plan_public_comment_draft.pdf.

**Goal 4.** With regard to Objective 4.1 (page 22, line 26), the Panel believes that bodies such as the International Organization for Standardization and the Organization for Economic Cooperation and Development are providing strong leadership and global coordination. We urge NNI agencies to participate in and contribute actively to such bodies. Objective 4.4 would benefit from output-oriented language concerning development and dissemination of risk-based tools (new or existing) for evaluating engineered nanomaterials and nanomaterial-enabled products from manufacture to end-of-life.

The ACC Nanotechnology Panel appreciates the opportunity to submit these comments. Please do not hesitate to contact me (Jay_West@americanchemistry.com) if you have any questions.

Sincerely,

Jay West
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