



Overview of Science and Technology Committee Draft E-Waste R&D Legislation

The e-waste R&D bill will create grant funding for universities, support the development of a green engineering workforce, direct the National Institute of Standards and Technology (NIST) to characterize alternative, greener materials that could be used for the production of electronics.

The provisions in the draft legislation are:

- **R&D:** The bill creates a grant program for university researchers, working in collaboration with industry partners, to lessen the impact of electronic products on the environment. Eligible areas include:
 - improved technology for recycling (such as for sorting and de-manufacturing);
 - new uses for material recycled from electronics;
 - product design to facilitate recycling and/or re-use;
 - greener alternative to hazardous materials;
 - tools to understand and measure the impact of electronics production and disposal of the environment;
 - and social science research to increase consumer participation in recycling and understanding of the impact of electronics on the environment.
- **Education/Workforce Development:** The bill will have three educational components:
 - Curriculum development grants to reform undergraduate engineering curriculum to include topics in green design;
 - the creation of internships for students to work on issues related to e-waste with an industry partner;
 - and, grants for workforce training and continuing education in the re-use, recycling, and electronic industries through community colleges and other institutions.
- **National Academies of Science Study:** The bill will commission a study from the National Academies of Science to review the impacts of e-waste and e-waste management options on the environment.
- **Materials Characterization at NIST:** This provision will direct NIST to systematically characterize alternative, greener materials for use in electronics. Comprehensive data on different chemicals and materials can help spur the adoption of substitutes. NIST

provided similar assistance when manufacturers were looking for alternatives to the chemicals implicated in the destruction of the ozone layer.