

SPEECH OF **HON. PETER WELCH** OF VERMONT IN THE HOUSE OF REPRESENTATIVES TUESDAY, SEPTEMBER 4, 2007

Mr

. WELCH of Vermont. Mr. Speaker, I would like to thank my colleagues on the Science & Technology Committee for their efforts in bringing H.R. 2850, the Green Chemistry Research and Development Act of 2007 to the House floor. This legislation is important and very necessary.

"Green chemistry and engineering" is the term used to describe the environmentally conscious design of chemical products and processes that are made safer to human health and the environment by reducing or eliminating the use or creation of hazardous and harmful substances.

Like many Americans, I am dedicated to reducing the causes and effects of global warming. Many of the solutions to global warming and other serious environmental problems need to be addressed at the molecular design level. This legislation does just that. It provides a path forward so that our chemists and engineers are able to conduct their work and research in an environmentally friendly manner.

This bill is also in alignment with the innovations legislation that was signed into law in August. It will help to sustain the United States' position as a global leader in the science and engineering fields and promote our ability to compete with other nations. The National Academies report, "Rising Above the Gathering Storm", commissioned by the House Science & Technology Committee, points out the growing concern for America's ability to compete in today's global economy. H.R. 2850 supports innovation by:

- Authorizing funding for green chemistry and engineering research;
- Investing in young researchers;
- Fostering collaborative R&D partnerships among our universities, industry, and nonprofit organizations;
- Promoting education and training of undergraduate and graduate students, as well as professional chemists and chemical engineers;
- Recognizing the value of the Manufacturing Extension Partnerships in the adoption of green chemistry and engineering innovations; and
- Providing for much needed science research to identify barriers to commercialization of safer chemistry and engineering practices.

This legislation is supported by my constituents who are members of the Green Mountain American Chemical Society. This organization includes members from Vermont's universities

and colleges, and from Vermont industries, such as IBM, BF Goodrich, Seventh Generation, and Biotek. Other supporters of H.R. 2850 include Vermont's Manufacturing Extension Partnerships and the Vermont Technology Council.

Vermont's business community is advocating ``green chemistry and engineering" research. Vermont-based Seventh Generation Inc. is a leading nationwide distributor of environmentally sensitive household soaps, detergents, paper products and diapers. According to Jeff Hollender and Martin Wolfe at Seventh Generation, on the face of it, green chemistry is pretty basic: find ways to make non-toxic or less harmful chemical alternatives from non-toxic or less harmful raw materials using processes that don't create pollution, and manufacture goods using less water, energy, and other natural resources. While the concept is simple, the reality is far from it. However, instead of representing failure, the current lack of alternatives just means that a lot of work still needs to be done.

Educators in Vermont are also supportive of increasing resources for green chemistry research. Dr. Daniel Savin of the University of Vermont is doing critical green chemistry research on the development and use of biodegradable plastics that are derived from renewable biomass resources as an alternative to the traditional petroleum-based plastics, whose production results in harmful greenhouse gas emissions. Dr. Savin is investigating the extraction of the feedstock for a new plastics material from whey-protein, a natural byproduct of Vermont's very important cheese production. These plastics could be used in pest control applications, weed suppression, and water retention; reducing the use of harmful chemicals and the depletion of natural resources. This is just one example of the value of investing in green chemistry and engineering research.

H.R. 2850 represents an important investment in green chemistry and engineering research and education. I am pleased to support its passage and urge my colleagues to support this legislation.