

S. 1054 – Smart Manufacturing Leadership Act

The Smart Manufacturing Leadership Act ([S. 1054](#)) was introduced in the U.S. Senate by Alliance Honorary Chair Sen. Jeanne Shaheen (D-N.H.) on April 22, 2015. Most recently, provisions of the bill were included in Section 1202 of S. 2012, the Senate's comprehensive energy bill. An identical bill was introduced in the U.S. House of Representatives ([H.R. 3266](#)) by Alliance Honorary Board Member Rep. Peter Welch (D-Vt.) on July 28, 2015.

Summary

This bill would improve the productivity and energy efficiency of the manufacturing sector by directing the Secretary of Energy to develop a national smart manufacturing plan and to provide assistance to small and medium manufacturers in implementing smart manufacturing programs. This plan would identify areas in which agency actions by the Secretary and other relevant federal agencies would achieve three goals:

1. Facilitate quicker development, deployment, and adoption of smart manufacturing technologies and processes;
2. Reduce environmental impacts and increase energy efficiency for all American manufacturers; and
3. Enhance competitiveness and strengthen the manufacturing sectors of the U.S.

Key Provisions

The Secretary would revise the plan every two years to account for advancements in technology and manufacturing needs. The Secretary would also expand the scope of technologies covered by the Industrial Assessment Centers to include smart manufacturing technologies and practices and to equip their directors with the training and tools necessary to provide technical assistance to manufacturers.

The Secretary would assess how to increase access to existing high-performance computing resources in the National Laboratories, particularly for small and medium manufacturers. The manufacturer's information and the facility's security would be maintained. The Secretary would also facilitate access to the labs for small and medium manufacturers so that these manufacturers can fully use the labs' resources to enhance the manufacturing competitiveness of the U.S.

The Secretary would be able to make competitive grants available to states to establish state programs that model how to implement smart manufacturing technologies. In order to leverage state engagement, each state receiving a grant would have to provide additional funds that equal at least 30 percent of the grant amount. These grants would be used to accomplish three goals. First, they would provide access to shared supercomputing facilities to small and medium manufacturers. Second, they would fund research and development of transformational manufacturing processes and materials technology that advance smart manufacturing. Finally, they would provide tools and training to small and medium manufacturers on how to adopt energy management systems and implement smart manufacturing technologies in their facilities.