

DOE's Better Plants program helps a diverse group of manufacturers leverage opportunities for innovation, training, and new technology. This includes AMO R&D Consortia, which are collaborative efforts that leverage common assets to the benefit of all stakeholders in targeted technical areas of manufacturing, overcoming the significant manufacturing challenges that are impractical for any single entity to bear alone. DOE has funded five institutes as a part of Manufacturing USA, a government-wide initiative focused on coordinating public and private investment in emerging advanced manufacturing technologies. Manufacturing USA brings together industry, academia, and government partners to leverage existing resources, collaborate, and co-invest to advance manufacturing innovation and accelerate commercialization. Better Plants partners can directly benefit from these institutes by joining them as official members.



The [Institute for Advanced Composite Manufacturing Innovation \(IACMI\)](#) supports the creation of clean energy solutions and catalyzing manufacturing competitiveness across the U.S. advanced composite ecosystem.

IACMI

Advanced composites are a game changer for American manufacturers paving the way for the next generation of fuel efficient vehicles, compressed natural gas storage, and wind turbines. IACMI's world-class team of leading industrial manufacturers, material suppliers, software developers, government, stakeholders, and academics focus on lowering the cost of advanced composites by 50%, reducing the energy used to make composites by 75%, and increasing the ability to recycle composites by more than 95% within the next decade.

IACMI issues calls for proposals from its membership to identify and prioritize resources to solve technical challenges that can lead to industry opportunities. Members can engage through short-term projects or, longer-term collaborative R&D efforts and have access to unique research capabilities. Some of these facilities include, the Composites Manufacturing Education and Technology (CoMET) facility in Colorado (focused on wind research); the vehicle technology center co-located with LIFT in Michigan that includes compression and injection molding presses; prepreg equipment; induction processing; and an RTM/Liquid Compression Molding machine and the Cvf Hub, a virtual modeling and simulation system led by Purdue University.

Better Plants Partner in Action: Designing Next Generation Car Parts through Simulation

Ford Motor Company, in partnership with the Purdue University branch of IACMI, is developing the next generation of lightweight carbon fiber composites as substitutes for their heavier metal components. Ford can request specific parts made from the composites and the dedicated campus lab designs and tests the components through custom computerized models. The whole testing process takes mere days to design the part, design the manufacturing process, and test it in their lab. The partnership is part of a five year program aiming to reduce the energy required to produce composites by 75%, and if successful will have a number of resounding impacts. Lighter components allow for lighter cars, resulting in higher fuel economy and a more energy efficient automotive manufacturing process.

To learn more about how to access numerous manufacturing institutes in the Manufacturing USA network:

Email:

Betterplants@ee.doe.gov or

Contact your Technical Account Manager

Visit:

[IACMI's Website](#)

[DOE's Advanced Manufacturing Office](#)