



Case Study

Client

Nonprofit Industry
Research Group

Project Number

21078

Team Members

Ronald Newman, Bogdan
Comanita, Robert Starkey, Susan
Rupp (Project Lead)

Market Analysis for Cotton-based Bioplastics

Summary of Client and Challenge They Faced

A nonprofit industry research group was exploring cotton applications in 3D printing and injection molding. They required an initial market analysis to identify opportunities for cotton-based bioplastics in this and other focal areas.

Our Approach to the Solution

LEC Partners (LEC) experts in market analysis, chemical engineering and process development, and polymer resins conducted a comprehensive review of the current value chain and key players in the natural fiber composite polymer markets.

This detailed review of market opportunities included an assessment of U.S. and global compounders working with natural fibers; brand activity; market trends analysis and identification – with specific focus on additive manufacturing and injection molding markets. Existing challenges and opportunities in bioplastic compounds were explored and a sequence of recommended next steps were provided including an assessment of potential areas of opportunity and future research directions.



Case Study

Market Analysis for Cotton-based Bioplastics

Client

Nonprofit Industry
Research Group

Project Number

21078

Team Members

Ronald Newman, Bogdan
Comanita, Robert Starkey, Susan
Rupp (Project Lead)

Client Results and Benefits

With the wealth of data and information compiled, the nonprofit industry research group was able to make a highly informed go/no-go decision about pursuing cotton composites in bioplastics and transitioning to other polyamide composite markets over the next several decades. In addition, they gained valuable insights on forming strategic partnerships with compounders engaged in research and commercialization of renewable polymer composites.