



SOLVING THE PROBLEM

Polyceed will deliver low-cost, wirelessly controlled, and multi-functional plug-and-play dynamic electrochromic (EC) window systems. EC window systems change light transmission properties in response to voltage, allowing control over the amount of light and heat passing through, enabling greater energy efficiency.

THE IMPACT:

Today's EC products are expensive to manufacture, complex to install, and require external wiring. Polyceed is developing a low-cost, controllable material for dynamic windows that requires no external wiring. The projected impact on commercial building energy efficiency includes broader deployment of dynamic glass and improving heat control at building fenestration, due to low-cost technology fabrication and installation.

HOW IN² IS HELPING:

Polyceed is in need of feedback on its current layering approach in order to build its first commercial prototype. Polyceed plans to take advantage of NREL's state-of-the-art laboratory facilities as well as the organization's market penetration assessment service. Through the IN² program, Polyceed will be able to further develop the dynamic glass, verify energy savings, and analyze how the EC window systems impact buildings.

ABOUT THE IN² PROGRAM

IN² is a technology incubator that fosters and accelerates early stage technology companies that provide scalable solutions to reduce the energy impact of buildings. Through a \$30 million program funded by the Wells Fargo Foundation and co-administered by the U.S. Department of Energy's National Renewable Energy Laboratory (NREL), sustainable building technologies are able to evolve and develop, contributing to the overall goal of a Smart and Connected Community that uses energy, water and other resources efficiently, reducing the negative impact on the environment.



TIER 1: Bench Scale

- Concept development stage
- Develop plans for prototyping & testing
- 3 – 5 years to market

TIER 2: Prototype

- Available for testing & validation
- Plans for development of final product
- Less than 2 years to market

TIER 3: Commercially Ready

- Models available in limited quantity
- Integrated demonstration
- Less than 18 months to market testing