



SUSTAINABLE DEVELOPMENT

Industrial Process Improvements
Carbon Capture
Zero Waste



ILLINOIS SUSTAINABLE TECHNOLOGY CENTER
PRAIRIE RESEARCH INSTITUTE

Thirty years of service
For a Sustainable Quality of Life

ENERGY

Bioenergy
Biochar Supercapacitors
Biodiesel
Plastics to Fuel

WATER

Ultra-filtration
Wetlands restoration
Pollution remediation
Smart sensor controls



Patented Technology

ISTC research looks for ways to improve industrial processes so they use less material or replace toxic or hazardous materials with more benign substances. For example, ISTC's Joe Pickowitz and Tim Lindsey patented a method to clean machine parts with water and reusable oil. It revolutionized what had previously been a complex and costly process using hazardous chemicals.



Lake Calumet Project



ISTC was part of a major, many-year effort to investigate, mitigate and rehabilitate Chicago's original heavy industry region, Lake Calumet. Deeply affected by more than a century of intense manufacturing, the area served as a laboratory for emerging environmental sciences. After decades of work, the U.S. EPA designated the Lake Calumet Cluster a Superfund Site.

Mud to Parks



The Illinois River Project - also known as Mud to Parks - has revised our view of dredge 'spoil' into a valuable reclaimed resource. ISTC's John Marlin has helped pioneer the harvesting of river sediments to serve as rich topsoil. Parks and brownfields across the state have benefited from the rich nutrients plucked from the river. The old U.S. Steel site in south Chicago has now been transformed into park land and thriving prairie spaces.

