About Us

The Clean Energy and Sustainability Analytics Center (CESAC) is a public research and technical assistance center that seeks to identify, quantify and interpret the ramifications of clean energy development and to facilitate energy planning. The center also provides support for clean energy policies, technology and practices through research and education programs.

Clean and Sustainable Energy Summit

CESAC organizes the Clean and Sustainable Energy Summit each fall, providing a venue for policymakers, industry representatives, NGOs, academics and other stakeholders to further discussions around sustainable energy challenges and solutions for New Jersey and beyond.

Current Projects

• Renewable Greenhouse Gas Initiative Related Economic and Energy Dispatch Modeling.

• Economy-wide modeling of energy and environmental policies.

• Exploring geographic opportunities for clean energy sustainability.

• Socioeconomic impacts of forest biomass-based biofuel development.

• Exploring place-based opportunities for bioenergy sustainability.

• Achieving green growth through terrestrial natural capital restoration in Rwanda.

• Sustainability regulatory integration and reform for Superfund sediment remediation projects.

• Ecosystem service tradeoffs, incentives, and optimal policy design to promote sustainable ecosystems.

CESAC projects are partially funded by the New Jersey Board of Public Utilities (BPU), New Jersey Department of Environmental Protection (DEP), National Science Foundation (NSF), PSEG Foundation, German Society for International Cooperation (GIZ), Sediment Management Working Group (SMWG), and United States Department of Agriculture (USDA).

Montclair State University
CESAC
Clean Energy and Sustainability Analytics Center

To Learn More:
Visit the center's website:
montclair.edu/CESAC

Contact Us:
CESAC@montclair.edu and 973-655-3739

Social Media:

 CESACmsu

 CESAC_MSU

 linkedin.com/in/CESAC/

COLLEGE OF SCIENCE AND MATHEMATICS

Clean Energy and Sustainability Analytics Center

Providing environmental and economic solutions to build a sustainable energy economy.

Montclair State University

Clean Energy and Sustainability Analytics Center

Approach

- We encourage collaboration between energy stakeholders and policymakers.
- We gather and analyze data to develop clean energy pathways that can be used for informed decision making.
- We generate Computable General Equilibrium-based Integrated Energy Environmental Economic models that can be used for energy and environmental planning in New Jersey.
- We foster faculty and student research in the area of clean energy and sustainability analytics.
- We assist policymakers, business and organizations in developing clean energy and transportation initiatives in the state and act as a resource hub regarding state regulatory and incentive policies.

Research and Advisory Services

Our experienced research team uses cutting-edge research to provide actionable, science-based insights to our clients. We help to identify the factors that may influence economic and environmental implications of a clean energy or sustainability project, including policy and sustainability relevance, market dynamics and stakeholder impacts. We undertake applied analysis to advise our clients and recommend ideal implementation strategies.

Modeling and Analytics

We excel in applying analytic techniques and adapting models for novel purposes, and developing new ones to satisfy project requirements. We use a variety of techniques, including economy-wide models, geospatial models, behavioral models, resilience analysis, financial models, emission and energy models, and data analytics at different stages of the project life cycle to provide timely and accurate analyses for our clients.

Engagement and Outreach

The CESAC team has considerable experience in engagement and outreach stemming from a wide range of research projects. We are capable of targeted outreach to assist specific groups on projects, which aim to inform stakeholders on clean energy and sustainability initiatives. Using tools – surveys, workshops, meetings, as well as social media – we tailor our approach to individual projects to maximize impact.

Education and Training

We aim to stay up-to-date on most current research across academia and industry in order to gain an unmatched perspective on energy and sustainability concerns. We specialize in making learning accessible for students, stakeholders and clients, via a variety of media, including presentations, webinars and publications. We strive to impart best practices within clean energy disciplines, and tailor our expertise to ensure effective skill development.