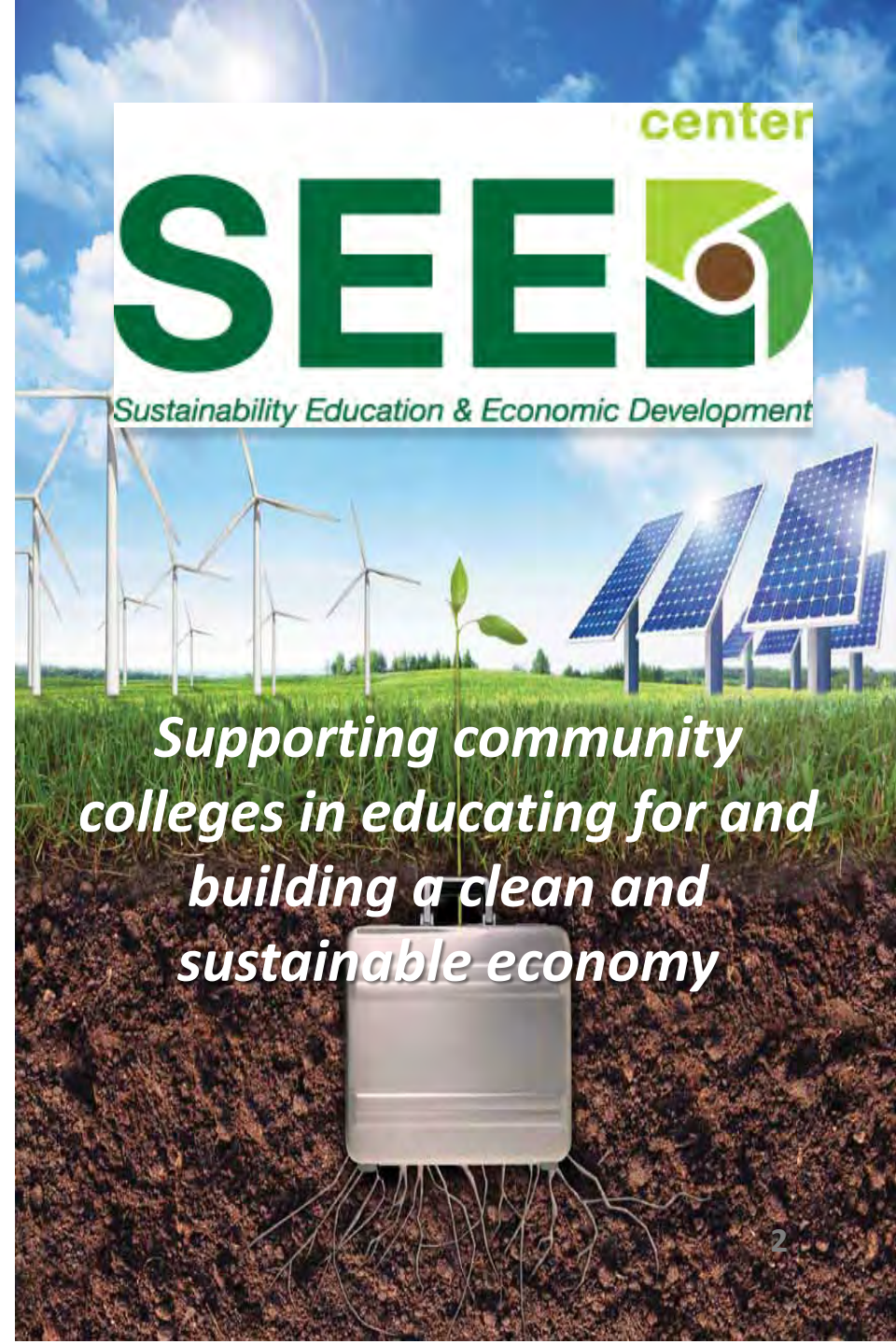


The College Campus as a Sustainable Living Laboratory

March 2015



***Building a Nation of Learners
by Advancing America's
Community Colleges***



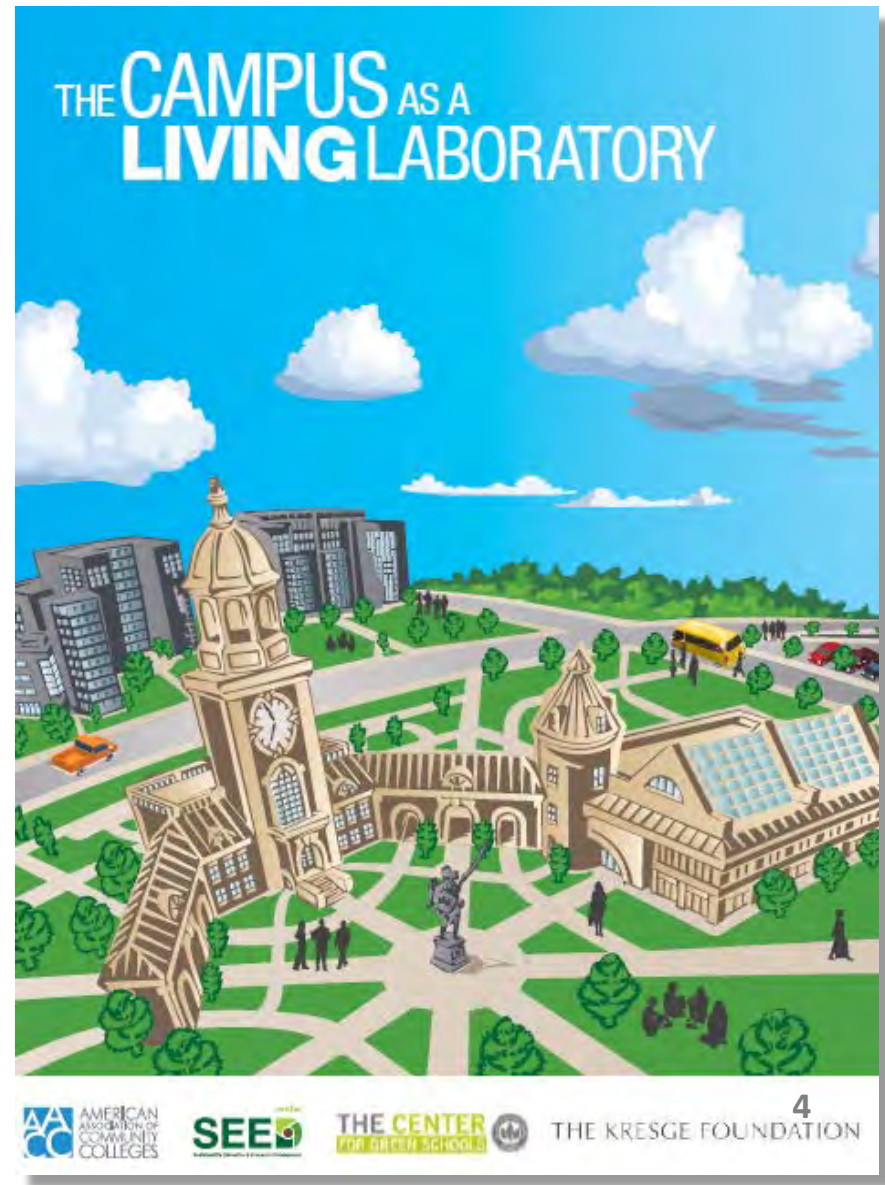
***Supporting community
colleges in educating for and
building a clean and
sustainable economy***

SEED: 485 Member Colleges



The Campus as a Sustainable Living Laboratory

- Student learning opportunities that incorporate the college campus built environment
- Performed in conjunction with traditional classroom learning to make instruction more relevant to students



What it Can Be...

“The idea underpinning the living laboratory theme is that the entire UBC campus is an experiment in sustainability...in which staff, students and faculty can test, teach, learn, apply and share the outcomes of their inquiries”

--John Robinson, Associate Provost | UBC
Sustainability Initiative

FOOD SERVICES

Redesign college composting procedures, analyze cost of recyclable bottles and flatware, turn waste into bio-diesel fuel

CONSTRUCTION AND LAND USE

Assess waste remediation practices, benchmark facilities against LEED criteria, restore native plants

TRANSPORTATION

Develop business plan for alternative-fuel campus fleet

BUILDINGS

Install building sensors, monitor energy use, calculate return on investment for renewable sources

GROUNDS

Assess campus pesticide use, build rainwater harvesting tank

PARKING

Develop financial models for lighting retrofits, study student attitudes toward ride-sharing





Georgia Piedmont Tech College



Central Carolina CC (NC)



Alfred State (NY)



Butte College (CA)



St. Clair County Community College (MI)



Lane Community College (OR)



Delta College (MI)



Gateway Tech College (WI)

Why? A Core 21st Century College Strategy

- Leads to on-the-ground sustainability outcomes
- Fosters internal relationships
- Generates important business/higher-ed partnerships
- Makes curricula relevant through experiential learning
- New, innovative model for higher education (also a core completion strategy)

Addressing Key Challenges

- **Engaging facilities**
- **Identifying key programs**
- **Identifying key campus opportunities**
- **Coordinating body/person**
- **Faculty commitment**

“Our students don’t even know they’re mastering algebra and geometry. They know they’re reducing a home’s energy consumption, and that’s what’s interesting for them.”

Dean, applied technology, Alfred State, discussing students’ work to optimize a net-zero home’s small wind energy source

“Students who have been trained on these living labs, solving real sustainability problems, no doubt have the hard and soft skills that are urgently needed in our industry”

Executive, commercial building technology
company

SEED: Our Mission to Scale Up Living Labs

80% of higher
ed institutions
conducted green
retrofits and
operational
improvements in
2012*

59% of
community colleges
say they are
interested in using
these projects as
student learning
opportunities

<5% of
community colleges
are actually doing it
today **

*2013 McGraw-Hill report: *New and Retrofit Schools: The Cost Benefits and Influence of a Green School on its Occupants*

**2013 SEED member survey