CREATING AN ENVIRONMENT FOR GROWING GREEN JOBS:
Community Colleges Shaping State and Local Energy Policies
Policy changes at the state and local levels likely will be the strongest determinants of where green jobs will flourish. Right now, across the country, hundreds of cities and states are considering new renewable standards, building code changes, incentive packages for energy-related firms, and other measures that will drive demand for green industry workers with relevant and up-to-date skills. Community colleges can be a critical voice in advancing policies that create specific opportunities for students to access and complete programs in an evolving and promising green world.

About AACC’s Green Action Plan Series

This action plan series includes practical and actionable steps that colleges can take to not only prepare a skilled workforce, but also to become change agents in regional efforts to develop a green economy.

About SEED

The American Association of Community Colleges’ Sustainability Education and Economic Development (SEED) initiative aims to advance sustainability and green workforce development practices at community colleges. With more than 425 college members, SEED identifies and shares promising models and resources and builds the capacity of college leaders, faculty, and staff. This program is consistent with AACC’s commitment to access and completion as part of the national goal to increase the number of students who complete degrees, certificates, and other credentials with value in the work place. More information can be found at www.theseedcenter.org or by contacting sustainability@aacc.nche.edu.
Acknowledgements

The American Association of Community Colleges (AACC) is the primary advocacy organization for the nation’s community colleges. The association represents nearly 1,200 two-year, associate degree-granting institutions, and more than 12 million students. AACC promotes community colleges through five strategic action areas: recognition and advocacy for community colleges; student access, learning and success; community college leadership development; economic and workforce development; and global and intercultural education. More information can be found at www.aacc.nche.edu.

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Message from the American Association of Community Colleges (AACC) about the SEED Green Action Plan Series

AACC is pleased to offer the SEED Green Action Plan Series, a set of practical guides and actionable steps that colleges can take to not only prepare a skilled workforce, but also to become change agents in regional efforts to develop a green and sustainable economy. For an emerging industry like this—where job growth potential is significant but great uncertainty surrounds market conditions—colleges can be doing a lot now to prepare for promising future opportunities. These action plans, aimed at senior administrators, faculty, and staff, are important resources to ultimately speed the implementation of these efforts.

AACC looks forward to working with you in this endeavor.

Walter G. Bumphus
President and CEO, American Association of Community Colleges
Message from College Leadership

Colleges and Green Public Policy: A Perfect Match
As many regions have learned over the past several years, industries such as wind and energy efficiency and green building do not simply emerge in random locations. It takes a comprehensive, region-wide effort to create the right conditions that make the area attractive to new energy employers, clean technology innovators, and, ultimately, new job opportunities.

One of these conditions—**stable public policies that incentivize sustainable energy industry growth**—may be the most critical determinant of where green jobs will flourish.

As community colleges, we have a real opportunity, perhaps even a responsibility to be aware of and active in local and state policy development efforts. This includes being more engaged in regional economic development planning activities aimed at creating sustainable and green communities. We cannot sit and wait for green jobs (and subsequent training opportunities) to simply appear. In today’s challenging economy, we must aggressively advocate for strategies to spur job growth and training in promising green technology fields.

To help us fulfill our critical role, I am pleased to introduce this SEED green policies action plan. It is designed to help colleges and others who want to create green jobs to better understand and leverage the impact of public policy on regional economic development. I am confident that it will empower colleges to become change agents, work more closely with those outside their institution, and help drive the development of a sustainable economy.

Rose Johnson, Ph.D.
President, Haywood Community College (NC)
Executive Member, AACC Sustainability Task Force

“[T]he greening of America is not a fleeting fad. It will continue to influence and impact our lives, requiring the development of eco-conscious, highly skilled workers, citizens, and communities. Community colleges are not only in a perfect position to do this; they also may be the only public institution whose mission and connection to community make it possible.”

Mary Spilde, President, Lane Community College and former AACC Board Chair
INTRODUCTION:
THE GREEN ECONOMY EQUATION

While the weak economy has stunted the growth and promise of green industries, it is not entirely to blame. Many regions simply lack the right synergistic, comprehensive conditions for these industries to take hold.

In some regions, there is a disconnect between training capacity and job growth. A community may have providers who train solar technicians, but inadequate regulatory incentives and consumer demand to support a solar products sector. Or, green regulations may encourage industry growth in an area with no training programs to produce qualified workers. It is crucial to cultivate the right conditions for simultaneously training green workers and growing green businesses.

Community colleges have the stature, reach, and mission to assume a prominent role in tying these conditions together and creating the synergy for green job growth.\(^1\) Smart public policy is the starting point.

Local and state utility regulations, energy portfolio standards, financial incentives, and other policies can be the most important determinants of where green companies and jobs will emerge. Colleges can have an immediate impact on local, state, and even federal development and adoption of such policies through the work of their government and community affairs departments, by engaging students and the public in local projects and civic engagement, and by convening and collaborating with businesses, workforce boards, and others to champion policy initiatives. This engagement becomes a critical part of enabling colleges to anticipate new green workforce needs.

Colleges across the country have set precedents for participating in regional green policy and strategy development. These regions show the greatest promise for providing opportunities for green jobs and training.

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\(^1\) Institutional cost savings achieved through improvements to campus facilities and operations are also a major impetus for community colleges to engage in sustainability issues. However, this document focuses primarily on colleges’ roles in helping to spur green job creation through economic development.
At a local level, cities across the country are implementing ordinances such as green building codes and energy audit requirements that are stimulating demand for weatherization services and more efficient building products. In fact, according to the U.S. Green Building Council, more than 450 localities across the United States have now adopted some form of LEED requirement for construction or renovation projects.

Similarly, states and communities increasingly use financial incentives as a tool to attract clean energy industry manufacturers and suppliers. Production tax credits, sales and property tax exemptions, low-interest and long-term loans, revolving loan funds, and rebates for industry (and colleges) aimed at increasing energy efficiency and renewable energy building installations not only help increase local demand for new clean energy products, but also make regions more attractive to global energy firms looking to establish a presence in visionary, progressive states.

Even states and regions that appear to be doing little to stimulate a green economy have small and large-scale policy initiatives at work. A sample of these green policies appears below with the number of states that have adopted them.

In 2011, the Dubuque, IA, City Council passed an ordinance requiring all area solar thermal installation projects be performed by licensed and trained individuals. An active participant in this policy process, Northeast Iowa Community College (NICC) formed the region’s first solar thermal course that satisfies the licensing requirements and that leads to a NABCEP certification. The new standards ensure workers receive a new set of marketable skills and support the emergence of a new sub market.
Community College Role in Public Policy Green Advocacy

Community colleges have been very powerful and influential advocates for local, state, and federal policy on issues affecting workforce development and education and training, and including financial aid. Although many colleges may be new to sustainable energy legislation and policies, this sector’s potential to spur job growth makes it well worth pursuing.

Importantly, the college role in public policy is not limited to advocacy or even policy initiation. Faced with depleting resources, college administrators, trustees, faculty, staff, and students have opportunities to partner more closely with regional and state stakeholder groups whose mission is to lead these policy efforts. Through these partnerships, and a host of existing resources, colleges can better understand what policy and funding streams drive consumer demand and industry growth—and be better prepared for meeting the specific needs of businesses.

All of these policy changes will continue to drive the demand for training for jobs up and down the supply chain.\(^2\) As states adopt energy efficiency resource standards that require utilities to save a certain amount of energy, new building codes are being shaped to meet them. This spurs increased demand for certified energy managers who can inspect these buildings; component manufacturing firms that can design and construct new heating and cooling systems and lighting structures; salespeople who can sell the systems and structures; and HVAC technicians, electricians, and other skilled workers who know how to install and repair them. For a community college, this can represent a critical mass of demand for education and training opportunities.

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Wei, M.; Patadia, S.; Kammen, D.M.
PART II: TAKING ACTION

We suggest 11 specific policy action steps that community college leadership, faculty, and staff can take to help build their regional green economies. Some speak to short-term legislative advocacy activities, some require forming closer relationships with state agencies, and others include longer-term efforts to build a stronger community culture of civic engagement.

Many colleges across the country are already engaged in these efforts, proving that they can be accomplished. Use the SEED Center to learn more about these stories and the local leadership.

Get Informed
Colleges must understand the local industries and their region’s specific connection between public policies/incentives that will encourage green market growth and specific job creation. They must also begin to envision how the college administration, faculty, and students can best get involved in advocacy efforts.

1. Identify a campus lead and include policy on the college’s sustainability agenda. Make it someone’s job to track green economy-related regional, state and federal policy, regulatory and program initiatives; and identify gaps and opportunities. The individual, whether a government affairs representative, a faculty member, a facilities planner, a sustainability officer, or other, should incorporate these discussions as part of the regular agenda of campus sustainability committees. The individual should have the capacity to connect the dots between certain policy directives and their impact on the institution—and then communicate that effectively up to college senior administrators and with key external stakeholder groups.

Bergen Community College (NJ), Finger Lakes Community College (NY), Howard Community College (MD), Mesa Community College (AZ), and Rockingham Community College (NC) are just a few colleges that have a designated climate commitment policy liaison dedicated to this function. Chandler-Gilbert Community College (AZ) has a standing civic engagement committee that monitors these issues and hosts an annual Energy Policy Forum. Speakers include state politicians, agency heads, and utility representatives and other private sector leaders. The event typically draws 250 administrators, faculty, staff, students, and the public.

There are also an increasing number of state community college system organizations that are supporting smaller colleges (with no standing government affairs or sustainability committees) in conducting this kind of energy policy tracking.

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3 Identified as such as a signatory institution of the American College and University Presidents’ Climate Commitment.
2. Be aware of the local and state policy landscape affecting the industry. 
Colleges should tap the most up-to-date green job trends, clean energy industry developments, and related legislative/policy issues. These should become part of existing college research and communication strategies. At a basic level, colleges should be able to determine which directives are in place and how they are impacting certain subsectors of the industry within their region.

Fortunately, a wealth of current information exists:

- **Building Codes Assistance Project**
  http://bcap-ocean.org/code-status
  Includes a series of U.S. maps depicting building energy code adoption and implementation status.

- **Efficiency First**
  www.efficiencyfirst.org/policy/
  Includes information on a number of federal, state, and local policy programs from HOME STAR legislation to energy efficiency tax credits.

- **American Council for an Energy Efficient Economy**
  www.aceee.org/sector/state-policy
  Includes detailed information on existing utility policies, building codes, financial incentives, and a summary of related policy priorities for each state.

- **Solar Energy Industries Association**
  www.seia.org
  Includes examples of state policies and incentive tools as well as legislative action alerts.

- **American Council On Renewable Energy**
  www.acore.org
  Includes snapshots of every state highlighting renewable energy capacity, job growth, industry investment, and active policies.

- **Database for State Incentives for Renewables and Efficiency**
  www.dsireusa.org
  Includes a database of existing state policies and financial incentives.

Some of these organizations will also support colleges in taking state action. For example, at no expense, the American Wind Energy Association (www.awea.org) will supply issue briefs, legislative talking points, and help colleges set up meetings at congressional representatives’ offices. (For more information, email grassroots@awea.org.)
At Santa Fe Community College (SFCC), engaging in clean energy-related public policy development is core to its mission and critical to ensuring students get and succeed in jobs.

At a local level, adjunct faculty continue to work closely with city officials and the Home Builders Association in an effort to make the local building codes green. At a regional level, the college serves on a city/county task force that developed the state’s first Renewable Energy Financing District, a policy that allows commercial property owners to secure a long-term loan to purchase and install a solar photovoltaic, solar thermal, wind, or other renewable energy system, and pay the loan back through their property taxes.

At a state level, SFCC faculty and students participated on a task force that provided recommendations to the New Mexico Energy, Minerals, and Natural Resources Department on solar industry incentive package design options.

In each case, college representatives are not only shaping the state’s overall approach to sustainability, but, given their involvement and access to the process, are able to rapidly refine curriculum and training programs to reflect expected market changes. In this case, SFCC’s Building Construction and Environmental Technology programs have undergone recent upgrades to meet these new renewable energy, energy efficiency, and green building directives.

When asked why the college has devoted so much time to the public policy process, Randy Grissom, the Director of SFCC’s Sustainability Technology Center, exclaims, “We don’t have a lot of industry here [in Santa Fe]. So, as a community, we need to take a risk and try to grow one. And as our state economic development officials seek to provide incentives to draw these green technology companies to the state, we always remind them that we better have a skilled workforce. Or the jobs will ultimately go somewhere else.”
3. Determine your region’s unique mix of opportunities for green job growth by connecting with your state energy office, your economic development entity, and your utilities. Understanding, for example, how utility companies are planning their workforce to meet new portfolio standards or how local incentives for commercial lighting retrofits will impact new supplier skill needs is critical for colleges designing responsive programs.

Working closely with state energy offices, regional utilities, and economic development agencies will provide a clear picture of the loan funds, tax credits, and other programs that states offer to spur renewable energy generation, encourage energy conservation, and catalyze new energy companies. In a growing number of states and regions, these organizations are now collaborating with the workforce system as “State Energy Sector Partnerships” or similar sector employer panels to discuss how these policy drivers translate into industry skill needs. Colleges should be represented in these efforts.

In addition, at a local level, colleges should work with their workforce investment boards, specifically, to ensure they include standing representatives from each of these specific organizations. Their presence will help create a direct line of communication to local green-collar businesses and contractors.

4. Join forces with local advocacy organizations. Many regions have local affiliates and nonprofit organizations already dedicated to tracking and advocating for certain energy and environmental policies. Organizations such as the American Solar Energy Society, the Environmental Defense Fund, the Sierra Club, and the U.S. Green Building Council have local chapters across the country that are explicitly aiming for increased community college support. In addition, organizational collaborations that develop and promote new energy policies are increasing their presence at both a regional level (e.g. Energy Efficiency Alliances) and state level (various energy research consortia and industry associations). Where appropriate, community colleges should be incorporated as board or advisory members or volunteers in these efforts.

As college personnel become knowledgeable on these issues, they are increasingly getting recognized as policy experts. Faculty and administrators from colleges such as Lane Community College (OR) and Johnson County Community College (TN) have provided public testimony during hearings for issues such as energy tax credits and local utility rate cases (to fund expanded energy efficiency activities).
Mobilize and Partner

Colleges can be more active in supporting policies, from lending their names to legislative efforts to serving as a regional convener of energy and environmental planning initiatives. In addition, colleges can encourage civic engagement on issues such as resource conservation, fuel sources, and energy rate structures by using the campus to educate students and the general public.

5. Hone messaging around the economy.
As with any advocacy effort, organizational messaging is crucial. While incorporating sustainability into a college’s overall policy message is important, many colleges report success, recently, in focusing in particular on the job creation potential of sustainable industries. As Jerry Weber, President of College of Lake County (IL) states: “In this economic climate, discussions about jobs and cost savings are what resonate with our state representatives. They also understand that green skills can make the workforce ready for industries, and energy efficiency can mean savings that can be reallocated for instruction.”

Northern Maine Community College (NMCC) is a key convener in a multi-stakeholder county collaborative aimed at creating a sustainable region and an alternative energy industry sector. Launched in 2010, the Mobilize Northern Maine comprehensive planning process includes representatives from the regional development commission, the business community, nonprofits, government, and higher education. The partnership is now moving aggressively on several fronts including expanding biomass conversion and designing financing structures to support regional energy efficient modifications.

see a full description soon of NMCC’s new renewable energy center of excellence and training plans at www.theseedcenter.org

NMCC hosts many of the collaborative meetings and brokered important alliances within the partnership on the way toward getting full plan cooperation.

“We are committed to supporting and leading economic development efforts in northern Maine,” explains NMCC President Timothy Crowley. “That leadership manifests itself in the building of networks and relationships that help address expansion of our economy in very challenging times.”
6. **Act as the regional energy strategy convener.** Community colleges can serve as a critical convening organization as more regions across the country assemble to discuss renewable energy choices, conservation techniques, and ways to attract green jobs. As credible and recognizable organizations, community colleges are naturally suited to host clean energy policy and planning meetings and to broker stakeholder relationships between economic developers, industry and utility leaders, government officials, unions, students, the public, and others. The result of which can be a regional coalition of support for smart energy policies that grow local businesses, provide more green jobs, and yield financial savings for residents.

7. **Connect with other colleges regionally or statewide.** A joint effort will not only make it easier for colleges to stay abreast of policy possibilities, but also showcase a more powerful singular voice on legislative changes to local, state, and federal officials. In Illinois, all 48 community colleges have partnered to create the Illinois Green Economy Network (igen at www.igencc.org). This group coordinates green-collar curriculum efforts and works with Illinois’ energy bureau under the Department of Commerce & Economic Opportunity on various policy initiatives that impact campus energy use and workforce development. This agency now provides funding to support the IGEN’s efforts to significantly reduce energy demand across the Illinois community college system. In addition, IGEN is working with state legislators and has begun to create legislation to allow for continual funding of IGEN initiatives. Similar state wide college collaborations are emerging in California, North Carolina, Texas, and elsewhere. Work through the AACC SEED Center to learn about and access leaders of these statewide college initiatives to determine how their model may be applied.
San Diego Miramar College’s Workforce Development Response to New Climate Regulations

The integration of energy and air quality regulations is critical in California to limit greenhouse gas emissions. However, despite the agreed upon need to foster cleaner air quality, the South Coast Air Quality Management District and various regional transit, wastehauler, and trucking companies faced a key challenge in keeping new advanced fuel and technology vehicles on the road. The problem: because technicians at these companies did not have the full skill set to maintain or repair its vehicles, vehicle down time was significant resulting in less-than-desired emission improvements.

San Diego Miramar College (SDMC), as part of California Community College’s Advanced Transportation Technology and Energy Initiative (ATTE), responded. The ATTE Center at SDMC worked with both governmental agencies and industry members to spearhead a comprehensive approach:

- In the immediate term, the ATTE Center in partnership with other five other community colleges implemented a four-day incumbent worker training program that introduces existing technicians to natural gas technologies and diagnosing and inspecting hybrid vehicles.
- To address the longer-term talent pipeline issues, SDMC is managing a program to train faculty at colleges across southern California to develop curriculum for their own programs. The emphasis is on enhancing colleges’ existing programs (e.g. in heavy duty or diesel technology) to include natural gas as part of their curriculum.

In just a short time, 150 workers have already been trained with many more planned as both programs continue to grow. The success has led to an important new partnership between the air regulatory agency, the network of ATTE community colleges, and now the Southern California Gas Company, which may open the door for additional SDMC-led training opportunities.

“Just having a relationship with the air regulatory agency and the state Energy Commission gave me greater insight into the challenges they were having with industry regulatory compliance,” explains Greg Newhouse, SDMC Associate Dean. “When I realized the policy problem was tied to workforce development we were able to use our industry and agency contacts and learn from employers regarding their specific training requirements. Now, workers across the region are getting updated skills, new students will get jobs, and the intention of the policy will be met: California will have more alternative vehicles on the road and ultimately cleaner air.”
8. Commit to civic engagement skill building for students. As Dr. Mary Spilde, President of Lane Community Colleges explains, “[Today’s students] have the expectation that colleges not only understand the [sustainability] issues but are proactive in responding to the . . . This provides avenues for student engagement and real-world problem solving that make education more relevant and enhance student learning outcomes.”

As a start, colleges should connect student life staff, student groups, and faculty to integrate civic engagement into curricular and co-curricular activities. Programs like www.350.org (developed by Middlebury College) and the Energy Action Coalition (http://energyactioncoalition.org/) are aimed at mobilizing students on campuses around the country around climate change and access to good green jobs. For example, the Energy Action Coalition hosts Powershift, a national gathering where participants meet directly with elected officials.

Additionally, the Association for the Advancement of Sustainability in Higher Education (www.aashe.org) provides a number of college examples of students connecting directly with local businesses for internships, service learning projects, and course-based civic engagement to promote sustainable practices. Butte College’s American Democracy Project is highlighted as a national higher education model. AASHE is currently building a curricular component to their Web site including more examples of colleges incorporating energy-related civic engagement within academic assignments.

9. Engage the public. Through continuing education and other forums, colleges have a role to play in delivering or reinforcing key sustainability messages to a community that may not always understand the potential incentives and specific advantages of taking action. Such actions include weatherizing their homes, installing solar panels, and reducing waste. Many colleges now host sustainability conferences, green speaker series, sustainable products fairs, specialized workshops, and other events that help the public, business owners, and employees become more knowledgeable and effectively engaged in advocating for smarter energy policies and job creation in this industry. See www.theseedcenter.org/Colleges-in-Action for a growing compendium of examples of colleges engaged in community engagement efforts.
Commit Internally
A great deal of internal campus education must occur to persuade presidents, trustees, and other leaders that sustainability and green job growth not only are important, but also merit active policy engagement.

10. Build the institutional leadership.
Elevating the role of college senior administrators to guide and advocate on behalf of community sustainability initiatives is critical. Fortunately, there are a growing number of resources targeting this specific audience. AACC’s Sustainability Task Force (http://www.theseedcenter.org/About-SEED/SEED-Leaders/Sustainability-Task-Force) is an open group of 35 plus college presidents that guide AACC’s SEED initiative and meet to share specific campus sustainability challenges and public policies. The American College and University Presidents’ Climate Commitment (ACUPCC) is a powerful demonstration of both individual and collective leadership, providing credibility and organizational support for advocacy efforts. Second Nature (www.secondnature.org) has established a Presidential Fellowship program engaging recently retired college presidents to work with their colleagues in support of the ACUPCC and other sustainability initiatives.

In the fall of 2011, AACC’s SEED Initiative will release a leadership action plan to provide college presidents specific steps, messaging techniques, and other best practices to effectively lead campus sustainability initiatives, engage trustees, and advocate externally.

11. Incentivize green policy understanding and action through faculty and student development.
To build students’ skills, colleges must make sure faculty and staff also have the knowledge and skills for civic engagement. Colleges should include information on policy engagement in the professional development activities for faculty and staff and encourage integration of these opportunities into the academic and co-curricular parts of campus life by including them in annual staff reviews. In addition, colleges should integrate civic engagement into the agendas for partnership building in as many areas of the college as possible, and into the expectations for the governmental relations office.

Other opportunities that colleges are pursuing include:
• Creating incentives for student projects, faculty courses, campus operations, and general college outreach work to be directed towards fostering greater support for green economy related policies, regulations, and programs.

One of the differentiating features of the Green Education Institute Advisory Board at Atlantic Cape Community College (ACCC) is its emphasis on the importance of the college’s role in consumer education, along with career education, as drivers of green economic development. As the associate dean of continuing education operations explains, “Our role is to educate the consumer on energy efficiency and renewable energy ideas, as well as to educate a workforce to support the economic development of new green jobs and the retraining of our workforce for existing jobs that require updated skills.”

From the upcoming Greenforce Initiative Report
• Providing a stipend to faculty to integrate green economy policy-related work into their course design.
• Raising the profile and related activities through coverage in the media and press and in the college website or newspaper.
• Providing opportunities for student service learning and internship activities promoting effective government advocacy and green programs.
• Collaborating with local industry to create faculty externships in government advocacy, community policy, and local and/or state advocacy organizations.

Conclusion
Great community colleges help to build great communities, opening pathways to prosperity to all who wish to take advantage of them. The colleges’ collective commitment is to seek opportunities for students and workers to access and complete programs and attain the credentials needed to compete in an ever-changing and expanding economy. Engaging in effective government advocacy and supporting employment sectors is not new to our colleges, but doing this work for the green economy is. The time has come for colleges to embrace a more proactive role in the emerging green economy by driving policy, regulation, and programs within government and key employment sectors alike.

For additional resources and examples of colleges that have effectively engaged in building the green economy, see AACC’s SEED Center at www.theseedcenter.org

“Through our visits to Washington, we offer policy-makers a real-world perspective on how their decisions affect local communities, and in turn we stay informed of key issues affecting our strategic planning. Green jobs are at the forefront of our visits; these hold the key to our nation’s energy and security future, while bringing family-wage jobs to rural America.”
Frank Toda, President, Columbia Gorge Community College, via the National Wildlife Federation’s Fly-in program.