



SHiFT

*Support Systems for Sustainable
Entrepreneurship and Transformation*

Good practice collection University support for sustainable entrepreneurship

*Bren School of Environmental
Science & Management, UCSB
California, USA*



Good practice collection

SHIFT ("Support Systems for Sustainable Entrepreneurship and Transformation") is a unique research project and is funded through the EU programme ECO-INNOVERA: www.eco-innova.eu. SHIFT's main goal is to enable universities, incubators, business development organizations, financial institutions and other relevant actors to support eco-innovation and sustainable entrepreneurship more effectively. On the basis of thorough empirical analysis of the status quo and the identification of good practices world-wide, concrete and realistic recommendations have been developed for policy makers and actors of the support systems: www.shift-project.eu

The Bren School of Environmental Science & Management at the University of California, Santa Barbara (UCSB) is part of a selection of good practice examples the Borderstep Institute has collated in the context of the SHIFT project to highlight exemplary activities of higher education institutions (HEIs) in Finland, Germany, Sweden, the United Kingdom and the USA that have successfully integrated sustainability in their respective entrepreneurship support system.

Bren School of Environmental Science & Management – University of California, Santa Barbara

Characterization: *Environmental science and management school that focuses on business and entrepreneurship*



Good practice highlights

Master of "Environmental Science and Management (MESM)": MESM is a 2-year professional degree programme designed for individuals who plan to enter or re-enter the workforce upon graduation. The programme focuses on application and problem-solving and has three parts: the first-year core curriculum, the second-year work in one of seven Specializations, and the Group Project or Eco-Entrepreneurship Project.

Module in "Corporate Environmental Management (CEM)": CEM provides for a specialization as part of the MESM and conveys how private-sector firms may address environmental and natural resource issues in a manner that also promotes shareholder value, thus creating a link between the quality of environmental and natural resources and a firm's overall market objectives.

Module in "Eco-Entrepreneurship (Eco-E)": Eco-E is part of the MESM and enhances other electives (specializations) by providing a special focus on eco-entrepreneurship. The module is a joint initiative between the Bren School and the Technology Management Program of the College of Engineering. Eco-E students pursue additional coursework and activities that provide them with skills and support to launch new ventures, products, and technologies that address society's environmental and resource problems.

UCSB Office of Technology & Industry Alliances (TIA) Startup Support Program: The Startup Support Program is a programme established to help UCSB startup companies. The programme provides one-on-one customized support covering a broad range of topics, services, and

resources. Anyone in the UCSB community who is considering starting up a company or who has already launched a new venture-based on UCSB research is eligible for this programme;

Eco-Entrepreneurship Advisory Council (EEAC): EEAC guides, supports, and promotes eco-entrepreneurship education at the Bren School, and serves as the primary conduit between the school and the entrepreneurial and investor communities.



Key data

Location: Santa Barbara, California, USA

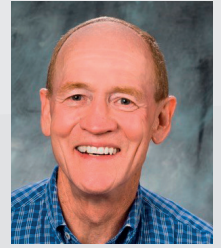
Founded: 1991 (Bren School), UCSB was founded in 1891

Number of students (2015): 220 (Bren School), UCSB as a whole has 23,000 students

Profile: The Bren School is among a few schools in the United States – and the only one on the West Coast – that integrate science, management, law, economics, and policy as part of an interdisciplinary approach to environmental problem-solving. The Bren School collaborates closely with other schools and groups at UCSB. Its interdisciplinary teaching and research programmes underline its mission of the connection between human and natural systems. Adjunct professors and visiting lecturers from industry and other leading universities complement the full-time faculty and extend the school's academic reach while enhancing the real-world relevance of the curriculum.

Interview with Gary Libecap, Ph.D.

*Professor, Corporate Environmental Management
Bren School of Environmental Science & Management
University of California, Santa Barbara*



Why did your university/business school start to support sustainable entrepreneurship and/or eco-innovation endeavours?

It started when I came here in 2006 because we had a traditional entrepreneurship programme at Arizona, where I was working prior to the Bren School. It didn't specifically focus on the environment although there were some students who were interested, but it was the most successful undergraduate and MBA program in Arizona. I directed the centre that ran it. When I came to the Bren School, it seemed to me that there was a perfect opportunity to apply it to environmental issues. I think a major reason is that our professional master's programme in "Environmental Science and Management" is like an MBA programme, in the sense that, it's a terminal degree and students want tools to be effective environmental managers. If you have this sort of an independent risk-taking group which student includes, then Eco-Entrepreneurship seems like a perfect opportunity for them.

Who initiated your programmes, what were the milestones of their evolution?

I initiated the Eco-Entrepreneurship programme in close collaboration with the Technology Management Programme of the UCSB College of Engineering. On that basis the Bren School launched the nation's first programme of study in eco-entrepreneurship (Eco-E) in 2007. We did a „Let's do it" mini version to see if we can develop this kind of a programme. And then, there was this explosive student interest, which caught a lot of the faculty off-guard. It was advertising this and really going after students who were looking for this kind of a programme. So it became clear that this couldn't be something just a little side project of one

of the faculty and that we really have to develop a comprehensive programme. And so, we did a search and identified Emily Cotter and hired her as Eco-Entrepreneurship Lecturer, Project Coordinator and Programme Manager. She has started several businesses herself. Emily was a huge part of the success. She's an amazing teacher. Literally, the first year we started this programme, I think we had 30 students out of our 80 that decided they wanted to do this even though it was not a reason they came to Bren at all. It's just a matter of being exposed to her in the initial orientation and two weeks kind of boot camp things about opportunities and a lot of them gave it a try. And now, we've flushed out the programme in a very big way. Another important milestone was the establishment of our Eco-Entrepreneurship Advisory Council. The Advisory Council guides, supports, and promotes eco-entrepreneurship education at the Bren School, and serves as the primary conduit between the school and the entrepreneurial and investor communities. It has been very helpful in terms of creating incubator funds and fellowships.

What can other universities learn from it?

The universities always have to justify themselves. They compete for government funds or they compete with private funds. They compete for the best faculty. They compete for the best students. If eco-entrepreneurship is an area that has social benefits, if this is an area that students are interested in, if this is an area the faculty are interested in, then a successful university has to be there.

What are your next steps/future plans?

We are working on developing more fellowships, trying to find a way to incubate the student teams, or really talk with some alumni and community members that will be putting together an Angel fund. We don't know the mechanics of it yet because different Angel and Master's funds operate differently. I don't know if it'll be one where we have the students present and each member decide if they want to invest or if they will collectively create a pool of funds and then have a Board that determines the investment amount and award our investment.

What has been the impact of your sustainable entrepreneurship support?

I think success is shown by student interest and the fact that we now have a full-time Eco-Entrepreneurship Lecturer and Programme Manager, Emily Cotter. Every year since 2012 we had one student team launch a new eco-venture. Last year we had two. This year, we'll have two as well. It's happening and there is momentum. Students are coming in and realizing this is a path that they can do after graduation. There's definitely been an impact as far as media coverage for our programme because our students have been consistently going to national competitions and winning awards and getting placing in the top semi-finals to finals. Our Eco-Entrepreneurship Team, Charborn, just recently won \$75,000 in a National Business Competition. Charborn seeks to unlock the potential of biochar as a soil amendment for the agricultural industries. A high-carbon soil amendment similar to shredded bits of charcoal, biochar allows farmers to boost yields while using less water and fertilizer. So, that happened and every year, we keep seeing more and more.



Additional Information

Bren School of Environmental Science & Management, UCSB:
www.bren.ucsb.edu

Master of "Environmental Science and Management (MESM)":
www.bren.ucsb.edu/academics/MESM.html

MModule in "Corporate Environmental Management (CEM)":
www.bren.ucsb.edu/academics/mesm_specialization/corp_env_mgt.htm

Module in "Eco-Entrepreneurship (Eco-E)":
www.bren.ucsb.edu/academics/eco_entrepreneur.htm

Eco-Entrepreneurship Advisory Council (EEAC):
www.bren.ucsb.edu/partnerships/eco_council.htm

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Find SHIFT online at: www.shift-project.eu

www.borderstep.org

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