LETTER FROM OUR DIRECTOR:

Having been at Western for six months, I am starting to know my way around campus, although I still get lost in the maze that is Bellingham streets. I have also come to appreciate the amazing work that was done by my predecessor, Prof. Andy Bunn, and the other faculty, staff and administrators, who got the Institute for Energy Studies (IES) established here at WWU.

Our progress in the past few months is exciting. In addition to the existing Energy Policy Minor, we now have an Energy Science Minor, which should appeal to students in majors such as Chemistry, Physics, Computer Science and Environmental Science.

Our first full degree program is now in place, a BA degree in Energy Policy and Management. This degree will give graduates knowledge and skills in energy policy, economics, and many aspects of today’s diverse energy business, while also providing a solid background in energy science concepts. The program includes an option to combine the BA degree with a minor in Entrepreneurship and Innovation.

The new Electrical Engineering BS degree is offered with an Energy Concentration, which covers cutting-edge topics like power electronics and smart grid technology. This program will benefit from the completion of the Alpha Technologies Electrical Engineering Laboratory, for which the ribbon-cutting took place on June 9th.

Much of our progress to date, as well as our future potential, depends on our private donors, whose gifts enable us to be proactive and pursue opportunities as they arise. We also rely on our industry partners for wise advice, as well as student internship and employment opportunities. We’re grateful for all of this help.

To support our new degree options, we now have 21 courses under the ENRG rubric, and we are working to add more and provide a more comprehensive curriculum in the future. All of these new courses and curriculum additions were shepherded through the University’s approval process by the IES Curriculum Committee, chaired by Prof. Phil Thompson.

In other news, WWU Chemistry Prof. David Patrick was named the first Snohomish County Public Utility District (PUD) Professor of Energy Studies. Prof. Patrick has mentored a student team that is developing a Smart Solar Window technology, for which they recently won a $75,000 award in the US Environmental Protection Agency’s People, Prosperity and Planet competition.

Also, a group of our students and faculty, led by Prof. Tom Webler and Prof. Sharon Shewmake, have formed a new Women in Energy Network, which convenes local women professionals in the field to help mentor and advise students in the program.

I look forward to working with our students, faculty, staff, administrators and industry partners to build the Institute for Energy Studies and complete our integrated ENRG curriculum. I hope that we can add a BS degree soon and, in the interim, a minor in energy technology. We also aim to expand our work with social sciences faculty and students, for example I hope we can help prepare WWU’s prodigious annual cohort of Peace Corps volunteers.

Joel Swisher
Director, Institute for Energy Studies

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Joel Swisher
Director, Institute for Energy Studies

“Educating the leaders for our clean and efficient energy future through interdisciplinary studies and research.”
At the time, it didn’t seem like it would amount to anything. It was 2009, and the Energy Institute was not yet formed. Many of us in the Environmental Economics track were craving more curriculum on the confluence of energy and the environment. I expressed my concern to former Energy Institute Director, Andy Bunn, who suggested I consider an independent study to outline additional coursework on energy topics. I heeded Andy’s advice and, together, we created an energy seminar and accompanying field course, kicking-off what would later snowball into the foundation for today’s Institute for Energy Studies. In the absence of a formal Energy Institute while a student at Western, I found success in exploring the energy, policy and business nexus through the Economics department and the Huxley College. The most valuable skill I developed, among many others, was the ability to translate technical and scientific information into a compelling and actionable narrative. This is exactly the kind of real world applied learning I believe the Institute imparts on its students. These skills have helped me to make a positive impact as a Coordinator of Alternative Fuels and Technologies with Western Washington Clean Cities Coalition. Our program, an affiliate of the U.S. Department of Energy works directly with fleet managers, technologists and regional policy makers to address our dependence on fossil fuel in transportation. I am so grateful for the experience I gained at WWU and I am quite proud to see the Institute form and prepare others for this exciting and important work.

Scott Dewees
Alumni

NEW FACULTY MEMBER: REID DORSEY-PALMATEER

Reid Dorsey-Palmateer is the newest permanent faculty member of the Institute for Energy Studies as well as the newest member of the Economics Department. A Puget Sound native, he has an M.A. and a Ph.D. in Economics from the University of Michigan, and earlier received a B.A. in Economics from Pomona College. Between his stays at Pomona and Michigan, Reid spent two years as a research assistant with the U.S. Federal Reserve Board of Governors. His areas of interest in research and teaching are energy economics, environmental economics, and industrial organization. His recent research has focused on the impact of wind power intermittency on CO2 emissions and generation costs, how transmission line requirements can affect the valuation of wind power projects, and aspects of transitional policy when moving to a less regulated retail electricity market.
Maria Cantwell Visits the Institute for Energy Studies and the Solar Window Team:

In a visit to campus on May 1, Senator Maria Cantwell met with IES Director Joel Swisher to learn about the Institute, discuss the role of our innovative curriculum in Washington higher education, and talk with faculty and students, including Founding Director Prof. Andy Bunn, Prof. David Patrick and students Lindsay Parpart and Jack Sharfstein. A highlight of the visit was a tour of Prof. David Patrick’s research lab, where Sen. Cantwell met with members of the Smart Solar Window team, a group that is developing windows for commercial buildings able to harvest UV sunlight and produce electricity. The team, consisting of students from Chemistry, Engineering, Design, Business, and Marketing, has been making waves with their window prototype, which they demonstrated to Sen. Cantwell, IES Board member and former Snohomish PUD General Manager Steve Klein, and others during her visit. The team recently took part in an EPA-sponsored competition in Washington, DC, winning $75,000 to support further development of the concept. They have also participated in several business plan competitions over the last two years, earning a total of $25,000 so far, including $5,000 last week at the University of Washington Business Plan Competition, where they were awarded the Wells Fargo Green Energy Prize. Patrick, along with marketing professor Ed Love, serve as advisors to the team. Patrick says, “This is a group of very talented students who are taking meaningful steps toward making cities and communities more sustainable. Along the way, you have scientific and engineering students learning to collaborate with design, policy, and business students, together developing a true interdisciplinary understanding of energy business, science, policy, and technology.”

“...This is a group of very talented students who are taking meaningful steps toward making cities and communities more sustainable.”

WWU SOLAR WINDOW TEAM:

HANNAH BOUSCHER
CHRISTIAN ERICKSON
JAMES KINTZELE
ASHLEY LOPER
JAMES MAYTHER
SARAH O’SELL
ADAM SLATER
RYAN SUMNER
I’m currently in my third year here at Western majoring in Environmental Policy and minoring in both Energy Policy and Economics. Energy has become my main focus as I have come to understand it is ingrained in every aspect of day-to-day life and at the base of many issues I am passionate about. When I began analyzing the environmental issues we are facing today I realized that many pieces of the knowledge are already out there, they just need connecting. I see studying policy as a means of obtaining an interdisciplinary understanding of issues that are generally analyzed independently. I believe in the power of communication across disciplines to foster new understandings about the energy dependence we have become accustomed to and how to resolve climate change, a crisis that is among the main motivation in my studies. They say it takes a village to raise a child, similarly, I believe it takes many passionate individuals across disciplines to solve our current energy and environmental problems. The energy policy minor has opened this interest for me, and has aided in opening the door to many other opportunities as well.

For me, being active in my campus and community about the issues I care about has been the most effective way to be a part of the solution. During the summer I will be traveling to Germany where I will be studying renewable energy policy and development. I hope to understand the successes Germany has had with their energy transition and to return home ready to implement these strategies in my community. I am currently interning with RE Sources for Sustainable Communities – a non-profit environmental education organization here in Bellingham. In this position I am an active voice opposing the proposed Cherry Point Coal Terminal and an advocate for oil by rail safety legislation. As an intern and as a member of Students for Renewable Energy, I work to help this community take steps to transition to a clean and sustainable energy system. I am applying the knowledge and understandings I have obtained through my energy classes here at Western, my growing knowledge and experience is vital to the impact I hope to make in the world.

Julianna Fischer
Student

Western’s Women in Energy Network works to bring together women students with professional women in the energy field, to provide mentoring, and create a network of connections.

For more information, connect with us on Facebook: https://www.facebook.com/groups/wwuwomeninenergy/
PHILANTHROPY UPDATE: ALPHATECHNOLOGIES LAB

The Institute for Energy Studies celebrated the generous philanthropy of Grace Borsari and Fred Kaiser on June 9, 2015 at the ribbon-cutting and dedication of the Alpha Technologies Electrical Engineering Lab at Western Washington University. Their gift of $1 million to the Institute for Energy Studies provided resources to create a lab that is designed to give students hands-on learning in advanced power systems and help them prepare for careers as leaders in the energy field.

Dr. Morad Abdelaziz, who joined the Institute and Electrical Engineering faculty last fall, guided the lab design and equipment selection. Abdelaziz states, “This lab will engage students in experiments examining the theory and operational practices of electrical machines, power electronic systems and smart grid technologies.”

The Alpha Technologies Electrical Engineering Lab will play an essential role in the Institute for Energy Studies program, helping to ensure its mission to educate the leaders for our clean and efficient energy future through interdisciplinary studies and research.

As global citizens who are energy innovators and successful entrepreneurs, Fred Kaiser and Grace Borsari have made an indelible mark at Western. Their dedication to innovative academic programs such as the Institute for Energy Studies distinguishes them as unwavering supporters of higher education and as visionary philanthropists.

Manca Valum
Director of Advancement for Strategic Initiatives | University Advancement

Founding Laureate
$1,000,000 to $4,999,999
Alpha Technologies /Grace Borsari & Fred Kaiser

Founding Benefactors
$100,000 - $250,000
Alaska Airlines
Ingersoll Rand

Founding Partners
$25,000 - $99,999
Snohomish County Public Utility District
Sharfstein Family
Puget Sound Energy
APCO Worldwide

Founding Contributors
$500 to $24,999
David L. Benson
Michael Butler / Cascadia Capital LLC
Lars Johansson
William "Bill" Johnson / Sound Energy Investments
Ross Andrew Macfarlane
Warren W. Michelsen
Paul Edmund Norman
Catherine Ann Riordan
William D. Ruckelshaus
Anonymous

“This lab will engage students in experiments examining the theory and operational practices of electrical machines, power electronic systems and smart grid technologies.”
Save the Dates!
October 6th - 7th, 2015

The Institute for Energy Studies 2015 Energy Symposium

On October 6th and 7th, 2015, the Institute for Energy Studies will be holding its first Energy Symposium. Students, faculty, and invited experts in the field of energy will be joining together on Western’s campus for presentations, lively panel discussions, student poster sessions, and networking.

The Institute will offer a 1 credit course for students interested in integrating the symposium with their program of study. Course participants will discuss strategies for a productive symposium experience, and will contribute through a research presentation at the expo or through critical writing on a symposium topic. Register for ENRG 397D for Fall 2015.

• For more information about the class, contact Professor Tim Kowalczyk: Tim.Kowalczyk@wwu.edu.

• For more information about the symposium, contact the Institute for Energy Studies: Energy.Institute@wwu.edu.

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