

Environmental Policy and Science Research Center Proposal

Drafted by

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April 13, 2014

Rationale:

This white paper lays out the rationale and steps necessary for establishing an environmental research center at Duke-Kunshan University (DKU). An environmental research center at DKU presents a unique opportunity to leverage Duke's environmental reputation, to address an area of growing importance in China, to create synergies with current and future DKU and Duke academic programs, and to build a flexible, interdisciplinary program supporting both social and natural science research.

To date, most research and teaching on environmental issues in China has been housed in the natural sciences and engineering programs. Chinese universities are just now beginning to experiment with building environmental policy and management programs, most notably Renmin University. While the development of academic programs in environmental policy and management has been slow, a number of research institutions have been established in China, including several collaborative programs with foreign partners (for an overview, see Turner and Luan 2013). In fact, many US researchers working on environmental policy and science issues have research projects with Chinese colleagues; yet, while collaborative research initiatives are plenty, few research initiatives have fully assimilated into the teaching mission of the university.

Building a top-notch environmental research center at DKU will help to distinguish DKU from other research endeavors in China through integrating research and educational programming on environmental policy and science. Given the environmental challenges facing China today and the increasing public and government awareness of the environmental impacts on both human health and the economy, the establishment of a cutting-edge environmental research center will work with policy-makers to tackle many of these problems. Providing solutions to environmental issues such as air and water quality, urbanization pressures, and energy and climate change are not only relevant for China, but for other rapidly growing economies and populations in Asia. An environmental research center will thus provide a hub for faculty to engage in interdisciplinary and policy-relevant research in China and beyond; it will also facilitate collaborations between DKU and Duke faculty/researchers with others researchers at Chinese universities, businesses operating in China, policy-makers, and non-governmental organizations. The research center will offer an important physical space for hosting visiting scholars and meetings/workshops and providing a venue for students to work on applied research projects.

It is also important to underscore that an environmental research center at DKU will be distinguishable from many other research institutions in China owing to its status as an independent academic institution. For the most part, policy research in China has been conducted predominantly in government institutions (e.g., under the State Council) rather than in independent academic institutions.

Potential research areas:

A research center will enable faculty, researchers, and students to develop research programs that are more attuned to particular environmental issues facing China as well as examining global issues from a China perspective.

This may include:

Air and water quality topics and the urban environment: As a rapidly growing economy, China is facing traditional environmental challenges at an accelerated pace. China's water bodies are heavily polluted, increasingly affecting water supply and other uses for agriculture and industry. Poor air quality in China's large cities has had tremendous health impacts and affected residents' quality of life.

Environmental management within state-owned enterprises: Increasingly, Chinese state-owned enterprises are becoming multinational corporations operating in different legal and regulatory environments.

Sustainability: This could build upon Duke's own initiatives on business sustainability, campus sustainability, and food sustainability. Food security is a top priority, as much of the China's cropland is too polluted for food production. A declining agricultural sector could exacerbate migration to the urban centers, placing additional pressure on urban infrastructure.

Oceans governance: This is an area in which DKU could become a leader in the area of environmental policy and science. Relevant topics here include exploration and shipping in the Arctic, deep-sea mining, and marine ecosystem services.

Climate change and energy issues: This would have strong synergies with expertise at Duke, the Duke Energy Initiative, and the Nicholas Institute for Environmental Policy Solutions (NIEPS). These will also become increasingly important topics for China, as its economy continues to grow and becomes a major consumer of fossil fuels and emitter of greenhouse gases. Thus, an environmental research center could foster cutting-edge research on energy efficiency and market-based approaches for pollution control. Other cross-cutting topics could be developed exploring climate change impacts on agriculture and food sustainability as well as links between water scarcity, non-conventional energy exploration, and health.

Given Kunshan's rapidly growing export economy, the environmental research center will need to develop partnerships with local government entities and the private sector to position itself as the leading environmental research institution in the city of Kunshan and Jiangsu Province.

The environmental center could also serve as a platform for developing short-term executive courses/workshops and facilitating outreach to local governments and industry. Topics could include local environmental management issues, corporate sustainability, and communicating science to policy-makers.

Relationship to other programs:

With the likely hiring of a faculty person to teach environmental policy at the undergraduate level at DKU, the development of world-class research center would help not only to further the teaching mission of DKU, but also provide the foundation for the development of a future graduate program in environmental policy. Research faculty could have limited teaching responsibilities. Research projects at the center could be used for developing client-based projects for both teams of undergraduate and graduate students. The creation of the center will also be vital for attracting funding for research on environmental policy and sciences at DKU.

An environmental research center would complement the research programs at the Global Health Center at DKU given that one area of its research focuses on global environmental health. Numerous opportunities for collaboration would be likely on such topics as water/air quality and health. To have a visible impact in the first stage of its development, connections to the Global Health Center will allow the environmental research center to establish name recognition and benefit from (as well as contribute to) the work already being carried out at DKU.

Potential collaborative endeavors in the area of risk training for Chinese businesses, corporate social responsibility, and environmental regulations in the context of state-owned enterprises would be likely with the creation of the MMS program at DKU. Likewise, connections to the proposed Center for Clean Future will provide for important research synergies in the areas of clean technology to reduce pollution.

Finally, we would expect an environmental research program to have strong connections back to the Duke campus. It would be a platform for Duke faculty and students to do work in China; likewise, one attraction for DKU faculty should be collaboration with regular Duke faculty.

Resource and infrastructure:

One of the strongest arguments for an environmental science and policy research center would be to build a foundation for DKU's broader environmental educational programs.

High-quality teaching faculty are likely only to accept positions associated with a DKU educational program if they know opportunities for research and outreach exist.

How do we build an environmental science and policy research center?

First and foremost, for the center to be successful, it will be essential for a senior scholar/researcher with international stature to lead the center at DKU and to be its champion on the Duke campus. Thus, there would be an immediate need to hire such a person in order to attract other faculty and graduate students as well as funding for research. The director of the center should have strong ties to the Duke campus so as to ensure that programs on both campuses, particularly those at NSOE, Sanford, and NIEPS at Duke, can cross-pollinate when appropriate. The environmental research center director will also be responsible for building relationships and networks with other universities and research institutions in China. At DKU, the director should establish connections with the global health center and the proposed center for clean future.

The director will ultimately guide the planning and operations of the environmental research center. The director will work with an external affairs person (described below) to manage relations with funders and outreach.

Second, to develop and sustain programming at the research center, it will be imperative to create three new research positions at the center. We have identified three positions based upon disciplines rather than any of the specific thematic topics outlined above. These positions will be primarily research focused, but are likely to also have a light teaching load so as to further deepen the connectivity between the education and research missions of DKU. We believe that environmental experts with strong disciplinary training should be able to work (and certainly teach) broadly on a number of environmental topics outside of their own thematic research. As such, an environmental economist with experience working on energy and climate, for example, should be able to help build research programs in the area of transportation.

The three policy-relevant fields we have identified are:

1. Environmental economist with policy experience
2. Environmental policy expert with experience working in China
3. Environmental natural scientist who works on environmental policy issues

While these positions will be DKU hires, it may be useful to consider a backstop appointment (i.e., a research professorship) at Duke and/or providing time for these DKU hires to spend at Duke as an initial step for attracting faculty.

Third, in order to build DKU's standing/brand in the area of environmental policy, a sustained faculty/research presence will be necessary. The environmental research center may choose to recruit additional adjunct research professors for specific projects.

Faculty may also seek to hire postdoctoral fellows to further their research. It would be advantageous in the first few years to provide funding for a few post-doctoral fellows to contribute to program building. Graduate students from Duke and other universities can be encouraged to develop research projects in China and to join research projects at the center. It will be expected that the core teaching faculty at DKU in a future environmental policy/management program will also be affiliated with the environmental research center and contribute to its research mission. Additional support staff would be needed to support programming at the center.

Fourth, it will be vital to deepen ties with Duke faculty as a mechanism for expanding research at DKU. Potential faculty from Duke that might be interested in research programs at an environmental center include Jim Zhang (NSOE, Duke Global Health Institute), Billy Pizer (Sanford School), Richard Newell (NSOE and Energy Initiative), David Hinton (NSOE), Pat Halpin (NSOE), Cindy Van Dover (Marine Lab/NSOE), Dalia Patino-Escheverri (NSOE); Ralph Litzinger (Anthropology); Avner Vengosh (NSOE), Erika Weinthal (NSOE); Randy Kramer (NSOE, Duke Global Health Institute); Marc Deshusses (Pratt); Giovanna Merli (Sanford School, DGHl); and Jeff Vincent (NSOE) among others.

Fifth, the environmental research center will require space. Investments would be necessary for the development of both dry and wet labs to also support natural science research at the center, although this could be sequenced to follow an initial focus on less capital-intensive social science research. The center should be situated in close proximity to the main campus so as to allow other faculty and students to interact closely with the center's research programs.

Sixth, to ensure the impact of a research center at DKU, efforts should be made to create partnerships with other research institutions on specific topics so as to create networks of environmental research both within China and abroad. Potential research collaborations could be with the following universities in China, many of which have faculty and researchers working in the area of environmental policy (notably environmental economics): Peking University, Renmin University, Tsinghua University. Wuhan University also has a strong environmental law program and could provide a strong partner for devising research programs and outreach on environmental governance and regulatory policy.

Seventh, in similar manner, the research center will need to emphasize outreach to appropriate government offices, both for impact and also for finding internships for students at DKU. There may also be opportunities to devise executive-level courses for mid-level government bureaucrats.

Potential Research Funding

An environmental science and policy research center will require an upfront investment by DKU to cover expenses for at least two years. Over time, faculty and research

associates hired at the environmental research center along with post-doctoral fellows will be expected to seek external funding to support research projects. DKU will need to continue to provide the environmental research center with basic infrastructure that will include information technology/computing equipment. Funds will be required for some international and domestic travel, hosting conferences/workshops, and support staff.

Lastly, opportunities are likely to arise for environmental research center faculty/researchers to partner with a wide array of organizations, including other universities, research institutions, non-profit organizations, and the corporate sector. For this reason, along with the need to for leadership on development efforts, an external affairs person should be hired. To sustain a vibrant research environmental research program at DKU, an external affairs person will need to be responsible for both external communications and assist with procuring funding, especially from donors, foundations, and the private sector. This person will work closely with DKU's office of development. The creation of a small advisory board for the center could also help to raise the visibility of the center, provide guidance on research programs, and to help with fund-raising.

Duke Kunshan University
Job Description: Director, Environment Program

Position: Environmental Program Director; rank equivalent of Full Professor or practitioner of similar stature.

Place of Employment: Duke Kunshan University (DKU), Kunshan, Jiangsu Province, China.

Primary Accountability: Responsible for directing the Environment Research Center and the new “international masters in environmental policy,” developing a strategy for research and education, recruiting and engaging faculty to work at DKU, and student recruitment.

Reports to: DKU Vice Chancellor for Academic Affairs

Duke Kunshan University (DKU) in Kunshan, Jiangsu, China invites applications for the director of the Environment Program. Successful candidates will be recognized leaders in the field of environmental policy or in the field of environmental science with a clear policy focus, with a vision for the potential contributions of a successful DKU environment program. The director will be a Duke Kunshan University faculty member, with the potential for appropriate consideration for Duke University affiliation. Chinese language proficiency is not required. Candidates should have a PhD degree in public policy, political science, economics, environmental science or a related field, with a focus on environmental policy. The ideal candidate would have research interests related to China and its role in the region/world, and demonstrate, through background or training, an ability to collaborate with other disciplines. We are particularly interested in distinguished candidates whose research foci relate to the areas of energy, the urban environment, climate, environmental health, conservation, and air or water quality. Candidates should have interest in facilitating collaboration with other research centers at DKU and research programs at Duke University, and strong administrative experience, such as that gained in chairing a department or directing a research center or institute.

It is anticipated that the initial appointment of a renewable 3-year term will begin on or after July 1, 2015. Interested applicants should send cover letter and curriculum vitae through Academic Jobs Online or DKUrecruitment@duke.edu. Consideration of candidates will begin on February 1st and continue until the position is filled.

Responsibilities:

- Developing and directing research programs at DKU to build a flexible, interdisciplinary program supporting both social and natural science research related to environmental policy.
- Recruitment and supervision of assistant director and research faculty to support the programs of the research center.
- Leadership for fundraising and grant writing for the center
- Overseeing the development of a new international masters in environmental policy program for DKU and student recruitment
- Recruitment and supervision of teaching faculty at DKU
- Interfacing with academic/research, government, private sector, and media entities in China
- Coordination and communication with environment and public policy programs at Duke University both to facilitate a strong and productive relationship among faculty and students across campuses, and to ensure curriculum rigor and consistency among programs.
- Maintenance of a strong research agenda.
- Participation in the development of faculty governance procedures at DKU.

January 29, 2015

Dear Masters Advisory Council Members:

I am writing in strong support of the proposed new International Masters in Environmental Policy (IMEP) to be launched at Duke Kunshan University. This new degree program is an excellent fit with the expanding global focus of the Nicholas School, as well as a natural outgrowth from our strong research and education capabilities in environmental policy. It is also a degree that has been very carefully researched and designed to meet a market demand that is complementary to what we are doing here at Duke, that takes proper advantage of Duke expertise and guidance, and that will create new opportunities for the Duke community. The newly created environmental research center at DKU (spearheaded by Prof. Jim Zhang) demonstrates some of the kinds of synergies that could be greatly expanded with a good mix of research and education activities in the environment at DKU, in partnership with Duke.

While I am relatively new here, I also believe this degree is a model of proper homework and faculty engagement. Professors Erika Weinthal and Billy Pizer have gone above and beyond to be sure the degree plans were well communicated at both NSOE and Sanford, and that multiple opportunities existed for broad faculty input. They have also been exemplary in their response to that input over the last year or so, taking comments from both schools and incorporating them into the design. This is truly a broad collaboration between NSOE and Sanford, and one that shows the great potential for Schools to partner effectively at Duke on new initiatives of broad benefit.

I also note that the faculty support for this degree was exceptionally strong. Our Faculty Council voted unanimously in support of the degree (7-0), our Education Committee also expressed strong support (9 in favor, 3 abstentions), and our faculty as a whole voted as follows: 45 yes, 0 no, 4 abstentions. This means that not a single negative vote was cast at any level of NSOE governance, which represents a level of faculty support that is rarely seen in academia! That support was earned: it's a strong, carefully thought out proposal that has clear benefits to both Duke and DKU. I am pleased to support it enthusiastically.

Please don't hesitate to contact me with any additional questions.

Sincerely,



Alan Townsend
Dean, Nicholas School of the Environment

November 13, 2014

To Whom It May Concern:

I am writing this letter on behalf of the Nicholas School of the Environment (NSOE) Faculty Council in support of the proposed new International Master in Environmental Policy (IMEP) degree which would be offered at Duke-Kunshan University (DKU). The proposed program will be jointly sponsored by the NSOE and the Sanford School of Public Policy (SSPP).

At its meeting of 10 September 2014, the NSOE Faculty Council began discussing a proposal for the IMEP program. At that meeting the preliminary proposal and background research underlying the proposal were presented to the Council by the program's steering committee chair, Dr. Erika Weinthal. In response to comments from the council and other faculty bodies, the proposal was revised and discussed further at the meeting on 8 October 2014. At that time the Council presented the steering committee with three major issues to be addressed: (1) full accounting for costs to Duke programs of any Durham/Beaufort faculty time spent supporting the new DKU program (2) a full statement of the potential benefits to the domestic educational and research programs at Duke, and (3) and statement concerning academic freedom for DKU programs.

The steering committee revised the proposal, fully addressing these concerns. The IMEP program fills an unmet need in China for rigorous analytic training in policy sciences related to the environment. Moreover, the existence of the environmental research facility in China will enable greater faculty research efforts on environmental issues in China, a clear global priority for Duke University and for society at large.

After careful review, the Faculty Council of the NSOE voted unanimously (7 yes, 0 no and 0 abstentions) in favor of the proposal.

Sincerely,



Lori Snyder Bennear
Associate Professor of Environmental Economics and Policy
Chair, Nicholas School of the Environment Faculty Council

January 30, 2015

Dear Masters Advisory Council Members:

I am writing in strong support of the proposed new International Masters in Environmental Policy (IMEP), a joint degree to be offered by the Sanford and Nicholas Schools located at Duke Kunshan University. This new degree program represents one initiative under Sanford's strategic vision for the future developed by our faculty, staff, and students last year. That vision prioritizes investment in international programs, partnerships, and faculty, as well as the principles of building on our strengths and drawing on Duke—all of which strongly supports the proposed IMEP degree and associated research center. Moreover, it is also a degree that has been very carefully researched and designed to meet a market demand that is complementary to what we are doing here at Duke, that takes proper advantage of Duke expertise and guidance, and that will create new opportunities for the Duke community. We are particularly excited to explore the potential for a larger public policy program and executive education as DKU grows over time.

Considerable input from faculty has gone into this proposal. This includes many of details surrounding the semester rotation for DKU students to come to Duke, as well as mechanisms to ensure the program maintains the quality and educational experience that we prize in our current programs. Professors Erika Weinthal and Billy Pizer have been exemplary in their response to that input over the last year or so, taking comments from both schools and incorporating them into the design. This is truly a broad collaboration between NSOE and Sanford, similar to our creation of the University Program in Environment Policy, and one that shows the great potential for Schools to partner effectively at Duke on new initiatives of broad benefit.

I also note that the faculty support for this degree was strong. On the motion to approve creation of the joint program, the Sanford Faculty voted 35 in favor, 5 against, and 5 abstaining. Those voices that were against were concerned about whether Sanford ought to be a full co-sponsor of the degree—all voices were roundly supportive of the proposal itself.

I am pleased to support this proposal enthusiastically. Please don't hesitate to contact me with any additional questions.

Sincerely,



Kelly D. Brownell
Dean, Sanford School of Public Policy
Robert L. Flowers Professor of Public Policy
Professor of Psychology and Neuroscience
Professor of Psychiatry and Behavioral Sciences

January 29, 2015

Dear Masters Advisory Council Members:

I am writing in strong support of the proposed new International Masters in Environmental Policy (IMEP), a joint degree to be offered by the Sanford and Nicholas Schools located at Duke Kunshan University. This new degree program represents an exciting opportunity that dovetails with the education, research, and outreach objectives of the Duke University Energy Initiative.

As the largest energy consumer and producer in the world, China is central to all major energy issues. This includes coal, oil, or natural gas demand, renewable energy technology and production, and nuclear power. The Energy Initiative has already invested in China—in terms of research and graduate students—and expects to do more.

Through the network it will develop, the IMEP program offers an opportunity for us to identify additional public sector, private sector, and educational partners in China. New energy related courses offered at DKU will add to Duke's capacity in energy education. New students in China will increase our alumni outreach. And, perhaps most interestingly, the opportunity for Duke students to go to China for a semester and learn firsthand about Chinese and Asian energy issues represents another avenue to bolster our opportunities for students here interested in energy policy.

We look forward to further supporting the IMEP program and energy activities at DKU. I am pleased to support this proposal enthusiastically. Please don't hesitate to contact me with any additional questions.

Sincerely,



Richard G. Newell
Director, Duke University Energy Initiative
Gendell Professor of Energy and Environmental Economics, Nicholas School of the Environment

Lawrence Carin, Ph.D.
Vice Provost for Research
Office of the Provost

March 23, 2015

Telephone: (919) 681-6438
Fax: (919) 668-5569

Dear Masters Advisory Council Members:

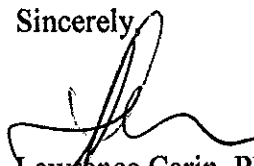
I am writing in strong support of the proposed Environment Program for Duke Kunshan University (DKU) that entails both a research center and an International Masters in Environmental Policy (IMEP) program. This program embodies the types of programs that we would like to see at DKU, as it brings together in a comprehensive manner education and research.

Under the leadership of former Vice Provost for Research, Jim Siedow, a subcommittee on research at DKU recommended the creation of several research centers at DKU that would leverage the reputation of Duke's strengths, one of which being the environmental field. While much attention has been on the creation of world-class education programs at DKU, the strength of these programs will hinge on the level of research that is carried out at DKU. As public and government awareness about China's mounting environmental problems grows, there are numerous opportunities for DKU and Duke faculty to play a leading role in carrying out research on water and air quality, energy and climate change policies, conservation, and urbanization issues. A strong research and education program at DKU will allow both DKU and Duke to position itself as a leading research institution on environmental issues globally with a specific focus on China.

The integration of research and education at DKU will, furthermore, be essential to attract high quality faculty, as they will require a place for them to carry out research. An environmental research center will provide numerous opportunities for the IMEP students and Duke students to engage in environmental research projects. Additionally, the presence of a strong research center at DKU will allow Duke-based faculty to expand their research in China and allow our academic programs to work on solving environmental problems.

I look forward to further supporting the IMEP program and research activities at DKU. I am pleased to enthusiastically support the joint Nicholas School and Sanford School's proposal for an Environment Program at DKU.

Sincerely,



Lawrence Carin, Ph.D.
Vice Provost for Research
Professor of Electrical and Computer Engineering
lcarin@duke.edu