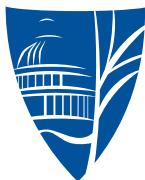


2011 Strategic Plan

Five-Year Goals



NICHOLAS INSTITUTE
FOR ENVIRONMENTAL POLICY SOLUTIONS
DUKE UNIVERSITY

2011 Strategic Plan

Five-Year Goals



NICHOLAS INSTITUTE
FOR ENVIRONMENTAL POLICY SOLUTIONS
DUKE UNIVERSITY

Contents

| | |
|---|----|
| Service to Society | 5 |
| Inflection Point | 5 |
| Five-Year Goals | 6 |
| Washington's Go-To Climate Policy Analyst..... | 6 |
| Partnering with Duke University..... | 7 |
| Strategic Planning Process | 8 |
| 1. Adopt criteria for priority setting..... | 9 |
| 2. Define research priorities | 9 |
| 3. Engage new decision-making audiences | 11 |
| Decision makers from the private sector | 11 |
| State, regional, and international decision makers | 12 |
| 4. Strengthen ties with Duke | 12 |
| Faculty Working Groups..... | 14 |
| Working group grants | 14 |
| Joint faculty appointments..... | 14 |
| Portal to Duke interests..... | 14 |
| Research assistantships..... | 15 |
| 5. Measure and report the impact of the Institute's work..... | 15 |
| 6. Establish a unique brand | 17 |
| 7. Pursue financial sustainability | 17 |
| Conclusion | 18 |
| Appendix | 19 |

“...the Nicholas Institute will excel at these gifts of community building, communities of understanding, communities of problem solving, and communities of possibility creation.”

—Duke University President Richard Brodhead

Service to Society

The Nicholas Institute for Environmental Policy Solutions at Duke University was launched in September 2005 in response to President Brodhead’s imperative to work in “service to society.” The Institute’s mission is to draw from Duke’s research expertise to develop timely and excellent policies that inform decisions that have an impact on the global environment. As one of seven signature institutes created by Duke to promote interdisciplinary collaboration, the Nicholas Institute endeavors to fulfill its mission by gathering knowledge from Duke’s diverse intellectual resources and by becoming a credible analytical source for decision makers, public and private.¹ The Institute’s objective, in the words of Pete Nicholas, is to “take all that Duke does and do some social good.”

As envisioned in its inaugural strategic plan, the Nicholas Institute has attempted to do social good by positioning itself as an honest broker in the divisive debates that increasingly block progress on environmental policy. To inject Duke’s expertise into policy discussions, Institute founders sought to establish a presence in policy debates from Washington to Raleigh to Brussels. Leveraging their established network of decision makers, they would provide timely and well-supported analysis to improve environmental quality.

By all accounts, the initial policy outreach strategy was effective. Drawing from faculty expertise in law, business, and policy, the Institute helped inform development of effective, efficient climate proposals on Capitol Hill. In partnership with Duke faculty, the Institute also endeavored to deliver credible, high-impact research in other areas, including oceans and fisheries and reliable clean water delivery around the globe. For example, in December 2010, the Nicholas Institute’s oceans program, in collaboration with Duke faculty, prepared on a tight deadline a paper requested by the National Commission on the Deepwater Horizon Oil Spill and Offshore Drilling. The Institute is also began helping decision makers in Laos to understand the costs and benefits of supplying China with hydropower where dams would debilitate fish supplies in the Mekong Delta. In fact, the Institute’s research focus reflects three areas in which Duke’s capability is well regarded: climate-energy, oceans, and water.²

Inflection Point

This second strategic plan comes at a critical inflection point for the Nicholas Institute. The plan marks the culmination of the Institute’s five-year startup phase, during which it experienced rapid growth and expansion, and kicks off its maturation period. Provost Peter Lange—the architect of the Duke University institutes—requested the plan in response to Tim Profeta’s first five-year review as Nicholas Institute director. Generously funded by a grant from the William and Flora Hewlett Foundation, the plan reflects the key challenges identified by that review and lays out goals to guide the Institute over the next five years.

The research, interviews, and multi-stakeholder discussion conducted for this strategic planning effort suggest that the Institute’s capacity to inform decisions in a substantively grounded and opportune way makes the Institute unique among university environmental research organizations. However, interviews and consultations with faculty and the Institute’s Advisory Board, together with a recent five-year review of the Institute’s work, identified six challenges:

1. Clearly establishing research priorities, given limited resources
2. Shifting from rapid-response to more strategic research
3. Increasingly focus on issues beyond cap-and-trade legislation and on clients beyond Capitol Hill
4. Measuring and effectively communicating the impact of Institute work
5. Eliminating the brand confusion that results from conflation of the Institute with the Nicholas School
6. Strengthening financial sustainability

1. The other Duke University institutes include the Duke Global Health Institute, the Duke Institute for Brain Sciences, the Institute for Genome Sciences and Policy, the John Hope Franklin Humanities Institute, the Kenan Institute for Ethics, and the Social Science Research Institute.

2. Habitat conservation and environmental health were other foci in the Institute’s inaugural strategic plan, but concerns about resource allocation prevented their pursuit.

These challenges are interrelated. The first requires creation of criteria for priority setting. With so many opportunities, some unsolicited, where does the Institute focus? The second challenge acknowledges that the Institute's rapid-response model does not align well with longer-term academic research cycles. The recent five-year review of Institute work revealed a desire among Duke faculty familiar with the Institute to better collaborate with the Institute in early-stage research development and design. For those faculty less familiar or unfamiliar with the Institute, this strategic planning exercise found that the Institute must build better awareness of the benefits it affords them.

The third reflects two issues. By design, the Institute made its name by building a Beltway beachhead on cap-and-trade and other key domestic policy issues. But now the Institute is so closely associated with cap-and-trade issues that external stakeholders are unaware of its engagement in many other areas. Moreover, cap-and-trade legislation is now dormant in Washington, necessitating attention to the fourth challenge: measuring and communicating impact. If passing legislation is a measure of success, the failure of cap-and-trade legislation does not bode well, at least in the short term, for the organizations engaged in the debate. Market approaches to the climate challenge at the federal level will inevitably resurface, but metrics fail to reflect that far-reaching federal legislative proposals, such as healthcare or campaign finance reform, typically require decades to finally pass. To better assess whether, and if so, how the Institute's work is informing environmental policy decisions, the Institute requires better performance measures.

A central finding of the Institute's strategic planning effort is that many external stakeholders do not understand that the Institute is an entity separate from the Nicholas School.

To meet the fifth challenge, the Institute must make a concerted push to rebrand. A central finding of the Institute's strategic planning effort is that many external stakeholders do not understand that the Institute is an entity separate from the Nicholas School. Others assume that the Institute operates as a freestanding nonprofit, deriving its resources from strategic goals designed to inspire foundation program officers. Rebranding raises questions about financial sustainability, the sixth challenge identified in the strategic planning process.

Five-Year Goals

To address challenges identified through the strategic planning process over the next five years, the Nicholas Institute, in partnership with its Advisory Board and Faculty Strategy Group, has identified seven goals:

1. Adopt criteria for priority setting
2. Define research priorities
3. Engage new decision-making audiences
4. Strengthen ties with Duke
5. Measure and report the impact of Institute work
6. Establish a unique brand
7. Pursue financial sustainability

The Institute's evolution—its positioning as a trustworthy expert on climate change policy and its subsequent leveraging of Duke University resources to strengthen other research areas—illuminates the thinking that led to these goals and to a new five-year plan.

Washington's Go-To Climate Policy Analyst

A credible, nonpartisan institution with no political agenda, the Nicholas Institute provides objective information to inform increasingly polarized environmental policy debates, thereby catalyzing progress on environmental problems. To reduce unproductive debate, the Institute helps decision makers arrive at a shared understanding of the impacts of and possible solutions to those problems. At the time of the Institute's founding, perhaps no environmental problem attracted more controversy than climate change, and Congress was mired in debate over legislation to deal with it.

Director Tim Profeta positioned the Institute to provide impartial, timely, and high-caliber assistance on so-called cap-and-trade proposals. These proposals called for a single, nationwide limit, or cap, on the combined total of all climate change-causing gases emitted in the United States and for distribution of tradable emissions permits equaling that total. Emitters with high abatement costs would be allowed to buy additional permits from emitters with lower abatement costs.

The Institute worked closely with elected officials in both parties and with key climate staffers to devise provisions to help ensure that reducing greenhouse gas (GHG) emissions under a cap-and-trade scheme would pose no undue costs on Americans. Some of these provisions reflected the Institute's pioneering work on offsets—voluntary GHG reductions outside a mandatory cap. Offsets hold enormous potential not only to reduce the cost of future climate policy, but also to benefit groups such as farmers and foresters, whose practices can reduce GHG emissions. The Institute quickly became a leader in development of measures to ensure that these voluntary actions would represent real, low-cost emissions reductions.



Due to a variety of economic and political factors, efforts at the national level to advance cap-and-trade policies have stalled. Nevertheless, the Institute has realized its initial goal of establishing a D.C. foothold and of becoming a trusted authority on climate policy and the design of markets to tackle climate change.

Partnering with Duke University

From the outset, the Nicholas Institute has strived to meet Duke's goal for its institutions: "distinction with distinctiveness" among comparable organizations. For the Nicholas Institute, the comparable organizations include Resources for the Future, known for the high caliber of its unbiased research in environmental economics, and other independent nonprofit environmental organizations, such as the Pew Center on Global Climate Change and the Bipartisan Policy Center. What distinguishes the Nicholas Institute from these nonprofit organizations is its relationship to Duke University. The Nicholas Institute is not a freestanding nonprofit environmental organization but rather an integral part of the university.³

In pursuit of preeminence among its peers, the Institute has made strategic use of Duke's considerable environmental expertise. It has formed partnerships to tackle critical research questions. It has forged collaborations not only with faculty and students in the Nicholas School—one of the most well-respected professional schools in environmental science and policy—but also in the School of Law, the Fuqua School of Business, the Sanford School of Public Policy, the Pratt School of Engineering, and Trinity College of Arts and Sciences. In addition, the Institute has worked to leverage Duke's standing as a major research university to access expertise outside Duke, thereby incorporating the greatest range of insights into its work.

Leveraging Duke's resources has paid off. The Institute is unique in the academic sector in its capacity to deliver timely, credible research to decision makers. To illustrate, consider that officials in the State of California come to Duke University for environmental policy guidance because of the Nicholas Institute's unique capabilities. In 2010, during development of California's cap-and-trade program, the Institute, on request, organized public workshops to inform decisions about how to keep the costs of the program manageable. More recently, the Institute developed in little more than one week a report to help Governor Brown (D-CA) respond to a legal challenge against the state's cap-and-trade regulation. The report compared the costs and benefits of cap-and-trade to alternatives, such as a fossil fuel tax or technology-based standards.

The Institute's ability to rapidly inform policy decisions hinges in large part on its high-caliber professional staff. The majority of Institute directors hold PhDs in economics, science, or engineering or possess law degrees. Therefore, they collaborate as peers with Duke faculty, but they are accustomed to and capable of working on timetables far more compressed than those that traditionally govern academic research.

From the outset, the Nicholas Institute has strived to meet Duke's goal for its institutions: "distinction with distinctiveness" among comparable organizations.

3. A board comprised mainly of environmental policy experts, business leaders, and current and former government officials advises the Institute, but Duke governs and largely funds it.

Staff members, many of whom are Duke alumni, assist Institute directors. Some of them create and use elaborate optimization models, for delivery of carbon sequestration, for example. Others are deeply versed in the complexities of environmental legislation and regulation.

Aside from staff, the key to the Institute's reputation for unimpeachable research is Duke University's commitment to funding of that research. The Institute's strategic planning exercise revealed that the Institute's best projects involve Duke faculty and senior Institute directors. One of these projects is the paper that the Institute produced last year on a tight deadline at the request of the National Commission on the Deepwater Horizon Oil Spill and Offshore Drilling. The Institute's Oceans Program director, Linwood Pendleton, orchestrated work on the report, which drew on the expertise of a half dozen Duke faculty members, each of whom contributed a discrete section. The Institute provided the summary, synthesis, and organizing drive.

Duke's provision of a core budget to the Nicholas Institute has allowed it to avoid accusations that it represents the viewpoint of any one particular funder. And because the Institute is not solely reliant on grants or large individual gifts, it can focus on conducting and communicating critical research in a timely way. A central finding of the Institute's strategic planning exercise is that the Institute's senior researchers have the freedom and flexibility to respond to short-term policy opportunities because they are *not* tied to existing grants or contracts.

Strategic Planning Process

The Institute commissioned the consulting firm of Bernuth & Williamson (B&W) to assess its performance over its first five years and to help identify priorities for the next five years. B&W has assisted in the preparation of strategic plans for several of the Institute's partner organizations, including Resources for the Future and the World Wildlife Fund. Accordingly, B&W came highly recommended by several members of the Institute's Advisory Board as well as by Institute stakeholders, who also played a critical role in designing and steering the strategic planning process. Also participating in that process was an Institute-convened strategic advisory committee comprised of nine Duke faculty (please see Appendix). The Institute devoted two Advisory Board meetings as well as a series of board conference calls to deliberate the plan. In addition, it created a commensurate internal process to obtain and present feedback from staff. This process culminated in a final session at the organization's annual retreat. The appendix to this plan provides greater detail on all of the aforementioned planning processes.

A central finding of the Institute's strategic planning exercise is that the Institute's senior researchers have the freedom and flexibility to respond to short-term policy opportunities because they are *not* tied to existing grants or contracts.

Commencing in late 2010, B&W, in collaboration with the Institute, undertook approximately 30 interviews with Institute stakeholders, some from Duke and some from other universities, Capitol Hill, foundations, and nonprofit organizations. Findings and non-attributed quotes in this document reflect consistent responses from at least three interview subjects. In addition to interviews, B&W conducted the positioning exercise mentioned above—comparing the Institute with nonprofit environmental policy organizations. Additionally, B&W conducted a benchmarking exercise that contrasted the Institute with comparable university environment and energy research centers at Stanford, Princeton, Cornell, Yale, and MIT. To understand the Institute's major sources of outside support and the areas to which its internal resources are devoted, B&W and the Institute analyzed grants and gifts by major focus area (climate-energy, oceans, freshwater) as well as outputs, including publications, press mentions, and unsolicited research requests from decision makers. B&W combined archival data with interviews of Institute directors and Duke faculty in four independent research memos (see the appendix). The independent research memos represent the views of B&W and not the Institute. Accordingly, B&W delivered the memos to Institute directors for reaction. The Institute, in turn, convened meetings and conference calls with both its faculty strategy advisors and Advisory Board. This plan primarily presents results with which the Institute directors, faculty advisory committee, and the Board all concurred.

On the basis of this intensive, one-year data collection and multi-stakeholder deliberation process, the Institute proposes to adopt the following seven goals:

1. Adopt criteria for priority setting

The Nicholas Institute is unique in its capacity to act on unsolicited, and, most often, unforeseen environmental challenges that decision makers bring to its doorstep. Yet some external stakeholders from the nonprofit realm continually counsel the Institute to set explicit priorities. Such an approach potentially undermines what the Institute does best: inform decisions as new challenges arise. As mentioned above, the state of California recently asked the Institute to contrast cap-and-trade strategies with carbon fees so that it could respond to a legal decision. This assignment—which will help courts as well as Governor Brown determine whether to move forward with California’s cap-and-trade program—was due in 10 days. Predicting the types of requests that will emerge is challenging. In 2010, decision makers brought at least 24 unsolicited opportunities to the Institute, and 2011 promises to be no different.

Although opportunities are many, the Institute’s core competency and resources to address them are finite. Given that reality—and with the Advisory Board and the faculty’s encouragement—the Institute will devise criteria to select and prioritize the work in which it will engage. To ensure that it does not sacrifice its nimbleness to act on unsolicited requests from external decision makers—a particular concern of faculty who participated in the planning process—the Institute will adopt a tiered set of selection criteria. These filters will help the Institute balance unforeseen opportunities with longer-term, strategic policy priorities—that is, perform the work that will inform the decisions that are most likely to create solutions of the greatest impact in the Institute’s three work areas: climate-energy, oceans, and water. Consequently, the Institute has chosen to focus on three environmental challenges: (1) mitigating and adapting to the climate challenges that fossil fuel combustion and use creates, (2) designing better approaches to manage the great commons of the world’s oceans and coasts, and (3) securing reliable and clean water for an expanding world population.

The Institute’s work on climate-energy, oceans, and water tracks three areas in which Duke has tremendous intellectual heft. Unsurprisingly, B&W’s interviews and in-depth analysis of the Institute’s work revealed that the Institute is most successful when it aligns itself with the areas in which the university is strongest academically. By focusing on these areas, the Institute fulfills its mission of leveraging Duke research and bringing it to decision makers.

To determine which prospective projects are likely to have the greatest impact in the three focal areas, the Institute will ask the following questions:

- Does the project leverage the work of Duke researchers and bring it to the attention of decision makers?
- Is the project likely to lead to successful implementation of the decision?
- Does the decision promise to make an impact on a large scale?
- Is the project translatable, or is it a useful case study for wider application if successful?
- Does any aspect of the decision maker—for example, inordinate influence—give the project unique leverage?
- Can the project attract external financial support?
- Does the project intersect with key Institute programs?

2. Define research priorities

The above-noted questions suggest some promising research priorities in each of the Institute’s three focal areas. In the area of climate-energy, the priority is preserving the Institute’s core competency in the design of markets to curb pollution while identifying other tools within the Clean Air Act and the tax code to reduce greenhouse gases in a low-cost way that provides regulatory certainty to regulated industries. To accomplish this objective, the Institute is about to partner with some of the nation’s leading legal experts on the Clean Air Act to help inform the U.S. Environmental Protection Agency’s development of new regulation to tackle global climate change.

Interviewees identified the energy component of the climate issue as the most promising area for Institute research. Many external stakeholders, especially Advisory Board members, expressed interest in energy as the way back into the climate change issue. This focus on energy is particularly salient, given Duke’s forthcoming energy initiative and the Provost’s commitment to supporting joint Institute-Duke faculty hires in energy.

The Institute’s work on climate-energy, oceans, and water tracks three areas in which Duke has tremendous intellectual heft. Unsurprisingly, B&W’s interviews and in-depth analysis of the Institute’s work revealed that the Institute is most successful when it aligns itself with the areas in which the university is strongest academically.

In the area of oceans, the Institute expects to build on the success of the Fisheries Leadership and Sustainability Forum (FLSF). FLSF experts based at Duke's marine lab in Beaufort, North Carolina, are working—among other places—in the Caribbean, where reef fish have suffered staggering declines, to help that region's fishery management council more accurately count what fisherman there catch. Better measurement can help to stabilize fish populations and bolster the livelihoods of people who depend on this vital industry. The Institute's oceans and fisheries efforts also are helping inform fisheries managers of the benefits to people of marine ecosystems. The oceans program will continue to support programs and research that demonstrate marine resource management that enhances benefits to society.

One of the primary vehicles to achieve this goal is the Institute's Marine Ecosystem Services Partnership (MESP). MESP is made up of governmental, nonprofit, and academic partners, including the Institute's National Ecosystem Services Partnership (described on page 12) and the National Oceanic and Atmospheric Administration (NOAA). Through MESP, the Institute's Ocean and Coastal Policy Program is working with NOAA, the United Nations Environment Programme, and the Commonwealth Secretariat to help government leaders at the highest levels understand and develop policies to balance the use and management of living and nonliving resources to meet social and economic development goals.



In the area of water, the Institute seeks to build on its work in providing people in the developing world with clean, reliable water supplies. It also seeks to build on its climate and energy efforts to promote resilience to changing rainfall and weather problems attending global warming. The institute will continue its work in Laos, where it is helping decision makers evaluate the tradeoffs between damming rivers to supply hydropower to China and protecting freshwater fish—a regional food staple.

Illustrative Nicholas Institute Priorities

Climate-Energy

- Using levers beyond the cap (e.g., subsidies)
- Applying cap competency in regions and states and in Europe

Oceans

- Finding ways to protect wetlands and the climate
- Helping decision makers identify values provided by marine ecosystems

Water

- Helping developing nations make tradeoffs between energy and fish
- Helping people in developing countries adapt to a warming world
- Applying market expertise to management of rapid growth in North Carolina's coastal communities

Of particular interest is research that applies the Institute's core competency in market design to environmental challenges other than climate change. Such research will allow the Institute to capitalize on its multiple strengths. One of the best examples of such synergy is research on *blue carbon*—the carbon captured and stored by coastal and marine wetland ecosystems. This work marries the Institute's expertise in carbon offsets with its expertise in marine environments to explore whether payment for carbon storage capacity can incentivize protection of coastal habitats such as mangroves, seagrass meadows, and salt marshes.

The Fisheries Leadership & Sustainability Forum

The Fisheries Leadership & Sustainability Forum (FLSF) is a partnership of four of the nation's leading academic and policy institutions:

- Stanford University's Woods Institute for the Environment
- Duke University's Nicholas Institute for Environmental Policy Solutions
- Center for Ocean Solutions
- Environmental Defense Fund, Incorporated

The FLSF provides professional development, continuing education, and networking opportunities for members of the regional fishery management councils through semiannual forums, regional workshops, and an ongoing support program. Its goal is to help council members enhance their understanding of the science, economics, and policies integral to fisheries management. The FLSF encourages the exchange of ideas and the expansion of knowledge on key fishery management topics. A neutral party, it advocates for no one fisheries management option or plan nor does it support or oppose actions taken by the regional councils.

<http://www.fisheriesforum.org/>

Analogously, the Institute plans to examine whether creating markets for ecosystem services can help land investors, state officials, and planners to better value and protect North Carolina's rapidly growing landscape. Here, too, the Institute would build on its capability to assign values to the carbon storage capacity of farms and forests. It would transfer that skill to valuing ecosystem services.

Helping people in the developing world as well as in Duke's backyard adapt to climate change calls on all of the Institute's program strengths in climate-energy, oceans, and water. Work in this area will allow the Institute to engage extant and emerging research competencies among Duke faculty.

3. Engage new decision-making audiences

The Institute continues to serve decision makers in Washington as an honest broker on environmental issues. However, the current gridlock in Congress has forced issues such as climate change policy to the back burner for the foreseeable future. Given this reality, the Institute—harnessing its research filter—proposes to engage decision makers in areas where progress is possible: in the private sector and at the local and state levels. Where opportunities to inform high-impact decisions exist, the Institute will engage at the international level as well.

Decision makers from the private sector

One of the central takeaways from the strategic planning exercise—voiced perhaps most strongly by faculty and senior Duke administrators—is the urgency of expanding the Institute's definition of *decision makers* to include the private sector. Several interviewees argued forcefully that Duke should be more engaged with the private sector and that the nonpartisan Institute is an excellent vehicle for reaching that audience. The private sector—corporations, financial institutions, and relatively small businesses such as real estate developers—are becoming increasingly engaged in environmental decision making through regulatory processes, but even more so outside these processes. A growing number of leading companies are looking to reduce pollution from manufacturing and procurement voluntarily as a way to save money, reduce risks from regulation and volatility, and garner favorable public attention.

Within the regulatory arena, a growing number of private-sector decision makers are attempting to promote clean energy through existing laws and programs, rather than by pursuing a new cap-and-trade law. To reposition itself in response to emerging clean energy opportunities offered by the private sector, the Institute proposes to help decision makers find levers for efficiently and effectively addressing climate change within the federal Clean Air Act, instead of working to devise in Congress new climate laws.

The Institute already is helping private-sector decision makers to better understand how state laws—such as standards to promote clean energy—and programs—such as public utility programs that require utilities to take clean energy into account—help the private sector to make more informed investment decisions. A promising potential area of focus is the utility industry. Already highly regulated, utilities are among the major emitters of greenhouse gases, and they have a big financial stake in the climate issue. Yet absent an overarching climate and energy framework, utilities have little certainty about their carbon liability, find themselves under increasing economic pressure, and face the prospect of new regulation.

Beyond regulation, private-sector decision makers are looking for guidance on reducing their consumption of energy and other resources such as wood and water used in manufacturing and transport. The Institute, under its newly launched Center for Sustainability & Commerce, recently convened representatives from 100 leading

The Marine Ecosystem Services Partnership

The Marine Ecosystem Services Partnership (MESP) includes governmental, NGO, and academic partners, including the National Ecosystem Services Partnership (based at the Nicholas Institute) and the National Oceanic and Atmospheric Administration. As part of the partnership, the Institute in early 2010 built a website allowing researchers to digitally access in one place the growing library of economic studies that endeavor to assign values to the services provided by marine ecosystems. The site (<http://marineecosystemservices.org>) provides a map on which users can pinpoint where studies have assigned values to ecosystem services. The site holds more than 900 entries of economic valuation data representing more than 2,000 values. The database offers up-to-date and easily accessible data, and the mapping tool allows users to mine different types of data by inputting spatial and thematic queries.

<http://nicholasinstitute.duke.edu/oceans/mesp>



Photo courtesy of Marissa Katarina Bergmann

corporations and federal and state agencies to assess how to refine measures to reduce environmental impacts and to better value inputs such as wood and clean water that healthy ecosystems produce. In September 2011, the Center convened top Fortune 500 executives to discuss how reducing the impact of their business activities on the environment might also bolster their bottom lines and increase their global competitiveness. The Institute plans to expand its outreach to private land investors and state and local officials—prime targets for the Institute’s work on assigning values to ecosystem services that may be provided when land is left in farming or remains undeveloped.

State, regional, and international decision makers

Throughout the planning process, faculty and Advisory Board members strongly counseled against mothballing what the Institute does with distinction: help decision makers harness markets to curb pollution. External interviewees similarly were very complimentary about the market design work of the Institute, in Congress and in California.

The Institute has the opportunity to apply its well-honed analytical approaches on cap-and-trade matters to climate policies at the state and international levels. As noted above, its cap-and-trade expertise has been used in California and by the Regional Greenhouse Gas Initiative (RGGI), a cap-and-trade system to reduce climate change-causing emissions in the northeast and Mid-Atlantic states. Now the Institute is partnering with European research universities to examine ways to strengthen overseas cap-and-trade systems (and to bring that information back to the United States for development of state and regional systems as well as for reemergence of a federal system).

In addition, the Institute hopes to apply its analytical tools in environmental markets to improve decision making regarding challenges outside climate-energy, such as trading markets to improve water quality and supply. One Institute project seeks to reduce nutrient pollution in a North Carolina reservoir that serves several counties. Of concern throughout the Piedmont area stretching from Raleigh to Birmingham, such pollution is an emerging priority for public policy—one on which the Institute and Duke can take the lead.

A conceptual or policy breakthrough on water quality and supply in North Carolina has potential applicability across the country. In the case of water quality, the Institute can draw on a strong internal “bench” of senior experts. The supply side of the equation, Duke this past year has made some prominent hires in the water area.

North Carolina’s projected growth and development offer yet other opportunities for deployment of Institute expertise. Helping local planners and the state treasurer to better value the services that undeveloped lands and farmlands provide may lead to development that better benefits private landowners and the natural environment.

Investing in a robust North Carolina presence makes sense for the Institute for several reasons. For one, doing so is good politics for the university, which rightly cares about its image in its local community. It cannot hurt for Duke to be seen playing a constructive role in helping resolve contentious and increasingly high-profile conflicts over natural resources. More parochially, working on a couple of high-profile projects in North Carolina keeps the Institute in the policy game in its backyard, providing a salutary counterbalance to its tendency to concentrate on the national and global levels. Ideally, the state and local levels can serve as a test bed for the Institute’s environmental policy ideas. If something can work in booming, sprawling North Carolina, the reasoning goes, it can work pretty much anywhere.

4. Strengthen ties with Duke

While aiming to bring more discipline to acting on unforeseen and unsolicited opportunities to inform decisions, the Institute also recognizes a need to engage more deeply with Duke faculty to develop and design long-term, strategic research proposals. To date, the Institute’s external engagements have been its strength. The Institute’s five-year review in 2010 flagged the need to invest greater time and effort in engaging faculty from all the schools at Duke and in building stronger ties to the Duke community generally. The Institute has responded by developing well-received faculty advisory groups for each of its substantive research areas as well as by assembling a faculty advisory group to steer its

The National Ecosystem Services Partnership

The National Ecosystem Services Partnership (NESP) engages both public and private individuals and organizations to enhance collaboration within the ecosystem services community and to strengthen coordination of policy and market implementation and research at the national level. The partnership was developed by the Nicholas Institute, which houses it, with early support from the U.S. Environmental Protection Agency and with donations of expertise and time from many other public and private institutions, including the Institute for Natural Resources at Oregon State University, which developed the NESP web portal. NESP has been connected to the dialogue of the USDA-led Community of Practice, annual Ecosystem Service Markets meetings supported by the World Resources Institute and the American Forest Foundation, and the Community on Ecosystem Services (ACES), which conducts biennial conferences.

<http://nicholasinstitute.duke.edu/ecosystem/nesp>

strategic plan. Interviewees from across the Duke campus report that these efforts have helped improve relations with the Institute. By deepening its ties to the intellectual community of Duke, the Institute benefits from the tremendous resources of Duke's faculty and students and brings its own knowledge of global debates on environmental concerns back to Duke's research and educational mission.

B&W's benchmarking findings were revealing in this respect. Virtually all of the Nicholas Institute's peer "institutes" at other universities offer financial incentives to faculty members to participate in interdisciplinary research.⁴ Typically managed as a competition, groups of faculty from different parts of the institution submit joint proposals for two years of funding at approximately \$100,000 year; winning proposals are selected by a faculty/administration committee. The Princeton Environmental Institute's Grand Challenge programs funded six such proposals last year; the Atkinson Center for a Sustainable Future at Cornell has an "Academic Venture Fund" that has funded 17 interdisciplinary projects.

The Provost's office at Duke uses the "problem-focused" (PFIRST) model to promote interdisciplinary research. The Institute recently has submitted six proposals composed with faculty. These grants are typically funded at much lower levels (\$20,000–\$30,000) than similar grants at comparable institutions. As a result, the PFIRST grants are sufficient to cover exploratory proposal and research proposal development, but inadequate to fully fund research endeavors.

To be sure, for an institute with an explicit policy focus, like the Nicholas Institute, the competitive model has its drawbacks. In bottom-up fashion, the research topics at Cornell, Princeton, or the Woods Institute at Stanford are far more likely to reflect the specific academic interests of individual teams of researchers than the research needed to answer a particular policy question that has been identified as a national priority. The policy impact of these bottom-up initiatives is also a matter of contention; the challenges of timeliness and relevance discussed above are again in play.

By deepening its ties to the intellectual community of Duke, the Institute benefits from the tremendous resources of Duke's faculty and students and brings its own knowledge of global debates on environmental concerns back to Duke's research and educational mission.

According to the Institute's faculty advisors, the benchmarking effort's focus on the resources available to the Duke faculty is not as important as ensuring adequate engagement capability. As in the case of unsolicited external engagements, the academic process of identifying promising new research works less by stating explicit research priorities, *ex ante*, and more through discourse, exploration, experiment, and sometimes, accident. Although seed money to incubate research ideas is important, the Institute's faculty advisors stressed that the most critical mechanism through which the Institute catalyzes the development of new research is faculty working groups. In these groups, researchers jointly devise promising longer-term work with the Institute. And the more that the Institute facilitates these groups and faculty access to Institute staff and Duke post docs and research assistants, the better. As most faculty advisors put it, the working groups—and not six-figure competitive awards—are the key to collaboration, because they reduce the transactions costs of devising and acting on new research ideas. More useful than large grants, they said, are seed monies akin to the PFIRST grants to help faculty working groups devise collaborative research proposals with the Institute.

The view of Duke faculty less familiar with the Institute might differ from that of the Institute's faculty advisors. The broader Duke academic community might find the provision of resources commensurate with those of university environmental centers attractive. Nonetheless, the Institute does not possess the resources to offer large grants.



4. According to the director of one of these competitor institutes, "without the carrot of the research funding, we would have a very hard time getting these people to collaborate."

Thus, to develop more research in climate-energy, oceans, and freshwater, the Institute proposes to (1) create and/or collaborate with existing faculty working groups in all areas of focus, (2) pursue joint faculty appointments with Duke schools, and (3) serve as a portal to Duke expertise even when external interest does not match Institute interests.

Faculty Working Groups

The Institute will bring research opportunities that overlap with its ongoing work and that pass its research filter to its newly formed and existing faculty working groups. Presently, the Institute has working groups in the areas of ecosystems, economics, and freshwater. In partnership with Duke faculty, it recently re-launched a standing committee on strategy, chaired by *Ex Officio* Advisory Board member and Duke Law professor Jim Salzman.

In collaboration with Nicholas School faculty, the Institute has also resurrected its climate and energy faculty working group. This group will operate at two levels, connecting the Nicholas Institute with faculty and contributing to a major Duke initiative in energy to be directed by outgoing Energy Information Administration (EIA) director and Nicholas School professor Richard Newell. Institute directors are also developing working groups for corporate sustainability and oceans. In addition to vetting opportunities, these groups will identify and pursue cutting-edge research. Most importantly, the Institute will use key working groups to establish relationships with decision makers.

Consultations with faculty involved in the strategic planning exercise clarified that funding to support proposal development and prospect cultivation are only two benefits that faculty seek from the Institute. Equally important are Institute efforts to reduce the transactions costs of partnering with the Institute. Three other coveted benefits are “plug and play” working group meetings, post-doc and research associate funding, and quick turnarounds on policy efforts by the Institute’s senior staff.

Working group grants

In an effort to involve faculty in research design and to spur innovation in research and outreach that will result in high-impact decisions, the Institute, pending clearances, proposes to provide startup research grants in the amount of \$25,000 annually. These grants—akin to the provost’s PFIRST model—are intended to promote strategic interdisciplinary environmental research.

Joint faculty appointments

Another promising way to pioneer research and to deepen the Institute’s engagement with faculty is use of joint appointments. The first such appointment recently brought one of the nation’s preeminent climate and energy economists, Billy Pizer, to Duke. Pizer will bring his considerable expertise in public energy finance from his tenure at the U.S. Treasury to bear on new research efforts at the Institute and at Duke’s Sanford School of Public Policy. Such efforts will form the cornerstone of a concerted Duke campaign to build faculty expertise in energy finance and energy economics.

The Institute envisions joint professorships with many schools on campus. Appointments would be made to explicitly connect the interests and expertise of the Institute with those of the schools. The Institute plans to use the Provost’s fund for such appointments to the degree that it is available, but also hopes to partner with the deans to fundraise for new joint professorships in the context of Duke’s development activities.

Portal to Duke interests

The Institute is often approached with opportunities beyond its focal areas of climate-energy, oceans, and water. For instance, on a recent board trip to Berlin, Institute advisors became excited about the prospect of pairing up with the

The Water, Sanitation, and Hygiene Forum

Access to safe drinking water and sanitation for all is possible and would empower the millions of people, especially women and children, who lack it. To examine how to achieve this goal, the Nicholas Institute and the Aspen Institute convened a multi-stakeholder dialogue focused on water, sanitation, and hygiene (WASH) in 2005. That first dialogue resulted in publication of *A Silent Tsunami*, a report highlighting the global importance of access to clean water and sanitation and outlining the major steps that stakeholders could take to provide this access rapidly and effectively.

In a follow-up dialogue hosted by the two institutes in May 2011, representatives of government, nonprofits, foundations, and academia reflected on progress made since 2005 and identified critical policy needs to enable U.S. entities to fully maximize the impact of their WASH activities over the next five to ten years. The forum benefited from the input of many of the original forum participants, who, along with many new participants, provided a wide range of expertise from a variety of organizations working on WASH challenges. *A Silent Tsunami Revisited* shares the progress made on expansion of WASH services since 2005. It highlights U.S. experts’ recommendations for improving the efficacy of the WASH sector and for achieving universal access to safe water and sanitation. This report and the 2005 report are available at nicholasinstitute.duke.edu/silentsunami.

Given the level of interest of stakeholders in the 2011 WASH forum, and the importance of the subject matter, the Nicholas Institute and Aspen Institute will co-host an annual forum focusing on broader water issues. Every third year, the forum will be solely devoted to WASH issues.

Potsdam Institute, which is doing research on soils. Rather than launch a new initiative in this area, the Institute will connect the Potsdam Institute—and other peer institutes as well as decision makers—with Duke faculty possessing the relevant expertise. This “portal” approach also holds great potential to tap prospects and partners. For example, in March 2011, the Institute hosted a climate policy forum at which deans from the Nicholas School, Sanford, and Fuqua were invited to cultivate major gift prospects.



Research assistantships

The Institute advances its educational mission by engaging promising Duke students to work with it and faculty partners on research projects. It has hired research assistants with funding from the Nicholas School of the Environment. The Nicholas School awards about 140 professional degree students with assistantships during their first year of study to assist faculty and staff with teaching, research, profession, and other projects. Students are expected to work eight hours per week during the school year. Nicholas Institute researchers rely on this talented pool of students to assist in all aspects of the Institute’s work, including some challenging administrative functions. Such assistantships notwithstanding, some senior Duke administrators interviewed by B&W were particularly keen on the Nicholas Institute becoming more active in the university’s teaching mission.

Owing to the importance of student engagement, the Nicholas Institute proposes to use some of its core support to offer as many as 10 research assistantships at a total annual cost of approximately \$30,000. Assistantships would be open to Nicholas School students as well as students from Sanford, Fuqua, Pratt, and Duke Law. The assistantships would be aimed at second-year students on the assumption that they have more fully formed research interests, are free of first-year course demands, and may use the funding to help fulfill thesis and other program requirements.

Because faculty view the Institute’s pool of research associates as one of the more attractive benefits that the Institute has to offer, the Institute will ensure that its faculty partners are aware of its assistantship program. In particular, it will publicize the research areas covered by the program and the interests and skills of individual research assistants. The Institute will endeavor to work with the Nicholas School to coordinate its research assistantships with those offered by the School.

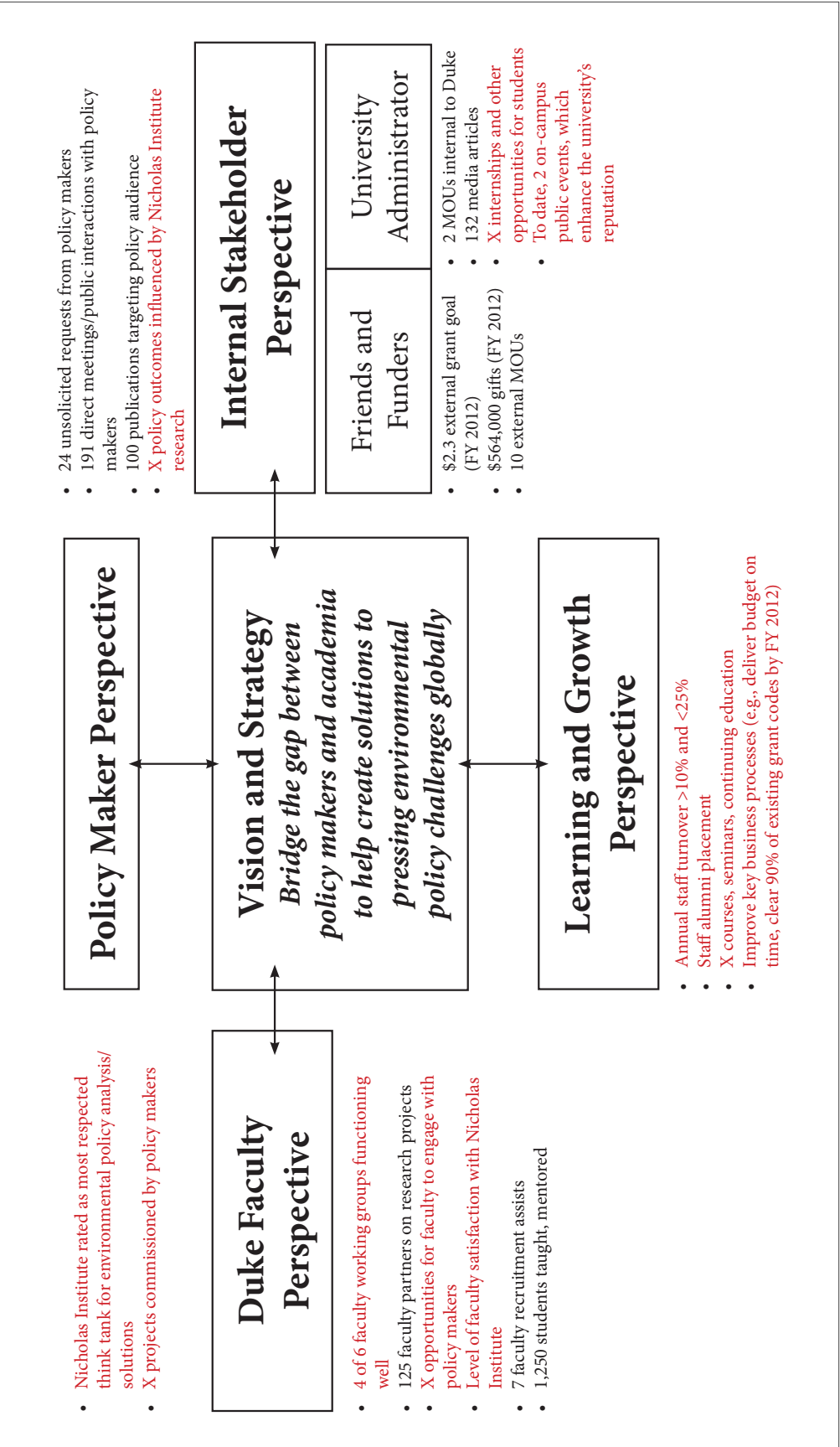
5. Measure and report the impact of the Institute’s work

Although Duke University supports the Institute’s core operations, the Institute is particularly fortunate to receive external grants and gifts from philanthropic foundations. During the strategic planning process, the Institute’s Advisory Board repeatedly raised the foundation sector’s concern that the impact of donations be calculated. Creating meaningful measures to assess this impact poses a particularly difficult challenge for policy analysis organizations such as the Nicholas Institute. The Institute’s mission is to inform timely and effective *decisions* that help meet the world’s critical environmental challenges. Because complex and multivariate processes shape decisions, ascribing causation for something as complex as federal climate legislation, the product of years of negotiation and intensive lobbying by hundreds of interest groups, is nearly impossible. The political process is not straightforward. But a purely anecdotal approach to impact, such as “we were at the table” or “we influenced the outcome,” also fails to pass muster.

The Institute currently provides administrators at Duke with a comprehensive set of impact measures that includes unsolicited decision-maker requests, publications, and financial goals. But the list of metrics reported to Duke administrators runs 71 pages, and no commensurate measures exist to track staff and faculty perspectives. External funders also lack concise, concrete measures with which to justify continued investment of discretionary resources.

The Institute needs a set of measures that are relatively simple to implement, outcome-oriented, easily communicated with graphics, and mindful of the Institute’s diverse audiences. Wherever possible, these indicators should be based on demand. Willingness to pay for a product is a powerful indicator of impact. Therefore, the Institute proposes to harness a “balanced scorecard” (BSC) approach (see Figure 1).

Figure 1. New and existing impact measures, FY 2011–2012



Developed by Robert Kaplan at the Harvard Business School, the BSC approach attaches equal weight to customer, internal operations, staff development, and financial perspectives. It identifies a handful of quantifiable goals for each perspective. For an organization such as the Institute, the BSC approach divides customers into funders (foundations, Duke University administration) and beneficiaries (decision makers).

The Institute proposes to augment its current set of impact measures with measures designed to track progress on its new goals. In addition to counting unsolicited requests for assistance, the Institute will scrutinize outcomes to determine whether opportunities that fall outside its core foci are referred to Duke faculty and how projects that fit its core competencies evolve. Particular attention will be given to the degree to which faculty working groups help to shape project research. Other impact measures will include the Institute's ranking in terms of respect among influential environmental policy think tanks, indicators of internal staff growth and learning, and business process metrics such as closing grant activity and certifying the level of investigator effort.

6. Establish a unique brand

Interviews conducted by B&W for the strategic planning process confirm that the Institute is well known nationally and associated with timely and excellent products. But, as noted above, external stakeholders associate the Institute primarily with cap-and-trade research. Less broadly known are the Institute's efforts in the areas of oceans and freshwater and its cross-cutting endeavors in valuing clean water and wood and in helping companies reduce the use and disposal of these and other production inputs.

The Institute's "Nicholas" moniker creates two different challenges. The first is brand confusion both at Duke and among external stakeholders. At Duke, few faculty initially comprehend the difference between the Institute and the Nicholas School, a confusion that can erect barriers to faculty collaboration with the Institute. Externally, many conflate the Nicholas School and the Nicholas Institute. Even sophisticated donors with a lot of experience in the environmental arena do not always understand that the Institute is a standalone entity, with its own fundraising needs.

The second brand challenge stems from the word *policy* in the Institute's name. For many potential collaborators, that word suggests that the Institute engages only with the government—that is, does not work with private sector and non-profit decision makers. This misperception may prevent outside groups and Duke faculty from approaching the Institute.

The Institute currently cannot address branding challenges associated with its name, but it can do a better job of advancing its work. To accomplish this task, the Institute proposes an investment in a marketing and communications effort to build greater awareness of and attract new sources of external funding for the research areas relatively reliant on core budget support, including oceans, water, and ecosystems. In the short run, the investment would fund development and implementation of a marketing plan and creation of a new Institute website. This effort would be coordinated with Duke's central communications operations, other Duke schools, and Institute directors.

7. Pursue financial sustainability

The Nicholas Institute is without parallel among Duke's interdisciplinary institutes when it comes to attracting outside financial support. Each year, it has been able to match, if not exceed, the core support received annually from Duke. In expectation of that trend continuing, the Institute plans to maintain a 40–50 person staff.

Consistent with its inaugural strategic plan, the Institute has cultivated external support from multiple sources—individuals, corporations, foundations, and government. But because its teaching mission is limited, the Institute cannot tap one group of potential individual donors: alumni. Therefore, the Institute is shifting the focus of its development office from Duke alumni philanthropy to mission-based philanthropy.

The Institute will look beyond foundations to corporate partners, where appropriate, and to corporate foundations. Already, this approach has proven fruitful. In FY 2010, corporate foundations gave the Institute \$1.5 million to examine climate issues, including ways to provide the private sector with investment certainty in the absence of a mandatory federal cap-and-trade system.

To maintain a multi-source funding portfolio, the Institute will redouble its outreach efforts to philanthropic foundations, particularly in the areas of freshwater and ecosystems research, which historically have relied on core budget support. To

external audiences especially, the climate program's success in attracting foundation support has had the unintended effect of making other areas of study (such as water, oceans and coasts, and ecosystem services) appear to be secondary concerns. Given the defeat of climate legislation, interviewees encouraged the Institute to better market these other areas of study.

To accomplish this task, the Institute expects to recruit a capable corporate and foundation relations (CFR) officer to identify new prospects, work with current donors, coordinate with senior Institute staff to implement priorities identified in this plan, and groom the Institute's junior staff to excel at corporate and foundation relations. Alternatively, the Institute envisions working with Duke's central CFR office to develop a junior staff member into a CFR officer. In this scenario, resources that would have been used to hire an officer would be used to hire a research development associate, a new position that is being tested at several other Duke University institutes.

B&W found that the most successful comparable "institutes" at peer universities possessed significant discretionary resources—usually the proceeds from a large founding gift (and naming opportunity). Perhaps the best example is Cornell. Drawing on an \$80 million founding gift, Cornell's sustainability center can invest \$600,000 in its faculty venture research fund; match other research grants at about the same level; underwrite several endowed chairs; and sponsor a wide range of events, lectures, and meetings.

The Institute lacks a large founding gift. This fact has created uncertainty about Duke's support of the Institute. Abating this uncertainty will require a strong signal from Duke administrators that the Institute has a solid financial commitment.

The Institute does not intend to exit the individual fundraising arena. Rather, it hopes, as noted above, to reposition itself as a portal to Duke—attracting potential new non-alumni friends and prospects and developing Institute funding priorities that also bring benefits to partners across campus. In this way, the Institute will support its core mission but also funnel resources to others on campus. The Institute recently employed this model to host a very successful policy outreach event in Los Angeles.

The Institute's non-alumni donors have largely based their support on the Institute's mission, not on its university affiliation. Therefore, the Institute expects to continue to work with these donors (including the Advisory Board). It will use the existing individual donor base to recruit other mission-driven donors, consistent with the portal approach discussed above.

Finally and most critically, the Institute's capability to fulfill its mission—informing high-impact decisions in an excellent and timely way—hinges on a dedicated funding source. What makes the Nicholas Institute singular among university programs and venerable environmental research organizations is that it is neither fully supported by a large endowment nor fully reliant on foundation support. Faculty advisers cautioned that although large endowments can help to produce high-quality research fitting for highly specialized journals, such research does not always align well with the type of timely policy information that environmental decision makers seek. Foundation grants, on the other hand, contain timetables for deliverables that can stymie researchers' attempts to respond rapidly to unsolicited, unfunded research requests. Over the next five years, the Provost has indicated his willingness to make a core budget funding commitment from Duke to provide that dedicated funding source, for which the Institute is greatly appreciative.

Conclusion

With its Duke affiliation and ties to some of the world's top energy and environmental researchers, the Nicholas Institute has carved a distinctive niche among organizations that focus on environmental policy. Over the next five years, the Institute will build on the solid foundation forged during its startup phase in three ways. First, it will cement ties to Duke faculty through working groups that identify work at the frontier of environmental policy. It will make talented students available to these groups through 10 new annual research assistantships. Second, with respect to unsolicited requests, the Institute will apply a filter to identify those projects that will have the greatest impact on decision making in the areas of climate-energy, oceans, and water. It will give priority to projects at the intersection of those areas, including elucidating blue carbon issues and helping state and local officials and private sector interests better value the benefits of clean water, wood, and carbon sequestration produced by ecosystems. Finally, the Institute will integrate its climate-energy, oceans, and water programs by working with Duke and other expert faculty to help communities in North Carolina and around the world adapt to a warming world. Successfully implemented, this plan will make the Institute more useful to diverse external constituencies, more essential to the mission of Duke, and more sustainable.

Appendix

Board of Advisors

William K. Reilly, Chair
Founding Partner, Aqua International Partners, LP
Senior Advisor, TPG Capital, LP

Frances Beinecke
President, Natural Resources Defense Council

Susan Bell
Vice-Chair
Chair, Nominating Committee
Vice President, The William and Flora Hewlett Foundation

William Chameides, Ex Officio
Dean, Nicholas School of the Environment, Duke University

Rev. Richard Cizik
President, New Evangelical Partnership for the Common Good

Disque Deane Jr.
Chief Investment Officer and Co Portfolio Manager, Water Asset Management LLC

Charles O. Holliday, Jr.
Chairman, Bank of America

Fred Krupp
President, Environmental Defense Fund

N. J. Nicholas Jr.
Member, Nominating Committee
Director, Boston Scientific Corporation, Xerox Corporation, and Time Warner Cable

Peter M. “Pete” Nicholas
Co-Founder and Chairman, Boston Scientific Corporation

Patrick F. Noonan
Chairman Emeritus, The Conservation Fund

Cornelia Quennet-Thielen
State Secretary, Federal Ministry for Education and Research, Federal Republic of Germany

Carter S. Roberts
President and CEO, World Wildlife Fund – United States

James E. Rogers
Chairman, President, and CEO, Duke Energy

William L. Rogers
Founder, TexWest, LLC

Virginia Sall
Member, Nominating Committee
Co-Founder and Director, The Sall Family Foundation

James Salzman, Ex Officio
Strategic Faculty Advisory Committee Chair
Samuel F. Mordecai Professor of Law
Nicholas Institute Professor of Environmental Policy

Joseph A. Stanislaw
Founder, The JAStanislaw Group, LLC
Independent Senior Advisor, Deloitte & Touche

Mark Tercek
President and CEO of The Nature Conservancy

Strategic Faculty Advisory Committee

James Salzman, Chair
Samuel F. Mordecai Professor of Law
Nicholas Institute Professor of Environmental Policy

Deborah Gallagher
Assistant Professor of the Practice of Resource and
Environmental Policy and Executive Director of the Duke
Environmental Leadership Program
Environmental Sciences & Policy

Patrick Halpin
Associate Professor of Marine Geospatial Ecology and
Director of the Geospatial Ecology Program
Marine Science & Conservation
Environmental Sciences & Policy

James Hamilton
Charles S. Sydnor Professor of Public Policy Studies
Professor of Political Science and Economics

Jan Mazurek
Director, Strategy and Operations

Tim Profeta
Director of the Nicholas Institute

Dean Urban
Professor of Landscape Ecology, Division Chair
Environmental Sciences & Policy

Avner Vengosh
Professor
Earth & Ocean Sciences

Jeff Vincent
Clarence F. Korstian Professor of Forest Economics and
Management
Environmental Sciences & Policy

Jonathan Wiener
Perkins Professor of Law, Professor of Environmental
Policy and Professor of Public Policy Studies

Mark Wiesner
Professor
Environmental Engineering

Interview Subjects

Alan Abramson
Former Carbon Market Fellow, Nicholas Institute

Frances Beinecke
*President, Natural Resources Defense Council
Nicholas Institute Advisory Board*

Susan Bell
*Vice President, The William and Flora Hewlett
Foundation
Vice Chair, Nicholas Institute Advisory Board*

Jim Boyd
*Resources for the Future (RFF), Senior Fellow and Co-
Director, Center for the Management of Ecological Wealth*

Bill Chameides
*Dean, Nicholas School of the Environment
Duke University*

Ralph Eads
Board of Trustees, Duke University

John Ehrmann
Co-founder and Senior Partner, Meridian Institute

Dan Esty
*Director, Yale Center for Environmental Law and Policy
Commissioner, Connecticut Department of
Environmental Protection*

Joel Fleishman
*Faculty Chair, Center for Strategic Philanthropy and Civil
Society, Sanford School, Duke University*

Cliff Gladstein
*President, Gladstein, Neandross, & Associates
Nicholas Institute ENLIST member*

Chad Holliday
*Chairman, Bank of America
Nicholas Institute Advisory Board*

Linda Lance
*Senior Council
Senate Energy & Natural Resources Committee*

Peter Lange
Provost, Duke University

Larry Linden
Founder and Trustee, Linden Trust for Conservation

David McIntosh
*Former Associate Administrator for Congressional and
Intergovernmental Relations, EPA*

Ellen Medearis
*Vice President, Duke Medicine Development & Alumni
Affairs*

Nick Nicholas
*Director, Boston Scientific Corporation, Xerox
Corporation, and Time Warner Cable
Nicholas Institute Advisory Board*

Kyung-Ah Park
Vice President, Goldman Sachs

Diane Regas
*Associate Vice President, Environmental Defense Fund
(EDF)*

Walt Reid
*Director, Conservation and Science Program Packard
Foundation*

William Reilly
*Founding Partner, Aqua International Partners
Chair, Nicholas Institute Advisory Board*

Ginger Sall
*Co-Founder & Director, Sall Family Foundation
Nicholas Institute Advisory Board*

Jim Salzman
*Samuel F. Mordecai Professor of Law
Nicholas Institute Professor of Environmental Policy;
Advisory Board*

Mike Schoenfeld
*Vice President, Public Affairs and Government Relations,
Duke University*

Blair Sheppard
President & CEO, Duke Corporate Education

Fred Stanback
Nicholas School Board

John Stowell
*Vice President for Environment, Health & Safety Policy,
Duke Energy*

Mark Tercek
President & CEO, The Nature Conservancy (TNC)
Nicholas Institute Advisory Board

Buzz Thompson
Perry L. McCarty Director and Senior Fellow, Woods
Institute
Stanford University

Roger Ullman
Executive Director, Linden Trust for Conservation

Peter Umhofer
Energy and Environmental Consultant,
Nicholas Institute

Danielle Rosengarten Vogel
Former Climate Change Advisor, Senator Lieberman

Analogous Academic Institutions Reviewed

Princeton
Environmental Institute

Yale
Center for Environmental Law & Policy

Cornell
David R. Atkinson Center for a Sustainable Future

Stanford
Woods Institute for the Environment

MIT
Energy Initiative