

The Denver Climate and Society Initiative (DCSI)

A Proposal Submitted to the University of Denver's Ideas to Impact (I2I) Initiative
April 14, 2023

Climate change is among the most complex and urgent challenges of our lifetimes and that of our students. Mitigating its magnitude and adapting to a changing climate will demand ingenuity and sustained commitment, along with well-educated, well-trained leaders to effect social and structural change. The University of Denver is uniquely situated to launch an ambitious, innovative, and impactful Climate and Society Initiative that reimagines interdisciplinary teaching, research, and public engagement on the societal impacts of the climate crisis and the political, economic, and societal responses to it.

The initiative will draw on DU's distinctive strengths, among them: environmental justice; climate impacts on migration, security, water resources, food insecurity, democracy, and other societal concerns; and the roles of governments, businesses, and civil society organizations in responding to the climate challenge. The initiative is a clear example of DU's commitment to the public good. It will leverage the unparalleled resources available in the Front Range, including complementary strengths at other universities in the area, the numerous of federal labs in the area, the concentration of energy and environmental businesses, non-governmental organizations and thinktanks, and our access to public officials. Combined, these attributes make this area perhaps the single best location for such an initiative.

Key elements of the program will include:

- Curricular innovations to prepare the next generation to live and lead in a world reshaped by climate change;
- Impactful research to advance our understanding of the societal dimensions of the climate crisis; and
- Engagement with policymakers and stakeholders to inform local, state, national and global solutions to the climate crisis.

Many universities have recently made substantial commitments to climate change. Most, however, are focused on science and technology rather than on societal impacts and societal responses. Yet, as the recent IPCC report makes abundantly clear, the fundamental problem now is not to understand the environmental impacts of climate change, but rather to galvanize the collective will needed to minimize and mitigate its impacts. Furthermore, few universities are exploring the intersectionality of climate change by integrating DEI considerations in teaching, scholarship and public engagement. We believe this initiative will position DU as a national and international thought leader on just those issues. DU will be both model for climate education and a exemplar of an engaged university committed to advancing the public good on this, perhaps humanity's most vexing problem.

A Cross-Campus Collaboration

This proposal represents a collaboration of five colleges and schools, but it will engage with virtually every unit on campus. Those primary collaborators are the College of Arts, Humanities and Social Sciences; the Daniels College of Business; the Graduate School of Social Work; the Korbel School of International Studies; and the Sturm College of Law. The lead faculty for those units are:

Susan Daggett, Sturm College of Law
Frank Laird, Korbel School
Lisa Reyes Mason, GSSW
Fritz Mayer, Korbel School
Tricia Olsen, Daniels College of Business
Andrea Stanton, CAHSS

We also envision significant engagement with the Department of Geography and the Environment within the College of Natural Sciences and Mathematics, which has a strong human geography focus.

This initiative is designed to build on the remarkable range of existing efforts on climate change and society at DU. These include myriad centers, degree and certificate programs, student activities, and faculty initiatives happening in nearly every academic unit on campus as well as in the Center for Sustainability. Those include, in addition to the Sustainability Center and the Department of Geography and the Environment, the Center for Global Change, the Center for Migration, the Sie Center for Security and Diplomacy, IRISE, the Pardee Center for International Futures, the Rocky Mountain Land Use Institute, the Scrivner Institute of Public Policy, the Nanda Center for International and Comparative Law, the Estlow Center for Journalism and New Media, and others. The initiative is also intended to reinforce the strategic plans of the colleges and schools, almost all of which have some element related to climate change and society. This project will provide the resources to strengthen those programs and build collaborative networks within and outside of the university.

We note that we see the I2I proposal for a Synthesis Center on Regenerative Futures submitted by a team led by Professor Bexell as a potentially complementary initiative that would help facilitate even wider coordination and information sharing at DU.

Why “Climate and Society”?

As noted above, many universities have recently made substantial investments in climate change and related initiatives, among them Stanford, Arizona State, CalTech, and others. Moreover, there are considerable strengths at other universities in our region, most notably at the University of Colorado and at Colorado State. Most of these, however, have a strong science and technology orientation. Consequently, there remains an important opening for the social sciences, the humanities, and the professions to better understand both the societal

impacts of climate change and the ways in which those might be responded to by government, business, and civil society.

Societal impacts—The direct environmental impacts of climate change—rising heat, extreme weather events, drought, flooding, sea level rise, and others—are increasingly predictable. As the recent IPCC report makes clear, we now know with some certainty how CO₂ and other greenhouse gas emissions will impact the planet. What is less well understood are the second-order societal impacts. These include but are not limited to:

Food insecurity—Environmental change is making our food production systems increasingly vulnerable, with potentially dramatic increases in food insecurity in many parts of the world.

Migration—Climate migration has already begun and is highly likely to grow in coming years, with profound implications for the lives of immigrants and both the societies from which they come and those where they seek to go.

Economic inequality—Climate change threatens to increase economic inequality, largely because those with the fewest means will be least well positioned to adapt to the coming changes.

Social unrest—Increased food insecurity, migration, and economic inequality, coupled with the challenges posed by extreme weather, water shortages, are highly likely to spur greater social unrest, with uncertain impacts on the stability of societal institutions.

International security—Problems of scarce water resources, migration pressures, rare minerals needed for green technologies, and other tensions have already led to conflict and are likely to intensify.

Democracy—All of the above represent challenges to democratic governance, a test of whether we can construct both more inclusive and more effective governance capable of meeting the challenges of a hotter age.

Justice—Core moral, justice, and ethical issues lie at the heart of societal impacts. Those who are, already, most vulnerable and who are generally least responsible for climate change will face disproportionate negative effects of climate change. These groups often include members of minority or indigenous groups.

Societal responses—The societal impacts of climate change are not inevitable; they depend on the actions taken by governments, businesses, civil society, international organizations, and individuals in their capacities as both consumers and citizens, at local, state, national and international levels. Understanding what actions are likely to be most effective, at what levels and in what combinations are crucial, as well as what strategies are most likely to lead to such actions.

There are myriad points of possible intervention that scholars at DU are well-positioned to address. These include, but are certainly not limited to:

- international climate negotiations;
- sustainable international development strategies;
- national, state, and local climate policies addressing land use, water policy, agricultural policy, a transition to a zero-carbon energy system, and urban design;
- private governance in the form of ESG policies;
- climate science communication, climate activism and collective action, environmental conflict resolution;
- environmental disaster response;
- environmental rights and justice, including most pertinently for us in Colorado, indigenous rights; and
- public engagement and education.

Why DU?

With so many other universities investing climate change, why should donors make an investment in DU? How can DU have an impact? What might make DU distinctive?

We see four reasons why DU is well-positioned to lead in this space:

First, DU's strengths in the social sciences, humanities and in the professional schools of law, business, social work, and public and international affairs align perfectly with the issues that have, to date, received less attention, yet are and will be the key issues over the coming years.

Second, this initiative ties squarely into core commitments of the university, most notably that to become carbon neutral by 2030, but also the 4-D student experience, the new mountain campus, and a focus on civic engagement.

Third, the strengths of the other major universities on the Front Range, notably CU Boulder, CU Denver, CSU, and the Colorado School of Mines are largely complementary to those of DU, positioning us to place a distinctive role, often in partnership with those institutions.

Fourth, the wider ecosystem in which we are based is perhaps the richest in the world in terms of resources on which we can draw, among them government agencies such as NREL, NCAR, and NOAA; research institutes and think tanks such as the Rocky Mountain Institute and the Keystone Policy Center; community organizations such as the Alliance Center; both traditional energy and green tech businesses; and public officials committed to addressing the societal impacts of climate change. And, the physical beauty of this area is a huge draw for all who care about these matters.

Potential Impact

The DU Climate and Society Initiative will have impacts through our teaching, our research, and our direct engagement with stakeholders.

Teaching impacts—We need prepare the next generation to live and lead in a world reshaped by climate change. To meet this great challenge will require intellect and knowledge, character to take selfless action, commitment to further personal and planetary wellness, and wisdom to choose to play a meaningful part in the great collective enterprise meeting the climate crisis will require. To forge a sustainable future, students must be prepared to act rooted in knowledge and ethical training. They need to understand the linkages between human behavior and ecological systems, how to mitigate the most harmful effects of environmental change, and build just, climate-resilient societies.

As part of DU's commitment to the "4-D" student experience, every DU student should graduate with some level of climate literacy. The Climate and Society Initiative would contribute to this aspiration by complementing essential science education with a distinctive focus on the societal dimensions of climate change, and an emphasis on the myriad ways in which students can be engaged in being part of solutions throughout their careers. It would also focus on the thoughtful utilization of the mountain campus, going beyond 'Outward Bound'-style activities to create a synergistic relationship between the campus setting and course content.

Research impacts—Drawing on strengths in the social sciences and humanities, and in business, law, social work, international relations and public policy, DU is well-positioned to be a thought leader and model of engaged scholarship on issues of climate and society. The focus of this scholarship is articulated above. To maximize the impact of this research, the Climate and Society Initiative would work with CCESL, emphasizing engagement with stakeholders to drive the research process through community-based research (not just at the end in "translation"). Such engagement will not only help to generate research questions of relevance to practitioners, it will help ensure a more receptive audience for the research.

Societal engagement—The DU Climate and Society Initiative has the potential to have major impacts at local, state, national and international levels. In Colorado, there is a clear opening for engagement on such issues as indigenous approaches to the environment, management of the Colorado river basin, regenerative agriculture, and wildfire mitigation. Nationally, we have the opportunity to provide leadership on many aspects of environmental policy, not least through our excellent connections to our elected officials. Already, DU makes meaningful contributions to important international processes ranging from sustainable development, to the nexus of climate and democracy around the world, and to participation in the IPCC process. Engagement on all these issues would involve applied research, direct engagement with stakeholder communities, and not least preparing our students for leadership at all levels.

DEI Emphasis

Diversity, Equity and Inclusion are central to this proposal, both at the heart of the societal impacts that are its focus, and, equally important, to the approaches needed to address those matters.

First, DEI concerns are central to both assessments of societal impacts and of possible responses. As noted briefly above, climate change is having and will have profoundly unequal and unjust impacts across geographies and populations. The world's most vulnerable communities will experience the greatest impacts and have the least capacity to cope with climate variability and extremes. In addition, efforts to transition the energy system to climate-friendly sources of energy will have a wide range of unequal effects on communities around the world. These disparate impacts raise critical questions about historical injustices and uneven social structures. Building on expertise in law, social work, anthropology, sociology, public policy, and education, research undertaken as part of the Initiative will examine systems of injustice and trace pathways for advancing economic, racial, and gender equity in the face of climate change.

Second, related, DEI issues need to be foregrounded as we consider and recommend processes through which public, private and civil society institutions respond to the climate crisis. The core questions include: Who has a seat at the table? How can we structure effective deliberative processes that give voice to those who have historically not had one, including notably indigenous and other historically minoritized communities?

Third, although the particulars of how the Initiative might be internally organized at DU still need to be worked out, we would be sure that DEI concerns would be represented. This could take different forms, but would certainly involve careful attention to diversity on whatever interdisciplinary steering/governance committee we establish.

Investment to Impact

Although DU already hosts an extraordinary array of climate and society activities, to position the University as a leader will require a substantial investment to make the whole greater than the sum of its parts. The initiative described above could take different forms depending, in part, on its scale. Likely, it would take the form either of a center or an institute, but form should follow function.

The core of the proposal will require substantial philanthropic investment. Once established, the initiative would be able to attract substantial additional research support and would generate revenue from enhanced enrollments.

Key philanthropic investments

Core staffing—Virtually nothing else is possible without some core staffing. The number and type of staff will depend on the scale of the initiative, but likely between 1-5 FTEs.

Faculty—Faculty members are the heart of what we do. Although we have numerous strong faculty, the addition of 1-5 new faculty members would be highly desirable. One could be a named chair in Climate and Society. A nationally and internationally recognized star who could be a leader on campus and off. What specific aspects of climate and society for that chair and others are TBD, but all would have a clear climate and society orientation. These positions could be based in any of the participating schools and colleges.

Research capacity—To support the work of faculty and to catalyze research on priority topics, we envision a fund for seed grants, funds for workshops and other convenings that locate DU at the center of major conversations, and, importantly, support for 1-4 PhD students each year. We would also benefit from funding for some number of post-docs.

Student Experiences—This initiative would greatly expand DU's curricular and extra-curricular experiences for students. To support that expansion, we envision a fund to provide course development grants, course activity grants, funds to support internships and other practicums, and funding to allow for retreats and other activities at the Kennedy Mountain Campus.

Student Recruiting—To attract outstanding students from diverse backgrounds, particularly MA and professional students will require scholarship funding.

Public engagement—We envision a substantial public outreach dimension for this initiative, including public events in the form of speakers (and perhaps a named annual lecture), major convenings (a Denver Climate and Society Summit), and other forms of public engagement (working with CCESL and other units). The initiative will also need funding for regular communication about its activities and those its affiliates in the form of newsletters, social media, and the like.

Attracting Additional Support

The Climate and Society Initiative will position us to better pursue sponsored research funding for complementary projects. For example, the National Institutes of Health recently announced exploratory grants for Climate Change and Health Research Center Development and the National Science Foundation has put out an RFP for Centers for Research and Innovation in Science, the Environment, and Society. Substantial funds will be made available over the coming years from other sources; a well-resourced initiative at DU will be an attractive investment for these and other organizations seeking to catalyze impactful work on climate change.

The Initiative would also provide the infrastructure for additional philanthropic investments on issues of particular concern to donors. These could be focused any of a vast array of topics

from empowering indigenous communities to the role of the arts in motivating climate action to the efficacy of corporate ESG efforts to climate science communication to supporting more sustainable development trajectories in developing countries, and much more.

Impacts on Enrollment

DU is not now, but clearly should be, a highly salient destination for students concerned about climate change. A robust Climate and Society Initiative greatly enhances our ability to recruit students to DU, both undergrads and, importantly, graduate and professional school students. Our existing graduate programs have degree or certificate programs whose curriculum could be expanded, while almost all our graduate programs have capacity to support higher student numbers. There is also considerable potential for developing interdisciplinary programs across schools and colleges. Currently, our lack of a clear reputation is a significant handicap in such recruiting.

There is enormous philanthropic interest in climate change. Indeed, it hard to imagine a topic of greater interest. But donors are looking for distinctive opportunities with real potential for impact. We are confident that the initiative described in this white paper would position us well with that donor community. It addresses a public issue of highest concern. It is focused on salient aspects of climate change with the greatest potential impact. It complements, rather than competes, with investments elsewhere. It leverages existing assets. Finally, a major hub located in the heartland of America—especially on the Colorado Front Range—at a university dedicated to the public good is well positioned to have tremendous intuitive appeal.