

Instituttets/senterets vurdering

Prosjekttittel:	<i>Pushing two of Nature's Limits? Linking the Value of Biodiversity to Climate Change Justice.</i>
Strategisk forankring	<p>IFF: Prosjektet plasserer seg i kjernen av instituttets forskningsstrategi (praktisk filosofi). Spørsmål knyttet til biodiversitet og klimarettferdighet er sentrale spørsmål for forskningen i feltet, og antar en klar praktisk filosofisk tilnærming.</p> <p>HSL: Prosjektet er vel innenfor hovedsatsningen til HSL fakultetet (Mennesker i Arktis). Prosjektet undersøker også spesifikke arktiske betingelser, i tillegg til andre, ikke arktiske områder. Videre vil den allmenne og mer generelt teoretiske forskningen ha betydelig relevans også for en arktisk kontekst.</p> <p>UiT: Prosjektet plasserer seg vel innenfor satsningsområdene «Energi, klima, samfunn og miljø», og «Teknologi». I tillegg har prosjektet en klar dreining mot bærekraft som man forventer vil ha en høy prioritet i UiTs neste strategi.</p>
Gjennomstrømming (navn på fullførte dr.gradskandidater)	<p>Magnus Egan (2021) Kerstin Reibold (2020) Fredrik Nilsen (2018) Tomasz Jarymowicz (2017) Melina Duarte (2016)</p> <p>Følgende planlegger innlevering 2022: Kristoffer Mällberg Vegard Stensen Morten Wasrud Sead Zimeri</p>
Forankring i fagmiljø	<p>En ph.d stipendiat vil bli innlemmet i forskningsgruppen <i>Environmental Philosophy Research Group</i> (EPG) som er velfungerende forskningsgruppe på nivå 1, og som ikke minst har et betydelig nettverk som stipendiaten vil kunne nyttiggjøre seg. Nettverket omfatter både nasjonale og internasjonale miljøer av topp kvalitet.</p>
Rekrutteringsgrunnlag	<p>På dette feltet forventes det at tematikkens høyaktuelle relevans vil virke rekrutterende i seg selv.</p>
Kvalitet på søknaden (herunder evaluering av prosjekt/fagmiljø)	<p>Søknaden fremstår som meget solid forankret i forskningsfronten, og kompetansen til nøkkelpersonellet som står bak søknaden, er også av høy nasjonal og delvis internasjonal kvalitet. Forskningsfeltet er, i akademisk tidsregning, fortsatt et nytt felt, men miljøet som står bak denne søknaden, står ikke tilbake for noen av de kvantitativt større miljøene andre steder i landet, og søknadens grundige forankring av de høyst aktuelle, mulige forskningsspørsmålene som en ph.d vil jobbe med, dokumenterer denne påstanden.</p>

Forslag til veileder(e)	Professor Jennifer Clare Heyward, IFF Førsteamanuensis Øyvind Stokke Førsteamanuensis Svein Anders Noer Lie
Instituttets rangering av søknaden	1

Søknad for PhD-stilling hos Miljø-Filosofi Gruppen, IFFS.

Prosjekttittel: Pushing two of Nature's Limits? Linking the Value of Biodiversity to Climate Change Justice.

The increased public and policy interest in the “Green Transition” – invites questions of what counts as an appropriately “green” transition. Clearly, the Green Transition includes the move from a fossil-fuel based economy to a fossil-free economy, but it be more than that? Indeed, *must* it be more than that? Recent controversies about windfarms in Norway have highlighted this. The opposition to windfarms focuses on their impact on wild animals, aesthetics and people’s sense of belonging to their natural environment. Other measures, for example large-scale afforestation, or Bioenergy, Carbon Capture and Sequestration (BECCS) could have very severe effects on biodiversity see for example (NAS 2015).

Whilst concerns about nature and biodiversity have always been floated in discussions about climate change, it was usually as an afterthought. It is only now that they are coming to the fore. The Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (IPBES) was inaugurated in 2013 and has since published authoritative reports on the state of global biodiversity, e.g IPBES (2019). In 2020 IPBES held a workshop with the Intergovernmental Panel on Climate Change (IPCC), sponsored by the UK and Norwegian governments, which begin an investigation of the relationships between climate and biodiversity protection measures. The report was published in June 2021 (IPBES&IPCC 2021).

The value and role of biodiversity and nature and how it interplays with the societal task of addressing global climate change is an inherently normative question and answering it is very challenging. For example, there has been a long-standing debate in environmental ethics about how to characterize the “intrinsic value” of nature and natural objects that is a widespread moral intuition across time and cultures. More recently IPBES have proposed the concept of “relational value” of ecosystem services (IPBES/4/INF/13, ch. 2 ; also see Chan 2016). However, as a new concept, moreover, one developed in a policy setting, it is undertheorized. How can it be best understood and reconciled with the longstanding debate about intrinsic and instrumental values in environmental ethics (see for example Elliot 1982, Rolston (1986) Sander (2019). Another issue is that discussion of “biodiversity”, “nature” and “ecosystem services” and “earth systems management” appear to suggest an abstract, universal understanding of what they are and how human beings depend upon or otherwise relate to them. However, human beings do not consciously interact with systems but with subsystems or entities specific to certain *places*, which are co-constituted by human understandings and behavioural norms. “Nature’s contribution to people” (IPBES 2021:) is not only be perceived differently but can *be* different across times, spaces, and places. Correspondingly, it is *particular places* that are being lost due to the impacts of anthropogenic climate change, especially in regions such as the Arctic (Heyward 2014; 2021). How should place-based understandings and valuations be valued and incorporated into scientific assessments of biodiversity and the climate? An in-depth philosophical analysis could be of some benefit when considering these issues. To date this has not been done.

Somewhat surprisingly, the philosophical debate on climate change did not originate in the subdiscipline of environmental ethics, but in the subdiscipline of political philosophy, namely cosmopolitan global justice. Perhaps because of these origins, the value of *biodiversity* and

the role of preserving or using biodiversity in climate change mitigation and adaptation has been relatively overlooked in the climate ethics\climate justice literature, whilst investigation into the concept of the natural (Noer Lie 2016) and the value of nature and its constituents remains the key endeavour in environmental ethics. Out of the major philosophical monographs on climate justice published in the last decade only two have even considered the value of biodiversity, devoting one chapter each to that discussion (Cripps 2013, Mollendorf 2014). Neither considered in depth the implications of valuing biodiversity for climate policy.

The overarching theme of the PhD's research will be "how does incorporating the value and role of biodiversity impact upon the form and content of just responses to climate change?". The researcher will be required to integrate literature in environmental ethics and in climate justice, although the particular weighting of the two and the precise focus of the thesis will be up to the appointee and his/her supervisor(s). They should also be willing to engage with relevant literature from other disciplines necessary to support the philosophical research. This eventual holder of this PhD position will provide in-depth conceptual and normative analysis which will explain and clarify of the relationships between climate change and biodiversity, as well as develop a framework for evaluating synergies and trade-offs mentioned above. In doing so, they will perform a long-overdue synthesis of the environmental ethics and climate justice literatures.

Possible research questions include.

1. *How exactly does an increased recognition of the value of biodiversity connect to the debate about degrowth or green growth, and influence possible conclusions?*

The debate between "dark green" and "light green" environmentalism in the early 2000s has largely been superseded by debates about "degrowth" and "green growth" (see e.g. Buchs-Hudson 2018). Green growth, along with its "light green" ancestor is more optimistic about the potential of technological development to solve environmental crises, such as climate change, and, whilst accepting the need for change, sees less need to dispense entirely with the capitalist paradigm. Advocates of "degrowth", by contrast, argues that fundamental shifts in production and consumption are necessary (at least in the developed world) for humankind to overcome our current predicaments. One possible reason for this divide in opinions is different understandings of the role and value of biological diversity and other ways the natural world contributes to understandings of human well-being.

2. *What are the implications of taking the value of biodiversity seriously for the globally endorsed 2 degree target, plus the measures that might have to be enacted should the target be changed or exceeded?*

Measures to counteract or otherwise address the challenges of global climatic change have traditionally been characterized as "mitigation", "adaptation", and "rectification", with technology-focused categories of carbon dioxide removal and solar radiation management being relatively recent additions (for critical analysis, see Heyward 2013). The understandings of, and the appropriate balance, of these have traditionally been discussed with little or no reference to the value of biodiversity. As noted above,

Bioenergy, Carbon Capture and Sequestration (BECCS) could have very severe effects on biodiversity. However, at present, optimistic assumptions about the availability and roll-out of BECCS are behind the IPCC's assessment that it is still possible to keep global temperature increases to within 2 degrees.

3. *What are the philosophical implications of living within, or transcending ecological limits?*

Climate change and biodiversity are two of what researchers in the Stockholm Resilience Centre have called the nine planetary boundaries. (Land use change, which also comes into play, is another). As noted above, it may not be possible to stay within both of these two important "limits to nature". To ascertain the full significance of this, we might ask what *is* a limit of nature and what does it mean, in an existential sense, to be bound by one or to transcend one. There are also practical questions: in many theories of distributive justice, it is assumed that there is a fixed level of goods (howsoever defined) to be distributed. Some substantive views hold that justice is the meeting of minimum limits or not exceeding maximum limits. Taking humans or human society as capable of permissibly transcending ecological and biological limits could greatly change how we view questions of distributive justice.

Strategisk forankring

This project clearly coheres with UiT's overall strategic aims and is intended to be another step towards developing them. Three of the five of strategic foci of UiT's Drivkraft i Nord strategy are:

- Energy, climate, society and environment.
- Technology
- Sustainable use of resources

The project's topic of the value and role of biodiversity in responding climate change is clearly relevant to the first of these listed foci. Moreover, as it is envisaged that responding to climate change will require technological development, and that development will also impact upon biodiversity, the project will also speak to the second.

Finally, considering the value of biodiversity invites us to ask what exactly should count as a "sustainable" use of resources, and will thus contribute to the third.

The Arctic Centre for Sustainable Energy and Greenhouse Gas Management (ARC) is a key element in UiT's strategic plan and all members of EPG have close links with ARC.

Heyward is ARC professor, and Stokke and Noer Lie, have together with vit.ass. Ove A. Haukenes, just completed a report on technology, nature and sustainability "The ARC Methodology", which offers a critical perspective of the framings around technology development.

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Notably, for UiT’s future strategic plan, the Vice-Rector Rikke Gjærum has recently emphasized the importance of "critical thinking" around sustainability and the many different technology-based strategies that will emerge in the years to come.

EPG is at the forefront when it comes to being able to contribute to this task; all EPG members have contributed to this endeavor over their careers. With its focus on conceptual and normative analysis, the PhD position will be an example of the kind of such critical thinking around sustainability that is now acknowledged as vital to achieving a just green transition.

Gjennomstrømmingsevne (navn fullførte dr.gradskand.)

EPG is one of four research groups at IFFS, with 11 members in total. Currently, we have PhD 1 position (Morten Wasrud), who is supervised by Erik Lundestad. Wasrud began his position in August 2017 and is expected to submit this summer. During her time at UiT, Clare Heyward has co-supervised one external PhD student to completion (Laura Garcia-Portela, based at Graz, now post-doctoral fellow in Fribourg).

Forankring i fagmiljø

The PhD project will be linked into the ongoing research of the permanent senior members of the EPG. The EPG is a relatively small level 1 research group, but the permanent members are highly research active.

Clare Heyward, the current EPG convenor, began working on climate justice in 2004. She has published articles on nearly all aspects of the problem of climate change, including adaptation, distribution of costs of climate measures, loss and damage, population change, and the potential role of new technologies in addressing climate change. She is also interested in questions of how to accommodate so-called “natural” resources and human relationships to them, in particular those of indigenous peoples.

Svein Anders Noer Lie has done more than 20 years of research in environmental philosophy. He focuses on ontological questions concerning nature, and has a special interest in the intersection between philosophy and biology. He has published with Routledge (2016) and in late 2021, he signed a new contract with Routledge for a monograph on the phenomenological and practical philosophical issues concerning the *Limits in Nature*.

Øvyind Stokke has wide-ranging research interests in deliberative democracy and natural resource justice. His current project is in the iCCU project at Finnfjord, examining ethical and political issues of developing carbon-capture and usage technology. He is co-editing an interdisciplinary book about scientific and social issues connected to iCCU.

Taken together, these EPG members can offer guidance and support in a range of philosophical traditions: from analytic philosophy, to the Frankfurt School, to phenomenology. Within IFFS more generally, the post-holder will have the opportunity to engage with any of the other three research groups, as their research interests develop. The “Pluralism, Justice and Democracy Group” (PDJ) seems initially the most relevant and the EPG has co-operated closely with them before. In addition, the post-holder will be encouraged to engage with ARC’s research and other activities and develop links with other researchers in ARC. They will also be encouraged to engage with research communities within UiT, for example, the nascent Environmental Humanities Network, and the well-established Sami Centre.

EPG also has an extensive national and international network, which the post-holder will be strongly encouraged to utilize. For example, Heyward is a founder member of the Nordic Network for Political Philosophy, a co-operative venture between the Philosophy Departments of UiT, Oslo, Bergen and NTNU and has an additional fellowship with the Institute for Future Studies in Stockholm.

Collectively, members of the group have close links with leading researchers at the universities of Dublin, Durham, Frankfurt, Fribourg, Graz, Keil, Oxford, Southampton, Twente, and Warwick. The group is also awaiting the decision of an application submitted in 2021 under Horizon 2020 for a Marie Skłodowska Curie Doctoral Network (title: Intergenerational Climate Justice: A MultiCriterial Approach towards a Feasible Ecological Transition). Part of an eight-member European-wide consortium, the group will gain funding for additional PhD position if successful and plan continue co-operation with this consortium regardless of the formal result.

Rekrutteringsgrunnlag

Climate justice and the green transition is one of the foremost problems facing the world and academic research is growing rapidly. We expect this position to attract interest from many well-qualified candidates across the world. The applied nature of this topic may also broaden its appeal in include those who are not necessarily looking for a traditional academic career.

Forslag til veileder(e)

Clare Heyward, Svein Anders Noer Lie, Øyvind Stokke

References.

Buch-Hansen, H (2018) The prerequisites for a degrowth paradigm shift: Insights from critical political economy. *Ecological Economics*, 146 pp. 157-163

Chan, K. M. A., P. Balvanera, K. Benessaiah, M. Chapman, S. Díaz, E. Gómez-Baggethun, R. Gould, N. Hannahs, K. Jax, S. Klain, G. W. Luck, B. Martín-López, B. Muraca, B. Norton, K. Ott, U. Pascual, T. Satterfield, M. Tadaki, J. Taggart, and N. Turner. 2016. Opinion: Why

protect nature? Rethinking values and the environment. *Proceedings of the National Academy of Sciences* 113(6):1462-1465. <http://dx.doi.org/10.1073/pnas.1525002113>

Cripps, E. (2013) *Climate Change and the Moral Agent: Individual Duties in an Interdependent World* (Oxford: OUP)

Heyward, Clare (2013) 'Situating and Abandoning Geoengineering: A Typology of Five Responses to Dangerous Climate Change'. *PS: Political Science and Politics* 46(1): 23-27.

Heyward, Clare 'New Waves in Climate Justice (2014), in Thom Brooks (ed) *New Waves in Global Justice*, Palgrave MacMillan, pp. 149-169.

IPBES (2019): Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES secretariat, Bonn, Germany. 1148 pages. <https://doi.org/10.5281/zenodo.3831673>

IPBES and IPCC (2021) *Biodiversity and Climate Change: Workshop Report*. https://ipbes.net/sites/default/files/2021-06/20210609_workshop_report_embargo_3pm_CEST_10_june_0.pdf

Mollendorf, D. (2014). *The Moral Challenge of Dangerous Climate Change* (Oxford: OUP)

NAS (2015) *Climate Intervention: Carbon Dioxide Removal and Reliable Sequestration* (NAS).

Noer Lie, S.A. (2016) *Rethinking Naturalness* (London: Routledge).