



Centre for Climate
and Energy Transformation

ANNUAL REPORT 2020



Actionable knowledge for transformation.

About CET

Climate change is one of the greatest societal challenges of our time. While we have acquired substantial knowledge about physical climate changes and to some extent their impacts on society, new knowledge is needed on how to achieve deep, rapid and sustainable transformation of society.

Climate and energy transition is one of three priority areas at the University of Bergen (UiB). The Centre for Climate and Energy Transformation (CET) was established in 2016 by the Faculty of Social Sciences as a hub for interdisciplinary research with a basis in the social sciences in this area. CET brings together researchers from three partner institutions - the University of Bergen, NORCE Norwegian Research Centre AS and NHH Norwegian School of Economics.



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Content: Judith L. Reczek Dalsgård, Eleanor Johnson and Håvard Haarstad

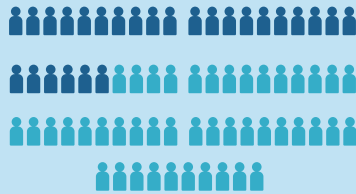
Design: Judith L. Reczek Dalsgård

People

70

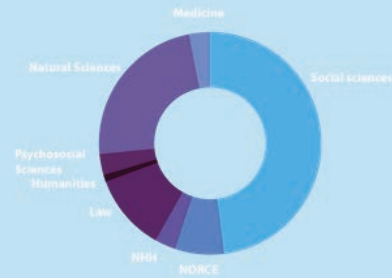
Affiliated
researchers

Gender balance



37% Female 63% male

Interdisciplinarity



3

New
Senior
researchers

Research

5

Projects
funded

ROLES
MUCS
MANIFEST
ASSET
BALANSEHUB

2

Centre of Excellence
project partnerships

DISCONNECT
HySAGO

Knowledge & Outreach



68

Scientific
publications



52

Engagements
in media

35

CET Lunch Seminars
& Events

Actionable knowledge

Informing policy and practice

Co-production

Strong stakeholder engagement



WORDS FROM THE DIRECTOR

The past year revealed a lot about societal transformation. We witnessed how quickly the taken for granted realities of life can change. In Norway, we saw how society can mobilize against a common threat, and how – when the urgency is clearly communicated by leaders – drastic policy measures are accepted and acted upon. We also saw how the burdens of disruption and rapid change are unequally distributed, and most severely affect those who are already vulnerable.

These lessons of the pandemic are not lost on us who study the potential for societal transformation in response to the climate challenge. Of course, many climate researchers argue that the climate crisis should be met with the same urgency. The experience so far is instead that climate action remains incremental and full of compromises.

Throughout this year, academics have had to learn to do things differently. How do we foster interdisciplinary collaborations and new partnerships when we can't meet physically? How do we do fieldwork, or communicate our findings to society? How do we take care of our students, and each other?

Fortunately, we did not have to start figuring out the answers to these questions from scratch. CET had already put a lot of work into strategies for reducing travels and exploring possibilities for virtual meetings and conferences. In 2020, this paid off in full. We were quick to shift to fully digital seminars, and we had higher participation in those seminars than we have ever had before. CET considered it more important than ever to maintain debate, exchange and collaboration. We are proud that we have organized a full range of events, as detailed in this annual report.

Other challenges were more difficult to meet. Early career researchers were forced to cope at home, some with new responsibilities of care, distanced from colleagues and supervisors. Journals were slow to respond. We have new colleagues who should have started working with us who are unable to enter the country, and even to begin their contracts.

Yet, thanks to the perseverance of the amazing people at CET and in the network, we made the most of 2020. In this report, you'll see that new projects and partnerships began, we communicated research insights in publications and the media, and some of our colleagues took important new career steps. Thanks to all!



Håvard Haarstad

CENTRE DIRECTOR



PEOPLE

Senior research capacity

CET continues to actively strengthen its senior research capacity. This is to ensure a group of senior scientists covering a broad competence base who can engage in project proposal development, supervision and contribute to the academic environment at CET.

Simon Neby is employed in a permanent position as Associate Professor in collaboration with the Department of Administration and Organisation Theory, UiB.

Kevin Anderson, University of Manchester, is engaged as Professor II from 2020 - 2023.

Siddharth Sareen, University of Stavanger, finished his postdoctoral fellowship and continues as Associate Professor II at CET.

Jessica Jewell, Chalmers University of Technology is re-engaged as Professor II for the period 2020 - 2022.

Tarje Wanvik, NORCE, finished his postdoctoral fellowship in June 2020 and continued as researcher II until December 2020.



Jessica Jewell
Professor II



Kevin Anderson
Professor II



Simon Neby
Associate Professor



Siddharth Sareen
Associate Professor II



Tarje Wanvik
Researcher II



Corbett Grainger
Associate Professor II

Recruitment positions



Katinka Lund Wågsæther



Rafael Rosales



Devyn Remme

Due to several externally funded project grants were secured in 2019, we have had several recruitment processes throughout 2020.

Three new PhD fellows are recruited at CET:

- Rafael Rosales is employed on the CITYFREIGHT project. Started September 2020.
- Subina Shresta is employed on the CITYFREIGHT project. Starting spring 2021.
- Tsimofei Kazlou is employed in the Energy Transitions priority area, starting spring 2021.

An interfaculty PhD fellow, funded through the climate and Energy priority area at UiB, with the Dept. of Physics and Technology - Efthymia Derempouka, starting March 2021.

Two research assistants were engaged during autumn 2020, Katinka Lund Wågsæther and Devyn Remme working on the Just mobility transitions research programme.

In autumn 2020, CET PhD fellow Stina Ellevseth Oseland landed the prestigious role as the first Climate Director at the Bergen Municipality, Norway's second-largest municipality.

Stina's research has looked at the administrative and political processes behind creating and implementing new climate strategies in Trondheim, Bergen and Stavanger.

Stina plans to submit her doctoral thesis in spring 2021.



Facsimile of the feature article about Stina Oseland in Bergens Tidende, 18.07.2021

Affiliate research network

At the end of 2020, there were 70 researchers affiliated with CET. The majority of the affiliates are at the University of Bergen, predominantly the Faculty of Social Sciences.

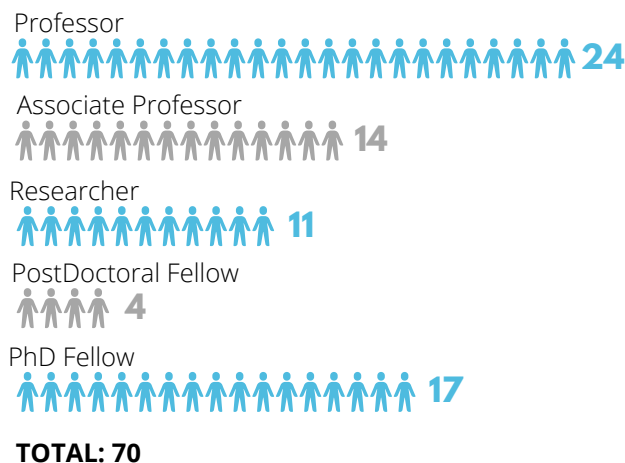
COVID-19 has made engaging the affiliated network difficult, as many of our regular meeting forums have been moved online. We had planned for our first affiliate Voss retreat in May 2020, this was instead held digitally with a good turnout.

The main meeting arena for CET affiliates is the regular CET Lunch Seminars every 1-2 weeks. We were quick to move over to the digital platform in March 2020 and experienced record attendances with up to 40 people attending some seminars.

We continue to organise project workshops and other meeting areas. Several affiliates are engaged in the development of research proposals.

The bi-monthly affiliate newsletter *etCETera* informs the affiliate network on news from the centre as well as funding opportunities and events.

During the COVID-19 lockdown, we implemented the use of Microsoft Teams as a way of communicating directly with our affiliate research network.



Institution	Department	Female	Male	Total
NHH	Dept. of Business and Management Science	2	2	
NORCE	Climate	3	3	
	Society	2	2	
UiB	Dept. of Administration and Organization Theory	1	3	4
	Dept. of Biological Sciences	3	3	3
	Dept. of Comparative Politics	2	1	3
	Dept. of Earth Science		9	9
	Dept. of Economics		1	1
	Dept. of Foreign Languages	1		1
	Dept. of Geography	8	13	21
	Dept. of Global Health and Primary Care		2	2
	Dept. of Informatics		1	1
	Dept. of Information Science and Media Studies	1	1	2
	Dept. of Physics and Technology	1	2	3
Dept. of Psychosocial Science	1	1	2	
Dept. of Social Anthropology	1	1	2	
	Faculty of Law	7	1	8
Total		26	44	70

RESEARCH

Projects grants in 2020

CET is a partner in several successful project proposals:

- MUCS - *Media Use in Crisis Situations: Resolving Information Paradoxes, Comparing Climate Change and the COVID-19 Pandemic*. (Research Council of Norway), led by Brita Ytre-Arne (UiB - dept. of Information and Media Sciences).
- ROLES - *Responsive Organising for Low Emission Societies* (JPI Climate). Led by Siddharth Sareen, UiS/UiB
- ASSET - *Accountable Solar Energy TransitionS* (Research Council of Norway, Young researcher talent). Led by Siddharth Sareen, UiS/UiB.
- MANIFEST - *MechANisms and actors of Feasible Energy Transitions* (ERC Starting Grant). Led by Jessica Jewell, Chalmers University of Technology.
- BalanseHub CET (Research Council of Norway). Led by Judith L. Reczek Dalsgård, UiB.

Partnerships

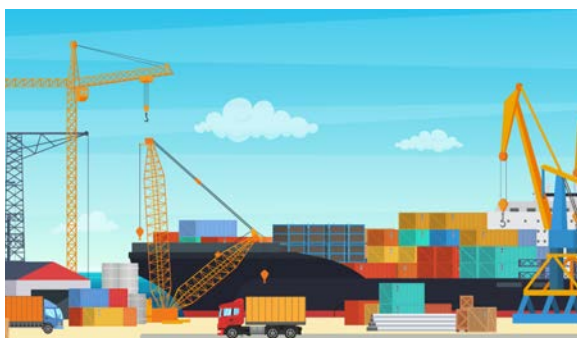
CET is represented in several leadership groups at UiB and other institutions:

- Noradapt - Norwegian Research Centre on Sustainable Climate Change Adaptation
- BOW - Bergen Offshore Wind Centre
- CeSam - Centre for Sustainable Area Management
- BSGS - Bergen School of Global Studies
- Arqus Alliance
- Håvard Haarstad was appointed for a second term in The Norwegian Board of Technology.

CET is also invited into two SFF (Norwegian Centre of Excellence schemes) proposals. DISCONNECT led by Professor Elisabeth Iversflaten, UiB and HySAGO led by Associate Professor Trygve Skjold., UiB.

A full list of projects at CET is available in **Annex 4**.

Running projects



CITYFREIGHT

Freight logistics in sustainable cities.

Led by Stein W. Wallace, NHH. Research Council of Norway.

Highlights from the project:

- Project kick-off in May 2020
- The first user-partner meetings have taken place.
- 2 PhD candidates hired at CET
- CET is mapping governance challenges for sustainable city logistics.



VARCITIES

Visionary nature-based actions for health, wellbeing & resilience in cities.

Led by Dionysia Kolokotsa, Telecommunication System Institute (TSI). EU Horizon 2020

Highlights from the project:

- Project kick-off in September 2020
- Bergen municipality and architects are developing the pilot concept – the park by Store Lunggårdsvann
- CET and UiB partners are researching participation and co-production of solutions.



Photo: Colourbox.com

DEMOCLIM

Cities confronted by protests: Democratic governance for efficient and socially just climate transformation.

Led by Hege Hofstad, OsloMet.

Highlights from the project:

CET will be looking into the following themes:

- Mapping of protest movements in case cities.
- Analysis of how protest movements influence city governance.



TR2AIL

Tracking, Reflecting and Reducing Air Travel: A pathway to more sustainable travel behaviour.

Led by Georgia Savidou, Stockholm Environmental Institute.

Highlights from the project:

- Development and testing of a travel emissions tracker app for organisations interested in reducing air travel.
- Report highlighting experiences and practical tips from the participating research organisations. See page 16.



CINTRAN

Carbon Intensive Regions in Transition - Unravelling the Challenges of Structural Change.

Led by Lukas Hermwille Wuppertal Institute.

Highlights from the project:

CET will be looking into the following themes:

- Analysis of how the rise of populist movements are linked to coal phase-out
- How can transitions in carbon-intensive regions be more just and inclusive?

CET Accelerator

CET restructured the CET Accelerator seed funding mechanism during the course of 2020. Instead of two calls per year, we now have a more flexible model to accommodate different types of projects.

CET Affiliates have the opportunity to apply for the following types of funding:

- Ideas and communication:
 - Small-scale projects. Available funding: NOK 100 000 per year
- Seed funding:
 - Stimulate project development. Available funding: NOK 1 mill. per year.
- Co-funding:
 - Stimulate project development. Available funding NOK 1-2 mill. per year.

CET Accelerator grants 2020



Siddharth Sareen

Project: Norwegian Energy POVerty

Grant type: Seed funding



Esmeralda Colombo

Project: Climate risk and democratic energy policies

Grant type: Ideas and Communication



Anand Bhopal

Project: Decarbonising Healthcare

Grant type: Ideas and Communication

EUROPEAN CITIES AS ACTORS IN CLIMATE AND ENERGY TRANSFORMATIONS



Håvard Haarstad received the TMS starting grant in 2015.
Photo: Grethe Meling



Celebrating five years of the city as a living laboratory.

The end of 2020 marked the close of our major project *European cities as actors in climate and energy transformation* project, funded by the Trond Mohn Foundation. Among the achievements, we are particularly proud of how the project has helped to develop the careers of researchers across the fields of sustainable city planning, governance, communications and media and social movements. The past five years have seen our ideas as a research group develop and progress, as we collectively worked to understand how cities think, how climate policies are networked and managed at the urban level, and ultimately - who is able and willing to make changes in our city?

When we started the project under the name SpaceLab in 2016, the world of sustainability research looked quite different from today, just under half a decade later. Though we started our research environment pre-Fridays for Future, there were signs that shifts in policy ideas and public narratives were beginning to take shape. As social scientists working in geography, we were equipped to think through these sudden ruptures and instabilities in political urban landscapes, from the local to international scales. At the end of the project it counts close to 50 scientific publications, with several more in process.

Beyond Oil 2017: Mobilizing alternative futures



Facsimile "our city is now a living laboratory" by Tarje Wanvik, Jakob Grandin and Kristin Kjærås in Bergens Tidende 23.09.2017,

Likewise, we have dedicated our energies to publishing ideas about the role of the researcher and the academic institution in the climate transitions, each drawing on our own empirical knowledge to find clarity and nuance in sustainability debates. In this vein, we published *Modes of engagement in climate and energy solutions* in the journal *Energy Research and Social Science* (Haarstad et al., 2018) and have actively engaged in social media and popular press debates. Now more than ever is a good time for the social sciences to learn how to adapt to rapid changes in society – this project is a testament to the importance of creating the space and time to be able to develop ambitious ideas.



The project has been key in supporting the careers of researchers here at the University of Bergen. Through this funding, our own Håvard Haarstad went on to become Professor of Geography, and SpaceLab grew to become the Centre for Climate and Energy Transformation. Our postdoctoral fellow Tarje Wanvik took time out of the project to work as political advisor for the Commissioner for Urban Development at the City of Bergen and gained new insights on urban politics from the inside. He has subsequently become Research Leader at NORCE. Our post-doctorate fellow Siddharth Sareen is now Associate Professor in Energy and Environment at the Department of Media and Social Sciences at the University of Stavanger and CET Associate Professor II. Our PhD recruits Kristin Kjærås and Jakob Grandin are now in the final stages of their doctorates, and research assistants Karin Lillevold, Marikken Wulff Wathne and Eleanor Johnson have moved onto positions elsewhere in the research sector.

The project has also funded our bi-annual “Beyond Oil” conference, where we invite some of the leading minds in sustainable transformations to deliver, debate and develop cutting-edge knowledge in energy and city governance.

As a group of researchers, we are committed to building a post-fossil fuel world and believe in acting and engaging at the local level to work with communities facing rapid change. We extend our gratitude to all of you who have taken part in our many workshops, seminars, events and writing initiatives these past five years.



From left: Siddharth Sareen, Tarje Wanvik and Kristin Kjærås.

The final report for the project was submitted to Trond Mohn Foundation on March 1, 2021. It listed 45 scientific publications published from the project at the time of the final report and another 13 publications at the advanced stage towards publication.

Highlighted publications

The publications were mostly in geography journals, including the highest-ranked journal in the field, in addition to interdisciplinary journals on sustainability and energy transitions:

Wanvik, T. and Haarstad, H. (2021) Populism, Instability and Rupture in Sustainability Transformations. *Annals of the Association of American Geographers*.
<https://doi.org/10.1080/24694452.2020.1866486>

Grandin, J. and Haarstad, H. (2021). Transformation as relational mobilisation: the networked geography of Addis Ababa's sustainable transport interventions. *Environment and Planning D: Society and Space*, 39, 289-308.
<https://doi.org/10.1177/0263775820963281>.

Grandin, J and Sareen, S. (2020). What sticks? Ephemerality, permanence and local transition pathways. *Environmental Innovation and Societal Transitions* 36: 72-82.
<https://doi.org/10.1016/j.eist.2020.04.008>

Kjærås, K. (2020). Towards a relational conception of the compact city. *Urban Studies*, 1-17.
<https://doi.org/10.1177/0042098020907281>

Wathne, M., and Haarstad, H. (2020). The smart city as mobile policy: insights on contemporary urbanism. *Geoforum*, 108: 130-138. <https://doi.org/10.1016/j.geoforum.2019.12.003>

Haarstad, H., Sareen, S., Wanvik, T., Grandin, J., Kjærås, K., Oseland, S., Kvamsås, Lillevold, K., and Wathne, M. (2018). Transformative social science? Modes of engagement in climate and energy solutions. *Energy Research and Social Science*, 42, August: 193-197. <https://doi.org/10.1016/j.erss.2018.03.021>

Bouzarovski, S. and Haarstad, H. (2019). Rescaling low-carbon transformations: towards a relational ontology. *Transactions of the Institute of British Geographers*, 44(2): 256-269.
<https://doi.org/10.1111/tran.12275>

Haarstad, H. and Wathne, M. W. (2019). Are smart city projects catalyzing urban energy sustainability? *Energy Policy*, 129: 918-925. <https://doi.org/10.1016/j.enpol.2019.03.001>

Haarstad, H. (2017). Constructing the sustainable city: The role of sustainability in the 'smart city' discourse. *Journal of Environmental Policy and Planning*, 19(4): 423-437.
<https://doi.org/10.1080/1523908X.2016.1245610>

Haarstad, H. and Wanvik, T. (2017). Carbonscapes and beyond: conceptualizing the instabilities of oil landscapes. *Progress in Human Geography*, 41(4): 423-450.
<https://doi.org/10.1177%2F0309132516648007>

KNOWLEDGE

Selected scientific publications

The following is a selection of scientific publications from 2020. A full list of publications from the CET Affiliated network can be found in **annex 1 and 3**.



Photo: Environmental Innovation and Societal Transitions

What sticks? Ephemerality, permanence and local transition pathway.

Climate change is increasingly governed through local configurations that are characterised by voluntary action, weak institutions and uncoordinated efforts. The impermanent and iterative nature of such initiatives makes it difficult to determine their enduring and potentially transformative impact.

Grandin, J and Sareen, S. (2020). Environmental Innovation and Societal Transitions, 36, pp. 72-82.

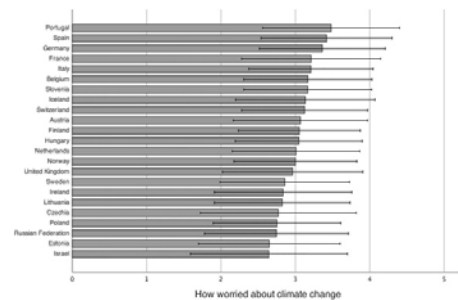


Photo: Thea Gregersen

Political Orientation Moderates the Relationship Between Climate Change Beliefs and Worry About Climate Change.

Public perceptions are well established as a key factor in support for climate change mitigation policies....we show that belief in anthropogenic climate change, followed by expectations of negative impacts from climate change, are the strongest predictors of worry about climate change.

Gregersen, T., Doran, R., Böhm, G., Tvinnereim, E., & Poortinga, W. (2020). Frontiers in Psychology, 11(July), pp. 1-12.



Photo: Oslo kommune

Towards a relational conception of the compact city.

Compact city strategies have become central to the development of urban sustainability politics. Cities across the globe are pursuing high-density, mixed-use developments and energy-efficient transportation systems. However, the correlation between compact city strategies and achieved sustainability is largely taken for granted in public and academic debates.

Kjærås, K. (2020). Urban Studies, pp. 1-17.



Photo: colourbox.com

Coordinating Wickedness: A Comparative Analysis of How Norway and Sweden Organize for Climate Policies.

Both countries' policy fields display characteristics of complexity, divergence, fragmentation and uncertainty, indicating a substantial degree of organizational wickedness. The conditions for dealing with such wickedness is affected by contextual factors such as ministerial rule and the petroleum industry's pivotal role in Norway, enhancing the role of administrative silos

Neby, S and Zannakis, M. (2020). Journal of Comparative Policy Analysis: Research and Practice, 22:6, pp. 593-611.



Det norske paradokset» i Klimasøksmål Arktis: ein rettsleg analyse av økonomiske vurderingar.

Klimasøksmål Arktis er det fyrste og einaste klimasøksmålet i Noreg. I søksmålet løfta saksøklarane fram sterk kritikk mot det dei oppfatta som ein paradoksal politikk i Noreg med å utvinne petroleum i Barentshavet

Colombo, E. (2020) *Retfærd* (2020), 2, pp. 47-70.

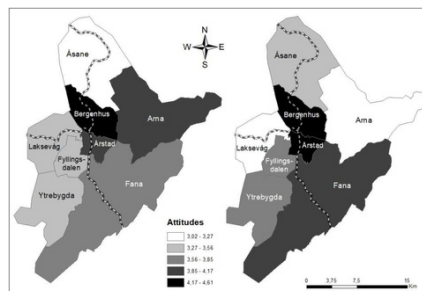


Photo: Endre Tvinnereim.

Explaining public acceptance of congestion charging: The role of geographical variation in the Bergen case.

Controversial policies introduced to improve public goods - such as the environment, mobility and public health - have shown patterns of initial opposition followed by broad acceptance once the public experiences positive effects of the policies.

Tvinnereim, E., Haarstad, H., Rødeseike, A., & Bugnion, V. (2020). *Case Studies on Transport Policy*, 8(3), pp. 922-1001.

Selected media publications

The following is a selection of media highlights from 2020. A full list of media publications from the CET Affiliated network can be found in **annex 2**.

Government climate advisers running scared of change, says leading scientist.

Kevin Anderson in *The Guardian*, 26 June 2020

- Our job as academics is to be disinterested in whether policymakers like or dislike our conclusions. We should only be concerned [with] whether they agree or disagree with our findings – and why?



Photo: Christopher Thomond/
The Guardian

All Hands on Deck: The Americanization of Climate Lawsuits?

Esmeralda Colombo *Harvest*, 22 Oct 2020

- Disputed US election results coincide with the Norwegian Supreme Court's hearing of the Climate Lawsuit. It is a telling overlap.



Photo: Maria Oswald / Unsplash

Ekspertintervjuet: Energifattigdom i Europa er et oversett problem.

Siddharth Sareen *Energi og klima*, 6 Oct 2020

- Ja, det finnes mer energifattigdom i Europa enn folk flest er klar over. En av årsakene er at det ikke har vært gode indikatorer for å måle dette. Det har blitt sett på som et problem i underutviklede land.



Photo: World Bank Photo Collection

OUTREACH

Events during a pandemic

CET has established itself as an active research centre with many activities and events over the past few years. 2020 didn't look like it would be any different.

We started the year attending the "contact conference" for the Ministry for Education and Research, where we presented our conference train from the Beyond Oil conference. This was shortly followed by several well attended and successful workshops at the SDG Bergen Day Zero event in February.

The Covid-19 pandemic and the national lockdown that followed on the 12th of March forced us to reassess our events plan for 2020. We were quick to switch over to the digital platforms available and held our first *CET Virtual Lunch Seminar* the following week on the 18th of March. We experienced record turnouts for our first virtual lunch seminars and had participants joining from all over Norway and overseas.

Håvard Haarstad was appointed Scientific Director of the Bergen Summer Research School 2020 with the theme of *actionable knowledge to meet global challenges*. The summer school was held in June 2020 as a digital summer school with 130 PhD students from six continents.

The TMS research project *European cities as actors in climate and energy transformations* marked the end of the project with the digital conference *Urban Interventions* and workshop with project participants.

CET has also been involved in several digital conferences with our partners including *Klimaomstilling 2020*, *Bergen 20tretti* and *Klimathon 2020*. See **Annex 5** for the full list of events.

From top: Judith L. R. Dalsgård and Kårstien Måseide, contact conference foto: Dag Rune Olsen
The lively audience at Day Zero event, Jesse Schrage & Judith L. R. Dalsgård at ay Zero foto: Paul S. Amundsen/UiB
Håvard Haarstad kicking off the Bergen Summer Research School. Foto: Eivind Senneset / UiB



Gender balance and perspectives

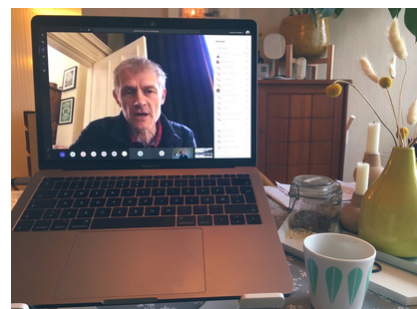
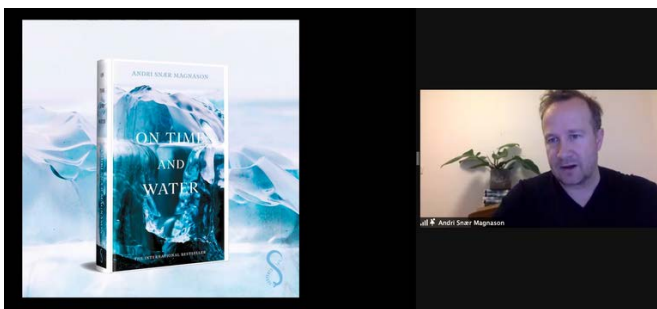
CET has had a strong focus on gender balance and gender perspectives throughout 2020. During the autumn semester, we organised a *Climate Intersections* reading group once a month where we read and discussed literature on climate and intersectionality. These are perspectives we are interested in including in our work at CET.

We organised an open seminar for CET Affiliates with the same name *Climate Intersections* where we invited leading scholars on the subject to discuss their work in the field.

CET also received funding for the Research Council of Norway initiative *BalanseHub network*. The network works on strategies and measures for gender balance in academia. We look forward to the knowledge exchange this forum will provide us within our strategies in future recruitment processes.

From top left: TMS workshop at Literature house Eleanor Johnson and Jakob Grandin at Urban Interventions.

Seminar with Icelandic author Andri Snær Magnason, CET Virtual Lunch with Kevin Anderson 2030 Bergen Klimathon 2020



EDUCATION

Master students at CET

Autumn 2019 we welcomed our second group of CET master students to the centre. Six students from three departments at the Faculty of Social Sciences. In February 2020 we held our first *CET Master Seminar*, where the students presented their projects and received vital feedback from CET researchers in their final stages of writing their theses.

When recruiting for the next round of master students in autumn 2020, we realised we needed to rethink how we organised this. With limited spaces in the offices due to COVID-19 restrictions, we decided to create a *Master Student Network*. 2020/2021, we have a network consisting of 11 students from 6 departments, including the Faculty of Law and the HEMIL centre.

The Collaboratory

CET continues to support the UiB Collaboratory, a student-driven initiative for partnership between researchers and students to mobilize innovation in research and higher education.

In 2020, UiB Collaboratory has worked to consolidate its local projects, strengthened its contribution to various educational initiatives at UiB and developed its international partnerships. In the course CET201 Sustainable Innovation, students worked in interdisciplinary teams with cases from GC Rieber, Equinor, StormGeo, USF Verftet and Bærekraftige Liv. The second part of the course was run virtually due to the COVID-19 outbreak.

27 abstracts from students at universities across Europe were accepted for the 2020 Bergen International Student Conference (BISC) on the theme "Beyond Sustainable Development"; the conference, unfortunately, had to be cancelled due to the COVID-19 outbreak.

The Collaboratory has also contributed to a number of educational initiatives at UiB, e.g. the Bergen School of Global Studies, Bærekraftskollegiet and Studiekvalitetsseminaret. Apart from the local activities, UiB Collaboratory has worked to strengthen its international partnerships through the Arqus European University Alliance and the Erasmus+ strategic partnership InternACTIONal.



Masterstudents 2019/2020



CET Master Student Network 2020/2021

Master theses 2020

Synnøve Beitnes, Department of Geography
Summer Drought 2018: A case study of agricultural resilience to extreme weather conditions and development of climate adaptation strategies

Amber Nordholm, Department of Geography
Scales of Energy Justice: Solar power and energy poverty alleviation

Siri Reintz Kleppe, Department of Sociology
Cultivating social change: Urban gardening as a manifestation of individuals needs and community concerns.

Katharina Leucht, Agrobiology at Århus University & Department of Geography
Radishes in the rain: Exploring barriers of urban gardening in Bergen.

Mina Måsvær Halle, Department of Comparative Politics
Local climate adaptation: Identifying opportunities and challenges for using climate knowledge in municipal decision making.

Sarah Mashhadi, Department of Geography - System Dynamics
Can Germany Move Towards 100% Renewables Without Major Problems?



Ronya Reitan Solberg and Synnøve Beitnes, The Collaboratory.

SUSTAINABLE RESEARCH PRACTICES

Overall, there have been low travel activities due to the Covid-19 pandemic, and as such, emissions from CET activities have gone down significantly.

The internal working group for the CET Low-Carbon Travel Policy will be reestablished and they will reassess the travel policy in a post-pandemic light. A new working group will include members from the wider CET affiliate network and other institutions with an interest and experience in this field, such as CMI.

The pandemic also gives CET the opportunity to set new standards for best practice in sustainable research practices.

CET has also been engaged in other concrete activities related to sustainable research practices including the **TR2AIL-project**, led by the Stockholm Environment Institute to develop a more sophisticated CO2 calculator. The report, *preparing for landing: Practical tips on tracking, reporting and reducing business air travel emissions* was launched in September 2020. The Tr2ail CO2 calculator started its testing phase in late 2020.

CET is also a formal member of the **UiB Climate Neutral group** through PhD fellow Jesse Schrage. The group works on implementing strategies for a carbon-neutral UiB, including a new travel policy for UiB.

CET Low-Carbon Travel Policy:

- Awareness** of climate gas emission targets and own emissions among researchers;
- Alternatives** for climate-friendly ways of organizing, conducting and meriting research;
- Accountability** through measurements, setting targets, and being transparent;
- A visible culture** that stimulates and supports low emission actions created.



Report from the TR2AIL research project with Stockholm Environmental Institute



Fasilimile Khrono 04.02.2020. Commentarty by Judith L. R. Dalsgård & Kårstein Måseide (CET), Lise Bjerke and Sidsel Roalkvam (UiO).

ORGANISATION

Secretariat

In 2020 the secretariat at CET has consisted of:

- Håvard Haarstad, Director
- Kårstein Måseide, Research Co-ordinator
- Judith L. Reczek Dalsgård, Communications

Kårstein Måseide started in a new position as Department Director at CICERO at the beginning of 2021. A new research coordinator, Nora Haukali, is starting in May 2021.

Judith L. Reczek Dalsgård became a permanent employee in June 2020 and has communications and administration as her areas of responsibility.



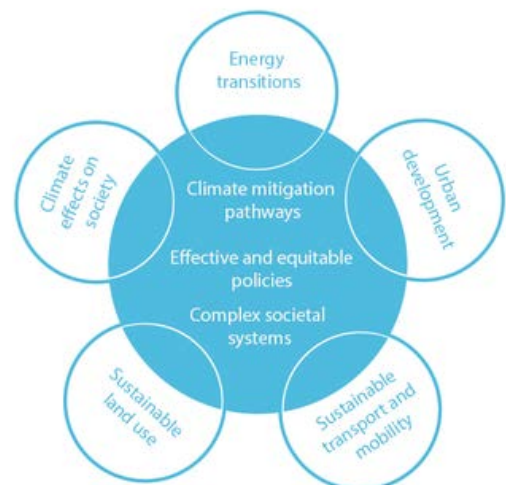
Strategy

CET continues to work with the 2020 - 2022 strategy and the thematic priority areas shown in the diagram to the right.

Goals:

Produce actionable knowledge that can inform policy and practice about how to achieve deep, rapid and sustainable transformation of society to mitigate climate change:

- Actionable knowledge
- Problem-oriented research
- Interdisciplinary knowledge hub.



CET Steering Committee

The CET steering committee consists of representatives from the partner organisations UiB, NORCE and NHH.

CET Steering Committee 2020:

- Chair: Jan Erik Askilsen, Dean Faculty of Social Sciences, UiB
- Siri Gloppen, Dept. of Comparative Politics, UiB
- Tore Furevik, Bjerknes Centre for Climate Research
- Malin Arve, NHH
- Ingrid Helgøy, NORCE
- Peter Anderson, Dept. of Geography, UiB

Finances

CET receives an annual allocation of **NOK 6 million** through the Norwegian Ministry of Education and Research. In addition, CET receives annual running costs of **NOK 100 000**, as well as office facilities, from the UiB Faculty of Social Sciences.

CET also receives funding from external projects as listed in **annex 4**.

ANNEX 1: PUBLICATIONS

CET publications

The following publications are authored or co-authored by CET affiliates, and CET is acknowledged since the project was partly owned or co-funded by CET.

Journal articles

Bremer S, Johnson E, Fløttum K, Kverndokk K, Wardekker A, Krauß W. (2020). Portrait of a Climate City: How climate change is emerging as a risk in Bergen, Norway. *Journal of Climate Risk Management*, Special Issue.

Colombo, E. (2020) Det norske paradokset i Klimasøkmål Arktis: ein rettsleg analyse av økonomiske vurderingar. *Retfærd* (2020), 2, pp. 47-70.

DellaValle, N. and Sareen, S. (2020). Nudging and boosting for equity? Towards a behavioural economics of energy justice. *Energy Research & Social Science* 68, 101589.

Fell, M., Pagel, L., Chen, C., Goldberg, M., Herberz, M., Huebner, G., Sareen, S. and Hahnel, U. (2020). Validity of energy social research during and after COVID-19: challenges, considerations, and responses. *Energy Research & Social Science*, 101646.

Grandin, J., & Haarstad, H. (2020). Transformation as relational mobilisation: The networked geography of Addis Ababa's sustainable transport interventions. *Environment and Planning D: Society and Space*, 0263775820963281.

Grandin, J and Sareen, S. (2020). What sticks? Ephemerality, permanence and local transition pathways. *Environmental Innovation and Societal Transitions*, 36, pp. 72-82.

Gregersen, T., Doran, R., Böhm, G., Tvinneim, E., & Poortinga, W. (2020). Political Orientation Moderates the Relationship Between Climate Change Beliefs and Worry About Climate Change. *Frontiers in Psychology*, 11(July), pp. 1-12.

Jewell, J., & Cherp, A. (2020). On the political feasibility of climate change mitigation pathways: Is it too late to keep warming below 1.5 C?. *Wiley Interdisciplinary Reviews: Climate Change*, 11(1).

Jewell, J., Emmerling, J., Vinichenko, V., Bertram, C., Berger, L., Daly, H. E., ... & Van Vuuren, D. (2020). Reply to: Why fossil fuel producer subsidies matter. *Nature*, 578(7793), E5-E7.

Karvonen, A., Cook, M., Haarstad, H. 2020. Editorial: Urban planning and the smart city: Projects, practices and politics. *Urban Planning* 5(1), pp. 65-68.

Kjærås, K. (2020). Towards a relational conception of the compact city. *Urban Studies*, pp. 1-17.

Martiskainen, M., Axon, S., Sovacool, B., Sareen, S., Del Rio, D. and Axon, K. (2020). Contextualizing climate justice activism: Knowledge, emotions, motivations, and actions among climate strikers in six cities. *Global Environmental Change*, 65, 102180.

Moss, T and Sareen, S. (2020). Demanding demand: Political configurations of energy flexibility in Berlin, 1920-2020. *Journal of Energy History*, 5.

Neby, S and Zannakis, M. (2020). Coordinating Wickedness: A Comparative Analysis of How Norway and Sweden Organize for Climate Policies, *Journal of Comparative Policy Analysis: Research and Practice*, 22:6, pp. 593-611.

Nielsen, K., Sareen, S. and Oskarsson, P. (2020). The politics of caste in India's new land wars. *Journal of Contemporary Asia*, 50(5), pp. 684-695.

Oskarsson, P. and Sareen, S. (2020). Adivasiness as caste expression and land rights claim-making in central-eastern India. *Journal of Contemporary Asia* 50(5), pp. 831-847.

Pai, S., Zerriffi, H., Jewell, J., & Pathak, J. (2020). Solar has greater techno-economic resource suitability than wind for replacing coal mining jobs. *Environmental Research Letters*, 15(3), 034065.

Sareen, S. (2020). Social and technical differentiation in smart meter rollout: Embedded scalar biases in automating Norwegian and Portuguese energy infrastructure. *Humanities and Social Sciences Communications*, 7(25), pp. 1-8.

Sareen, S. (2020). Metrics for an accountable energy transition? Legitimizing the governance of solar uptake. *Geoforum* 114, pp. 30-39. Sareen, S., Thomson, H., Tirado Herrero, S., Gouveia, J., Lippert I., and Lis, A. (2020). European energy poverty metrics: Scales, prospects and limits. *Global Transitions* 2, pp. 26-36.

Sareen, S and Grandin, J. (2020). European green capitals: Branding, spatial dislocation or catalysts for change? *Geografiska Annaler B: Human Geography* 102 (1), pp. 101-117.

Sareen, S. and Haarstad, H. (2020). Energy transitions governance (Special issue). *Global Transitions*, 2(March).

Sareen, S and Haarstad, H. (2020). Legitimacy and accountability in the governance of sustainable energy transitions. *Global Transitions*, 2, pp. 47-50.

Sareen, S. and Haarstad, H. (2020). Editorial: Legitimacy and accountability in the governance of sustainable energy transitions. *Global Transitions*, 2, pp. 47-50.

Sareen, S., Saltelli, A. and Rommetveit, K. (2020). Ethics of quantification: Illumination, obfuscation and performative legitimation. *Humanities and Social Sciences Communications* 6(1), pp. 1-5.

Silva, L and Sareen, S. (2020). Solar photovoltaic energy infrastructures, land use and sociocultural context in Portugal. *Local Environment*, pp. 1-17.

Tvinnereim, E., & Ferguson-Cradler, G. (2020). Electric vehicles from novelty to controversy: Analyzing environmental and fairness claims in open-ended survey questions. APSA Preprints. doi: 10.33774/apsa-2020-6s44w

Tvinnereim, E., Haarstad, H., Rødeseike, A., & Bugnion, V. (2020). Explaining public acceptance of congestion charging: The role of geographical variation in the Bergen case. *Case Studies on Transport Policy*, 8(3), pp. 922-1001.

Tvinnereim, E., Lægreid, O. M., Liu, X., Shaw, D., Borick, C., Lachapelle, E. (2020). Climate change risk perceptions and the problem of scale: Evidence from cross-national survey experiments. *Environmental Politics*.

Tvinnereim, E., Lægreid, O M., Fløttum, K. (2020). Who cares about Norway's energy transition? A survey experiment about citizen associations and petroleum. *Energy Research & Social Science* 2020 ;Volum 62:101357. s. 1-10

Wathne, M., and Haarstad, H. (2020). The smart city as mobile policy: insights on contemporary urbanism. *Geoforum*, 108, pp. 130-138.

Books & Book Chapters

Haarstad, H. (2020) Do Climate Targets Matter? The Accountability of Target-setting in Urban Climate and Energy Policy. In: Sareen, S. (ed.) *Enabling Sustainable Energy Transitions*. Palgrave Pivot.

Sareen, S., Moss, T., Lund, C., Haarstad, H., Sovacool, B., Wolf, S. (2020) Conclusion: Legitimation and Accountability in Energy Transitions Research. In: Sareen S. (ed.) *Enabling Sustainable Energy Transitions*. Palgrave Pivot.

Sareen, J. (ed) 2020. *Enabling sustainable energy transitions: Practices of legitimation and accountable governance*. Palgrave Pivot.

Policy briefs and reports

Dannevig, H., Neby, S., Rusdal, T. & Husabø, I.A. (2020) Frå to til eitt klimatilpassingsfylke. Lærdommar frå klimatilpassingsarbeidet i Hordaland og Sognog Fjordane fylkeskommunar. RapportSogndal, NORADAPT/Vestlandsforskning.

Haarstad, H. et al. (2020) Digitalt skifte for transport. Teknologiradet. <https://teknologiradet.no/publication/digitalt-skifte-for-transport-16-nye-teknologier-og-hvordan-de-endrer-byene/>

Neby, S., Wanvik, T.I., Angell, E. (2020) Klimarisiko i norske kommuner. En kartlegging og sammenstilling. Report to Norwegian Environment Agency. Bergen, NORCE.

Sareen, S and Wolf, S. (2020). *Accountability and sustainability transitions*. Science Policy Research Unit Working Papers Series, University of Sussex. <http://www.sussex.ac.uk/spru/research/swps>

Sareen, S. (Co-author). (2020). Making the most of qualitative evidence for energy poverty mitigation. ENGAGER policy brief (Middlemiss, L. et al). www.engager-energy.net/wp-content/uploads/2020/02/ENGAGER-Policy-Brief-No.-3-February-2020-Making-the-Most-of-Qualitative-Data-for-EP-Research-and-Action.pdf

Wilkerson, B., Aguiar, A., Gkini, C., Czermainski de Oliveira, I., Lunde, Trellevik LK., Kopainsky, B. (2020). Reflections on adapting group model building scripts into online workshops. *System Dynamics Review*

ANNEX 2: MEDIA OUTREACH

CET media outreach

The following is an overview of media and public outreach by CET affiliates.

Anderson, K (2020). Newspaper interview: Government climate advisers running scared of change, says leading scientist, The Guardian, 26 June 2020.

Anderson, K (2020). Newspaper interview: Ekspertintervjuet: Oljearbeidere er nøkkelen til energiomstillingen, Energi og Klima, 2 sept 2020.

Colombo, E. (2020). Newspaper interview: Norway's Supreme Court Hears Rights Challenge to Arctic Oil Drilling, New York Times, 22 Dec 2020

Colombo, E. (2020). TV interview: <https://www.tv4play.se/program/nyheter/eterna/unik-r%C3%A4tteg%C3%A5ng-kan-stoppa-oljeborring-i-arktisk/13303078>

Colombo, E. (2020). A legal and reputation scandal looming days ahead of Norway's climate case. Harvest Magazine, 22 October 2020

Colombo, E. (2020). All Hands on Deck: The Americanization of Climate Lawsuits? Harvest Magazine, 22 October 2020

Colombo, E. (2020). Alle mann på dekk: Klimasøksmålet og amerikaniseringen av norsk rettskultur", Harvest Magazine, 4 November 2020

Gregersen, T., & Doran, R. (2020). Bør økonomisk vekst prioriteres foran miljøinteresser? Energi og Klima: Norsk klimastiftelses nettmagasin. <https://energiogklima.no/nyhet/boer-okonomisk-vekst-prioriteres-foran-miljointeresser/>

Gregersen, T, Ursin, L. (2020). Ekspertintervjuet: Derfor endrer klimaholdningene seg så lite. Energi og Klima <2°C, 2020-06-24

Gregersen, T, Doran, R. (2020). Bør økonomisk vekst prioriteres foran miljøinteresser?. Energi og Klima : Norsk klimastiftelses nettmagasin 2020

Gregersen, T. (2020). Tillit til mediedekning om klima. Energi og Klima. Norsk klimastiftelses nettmagasin

Gregersen, T. (2020). Klimaskepsis. Energi og Klima : Norsk klimastiftelses

Haarstad, H. (2020). PwC-podden: Fremtidens transport <https://www.pwc.no/no/podcast/pwc-podden/fremtidens-transport.html>

Haarstad, H. (2020). Innoasis science talks: Will smart cities make us sustainable? <https://vimeo.com/470505990>

Haarstad, H. (2020). En rekke medieoppslag om Bergen Summer Research School, blant annet her: <https://www.uib.no/en/rs/bsrs/136079/bergen-summer-research-school-goes-digital>

Sareen, S. (2020). Ekspertintervjuet: Energifattigdom i Europa er et oversett problem, Energi og Klima <https://energiogklima.no/to-grader/ekspertintervju/ekspertintervjuet-energifattigdom-i-europa-er-et-oversett-problem/>

Sareen, S. (2020). Siddharth forsker for en bedre og renere verden, Ung Forskning.no <https://ung.forskning.no/energi-forurensning/siddharth-forsker-for-en-bedre-og-renere-verden/1751973>

Sareen, S. (2020). The real virtual experience of a Greenhouse fellow. New Natures.org, <http://newnatures.org/greenhouse/haring-research/the-real-virtual-experience-of-a-greenhouse-fellow/>

Sareen, S. (2020). Climate strikes back: anatomy of protesters in six cities, Sussex University <https://blogs.sussex.ac.uk/sussexenergygroup/2021/02/02/climate-strikes-back-anatomy-of-protesters-in-six-cities/>

Sareen, S (2020). Ni nye medlemmer i akademiet. Khrono <https://khrono.no/ni-nye-medlemmer-i-akademiet/520717>

Sareen, S. (2020). Caste, nature and their presence in a new India. The Indian Express <https://indianexpress.com/article/opinion/columns/dalits-caste-savarnas-india-swachh-bharat-misson-6368655/>

Sareen, S. (2020). How can positive energy districts shape urban futures in Europe. (2020). <http://www.europeanenergyinnovation.eu/OnlinePublication/Winter2020/index.html#p=44>

Siekiera, J. (2020). "Australia's on fire", Radio Tok FM, 3.01.2020 [Poland].

Siekiera, J. (2020). "Australians don't wonder about climate change", SmogLab, 8.01.2020 [Poland].

ANNEX 3: PUBLICATIONS

Other publications

The following publications are authored or co-authored by CET affiliates and are of relevance to CET, but where CET did not directly fund or contribute to the project / publications.

Journal articles

Aarset B., Carson SG., Wiig H., Måren IE., Marks, J. (2020). Lost in Translation? Multiple Discursive Strategies and the Interpretation of Sustainability in the Norwegian Salmon Farming Industry. *Food Ethics*, 5(11).

Ahmad, H. (2020). A truck and drones model for last-mile delivery: A mathematical model and heuristic approach, *Applied Mathematical Modelling*, 80, pp. 290-318.

Andersen, G. (2020) Karbonsnakk – hva snakker vi om når vi bruker begrepet «karbon»? (med Anje Müller Gjesdal). *Nytt norsk tidsskrift*, 37(02), pp. 163-178.

Basher, A., Islam, A. S., Stiller-Reeve, M. A., & Chu, P. S. (2020). Changes in future rainfall extremes over Northeast Bangladesh: A Bayesian model averaging approach. *International Journal of Climatology*, 40(6), pp. 3232-3249.

Baurley, NR., Robson, BA. and Hart, JK. (2020). Long-term impact of the proglacial lake Jökulsárlón on the flow velocity and stability of Breiðamerkurjökull glacier, Iceland. *Earth Surface Processes and Landforms*, 45(11), pp.2647-2663.

Dahl, T., Fløttum, K. (2020). Climate change from a corporate perspective: a case study of the linguistic representation of the energy transition by the fossil fuel companies Total and Equinor. *Cahiers de praxématique* 73.

Falck Langaas, R., Fløttum, K., Gjerstad, Ø. (2020). Expressing one's conceptions of lifestyle in a climate perspective. *Cahiers de praxématique* 73.

Fløttum, K. (2020.) Le changement climatique en discours. *Cahiers de praxématique*, 73.

Fløttum, K., Gjerstad, Ø., Badiang Oloko, F. (2020). Les voix dans le discours climatique : essai d'une combinaison de la polyphonie avec l'analyse de contenu, l'analyse narrative et l'analyse rhétorique. *Cahiers de praxématique* 73

Gallagher L., Kopainsky B., Bassi A. M., Betancourt A., Buth C., Chan P., . . . Bréthaut, C. (2020). Supporting stakeholders to anticipate and respond to risks in a Mekong River wa-ter-energy-food nexus. *Ecology and Society*, 25(4).

Guo, F., Gu, X., Guo, Z., Dong Y and Wallace, SW. (2020) Understanding the marginal distributions and correlations of link travel speeds in road networks. *Online Scientific Reports* 10

Herrera Anchustegui, I. (2020). Is Hywind Tampen's State Aid Approval a Kickstart for the Norwegian Offshore Wind Industry?, *European State Aid Law Quarterly*. 19(2)

Herrera, H., Kopainsky, B. (2020). Using system dynamics to support a participatory as-sessment of resilience. *Environment Systems and Decisions*.

Herrera H., Kopainsky B. (2020). Do you bend or break? System Dynamics in resilience planning for food security. *System Dynamics Review* 35(4), pp. 287-309.

Jansen, E., Christensen, JH., Dokken, TM., Nisancioglu, KH., Vinther, BM, Capron, E., Guo, C., Jensen, MF., Langen, PL., Pedersen, AR, Yang, S., Bentsen M., Kjær, HA., Sadatzki, H., Sessford, E., Stendel, M. (2020) Past perspectives on the present era of abrupt Arctic climate change. *Nature Climate Change*, 10, pp - 714-721

Kopainsky B., Frehner A., Müller A. (2020). Sustainable and healthy diets: Synergies and trade-offs in Switzerland. *Systems Research and Behavioral Science*, 37(6), pp. 908-927.

Lucas, M., Atanga, G., Hisken, H., Mauri, L. & Skjold, T. (2020). Simulating vented hydrogen deflagrations: Improved modelling in the CFD tool FLACS-Hydrogen. *International Journal of Hydrogen Energy*.

Lucas, M., Skjold, T. & Hisken, H. (2020). Computational fluid dynamics simulations of hydrogen releases and vented deflagrations in large enclosures. *Journal of Loss Prevention in the Process Industries*, 63.

McClymont, EL., Ford, H., Ho, SL., Tindall, JC...Nisancioglu, KH...et al (2020.) Lessons from a high-CO2 world: an ocean view from ~ 3 million years ago. *Climate of the Past*, 16.

Myklebust, IE., Schütz Eskeland, S. (2020) Rammer for ein god oppvekst - korleis skal plan- og bygningslova sikre "barnets beste"? I: Likestilling, barn og velferd. Rettsfelt i utvikling. *Gyldendal Juridisk*, pp. 421-439

Ogunbode, CA., Doran, R., & Böhm, G. (2020). Individual and local flooding experiences are differentially associated with subjective attribution and climate change concern. *Climatic Change*.

Ogunbode, C. A., Doran, R., & Böhm, G. (2020). Exposure to the IPCC special report on 1.5 °C global warming is linked to perceived threat and increased concern about climate change. *Climatic Change*, 158(3-4), pp. 361-375.

Prochazka, V. and Wallace, SW. (2020). Scenario tree construction driven by heuristic solutions of the optimization problem. *Computational Management Science*, 17, pp. 277-307.

Robson, B.A., Bolch, T., MacDonell, S., Hölbling, D., Rastner, P. and Schaffer, N., (2020). Automated detection of rock glaciers using deep learning and object-based image analysis. *Remote Sensing of Environment*, pp. 250

Siekiera, J. (2020). France as the 2nd largest ocean power – legal connotation of ocean change to the French state, *Annals of the Faculty of Law of the University of Zenica* [Bosnia and Hercegovina].

Siekiera, J. (2020) Regional integration in the South Pacific: challenges for public governance, *Brazilian Journal of International Law*.

Siekiera, J. (2020) French EEZs in the Pacific in the context of ocean change, *Lex Portus* [Ukraine].

Song, Y., Ulmer, M., Thomas B., and Wallace, SW. (2020) Building Trust in Home Services - Stochastic Team-Orienting with Consistency Constraints. *Transportation Science* 54 (3) pp. 823-838.

Stefaniak, AM., Robson, BA., Cook, SJ., Clutterbuck, B., Midgley, NG. and Labadz, JC., 1920. (2020) Mass balance and surface evolution of the debris-covered Miage Glacier, 1990–2018. *Geomorphology*, 373, 107474.

Books & Book Chapters

Hunter, TS., Herrera Anchustegui, I., Crossley, P., Álvarez, G. (2020) *Routledge Handbook of Energy Law*. (Routledge, 2020). 650 pages.

Hunter, TS., Herrera Anchustegui, I., Crossley, P., Álvarez, G. (2020) Introduction to the Routledge Handbook of Energy Law. In *Routledge Handbook of Energy Law*. (Routledge, 2020). pp. 3-13.

Hunter, TS., Herrera Anchustegui, I., Crossley, P., Álvarez, G. (2020). Uses and abuses of EU competition law in Energy. In *Routledge Handbook of Energy Law*. (Routledge, 2020). pp. 107-122.

Hunter, TS., Herrera Anchustegui, I., Crossley, P., Álvarez, G. (2020). The role of state aid law in energy. In *Routledge Handbook of Energy Law*. (Routledge, 2020). pp. 123-139.

Hunter, TS., Herrera Anchustegui, I., Crossley, P., Álvarez, G. (2020). Regulation of electricity markets in Europe in light of the Clean Energy Package: prosumers and demand response. In *Routledge Handbook of Energy Law*. (Routledge, 2020). pp. 90- 106.

Hunter, TS., Herrera Anchustegui, I., Crossley, P., Álvarez, G. (2020). Shale gas regulation in Mexico and Colombia: an uncertain future. In *Routledge Handbook of Energy Law*. (Routledge, 2020). pp. 291-309.

Policy briefs and reports

Accatino, F., Paas, W., Herrera, H., Appel, F., Pinsard, C., Shi, Y., . . . , Kopainsky B., . . . Reidsma, P. (2020). Impacts of Future Scenarios on the Resilience of Farming Systems across the EU Assessed with Quantitative and Qualitative Methods. D5.5 H2020 Project SURE Farm - Sustainable and Resilient EU Farming Systems.

Alendal, G., Oleynik, A., Dankel, DJ., Schütz, SE., Omar, A., Torabi, P., Gasda, S., Et al., More authors. (2020). Monitoring offshore CO2 storage projects, aligning capabilities with regulations and public expectations.. 22nd EGU General Assembly; 2020-05-04 - 2020-05-08

Reidsma, P., Paas, W., Accatino, F., Appel F., Black, J., Bijttebier, J., Gavrilescu, C., Kopainsky, B., Krupin, V., Manevska Tasevska, G., Meuwissen, M., Ollendorf, F., Peneva, M., Senni, S., Severini, S., Soriano, B., Urquhart, J., Vigani, M., Zawalinska, K., Zinnanti, C., Herrera, H. (2020). Impacts of improved strategies and policy options on the resilience of farming systems across the EU. D5.6 H2020 Project SURE Farm - Sustainable and Resilient EU Farming Systems.

Schütz, SE. and Fauchald, OK. (2020). Unntak fra plikten til å utføre miljøkonsekvensutredning i lys av EØS-retten. Oslo: Fridtjof Nansens Institutt, 66 s. UiB, UiO

Siekiera, J (2020) Australia in the time of crisis: multidisciplinary determinants "Polish Political Science Yearbook" [Poland].

Siekiera, J. (2020) European science diplomacy and its applications to global challenges "Polish Political Science Yearbook", [Poland].

Siekiera, J. (2020) Maritime Biodiversity from the French State's Perspective "Polish Political Science Yearbook", 2/2020 [Poland].

ANNEX 4: PROJECTS

CET Projects

The following projects are fully or partly owned by CET. Total budget shown in the far right column is the total budget for the project.

Funder / Project title	Project owner	CET partner(s)	Project period	Total budget (NOK)
Akademiaavtalen, Statoil/UIB				1 050 000
Prof. II - Applied Economics in Climate and Energy Transformation	UIB - CET	C. Grainger	2019 -2022	1 050 000
EU – H2020				131 148 740
CINTRAN – Carbon Intensive Regions in Transition – Unravelling the Challenges of Structural Change	Wuppertal Institut für Klima, Umwelt, Energie gGmbH	J. Jewell/E. Tvinnereim	2020 – 2024	29 994 050
VARCITIES – Visionary nature-based actions for health, wellbeing & resilience in cities	Telecommunication Systems Institute	H. Haarstad (UIB – Geography, MN, MOF, Law, KMD)	2020 – 2025	101 154 690
EU – ERC				15 000 000
MANIFEST – MechANisms and actors of Feasible Energy Transitions	Chalmers University of Technology	J. Jewell	2021 – 2026	15 000 000
EU – JPI Climate				10 000 000
ROLES – Responsive Organising for Low Emission Societies	UIS UIB – CET	S. Sareen	2020 – 2023	10 000 000
RCN – Research Council of Norway				55 697 000
CityFreight – Freight Logistics in Smart Cities	NHH	S. Wallace, H. Haarstad, E. Tvinnereim, S. Eskeland Schütz, K. Måseide	2020 - 2024	18 558 000
DemoClim – Cities confronted by protests: Democratic governance for efficient and socially just climate transformation	OSLOMET – NIBR	H. Haarstad	2020 - 2023	13 219 000
MUCS – Media use in crisis situations: Resolving Information Paradoxes, Comparing Climate Change and the COVID-19 Pandemic	UIB – InfoMedia	H. Haarstad	2021 - 2025	12 420 000
ASSET – Accountable Solar Energy TransitionS	UIS	S. Sareen	2021 - 2024	11 400 000
BalansHub CET	UIB – CET	J. Dalsgård	2021 - 2022	100 000
UIB – Climate and Energy				3 000 000
HySociety - Hydrogen som energibærer i samfunnet: risikobilde, risikoforståelse og offentlig aksept.	UIB	H. Haarstad	2021 - 2024	3 000 000
Vinnova - Sveriges Innovationsmyndighet				651 682
TR2AIL - Tracking, reflecting and reducing air travel: A pathway to more sustainable travel behaviour	SEI - Stockholm Environment Institute	K. Måseide, J. Dalsgård	2019 - 2020	651 682
Grand Total				216 878 929
UIB - University of Bergen, CET Accelerator				331 507
NO -EPOV - Norwegian Energy POVerty	UiB – Dept. of Geography	S. Sareen	2021 - 2022	200 000
Decarbonising Healthcare: Building a Norwegian Net Zero Healthcare Coalition	UiB - Bergen Centre for Ethics and Priority Setting	A. Bhopal	2021 - 2021	48 840
KLIMADEMO – Climate Risk and Democratic Energy Policies	UiB – Law	E. Colombo	2020 -2021	82 667
Total				331 507

ANNEX 5: EVENTS

CET events

Date	Name	Institution	Title	Type
15.01	Birgit Kopainsky	Dept. Of Geography	Systems dynamics workshop	Workshop
16.01	Esmeralda Colombo	Faculty of Law	Investing in our future, divesting from our past. From climate risk to climate opportunity	conference
22.01	Mattias Lindquist	Chalmers University	Only connect - from local actions to a substantial improvement in sustainability?	CET Lunch
29.01	Joanna Siekiera	Faculty of Law	Legal consequences of ocean change in the Pacific – International Law in “Mare Nullius” Project	CET Lunch
05.02	Carlo Aall, Lise Bjerke, Jesse Schrage	NorAdapt, UiO and CET	DAY ZERO: Sustainable universities and the global research agenda.	Workshop
12.02	Alain Starke	Dept. Info and Media	Beyond 'one-size-fits-all' platforms: Promoting personalized energy-saving advice using recommender systems	CET Lunch
19.02	Erik Kolstad	NORCE/CET	Klimamyter	CET Lunch
25.02	Ignacio Herrera Anchustegui	Faculty of Law/BOW	The Norwegian Offshore Wind Paradox	CET Lunch/Energy Lab
03.03	Amber Nordholm, Mina Halle, Siri Reintz, Synnøve Beitnes, Katharina Lucht	CET Master students	Master student seminar	Master seminar
04.03	Tarje Wanvik / Håvard Bjørnstad	CET	Fremtidsspillet	CET Lunch
11.03	Matthew Cook	Open University	Exploring spatiality, innovation and transitions	CET lunch
18.03	Dorothy Dankel	Dept. Biological sciences	Challenges of the Science-Policy interface of Localizing the SDGs #LoVeSeSDG	CET Virtual lunch
25.03	Kevin Anderson	CET	How closely do the mitigation proposals of 'climate progressive' nations align with the Paris Agreement?	CET Virtual lunch
01.04	Stein W. Wallace	NHH	Future freight distribution in Bergen	CET Virtual lunch

15.04	Carlo Aall	Vestlandsforskning/ NorAdapt	What happens to climate vulnerability when we transition from a fossil fuel society to a 100% renewable energy society?	CET Virtual Lunch
21.04	CITYFREIGHT	NHH and CET	Cityfreight kick off	Project launch
20.05	William Helland - Hansen	Dept. Of Earth Sciences	Coastal changes 21st Century	CET Virtual Lunch
27.05	CET Affiliate retreat	CET affiliates	Actionable knowledge	CET Virtual retreat
03.06	Corbett Grainger	CET	Supply-Side Climate Policies: Stop Drilling or Fund Innovation?	CET Virtual Lunch
10.06	Sonia Yeh	Chalmers University	A holistic analysis of passenger travel energy and greenhouse gas intensities	CET Virtual Lunch
18.06	Dorothy Dankel, Håvard Haarstad ++	Dept. Biological sciences	How do we localize the global sustainability goals?	BSRS brunsjømøte
03.09	Siddharth Sareen	CET	Just mobility half day seminar	Half day seminar
11.09	Seema Arora Jonsson, Vanesa Castan Broto, Annica Kronsell		Climate Intersections	Seminar
16.09	Kjersti Fløttum	Dept. Foreign Languages	Climate change and lifestyle issues	CET Lunch
23.09	Klimaomstilling2020	County governor Vestland	Klimaomstilling2020	Conference
30.09	Åshild Aarø	StartUp Bergen	Bergen 20tretti	CET Virtual Lunch
07.10	Katinka Wågsæther	CET	The South African climate change adaptation landscape	CET Virtual Lunch
14.- 15.10	CET internal retreat	CET	What is transformation?	Seminar
21.10	SpaceLab workshop	CET	What's next? Summary of the European cities as actors in climate and energy transformations project.	Workshop
22.10	CET affiliates	CET	Project development workshop	Workshop
05.11	SpaceLab	CET	Urban Interventions	Conference
11.11	Thea Gregersen	CET	Would it matter? Interactions between worry about climate change and efficacy beliefs	CET Virtual Lunch
18. – 19.11	Klimathon 2020	Vestland County	Klimathon 2020	Workshop
25.11	Anand Bhopal	Dept. Of global public health and primary care	Decarbonising healthcare	CET Virtual Lunch
11.12	Andri Snær Magnason	Independent author	On time and water , a conversation with Andri Snær Magnason	Book Launch

Centre partners

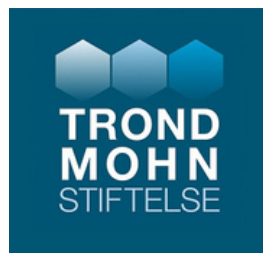


UNIVERSITY OF BERGEN



NORGES HANDELSHØYSKOLE

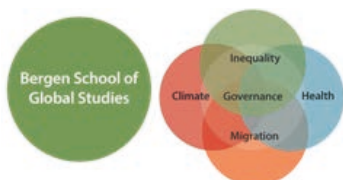
Collaborative partners



Bergen Offshore Wind Centre



CITY OF BERGEN





CET

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and Energy Transformation