

Report from the international ESPON/NRF Conference:

Climate Change in Northern Territories.
Sharing Experiences and Exploring New Methods
Assessing Socio-Economic Impacts.

**Organized in cooperation between ESPON-ENECON and Northern
Research Forum (NRF)**

22nd – 23rd August 2013

Venue: University of Akureyri, Akureyri; Iceland

Grétar Thór Eythórsson, University of Akureyri and ECP-Iceland



The central theme of the conference was divided into three sub-themes:

- ❑ Territorial socio – economic impacts of climate change
- ❑ Methodologies for assessing socio-economic impact
- ❑ Adaptation to climate change in regions and local communities – examining methods and sharing knowledge

Organizers:

The ENECON-consortium in cooperation with NRF

Brief Dictionary

ESPON Evidence in a North European Context (ENECON) = The project ENECON addresses challenges and opportunities facing territorial development and spatial planning policies and practices, particular to the vast territory of the northern part of Europe. The project is implemented by the ECPs from Norway (Lead Partner), Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway and Sweden

ECP = ESPON Contact Point

ESPON 2013 = The European Observation Network for Territorial Development and Cohesion

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Icelandic ESPON website: <http://www.rha.is/is/page/espon>

ENECON website: <http://rha.is/enecon>



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Programme –
Links to presentations and photos can be seen at the
ENECON-website
<http://rha.is/enecon>

CLIMATE CHANGE IN NORTHERN TERRITORIES
Sharing Experiences and Exploring New Methods
Assessing Socio-Economic Impacts
Open Assembly/Conference in Akureyri, Iceland
22. – 23. August 2013

Program

Wednesday 21st August

Pre-Conference day for the NRF Young Researchers

Thursday 22nd August

08:15 – 09:00	Registration – Coffee
09:00	Words of welcome Rector Stefán B. Sigurðsson, Professor Lassi Heininen and Professor Grétar Þór Eypórsson
09:25	Opening speech Mr. Ólafur Ragnar Grímsson President of Iceland
09:45	Keynote Speaker Executive Director Patricia A. L. Cochran, Alaska Native Science Commission: <i>"Indigenous Peoples and Climate Change: Framing the Dialogue"</i> NRF Young researcher Nikolas Sellheim: <i>"Living with 'Barbarians' - Within the Commercial Sealing Industry"</i> Open for questions/discussions
10:35	Coffee break
10:50	Parallel sessions I, II and III
Session I:	Stefan Sigurðsson: <i>"The Natural Resource: Reindeer"</i> Sigriður Kristjansdóttir: <i>"Global climate changes and the tensions of Sustainable Development"</i> Irēna Pučka: <i>"Sustainable forestry in the context of climate change mitigation"</i> NRF Young Researcher Susan Carruth: <i>"Climate & Change: Greenland's energy landscape"</i>

Session II:	<p>Gestur Hovgaard & Gretar Eythórsson: „<i>The West Nordic region: Possibilities and role in future development in the North-Atlantic</i>“</p> <p>Dmitry Zimin: „<i>Climate Change and the Northern Sea Route: A New Russian Strategy in the Arctic?</i>“</p> <p>Lisa Van Well & Johanna Roto: „<i>The Arctic: Europe’s Strategic Neighbourhood</i>“</p> <p>Heikki Eskelinen & Matti Fritsch: „<i>Looking North – the Arctic Dimension in Finnish Regional Policy</i>“</p>
Session III:	<p>Elin Ebba Ásmundsdóttir: „<i>Enabling social capital in the Arctic</i>“</p> <p>NRF Young Researcher Noor Johnson: „<i>Grantwriting and other translational skills in adaptation practice</i>“</p> <p>Andréa Finger: „<i>Agency as redefined by climate change: the case of the Arctic</i>“</p> <p>Robin Bronen: „<i>Climate-Induced Community Relocations: Resilience and Adaptation of Alaska Native communities</i>“</p>
12:20	Lunch
13:30	Reporting from parallel sessions
13:45	<p>Keynote speaker</p> <p>Senior Researcher Jon Naustdalid, former Director General at Norwegian Institute for Urban and Regional Research (NIBR): „<i>The certainty of uncertainty: The challenge of planning for a changing climate</i>“</p> <p>Open for questions/discussions</p>
14:30	Parallel sessions IV, V and VI
Session IV:	<p>Natalia Loukacheva: „<i>Climate Change Governance in the Arctic and Legal Issues</i>“</p> <p>Anton Vasiliev: „<i>Arctic Council and Climate Change Policies</i>“</p> <p>NRF Young Researcher Bianca Tiantian Zhang: „<i>Legal Challenges of Precautionary and Ecosystem Approach in Arctic Fishery Governance</i>“</p> <p>Lára Jóhannsdóttir: „<i>Role of insurers when adapting to changing climate</i>“</p>
Session V:	<p>Tanja Suni: „<i>Land-atmosphere-society processes in the boreal and Arctic regions – collaboration opportunities within iLEAPS and PEEX</i>“</p> <p>Antti Roose & Martin Gauk: „<i>Mitigation policies and planning responses to emergent suburban development in Estonia</i>“</p> <p>Kari Laine: „<i>Analysis of Regional Climate Strategies in the Barents Region</i>“</p> <p>NRF Young Researcher Julia Martin: „<i>Hyperextended objects in environmental planning</i>“</p>
Session VI:	<p>Janis Lapinskis: „<i>Climate change impacts on coastal areas in Latvia</i>“</p>

NRF Young Researcher Ilona Mettiäinen: „*Planned or emerging futures? Addressing climate change on regional level by strategic planning*“

Jaak Jaagus: „*Recent climate changes in the Baltic Sea region and their impacts in the coastal regions of Estonia*“

Arvo Järvet: „*Adaptation methods of climate change and recommendations for water management in Estonia*“

15:20	Coffee break
15:50	Parallel sessions IV, V and VI (continues)
16:40	Reporting from parallel sessions, discussion and summing up
17:45	Buses to hotels

Friday 23rd August

09:00	Keynote speaker: Dr. Erik Gløersen, senior consultant at Spatial Foresight, lecturer and researcher at the University of Geneva: „ <i>Factoring in Territorial Diversity in development and adaptation strategies: Policy challenges and methodological proposals</i> “
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Open for questions/discussions

09:45	Parallel sessions VII, VIII and IX
Session VII:	NRF Young Researcher Michał Łuszczuk: „ <i>Maritime regionalism as a framework for analysing the territorial challenges of the Arctic transformation</i> “ Kári F. Lárusson: „ <i>Rapid Assessment for Rapid Change "information for adaptation in the North</i> “ Vífill Karlsson & Gretar Eythórsson: „ <i>Adaption to changes in two rural municipalities in Iceland</i> “ Edward H. Huijbens: „ <i>Incorporating climate change in polar tourism product development</i> “
Session VIII:	Sigfriður Inga Karlsdóttir: „ <i>Giving birth in rural areas</i> “ Hildigunnur Svavarsdóttir: „ <i>Factors affecting recruitment and retention of health care professionals in rural areas</i> “ Sonja Stelly Gustafssdóttir: „ <i>Public perspective on health care service in rural areas</i> “ Sigrún Sigurðardóttir: „ <i>Psychological Trauma, Stress and Violence: Consequences for Health and Well-being</i> “
Session IX:	Bergur Einarsson: „ <i>The impact of climate change on glaciers and glacial runoff in Iceland</i> “ NRF Young Researcher Sigmar Arnarsson: „ <i>Northern Shift of Species</i> “

Steingrímur Jónsson: „*Climate variability, climate change and the future of fisheries in the Arctic and sub-Arctic marine ecosystems*“

Páll A. Daviðsson: „*THE ICE CIRCLE: funding research and providing an international channel of communication for Arctic voices*“

10:35 **Coffee break**

10:55 **Parallel sessions VII, VIII and IX (continue)**

11:45 **Reporting from sessions**

12:00 **Lunch**

13:15 **Keynote speaker:**

Professor Matthias Finger, Ecole Polytechnique Federale (EPFL): “*The resources exploitation / climate change nexus: why the Arctic matters for the world*”

NRF Young researcher Hanna Lempinen: “*Social sustainability in/and the Barents energyscape: Conceptual and methodological platforms for tracing the elusive social*”

14:05 **Parallel sessions X and XI**

Session X:

Garri Raagmaa: „*Regional Higher Educational Institutions as Green Economy Knowledge Hubs in the Northern Territories*“

NRF Young Researcher Marguerite Marlin: „*Leveraging Globalization: How Global Venues Offer a Comparative Advantage for IPO Influence on Arctic Policy*”

Eva Halapi: „*Climate Change – Perceptions and knowledge among young adults in Iceland*“

Anna Lilja Sigurvinsdóttir, Eva Halapi & Kjartan Ólafsson: „*Awareness, perception and attitudes on global climate change among Icelanders*“

Session XI:

Kristín Þórarinsdóttir & Rúnar Sigthórsson: „*Can action research act as a vehicle in climate change adaptation?*“

Olaf Foss: „*Methodological challenges in multi-disciplinary climate change research - experiences from ESPON CLIMATE*“

Janis Kaulins: „*Municipal Indicator System Development for risk adaptation and communication assessment in coastal risk governance*“

Erik Gløersen: „*Using Foresight to trigger entrepreneurship and growth in West Nordic rural communities*“

14:55 **Coffee break**

15:15 **Parallel sessions (continues)**

16:05 **Reporting from sessions**

16:20	Panel discussion, summing up and farewell
18:15	Buses to hotels

Saturday 24th August

10:00 – 17:00	Excursion Day: Eyjafjörður coast line, Siglufjörður and Skagafjörður https://events.artegis.com/lz/CustomContent?T=1&custom=1657&navid=5691&event=10494
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The idea behind the conference and the implementation

The global climate change is by scientists predicted to have great environmental and socio-economic impacts in the whole Arctic as well as in northern Europe. There will seemingly be direct and indirect impacts on nature and on communities as well as uncertainties. In addition, the global warming is predicted to accelerate off-shore oil and gas drilling in the Northern icy seas and open a new (global) sailing route from the North Atlantic Ocean through the Arctic Ocean to the eastern parts of the globe. All this is expected on one hand, to have great impacts on the economic and social opportunities of the northerly regions in the Arctic including Northern European countries, and on the other hand, to create bigger risks to the fragile Arctic ecosystem. The impact of all this is going to be widespread in North Europe and the entire North. This has already and will in near future mean an increasing need for research in both natural and social sciences as well as for interdisciplinary approach. The aim of the event was to turn the attention towards this aspect of territorial challenges for European regions by organizing a conference where the focus would be on existing evidence and the need for future research in the northernmost regions of Europe and the Arctic, and the challenge of translating scientific knowledge into action. The idea was that this conference would bring together researchers with similar background but had been focusing on different problems and situations and applied different methodological approaches. Regional and local stakeholders as well as state politicians and policymakers are also target groups for this conference. This was also believed to be a way to disseminate ESPON projects which had in one way or another focusing on these problems.

A total of 110 researchers, politicians, bureaucrats and other stakeholders from 14 countries attended this two day conference. Four keynote presentations were given plus two following presentations by young researchers and 44 presentations were given in 11 parallel sessions. This made a total of 50 presentations during the two days as can be seen from the program on the pages above.

Selected presentations at the ENECON conference

(for detailed presentations, see ENECON website, <http://rha.is/enecon>)

First day, 22nd August

Words of Welcome

Stefán Sigurðsson (Rector, University of Akureyri)

Grétar Thór Eythórsson (Professor, University of Akureyri, Iceland ECP)

Lassi Heininen (Chairman of NRF, Professor at University of Lapland)

The rector of the University of Akureyri, **Stefán B Sigurðsson**, welcomed people to Akureyri and the University. He also gave a brief description of the history of this rapidly growing university located at 66°N. The Icelandic ECP, **Grétar Thór Eythórsson**, underlined that one of the main aims of the conference was to disseminate ESPON results by involving policy makers, practitioners and scientists and bringing people from different disciplines together. Grétar presented and described the ESPON program and the ENECON project and its aims and events as well. Further he said: *"With this conference, we in the ENECON-project, want to turn our faces towards the regional challenges for northern European regions - to put the focus on future research in the northernmost regions in Europe and the Arctic. We thought it would be wise and necessary to organize such a conference in cooperation with The Northern Research Forum. Our belief is that ESPON knowledge, research, methodology and experience could contribute to future research in the northernmost parts, where the problematic is in many ways so different from what it is in the more central parts of Europe. Further, the idea is that such a conference could bring together researchers which have similar background but have been focusing on different problems and situations. Regional and local stakeholders as well as state politicians have also been a target group for the conference. We in ENECON hope that the outcome of this new type of cooperation, which we have had with NRF will give us here interesting contributions, a lot of discussions and not at least networking that can bring together scientists and stakeholders from different disciplines and different parts of the world!"*. Finally, the chairman of NRF, **Lassi Heininen**, welcomed people to the conference and emphasized that the effort made by the ENECON project to initiate such a conference was important.

Keynote presentation – Jon Naustdalslid

Senior Researcher **Jon Naustdalslid**, former Director General at Norwegian Institute for Urban and Regional Research (NIBR): *"The certainty of uncertainty: The challenge of planning for a changing climate"*.

As the title indicates the question raised in Jon Naustdalslid's keynote presentation was: *How has climate change – or more precisely - our knowledge about climate change – caused new challenges for policymaking and planning?*

Jon talked about how we could or should adapt from a new known climate to future unknown climate. His argument was that even though the common response was to get more knowledge and forecasts about the future, such precise modeling would not help at the local level. The more policy-relevant knowledge, the less scientific certainty. Further he argued that scientific studies of the climate had changed for the last 30 years from analyzing the physical reality of climate to trying to predict the development of global temperature with modeling. This of course also means modeling of socio-economic consequences: Modeling of both nature and society. Modeling society means alternative scenarios or story lines which means that uncertainty in predicting the society means even more uncertainty than in the



nature modeling. This, argued Naustdalslid, means a risk of mal-adaptation of societies. The choice is to either adapt by compensating for the effects of climate change or to adapt by making the societies more resilient to the uncertain and in many ways unpredictable future. So, his final result and recommendation was that adaptive planning was likely the only possible response to the future challenge.

Jon Naustdalslid gives his keynote speech on 22nd August.

Keynote presentation - Erik Gløersen

Dr. **Erik Gløersen**, senior consultant at Spatial Foresight, lecturer and researcher at the University of Geneva: *"Factoring in Territorial Diversity in development and adaptation strategies: Policy challenges and methodological proposals"*

Gløersen used results and findings from the ESPON project **Geospecs** as a base for his presentation and also he referred to the **Territorial Diversity** project. Gløersen took his point of departure in three European categories of territorial diversity; a) Mountains, b) Islands, and c) Sparsely populated areas. His point was that the focus always was on the handicaps of these unique types of areas in the European policy making. He took an example from the European Treaty (art. 174):

“particular attention shall be paid to [...] regions which suffer from severe and permanent natural or demographic handicaps such as the northernmost regions with very low population density and island, cross-border and mountain regions.”

Erik argued that this approach is misinformed in a number of respects:

- Geographic specificity can be an opportunity as much as a handicap
- When geographic specificity limits development, this does not necessarily lead to backwardness
- Geographic specificities are generally permanent features, producing constant effects

Further he argued that central issues concerned:

- Specific vulnerabilities of small communities in the face of economic fluctuations in an open and deregulated economy
- The lack of a «systemic approach» in which the different types of contributions to a balanced, sustainable and prosperous Europe are identified.

Finally he argued that

- It was not meaningful to search for statistical correlations
- The objective was rather to identify causal relations linked to geographic specificity
- The policy relevance of causal relations does not depend on the extent to which they produce observable effects, but on how they inform envisaged policy options

Gløersens general conclusions were:

While quantitative data can inform policies, the evidence base is necessarily a qualitative understanding of causal processes

- Territorial categories based on geographic specificities may contribute to design better policies
- They help seeing beyond traditional divisions:
 - advanced / lagging
 - North / South
- Parallels between categories can be identified.
- One can gain a better understanding of “specificity” of the Northern Territories by approaching them as cases of these general categories,
- Categories of territorial diversity helps showing similarities between territories across the European space, rather than emphasizing differences between transnational groups (North, South, East, West)

- Climate change mitigation and adaptation strategies can gain in efficiency by factoring in territorial diversity.



Erik Gløersen gives his keynote speech on the 23rd (left). After the speech he answered questions on his speech (right). The Iceland ECP, Grétar Eythórsson was the moderator.

Lisa Van Well & Johanna Roto: „The Arctic: Europe’s Strategic Neighbourhood“.

The **ESPON** project **ITAN** (Integrated Territorial Analysis of the Neighborhood) was presented in Session II on the 22nd by Van Well and Johanna Roto who are scientists at NORDREGIO. In the presentation they emphasized the comprehensive view of the European Neighbour Regions – the four main neighborhoods: Northern, Southern, South-Eastern and Eastern. ITAN Arctic was taken as an example of a case study in



the project by zooming in for Barents region and West Norden. In other words: The Arctic was taken as one of Europe’s strategic neighborhoods. The questions raised were: 1) In what sense can the spatial structure of the Arctic area be understood as “one region”? 2) What are the common links and flows between the Arctic and Europe? 3) Why is the Arctic important for Europe? Why is Europe important for the Arctic? 4) What are the drivers of integration in the Arctic itself and with the rest of Europe? 5) What are the territorial potential for cooperation? How has climate change changed these potentials or pre-conditions? Among conclusions were that Arctic cooperation was evident through cross-border and cross-national cooperation; through Nordic cooperation; through joint policy frameworks and intergovernmental cooperation such as Arctic Council and BEAC. Further,

on the question whether the Arctic was a threat or a potential for Europe, the

answer was “both”. And finally on the question whether the Arctic and Europe could be defined as some kind of one region there were seen some opportunities in that direction but they were distinct from many aspects of Europe/Arctic.

Ove Langeland, Bjørg Langset and Olaf Foss: “Methodological challenges in multidisciplinary climate change research – experiences from ESPON CLIMATE”.

The **ESPON Climate** project was presented in a presentation in session XI on the 23rd by Ove Langeland, Bjørg Langset and Olaf Foss who are all working at NIBR in Oslo, Norway. Ove Langeland took care of the presentation on site and described the project as

- a pan-European vulnerability assessment as a basis for identifying regional typologies of climate change exposure, sensitivity, impact and vulnerability.
- On this basis, tailor-made adaptation options can be derived which are able to cope with regionally specific patterns of climate change.
- In the ESPON Climate project this regional specificity is addressed by seven case studies from the transnational to the very local level.

The main points in the project are:

- Climate change – long term changes
- Predictions in social science
- Scenarios as alternative future research

The concluding discussion was much about how to achieve optimal multidisciplinary, if it was possible to predict the future in social sciences and finally which kind of climate research was most helpful for spatial planning.



On the left: Olaf Foss, ECP Norway (here in the role as coordinator in one of the parallel sessions) and on the right: Ove Langeland in the presentation on the 23rd.

Some other presentations

There was a lot of interesting presentations at the conference. For example Garri Raagmaa from University of Tartu in Estonia who in his presentation **“Regional**



Higher Educational Institutions as Green Economy Knowledge Hubs in the Northern Territories” referred to the **ESPON – KIT** project.

Antti Rose, from the University of Tartu and ECP of Estonia together with his colleague Martin Gauk gave a presentation on **„Mitigation policies and planning responses to emergent suburban development in Estonia”** in Session V on the 22nd.



The Finland ECP and Professor at University of Eastern Finland, Heikki Eskelinen gave a presentation with his colleague Matti Fritsch about **The Arctic dimension in the Finnish Regional Policy**.

*As a keynote speaker invited by our cooperative partner, NRF, Professor Matthias Finger, Ecole Polytechnique Federale (EPFL): gave the presentation: **“The resources exploitation / climate change nexus: why the Arctic matters for the world”**. He was followed up by the by NRF invited Young researcher Hanna Lempinen with a presentation with the title: **“Social sustainability in/and the Barents energyscape: Conceptual and methodological platforms for tracing the elusive social”**.*



On day 2 (23rd) the conference was summed up by a panel discussion including all four keynote speakers: Erik Gløersen, Jon Naustdalslid, Matthias Finger and Patricia A. L. Cochran. Professor Lassi Heininen the chair of NRF coordinated the discussion and Heikki Eskelinen made some remarks on behalf of the ENECON project. After that Both Lassi Heininen (NRF) and Grétar Thór Eythórsson (ENECON) gave short farewell speeches. Two full 10 hour days of presentations, discussions and intensive networking came to an end late in the evening 23rd August. The following day, Saturday 24th of August was either a day of departure or for some an excursion day where the Eyjafjörður coast line, Siglufjörður and Skagafjörður were visited.



From parallel session II on 22nd. Here you see among others Johanna Roto (NORDREGIO), Erik Gløersen (Spatial Foresight), Ove Langeland (NIBR), Gestur Hovgaard (University of Faroe Islands) and Garri Raagmaa (University of Tartu).



Of course there was a massive presentation of ESPON on site. Outside the lecture halls there were posters as well as a table loaded with ESPON reports.

www.espon.eu

The ESPON 2013 Programme is part-financed by the European Regional Development Fund, the EU Member States and the Partner States Iceland, Liechtenstein, Norway and Switzerland. It shall support policy development in relation to the aim of territorial cohesion and a harmonious development of the European territory.

ISBN