



**Nordic-Baltic Impact
Assessment Conference**

Book of Abstracts

Tallinn 2018

Nordic-Baltic Impact Assessment Conference 2018

The first Nordic-Baltic Impact Assessment Conference was held in 2012 on Estonian western archipelago, Kuressaare, Island of Saaremaa. Encouraged by the success of the first conference and considering the ever-growing importance of Impact Assessment (IA) as a decision making tool at strategic planning, regulatory and project level, the Nordic-Baltic network of IA practitioners recognised the need of periodic meetings to share experiences.

The conference is not simply a platform of discussion of specific academic issues of IA but rather a possibility to share and learn about new approaches and practices of IA among practitioners of public and private sectors in the Baltic Sea region. Issues of general relevance will be illustrated by local examples and hotspots of IA practice (Reidi tee, Rail Baltic etc.). The thematic areas of the conference are broad since IA addresses a wide spectrum of socio-ecological issues, including circular economy, sustainable energy, and integration of biodiversity, sustainable mobility, and climate change into daily societal development activities.

Sustainable use of the natural resources of the Baltic Sea without compromising the good environmental status of the sea, remains in the focus of the Nordic-Baltic IA conference as in the previous conference. Policies and projects developed in the Baltic Sea (such as offshore wind parks, gas pipelines, bridges and tunnels, as well as intensifying marine traffic) have an impact on the marine ecosystem and the people around the sea. The conference explores the methods and tools, but also technologies and governance options for the benefit of people and the environment.

On behalf of the organizers, we welcome all participants to take part in the 2nd Nordic-Baltic Impact Assessment Conference!

Heikki Kalle, Age Poom, Helen Sooväli-Sepping, Charlotta Faith-Ell, Hólmfríður Bjarnadóttir, Sanne Vammen Larsen, Ismo Pölönen, Kaja Peterson, Riin Kutsar, Rauno Sairinen

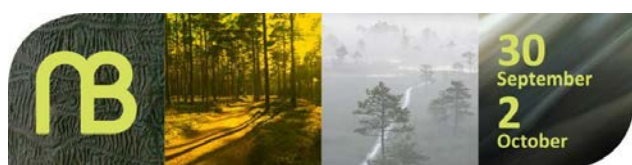
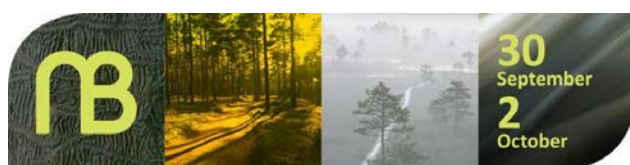


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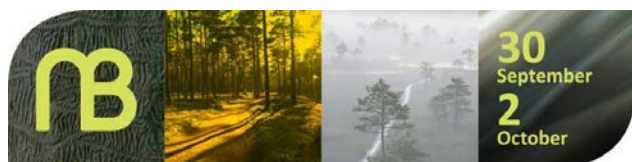
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Conference Programme

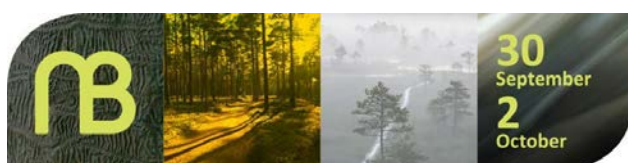
Oct 1st, 2018

- 8:30–9:30 **Registration** @ Tallinn University, Mare building, in front of hall 225, 2nd floor
- 9:30–11:30 **Opening plenary: The role of Impact Assessment as an Instrument for Sustainable Governance**
@ Mare 225, 2nd floor
Moderated by **Lone Kjørnø**
Opening: **Heikki Kalle**, **Helen Sooväli-Sepping**, **Kaupo Heinma**, **Age Poom**
Maria Rosário Partidário “IA as an instrument of governance for strategic change”
Jos Arts “IA and governance – uncertainty and power”
Panel Discussion: **Maria Partidário**, **Jos Arts**, **Helen Sooväli-Sepping** and **Kaupo Heinma**
- 11:30–12:30 **Lunch** @ Mare atrium, 3rd floor
- 12:30–14:30 **Parallel session 1** @ Mare 225, 2nd floor
Critical reflections on social, cultural, economic, health impacts and stakeholder engagement in IA
Chairs: **Rauno Sairinen**, **Helen Sooväli-Sepping**
Sanne Vammen Larsen, Sara Bjørn Aaen, Anne Merrild Hansen, Helle Nielsen, Lucia Mortensen “Renewable energy in headwinds”
Hans Orru “Health impacts – from mentioning to real assessment”
Shiu Fung Hung, Thomas Fischer “Dynamics of information provision and influencing decision making: empirical findings”
Sanne Vammen Larsen “Local knowledge in Greenlandic EIA practice”
Lena Levin, Charlotta Faith-Ell “How to apply SDG5 in Transport and Infrastructure Planning”
- Parallel session 2A** @ Mare Senat Hall, 6th floor
Strategic planning and IA in the transport and energy sectors
Chairs: **Heikki Kalle**, **Ross Marshall**
Hólmfríður Bjarnadóttir “Urban energy resilience – the role of strategic planning and SEA. A case study of Reykjavik capital region”
Juliane Biehl, Johann Köppel, Gesa Geißler “Checks and Balances? – Strategic planning approaches and impact assessments in German wind energy governance”
Jaak Tuksam “The quantifying of distributed energy technology impact in the consideration of energy aspects in spatial planning”
Jaak Järvekülg “The role of impact assessment in road projects in Estonia”
Charlotta Faith-Ell “A comparison of SEA for high speed rail in Sweden and Estonia”
- 14:30–15:00 **Coffee break** @ Mare atrium, 3rd floor
- 15:00–17:00 **Parallel session 3** @ Mare 225, 2nd floor
The integration of sustainability in decision making through Impact Assessment
Chairs: **Ulrika Gunnarsson-Östling**, **Ross Marshall**
Ulrika Gunnarsson-Östling, Karolina Isaksson “Transport planning for sustainable development”
Oлга Melnicenko, Aiga Kāla, Oskars Beikulis “SEA as a tool for integration of innovative environmental protection approaches in spatial planning”
Sirje Pädam, Charlotta Faith-Ell “Evaluation of SPEAK-proposals for improving effectiveness in SEA and planning”
Ross Marshall “Why we need leadership in EIA more than ever!”
Lone Kjørnø “Making research matter (more) in favour of sustainability – a reflection upon future research within the cross-field of impact assessment and decision-making”
- Parallel session 2B** @ Mare Senat Hall, 6th floor
Strategic planning and IA in the transport and energy sectors
Workshop
Heikki Kalle
Jos Arts
Pille Metspalu
Riin Kutsar
- 19:00–23:00 **Reception** @ Platz Restaurant, Roseni 7, according to registration



Oct 2nd, 2018

- 8:30–10:00 **Plenary: Effectiveness in Impact Assessment** @ Mare 225, 2nd floor
Moderated by **Charlotta Faith-Ell**
Thomas Fischer “Post-factual threats to EIA”
Matthew Cashmore “Quality, effectiveness and the science-policy interface”
Panel Discussion: **Thomas Fischer, Matthew Cashmore, Hólmfríður Bjarnadóttir, Tiit Oidjäv and Sirje Pädam**
- 10:00–10:30 **Coffee break** @ Mare atrium, 3rd floor
- 10:30–12:30 **Parallel Session 4** @ Mare 225, 2nd floor
Biodiversity, ecosystem services, and Appropriate Assessment of Natura 2000 areas in IA
Chair: **Kaja Peterson**
Josefin Kofoed Schröder, Anna Jakobsson, Berit Brokking Balfors “Implementing ecosystem services by detailed physical planning”
Ieva Rove, Laila Sica “Experience of Impact Assessment In State Owned Forests in Latvia”
Pille Metspalu, Riin Kutsar “Renewing planning guidelines for green infrastructure in Estonia”
Miklós Zsolt Szilvácsku “The value scale foundation and institutional aspects of impact assessments”
Discussion
- Parallel Session 5** @ Mare Senat Hall, 6th floor
Legal system, capacity building and guidance as a drivers of effectiveness of IA
Chair: **Ismo Pölönen, Age Poom**
Ismo Pölönen “Role of law in enhancing the effectiveness of EIA practice”
Gesa Geißler, Johann Köppel, Anke Rehhausen “Learning in German maritime spatial planning and strategic environmental assessment”
Josh Fothergill, Robert Adamczyk, Ben Cave, Jo Murphy, Rob Evans “Experiences of capacity building for competent experts”
Kimmo Jalava “Educational EIA support material for (new) EIA authorities”
Evija Skrastiņa, Aiga Kāla, Olga Melnicenko “Guidelines for improvement of effectiveness of EIA Screening process in Latvia”
Josh Fothergill, Stuart McLanaghan, Emanuela Vanacore, David Smith “Aligning circular economy standards & impact assessment”
- 12:30–13:30 **Lunch** @ Mare atrium, 3rd floor
- 13:30–15:30 **Closing plenary: IA as a facilitator for achieving the Sustainable Development Goals** @ Mare 225, 2nd floor
Moderated by **Heikki Kalle**
Kaja Peterson, “Linking SDGs into IA”
Panel Discussion: **Kaja Peterson, Sanne Vammen Larsen, Rauno Sairinen, Age Poom and Lena Levin**
Closing



Parallel Session 1

Critical reflections on social, cultural, economic, health impacts and stakeholder engagement in IA

Renewable energy in headwinds

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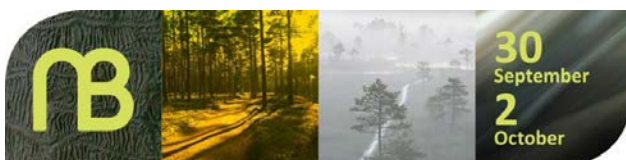
Keywords: EIA, socio-economic impacts, distribution of impacts

Abstract

In Denmark, the need for a transition to renewable energy has prompted a number of renewable energy projects over the past decades, including wind turbines, biogas plants and large photo voltaic facilities. In recent years, many of these projects have caused conflicts, as citizens protest the development in their local communities. These conflicts pose a challenge to the transition to RE, which has encouraged research and development in the role of EIA and especially assessment of social impacts in the process.

As part of various research projects in this field, studies have been carried out on what constitutes these conflicts. Here the distribution of benefits, such as economic compensation, revenue and business opportunities, as well as disadvantages, such as impacts on health and property value, stand out as significant and complex contributors to the conflicts. The social dynamics concerning the distribution often leads to divisions in the local communities, which constitutes a significant negative social impact from RE projects which needs to be addressed.

This paper will go through the main benefits and disadvantages related to RE projects that are significant to the local citizens. Furthermore, the paper will focus on how the distribution of local benefits and disadvantages is viewed by the local citizens, and what the consequences of the distribution are for local communities. The paper will conclude with a discussion of the role of EIA in this context.



Health impacts – from mentioning to real assessment

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Keywords: public health, air quality, noise, stress, epidemiology

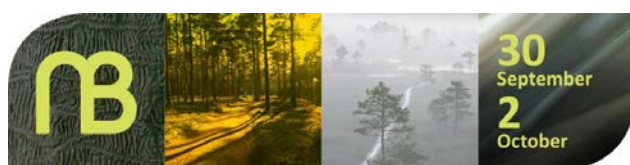
Abstract

In environmental impacts assessment (EIA) health is an important indicator of the influences; however, often just mentioned in the assessment process. This can be due to limited knowledge, resources, availability of experts, evidence etc. Same time health impacts are highly fascinated by public as these are the effects that could them personally influence. One of the procedures to quantify the health impacts is health impacts assessment (HIA) that enables to quantify the potential effects on health and the distribution of those effects within the population. HIA will use (1) information on current health status, (2) change in population exposure to environmental factor and (3) relationship between health and exposure in earlier epidemiological studies.

Current paper will give examples of the transport projects, where the health impacts have been evaluated and how that have influenced the decision making process. One of them is the 21 km long by-pass (18 km in a tunnel) in Stockholm, where the beneficial effects for the general population associated with improved ambient air quality and the expected adverse effects for tunnel users from additional air pollution exposure, had been evaluated. As the conclusion of the first assessment, depending on the exposure of tunnel users, the effect could be beneficial or adverse. As the consequence of unfavourable results, more detailed analysis was followed, showing adverse effects due to increased exposures (as the first analysis did not include all tunnel entrances). Currently the project, that had to start in 2016, has been postponed due to high costs and unfavourable message for public.

Another example comes from Tallinn, where during urban regeneration parts of two main streets in Tallinn city centre will be re-built by 2020 to decrease traffic amounts and create more friendly space for pedestrians and cyclers, called "New Main-street". The aim that analysis was to assess the reduction of health impacts with the planned changes in urban environment. It appeared that if currently air pollution in the city centre study area is causing 30.0 premature deaths annually, it could be reduced by 1.1 cases every year among people living, working and passing the area. The effect is mainly due to reduction of exhaust and less due to reduction of road dust. The health benefits of noise reduction could be 0.1 premature deaths annually. Currently in the area are every day physically active 6,000 people. If the number of 15 minutes physically active people could be doubled or they could be 15 more minutes physically active, this would result in 3 saved premature deaths. So this kind of urban regeneration should be highly appreciated by public.

Nevertheless, those HIAs are dependent on the availability of original epidemiological studies, need detailed exposure data and require resources. Currently there is solid evidence on the health effects on air pollution, noise, chemicals etc and it is growing. One could ask, if in small projects this kind of detailed assessment is too demanding, but in large infrastructure project the quantification of the health consequences could be crucial for justified decision-making.



Dynamics of information provision and influencing decision making: empirical findings

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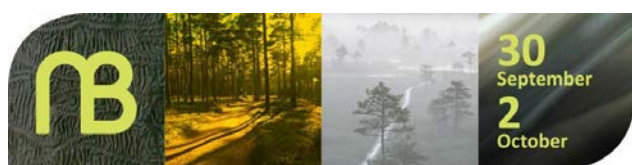
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Keywords: stakeholder engagement, public, decision making

Abstract

Stakeholder engagement is widely considered as one of the crucial components in current EIA practice. There are two major aspects in the discussion on the role of stakeholder engagement in EIA. The first aspect focuses on the function of provision and review of information that stakeholder engagement allows individuals to offer their knowledge to enhance the quality of technical assessments. For example, stakeholders could provide a critical analysis of documentation (Sheate, 1996,p.88); or, could generate cognitive and value-based information (e.g. O’Faircheallaigh, 2010). The second aspect focuses on the influence of decision making. Stakeholder engagement have a political interface, various interests seek influence during the process. While it has the potential to connect environmental issues to the wider democratic discourse, the dynamics of political interaction in the EIA process is unclear (O’Faircheallaigh, 2010). In this paper we re-examine the latest discourse on the potential and function of stakeholder engagement and use empirical case studies from Hong Kong to reveal the dynamics between information provision and influence on decisions-making.

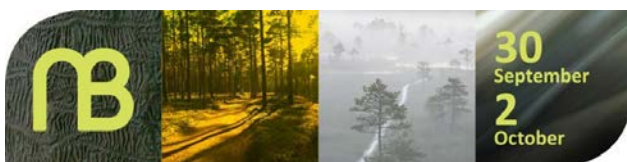
As part of a PhD research project, various EIA projects in Hong Kong have been studied and analyzed in depth to investigate the relationship between stakeholder engagement and EIA effectiveness. This paper picks two of the cases, both of which are public works projects that included development of ecological sensitive areas: one is the strategic planning of Tung Chung New Town extension, the study area of the project covered one of the remaining natural rivers and bays in Hong. After two years of liaising within and beyond the EIA process, a compromised plan was made to protect the ecological sensitive areas. The second case is the artificial bathing beach at Lung Mei. The project, originated from suggestions by the regional council, proposed to turn an ecological sensitive mudflat into an artificial bathing beach. Despite strong objection from concerned groups, the project was approved with conditions to implement further mitigation measures. In both cases, concerned groups provided supplementary ecological information of the area, critically reviewed the documentation and liaised with the environmental protection measures; however, the outcomes were very different. The research findings suggest that while the technical assessment served as the foundation of public engagement and liaison, it is also a strength as well as major limitation of stakeholder engagement in EIA practices. It is common to see the technical assessments follow up and address the concerns raised by the stakeholder, and usually additional mitigation measures would be implemented. However, it also binds the environmental issues to technical terms that do not promote discussions on the higher policy level like the wider environmental objectives.



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Local knowledge in Greenlandic EIA practice

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Keywords: EIA, Arctic, local knowledge, uncertainty

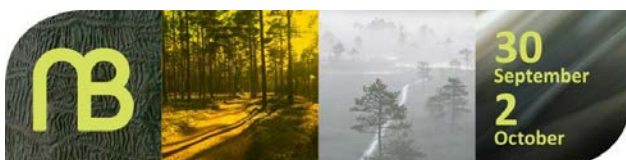
Abstract

The Arctic is facing possible significant changes due to e.g. changes in climate and prospects of new industrial development. These changes place the Arctic in a situation with large uncertainties concerning the future and significant choices to be made from a strategic planning level to a specific project level. When making crucial decisions in a context of uncertainty, research has pointed towards the necessity of basing decisions on local knowledge and values alongside traditional scientific knowledge. Across the Arctic environmental impact assessment (EIA) is a pivotal tool used to support decision-making, promoting sustainable development through identifying, assessing and mitigating negative or enhancing positive impacts of a project. In an uncertain context, such as in the Arctic, the uncertainty concerning e.g. which activities will be implemented, how they are designed and used, and how the status of the surrounding environment will develop, also means that the assessment of impacts of a project is uncertain. One suggested way of working with uncertainty is to work with local knowledge and its potential to support the assessment processes.

Based on this, the paper presented reports on a case study of EIA of two large-scale projects in Greenland, focussed on the following questions:

- Is uncertainty handled in IA processes in Greenland? How?
- Is local knowledge included in IA processes in Greenland? How?

Based on the results, the potential for using local knowledge in EIA in Greenland is discussed.



How to apply SDG5 in transport and infrastructure planning

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Keywords: SDG5, gender mainstreaming, gender impact assessment, transport planning

Abstract

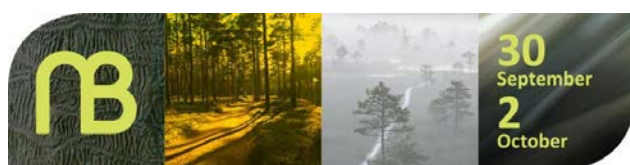
In light of the sustainability goals introduced through the UN's 2030 Agenda for Sustainable Development, this paper presents a model of how to address gender mainstreaming in transport planning in a more systematic way. Working systematically on gender mainstreaming in transport infrastructure entails implementing a gender perspective in all stages of decision making, planning, and execution (Christensen et al. 2007; Woodward 2003).

In our research, we have been influenced by the fields of social impact assessment (SIA) and strategic environmental assessment (SEA), combining them into a model for integrating gender equality into transport planning. Previous research has addressed the gender equality goals in Sweden; now we suggest how to explore how Sustainability Goal five of 2030 Agenda can be integrated in impact assessment.

Our model has been developed over ten years of research into how gender equality goals can be implemented in transport planning at national and regional levels (Faith-Ell et al. 2010, 2012, 2013; Halling, Faith-Ell & Levin 2016; Levin & Faith-Ell 2011, 2014). The model is objectives led, goal oriented, and adapted to planning practice. This paper aims at providing an analysis of tools for more systematic gender impact assessments adapted to the global gender objectives integrated into the sustainable development goals of the 2030 Agenda, which declares: "Achieve gender equality and empower all women and girls" (UN 2015). The analysis starts from the suggestion of how the transport system can act as a "facilitator" for the achievement of equality goals.

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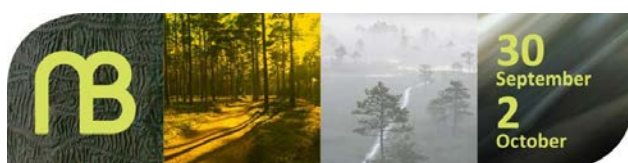


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Parallel Session 2

Strategic planning and IA in the transport and energy sectors

Urban energy resilience – the role of strategic planning and SEA: A case study of Reykjavik capital area

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Keywords: comprehensive planning, land use planning, SEA, energy resilience, integration

Abstract

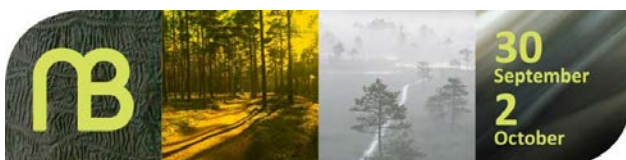
In terms of meeting climate targets and promoting sustainability-led development comprehensive planning holds a key role. Decisions regarding land allocation, major infrastructure and services are based upon regulations set out in land use plans, as well as political strategies for future development of the municipality or the region.

The consideration of essential infrastructure in terms of energy and resources is an important factor in land use decisions. The energy demands of households, increase in use of electricity with new technologies and changes in lifestyle puts extra demands on the urban energy systems.

Despite of this, synergies with energy systems and comprehensive planning is often lacking, missing an opportunity for early integration. Considerations of those systems at early stages can result in efficient use of resources, minimise impacts and ensure the resilience of those systems. An important factor in achieving this is an effective Strategic Environmental Assessment.

This paper examines how the supply and distribution of energy is addressed in comprehensive planning – taking Reykjavik's rapidly expanding regional area as a case study. Currently, over 60 % of Iceland's population lives in the regional capital area and the area is experiencing steady population growth. The regional area's six municipalities all prepare their own comprehensive municipal plans, as well as a regional plan for the area. A SEA was carried out in the preparation of all of those plans. No common energy plan exists for the region and the distribution and supply of geothermal water, drinking water and electricity is provided by either Reykjavik energy or the municipalities.

The paper presents the first stage of a research project where the current situation is mapped out and potential gaps identified. The results of a review of the energy consideration in comprehensive plans and accompanying Strategic Environmental Assessments will be presented. Furthermore, the role of SEA in leading to greater synergy of energy aspects in urban development processes will be discussed.



Checks and Balances? Strategic planning approaches and impact assessments in German wind energy governance

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Keywords: renewable energy, wind energy, spatial planning of infrastructure, zoning

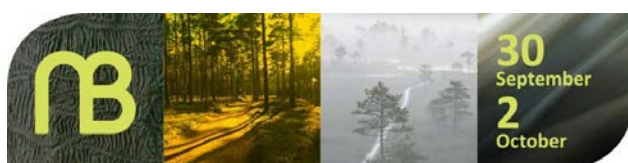
Abstract

The German Energiewende (energy transition) contributes significantly to extending renewable energy (RE). In pursuing current trajectories (65% renewables in gross electricity consumption by 2035), annually at least 5 GW photovoltaics and 4 GW land-based wind energy will have to be developed (Agora Energiewende 2018). While Germany currently ranks third in installed land-based wind energy capacity (ca. 51 GW as of 2017), it has the highest relative density (i.e. installed capacity per land area). In light of land scarcity and the pursuit of the energy transition, the pressures and intricacies for strategic planning and impact assessments (IA) to balance competing land uses and myriad interests will further increase. Yet, Germany has an ambitious planning and zoning system that governs the development of wind energy spatially and – above all – at a strategic level.

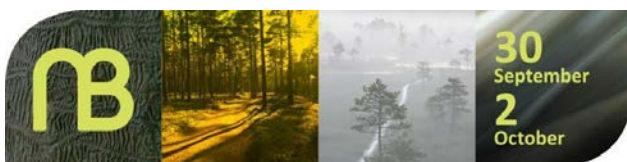
Our contribution intends both to explore how the multi-level German planning and IA system for wind energy development works and to identify drivers and barriers to this planning approach. With further progression of the Energiewende, instruments of power control and power balance (checks and balances) have been established. We will portray the roles and leeway of various stakeholders and IAs in the German wind energy planning system and pinpoint their strengths and weaknesses.

Wind energy projects in Germany have a ‘privileged’ status, i.e. they have to be granted a permit if the project does not conflict with public interests and if adequate public infrastructure provision can be guaranteed. The strategic planning system governs wind energy projects in order to avoid scattered development and fragmentation of landscapes. In general, the German planning system follows a decentralised approach with several governance levels (federal, state, regional, and local) that interact with another and allow for power control and power balances (checks and balances). While the federal government sets development trajectories for RE (e.g. in policies), the states can refine these by setting concrete targets (e.g. in state development programmes). Additionally, various states provide guidance documents and regulations for planning and siting wind farms. At the subsequent governance level, over 100 regional planning entities contribute a vital link between state objectives and local interests. In considering public interests, inter alia hot spots of protected wildlife, recreational areas, distances to settlements, and heritage sites, these planning regions identify and designate priority areas for wind development at a strategic level (e.g. in regional development plans). At the local level, municipalities can further zone the actual sites by establishing so-called concentration zones (e.g. in land use or zoning plans). At all governance levels, IAs – as instruments of checks and balances – ensure that public interests will not be adversely affected. Especially strategic environmental assessment (SEA) for programmes and plans plays a vital role in German spatial planning for wind energy (e.g. SEAs for the state development programmes, regional development plans, land-use and zoning plans).

We will discuss implications of the German strategic wind energy planning approach and the



strength and weaknesses of the IAs e.g. related to the consideration of social aspects and concerns about creating stigmatic 'energy landscapes'. Furthermore, we will highlight the role of litigation and jurisprudence as another instrument of checks and balances, and discuss the implications for the future of strategic wind energy planning in Germany.



The quantification of impacts from distributed energy technology in the consideration of energy aspects in spatial planning

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Keywords: energy production and distribution, energy technology, power grid

Abstract

The shift to an extensive use of renewable sources in energy production in both industrial scale as well as in households has resulted structural changes in energy production and transmission. The changes are affecting the use of natural resources creating new challenges for strategic planning and related impact assessments in different spatial scales.

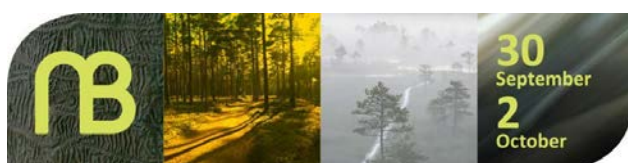
The hypothesis states that there is a new paradigm on energy questions in politics and its main expression is the climate policy. With the plan to phase out from fossil fuels in order to mitigate the impact that energy sector has on climate change, different alternative energy solutions have been developed and numerous are yet to be developed. With a common denominator the renewable energy resources are scattered in space more than any other fuel, therefore harnessing them is a question of fusing generation with “mining” that in other words means that primary energy is consumed on-site and that is almost everywhere. This wide spatial exploitation of resources interacts with the surroundings in different ways from which the ones with quantifiable parameters are the subject of the study.

One other aspect of this shift towards distributed generation is that the development of the energy system as it is done today has to adapt. In Estonian power systems for example the transmission grid development it is expected that every new unit (consumer or producer - prosumer) will be planned based on the status quo i.e. the transmission system developed in the period from the sixties to the eighties. Every deviation from the existing base line means a major price tag for the prosumer.

That said the solution to debate over might be that there is a new planning exercise to be implemented – the networks development plan that takes the strategic goals of e.g. the wider integration of renewables and brings them to the drawing board to be implemented in the power system development. And yes – that means investments in the networks planning, and no – it cannot be done by the acting system operators but must be done in cooperation with them.

The aim is to study energy technology specific land use factors and to quantify the impacts for later use in digital implication for solving challenging energy system problems as interconnection strength development in power grid. The study is generating a sequence of impacts as a by-product for later use as impact assessment methodology input.

The paper is aimed at encouraging discussion on the possibilities of sustainable development of energy system with new horizons in energy production and distribution. The paper addresses the issues of 1) energy density over a unit area of different energy technologies has to be controlled with dedicated online management system, 2) quantifying environmental and socio-economic impacts and the competition over unit area of given technology is the goal of the management system.



Impact assessment in road projects in Estonia

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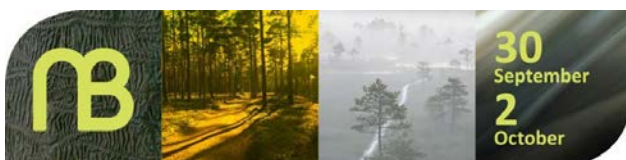
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Keywords: EIA, transport infrastructure, corridor selection, planning tiers

Abstract

Environmental Impact Assessment of major linear transport infrastructure projects is associated with a number of challenges including a wide variety of different impacts and often contradicting views of different interest groups, such as road users vs local communities and environmentalists vs traffic economists, to name a few of the most prominent potential conflicts. Furthermore, the nature and clarity of different impacts can vary considerably throughout any single project, making it virtually impossible in practice to objectively use comprehensive quantitative methods, stressing the need for a good process-lead approach and well-informed consent decisions by the officials. To end up with the best compromise solutions and guarantee mitigation of all adverse impacts environmental considerations need to be addressed already in early planning stages of all new transport infrastructure.

The aim of this presentation is to give a brief look into Estonian practice of impact assessment of transport infrastructure plans and projects. The presentation shall introduce some of the lessons learned, making use of examples from different levels of transport infrastructure planning and design, starting with strategic level and finishing with design implementation and follow-up. The main focus is to give insight to the role and effectiveness of impact assessment in transport projects in Estonian practice, conclusions are drawn about the main benefits and shortcomings.



A comparison of SEA for high speed rail in Sweden and Estonia

Charlotta Faith-Ell¹, *

¹WSP/EKKI

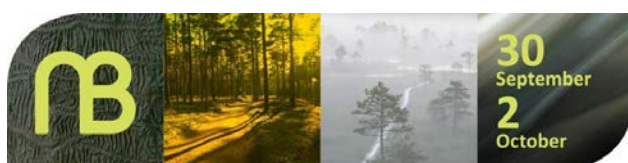
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Keywords: rail infrastructure, high speed rail, EA effectiveness, strategic environmental assessment

Abstract

High Speed Rail (HSR) is currently planned in several countries. The main argument behind this movement is a strive to curb CO2 emissions from the transport sector through a transport mode that can compete with aviation. Development of HSR is currently undergoing in both Estonia and Sweden. The main objective behind both cases is to connect the countries with the rest of Europe. Strategic Environmental Assessments (SEA) have been applied in both cases.

This presentation is based on a comparison of the SEA processes of two HSR cases; i) Rail Baltic between Tallinn and the Latvian border and ii) Sweden HSR between Jönköping and Malmö. The presentation builds on practical experiences of managing both processes in combination with the results of a research project called SPEAK (Sustainable Planning Environmental Assessment and Knowledge). The analytical framework for the comparison of the two cases in this presentation is EA effectiveness. There are several types of effectiveness of EA that are discussed in literature – procedural, substantive, transactive, normative, and knowledge and learning. The results of the comparison shows that there are several similarities between the two cases, for example the application of an objectives led approach to SEA. At the same time, there are several differences, for example the legal provisions for the two plans. The conclusion of the comparison is that planning in practice is seldom linear. Furthermore, HSR projects are highly political which influences the SEA process to a large extent.



Notes on the Workshop: Strategic planning and IA in the transport and energy sectors

The workshop was organized in three groups:

- Land use,
- Transport,
- Energy

Three moderators, having different aspects of EA process as discussion themes, discussed in turns with all groups. Themes of discussion were:

- Scale (of EA) – Heikki Kalle,
- Scope, objectives – Pille Metspalu and Riin Kutsar,
- Quality of decisions – Jos Arts

Land-use group

Quality of decision-making

SWEDEN: on scoping, have to be brave to make decisions, not gather all the information and stop there. Especially in regional level.

DENMARK: No regional plan, no national plan in Denmark.

Vague requirements ... provisions in the plan very vague.

Related to topic, sometimes municipalities are very much involved, sometimes not.

DENMARK SEA is not impacting decision-making a lot. Almost all of the SEAs are conducted as desk job. The statements and assessments are very vague. Resulting in So-What? Attitude. Impact assessment is not central, only minor amendments made in the plans.

SWEDEN SEA affects the choices that are made – the localization of development areas, key infrastructure. Specific measurements needed to ensure that each plan adds up to overall goals. Some rules – each detailed plan should take care of their own rain water, rules in local municipalities; parking requirements if you do not follow it, then you have to provide some kind of compensating measures.

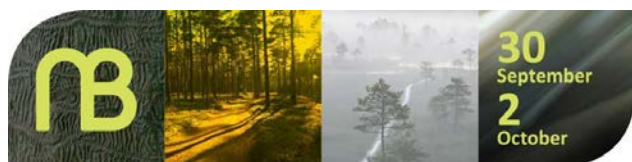
Makes sense to make the planning system more local.

Follow-up – translate the requirements to measurement criteria. Poorly developed in all the countries. Impact assessment has to be done as well.

DENMARK: Renewing plans is not very thoroughly organized. Often revising some guidelines only.

Transport group

FINLAND: It is a requirement for the permission process, to go or not to go. There are examples when the SEA says no and then it's no go. On strategic level, it guides decision-making as it is carried out in a parallel way.



Follow-up process is existing but it does not affect the project implementation, it's more information gathering for the next projects and IA-s.

ESTONIA: strategic level is not good, project level is quite OK, follow-up is bad again. Still no thorough alternatives. When the need for IA is not clearly stated then the impacts are overlooked.

Planning failures in NETHERLANDS.

LATVIA: EIA is carried out and impacts are assessed, but "NO" never said.

Health impacts – things are getting better. Used widely by public. Although still health impacts barely mentioned.

Follow-up to monitor the effects of specific project is difficult.

Energy group

LATVIA: EIA is not always applied, mostly everything is evaluated. Wind turbines.

GERMANY: no national strategy for energy. Wind turbines per se IA not mandatory. 6–19 required. Developers would like to have EIA because it will help in court. Social doubts.

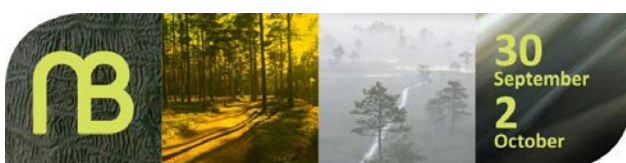
Thomas shared his research conclusions about how effective EIA or SEA is. 10% of EIAs lead to major changes of the projects and 20% do nothing.

ICELAND: hydroelectric power stations – EIA calculate properly, sometimes they change plans and gives people to see what's there. People get interested and know more about things. Working as an instrument to change the plan.

UK: EIA is generally more effective. SEA is really not that effective. We are not giving the instrument any teeth.

No coherent national energy strategy; SEA could be used as a driver.

GERMANY – planning region.



Parallel Session 3

The integration of sustainability in decision making through Impact Assessment

Transport planning for sustainable development

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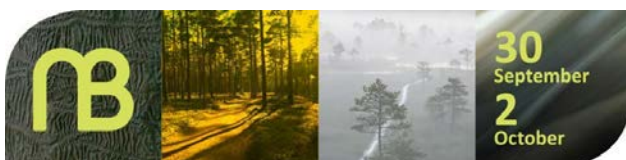
Keywords: transport planning, planning tools, political power, decision-making

Abstract

Long-term transport planning is facing major challenges such as increased urbanization and the requirement that greenhouse gas emissions from the transport system must be reduced. The rapid development of society and technology, such as digitalization, automation and sharing economics, creates uncertainties about the future for which the infrastructure is planned. However, it is clear that a comprehensive transformation into a sustainable society, and a change in the transport system, is needed to deliver accessibility in a sustainable society. This demands more efficient planning processes with planning tools that enable efficient and flexible planning for tomorrow's transport system, as well as creating conditions for early dialogue with different actors.

Except for above-mentioned climate targets, the long-term transport planning also needs to adapt to managing and integrating other sustainability targets. A further challenge for transport planning is that many actors influence the process in different ways. One of the tools for integrating sustainability in transport planning and reaching different goals is strategic environmental assessment as regulated by. However, there are different views on how to make an environmental assessment and what it aims at.

In order to get a deeper understanding of today's practice, this paper looks into the transport planning practice in Sweden. Based on interviews with important actors (practitioners and politicians), this paper discusses these actors view on transport planning for sustainable development and their view on the role of different actors in the transport planning process. This facilitates for a discussion on different views on knowledge and the role of the political in planning processes. Here, the political is acknowledged as being conflicts that do not have rational solutions. In transport planning this means that the practice we see today is just one way of doing transport planning while another configuration of power could give rise to other ways of understanding what characterizes a good planning practice is. By interviewing practitioners as well as politicians we want to understand those political dimensions that are sometimes hidden in the strive for harmonious and non-conflictual solutions. This is important since making environmental assessments effective must acknowledge the political dimension of planning as well as assessments.



SEA as a tool for integration of innovative environmental protection approaches in spatial planning

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¹ SIA Estonian, Latvian & Lithuanian Environment

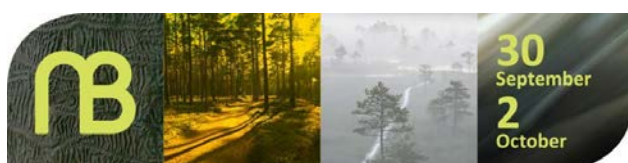
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Keywords: SEA, spatial planning, mitigation, adaptation

Abstract

Requirements and framework for carrying out strategic environmental assessment (SEA) for planning documents is set forth in EU directives and national legislation. However, in practice SEA is oftentimes regarded as a merely formal procedure, in framework of which it is important to establish whether the planning document complies with legal environmental requirements and follows policy objectives, without setting a higher ambition in terms of environmental protection. Therefore in most of the cases measures recommended in the result of SEA are mostly of a formal nature or focusing strictly on ensuring direct legal compliance.

The presentation at issue shows practical experience in integrating environmental protection considerations in land use through SEA procedure, using example of SEA for Riga city spatial plan for 2030. Being capital and the biggest city with the most inhabitants and economic activity in Latvia, the spatial plan of Riga is rather complex and detailed, consisting of territory use and building regulations and map with functional zones of territories, as well as a number of additional documents. The focus of presentation will be addressed to such aspects as integration of good practice and governance measures related to climate change adaptation and mitigation to be implemented city-wide through land-use requirements, assessment of planning document's impact on human wellbeing through environmental and socio-anthropological perspective, as well as interconnection of various sectors, looking for cross-cutting synergies. Such horizontal aspects as ecosystem services and circular economy are streamlined through various measures throughout the document. Carrying out SEAs of spatial plans it is important to use holistic approach and address issues stemming from requirements in regulations together with functional zone map. The example of Riga city spatial plan SEA also depicts the importance of parallel procedure – i.e. commencement of SEA and engagement of environmental experts in early stage of drafting of the planning document.



Evaluation of SPEAK-proposals for improving effectiveness in SEA and planning

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Keywords: effectiveness in SEA and planning, multi-criteria analysis

Abstract

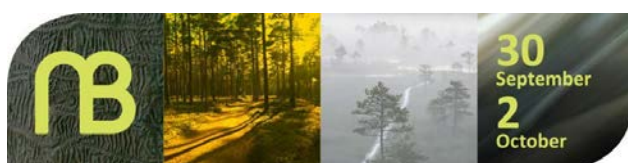
The research programme SPEAK (Sustainable Planning and Environmental Assessment Knowledge) has contributed to a deeper understanding of SEA practices in municipal and sectoral planning in Sweden (Balfors et al. 2018). By relating the empirical findings of the SPEAK programme to the international discourse on SEA effectiveness (Kolhoff et al. 2009, Stoeglehner et al. 2009, Cashmore et al. 2010, Arts et al. 2012, Bond et al. 2013, Chanchitpricha & Bond, 2013, van Doren et al. 2013, Lyhne et al. 2017), has further contributed to generalization of the results (Balfors et al. 2018, Faith-Ell et al. forthcoming). In order to improve effectiveness in SEA and planning, the SPEAK programme has put forward a number of proposals (Balfors et al. 2018). The proposals include policy recommendations of the work packages of the SPEAK programme and suggestions generated in focus groups and workshops carried out throughout the SPEAK programme during the time period 2015-2017.

The aim of this paper is to analyse the proposals generated during the SPEAK programme and to evaluate them in order to prioritize among proposals. For this purpose a multi-criteria evaluation framework will be set up (DCLG 2009). The analysis is based on the proposals presented by Balfors et al. (2018) and Faith-Ell et al. (forthcoming). Starting out from the model of effectiveness developed by the SPEAK programme, the proposals will be analysed by multi-criteria analysis (MCA) and cover additional aspects of e.g. socio-economic effectiveness, cost effectiveness, distribution aspects and flexibility/sensitivity.

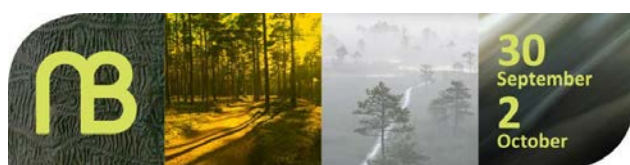
In order to set up an MCA framework, there is a need to identify a number of relevant criteria. The relevance needs to relate to policy goals, including cost-effectiveness, distributional aspects, SEA effectiveness etc. Having defined the appropriate policy goals, the criteria developed by Chanchitpricha and Bond (2013) will be used as a starting point. Relevant criteria will be selected from Chanchitpricha and Bond (2013) and further criteria will be added in order to reflect the appropriate goals of the analysis at hand. Based on the set of chosen criteria, each proposal will receive scores on each criterion. Examination of the scoring will take place in a performance matrix. Analysis and consistency checks of the outcome will be carried out. The next step of the analysis is to group proposals by priority by applying different principles, such as cost-effectiveness or distributional impact. The paper is concluded by policy recommendations in terms of the priority ordering arrived at in the MCA.

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Why we need leadership in EIA more than ever!

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Keywords: EIA, leadership, management, sustainability, project team, decision-making

Abstract

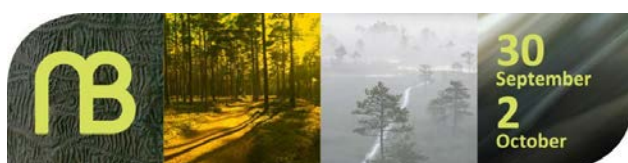
Leadership is an oft-used and sometimes nebulous term, particularly in the field of Project Management. EIA professionals often start their career based on their technical or social science competency arising from their first degree. Very soon they are asked to take on greater responsibility for a wider group of multi-disciplinary experts. Not only does this require team leadership competencies but their project visibility requires them to interface with a wider array of leaders and professions within the Project team.

Although leadership is not traditionally taught in science or social graduate programmes, EIA practitioners often possess many of the qualities that are needed to excel at leadership. Four key leadership areas are identified as strong indicators of EIA leadership, these are summarised as:

1. **Systems Thinking:** The intellectual flexibility to see the bigger picture, as well as assessing complex problems, formulating design changes or mitigation solutions, and generating action plans. In addition to appreciate social and technical details—and to shift perspective between competing interests in order to develop strategies that resulting in optimal solutions for all stakeholders.
2. **A Sustainability Mindset:** A strong interior sense of purpose combined with a worldview that incorporates a long-term orientation and an inherent motivation to address future sustainability challenges.
3. **Visioning:** Influential in promoting environmentally inclusive design within the primary scope and purpose of the project mandate, helping to embed sustainability/Env/Soc thinking into the project team's decision-making within this and future projects.
4. **Relationship Building:** An understanding of internal and external stakeholders across professions, cultures and backgrounds; an advocate of diversity of opinions; and the desire to build productive, long-term relationships with key stakeholders.

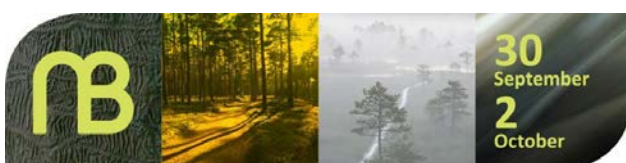
To operate successfully at this level requires a wider range of skills and development needs that many EIA specialists have not been prepared for – or even considered necessary. Managing responsibility both for the EIA team and the EIA procedural steps, the EIA manager must also act across a wider spectrum of holistic leadership values relating to the ethics, social justice, behaviours and scale of impacts for the proposed development. Interfacing to influence the key decision makers requires not only an understanding of their personal power as a leader, but also the framing of discussions in language better understood by other professions and acting as the interface between the competencies of the other EIA practitioners and how they influence better design, decision-making and legacy considerations in the rest of the team.

This paper seeks to start a conversation and debate in leadership in EIA, to define some of the characteristics of EIA leadership to help identify the traits that are most likely to be influential in



helping determine sustainability and under-right the influence and value that EIA can bring to projects. Many of the views expressed are based on experience but some qualitative research in this area is included. We offer ideas on how to find and develop EIA leadership and look at the concept of leadership in EIA, highlighting specific leadership roles and analyses the ‘freedom to operate’ that often influences EIA leadership ability and influence.

There is an urgent need in business today for a new type of leadership—one that makes the long-term sustainability of our world a top priority. Considering the challenges, we face today, there has never been a more important time for effective leaders in EIA to step forward and influence large scale construction projects!



Making research matter (more) in favour of sustainability – a reflection upon future research within the cross-field of impact assessment and decision-making

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Keywords: research, decision-making, science-accumulation, change agency

Abstract

This presentation reflects upon two potentials for future research within impact assessment:

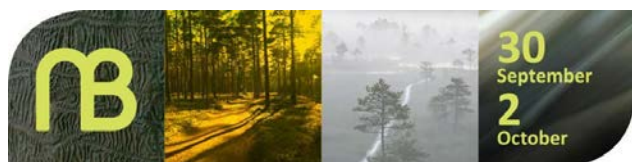
1. The relevance and consequences of theories and insights about policy- and decision-making processes and the role of knowledge therein, and
2. Collaborative knowledge production – linking research, practice and decision-making.

The scholarly discussion about the role and effectiveness of IA as a tool to promote sustainable development has increased, and it has been questioned if IA has the wanted impact. Much has changed over the last decades – and there is growing literature and knowledge base on real policy and decision making involved in IA; increasing our capacity for scientifically framing a more realistic and comprehensive approach to IA and decision-making.

Firstly, the presentation reflects upon the question to what extend we are actually progressing, when it comes to IA research cumulating by building upon other fields' theories, and discusses indications of significant potentials to realize.

Secondly, the presentation reflects upon the argument that science and practice needs to be connected in order to make 'green knowledge', and that we experience a general move towards more externalist approach in which factors not being part of the academic discipline, decides scientific development. Different modes of research, representing different ways science is interacting with society, are presented and discussed.

Synthesizing; making research critically matter more for policy- and decision-making in favor of sustainability, the presentation argues research need to be further guided by insights into the nature of decision-processes and the ways to influence these processes – achieved through both 'science-accumulation' and practice engagement – and that reflections upon balancing the externalist and internalist approach is strongly needed.



Parallel Session 4

Biodiversity, ecosystem services, and Appropriate Assessment of Natura 2000 areas in IA

Implementing ecosystem services by detailed physical planning

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Keywords: ecosystem services, detailed physical planning, implementation of sustainable development

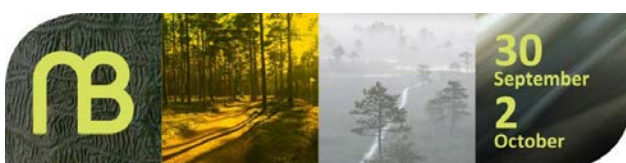
Abstract

ISSUE (Integrating Sustainability Strategies in Urban Environments) is a research project with the overall aim of developing innovative strategies to support sustainable development in urban and peri-urban areas in Sweden. In addition, the aim is to advance knowledge regarding sustainability through multi-stakeholder collaboration. In order to reach a deeper understanding of these processes, the consultant company Sweco (in collaboration with Royal Institute of Technology) has carried out an interview study with officials (physical planners, environmental planners, building permits administrators and development engineers) of municipalities in the Stockholm vicinity and representatives at construction companies active in the Stockholm region.

The preliminary results of the project indicate that the detailed physical planning process carried out by the municipalities has a crucial role for implementing sustainability solutions in practice.

However, the study shows that regulating ecosystem services in detailed planning is a challenge and that some are even harder to regulate than others. The Swedish legislation for physical planning is primarily focused on the issues of design and much less on issues concerning for example nature preservation, management of surface water or local cultivation. Thus, ecosystem services connected to esthetical values are more manageable than those connected to ecological values. The physical planning process is therefore insufficient as a sole tool for the regulation of ecosystem services in urban development and to make such regulations more efficient, several respondents raise the issue of legislation changes.

The interview study also identifies other tools for the implementation of ecosystem services in urban development, such as requirements for the acquisition of land (in cases where the municipality is the land owner), regulations in implementation agreements and bonus systems. These tools are both valuable and maybe even necessary complements to the planning process, in order to regulate and implement ecosystem services in urban development.



Experience of impact assessment in state owned forests in Latvia

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Keywords: impact assessment, forest infrastructure, proactive professional communication, professional competence of staff

Abstract

The Joint-Stock Company “Latvia’s State Forests” (in further text - LVM), established in 1999, manages over a half of Latvia’s forests, in terms of numbers – net turnover 276 million euro, average volume of wood sales per year 6 million m³. LVM in a form of corporation, manages state-owned forests. Integrated management considering nature conservation and maintenance of biological diversity takes important place within strategic and tactical planning of lands managed by the LVM.

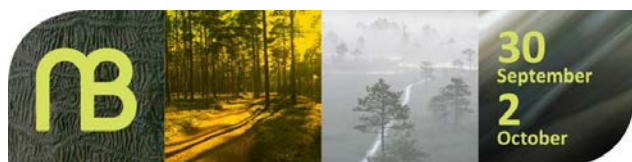
Main areas of activities of the LVM are connected to supply of timber assortments, fuel chips, seeds and plants, recreation and hunting services and mineral resources. Important part of successful management is forestry infrastructure construction, reconstruction, maintenance and surveillance. Forestry infrastructure particularly consists of forestry roads and drainage systems, large culverts, bridges and rail crossings etc.

LVM has in its possession more than 11,000 km of forest motor roads, which together with 5,000 km of natural driveways and 2,830 km of roads belonging to other owners make up 1.1 km/100 ha road network density. Average 300 km forest road building per year carried out. As well, 464,054 ha of ameliorated areas are in LVM possession. Total length of the drainage network is 43,680 km. 15 000 to 30 000 ha of ameliorated areas per year are reconstructed to improve and maintain their functions. So, this is significant amount of existing and planned objects even on the State level.

For each planned forestry infrastructure object and acquisition of mineral deposits initial environmental impact assessment has carried out according special procedure within the rules of LVM. Within this process, field work is carried out by LVM staff - bird, plant species and habitat expert, to register all nature values on a site and within proposed impact area of planned activity. Thus, possible to analyse and assess real situation in a field, combined with all another data available as well as legal status of the site. All proposed actions to minimize possible negative impact on environment is planned according to special environment requirements and expert additional suggestions. Nevertheless, specific criteria of FSC and PEFC forest management certification systems are taken into account in the assessment to provide integral assessment of all binding aspects. Special plant and bird species, European Union importance habitats monitoring is carried out by LVM staff to ensure overall forest related ecosystem quality.

After the inner environmental impact assessment, the proposal of planned activity is submitted further according to the legal frame of environmental impact assessment system in Latvia.

This system provides high level of expert competence within LVM staff, nevertheless there are some professional challenges in information exchange, professional communication process and interpretation issues with legal authorities.



Green infrastructure planning guide

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Keywords: green infrastructure, ecosystem services, spatial planning

Abstract

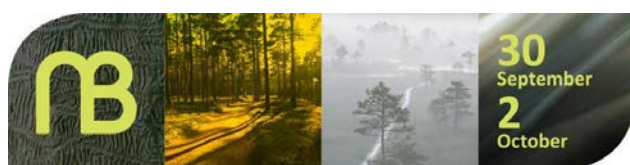
Green infrastructure (GI) is a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to ensure the functioning of natural processes, deliver a wide range of ecosystem services and mitigate the impacts of climate change.

Applying ecosystem approach (which aims to integrate the management of land, water and living resources in a way that promotes conservation and sustainable use) in GI planning plays important role in maintaining functionally and spatially connected, healthy ecosystems providing goods and services sustainably.

Considering fundamental aims of GI and recent approaches to GI planning, the analysis of Estonian GI was conducted and new GI planning guide was developed within the framework of the project „Developing tools for the assessment and prognosis of biodiversity status, closely linked to socio-economic and climate change aspects, as well as for the improvement of biodiversity data accessibility.“ (ELME). Project was ordered by the Estonian Environment Agency and funded from European Union Cohesion Fund, Environmental Investment Centre and Ministry of Environment of Estonia.

The aim of the GI guide is to provide practical advice on how to plan and use GI as ecologically connected network of ecosystems, which deliver a wide range of goods and services in a long-term perspective.

Our presentation gives an overview of the GI planning guide compilation process. We highlight challenges faced during the process and describe first implications in implementing the guide in local municipalities' comprehensive plans.



The value scale foundation and institutional aspects of impact assessments

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Keywords: planning and management system, landscape level, community value scales, accepted values, impact assessment

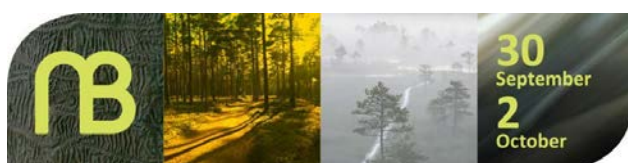
Abstract

During the 40 years history of the development of impact assessments, a number of scientifically established and, at the same time, practically proven procedures and methods were developed and became common practices. Impact assessments were developed in a number of subject matters and at different decision-making levels (for example, health, environment, regional, etc.). It is becoming more and more evident that in spite of varied methodologies and broad incidence, impact assessments can, only very seldom, be in the focal point of sustainability related decisions, and can seldom achieve that impact assessments are not only one of the many boards to which the decision-makers either pay attention or not. It is a fundamental issue, whether impact assessments can actually contribute to putting the sustainability aspects into the forefront of the individual and community value scales.

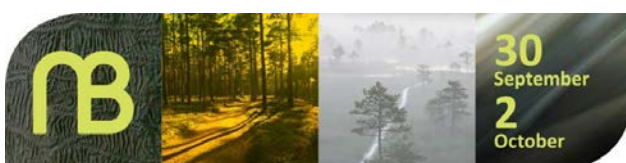
Based on my examinations and surveys I drew the conclusion that the possible trend for further development of impact assessments, the sustainability focused development, means, on the one hand, the renewal of the planning and management systems of public policy from a social-ecological perspective and, on the other, the development of decision-making and impact assessment culture focusing on the values of sustainability and development.

The suggested way of IA's development can be summarised in the following:

1. Sustainability impact assessments can be carried through if they are matched to the decision-making and planning levels, are shaped together with them, and are adapted to the given conditions.
2. Development of a positive approach to sustainability and the joint interpretation of the frameworks of sustainability to the given space (for example the landscape) and subject matter.
3. Inclusion of the impact assessment chain into the regulation, and its consistent application, namely importance of reducing the distances with feedback both in time and space.
4. Development of a set of criteria on the basis of landscape sustainability, identification and systematisation of the common value elements and overlapping consensus.
5. Promoting the processes of community, individual and organisational learning and the conscious implementation of knowledge management (multi-level learning), which benefits from the results of the participation-based theory elements of communication research. (participation based social learning).



6. Further development of the legal and institutional frameworks (public administration, government) necessitated along the core values of landscape sustainability and development, and system level, comprehensive approach to planning.
7. The values of personage, solidarity and subsidiarity shall be put into the centre. As to the values, guaranteeing vitality and resilience shall be researched and practically enforced in connection, with the ecosystems and the local communities.
8. I propose that the landscape, as a living space, shall be managed as a system, as one fundamental unit of planning and development. The landscape, as an principal ecological and social unit, shall be managed in the planning, impact assessment, management and economic systems, promoting this way the strengthening of landscape knowledge, identity, culture, communication and community.



Parallel Session 5

Legal system, capacity building and guidance as drivers of effectiveness of IA

Role of law in enhancing the effectiveness of EIA practice

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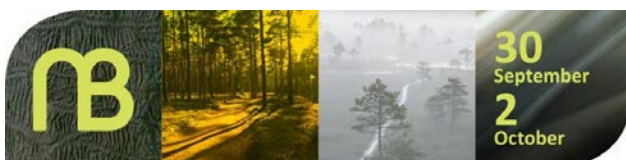
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Keywords: EIA Law, effectiveness, public participation, follow-up, EIA report, scoping

Abstract

Aim of the presentation is to facilitate discussion on the relationship between EIA law and practice and introduce key findings of the research project “EIA Law in Transition – Keys for Smart Re-design and Implementation (EIALAW)”. When do we need legal steering? What type of regulation should be used to ensure simultaneously the realization of the EIA principles and qualities of smart regulation? Our recent research indicates that some significant areas of EIA, e.g. public participation, have evolved without support of direct legal obligations. Some other elements, such as EIA follow-up, are underdeveloped, and seems to be in a need of legal push.

Furthermore, our research identifies the ambiguity of the requirements for EIA report as a potential cause of new legal disputes. This type of implications can be tackled by high quality scoping process where the core content of the EIA report is pre-determined in a coherent way. The research also suggests that interpretation of EIA legislation should not be detached too far from substantive legislation that primarily mandates the scope of information that can be given legal weight in the formal decision-making. Overall, well-designed EIA law functions as crucial catalyst for utilizing preventive, integrative and democratic functions of EIA in practice.



Learning in German maritime spatial planning and strategic environmental assessment

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Keywords: maritime spatial planning, institutional learning, SEA

Abstract

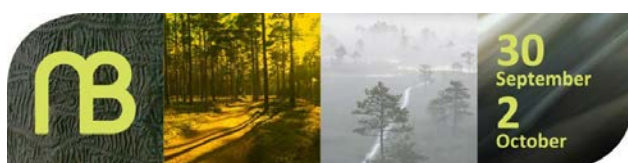
The capacity for institutional learning (double loop learning) and transformative capacity has been identified as one element constituting effectiveness and quality of impact assessment systems [1,2]. Several authors have aimed at studying how impact assessments have triggered institutional learning [e.g. 3,4,5]. Wallington et al. [6] describe double loop learning as to “change the way decisions affecting the environment are made, to question the type of development proposed and [...] to at least implicitly question the automatic equation of technological innovation and industrial progress with (sustainable) development” [cited by 7].

We use a case study approach for providing evidence of institutional learning and transformation in federal level planning and SEA processes in Germany. We analyse the Maritime Spatial Planning for the German EEZ with its integrated SEA process. This case is of special interest as the recently launched plan amendment and SEA process provides the opportunity to study the case via direct observations.

The SEAs for the original MSPs adopted in 2009 were the first being conducted by the responsible authority, the Federal Maritime and Hydrographic Agency and amongst the first SEAs conducted by a federal agency in Germany at all [8]. Furthermore, Germany was a pioneer in maritime spatial planning with the adoption of the 2009 plans [9]. An evaluation of the SEA for the 2009 MSPs [10] revealed several shortcomings related primarily to the timely involvement of the public, the assessment of alternatives and the consideration of cumulative effects [9]. In 2018, an amendment process of the German EEZ MSPs for the (North and) Baltic Sea has been initiated and allows for studying progress compared to the 2009 initial approach.

First results indicate that some signs of institutional learning can be found. This includes the creation of a Scientific Advisory Committee which has been launched even before the plan amendment processes was officially started. This committee has been established to broaden the knowledge and methodological basis, to safeguard the use of best available science both in the making of plans and procedural steps, thus to provide a peer-review process and to enhance credibility and trustworthiness of the amended MSPs and the SEA process. With a recently announced time- and workplan for the MSP amendment process there are indications that e.g. early involvement of the general public and agencies, also in a transboundary context, starting with the scoping process will be realized other than in 2009.

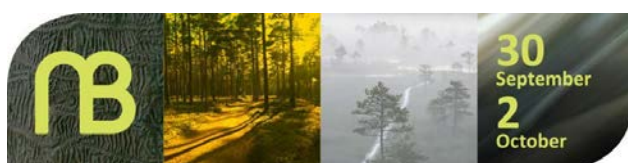
We will discuss the relevance of impact assessment for those changes and if certain characteristics [internal “conditions” by 11] of the planning task and the responsible agency can be identified. This includes, for example, the active involvement of agency staff in projects (e.g. Baltic Scope, SEANSE,) and transnational networks (e.g. HELCOM, OSPAR). Furthermore, with maritime spatial planning being a rather novel planning task for the Federal Maritime and Hydrographic Agency, path-



dependency and lock-in [12] of staff and processes are seemingly less dominant and changes are still more likely to happen. We will compare the MSP case to other German federal level SEA cases [9].

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Experiences of capacity building for competent experts

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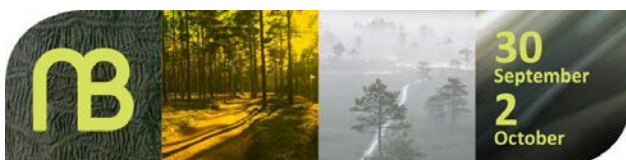
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Keywords: competent, expert, skills, training

Abstract

This paper will provide a reflection on a range of Environmental Impact Assessment (EIA) related training delivered to individuals who would already be considered both competent in practice and expert in their knowledge.

The paper draws from recent training experiences across three organisations: the European Bank for Reconstruction and Development (EBRD), Public Health England (PHE) and the World Bank. The paper will discuss the training techniques, challenges and benefits of continuing professional development.



Educational EIA support material for (new) EIA authorities

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Keywords: support material, education

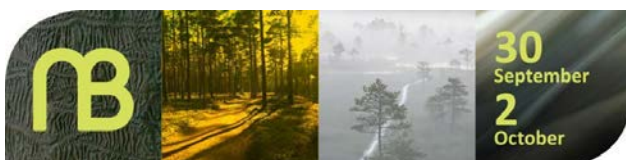
Abstract

In Finland the renewed EIA legislation came into force in 2017 and after over 20 years of EIA in the country there is also a new generation of authorities filling positions to coordinate and guide the EIA processes. In order to support the transition the Ministry of Environment has been producing web-based educational material aimed at new-comers. This paper describes how the material was built in co-operation with experienced EIA authorities and researchers, explains the objectives and contents of the material and introduces the structure of the educational web-platform.

The support material is structured around the main requirements of the EIA legislation. The aim is to clarify the tasks EIA authority has, give practical advice and outspoke the challenges and difficulties of the work. The material makes use of descriptive text parts, images, videos, toolboxes and checklists. For specific issues Question/Answer sections were reserved. The videos include short videoschool lectures attached to certain parts of the material, a short promotional video to introduce EIA in public meetings and an interview video with experienced EIA authorities sharing their insights.

The material is not legally binding, it is designed to help – to ease the learning curve. Emphasis was given to ensure that the material would also look attractive and tempt people to familiarize with it. The table of contents follows the phases of EIA procedure and the tasks of EIA authority – this should ease the use of the material in between the daily work.

While the material is aimed at EIA authorities the plan is to make it publicly available – hopefully it can provide self-help for variety of stakeholders and eventually improve the EIA practices in the country.



Guidelines for improvement of effectiveness of EIA Screening process in Latvia

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Keywords: EIA screening, capacity building

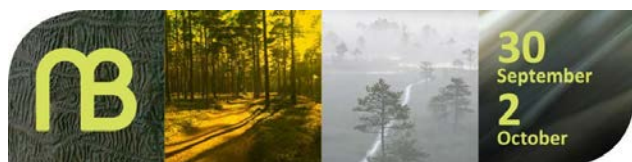
Abstract

On May 15, 2014, amendment (2014/52/EU) to the EIA Directive (2011/92/EU) came into force, striving to lighten administrative burden, ensuring better regulation and more harmonized framework, as well as broadening the scope of addressed aspects. The requirements of the amended directive are currently being transposed into Latvian legal system. In addition, last year the EIA screening stage procedure in Latvia underwent changes at administrative level and from previously centralized approach currently screening is carried out in Regional Environmental Boards (REB).

It has been recognized at the EU level that in case of decentralized screening it is important to ensure that all authorities follow harmonized screening approach. After assessment of selected screening decisions from REB, it was concluded that current legislation provides discretion to REB, resulting in high probability of different decisions in similar cases. To harmonize the approach, facilitating better regulation, as well as ensuring that all aspects covered by the amended EIA directive are addressed, experts assessed 2017 EU EIA Screening Guidelines, other EU MS practice (incl., Germany, Austria, Czech Republic, UK), local court decisions, as well as literature.

The decision to develop comprehensive national EIA screening guidelines and carry out capacity building of REB experts was taken. National guidelines are largely based on the EU Guidelines of 2017, integrating the screening checklist approach, tailoring it to better suit national conditions – national legislation includes 2 lists – lists of activities with thresholds for full EIA and list with thresholds for screening. In national guidelines additional thresholds are introduced for screening – projects requiring complex screening (applying whole checklist) and projects requiring only site screening (applying part of the checklist which includes site-specific questions). Such checklist and threshold approach ensures that REB experts do not miss any relevant aspect, at the same time relieving administrative burden as experts do not have to carry out comprehensive assessment for activities which, due to their nature, are typical and have low potential for significant impact on environment. In addition, a checklist for identification of potential significance is included in the national guidelines. Such approach not only harmonizes the decision making process and lightens the administrative burden, but also makes the process more transparent and understandable to project developers.

In addition to the abovementioned, the guidelines include number of other methodological recommendations – providing new screening decision form, clear guidance on when to request additional information etc. In case REB adapt the methodology provided in national guidelines, especially regarding request for additional quantitative information (e.g., emission limit projects), also the time for screening process can be decreased, which is currently a significant problem in screening process in Latvia, thus also following the nature of the EIA directive, which emphasizes importance of clear and not unjustifiably long deadlines.



Aligning circular economy standards & impact assessment

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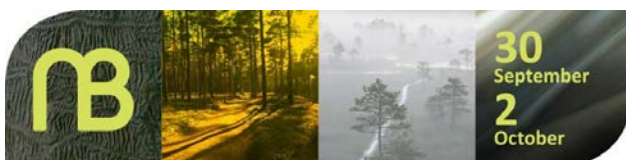
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Keywords: circular, economy, BS8001, IA

Abstract

This paper will build on a paper presented at IAIA17 in Montreal entitled: What role will IA play in the circular economy? It will develop on the issues discussed in Montreal by reflecting on the author's experiences of helping author the world's first Circular Economy standard for organisations (British Standard 8001). It will consider how the Circular Economy can relate to IA by drawing upon the author's experience of developing BS8001, its application in a Swedish Government funded research project (TRACE EMS - TRAnstitioning to a Circular Economy via Environmental Management Systems) and from the delivery of a series of training Circular Economy training sessions with businesses across Wales, funded by the Welsh Government.

The paper will also consider what can be learnt from the UK's MIROG (Major Infrastructure - Resource Optimisation Group) and the development of a guide on Material Assets in EIA (resources and waste), led by WSP in the UK. The paper will pay particular attention to how BS8001's core Circular Economy principles can be draw into project planning, design and delivery through the SEA, EIA, EMP and EMS processes, the principles are: Systems Thinking, Value Optimisation, Data Management, Collaboration, Innovation and Stewardship.





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