

**Sustainability and the Social:
Platforms for tracing the elusive social in energy-related debates**

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Abstract

Climate change and its impacts are not the only forces shaping the socioeconomic landscapes of northern countries and communities. Thawing sea ice and warming climate, declining resource base, growth in energy consumption and technological developments are pushing energy extraction activities further towards the northern parts of the globe. Utilizing the vast hydrocarbon potential of the northern regions is expected to have dramatic impacts on economies, environments and communities of the north which are already experiencing the impacts brought on by the changing climate and environmental conditions. The resource-driven development discourses and imagined futures rely greatly on the concept of sustainability; however, the debates tend to focus on the economic and environmental dimensions associated with energy-related plans and projects. Although Arctic energy developments have had an uneven track record, discussions on the social impacts of energy production, transport and consumption tend to become silenced or sidelined, translated into socioeconomic benefits or simplified to refer to corporate social responsibility in its different forms.

This working paper takes an explicit focus on the vaguely defined social dimension of sustainability both in terms of the broader sustainability debate as well as in the specific context of energy. Through a literature review and the introduction of the methodological framework of situational analysis (Clarke 2005), the paper lays out the conceptual and methodological foundations for empirically mapping the diverse manners in which social sustainability becomes defined and understood and/or constructed as a site of silence in the context of the forthcoming case study analysis of the contemporary Arctic energy cape of the Barents region.

Introduction: Energy in/and the North

Energy and related questions have become an issue of “high politics” (Aalto et al 2013, 1) both in domestic and international contexts in the interplay of various overlapping and interconnected debates and developments. On the one hand, the projected growth in global energy consumption by 30 percent by 2035 plays a role (IEA 2012); on the other hand, the reserves at existing and operational production sites are estimated to be gradually dwindling (cf. Owen, Inderwildi and King 2010). Simultaneously, the changing climate (cf. IPCC 2007) has implications on the energy debate which are at least twofold. While the increasing awareness of the linkages between fossil fuel combustion and climate change is shaping international energy policies and debates, the warming climate and thawing sea ice are also opening previously inaccessible areas for energy-related activities. Combined with evolving technologies, together these developments are pushing energy exploration and extraction activities towards previously inaccessible areas in the remote north.

Despite the common misconception which portrays the interest towards and utilization of Arctic energy reserves as a new phenomenon, exploitation of the region’s energy resources for both local and commercial needs – although with varying intensity – has been taking place since the beginning of the 20th century (AMAP 2007, 14-15). However, as the interest towards the Arctic region and especially its vast hydrocarbon reserves (cf. USGS 2009) is projected to further increase (AMAP 2007, 31-33), the Arctic as a whole and specifically the hydrocarbon-rich Barents region has been nicknamed as the ‘world’s new energy province’ both in popular and political debates. These framings have created twofold reactions; whereas some have viewed the north as being constructed and presented solely as a resource region for the global market economy (cf. Tennberg, Riabova and Espiritu 2012, 17), others have taken the ongoing developments to imply “investing, developing, building – taking ownership for the people of the North [...] all with the goal of using its energy resources by and for the residents of the Arctic” (AES 2010, 5).

Regardless of these debates, the planned and ongoing energy-related development projects in the north are expected to dramatically alter the social, economic, environmental and cultural landscapes of the northern regions. These great expectations are reflected in active international and regional discussions and debates in which the notion of sustainability in its various creative, ambiguous and flexible forms has gained a key rhetorical role (for the [ab]uses of the concept of sustainability in energy politics cf. Littlefield 2013). Whereas the sustainability debate in relation to energy tends to a great extent focus on the environmental and economic dimensions, questions associated with the social implications of these developments become silenced and sidelined or translated into vocabularies of socioeconomic indicators and corporate social responsibility. The disturbing absence of the social dimension beyond these understandings and articulations is the key motivation behind the conceptual and methodological excursion of this paper: 1) is there and 2) how to trace, chase and grasp the 'social' in the energy sustainability debates in the case study context of the north?

Sustainable development, sustainability and energy – A brief excursion to mainstream debates

Since the conception of the popularized Brundtland definition of sustainable development – meeting the needs of our generation without compromising the ability of the future generations to do the same – more than 25 years of academic and political debates have yielded hundreds of alternative visions and definitions of the concept. Needless to say, the flurry of definitions and uses has also given rise to various strands of critique neatly summarized by Lawhon and Murphy (2012, 355), who refer to the concept's "fuzziness, cooption by neoliberal forms of capitalism, and lack of real-world applicability and progressiveness". In a similar manner, Srivastava (2011, 107) has described the whole concept of sustainable development as "an attempt to square a circle" which has had "a great degree of discursive effect" but no impact on "compliance with these norms" which would be "more than rhetorical".

Although the notions of sustainable development and sustainability tend to be (ab) used synonymously especially in political and popular debates, they can be seen to refer to different things. Whereas sustainable development implies development towards the state of sustainability and/or development which does not undermine its own basis, sustainability refers to a state of being or a way of living which can be maintained also in the future (Missimer et al 2010, 1108). The conceptual decoupling of sustainability from its “problematic” (Sneddon 2000, 523) companion development has invoked reactions both for and against this move. While some view the attempt to decouple sustainability from development as a rhetorical strategy allowing for making use of the positive connotations of the umbrella concept to serve a wide range of political goals (cf. Hjerpe and Linner 2009, 243), for others like Sneddon (2000, 525) the “advantage of ‘sustainability’ lies in how researchers invoking it must reference it against specific geographic, temporal and socioecological contexts. This context-specificity forces the crucial questions: what exactly is being sustained, at what scale, by and for whom, and using what institutional mechanisms?”

From the viewpoint of sustainable development, energy, its production and consumption have been constructed a twofold role. While energy has been seen as a prerequisite of sustainable development, especially environmental impacts of its production and consumption have been portrayed as serious sustainability concerns (WCED 1987). The contemporary debates over energy and sustainability carry significant resemblance to these articulations familiar from the Brundtland report. Furthermore, the question of sustainability in the context of energy still tends to be approached through the “dominating dyad” (Psaridikou and Szerszynki 2012, 30) of the environment and the economy which to great extent sidelines the diverse manners in which energy, in all its forms and ‘phases’ from pre-production to post-consumption, is intertwined into issues and concerns of social nature.

In the context of fossil fuels, the question of sustainability appears even more problematic; how to sustainably use and produce something that is associated with environmental degradation

and changing climate not to mention the intergenerational concerns (cf. Murphy 2012, 15) linked to exhausting finite energy reserves? Still, an attempt to define fossil fuel sustainability has been made; from the viewpoint of AMAP (2010, chapter 3, 5), sustainability in this context translates into “that no lasting harm is done, for example through environmental degradation” and that the activities “produce lasting benefits, for example through contributing to the cultural, economic, environmental, and social viability of a region or a society”. Thus, what is being ‘sustained’ are not the resources themselves, but the “level of need satisfaction and equal opportunities”; in a similar manner, unsustainable measures might be justified on the path towards sustainable development (Langhelle, Blingheim and Öygaarden 2008, 20).

Grasping the social pillar

Out of the three pillars of the economy, environment and the social included in the mantra-like Brundtlandian definition of sustainable development and sustainability, the social dimension has been broadly recognized as the most elusive. The social of the sustainability debates and agendas has been characterized “fluid” or as “dismissed altogether” (Boström 2012, 1) and as “a conceptual chaos” which “compromises the term’s utility” (Vallance, Perkins and Dixon 2011, 342). While remarks have been made that the social component of sustainability is “more difficult to analyze, comprehend, define, and incorporate into sustainability projects and planning than the other dimensions of sustainability” (Boström 2012, 6), and that due to its vague and elusive nature the whole notion should be abolished altogether (Sneddon 2000, 523), also hopeful views relying on the notion to “continue to develop” (Axelsson et al 2013, 217) have been presented.

Despite the doubts over the usefulness of the concept of (social) sustainability, the last few years have seen an emerging strand of literature aiming to map, systematize and classify the exceptionally broad field of literature. Whereas for some authors the focus has been on mapping the ways in which the social sustainability debate has transformed into the pre-eminent policy concepts like equity, awareness of sustainability, participation and social

cohesion (Murphy 2012), others have focused on conceptualizing the theoretical debate. Vallance, Perkins and Dixon (2011) have categorized the social sustainability literature under three key themes. For the authors, “development social sustainability” refers to development goals of concrete kind; “bridge social sustainability” deals with attitudes, behavior and social promotion of sustainability values; and “maintenance sustainability” focuses on what is wanted to be sustained, by whom and why. Another, partly overlapping categorization distinguishes between “substantive” and “procedural” sustainability in the context of the social dimension. Whereas the substantive element refers to the actual status of or contribution to the social conditions, the procedural component refers to the perceptions of the affected population or community on the status or directions of the ongoing ‘development’ (Del Río and Burguillo 2008, 1328-1329).

Building on the ‘social’

As noted on several occasions in this paper, both the broader umbrella notion of sustainable development as well as its social dimension are contested and politicized concepts. The “vagueness and interpretative flexibility” (Boström 2012, 11) of the notions both allow for and owe to the various contents and rhetorical uses assigned to the concepts often taken as a given in popular and political debates. In terms of the social dimension, much of this in clarity stems from taking for granted the term ‘social’ itself (ibid, 8): it is either not or only vaguely defined or conceptualized in terms of dictionary definitions (cf. e.g. Murphy 2012, 18; Axelsson et al 2013, 217). The mainstream views of the contents of the social – both in the context of the sustainability debate as well as social scientific theory in general – withhold an implicit understanding of the social comprising of and being limited to human interactions and institutions. However, also viewpoints which explicitly aim not to “limit in advance the beings that inhabit our social world” (Latour 2005, 16) have emerged under the umbrella of the sustainability debate. These approaches expanding on the notion of the social are aware of the “often hidden, political work involved in defining what belongs to our common world” (Psaridikou and Szerszynski 2012, 32). In addition, they share an understanding of the “one-

sidedly human view of the social” as both “unrealistic and unfair” Hiedanpää, Jokinen and Jokinen 2012, 47).

While the aforementioned approaches all see the social as a more-than-human phenomenon, there are still considerable differences in terms of what is ‘accepted’ or integrated to the realm of the social. Whereas for some the social world is broadened to include animals, nature and/or biotics in general (cf. Hiedanpää, Jokinen and Jokinen 2012, Youatt 2007), others highlight the inextricably physical and material nature and connections of all lived and experienced social realities (Psaridikou and Szerszynki 2012, Latour 2005). Also for Ingold (1997, 232) there is no “separate domain of society, beyond the limits of nature, within which properly human life is lived” as “the world in which we dwell is inhabited by beings of manifold kinds, not just human beings, and that our ideas about the world – including those that go by the name of science – are fashioned against the background of our active engagement with its diverse human and nonhuman constituents.”

The critique and expansions of the social resonates well with debates over the artificiality of the pillar structure of sustainability (and societies). What is being advocated by the views which understand the social as situated interweaving’s of elements both human and nonhuman alike (cf. Latour 2005, Clarke 2005) is very much concerned with the idea of dismantling the artificial separation of the ontological domains of the social, environmental and economic in the first place. From this viewpoint, what is being promoted is an understanding of “the economic” as embedded in social relations, and “the social” as including relations between humans, biotic and the material world, and dissolving “any hard boundaries between the economic, the environmental, and the social” (Psaridikou and Szerszynski 2012, 39). As stated by Boström (2012, 12), the conceptual and theoretical tools for instigating such a move are readily available; “[e]nvironmental sociology challenges the dualism between society and nature, and economic sociology teaches us that the economy is socially embedded”.

It seems very likely that the “inherent vagueness and interpretative flexibility of both the sustainability concept in general and social sustainability in particular cannot be fully overcome” Boström (2012, 11). However, divergent views on the implications of this statement have been presented. Whereas perspectives advocating the deletion of the whole notion from (academic) vocabulary do exist, so do approaches building on the concept of sustainability from an inherently situated viewpoint. These positions construct social sustainability as “neither an absolute nor a constant” but as “a dynamic concept which will change over time (from year to year/decade to decade) in a place” (Dempsey et al 2011). Indeed, “there is no one social sustainability, but rather many articulations of the concept” (Hiedanpää, Jokinen and Jokinen 2012, 40) and that a mosaic of different definitions and understandings can and often does exist even within the same situational contexts and across temporal and geographical scales (Lehtonen 2004).

Introducing situational analysis: Aims and potentials

This working paper has so far outlined and demarcated the key conceptual debates within and based on which the discussions and definitions of social sustainability will be traced, mapped and analyzed in the context of an empirical case study in later versions of this work. The social in the sustainability debate has become characterized in terms of contextual and situated assemblages and mosaics of human and ‘nonhuman’ elements and entities; furthermore, the possibility of simultaneously coexisting and potentially contradicting views to both the ‘contents’ of the social as well as the status of its sustainability has been acknowledged. However, what remains to be tackled are the questions related to empirical operationalization of the concept; how to allow for the variety of overlapping, coexisting and contradicting definitions and understandings of the social to be identified and brought to the fore from the empirical research materials? In this section, the loose theoretical and methodological framework of situational analysis will be discussed as a potential alternative.

Situational analysis, developed and refined by Adele Clarke (see e.g. Clarke 2003, 2005), can best be described as both building on and moving away from the framework(s) of conventional grounded theory (cf. e.g. Glazer and Strauss 1967, Strauss and Corbin 1997). Rejecting the basic notion of ‘social process’ so central in grounded theory approaches and replacing it with the notion of *situation*, situational analysis aims at grasping the wide range of viewpoints and elements contributing in and to the situation as a whole instead of focusing on the dominant views and hegemonic voices shaping the situation. Through its explicit awareness of both situatedness and diversity, the framework’s theoretical underpinnings make it possible to “to draw together studies of discourse and agency, action and structure, image, text and context, history and the present moment – to analyze complex situations of inquiry broadly conceived” (Clarke 2005, p. xxii). Methodology wise, the framework of situational analysis can be seen to carry significant resemblance especially with loosely guided discourse analysis (cf. e.g. Dryzek 1997) where attention is explicitly paid to the variety of different elements, their interrelations as well as discursive constructions and linguistic devices shaping the energy debates.

Instead of applying a fixed conceptual or theoretical framework guiding the approach to and the analysis of the empirical materials, a research setting making use of situational analysis takes an open-ended approach to the situation at hand. The aim of the research becomes to “not limit in advance the sort of beings populating the social world” (Latour 2005, p. 16) but to “capture and discuss the messy complexities of the situation in their dense relations and permutations” (Clarke 2005, p. xxxv) instead. Making use of different cartographic modes of presentation as visual aids – situational maps mapping the diversity of elements present(ed) in the situation of inquiry, social worlds/arenas maps to visualize the discursive coalitions and shared living worlds, and positional maps to explicate the wide scale of viewpoints at play – situational analysis aims at grasping and understanding the plurality and diversity of actors, discourses and elements acting in and contributing to the formation of the situation as a whole instead of only outlining the dominant voices and elements in a given situation (on maps cf. Clarke 2005, 83-127).

In sum, in future versions of this work the wide scale of different actors, factors and elements – including discursive, human, collective, legislative, political, material, and in-between –

populating the regional energyscape and colouring the energy debates will be captured, mapped and analyzed with an explicit aim on identifying heterogeneity of views on social sustainability. Attention will also be paid to the sites of silence in relation to the social dimension at the face of economic and environmental concerns as well as the diverse manners in which energy as a boundary object (cf. Star and Griesemer 1989, Star 2010) becomes intertwined into socioeconomic concerns and living worlds beyond the sphere of 'high politics'. As the framework also guides to drawing attention to the viewpoints which are not discussed, it also enables paying explicit attention to the manners in which linkages between hydrocarbon development and climate change as well as the social and cultural implications of these mutually reinforcing developments are left unarticulated in the Northern energy debates.

Grounding the case study: Observations on social impacts of northern energy developments

Despite the observed tendency to sideline the social impacts and repercussions of energy developments in political and popular debates, some research on the social dimensions associated with Arctic energy developments has been conducted. Although these contributions have to a great extent not taken part in the conceptual debate over the essence of the social, the case-study based contributions serve to provide examples of the manners in which the social has been approached and operationalized in different empirical energy-related contexts. In sum, the impacts of resource exploitation have been found to manifest themselves in various forms. Even within the Arctic region, oil and gas projects have had greatly varying impacts to different levels in different contexts, as neither the possibilities for participation nor the revenues have been equally dispersed to different levels; however, also encouraging examples of local development and inclusion have been found (AMAP 2010, chapter 3, 63-64).

All in all, oil and gas activities (as well as other grand-scale industrial projects) have been noted to "exert or have the potential to exert a major influence on Arctic social and economic systems" (AMAP 2010, chapter 3, 68); in addition, the impacts of different forms and phases of hydrocarbon resource development and have been noted to vary in scale and character in the

context of different case studies. In relation to different development projects, even similar outcomes have been found to contribute to different impacts; for example, increased income levels and job opportunities can equally well contribute to improving the quality of human life as have a negative effect on the society through rapid changes in the livelihoods, traditions and social patterns (ibid., 38). The relationship between petroleum hydrocarbon resource exploitation and human health is respectively twofold. On one hand, the revenues created by the industry can be partially directed to improving health care systems and facilities; on the other, the health issues linked to industry patterns and pollution can also pose a threat to the human health (ibid., 39).

Based on existing research it has also been noted that positive outcomes in one region or one level do not equal to similar consequences in other sectors or elsewhere. In economic terms, the effects range from macro-level changes such as growth in GDP to micro-level developments such as growth or decline in demand in local markets. Industrial development has its implications also on demography; population increases, decreases and changes in gender and age composition are typical effects of the gas and oil development. Also cultural and educational implications can be traced as in the form of increasing education possibilities or disruptions in traditional livelihoods and cultures. In a similar manner, the human health and society's general well-being can be affected to both directions; in some cases, the increasing income has created better health care and improved quality of life, in others, the rapid changes in ways of living have caused a significant source of personal stress as well as societal dysfunction. (AMAP 2010, chapter 3, 65-66.)

Concluding thoughts: Towards the search of the elusive social

The aim of this paper has been to lay out the theoretical and methodological platforms which will guide and ground the forthcoming empirical work of the case study article as well as to provide a very preliminary view to how the social impacts of energy developments have been understood in the context of empirical case studies. As made evident through the discussions

above, any attempts to establish a universal or generalizable definition of the social either in the context of energy or sustainability will inevitably have to be abandoned. Furthermore, and as stated by Sneddon (2000, 526), “[w]hile the ability of ‘sustainable development’ to serve as instrument for a transformative politics of environment and development is severely curtailed, this path may still be open to context-specific notions of sustainability”. The starting point of the forthcoming empirical analysis will thus be an open-ended investigation of the diverse understandings and articulations and sites of silence in relation to the social dimension of sustainability in a temporally and geographically specific case study context.

Although the empirical analysis in relation to this contribution remains to be conducted, it can be stated that looking at an Arctic energyscape presents a complex and challenging case study. Simultaneously rich in both renewable and non-renewable energy resources and housing several operational and planned megaprojects with substantive implications on livelihoods and living environments, it is also a region where issues related to availability and affordability of energy – energy needs or even energy poverty – are very much on the agenda (AES 2010, 5, 16). The diversity of the energyscape (cf. Lempinen 2013) makes the process of tracing the social in the sustainable even more complex: in addition to the multiple understandings and elusive definitions of both the social and the sustainable, also energy can mean very different in terms of different energy sources, energy projects and from different viewpoints. The aim to map and do justice to the diversity of the social in the sustainable will be both the greatest challenge as well as the biggest contribution of the later versions of this work.

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