

Chapter ?

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“Prudent development:” the (r)evolution of the Arctic energy concern in the 2007–2017 Arctic Energy Summit Reports

Abstract

Introduction: the Arctic as the world’s new energy province?

In popular, political and scholarly debates alike, the Arctic region is seen as about to become the world’s new energy province. A significant share of the world’s unutilized oil and gas resources are estimated to be located in the Arctic (USGS, 2009). The international interest in the region’s energy endowments has heightened in the interplay of various overlapping and interconnected developments. The expected growth of global energy demand (IEA, 2017), dwindling reserves at existing production sites (cf. Owen, Inderwildi and King, 2010; Di Muzio and Salah Ovadia, 2016) and anxiety over the impacts of political events on energy supplies (cf. e.g. Liuhto, 2009; Paillard, 2010) all play an important role, as does climate change. Together with technological developments, the thawing sea ice is expected to make previously inaccessible areas available for energy production and transportation activities (cf. e.g. Loe and Kelman, 2016, p. 25; Kristoferssen, 2014, p. 56).

While this “widely circulated, orthodox version” (Hannigan, 2015, p. 8) of what energy means in the Arctic—or, conversely, what the Arctic means in the context of global energy—has gained a

significant foothold, it has also been brought to question on many fronts. For one, it is debatable whether the estimated reserves actually exist, and, if they do, whether they can be extracted in a manner that is both economically profitable and compatible with international climate commitments and goals (McGlade and Ekins, 2015). Additionally, the warming climate might not only reduce the ice cover but also lead to more extreme and more unpredictable weather conditions, making energy operations in the North much riskier both operationally and financially (Emmerson and Lahn, 2012; Harsem, Eide and Keen, 2011). Woven together, these arguments construct a rather different kind of Arctic region, one that is and will remain “more of an energy backyard than a frontier” (Sidortsov, 2016, p. 2).

While the energy narrative laid out above is based on a simplistic understanding of energy as the exports of oil and gas (cf. Lempinen, 2018), it is also problematic by focusing on the role that the energy resources of the Arctic region have in the global puzzle of energy production and energy security. Meanwhile, only marginal attention is paid to what the energy concern entails *in the context of the Arctic region* or what it means for the residents and communities in the circumpolar North (see also Sidortsov and Sovacool, 2015). These questions are also at the core of discussions related to the social dimension of the Arctic energy concern and the social sustainability of Arctic energy developments. In sustainability-related debates in general, the social dimension has been broadly acknowledged as elusive and nearly impossible to operationalize (Boström, 2012; Murphy, 2012). This remains even more the case in the specific context of the energy, which has predominantly been framed as a techno-econo-scientific concern, with little attention to what its societal dimensions beyond socioeconomic development might entail (see Lempinen, 2017).

To make up for this deficiency, I will focus explicitly on the ways in which the regional energy concern has been conceptualized *from within and for* the Arctic region. Making use of the final reports from the 2007–2017 Arctic Energy Summits, a series of high-level science and policy meetings with an aim to highlight the regional dimensions of Arctic energy, the article scrutinizes the regional energy concern from within the region. It explores how the needs, challenges and special features of the northern energy concern have been conceptualized in the Arctic during the last decade. In addition, the focus of the analysis lies on the ways in which the social dimension of energy in the Arctic region is framed and portrayed and on the ways in which the today and tomorrow of regional energy development is entwined with and constructed as a social sustainability concern.

[The Arctic Energy Summits: an overview](#)

The Arctic Energy Summits—an outgrowth of an International Polar Year 2006–2008 initiative #299 led by the Institute of the North based in Anchorage, Alaska, and later “adopted” by the Arctic Council’s sustainable development working group—are a series of high-level science and policy meetings dealing with issues related to energy in the context of the circumpolar North. The summits draw “several hundred industry officials, scientists, academics, policy makers, energy professionals and community leaders together to collaborate and share leading approaches on Arctic energy issues (Arctic Energy Summit, 2018a). The first summit took place in Anchorage, Alaska, in 2007; the second in Akureyri, Iceland, in 2013; the third in Fairbanks, Alaska, in 2015; and, at the time of writing this article, the most recent one had been organized in Helsinki, Finland, in 2017.

What makes the summits different from the wealth of conferences touching upon or explicitly dealing with Arctic energy is their focus on energy as a *regional* concern as well as the emphasis on the *diversity* of the energy concern within the region. In contrast with the “exploit and export” oriented mainstream approach to energy in the Arctic region, under the summits energy resources are (also) discussed “from a comprehensive and holistic perspective” and as a “fundamental building block for communities and economies” to develop best practices, minimize risks and “foster greater benefits to northern peoples” (Arctic Energy Summit, 2018b). The findings and conclusions of each of the summits have been published in dedicated Final Reports which together cover 10 years of regional debates over energy in the Arctic region. As such, they provide a possibility for exploring the ways in which the regional understanding of energy has changed and evolved during the period of scrutiny which saw both a growing interest in Arctic energy resources and an increasing awareness of the climate impacts of (Arctic) energy development (cf. McGlade and Ekins, 2015). While the reports are at best superficial and simplistic summaries that inevitably flatten the diversity of voices and viewpoints present(ed) at the summits and their sessions, their analysis is nonetheless both important and informative. The final report documents are intended to provide the knowledge base that will support the Arctic Council’s Sustainable Development Working Group in its future work touching upon energy and communities in the circumpolar North.

Methodologically, this chapter scrutinizes the Summits Final Reports through a loose framework of thematic content analysis (cf. e.g. Julien, 2008; Pickering, 2004): the contents and constituents of the regional energy concern as well as their change over the decade between the first and the fourth, most recent summit, are mapped in a data-based, qualitative manner. In the analysis, the focus is on the sections that aim to summarize the contents, key concerns and recommendations from each of the conferences, but the abstracts of individual conference presentations listed at

the end of some reports have been left outside the scope of scrutiny. The article focuses on how Arctic energy is framed and how its intertwinements with societal life and social sustainability in the North are constructed, paying special attention to how the uneasy relationship between sustainable development and nonrenewable resource extraction keeps being constructed, negotiated and justified.

The global significance of Arctic energy wealth vs. regional energy security needs

Despite the regional focus of the Arctic Energy Summits, the final reports begin with and echo the ways in which the Arctic region and its energy reserves are framed in international political and media representations. References to the energy “richness” (AES, 2013, cover) of the region are many. The Arctic is portrayed as “abundant” (AES, 2015, p. 5) in its oil and gas reserves, housing deposits “possibly greater than 25 percent of global reserves” (AES, 2010, p. 26) left for extraction. These estimated massive reserves are framed as making “the High North as a source of new energy for the world” (AES, 2010, p. 6), even to the extent that developing the Arctic as “an energy province is essential to global and energy security” (AES, 2010, p. 22). The region’s energy reserves are allotted a pivotal role in fueling global economic growth (AES, 2013, p. 21) as well as supplying for the consumption of “petroleum products like plastics, chemicals, and a vast array of synthetic materials that originate from petroleum” that contemporary societies are “highly dependent on” (AES, 2017, p. 9).

However, the reports not only deal with energy as an issue of feeding global energy and materials demand and economic growth, but energy is also constructed as an issue of regional energy challenges and needs. Both of these are factors more often than not left out from global framings of energy in the Arctic region; there is therefore “a need to assess local need (access and affordability) versus the global needs” (AES, 2013, p. 29). Indeed, the Energy Summits and

their final reports portray the Arctic region as one of both “great energy wealth” and “great energy poverty” (AES, 2010, p. 13; also AES, 2017, p. 7). Amid the “richness” (AES, 2013, cover), the residents of the vast region are suffering from “crippling energy costs threatening their very existence” (AES, 2010, p. 19) and are paying “some of the highest energy prices in the world” (AES, 2015, p. 5). In the shadows of the world’s new energy province, the regional energy concern revolves around the double challenge of “security and affordability” (AES, 2015, cover): access to affordable (AES, 2010, p. 9) and reliable (AES, 2010, p. 24) energy resources nothing less than “dictates” (AES, 2010, p. 8) the future of rural subsistence lifestyles (AES, 2010, p. 11), “quality of life” (AES, 2010, p. 8) and the very survival (AES, 2010, p. 9) of northern communities. From this perspective, the availability and affordability of energy in the circumpolar North become a pivotal social sustainability concern.

These concerns repeatedly raised throughout the reports are not unfounded, as the cold climate, long distances and heavy industries make the Arctic nations among the highest per capita energy consumers in the world (Rasmussen and Roto, 2011, p. 151). Thus, regional energy development is “of significant interest to the energy and security needs of the Arctic nations” (AES, 2010, p. 8). Solutions for the stabilization of energy costs and measures promoting energy self-sufficiency in northern remote communities thus occupy a key position in discussions of the state and future of energy in the circumpolar North (AES, 2013, p. 18). However, it is not the oil and gas resources of the region but rather the renewable energy reserves that are brought to the fore. Indeed, the Arctic is portrayed as “abundant” not only in its hydrocarbon reserves, but also in its renewable energy endowments ranging from “wind, solar, hydrokinetic and geothermal” (AES, 2015, p. 5). Development and utilization of renewable energy resources are seen to bring “opportunities ... in the form of generating lower costs, while also improving the energy self-sufficiency of communities” (AES, 2013, p. 15). This will both efficiently address the dual

energy security challenge of affordability and availability (for energy security see e.g. Lempinen and Cambou, 2018; Kruyt et al, 2009; Cherp and Jewell, 2014) and contribute to the “potential for more success for communities and countries” in the North (AES, 2017, p. 6). However, the prospects of renewable energy deployment in the region are hampered by lack of knowledge, as the decades of political, economic and scholarly attention on the nonrenewable resources of the region have led to a situation where there “hasn’t been enough effort to examine renewable and alternative energy” (AES, 2013, p. 29). The reports’ references to the dire need to map the renewable energy potential of the region are, however, making an impact. The region’s renewable energy potentials are in the process of being mapped under the umbrella of the Arctic Renewable Energy Atlas (AREA, 2018), a project endorsed by the Arctic Council’s Sustainable Development Working Group.

Alongside renewable energy sources, new and emerging energy sources and technologies are also reserved a crucial role in responding to the region’s energy needs. Technological development is seen as a way of lowering the costs of electricity, heating and transportation (AES, 2010, p. 17) as well as of improving the reliability of energy supply. Diversification of power generation systems (AES, 2015, p. 5, 7), improving grid access (AES, 2013, p. 5; AES, 2016, p. 7), retrofitting existing diesel-fueled energy systems (AES, 2010, p. 11; AES, 2017, p. 3) and developing technologies and incentives for energy efficiency and saving (e.g. AES, 2010, p. 11; AES, 2013, p. 21; AES, 2015, p. 6; AES, 2017, p. 10) all contribute to improved energy security and “economic opportunity” (AES, 2010, p. 15). In addition, technological advancements are expected to bring completely new energy sources to the local Arctic energy mixes: different forms of “emerging energy technology” (AES, 2013, p. 10) ranging from hydrogen to tidal and ocean heat utilization and even to floating nuclear power plants (AES, 2013, p. 9–10, 15) are being experimented with. In sum, such “a wide array of energy

production, storage, and transfer technology is under development” (AES, 2015, p. 5) that “[t]echnology in general is not the problem. Technical solutions exist for each challenge area” (AES, 2010, p. 10). The problems of regional energy poverty and energy security could already be solved.

Fueling development

While catering for regional energy needs constitutes a major component of the Arctic Energy Summits’ concerns that deal with the societal aspects of (energy) sustainability, Arctic energy as it is portrayed in the reports cannot be reduced to an issue of improving energy security in the circumpolar North. It is also the instrumental role that energy development is expected to have in fueling “local and regional development” (AES, 2013, p. 25) and “sustainable development” (AES, 2015, p. 5) that receives a bulk of attention in the reports. Indeed, energy resources and their secured availability are not only a “fundamental component of sustainable development” and “human development” (AES, 2015, p. 5; AES, 2013, p. 3) and a “fundamental building block for communities” (AES, 2015, p.3) but also vital for regional economic activity and “the economic development needed to retain a strong and vibrant population” (AES, 2013, p. 6). In particular, extractive energy development is framed in terms of the “large economic opportunities” it can bring (AES, 2013, p. 21) and as vital in “the creation of wealth for governments, communities and the private sector” (AES, 2015, p. 5), as it contributes to “economic and community prosperity” (AES, 2013, p. 4), “produces revenue at all three levels of government, as well as important jobs for citizens” (AES, 2013, p. 22). These remarks highlight the second dimension through which Arctic energy becomes a (social) sustainability concern in that the revenues derived from energy-related activities are reserved an instrumental role in fueling and supporting overall regional development.

Indeed, “responsible development and utilization of Arctic energy resources” are seen to “have great potential to spur community and economic resilience” (AES, 2013, p. 3). However, alongside the great economic opportunities and bright development prospects that making use of regional hydrocarbon reserves is expected to bring, the problems and challenges associated with the development of Arctic energy are also discussed at great length. As such, regional energy development cannot be framed solely as an opportunity and a strategy for regional sustainable development. It is also a sustainability challenge whose solving the reports address in great detail. So, the final reports do not as much deal with the question *of whether* to go forward with developing the Arctic as the world’s new energy province as they engage in discussions on and criteria for *how* this development should be conducted. In fact, it is seen as “*necessary to depoliticize the question of whether the development of energy resources in the Arctic can be done in a sustainable and responsible way*” (AES, 2013, p. 8; italics mine). While “there will always be an element of risk in resource development” (AES, 2013, p. 8), the “enormous positive externalities” (AES, 2013, p. 8) that regional energy development is expected to bring justifies taking these environmental and societal risks as long as they are managed and mitigated according to best practices and the most stringent of standards possible (see AES, 2013, pp. 14–15; AES, 2015, pp. 10–11).

Descriptions and definitions of how to correctly implement energy development in the Arctic thus fill the pages of the Final Reports: according to them, Arctic energy projects “should seriously consider environmental impacts and should adopt current best practices to minimize harm while also taking into account regional, national and global energy needs” (AES, 2010, p. 16); be “balanced with protection of the environment and respect for traditional ways of living” (AES, 2015, p. 5; AES, 2013, p. 3); balance “risk mitigation, cultural integrity, and economic opportunity” (AES, 2015, p. 5; also AES, 2013, p. 3); and address the “three key topics” of the

“economics, environment and impact on the people of the North” (AES, 2010, p. 16). Through the repeated references to the separate dimensions of the environment, the economy and the social dimension in the North, the reports echo and reinforce the definitions of sustainability and sustainability articulated in the Brundtland Commission’s report (see WCED, 1987). However, in addition to and instead of sustainability (AES, 2010, p. 9, 17; AES, 2017, p. 7), the requirements of Arctic energy developments are framed through terms such as “responsibility” and developing “resources *prudently*” (AES, 2015, p. 5; AES, 2013, p. 3; italics mine).

According to the 2015 Summit’s Final Report, this new term “encompasses a holistic goal including economic, environmental and social development” (AES, 2015, p. 12). While the contents of this concept are far from novel—being basically identical to those familiar from the sustainability debates—resorting to the term “prudent” instead of “sustainable” avoids much of the critical discussion that revolves around the idea of sustainably developing (with) nonrenewable resource extraction and making use of finite resources to create long-lasting benefits and wealth (see Lempinen, 2018).

In the reports’ definitions of “prudent” development, attention is devoted both to the “extremely sensitive” Arctic environment (e.g. AES, 2010, p. 8; also AES, 2013, p. 4; AES, 2015, p. 5) and the “needs of local peoples, communities and economies” (AES, 2015, p. 6). Out of these, especially the latter deserves closer scrutiny, partly because of the ways in which the elusive social dimension of sustainability has in general been sidelined from sustainability-related debates equally in the context of energy and beyond (cf. Lempinen, 2018), and partly owing to the ways in which the social or societal dimension is framed in the context of the Arctic Energy Summits and their Final Reports. Historically, the impacts of energy-related developments, whether positive or negative, “have historically been unevenly distributed” (AES, 2010, p. 23), and it has been questioned whether “local communities receive enough benefits to offset

downstream environmental and social costs” (AES, 2015, p. 11). Against this background, in their “regional approach to energy” (AES, 2015, p. 5) the reports emphasize the benefits and the “immediate, local benefit” (AES, 2015, p. 6) experienced by “the People of the North” (AES, 2013, p. 11), “all northern residents (AES, 2015, p. 5) and “specifically those indigenous people living a subsistence lifestyle in remote communities” (AES, 2010, p. 23) and “traditional or subsistence-based economies” (AES, 2015, p. 6).

In this, the Summits on the one hand take a regionalized approach to the social dimension, paying only marginal attention to “global implications of activity in the region” (AES, 2015, p. 6). On the other, they adopt a strongly developmental approach to what social sustainability in the context of Arctic energy entails, focusing on the concrete benefits gained by northern communities as a direct consequence of oil and gas development (see Vallance, Perkins and Dixon, 2011). However, the social dimension is not wholly reduced to developmental terms: issues related to local and indigenous participation and consultation (e.g. AES, 2013, p. 4; AES, 2013, p. 13; AES, 2015, p. 7; AES, 2017, p. 7) and integration of traditional knowledge (e.g. AES, 2010, p. 23; AES, 2013, p. 17; AES, 2015, p. 11; AES, 2017, p. 8) into energy-related decision-making also feature prominently when the social requirements of energy developments are discussed. The reports frame “local communities and indigenous peoples as key stakeholders, rights-holders and energy partners” (AES, 2017, p. 7), and for this reason “the utilization of Arctic resources will not occur without coming into conflict and subsequent dialogue with *the indigenous people who call the Arctic home*” (AES, 2013, p. 4; italics mine). It is “important that local peoples are at the table and not represented or misrepresented by outside interests (AES, 2017, p. 7) and that projects “move forward very carefully and collaboratively” (AES, 2010, p. 24). The benefits of this include “improved project planning and design, better decision making,

and ensuring more equitable benefits to community and Indigenous stakeholders” (AES, 2017, p. 7).

In emphasizing consultation, communication and participation, the Summits’ approach to what socially sustainable Arctic energy development entails also borrows from procedural understandings of sustainability. From this perspective, both the concrete outcomes of “development” and the ways in which this development is experienced by those affected need to be taken into account and addressed (see Del Río and Burguillo, 2008; Vanclay, 2002; 2003). What must be noted, however, is that the participatory aspects of Arctic energy development are also framed instrumentally. Informing and engaging the residents of the Arctic region “have a role in strengthening public confidence as well as spreading awareness of change and activity increases” (AES 2013, p. 4): “stakeholder engagement” (AES, 2013, p. 12) is seen as a means to “ensure local support for Arctic energy projects” (AES, 2010, p. 24) and to “promote the public’s ownership in the outcome” (AES, 2013, p. 17) for “maintaining public confidence” (AES, 2013, p. 5). As such, engagement of and collaboration with local residents is not (solely?) a value in its own right. Developers “utilize emotion, traditional values, scientific evidence, lessons learned and lessons yet to be learned, to build relationships” (AES, 2017, p. 8) to maximize the support from local communities and, through this, to improve the conditions of their own energy development projects. All in all, the discussion on engagement takes place against an uneasy backdrop. While the most recent report explicitly states that “engagement at the local level must include the option to say ‘yes or no’ to development” (AES, 2017, p. 7), the “unequal relationship between local community and industry” is also an acknowledged fact: “a small community will rarely have the financial resources and capacity of resource development groups” (AES, 2013, p. 13).

The elephant in the living room? Climate change and Arctic hydrocarbon development

From the perspective of the social dimension in the North, the Arctic Energy Summits and their final reports revolve around two key concerns. On the one hand, the discussion focuses on aspects of energy availability and affordability, on eliminating Arctic energy poverty and catering for regional energy needs predominantly through renewable energy resources and technological development. On the other hand, energy and the social dimension in the Arctic region converge in the context of extracting and exporting fossil fuels to create wealth and well-being for the socioeconomically challenged region. Oil and gas developments are framed as vital in terms of sustainable and long-lasting development of Arctic societies, but what these interpretations and expectations do not account for are the climate impacts of Arctic oil and gas developments. In other scientific assessments and reports produced under the auspices of the Arctic Council, climate change has repeatedly and consistently been pointed out as one of the direst challenges (already) facing Arctic societies and communities (see AHDR, 2015; ARR, 2016). At the same time, it is well established that the energy sector is responsible for around two thirds of the annual global greenhouse gas emissions (IEA, 2015, p. 11); furthermore, the year 2017 saw record-high carbon dioxide emissions both from the energy sector and overall (IEA, 2018, p. 3).

Against this background, the implications of climate change on the prospects of Arctic energy development appear challenging from at least two perspectives. Adding even a “modest Arctic energy boom” (Forbis and Hayhoe, 2018, p. 2) to the global emissions balance would send the world far beyond emission levels deemed acceptable or safe under the two-degree global warming target set in the Paris Agreement (UNFCCC, 2016). Such an increase in emissions would only accelerate the impacts of climate change already felt in the Arctic region. Relying on

fossil fuels as a developmental strategy when global emissions will need to be limited is risky also in the sense that the future demand of oil and gas will most likely not be aimed at the Arctic reserves that have been estimated as notoriously risky and expensive to utilize (Emmerson and Lahn, 2012). Staying within the two-degree global warming target has been calculated to mean utilizing only a fraction of the currently known resources that are located elsewhere in the world and leaving practically all capital-intensive Arctic hydrocarbon reserves unutilized (see McGlade and Ekins, 2015). Indeed, in the context of fossil fuel extraction the activity and their revenues do not necessarily—or even likely—last to the point when the existing reserves have been fully utilized. Instead, their utilization ceases at the point when their extraction is no longer economically profitable, politically supported or societally accepted (Freudenburg 1992, p. 324; Mitchell et al, 2001).

Despite their lasting focus on hydrocarbon-based regional development, the summits' final reports and proceedings also echo the issue of climate change. This is reflected in the remarks referring to the need to curb the climate gas emissions of Arctic oil and gas activities. Repeated references are made to technologies and policies encouraging carbon capture and storage in energy production (AES, 2010, p. 11, 15, 17; AES, 2017, p. 10) and, more recently, also to carbon pricing and emission trading schemes (AES 2017, p. 10). What is of course noteworthy in these references is their focus on upstream emissions: all in all, minimal attention is paid to what happens when the resources produced in the Arctic—even with zero greenhouse gas emissions—are consumed elsewhere in the world. The challenges posed by climate change are also pondered in the context of the impacts that the changing climate will have on Arctic energy activities themselves. While “climate change and its impact on the Arctic are well documented, how this will play out in the development of energy projects is less clear” (AES, 2010, p. 16) as are the impacts of climate change on Arctic (energy) infrastructure (AES, 2010, p. 20). The need to

“integrate climate change into existing management” (AES, 2015, p. 6) is acknowledged, although the practical implications of this need are not addressed in any concrete manner.

What must be noted is that while the Summits’ foci on regional energy needs and criteria for sustainable Arctic energy development have remained somewhat consistent and unchanged during the decade and the four summits, it is in the reports’ relationship with energy production and climate change that we can see a dramatic discursive change. Where the first summit report still refers to the “need to increase, not curtail fossil fuel production” as a bridge to future’s alternative technologies (AES, 2010, p. 15) and to “a paradigm shift that will allow for the world to view coal as a transformational fuel and a transitional hydrocarbon resource, rather than a “dirty” combustion fuel” (AES 2010, p. 11), the 2017 summit—arranged after the Paris Agreement (see AES, 2017, p. 5)—describes climate change as “a *new* framework” (AES, 2017, p. 5; italics mine) for addressing Arctic energy issues and the future prospects of Arctic oil and gas development as “clearly a flashpoint for debate” (AES 2017, p. 5). The 2017 report refers to “commitments made in the Paris Agreement” (AES, 2017, p. 5), an ongoing energy transition toward renewables and alternative energy sources (AES, 2017, p. 9, 11) and to a “low-carbon future” (AES, 2017, p. 9) and “carbon-neutral” (AES, 2017, p. 11) future. These new emphases are clearly consistent with the need to increase the affordability and availability of energy in the region through renewable energy and new technologies, but what remains less clear is how they will play out in the context of filling the socio-economic void left by reducing and potentially ceasing Arctic oil and gas extraction activities.

Concluding thoughts

This article has closely read the final reports of a decade of Arctic Energy Summits, a series of high-level science and policy meetings dealing with issues related to energy in the context of the circumpolar North, with an aim to investigate how the Arctic energy concern and its social sustainability dimension have been conceptualized from *within* the region. This focus has been motivated by at least two reasons. On the one hand, the social dimension (of sustainability) as it pertains to energy has been widely acknowledged as undertheorized and understudied; on the other hand, the regional aspects and importance of energy in the Arctic region have consistently become overshadowed by the international interest in the role that the region's oil and gas reserves are expected to have in fueling the world's increasing energy demand.

While the Energy Summits and their final reports acknowledge and underline the importance of the Arctic region for the world's future energy supply and construct the region predominantly in terms of its massive energy wealth, the implications of this wealth are constructed in a different light. Arctic energy reserves—especially the region's massive energy resource endowments—are reserved a vital role in supplying for the demand within the region whose residents continue to “face affordability, reliability and security concerns” (AES, 2017, p. 5). And yet, the oil and gas resources of the region are or at least have been reserved a crucial role in creating revenues and wealth that will have an instrumental role in the future development of the region and its communities and societies. While the concerns over regional energy security and the idea of using energy to fuel overall (sustainable?) development have consistently been foregrounded by the summits in the last ten years, the increasing awareness and worry over climate change and its impacts have contributed to a gradual but remarkable shift in the reports' relationship to Arctic hydrocarbon development. Previously advocated rather unreservedly, provided that carbon dioxide emissions arising from production processes are minimized (AES, 2010), fossil fuel extraction is in the most recent report described in terms of a “flashpoint for debate” (AES 2017,

p. 5) and the overall discussions “regarding the future of the Arctic” are framed as “dominated” by discussions on “innovation and renewable energy” (AES, 2017, p. 9).

While this shift from fossil fuels to renewables and to a “green energy transition” (AES, 2017, p. 5) has most likely taken place at the level of discourse rather than actual energy policy and practice, it is nonetheless notable. What is equally notable is the way in which the Arctic continues to be framed as the “new energy province” (AES, 2010) for the world, but only in a different context than before. The first summit report emphasized the impact that the Arctic oil and gas resources have for “how the world defines energy security” (AES, 2010, p. 24), but during the decade that the summits have been arranged the importance of Arctic energy for the world has increasingly become constructed in terms of the “potential” that the region has for being “a model of clean energy development and use” (AES, 2013, p. 4). This shift is at its clearest in the most recent, the 2017 summit report, which outlines a future where “Arctic energy expertise can be exported to help other regions of the world adapt or transition to cleaner energy” (AES, 2017, p. 5) and where the “Arctic is increasingly defined by its renewable energy and energy efficiency leadership” (AES, 2017, p. 5). Thus, despite the change in the content of what “energy” in the Arctic will or is expected to entail, what has not changed is the envisioned significance and exceptionally weighty role that continues to be reserved for Arctic energy in solving both the energy challenges of the world and the sustainable development challenges of the Arctic region.

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