

Energy and minerals in Greenland

**Governance, corporate responsibility
and social resilience**

Emma Wilson



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1 See www.twcentral.co.uk

2 More of his Greenland photographs can be found here: www.flickr.com/photos/timw50014/sets/72157631666299204

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1

Introduction

Greenland is perceived globally as an ice-bound wilderness where climate change is escalating, opening up new frontiers for – often controversial – energy and minerals development. We hear much less about social change in Greenland and the complexity of decisions that the citizens of this sparsely populated country have to make about their future development. The country is facing a period of social change and instability, not only due to climate change but also because of its aspirations towards greater economic and political independence from Denmark.

Greenland's economic model is based on very high levels of employment in the public sector and dependency on two main sources of income – the fishing industry and a block grant of subsidies provided every year from Denmark. With the granting of self-government in 2009, Greenland now needs to generate sufficient revenues to 'buy' itself full independence from Denmark. The Greenlandic government aims to do this by developing the country's valuable mineral, oil and hydropower resources. Can Greenland do this without succumbing to the so-called 'resource curse', which has seen other mineral-rich countries fail to generate prosperity, security and social well-being from their resource wealth? Indeed, can the country generate a reliable income at all from its natural resources, given the volatility of commodity markets? The drop in oil and mineral prices in 2014 has had a considerable impact on Greenland's prospects.

1.1 Purpose of the report

In September and October 2012 I visited Greenland thanks to a one-month 'sabbatical' granted by IIED. This report is an extended trip report from my 'sabbatical', with analysis of material gathered following my return. There are many bigger experts than me on Greenlandic issues, but IIED's regular stakeholders rarely get the opportunity to read about the Arctic. While my own personal experience includes Arctic and Northern research (mostly in northern and far-eastern Russia), this is not a key focus region for IIED.

I felt it was important to produce an IIED publication exploring some of the key issues for new audiences and applying some of IIED's global experience to Greenland's situation. Despite obvious differences in circumstance and geography, Greenland is facing similar challenges to the new hydrocarbon provinces of East Africa, for instance, which also need to be thinking carefully about the path of their future development before launching into full-scale exploitation. Similarly IIED's international experience on extractive industries from more mature oil and mineral-producing countries, from Nigeria to Kazakhstan, is valid to share in this context.

The report is based on interviews, public meetings and informal meetings (including with students, shopkeepers, waiters and dog-walkers) during my 'sabbatical' in Greenland, along with analyses of written materials and a follow-up post-visit with a range of different stakeholders. In total I engaged with 30 people who are recorded at the end of this report as

Figure 1. Map of Greenland



Source: Map of Greenland ©iStock.com

'personal communications', which were formal interviews, informal discussions and/or email correspondence. Not all my meetings were recorded under 'personal communications' as they are not referred to in this report.

It was difficult to find time to complete the report following my return, due to other work priorities. Moreover, a series of convulsive political events in Greenland, closely related to the energy and extractive industries sectors, have made it difficult to set a cut-off point for the story. So I have continued to work on the report and periodically included updates on the rapidly changing situation in the country.

1.2 Overview of field work

In 2012 I first visited Kulusuk (population 273) and Tasiilaq (population 2,062) (Statistics Greenland, undated) in Eastern Greenland. Here I stayed in local hotels and hostels, explored the area and met with some local people who were prepared to spend time talking about their lives and their perspectives on Greenland's future. I spoke in English, as I know neither Greenlandic nor Danish, and was surprised how many people even in small villages were able to speak English.

After flying across the ice cap to the western side of the island, I spent two weeks in Greenland's capital Nuuk (population 16,818) (Statistics Greenland, 2014). Here I met with key figures in government, academia and civil society, and gave a presentation on international experience of extractive industries and sustainability at the University of Greenland. I attended a public meeting related to a proposed iron ore development close to Nuuk and discussed reactions to the project and the consultation process with local participants. I also experienced some of the life of the capital, including two Greenlandic rock concerts, shopping and coffee shops, and a boat trip up the Nuuk Fjord. Finally I took an overnight boat to Maniitsoq in southern Greenland (population

2,530 as of 2014) (Statistics Greenland, 2014), where I met with the local administration to discuss a planned aluminium smelter project close to their settlement – a former centre of the fish-processing industry, but now with few economic prospects apart from the proposed smelter and a potential mine project.

I was impressed by the efforts of civil society to promote greater understanding of the impacts of large-scale resource projects through research, information sharing and promoting better public consultation. This includes work by researchers based at the University of Greenland (*Ilisimatusarfik*); NGOs such as Transparency International Greenland, Avataq and Friends of the Nuuk Fjord; and the local branch of the Inuit Circumpolar Council (ICC); as well as international partners such as WWF and Greenpeace. I was also struck by Greenlandic companies' interest in corporate social responsibility (CSR), not only because it is required by international projects, but because there is a strong belief that business ought to serve and support society. The 'CSR Greenland' network has grown rapidly since being set up in 2010; the Employers' Association of Greenland has been active in promoting good practice, for example in stakeholder engagement. International companies working in Greenland, including industry service companies, are also supporting enterprise development and capacity building, and setting good-practice standards. The government of Greenland (*Naalakkersuisut*) faces capacity challenges in tackling extractive industry-related issues, but evidently wants to engage more meaningfully with the public and the media. People working in local government, such as the public servants I met in Maniitsoq, seek to improve local economic prospects and are learning from international experience to prepare themselves to manage new and difficult projects.

1.3 Summary of the content

Section 2 provides an overview of evolving aspects of Greenlandic society that are relevant to a discussion of the new era of energy and minerals development in the country. The section starts with a discussion of resource-related politics, a particularly pertinent topic for the turbulent period 2012–2015. It considers Greenland's aspirations towards greater independence and the challenges of the current economic model, as well as local adaptation and resilience in the face of social transformation and climate change. The section also considers the growth of civil society activism and corporate responsibility in response to plans for increased resource development.

Section 3 offers a snapshot of developments in Greenland's energy and minerals sectors, including the Aappaluttoq ruby mine in the southwest (and implications for artisanal miners); the large-scale Isua iron ore project close to Greenland's capital, Nuuk; Alcoa's proposed aluminium smelter in Maniitsoq in the southwest; and offshore oil exploration in Baffin Bay off the western coast. Section 4 focuses on how key social issues are being (or could be) addressed in Greenland, with reference to international standards and experience. Section 5 summarises the key recommendations from the study, ending with a series of questions which remain open and may provide a starting point for further research and debate.

2

The changing face of Greenland

Greenland is facing another period of rapid social transformation, partly due to climate change, partly due to the need to bring in funds to support greater economic and political independence from Denmark. The Greenlandic government believes the best way to secure these funds is to exploit the country's mineral and energy resources.

Greenland or *Kalaallit Nunaat* ('the country of the Greenlanders') is an autonomous country within the Kingdom of Denmark. It is the size of Western Europe, with a population of less than 56,000 people, living in 72 communities

mostly along the coastal edges. Greenland's economic model is based on very high levels of employment in the public sector and dependency on two main sources of income – the fishing industry and a block grant of subsidies provided every year from Denmark: in 2013 this totalled DKK 3,624 million (or £386 million) (Statistics Greenland, 2014: 8).

With the granting of self-government in 2009, Greenland now needs to generate sufficient revenues to 'buy' itself greater independence from Denmark. The government of Greenland sees exploiting the country's valuable mineral, oil



Many people perceive Greenland as a land of icebergs and glaciers. Much less is known about Greenlandic society.
Photo: Emma Wilson

Box 1. Greenland facts and figures

Area:	2,166,086 km ² (world's largest island) (ice free 410,449 km ²)
Population:	55,984 (Jan 2015)
Population of capital Nuuk:	16,818 (Jan 2014)
Life expectancy:	Female: 73.5 years; Male: 68.7 years (2012)
Languages:	Greenlandic (<i>Kalaallisut</i>), Danish
Government:	Parliamentary democracy within a constitutional monarchy; self-governing overseas administrative division of Denmark since 1979; head of government Prime Minister Kim Kielsen (Siumut party); head of state HMS Queen Margrethe II of Denmark
GDP:	DKK 11.5 billion (£1.22 billion); real growth rate 0.9 per cent (2011–2)
Inflation rate (consumer prices):	1.8 per cent (January 2012 – January 2013)
Labour force:	26,994 permanent residents, aged 18–64 (monthly average 2012)
Unemployment rate:	9.8 per cent on average per month (aged 18–64) (2012)
Budget:	DKK 10.1 billion income (£1.07 billion); DKK 9.7 billion expenditure (£1 billion), including capital expenditure of DKK 0.7 billion (2012)
Industries:	Fish processing (mainly prawns and Greenland halibut), handicrafts, hides and skins, small shipyards, mining
Natural resources:	Zinc, lead, iron ore, coal, molybdenum, gold, platinum, uranium, hydropower, copper, nickel, rare earth metals, gemstones, fish, seals, whales, oil and gas under exploration
Agriculture:	Forage crops, greenhouse vegetables, sheep, cows, reindeer, fish
Exports:	DKK 2,761.1 million (£294 million) (2012) (provisions and livestock); export partners: Denmark and Iceland
Imports:	DKK 4,955.3 million (£528 million) (2012) (machinery and transport equipment, manufactured goods, provisions and livestock, petroleum products; import partners: EU – primarily Denmark and Sweden
Block grant:	DKK 3,624 million (£386 million) in subsidies from Denmark (2013)
Electricity:	Production 376 GWh (2009); consumption 314 GWh (2012)
CO₂ emissions (energy):	577,000 tonnes of CO ₂ equivalent (2012)
Telephones:	Landlines in use: 16,296; mobile phones: 59,897 (2013)
Internet connections:	11,441 (2013) (internet suppliers=1)
Television stations:	Kalaallit Nunaata Radioa (national television); some local TV stations
Newspapers:	Atuagagdliutit/Grønlandsposten (AG) and Sermitsiaq
Transport infrastructure:	Ports in 16 towns; harbours in 60 settlements; 14 airports, 7 heliports and 37 helistops; no railways

Source: Statistics Greenland (2014); Statistics Greenland (2015)

and hydropower resources as the obvious route to greater independence. The Danish Arctic Strategy 2011–2020 emphasises the need to exploit Arctic mineral resources safely, with high returns for society, while also promoting health and social sustainability (Kingdom of Denmark, 2011). Yet energy and mining issues are considered to have contributed to the disruption in Greenlandic politics over the past two years, with two general elections called in 2013 and 2014 (McGwin, 2014b).

2.1 Resource politics

Greenland has been going through a period of considerable instability in its government, with two general elections held in two years while I was writing this report, the latest being in November 2014. In March 2013, the people of Greenland had elected their first female Prime Minister. The former Prime Minister, Kuupik Kleist, of the socialist Inuit Ataqatigiit (IA) party, was ousted by Aleqa Hammond of the centrist social democratic Siumut party (the party which was in power prior to Kleist's term). One reported reason for this shift in voter support was public concern that Kleist had been too soft in his approach to negotiating the terms of mineral development in the country, as well as failing to ensure adequate citizen participation in decision-making around resource extraction and exploration (Hubbard, 2013). Another factor may have been the introduction of a new law apparently allowing foreign companies to decide whether to hire in foreign labourers at below the minimum wage for major industrial projects (Jichang, 2013). Hammond was keen to promote extractive industry development, but won the election on a platform promising heavier taxation of the extractive industries, stronger regulation and environmental protection, and a commitment to involve citizens more meaningfully in decision making (Scrutton, 2013; Hubbard, 2013).

In October 2013, the Greenlandic parliament (*Inatsisartut*) lifted a ban on uranium mining to allow for the extraction of rare earth metals which are often found trapped within uranium reserves, a move that has attracted controversy and public protest. In the same month, Greenland also finally awarded a licence to UK-based London Mining to build a vast open-cast iron ore mine 90 miles from the capital Nuuk – another controversial project which many accuse of failing to consult meaningfully with citizens (see Section 3.1). Along with accusations of misuse of government funds, the uranium decision reportedly contributed to Hammond's own downfall in September 2014, and was certainly a key focus for political opposition (Olsvig, 2013).

A general election held in November 2014 resulted in Siumut, with a new leader, Kim Kielsen, and Inuit Ataqatigiit, led by Sara Olsvig, both winning 11 seats in the 31-seat parliament.³ Although Olsvig won more personal votes than Kielsen, Siumut won the election overall (albeit by a narrow margin of 326 votes) with promises of welfare reform, privatisation and lower corporate taxes, along with economic diversification through support for fishing and tourism (Danielsen, 2014; Crouch, 2014). In December 2014, Kielsen established a new coalition government with the Democrats and the centre-right liberal party Atassut, which together amount to a total of 17 seats and 52.6 per cent of the votes (Danielsen, 2014). Siumut has expressed its continued support for the extractive industries. Kielsen is quoted as stating, on the eve of the election: 'Investors can rely on our commitment to resource extraction... Siumut wants a secure, stable, long-term investment environment' (ibid).

³ For a breakdown of the election results, see www.electionguide.org/elections/id/2825/

Box 2. Debating a future Greenland

There has been a lot of public reflection on what Greenland will look like in the future and this is a great positive for the country. One example was the preparation for Greenland's contribution to the architecture exhibition, the 13th International Architecture Exhibition, Venice Biennale (29th August to 25th November 2012).⁴ A public survey was set up by Professor Minik Rosing of the University of Copenhagen and his team. The survey, entitled Possible Greenland, encouraging comments on a proposed vision for a sustainable, thriving future society, based on mineral and energy development, tourism, agriculture, fishing and hunting, housing and transportation. The vision considered the implications of increased urbanisation and how to preserve life in the '*bygd*' or small settlement, while also ensuring valuable resources are not wasted in upholding a vast public support system. The survey was made up of the following 10 key questions (Sermitsiaq, 2012a⁵; Conditions, 2012):

- 1. A new world order in the Arctic – is Greenland ready?** How to build the necessary competences for Greenlanders to sit at the head of the table themselves?
- 2. The '*bygd*' – an expensive cultural artefact or a future possibility?** Villages are expensive to run but have immense social and cultural value. How to maintain this?
- 3. Close relations – nepotism or a network society?** Will future democracy grow out of Greenland's tradition of close social relations combined with modern network technology?
- 4. Will future Greenlanders eat rice and work hard?** Should guest workers such as the Chinese be encouraged to integrate and contribute to society, or just leave quickly?
- 5. Education – not just a right, but a civic duty?** Most Greenlanders are too poorly educated to compete for jobs in business or public administration. Many go abroad to study, but then stay there, while key jobs are taken by Danes and other foreigners.
- 6. What's the catch?** How to develop Greenland's fisheries? Currently this is the main source of resource-based income, but a volatile industry.
- 7. From hunters to farmers?** Agriculture is not yet self-sufficient, but is creating new pride and identity among Greenlanders. How to support its ongoing development?
- 8. Can melting ice satisfy the world's thirst for energy?** Should Greenland say 'no' to diesel power plants (cheaper for industry in the short term) and focus on its vast hydropower resources?
- 9. Is tourism just about the money?** What does Greenland want from tourism? It can offer a chance to maintain traditions and develop a new self-image.
- 10. Does oil kill initiative?** Will easy oil money reinforce the dependence instilled through the Danish block subsidy, blocking enterprising spirit and innovation capacity?

4 The Danish Minister for Culture commissioned Professor Minik Rosing, along with NORD Architects Copenhagen, to lead a team of Greenlandic and Danish architects and engineers in preparing the official Danish contribution to the Biennale. 'Possible Greenland' is an exhibition, with a detailed book published by Conditions, the Scandinavian magazine on architecture and urbanism (Conditions, 2012). The book highlights some of the key challenges facing Greenland in the future and invites dialogue and debate, at the international level.

5 The questions were accessed in November 2012 but are no longer available online.

2.1.1 International Arctic resource politics

Greenland is also involved in international politics around the Arctic, driven to a degree by expectations of future oil and gas prospects. Conflicting territorial claims have been or are being submitted under the UN Convention on the Law of the Seas (UNCLOS) (Collins *et al.*, 2013). In December 2014 the Danish and Greenlandic governments submitted a territorial claim to the UN Commission on the Limits to the Continental Shelf which incorporates the North Pole itself (Pettersen, 2014a). The claim overlaps with Norway's existing claim and will conflict with a territorial claim being prepared by Russia to submit in March 2015 (Pettersen, 2014b). While this may appear to be cause for alarm, the nations have publicly agreed to settle disputes under UNCLOS and through diplomatic means (Collins *et al.*, 2013).

Non-Arctic states are also increasing their interest in the region. China, Japan, India, South Korea, Singapore and Italy were all granted observer status on the Arctic Council in 2013. Existing observers are France, the Netherlands, the UK, Poland and Germany.⁶ At the 2013 ministerial meeting of the Arctic Council in Kiruna, Sweden, the Arctic Council adopted its second legally binding agreement, relating to oil-spill response in the Arctic (following the agreement on search and rescue, adopted in Greenland in 2011) (Myers, 2013). The European Union has developed its own Arctic strategy and is the largest funder of Arctic research (€20 million/year); it was granted observer status on the Arctic Council in 2013 (Fule, 2013).⁷

2.2 Self-government

Greenland is the first and only autonomous Inuit nation. The example of successful decolonization while maintaining a continued alliance and friendship with the former colonial power Denmark may set standards and serve as inspiration for indigenous peoples worldwide.

*Minik Rosing, Professor in Geology, University of Copenhagen
Conditions (2012: 8–9)*

At the heart of Greenland's debates and decision-making on extractive industry development is the question of Greenlandic independence from Denmark. Greenland currently constitutes part of the Kingdom of Denmark along with the Faroe Islands (Nystø, 2011). Home rule was granted in 1979 and self-government was established in 2009. Greenland is now seeking full independence, but this is dependent on the country being able to replace the annual block subsidy from Denmark, which makes up about one third of the country's annual budget (see below). While Inuit populations in Canada and Alaska typically oppose major energy and mining developments on their lands and coastal waters, Greenlandic Inuit leaders insist that this is the only way for them to secure an economic basis for self-governance. Some Greenlandic hunters also share this pragmatic view (Bjørst, 2012).

Industry analysts believe that only large projects such as the Isua mine project (see below) will ensure independence, and that it will take time to get such projects up and running (Boersma and Foley, 2014). An industry expert I spoke to in Greenland also suggested that the Danish subsidy cannot be reduced to zero by mining alone, and that only oil development can provide sufficient revenues (personal communication).

⁶ For a list of observers see: www.arctic-council.org/index.php/en/about-us/arctic-council/observers

⁷ See also www.arcticinfo.eu/en/march-2014

The oil price collapse and withdrawal of most oil majors from Greenland in 2014, has had a major impact on hopes for independence within the lifetimes of current political leaders (The Economist, 2015). A slump in iron ore prices also led to the collapse of iron ore mining company London Mining, putting the Isua project on hold until January 2015 when it was taken over by General Nice, one of China's largest coal and iron ore companies (Armstrong, 2014; Hornby *et al.*, 2015). All of this illustrates the unpredictability of an independent future that is heavily reliant on the extractive industries and commodity markets.

2.2.1 From first settlement to Danish rule

Greenland has been inhabited by Paleo-Eskimo cultures since around 2500 BC. The Thule people (the direct ancestors of the current indigenous Inuit population) first settled in northern and western Greenland from North America around 1300 AD. Norse settlers from Iceland and Norway arrived in the east around 1000 AD, but these populations later left or died out. After a period of Norwegian colonial rule in the 13th century, Denmark gradually took over, following the arrival of the missionary Hans Egede in present-day Nuuk in 1721 (O'Carroll and Elliot, 2005).

The UN recognised Greenland as a part of the Kingdom of Denmark in 1954. In the 1950s and 1960s, relations between Denmark and Greenland were based on what was known as the G50 plan in the 1950s and the – now infamous – G60 plan in the 1960s. The G60 plan included development of Greenland's fisheries, which created many jobs, but it also involved the rehousing of thousands of Inuit from their villages to apartment blocks in the centre of Nuuk (Lyck, 2012; Moshiri, 2010). Since 1953 and the end of colonial rule, Greenlanders have been seeking independence from Denmark and to recover from the mistakes that have been made to date in efforts to modernise and restructure Greenlandic society (see below).

There was a backlash of anti-Danish feeling in the 1970s and 80s, and many in modern-day Greenlandic society still feel some resentment towards Danish control. The 1970s saw political awareness increasing among the Inuit, and the formation of the left-wing, anti-imperialist Siumut ('Forward') party and the national newspaper Sujumut (Nuttall, 1992). In the 1970s, the first Greenlandic rock band, Sumé ('Where?') reflected society's feelings about Danish imperialism and Greenlanders' yearning for independence. Sumé produced the first rock album in the Greenlandic language in 1973, entitled 'Sumut' ('Where to?'). The cover of the album depicted a 19th century woodcut of an Inuit hunter killing a Danish trader. Their songs, mostly written by Malik Høegh or Per Berthelsen, include lyrics such as 'It's time to live again as Inuit not as westerners'. I saw them live in concert at a rock festival in Nuuk in October 2012, and they still managed to touch the crowds deeply.

I encountered anti-Danish feeling particularly in the smaller settlements, where the dominance of Danes in administrative and law-enforcement roles is resented. One middle-aged man, a former school-teacher whom I met in Maniitsoq told me that he doesn't like the police, because he feels it is a Danish system. His vision of the future is 'No Danes in power and no Danish taught in schools'. In his view, 'Power and money are Danish. Modern Greenland isn't about sharing, or friends or kinship, it's about money.' He continued (note that this was in 2012 when Kuupik Kleist was still in power):

Malik Høegh had the same thoughts as me. That wonderful poetry. But what has happened now? Kuupik Kleist and a coalition of the far right and far left. Høegh wrote about independence, freedom from the Danes, taking control of our own lives. But it wasn't supposed to be like this. What a bitter disappointment!



Graffiti on a wall in Maniitsoq. Many people in modern-day Greenlandic society still resent Danish control, which extends to the police system. Photo: Emma Wilson

2.2.2 Development on Greenland's terms

In 1979, Greenland was granted home rule. In 1985 the country pulled out of the EU, while remaining part of Denmark, following a referendum in 1982 (Statistics Greenland, 2014). The question of independence was brought up at that time, but Greenlandic and Danish politicians agreed that Greenland had insufficient human or resource capacity to support independence (Nystø, 2011). Self-government was established on 21 June 2009, after a referendum in November 2008, which reflected citizens' optimism around the potential revenues from minerals, oil and gas (ibid). The Self-Government Act (2009) gave Greenland full control over its mineral resources, and allowed the government to keep all mining revenues, as long as the equivalent of 50 per cent of government revenue above DKK 75 million (approximately £9 million in 2009) was subtracted from the Danish subsidy (Boersma and Foley, 2014).

Following the 2008 referendum, the chair of the Inuit Circumpolar Council in Greenland, Aqqaluk Lynge, called on local leaders to be realistic about Greenland's potential for supporting independence, noting the need to build economic foundations and reach educational

goals (Nystø, 2011). Many Greenlanders think that even today it is too soon for independence. More than one person I spoke to observed that 'there are too few of us to make independence work'. Yet there is a strong sense that Greenlanders want to be in control of their own future development. For example, in an interview, the CEO of Greenland's state oil company Nunaoil observed: 'We want the development, but we want to do it on our own terms; we need to develop with dignity and integrity' (personal communication) (see also Box 3, Section 3.3). The desire to have control over future development is coupled with anxiety about the speed at which decisions are currently being made (without sufficient public consultation) and the need for Greenland to be well-prepared before launching into full-scale extractive industry development. For example, a middle-aged man that I met walking his dog in Nuuk made a revealing comment: 'In 50–60 years we could do it ourselves instead of the Chinese or whoever. If we are going to pollute, we should be doing it ourselves' (personal communication).

There is concern about the government's lack of experience with the extractive industries and lack of capacity to negotiate on an equal footing with major corporations and investors. The head of the NGO Transparency International Greenland said in an interview (personal communication):

Extractive industry development can be a good thing but we need to do it slowly; it needs to be controlled. We fear the government won't put the right kind of pressure on industry.

Other respondents observed that the lack of capacity also extends to other key areas, including regulations and regulatory agencies, civil society and the media. The former head of Air Greenland observed in a written response to my questions (personal communication):

The biggest challenge for Greenland is the speed of things. We do not have anything in place for a quick development, so we should take our time to do it properly. We need development of infrastructure, people skills, taxation rule, legislation, etc. So this should be done gradually with one or two projects to test things out. There is not enough regulation in place – this is too important to rush through. But we don't have to invent everything ourselves. There are places we can look to for guidance and experience. Not to pursue oil or minerals will mean a total dependency of Denmark and the Danish subsidy. We can't have that if we want to become more self-sufficient as a country.

So the current challenge for Greenland is to balance its desire for full independence from a ruling power that is seen as historically responsible for much of Greenland's social trauma, with the need to avoid rushing into major industrial development unprepared. Such a scenario could result in a different kind of dependency (on the vagaries of commodity markets) along with considerably more trauma for society if the environmental, social and cultural issues associated with major industrial projects are poorly managed. A more measured approach, with full protection of human rights and application of environmental and social safeguards, could allow Greenland to become a democratic and self-sufficient nation, improving its educational and health systems, tackling unemployment and supporting the culture and livelihoods of its rural indigenous populations (Hubbard, 2013).

2.3 The economic model

As noted above, Greenland's income currently comes from two main sources: the fishing industry and the Danish block subsidy. Although modern commercial fishing has only existed for the past 50 years in Greenland, it accounts for 90 per cent of Greenland's export (Sermitsiaq, 2012b). The block subsidy from Denmark totalled DKK 3,624 million or

£386 million in 2014, and accounts for over half of the national budget (Statistics Greenland, 2014; see also Nuttall 2012b; O'Carroll and Elliot, 2005). Maintaining Greenlandic society in its current form is very expensive, with high rates of employment in the public sector and huge infrastructure and transportation challenges associated with serving and maintaining Greenland's network of rural settlements. Moreover, Greenland has an ageing population, which will put increasing strain on the economy in the coming years (Boersma and Foley, 2014).

If Greenland is seeking to start up major energy and minerals projects to become independent of the Danish block grant, it must first of all reassess its current economic model and consider how to diversify its economy, not only by expanding its mineral and energy sectors (see Ramboll, 2014). If the current model is not assessed and reformed before extractive industry revenues start to flow more freely, then there is a risk that Greenland simply lurches from one dependency relationship (with Denmark) to another (with unpredictable commodity markets), mediated by unfamiliar forms of contractual relations and negotiation styles, and new global influences on Greenlandic politics (Nuttall, 2012b).

2.3.1 Trade and economic development

During the colonial period, Denmark controlled travel and trade with Greenland via the Royal Greenland Trading Company or Kongelige Grønlandske Handelskompagni (KGH). Once Greenland was incorporated as a part of Denmark in 1953, the Danish monopoly on trade was lifted, although a failure to secure sufficient external investment meant that KGH began to get directly involved in production as well as trade (Nystø, 2011). In 1986 ownership of KGH was transferred to Greenland Home Rule, and it became known as Greenland Trade or Kalaallit Niuertiat (KNI). Today KNI is Greenland's largest trade and service company, employing more than 1,000 employees across Greenland, with an annual turnover of around DKK 2.5 billion

(£0.26 billion) (KNI, undated). KNI owns five companies, including Pilersuisoq, the retail chain that supplies groceries to rural settlements across Greenland, and Polaroil, which supplies liquid fuels to all parts of the country.



The village shop – Pilersuisoq – in Kulusuk. Many goods and food items in Greenland are now imported. Photo: Tim Wilson

While fishing is not a traditional Inuit activity, the industry has become a major part of the Greenlandic economy, and Greenlanders have adapted themselves to its challenges. The modernisation drives of the 1950s and 1960s involved development of the fishing industry, including cod fishing and shrimp processing, in which many Greenlanders became engaged, often migrating from rural areas to ice-free south-western coastal towns such as Maniitsoq (Nuttall, 1992). This left them vulnerable to fluctuations in fish populations – such as a decline in cod fisheries in the 1990s. However, fishing remains the main export industry for Greenland, though far more people are employed in the public sector than in fishing (see Section 2.3.2).

Greenland depends heavily on imported goods including food. In the 1990s, Nuttall observed how Greenlandic society had been following a typical path of remote colonies, where increased dependence on (imported) store-bought goods equated to increased dependence on the Danes, as 'luxuries became necessities' (Nuttall, 1992:18). Today most manufactured goods

and many food items are imported from abroad. A shopkeeper in Tasiilaq was selling Danish-made cake in her shop. In a conversation over the counter, she explained the challenges of stocking her shop. A ship delivers goods once a month from Denmark, when passage is feasible. The last one of the year comes in November then the next after that is not until June. The town has a huge storage facility by the harbour. In the winter months shops can get stores flown in from Iceland but this is even more expensive. A young hotel waiter in Tasiilaq observed that local people increasingly have a taste for beef and chicken, which can only be imported. He personally does not eat much seal meat, although his family does, and they drink seal oil. Fish and seal meat are seen as 'old fashioned' while 'modern meat' is imported frozen via Pilersuisoq (run by KNI, see above). Yet Pilersuisoq is expensive as it has no competition in many of Greenland's outlying towns and villages; products in Nuuk are much cheaper.

2.3.2 The structure of employment

The population is currently highly dependent on public sector jobs. Statistics Greenland (2014) reports that in 2012 there were 9,804 people employed in 'public administration and service' out of a total of 25,501 people in employment. In comparison, just 3,532 people were employed in 'fishing, hunting and agriculture' and 3,086 people employed in the next largest employment sector, 'wholesale'. Only 143 people were involved in 'mining and quarrying'. According to Statistics Greenland (2014), out of 44,251 people over the age of 15 in 2012, 17,389 were receiving social benefits, including social welfare benefits (8,653), unemployment benefit (3,374), maternity benefit (1,023), early retirement benefit (2,990) and retirement pension (3,943). In total the social benefit system cost Greenland nearly DKK 826 million (or nearly £87 million) in 2012 (ibid).

Encouraging exploitation of Greenland's oil, minerals and hydropower potential is seen as a way to create new jobs. It is not all

about Greenlanders going down mines, but about developing service industries such as transportation, catering and knowledge-based industries. To avoid potential threats of a 'resource curse' the government should also focus on non-extractive sectors. A 2014 report commissioned by Greenpeace analyses various sectors, including energy and minerals, that could contribute to Greenland's future development and employ local people. The others include fisheries, tourism, agriculture, seal products, server cooling (based on hydropower and a cold climate), export of hydropower, and industrial processing (Ramboll, 2014).

Respondents from different sectors that I spoke to during my time in Greenland reported a lack of incentives to encourage people to develop their own businesses. The British film *Village at the End of the World* portrays, among other things, the efforts of villagers in a small village of 59 inhabitants to re-establish a fish-processing plant in the village, overcoming both bureaucracy and apathy or lack of belief.⁸ One respondent in Tasiilaq observed of the population of his town: 'There are the rich people who have their own businesses and the poor who are on benefits and don't want to work' (personal communication). It was not clear from that conversation the extent to which the 'poor' that he was referring to already engaged in subsistence activities, and whether that was not considered to be 'work' if it was part of the informal economy (see below).

Several business people that I spoke to highlighted the challenge of attracting local Greenlanders to work in the new energy and mineral industries. Some spoke of the need to consider how appropriate certain jobs are to the local workforce – and about the strategic and psychological aspects of local hiring and local job creation. Such observations also need to be balanced with comments from other

respondents (including government officials and business people) that not all Greenlanders are averse to working on industrial projects; some have already adapted to the harsh demands of the fishing industry (including long periods spent at sea); and there are regional differences in local responses to new working cultures and challenges (see also Section 4.5).

2.3.3 Subsistence and the 'mixed economy'

There is a need for government planners to better understand the importance of subsistence activities to national and local economies, as well as the significance of decisions made at national and international levels that might affect those activities. For example, an EU ban on seal products enacted in 2010 as a response to protests against seal-hunting from European citizens and international NGOs such as Greenpeace, reportedly led to a 90 per cent decline in seal exports from Greenland. Despite an exception for Greenlanders within the ban, the decline in demand meant the loss of livelihoods for 25 per cent of seal hunters, and a one-third drop in income for the remaining hunters, with traditional seal-related activities now depending on government subsidies (Ramboll, 2014; McGwin, 2014a).

Subsistence and family ties are still considered to be the main social benefit system for Greenlanders, while many are involved in the 'mixed economy', engaging in subsistence activities as well as participating in the market economy (Hubbard, 2013). Lending boats and sharing and exchange of traditional food (e.g. meat from hunting) are still common practice even in those who trade commercially, as demonstrated by the Survey of Living Conditions in the Arctic (SLiCA) research project led by the University of Greenland (Poppel, 2006; Anderson *et al.*, 2002).⁹ SLiCA provides evidence that the more people

⁸ See <http://villageattheendoftheworld.com/about.php>

⁹ See www.arcticlivingconditions.org/



A husky dog used for hunting in Tasiilaq, Eastern Greenland. Subsistence and family ties are still the main social benefit system. Lending boats and sharing and exchange of traditional food (e.g. meat from hunting and fishing) are still common practice. Photo: Tim Wilson

earn, the more they participate in subsistence activities because of the costs of feeding dogs, or maintaining a boat, purchasing ammunition, and so on. Without the practice of sharing, the poorest might be locked out of subsistence activities, caught in poverty and unable to move to towns (Poppel and Kruse, 2009).

Poppel (2006) observes that the importance of subsistence economies in the Arctic – and the interdependency of subsistence and cash economies – is becoming more widely recognised, including in the Arctic Human Development Report, the Arctic Climate Assessment Report and the Arctic Monitoring and Assessment Programme, among others. Yet 'sufficient data are not yet available to give a comprehensive picture of the subsistence activities of economic significance to individuals, households and communities in the Arctic' (ibid: 65). The SLiCA project has been helping to fill these gaps. For example, a survey of hunters was carried out from 2003

to 2005, including their catches, expenditure on hunting equipment and attitudes towards professional hunting (Poppel, 2006). This kind of research is essential to build understanding of Greenlandic society before the full-scale industrial development of its energy and mineral resources.

2.3.4 Consolidating rural settlements

According to respondents, the government position tends to be that in small communities, fishermen and hunters have very low incomes and are therefore 'not contributing to the economy' (i.e. through taxes). This kind of thinking supports the government's stance on consolidating settlements – i.e. closing smaller settlements and moving people to larger ones. Another argument is the increasing difficulty of attracting teachers and services to these small communities, as several of my respondents noted.

But there are concerns about how sustainable the systematic consolidation of settlements would be, and the extent to which it would further undermine the social fabric of Greenland. The topic of consolidating settlements was addressed in the consultation around Greenland's contribution to the architecture exhibition, the 13th International Architecture Exhibition, Venice Biennale (29th August to 25th November 2012) (see Box 2):

Greenlanders move from rural to urban areas. Most bygder (small settlements) are gradually being depopulated, and today, only a few of them are socially and economically sustainable. The question is are we going to watch passively while the bygder slowly languish at a high cost to society? Or can we intervene actively, closing down the worst, and developing the best in order to preserve bygð life as a possibility in the future?

(Conditions, 2012: 186).

This raises many questions, such as why Greenlanders are moving away from the more isolated settlements – and would they stay if they could? And how to maintain the network of settlements in a more efficient way than the country is currently doing. Could more be done to support small businesses and self-sufficiency in these settlements?

2.4 Social trauma

Dramatic, rapid and often ill-considered social changes, such as the G60 plan and associated resettlement, have placed considerable stress on Greenlandic society over the past century. A professor at the University emphasised the importance of thinking about how resilient Greenland is to facing more change before launching into large-scale mineral resource developments, observing that society 'hasn't been fixed since the last set of changes' (personal communication). A hundred years

ago, Greenland had one of the lowest suicide rates in the world. Now it has the highest, with a high percentage of young men among these numbers (Moshiri, 2010; George, 2009; Ghosh, 2013). Rates of sexual abuse are also high, and the number of legal abortions (783 in 2012) is comparable to the number of births (a little over 800 in 2012) (Statistics Greenland, 2014). On the other hand, the number of births is greater than the number of deaths, while life expectancy at birth has increased from around 35 years in 1946–51 to around 70 years today (ibid), which is still less than European averages, and compares more to North American Inuit (Christiansen *et al.*, 2013).



A cemetery in Kulusuk, Eastern Greenland. There are no names on the crosses because according to Inuit tradition names are passed on to the next generation after death. Photo: Tim Wilson

2.4.1 The question of alcoholism

The generation to shoulder most of the burden of change in Greenland in the 1950s, 60s and 70s is the generation that are now parents. Many of them have turned to alcohol. Some children have been the victims of parental neglect and abuse related to alcoholism (Ghosh, 2013; Allagui, 2009). These issues are reflected in popular culture, such as the films 'Inuk' (2010)¹⁰ and 'The village at the end of the world' (2013)¹¹ and the music of the rap band Prussic, a

¹⁰ See www.inuk-lefilm.com/EN/Story.html

¹¹ See <http://villageattheendoftheworld.com/about.php>

Greenlandic rap band of young people raging against their parents' alcoholism and drug abuse (O'Carroll and Elliot, 2005).

The government has made efforts to address alcoholism. In 2012, I noted that shops did not sell alcohol on Sundays, after 1pm on Saturdays, or after 6pm in the evening.¹² On the Friday that I was in Tasiilaq (September 2012), the hotel waiter asked me: 'What did you see today? A lot of drunk people?' This was true – Friday is pay day in Tasiilaq, and the town appeared to be full of people drinking or already drunk. The supermarket car park was full of people and scattered with empty tin cans. People didn't appear to be aggressive, although I encountered one young girl hiding behind a shed crying.

Statistics would indicate that the country has overcome its problem with alcoholism and even has lower levels of alcoholism than Denmark (Aage, 2012; Bjerregaard and Becker, 2013; Eurocare, 2012). Comparisons between past and more recent years can be made on the Statistics Greenland website.¹³ Yet my own observations and discussions with social and anthropological researchers and government representatives indicate that there are still some serious problems with alcohol abuse in the country, as for instance the statistics do not take into account patterns of consumption, such as binge drinking.¹⁴ There is some evidence (from the above-mentioned films and my discussions with respondents) that new generations of Greenlanders have a different attitude towards drinking and that young people are not resorting to alcohol in the same way as their parents (personal communications). However, as noted above, suicide rates remain high especially among young men, indicating that social trauma is still being felt deeply among the country's younger generation.



Empty beer cans on the outskirts of Tasiilaq village on pay day.
Photo: Tim Wilson

2.4.2 Building resilience through closer ties to family, community and environment

A key issue highlighted by social researchers and filmmakers is that Greenlanders have lost links with their roots. They were resettled from turf houses to Danish-style houses in villages such as Kulusuk even before the G60 plan was implemented. In Kulusuk, a local guide told me that while hunting practices were allowed to continue, other cultural practices such as drum dancing died out (personal communication). It is increasingly understood that resilience is built through closer relations with one's family, community and environment. Nuttall (2009: 298) observes:

An inability to respond appropriately to this world of constant flux has much more to do with institutional, political, and social changes that provide no room to move freely in a changing world and to navigate it with reference to the experience of an intimate relationship with one's local environment.

¹² See also: <http://thefourthcontinent.com/2013/07/26/imagine-drinking-water-only-alcohol-and-greenland/>

¹³ See <http://tinyurl.com/statistics-greenland-alcohol>

¹⁴ I am particularly grateful to Professor Peter Bjerregaard of the University of Southern Denmark who helped to clarify this in response to a question I asked at workshop at Umea University in November 2014.

In the film 'Inuk', hunters help the child victims of alcoholic parental abuse and neglect by bringing them closer to their community elders and learning traditional livelihood activities. This kind of approach has been tried successfully elsewhere, for example in Labrador.¹⁵

Yet it is less easy to see what would work in the context of urban Nuuk. A tour guide in Nuuk told me about one case of the social experimentation of the 1960s: 'The managers of a fish factory wanted their workers living close by, so they forcibly resettled people from outside settlements to some high-rise blocks in Nuuk – like battery hens. Then they said to them, you have to come into work at 7am. Of course, no-one did' (personal communication). The high-rise blocks are still there and are still seen as a hotspot for poverty and social trauma, yet this problem is difficult to address given the acute housing shortage in the capital.

2.5 Climate change

A key focus of resilience thinking is climate change. International observers would be forgiven for imagining melting ice rather than high-rise flats when they think about the vulnerability or resilience of Greenland's indigenous populations. Climate change is often at the centre of discussion around mineral resource extraction – the vision of melting ice opening up new mineral deposits and transport routes. Climate change is often used in political discourse, not always in a way that reflects local realities (see below). Understanding local realities and levels of resilience to climate change can help to build understanding and resilience in the face of major energy and minerals developments.

2.5.1 Climate change in action

Climate change is happening faster and with greater impact in the Arctic than elsewhere in the world (ACIA, 2005). Images of polar bears

stranded on isolated chunks of sea ice or the Ilulissat glacier 'calving' icebergs, dominate the western media (Tejsner, 2013; Bjørst, 2012). In July 2012, the Greenlandic ice sheet had a record melt, with 97 per cent experiencing some melting, and an iceberg twice the size of Manhattan broke from the Petermann glacier in northwest Greenland, with both events receiving substantial amounts of international media coverage (Hanna, 2012; Palmer, 2012). In 2013 there was considerably more sea ice than in 2012, but the extent remained lower than the long-term average, while a 2014 review observes that sea-ice cover remained a little below average, but sea-ice conditions were 'largely unremarkable' compared to recent years, in contrast to record high levels of sea ice in the Antarctic (NSIDC, 2015).

Greenlanders have been facing climatic changes for centuries. For example, the stocks of Atlantic cod slumped in the 1970s, but recovered in the 1980s before declining more dramatically in the late 1980s and early 1990s. Largely this was attributed to over-fishing, but climate variability has also contributed to fish migration patterns, growth rates and mortality (Lilly *et al.*, 2008). The decline of cod fisheries in the 1990s resulted in the closure of fish-processing plants (originally introduced by the Danish). In Maniitsoq, for example, employment figures have not recovered since the 1990s, when their fisheries collapsed, and many people have left the village. Hopes are pinned on the proposed aluminium smelter and now a possible mining project to provide jobs for local people (see Section 3.2).

Climate change is also opening up mineral and oil deposits as the ice cap melts and transport routes open up.¹⁶ The warming climate is also creating better conditions for agriculture. In the south Greenlanders are now raising sheep and growing potatoes, cabbage and broccoli (Traufetter, 2006). Greenland is becoming

¹⁵ See for example www.nunatsiavut.com/departement/youth/

¹⁶ The gas resources discovered so far are small, and gas markets not favourable at the present time, largely due to the US shale gas boom.



A receding glacier near Kulusuk in Eastern Greenland. Climate change is opening up new opportunities for development, including mining, transportation and agriculture. Greenlanders are demonstrating resilience in adapting to climate change challenges. Photo: Tim Wilson.

more popular as a tourist destination for dog sledding, whale watching, viewing glaciers and icebergs, and engaging in extreme sports, such as heliskiing. Increasing numbers of researchers are visiting, as more funding becomes available for climate change research, while filmmakers and journalists are also exploring climate-related topics as global public awareness and interest grows.

2.5.2 Adapting to change

Greenlanders have proven themselves inherently adaptable to change, by moving from place to place and changing their social, economic and cultural practices in response to climatic or other changes: this might mean

hunting in new places or trying out new economic activities such as fishing (in the days when the Inuit only hunted sea mammals) (Nuttall, 2009). This capacity to adapt is also demonstrated in a sequence from Bruce Parry's documentary series 'Arctic'.¹⁷ In Greenland, Parry and a subsistence hunter go on a seal-hunting trip by dog-sled. Having finally arrived at the hunting grounds, the hunter expresses surprise and disappointment that the ice had melted earlier than expected and says that he cannot hunt without a boat. While he and Parry ponder the impacts of climate change, another (better adapted) hunter rides up on his dog-sled – with a boat. As Tejsner (2013) observes, crisis narratives tend to leave out important aspects

¹⁷ See www.bbc.co.uk/programmes/b00xjyfx

of people's interaction with ice, such as human agency and the flexibility to respond and adapt to a changing environment.

Local positions on climate change and economic development are often more complex than westerners expect. While Greenlanders might want global players to accept their responsibility to reduce emissions, they may also be pragmatic about their own need to develop potentially polluting – and CO₂-generating – industries (Bjørst, 2012). For Greenland's hunters, the future might be seen as a combination of traditional activities and industrial development, with good education a key requirement for their children to succeed (ibid). Local people often give the impression that they are less interested in climate change than in other aspects of social and environmental change, such as new resource management regulations that restrict whaling, seal hunting and fishing practices, or the potential impacts of mining on reindeer-hunting grounds (Tejsner, 2013).

Nuttall (2009, p.297) suggests that:

[R]esearch efforts should not only focus on local observations and community perceptions of change, but, perhaps more importantly, on identifying the nature of human agency and resilience, assessing community vulnerability, and understanding community responses to past and current change.

This approach could also be applied to learning about resilience to social change and could usefully inform those seeking to build local resilience to the changes that could result from major energy and mineral developments.

2.5.3 Climate change as political discourse

Climate change is increasingly used as a political discourse by indigenous cultural and political leaders, sometimes representing opposite sides of the climate change debates. Nuttall (2009) observes the range of adaptation strategies being employed and people's

different perceptions – and portrayals – of the future. Greenland's (indigenous) government's talk of mineral resource opportunities contrasts with the discourse of indigenous activists, who portray Arctic peoples as victims of climate change that threatens the delicate balance of their relationship with their environment. A leading indigenous activist from Greenland even appeared at a Stansted Airport expansion hearing to draw attention to the impact of increased air traffic on indigenous livelihoods (ibid).

Tejsner (2013) observes how climate narratives often originate in places far away from Greenland (or Tuvalu) and are often shaped more by Western imagination and expectations than local experience (as described in the previous sections for example). Bjørst (2012) argues that academically constructed climate-crisis narratives fail to explain what is happening locally in Greenland. To play a part in these narratives (for example at the annual climate change Conference of the Parties), Inuit are required to play the parts of victims or witnesses of climate change, neither of which adequately reflects their realities (ibid).

On the other hand, it would be wrong to imply that Greenlanders do not share global concerns about melting ice, or that they do not appreciate the power of that imagery. For example, one of Greenland's most popular indie rock bands today, Nanook, expresses concern about climate change in the short and simple lyrics of the song 'Sound of dripping water' (sung in Greenlandic):

I hear the sound of dripping water; I look upon the melting ice; the beaming ice shines at me; the giant white icebergs are exploding; the spinning earth is decelerating; I'm troubled by what I see.

2.6 Civil society activism

In Greenland, the public, especially in Nuuk, are well-informed and willing to protest about issues relating to their environment and livelihoods. Protests took place in 2008 in Nuuk relating to government restrictions on artisanal ruby gathering in an area of interest to a mining company (Madsen, 2008). In November 2012 protests were held against the London Mining proposals to establish an iron ore project close to the Nuuk Fjord (Nuttall, 2009); and most recently in October 2013 as Prime Minister Hammond announced the lifting of Greenland's moratorium on uranium mining (Nuttall, 2012a).¹⁸ (For more on these projects see Section 3.1.) In particular, the perceived inadequacies of public consultation processes, particularly relating to the London Mining project, have galvanised public awareness and action in Nuuk.

2.6.1 Civil society views on extractive industry development

I met several civil society representatives during my stay in Greenland and was impressed by their knowledge and dedication. Some organisations, such as Transparency International Greenland have been established in direct response to Greenland's expanding energy and minerals developments. According to their website, Transparency International Greenland seeks to build knowledge about corruption and related 'grey areas' of business practice, media, civil society and administration; and to advocate and lobby for appropriate legal and regulatory mechanisms to ensure transparency and accountability. The aim is 'to ensure that Transparency International Greenland is a strong and well-established watchdog before the major investments in oil, gas and minerals get into their stride' (Transparency International Greenland,

undated a). In 2012 the organisation published its 'Integrity study on the public sector in Greenland' (Transparency International Greenland, 2012) which aims to assess the current state of affairs and potential risks of corruption increasing as oil and mineral resource development expands (see also Section 3.1).

The small NGO Friends of the Nuuk Fjord (or Venner) was set up primarily to monitor and hold London Mining to account in its development of the Isua mine project (see Section 2.1.1). The organisation had just five volunteer staff in 2012, but prided itself on its 'common touch', the fact that their activists are Greenlandic speakers, not Danish speakers, and their ability to mobilise people. According to Venner's leader (personal communication):

Venner is closer to the people [than other NGOs]; we visit houses, have local campaigns and so on. At our first meeting we had 96 people – we were only expecting 25. They were young and old, fishermen, hunters, people from the old villages in the fjord.

The Greenlandic chapter of the Inuit Circumpolar Council (ICC) is located in Nuuk. The ICC is an NGO representing the Inuit living across Greenland, North America and the Russian Arctic.¹⁹ In Greenland, the ICC is engaged in building awareness about resource development projects. A project in partnership with WWF provides guidance to government to improve the process of public consultation and to get more people involved. So far the project has produced five reports, a summary report and a TV documentary on public consultation processes that aired on 13th March 2015, followed by a TV debate.²⁰

¹⁸ Photos of the protest can be accessed here: <http://makitanunavut.wordpress.com>

¹⁹ See www.inuitcircumpolar.com

²⁰ The reports can be found here: <http://inuit.org/en/activities/reports/icc-and-wwf-reports-on-mining-activities-in-greenland.html>

In autumn 2013, WWF, Transparency International Greenland, ICC Greenland and the Association of Fishermen and Hunters in Greenland set up an NGO coalition for better consultation processes in Greenland and prepared a set of joint recommendations for the Greenlandic government. In the run up to the November 2014 elections the NGO coalition held a rally, inviting representatives from each party to talk about what they would do to ensure that citizens are more involved in decision making about mineral resource development (Mette Frost, personal communication).

I found civil society organisations to be fairly balanced and pragmatic in their positions relating to Greenland's plans to expand its industrial energy and minerals sectors. However, they all tend to feel very strongly about the processes that need to take place to ensure the developments are sustainably and fairly implemented. The head of Transparency International Greenland for example observed in an interview: 'We don't have a position on whether the extractive industries are good or bad, but we want the right process and we need to take the time that is required to do it properly' (personal communication). The head of Friends of the Nuuk Fjord stated in an interview, 'We don't say no to mining, we say mining needs to be responsible, and we need to protect animals and landscapes that can't protect themselves' (personal communication).

The environmental NGO Avataq frequently takes a stronger stance against extractive industry projects. Two of the key concerns of Avataq's leader are government capacities and levels of public participation in decision making: 'We don't think the Greenlandic government has taken account of the social impacts, and they are imposing these developments over the heads of the public, without their participation' (cited in Harvey, 2012a).



A neighbourhood in Greenland's capital Nuuk. Civil society in Nuuk is well-informed and willing to protest about issues relating to the environment and local livelihoods. Photo: Emma Wilson

Representatives of the Inuit Circumpolar Council (ICC) said in an interview that they were 'not against resource development, but the people need to be involved in the processes. We are afraid that companies have too much power [...] we need to start by educating people, including on impact assessment procedures and human rights' (personal communication). They made reference to the 2010 Nuuk Declaration, which urges the ICC globally to support sustainable natural resource development, develop a position on impact assessment, promote responsible business activities and enhance the involvement of local people and indigenous knowledge in decision-making processes (ICC, 2010).

A representative of WWF whom I met in Copenhagen, said they are not against development per se, but that it had to be carefully planned, it could not be rushed and there needed to be a lot more public debate, especially around oil extraction: 'You can't ask Greenland of all countries to give up their oil aspirations when Norway and other Arctic countries are not taking a moral lead' (personal communication).

2.6.2 Civil society capacity building

A key issue for Greenlandic civil society is capacity. Several of the civil society activists I interviewed or spoke to were doing the work in their spare time. Despite the potential to raise funds from foundations, they often simply have no time to write proposals. Respondents suggested the government could provide support, even temporarily, for organisations to build a secretariat and raise funds to start growing and building capacities. They highlighted the challenge that neither civil society nor government have access to legal expertise, whereas companies can afford to hire the best lawyers. Some suggested setting up a fund, based on oil company contributions that could pay for this kind of specialist advice (personal communications).

Partnerships with international NGOs are important for building and augmenting the capacities of Greenlandic civil society. WWF's project with the ICC on public consultation is one such example. However, the Greenlanders are also conscious of wanting to do things in their own way. Some of them mistrust Greenpeace for example, blaming them for the 2010 EU ban on trade in seal products (see above).²¹ However, respondents also noted the important work that Greenpeace is doing today in helping local NGOs to understand and analyse the documentation produced around the oil and gas projects – something that local NGOs do not have the time or the capacities to do themselves, and something that WWF is also keen to support through the NGO coalition (personal communications). One government official expressed surprise at 'Greenpeace's levels of preparedness, their ability to dig into documents and suggest direct answers' (personal communication).

The University of Greenland has been a key player in building awareness and capacities in relation to Greenland's mineral and energy prospects, through targeted research projects and involvement in – and commentary on – public consultation processes. The university's Climate and Society Group has taken the Isua iron ore project as a research topic, with ongoing monitoring, meetings with local hunters, fishers, boatmen and tourism operators, publishing policy briefings, holding discussions in town, and mapping place names. They have been calling for an independent review panel. The university is also introducing an optional extractive industries course from 2014 as part of the Sustainable Resource Management bachelor's degree, building on links with Canada's experience (personal communication). The Survey of Living Conditions in the Arctic project (SLiCA) also contributes to understanding local livelihoods and extractive industries (see Section 2.3.3).²² The university has been considering support from companies for this research, but there are ethical issues related to using industrial sponsorship. There has been talk of establishing a fund for companies to contribute to, so as to increase neutrality (personal communication).

2.7 Corporate social responsibility

Corporate social responsibility (CSR) is a key concept framing business and society relations in Greenland. There is a high level of awareness about CSR among Greenlandic and foreign companies operating in Greenland (Welsh, 2012). One of my first entry points to local stakeholders was through CSR Greenland, a network that helps local businesses to build their CSR capacities, while also raising awareness more widely on business–society relations and corporate responsibility within society. CSR Greenland also draws attention

²¹ Local informants emphasised that this ban – and their horror of Europeans – was triggered by pictures of Canadians clubbing seals to death, something which was not done in Greenland (see also Ramboll, 2014).

²² See www.arcticlivingconditions.org

to government responsibilities and seeks to increase government capacities for more effective governance, as well as civil society capacities to hold government and business to account (for example through supporting the establishment of Transparency International Greenland, see above).²³ CSR Greenland celebrated its fourth anniversary in October 2014. Despite this, there are some sceptics of the notion of CSR, particularly among academic observers, who highlight the contrast between rhetoric and practice in key cases such as public consultation, impact assessment and information sharing on mining projects and the uranium issue (Nuttall, 2013) (see also Section 3.1).



Boats in Tasiilaq harbour. CSR in Greenland is about the interdependency of business and society, about mutual need and co-existence. Photo: Emma Wilson

2.7.1 CSR in theory

The notion of a company's 'social responsibility' originally came out of literature and practice of the 19th century, referring to the company's responsibility to its workforce and local community. Corporate social responsibility (CSR) as a term evolved in the 1950s and 60s with the publication of seminal works such as Howard Bowen's book 'Social responsibilities of the businessman' in 1953. This was the first

comprehensive study of business ethics and social responsibility and defined CSR as the aligning of business policies and decisions to the objectives and values of society. The original meaning of CSR has evolved over the years to accommodate new academic theories and corporate practices (Carroll, 1999; Visser, 2011). Today, CSR is often criticised for being misleading as a term or ineffective in practice (Blowfield and Frynas, 2005; Black, 2013; Morrison, 2014). Other notions such as 'shared value' (Porter and Cramer, 2011) and the 'social licence to operate' (Thomson and Boutilier, 2011; Morrison, 2014) have emerged to consider the relationship between business and society. The 'social licence' refers to the broad acceptance of business activities within the local community and wider society, and may exist in various forms, from informal relations to more formal 'impact-benefit agreements' (Thomson and Boutilier, 2011; Black, 2013; Morrison, 2014). The negotiation of such agreements is shaped by rights and responsibilities established in international standards, national and sub-national laws, and local social norms and expectations (Wilson, forthcoming).

The UN Guiding Principles on Business and Human Rights (UNGPs) (UNHR, 2011) have brought the term 'responsibility' back to centre stage. These principles are based on the 'protect, respect and remedy' framework developed under the guidance of Professor John Ruggie (UN Special Representative on Business and Human Rights). They establish the responsibility of governments to 'protect human rights' and the responsibility of business to 'respect human rights'. This has helped to clarify relative responsibilities of business and government and also helps to ensure that debates on corporate responsibility are increasingly linked more closely to debates on government responsibility.

²³ CSR Greenland has 35 members. See www.csr.gl/HvaderCSRGreenland/tabid/57/language/da-DK/Default.aspx

2.7.2 CSR in practice

In Greenland there is a refreshing lack of anxiety about using the term CSR, which makes for clarity of both thought and action. For CSR Greenland, the understanding of CSR remains fairly close to the original notion of a company's responsibility to its workers and local communities, but there is emphasis on a two-way relationship. Reflecting traditional Greenlandic values, CSR in Greenland is about the interdependency of business and society, about mutual need and co-existence.

[T]he essence of CSR is that businesses cannot be successful if the local communities they serve are not also developing in a positive direction. At the same time, society needs successful businesses to ensure growth and development, so CSR is about everyone pulling together to benefit each other

(Christiansen, 2013).

But Christiansen also notes that while there is a strong tradition in Greenland of businesses caring for their employees and local communities, 'working strategically on incorporating CSR into business processes is still a new mindset' (Christiansen, 2013).

The prospect of increased investment and promotion of energy and minerals projects in Greenland was a key motivator for companies and the Employers' Association of Greenland to come together to set up CSR Greenland. As Christiansen (2013) observes, 'Air Greenland helped found CSR Greenland in order to build resilience and safeguard the country's growing business community. The developing oil and mining industries make these efforts of particular importance'. The head of the Bank of Greenland also observed: 'Companies coming into Greenland will expect and require local partners that are aware of responsible business

issues that have written codes of conduct that they stick to' (cited in Welsh, 2012: 35).

Some key areas of concern for members of CSR Greenland include the following (Christiansen, 2013):

- **Transparency and accountability:** CSR Greenland helped to establish Transparency International Greenland, while business ethics and anti-corruption feature in members' CSR policies.²⁴
- **Education and strengthening local competencies:** This features strongly in the CSR policies of Greenlandic companies. Air Greenland set up a study programme in business economics so that students can get a relevant education without having to go abroad to study.
- **Social instability:** Social instability undermines businesses and many employees are affected by personal and social traumas. Companies have been helping their employees to overcome personal issues through on-the-job psychiatric care and stress management programmes.
- **Infrastructure and transportation:** A key challenge in Greenland is being able to visit outlying settlements with support programmes. Royal Arctic Line helps the NGO Meeqqat Inuunerissut (Better Life for Children) to travel around Greenland and educate people on the circumstances facing abused children.
- **Health and local production:** Brugseni (Greenland's largest supermarket chain) has a plan to increase local food production in its supply chain – currently 90 per cent of their goods are imported from Denmark – so they educate producers on better techniques and help them with supply logistics.

²⁴ Air Greenland's statement on CSR can be found at: <http://tinyurl.com/csr-air-greenland>

- **Environmental sustainability:** In 2013, West Greenland's cold water shrimp trawl fishery (Greenland's largest export) became the first Greenlandic fishery to achieve MSC certification (MSC, 2013). In 2013, CSR Greenland started up a collaboration with WWF called Green Companies, Clean Greenland, aimed at reducing companies' environmental impact through workshops and mentoring (personal communication).

Like other members of CSR Greenland, Air Greenland provides an essential public service through its core business. In a country where distances are vast and travel is sometimes not possible by sea, Air Greenland operates 59 internal routes and three international ones.²⁵ While accepting they have a significant carbon footprint, they work towards greater efficiency which they say has a business benefit as well as a positive impact on staff morale (ibid). The company has also signed up to the UN Global Compact. In a written response to my questions in 2012, the then-CEO of Air Greenland stated (personal communication):

It is only natural for Greenland to pursue new business areas that can create new revenue – so the dependency of Denmark can be minimised [...] The important thing is HOW you do it. Can you do it sustainably, can you make sure it will benefit the local population and are the necessary fall back solutions in place ('what if' scenarios)?

In an interview with his communications manager in 2012, we discussed how Air Greenland wants to have policies in place because there is a risk of increased corruption associated with these industries, as well as higher social and environmental risks, requiring the strictest regulation. She noted that Shell, Cairn and all big companies want to see CSR policies and documentation on environment, social responsibility and anti-corruption. 'We

have seen this as an opportunity to make what we do anyway more systematic and strategic. We are now completing a five-year strategy and CSR is raised to the highest level' (personal communication).

A representative of Royal Arctic Line, Greenland's government-owned cargo-shipping company, explained that the company's CSR approach has a strong focus on capacity building, seeing this as a key CSR contribution, and training more people than they can hire. She admitted that they have challenges, for example, when local staff are reluctant to work longer hours or work faster to meet deadlines, observing that 'Greenland is not a competitive society'. English language is also a big challenge, especially for labourers such as harbour workers who do not have a higher education (see Section 4.5).



Port area, Tasiilaq. Key CSR issues in Greenland include transparency and accountability, capacity building and skills development, environmental protection and developing infrastructure for social support programmes. Photo: Emma Wilson

In an interview with me in 2012, the CEO of Nunaoil, Greenland's national oil company, highlighted key CSR and government responsibilities in the oil sector, including public consultation, local job creation, building

25 See www.airgreenland.com/destinations/greenland

government capacities to negotiate a fair deal for society and to manage revenues effectively, and building workforce capacities, especially language skills and appropriate working culture and experience (personal communication). A key concern is oil-spill response – ensuring capacities are in place and that international companies are able to provide this, given the lack of existing capacity in Greenland (see Section 2.3).

The Employers' Association of Greenland works to build awareness and capacities on CSR within the business community. The local branch of Shell is a member, as is GOIA (Greenland Oil Industry Association, see Section 2.3). According to a consultant who spoke to me in 2012, the Employers' Association is concerned about the lack of mining experience within the governance structures of Greenland, afraid the government will be too soft on foreign companies and perhaps not support the inclusion of Greenlandic companies and

employees enough; that human rights of workers, especially foreign labour, may not be respected. They try to encourage companies to take on local apprentices and work to build their capacities. The organisation also produces reports on labour force mobility and resource demands (personal communication).

In 2012 the Employers' Association produced a report on public consultation, which emphasised that consultation should be about genuine dialogue, not just public meetings (Bjørn Aaen, 2012; see also Section 4.3). In 2012, the consultant explained to me how the organisation had been actively seeking to learn about industry good practice in other countries (the consultation report is based on experience in Newfoundland). People need to be a part of the discussion earlier in the process, and they need more time so that they can understand the arguments being put forward by companies and the government (personal communication). This is discussed more in the following sections.

3

Greenland's mineral and energy resources

Greenland has some of the world's richest mineral resources, including rare earth metals, iron ore, gold, copper, zinc, rubies and other gemstones and uranium. The country also has vast hydropower potential and can use this to attract energy-intensive industries, such as aluminium smelting. Oil development is still in the exploration phases, and this has tailed off following a drop in oil prices, but the government sees this as a critical future source of revenue.

While the narrative around the opening up of Greenland's oil and mineral resources often focuses on climate change – the receding ice-cap and more accessible marine transport routes – this is not the only reason for increased interest. One key factor has been the rising price of minerals and oil on world markets (Thomas, 2007), although price drops have been cause for great insecurity in 2014–2015 (The Economist, 2015; Armstrong, 2014; Hornby *et al.*, 2015). As Nuttall (2012a) notes, the increased interest that multinational corporations have been showing in Greenland's natural resources is also due to an aggressive marketing campaign by the Bureau of Minerals and Petroleum (BMP), the government agency responsible until recently for both promoting and regulating extractive industry development (see below). Nuttall also notes the mediation role played by the Employers' Association of Greenland, providing linkages between Greenlandic and international companies.

According to Greenland's Oil and Mineral Strategy (2014–2018) the government's goal in promoting extractive industries is to enhance prosperity and welfare by creating new income and employment opportunities. Their emphasis

is on ensuring that several mines are opened up and in operation at any one time, and finding commercially viable oil resources to develop. Sustainability considerations are also being strengthened. For example, as of January 2013, following an amendment of the Mineral Resources Act, the responsibilities of the former BMP have been allocated between the Ministry of Industry, Mineral Resources and Labour, the Mineral Licence and Safety Authority and the Environment Agency for Mineral Resources Activities (Government of Greenland, 2014) (see Section 3.2).

Greenland's key resources include:

- **Key minerals:** Iron ore, gold, copper, gemstones, zinc, rare earth minerals and uranium are especially significant.
- **Rare earth minerals:** Important for modern technologies from mobile phones to wind turbines; China controls 90 per cent of global reserves.
- **Uranium:** In October 2013 the Greenlandic parliament voted to lift a moratorium on uranium mining, to allow for more rare earth mineral extraction, but Greenland may seek to market the uranium itself.
- **Oil and gas:** Exploration for oil and gas is in its early stages. In the past 40 years there have been 14 exploratory drillings (8 in the past five years). With the decline in the price of oil, several companies have now withdrawn for the time being.
- **Hydropower:** Greenland seeks to position itself as a provider of large-scale hydropower to industrial users, though it is still cheaper in the short term to use diesel generation.

3.1 Minerals

The European Union is actively engaging with Greenland's government – in what has been dubbed 'raw material diplomacy' (Harvey, 2012b) – to gain access to Greenland's mineral and hydrocarbon resources. China, South Korea, Canada and the USA are also eyeing Greenland's mineral wealth with great interest. A Chinese company has recently taken over the Isua iron ore project close to Nuuk (Hornby *et al.*, 2015), while South Koreans are investing in the Kvanefjeld rare earths and uranium project and Canadians and Norwegians are investing in the Aappaluttoq ruby and sapphire project (see below) (Jichang, 2013; Arctic Journal, 2013).

Iron ore, gold and copper are particularly significant to Greenland's mineral strategy, due to their high market value and abundance

in the country; other important resources are gemstones, zinc, rare earth minerals and now uranium. The licences available in Greenland include standard prospecting, exploration and exploitation licences issued to companies, as well as small-scale licences granted to individuals, mostly for gemstone collection. According to the government, the number of prospecting licences issued increased from 15 in 2000 to 22 in 2014; exploration licences increased from 24 to 71; exploitation licences increased from 0 to 5; and 12 small-scale licences have been issued since that form of licence was introduced in 2009 (Mineral Licence and Safety Authority, 2015). As of 2012, only 143 people were reported as being employed in 'mining and quarrying' (Statistics Greenland, 2014).



Local communities close to proposed mining sites are concerned about potential environmental impacts but also interested in possible employment relating to these projects. Photo: Tim Wilson

As the ice cap recedes, mining companies can now explore in areas that were previously inaccessible, and also work in the area for longer each year than was previously possible (Thomas, 2007). For example, in 2008 Angel Mining started work on re-opening an old zinc and lead mine on Greenland's west coast, known as the Black Angel mine. This was closed in 1990 (after 17 years of production) because of low world prices and the challenges of working so far north. Subsequently, zinc prices rose, while a glacier also retreated 250 metres, giving access to around two million tons of high-grade zinc and lead ore. Milder temperatures also mean that miners and engineers can work on mine sites for eight rather than six months of the year. Melting Arctic sea ice could also open a more direct passage for shipping from Greenland to metal-hungry Asian countries such as China and allow mineral exploration along the coast where sea ice had previously blocked the route.

3.1.1 Greenlandic rubies: a missed opportunity for an ethical gemstone industry?

In March 2014, following ten years of exploration, True North Gems (TNG), a Vancouver-based junior mining company, was granted a 30-year exclusive licence to construct an open-pit ruby and pink sapphire mine at Aappaluttoq in southwest Greenland, with its joint venture partner LNS Greenland (LNSG) which is owned by Leonhard Nilsen and Sonner of Norway (Jamasmie, 2014). The project is due to start production towards the end of 2015, pending negotiation of an impact-benefit agreement with the local community (Dollerup-Scheibel, 2014). The mine contains an estimated 162 kilo-tonnes of ore (Lowe and Doyle, 2013). The project is expected to create up to 80 long-term jobs and provide a royalty of 5.5 per cent on all sales of the gems (Jamasmie, 2014). Ruby prices have almost doubled since 2004 and the Aappaluttoq rubies are

considered to be 'exceptionally high grade' (ibid; Lowe and Doyle, 2013).

The 2009 Mineral Resources Act and its 2012 amendments require anyone involved in mining, including artisanal miners, to obtain a licence, and have made it possible to grant mining firms exclusive agreements, which prevents local people from gathering gems in those areas (Lowe and Doyle, 2013). Prior to this, artisanal miners could gather rubies without a licence and were able to process and sell the rubies they found. Artisanal miners were initially allowed to gather rubies from the TNG exploration licence area, but these rights were subsequently restricted, and the BMP stopped issuing export licences to Greenlanders (ibid). Rubies have been confiscated from local miners, including one ruby reportedly valued at half a million dollars (Valerio, 2008). A pivotal moment came on 16 August 2007, when Niels Madsen and others went to Aappaluttoq to gather rubies. TNG informed the government and the Greenlandic police arrived by helicopter to detain the miners. In protest, the 16 August Union was set up to defend the rights of Greenlanders to engage in artisanal gemstone mining (Lowe and Doyle, 2013).

Lowe and Doyle (2013) argue that reinstating traditional mining rights and building collaboration between artisanal and industrial mining interests would generate greater economic and social benefit for the local community and Greenland as a whole. Greenlanders are missing an opportunity to develop a value-adding gemstone polishing industry by exporting rough rubies and sapphires. Moreover, ethical jewellery campaigners argue that until issues around local mineral rights and ruby confiscation are sorted out, TNG will not be able to market Greenlandic rubies as 'ethical' or 'fair trade' and will thus lose out on a potential market advantage over other sources such as Burma (Choyt, 2008). Greg Valerio of Fair Jewellery Action, states (Lowe and Doyle, 2013: 5):

There is no doubt in my mind that a Greenland ruby or sapphire presented to the world from the hands of a local Greenlander is a powerful life-changing product. A Greenland ruby or sapphire that enshrines the values of local community, responsible environmental small-scale mining, economic regeneration and human rights will be precisely the kind of gemstone the jewellery industry is looking to get behind. Surely this is what makes a gemstone precious?

3.1.2 The Isua iron ore project

In October 2013, UK-based mining company London Mining was awarded a 30-year licence to build a vast open-cast iron ore mine at Isukasia, western Greenland – a project they call the Isua project (London Mining, 2013). By October 2014 the company had gone into administration due to a slump in iron ore prices, a battle with Glencore over a supply contract, and the costs and challenges of operating in Sierra Leone (their main project) where their operations were badly hit by the Ebola virus (Armstrong, 2014). After several months of uncertainty, the project was taken over by General Nice, one of China's largest coal and iron ore companies (Hornby *et al.*, 2015).

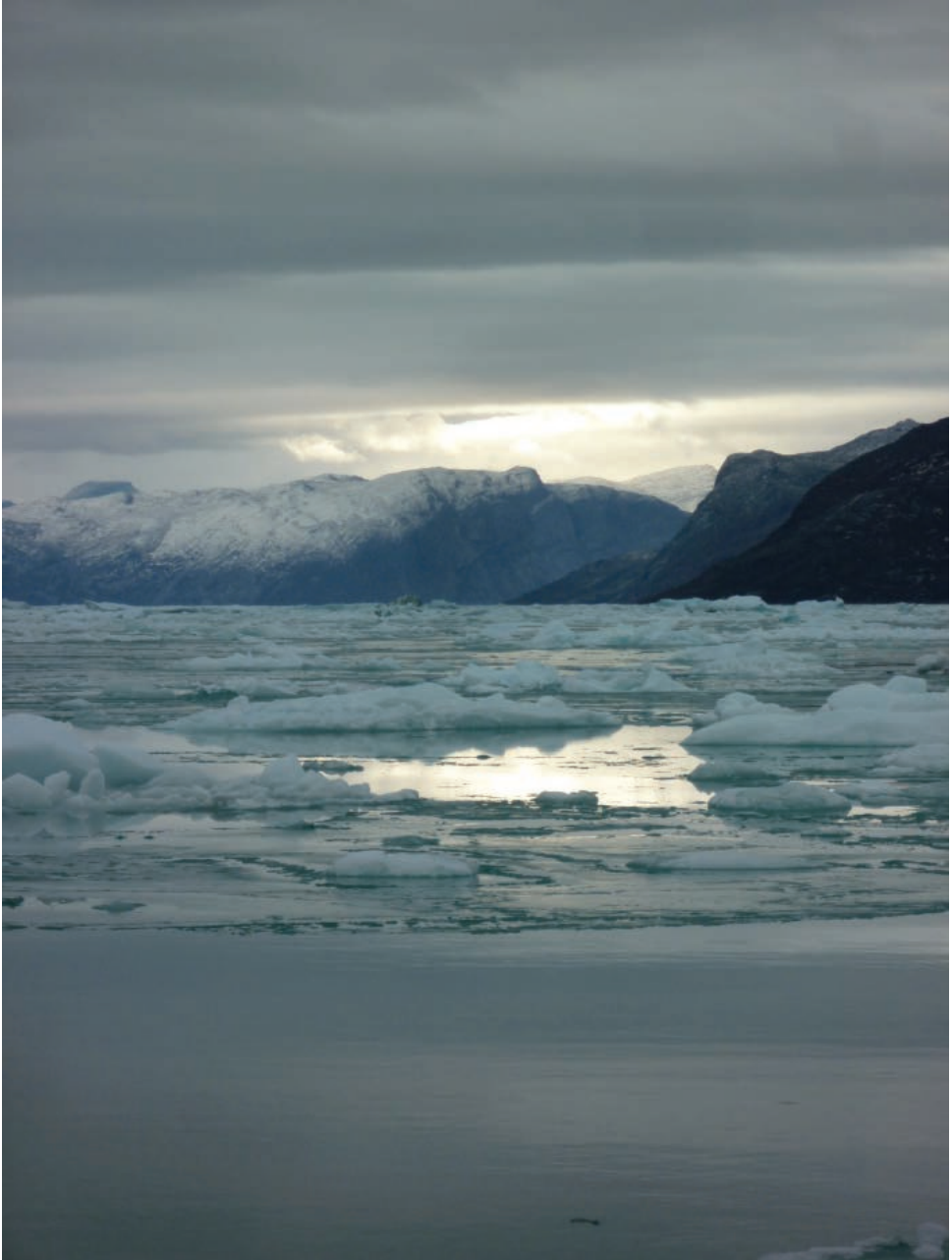
The mine at Isukasia is expected to produce 15 million tonnes of iron ore per year for the global steel industry, exporting it year round from a deep seawater port. Isukasia is 150km northeast of Nuuk and 100km from the proposed port (70km northeast of Nuuk) (Harper, 2013; Nuttall, 2013). Iron ore is to be extracted using the open pit method from a mountain partially located beneath the ice cap; the mountain will be removed entirely. The iron ore will be shipped down the Nuuk Fjord for export. The location in the southwest of Greenland allows for year-round shipping (Nuttall, 2012a; George, 2011). The project is expecting to bring in 3,000 Chinese labourers for the construction period. London Mining has completed several seasons of exploration drilling, following earlier drilling in the 1970s (Harper, 2013).

The Isua project has been particularly high profile because of

- its proximity to the educated population of Nuuk;
- the prospect of increased traffic and pollution on a major waterway, the Nuuk fjord, which is used by a wide range of people, from seal and reindeer hunters to tourists;
- concerns about the influx of Chinese workers for the construction (even before news of the takeover by General Nice); and
- the perceived inadequacies of the associated public consultation process to date, which has been heavily criticised in the mass media, in online forums and within the academic community.

A series of four public meetings took place in 2012 as part of the environmental impact assessment (EIA) process. These are explored in detail by Nuttall (2012a). I attended one of these meetings, which was held at the university, some way out of the centre of Nuuk; other meetings had been held more centrally. At the meeting that I attended, the consultants reported that the EIA had concluded there would be 'very little impact' because the area had 'low biodiversity' and was a 'virgin territory'. Local residents attending the meeting argued that in fact the area was actively used for hunting reindeer and seals. One hunter observed: 'There is great biodiversity in the fjord from plankton to whales and right now it is being used by citizens of Nuuk as a source of food. I have lived off hunting from the fjord for 24 years.'

When asked what would become of the crater following extraction, the consultants replied that the ice-cap would melt and 'fill in' the crater. Further questions related to: CO₂ emissions (including from ships and vessels) and Greenland's future targets, disposal of ballast water in the Nuuk Fjord, emergency response plans in case of shipping accidents, mine closure, tax arrangements, hunting restrictions, noise levels and their impact on whales in



The Nuuk Fjord. Iron ore from the Isua open-cast mining project will be shipped down the fjord for export. Local people are concerned about potential negative impacts on hunting, tourism and the environment.
Photo: Emma Wilson

the fjord, use of chemicals, use of diesel versus hydropower to power the mine, and the accessibility of information on the London Mining website (see also Nuttall, 2012a).

Despite people's concerns about the content of the EIA, most complaints from the people who attended that meeting – voiced in the plenary and also privately afterwards – were about the process of the consultation itself (personal communications). The consultants gave a PowerPoint presentation, which was rushed at the end due to insufficient time. Time was lost at the beginning of the meeting while technology was sorted out. One person was translating between English, Danish and Greenlandic, which was long-winded and meant the interpreter became very tired and began to miss things out.

Over the series of four meetings, questions would be asked at one meeting then answered at the next meeting, with several weeks elapsing in between. At the meeting that I attended, one participant asked: 'Why have you answered eight questions today, when we asked about 50 questions at the last meeting?' In discussions after the meeting people observed that time had been too short to address the complexity of the questions; there was a need for more independent expert comments; and there had been no space for debates about sustainability and alternative paths of development (personal communications). It remains to be seen to what extent the new Chinese owners of the project, General Nice, will build on this experience and follow the style of London Mining in engaging with the local population, or seek to improve the nature of public engagement and the quality of information made public.

3.1.3 Rare earth minerals and the Kvanefjeld project

International investors and governments are particularly interested in Greenland's rare earth minerals. Rare earth minerals are used in wind turbines, electric cars, portable computers,

mobile phones, energy-saving light bulbs, optical and medical devices, missiles, lasers, satellite communications, and radar systems. China controls over 90 per cent of global reserves; the biggest deposits outside China are in Canada, Russia, the US, Australia, India and South Africa, as well as Greenland (Reichel, 2012). China has restricted exports to conserve resources and give priority to its internal markets (ibid).

Greenland Minerals and Energy (GME) has been exploring the potential development of rare earths (as well as uranium, see below) at Kvanefjeld (known locally as Kuannersuit), a plateau in southern Greenland, near the small settlement of Narsaq (population 1,500), the home village of former Prime Minister Aleqa Hammond. GME believes that Kvanefjeld is one of the world's largest rare earth mineral deposits with the potential to supply up to 20 per cent of global demand (Vestergaard, 2013; Greenland Minerals and Energy Ltd, 2013). Greenpeace is campaigning against any oil drilling in the Arctic, but supports exploitation of rare earth minerals, because of their importance for renewable energy technology, although a 2013 decision to overturn a moratorium on the mining of uranium (which is found with rare earths) has complicated this debate (see below).

3.1.4 The uranium controversy

In October 2013, following a controversial parliamentary vote won by 15 to 14 votes (with two absentees), a 25-year ban on uranium mining was lifted, ostensibly to allow for the extraction of rare earth minerals (McGwin, 2013). The then Prime Minister Aleqa Hammond was quoted as saying: 'We cannot live with unemployment and cost of living increases while our economy is at a standstill. It is therefore necessary that we eliminate zero tolerance towards uranium now' (Vahl *et al.*, 2013). There has been considerable opposition to this decision in Nuuk itself. Local communities close to proposed sites are also concerned about the potential environmental and health

consequences (Nuttall, 2013), though some feel that the country and their community need the economic development (Fletcher, 2014). Key concerns include impacts on hunting and fishing activities; ecosystems and community viability; environmental threats, including health impacts of uranium dust; inadequate consultation processes and social and environmental impact assessments; and the possible influx of thousands of foreign construction workers and associated labour rights issues (Nuttall, 2013).

Prior to the parliamentary debate, traditional drum dancers had performed in Nuuk city centre, singing songs about how minerals were the veins of the earth and expressing concern about the commodification of nature (Nuttall, 2013). One of the governing coalition parties, Partii Inuit, stepped down from the coalition in protest prior to the vote (Weaver, 2013). People gathered in silent protest as the decision to lift the ban was debated in parliament (*ibid*). NGOs and the opposition party Inuit Ataqatigiit (IA) called for a referendum, while the leader of IA, Sara Olsvig, highlighted the lack of effective public consultation around the issue (*ibid*). In a blog post, Olsvig (2013) invoked the UN Declaration on the Rights of Indigenous Peoples, and which allows for the free, prior and informed consent (FPIC) of indigenous peoples to industrial development taking place on their lands (see Section 4.4.2).

In 2010, the Greenlandic parliament had already amended legislation to make it easier to explore for radioactive elements (World Nuclear News, 2013). GME has already been exploring for uranium as well as rare earths at Kvanefjeld. The director of GME welcomed the decision to lift the ban, saying that it put Greenland 'on the path to uranium-producer status' (*ibid*). Analysts suggest that Greenland could rank among the world's top five or ten uranium producers (Mered, 2013; Vestergaard and Bourguin, 2012). There are questions

around whether Greenlandic uranium can compete with Australia, Niger or Namibia, but Greenland is seen as a good uranium source from geopolitical and investment security perspectives, making it more attractive than authoritarian or unpredictable Central Asian or African regimes (Mered, 2013).

However, observers draw attention to the complicated legal regime and the split governance issues between Greenland and Denmark which are particularly acute in relation to uranium and nuclear-related matters, and will take years to resolve, while mines will also take time to set up (Vestergaard, 2013; Vestergaard and Bourguin, 2012). In short, experts believe that Greenland will not become a uranium exporter any time soon.

3.2 Hydropower and aluminium smelting

Greenland was dependent solely on imported oil for power generation for 40 years, following a decision by the Danish-led authorities in 1950 (Bertelsen and Hansen, 2015). Greenland's first hydropower station, the 45MW Buksefjord plant has been supplying Nuuk with power since 1993. Further plants include: a small 1.2MW plant feeding Tasiilaq on the eastern coast since 2005; Qorlortorsuaq Dam in the south, yielding 7.2MW since 2008; and the 15MW Sisimiut Hydro Power Plant in the west (since 2009). The latest hydropower station – in Ilulissat, western Greenland – increased its capacity to 22.5MW in 2013 (North of 56, 2013). Currently 70 per cent of Greenlandic households are served by hydropower. There is potential for more hydropower production, which only requires a political decision to go ahead (Bertelsen and Hansen, 2015).²⁶

In the late 20th century, mega-industries such as aluminium smelting were identified as potential users for Greenland's hydropower resources.

26 However, a representative of WWF notes that the easy wins have been made on hydropower and that small communities will be very expensive to reach, so alternative renewable options including wind and solar should be explored (personal communication).

Other commercial activities such as hosting information data centres have been discussed more recently, in the light of Greenland's potential for natural cooling as well as large-scale hydropower (following the example set by Sweden) (Ramboll, 2014).

3.2.1 The Alcoa aluminium smelting project

In 2006 the US aluminium company Alcoa started to assess the potential for establishing an aluminium smelter (Bertelsen and Hansen 2015; Hansen 2010). The location finally agreed was Maniitsoq, in southwest Greenland, a town of 2,530 residents (Statistics Greenland, 2014). The final decision on whether to go ahead with the project is still pending (Rose, 2011).²⁷ The Greenland Aluminium and Hydroelectric Development Project is a collaboration between Alcoa and the Greenlandic government. The government set up a company – Greenland Development – to provide an interface with Alcoa. The proposed project will consist of an aluminium smelter with projected capacity of 340,000 tonnes/year (Valdimarsson, 2014). The smelter will be located in the northwest of Maniitsoq Island, about 11km from Maniitsoq town. Two hydropower stations to the north and the south are to provide electrical power to the smelter. A port will be constructed close to the smelter site, and housing and services provided for workers during construction and operations. During operations the smelter is expected to create 600 permanent jobs (Alcoa, 2015).

Key issues include a proposed migrant construction workforce of around 2,000 (probably Chinese) labourers; related labour standards issues; and the potential to overwhelm local services such as healthcare (Bertelsen and Hansen, 2015; Nuttall, 2012b; Lund, 2012; Hansen, 2010). During my time in Greenland in 2012, NGO and student respondents expressed concern at the lack of transparency around Alcoa's

Memorandum of Understanding with the government, and suggested that concessions were being made that were not in society's best interests, such as cheap labour and tax breaks (personal communications). NGOs feared that hydropower will not be extended to the community, and that there is not enough political will to persuade the company to do this, and they expressed concern about the quantity of CO₂ that the aluminium smelter would emit (personal communications). One NGO respondent claimed that the government had reached the conclusion that 'the people of Greenland were in favour of the aluminium smelter' before the site was selected; that those not in favour 'didn't have a voice'; that people had not had enough information to make an informed decision, and that the process had been rushed. He observed: 'In Iceland they had a debate for 30 years before they built their first smelter' (personal communication).



Populations of towns such as Maniitsoq should have the opportunity to make a meaningful contribution to impact assessments of projects planned in their region. Photo Emma Wilson

²⁷ For updates see www.alcoa.com/greenland/en/proposed_smelter/project_updates.asp and www.alcoa.com/greenland/en/proposed_smelter/project_background.asp

On a more positive note, the strategic environmental assessment (SEA) conducted by Alcoa (over and above legal requirements) is seen as a positive precedent and a valuable exercise in incorporating local environmental information into project-related decision making, even though this was largely as a result of informal relations between actors, rather than the formal decision-making structure per se (Hansen, 2010). According to civil servants in Maniitsoq, Alcoa is talking about offering on-the-job training, including carpenters and electricians; there will be opportunities for service companies. 'If parliament approves this project, small companies are waiting.' They said that they had had a lot of meetings with the company, although 'We haven't seen too much of Alcoa in the past two to three years' (personal communication).

Both supporters and opponents of the aluminium smelter have engaged closely with stakeholders in Iceland, where there has been rich experience of aluminium smelting, with three operating smelters. The NGOs Avataq and Against Aluminium Smelter in Greenland have studied local Icelandic experience and published letters on the Saving Iceland website.²⁸ In 2011, officials from the Maniitsoq administration visited Alcoa's East Iceland smelter with elders, hunters and entrepreneurs, including a tour of the plant and meetings with their counterparts in the local administration. 'We are talking about setting up a company like they did in East Iceland to serve Alcoa' (personal communication).

In general, my impression was that people have a more positive view of the Alcoa project than the iron ore project. Partly this is based on the objective analysis of the SEA process offered by Hansen (2010), and partly on my respondents' comments, including those living in Maniitsoq itself. For instance, one NGO representative

who was critical of both projects observed, 'At least with Alcoa we have always been invited to argue our opinion – that is not the case with London Mining' (personal communication). Nonetheless, there has been quite a lot of NGO criticism of the Alcoa project, and while the local administration representatives were in favour of the project overall, due to overwhelming economic and social need, I noted that some of their own key concerns, such as the question of hydropower for Maniitsoq, were in line with the concerns expressed by NGOs (personal communications). However, the lack of progress on the project is also of concern. Indeed one aspect of this is that the company is sitting on the rights to hydropower potential that could be used as a renewable energy source for other industrial purposes, including the Isua project, a matter highlighted by WWF (personal communication).

It is also worth noting that the aluminium smelter is not the only project under development in the Maniitsoq area. In 2011, North American Nickel (NAN) was granted exclusive exploration rights for nickel, copper, cobalt and platinum group metals in an area to the southeast of Maniitsoq. In January 2015 NAN signed an agreement for use of a port close to the southern border of its licence area which will provide year-round deep-water access to the project.²⁹

Maniitsoq needs the investment and the jobs – and the sense of purpose – that an aluminium smelter or an operational mine could offer, and there is clear frustration that the region is not yet benefiting from its valuable industrial potential (such as hydropower and ice-free deep-water ports). There has been a slow decline in Maniitsoq over the past 20 years. The fish-processing plant, which employed 400, closed around 12 years ago due to a decline in cod catches (relating to the collapse in cod fisheries in 1990), which was a big blow to the town,

28 See www.savingiceland.org/2011/03/from-the-resistance-against-alcoa-in-greenland and www.savingiceland.org/2011/04/alcoa-in-greenland-empty-promises

29 See www.northamericannickel.com/projects/greenland/maniitsoq/

and around 500 educated people left for Nuuk and other towns. Maniitsoq doesn't have many alternatives. Despite its picturesque aspect (it is known as Greenland's Venice because of its location on several small islands linked by bridges and canals), Maniitsoq struggles to attract tourists, as the local civil servants observed: 'We lack icebergs, we don't have dog-sleds, big cruise ships pass Maniitsoq by. There is just some heliskiing for rich Russians' (personal communication).

3.3 Oil and gas

Few areas are as appealing to petroleum geologists as the Arctic. Once an inland sea choked with tropical vegetation, the bedrock below the Arctic Ocean today provides the ideal conditions for finding oil reserves.

Kevin McGwin, The Arctic Journal (McGwin, 2015)

Oil exploration is in its early stages in Greenland. Despite huge expectations, experts warn that even if oil were to be produced successfully, it would take many years to set up an export industry.³⁰ Several major international operating companies have held exploration licences for the western shores of Greenland, in Baffin Bay: Maersk Oil Kalaallit Nunaat, ConocoPhillips, Shell Greenland, GDF Suez, Statoil, DongEnergy and Cairn Energy. Tullow Oil is in a joint venture with Maersk. Greenland's state oil company Nunaoil (see below) has a shareholding of 8 to 12.5 per cent in every exploration licence (Nunaoil, 2013).

The Greenland Oil Industry Association (GOIA) was set up in 2009 as a forum for discussion among its members, the oil and gas companies holding licences in Greenland. The forum is used to share experience and good practice – there are working groups on oil-spill

response, drilling and health, safety and the environment (HSE). GOIA organises meetings with key Greenlandic official organisations, and represents its members in legislative and regulatory matters.³¹

In the past 40 years there have been 14 drillings in Greenlandic waters, of which eight were carried out between 2010 and 2011 by Cairn Energy (Cairn Energy, 2015a). In the 2013 coalition agreement, the government indicated that new offshore drilling licences would be harder to secure and exploration would be subject to greater scrutiny (Macalister, 2013). Nonetheless, four licences were issued in 2013 for the East Greenland licencing area in the Greenland Sea. However, prospects for developing Greenland's oil resources deteriorated suddenly in 2014 with the drop in the price of oil, making Arctic exploration too expensive for most. In January 2015, Statoil, GDF Suez and Dong Energy all returned their exploration licences, while other companies put theirs on hold (The Economist, 2015).

3.3.1 Greenland's oil company Nunaoil

Greenland's national oil company, Nunaoil, is a partner in all hydrocarbon licences issued to international companies, and is a 'carried partner' in the exploration phase, i.e. the partner companies cover costs until a project is commercial (Nunaoil, 2013). Its activities include: engagement with the government and the public; capacity building, compilation of databases, knowledge sharing, promotion of Greenland oil opportunities; and negotiation of collaboration agreements with other partners and service agreements with service companies, developing financing scenarios, participation in GOIA. In 2012 I interviewed the CEO of Nunaoil, Hans Kristian Olsen (Box 3) (personal communication).

30 Greenland's gas is less interesting for investors – despite being viewed as environmentally less risky (Chazan, 2012) – due to the difficulty of transporting gas to markets from a location as remote as Greenland, and the fact that gas markets are well supplied at present.

31 See www.goia.gl

Box 3. Interview with the CEO of Nunaoil

Hans Kristian Olsen has been the managing director of Greenland's oil company Nunaoil since 2005. He is a Greenlander, a trained ore geologist, and he cares deeply about his country and about the right of Greenlanders to take control over decisions relating to their own future. Olsen noted that the key issues for Greenlanders are similar to those associated with mining – public consultation, local jobs, and the government's ability to negotiate a fair deal for the people. According to Olsen, politicians don't know the industry and so they have a lot to learn.

Olsen observed that Greenlanders are concerned about preserving their traditional way of life, especially hunting and fishing. People ask Nunaoil about potential environmental impacts: their food is in the ocean where oil exploration is taking place. This is deep-water drilling and Greenland has a very sensitive environment: so a good oil-spill response system is an essential part of environmental protection. The authorities are demanding a guarantee that companies such as Cairn can clean up if there is a spill.

People also ask Nunaoil about jobs. Yet Olsen believes that realistically the Greenlandic workforce won't have the capacity or know-how to take all the jobs available. Greenland needs to prepare geologists, lawyers, economists and business managers for the future. Small companies realise that most jobs will be in the service sector, not production. If local people want to get involved it requires a lot of motivation to learn skills and the English language. Greenlanders don't like to travel abroad for training if it means leaving their families. In their licences, foreign companies commit to providing training and building the skills of Nunaoil's employees.

Olsen noted that Greenland has a long time to wait before first oil is produced: perhaps 10–20 years. The public and politicians are expecting oil production to happen sooner. A key challenge is to avoid creating unrealistic expectations, by holding public meetings and building understanding. Greenland needs the revenue from oil development, but it also needs to manage it properly, so the profits are not all spent outside Greenland. Olsen states: 'We want the development, but we want to do it on our own terms; we need to develop with dignity and integrity.'

Source: personal communication

3.3.2 Impacts and benefits

In 2013, the five companies that were operating in the Baffin Bay area carried out a collaborative social baseline study, to form the basis of the operating companies' respective social and environmental impact assessment processes (SIA and EIA) (Cairn Energy, 2015b; see also Section 4.3). In addition, Cairn has held public meetings in several settlements close to the Baffin Bay area. On their website, they report their three key findings (Cairn Energy, 2015c):

- A high proportion of the residents in this north-western part of Greenland are hunters and fishermen, and their central concern is the effect drilling could have on marine mammals.
- They are concerned about the potential impact of an oil spill on the local environment, which they rely upon for their livelihoods.
- There is also an underlying anxiety about skills development in the area, as it is recognised that opportunities for young people are limited, which is also true of the small towns nearby.



Exploring for oil and gas in Greenland's water is a high risk business requiring the most modern technology and the strictest environmental standards, including oil spill response preparedness. Photo: Tim Wilson

Oil-spill response is also a key issue for the government, which lacks capacity in this area. A government official noted, 'Generally if something happens on land we can deal with it. If it happens in water it is much more difficult. Greenlandic oil-spill response can't handle major incidents [...] Our policy is to put the responsibility onto the project owners. They have to rent equipment and get it to Greenland.'

The findings of the baseline study are to be incorporated into Cairn's SIA, which will provide a basis for the next impact-benefit agreement (IBA) to be negotiated with the government in relation to the proposed drilling in Baffin Bay. Cairn has already negotiated and implemented several IBAs. On its website, Cairn notes that in 2010 and 2011, IBAs between the company and

the government provided support to education and training, community development projects, local business support and institutional capacity building (see Section 4.5). Following the 2011 IBA, Cairn set up two community funds for education and community development (Cairn Energy, 2015d).

3.3.3 *Opposition*

Cairn's exploratory drilling has attracted a great deal of international attention, notably from Greenpeace, which is campaigning for a full ban on Arctic oil and gas activity, while also seeking to minimise the risks of operations that do go ahead. Greenpeace and other NGOs have protested in particular about the lack of transparency over the oil-spill response programme for Cairn's drilling activities in

2010 and 2011.³² There has been less protest within Greenland.

Some respondents noted that Greenlanders are not in favour of Greenpeace's tactics (such as climbing on platforms), and say that they are promoting the organisation at Greenlanders' expense. Greenlanders would prefer to make their own decisions about their economic future; some still feel affronted (rightly or not) about Greenpeace's role in the 2010 EU sealskin trade ban. On the other hand, local NGOs and officials appreciate the assistance Greenpeace has provided in terms of reading documents and helping people to understand some of the complexities of the projects.

The above-mentioned call for restraint in giving out new offshore drilling licences in the 2013 coalition agreement followed a report by Lloyd's and Chatham House warning of the risks of investing in the Arctic (Emerson and Lahn, 2012); and one by the UK Environmental Audit

Committee calling for oil drilling in the Arctic to be put on hold until the following criteria are met (UK Parliament, 2012):

- A pan-Arctic oil-spill response standard is in place
- A stricter financial liability regime for oil and gas operations is introduced that requires companies to prove that they can meet the costs of cleaning up
- An oil and gas industry group is set up to peer-review companies' spill response plans and operating practices, reporting publicly
- Further independent research and testing on oil-spill response techniques in Arctic conditions is conducted, including an assessment of their environmental side-effects
- An internationally recognised environmental sanctuary is established in at least part of the Arctic

32 The OSR plans were eventually published in 2011: www.bbc.co.uk/news/uk-scotland-scotland-business-14536361

4

Addressing key social issues

As an emerging minerals and petroleum economy, Greenland needs to ensure that legislation and governance structures are in place, and capacities built within regulatory and administrative bodies to deal with the changes. Public consultation and the accountability of industry and public bodies are key areas to focus on.

Countries that are dependent upon natural resource extraction often suffer from the so-called 'resource curse', symptoms of which include weak economic growth (in spite of high resource revenues), revenue and currency volatility, the decline of other sectors, increased corruption, mismanagement of revenues, and/or political authoritarianism (Auty, 1993; Sachs and Warner, 2001; Gary and Karl, 2003; Humphreys *et al.*, 2007; Gilberthorpe and Hilson, 2014). Soros (in Humphreys *et al.*, 2007) describes the resource curse in terms of three main processes:

- the so-called '**Dutch disease**' i.e. the appreciation of currency due to resource revenues and the negative impact of this on the competitiveness of other industries;
- **fluctuating commodity prices**, which cause disruption to the economy; and
- **the effect on political conditions**, summarised as: 'asymmetric information, asymmetric agency and asymmetric bargaining power' (ibid, vii).

In resource-rich regions where regulation is immature and government expertise is low or evolving, there is an even greater need for company–government partnerships, individual

company responsibility, and industry-wide collaboration to fill the gap, as well as high levels of transparency over agreements and processes that define the government–industry relationship. It is important to ensure that civil society is well-enough informed and empowered to hold government and industry to account. In this context effective public consultation is essential, to inform society about industrial activities and relevant decision-making processes; provide government and industry with important information about society's needs; and address power asymmetries to ensure that local people have a meaningful voice in decision making.

Some of the key issues facing people in Greenland, as identified by my respondents and by the literature include: governance and transparency; impact assessments; meaningful public engagement; impact-benefit agreements; and local content and job creation. The following sections discuss these in more detail with reference to international standards and experience.

4.1 Governance and transparency

From the 1990s the operations of multinational extractive industry corporations have come under increasing scrutiny and criticism globally, while donors and international financial institutions have increasingly been promoting good governance, economic reform and transparency (rather than deregulation and free trade) as key ways to overcome the resource curse and achieve better economic development (Wilson and van Alstine, 2014). The broad 'theory of change' around



In the 1950s and 60s, efforts to modernise and restructure Greenlandic society saw the resettlement of thousands of Inuit to apartment blocks in Nuuk. Since the end of colonial rule, Greenlanders have sought independence from Denmark and to recover from such mistakes. Photo: Emma Wilson

transparency is that if data on extractive industry operations is open to the public, civil society will be able to use that data to hold government and industry to account (e.g. by challenging them on how revenues are managed), resulting in more effective revenue management, less corruption, more responsive decision making, and ultimately leading to less conflict and poverty and better development prospects.

4.1.1 Evolution of the governance and transparency agenda

Between 2001 and 2004, the World Bank Group carried out its extractive industries review to understand how their financing of

extractive industries' activities could better deliver their goals of sustainable development and poverty reduction (World Bank, 2004). Revenue transparency was identified as a key area and the Bank began to ask governments to demonstrate revenue transparency as a precondition for Bank investment in the extractive industries (World Bank, 2004). The Extractive Industries Transparency Initiative (EITI) was launched at the 2002 Johannesburg Earth Summit, following intensive campaigning in particular by the Publish What You Pay NGO coalition, which continues to push the transparency agenda through its global civil society networks.³³

³³ Publish What You Pay is now a global coalition of over 800 NGOs, working not only on EITI but also on broader transparency and accountability issues, including recent US and EU legislative developments: www.publishwhatyoupay.org

Box 4. International good practice standards

The **UN Guiding Principles on Business and Human Rights (UNGPs)** outline the relative responsibilities of government and industry in the sphere of human rights. The 'protect, respect and remedy' framework, developed under the guidance of the UN special representative Professor John Ruggie, emphasises that governments must protect human rights, business must respect human rights, and there must be access to effective remedy in the event of human rights abuses. The framework has been widely adopted by governments, while businesses have incorporated it into their management policies and procedures. The UNGPs or 'Ruggie principles' (UNHR, 2011) are based on the International Bill of Human Rights (civil, political, economic, social and cultural rights) and the International Labour Organization's (ILO) Declaration on Fundamental Principles and Rights at Work (1998). Denmark has produced an action plan on business and human rights to implement the UNGPs (Government of Denmark, 2014).

Indigenous peoples' rights are not specified in the UNGPs, but a guidance note suggests that circumstances may require consideration of additional standards and UN instruments. The reference points for indigenous rights include the 1989 **International Labour Organization (ILO) Convention No. 169 on Indigenous and Tribal Peoples** (or ILO 169), and the (non-binding, but widely endorsed) 2007 **UN Declaration on the Rights of Indigenous Peoples** (or UNDRIP). Denmark has ratified the ILO Convention 169 and voted in favour of the adoption of the UNDRIP.

For the private sector, the benchmark for good practice in the extractive industries is the **International Finance Corporation (IFC) Environmental and Social Performance Standards (PS)** (IFC, 2012a), of which Performance Standard 7 relates to indigenous peoples. These standards apply directly if companies are seeking finance from the IFC or any of the Equator Principles Financial Institutions, while other international financial institutions have their own similar requirements.³³ The IFC is the private-sector arm of the World Bank, which also has its own safeguard policies (World Bank, 2014).

The **Organisation for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises** are legally non-binding principles and standards for multinationals headquartered or operating in countries that have adhered to the OECD Declaration on International Investment and Multinational Enterprises. The OECD Guidelines (2011) cover areas including human rights, industrial relations, environmental protection and corruption. Each adhering country is required to set up a national contact point (NCP) responsible for promoting the Guidelines, dealing with enquiries and investigating complaints about a company. Denmark has adhered to the declaration and has a national contact point.³⁴

³⁴ Eight financial institutions have signed up to the Equator Principles. See: www.equator-principles.com

³⁵ For details of Denmark's national contact point, see: <https://mneguidelines.oecd.org/ncps/denmark.htm>

EITI is a global programme to encourage governments to publish what they receive from extractive companies and companies to publish what they pay to governments (EITI, 2013). To date 48 national governments have signed up to EITI, and 31 are compliant with the EITI requirements (EITI, undated). A key aspect of the EITI process is the requirement for countries to establish a national multistakeholder group of representatives from government, business and civil society to oversee EITI implementation. In countries where civil society voice has traditionally been very weak, this is often the only opportunity to engage around the table with government and industry. Countries as diverse as Nigeria, Côte d'Ivoire, Iraq, Peru, Azerbaijan and Norway are already compliant. After a slow start, other European countries are now expressing their intention to follow Norway, including the UK, France, Germany and Italy (as well as Australia and the US), though not Denmark (World Bank, 2013).

Legislative initiatives have followed. The US Dodd–Frank Act (2010) and the EU Accounting and Transparency directives (2013) require companies listed on EU and US stock exchanges to disclose payments to governments – project by project and country by country. Transparency in the extractive industries was a key theme of the June 2013 G8 summit (hosted by the UK). G8 leaders announced their commitment to introduce new transparency laws that would require oil, gas and mining companies to disclose the payments they make to governments.

With the EU and US legislation coming into force, along with EITI reporting, considerable amounts of data will be made available. A key challenge with all transparency initiatives is ensuring that the open data is used effectively by the public. A particular challenge is how to make the data relevant to people living locally in the communities directly affected by extractive industry operations; and enabling them to use it to hold government and industry to account (Wilson and van Alstine, 2014).

If information cannot be understood or used by people, the potential for transparency to lead to greater accountability and better development outcomes is seriously undermined (O'Sullivan, 2013).

Wilson and van Alstine (2014) discuss a number of initiatives aimed at 'localising transparency' (i.e. making it more relevant to local communities), with varying degrees of success. Such initiatives include: a sub-national EITI programme in Ghana that attempts to localise the EITI process; a multistakeholder initiative established in an oil-producing region of Kazakhstan to discuss specific local issues, such as environmental impacts and community development spending; 'road shows' taking EITI information to local communities in Nigeria; and mobile phone apps that help people to engage with EITI information (a DfID initiative piloted in Nigeria). Further potential opportunities include linking up with extractive companies' information centres set up in local project areas to disseminate information; work with local journalists to build understanding about the kind of information made available by EITI, Dodd–Frank and the EU directives; as well as increased use of local radio, schools and higher education establishments as channels and forums for debate.

Investment contracts are important tools for governments to negotiate a fair deal for society, and global civil society organisations continue to push for mandatory transparency of investment contracts (PWYP, 2011). Investment contracts cover aspects of revenue sharing; requirements for sourcing labour, goods and services locally; technology transfer; infrastructure development; environmental and social impact assessments and protection measures; dispute resolution; and confidentiality (Open Oil, 2012). It is considered good practice for investment contracts to be published on company websites (EITI, 2013). Selected information can be kept confidential if it is proven to be genuinely commercially sensitive, while regulations can stipulate that the public interest can outweigh

commercial considerations in deciding whether information should be kept confidential or made publicly available (Cotula 2010). Research shows that while it is important to get the contracts right, the deals are shaped not just by the contracts themselves but also by the wider legal frameworks, such as investment treaties and national codes, within which the contracts fit (Cotula, 2013; 2010).



Town centre of Greenland's capital, Nuuk. With such a small population, personal relations are significant in politics, which makes transparency of decision-making even more important. Photo: Emma Wilson.

Inexperienced governments may feel they ought to make a lot of concessions to companies, especially in the early stages of attracting foreign investment. Yet this may subsequently result in government u-turns, which companies find destabilising. An example is the Sakhalin-2 offshore oil and gas project in the Russian Far East, which negotiated a very favourable production sharing agreement in 1994, only to be forced to sell a controlling stake to Russia's state-owned gas company Gazprom twelve years later, when Russia's economy and political power were stronger (Fenton Krysiak, 2007).

4.1.2 Governance and transparency in Greenland

The Mineral Resources Act (2009, amended 2012) covers activities in both mining and hydrocarbon development, and related energy activities (Government of Greenland, undated a, b). WWF Denmark criticises the Mineral Resources Act as it overrules all other environmental and conservation acts, resulting in two parallel regimes, one for extractive industries and one for other activities likely to have an impact on the environment (personal communication).³⁶ In January 2013, following the amendment of the Mineral Resources Act (and in line with the Oil and Mineral Strategy), the responsibilities of the former Bureau of Minerals and Petroleum (BMP) were divided among the Ministry of Industry, Mineral Resources and Labour, the Mineral Licence and Safety Authority and the Environment Agency for Mineral Resources Activities. Material from the former BMP website has now been transferred to the government of Greenland website.³⁷ The Oil and Mineral Strategy also notes that 'Steps will be taken to further accumulate competences in the advisory activities of the Greenland Institute of Natural Resources in the area of mineral resources activities' (Government of Greenland, 2014: 7). This will partially address concerns around government competencies to govern resource development.

Greenland is not a corrupt society (Denmark sits at the top of the 2014 Transparency International Corruption Perceptions Index).³⁸ But, as with all small societies, one problem highlighted by respondents is that personal relations are very significant in politics and decision making, and there are high levels of nepotism, which is a good reason to be careful and transparent

36 WWF Denmark has also criticised the government of Greenland for attempting to pass a new Mineral Resources Act that would limit public access to information until after decisions on licensing have been made by the government. The Greenland Ombudsman later criticised the draft law and the thinking behind it (personal communication).

37 See www.govmin.gl

38 See www.transparency.org/cpi2014/infographic#compare

about decisions (personal communications). Moreover, the Greenlandic administration is seen as a closed institution, with people in key positions keen to maintain the status quo. As one government official noted in an interview with me in 2012, 'the former government was in place for 30 years, which was a real problem. The new government wants to be open and transparent, but that is difficult if you can't change the administration' (personal communication). Since this comment was made, the old party returned to power, was ousted and then voted back in by a small minority, a series of events that have shaken up the political sphere, but not necessarily shifted the 'status quo'.

Civil society and industry express concern that Greenland is poorly prepared to meet the challenges of developing large-scale energy and minerals projects. Transparency International Greenland's website (undated b) states:

Studies conducted by Transparency International in other parts of the world suggest that oil exploration and mining are among the areas of economic activity which carry the greatest risk of corruption. It is therefore important that the Greenlandic society is prepared to cope with the new economic players, and the risks this may entail.

Transparency International Greenland's integrity study on the public sector in Greenland (Kristensen, 2012) is a welcome first step at avoiding the 'resource curse' in Greenland by increasing awareness of the potential risks. The study concludes that Greenland's public sector is struggling with a high turnover of staff and complicated, sometimes incoherent legislation, making it vulnerable to arbitrary administration and potentially also corruption. The study reports high levels of nepotism, which increases the risk of the wrong people getting into and staying in key positions, while also making whistle blowing difficult. The study recommends

better whistle-blower arrangements; streamlining of public consultation procedures across public sector departments; and improved access to information.

Several people expressed anxiety that people in government lack the skills to negotiate with major companies. Student and NGO respondents expressed concern about the content and transparency of investment contracts negotiated between the Greenlandic government and extractive industry companies. As one government official noted, 'Companies can get help from top lawyers, but governments can't afford that' (personal communication). NGOs argue that the government has not been tough enough in negotiating with companies to date, and instead focuses on developing partnerships that do not necessarily operate in the interests of society (Nuttall, 2013).

If the government is to make critical decisions about major energy and extractive industry projects, they need to have all the available information about all potential opportunities, impacts and alternatives. Yet several respondents noted how difficult it is for the government (as well as civil society) to read, understand and properly respond to the impact assessment documentation and other aspects of regulation (see also Section 4.2). Efforts are already being made by government and civil society to increase transparency and build capacities. The government website provides access to standards, guidelines, and strategic assessments related to mineral and oil developments.³⁹ For those who use the Internet regularly this is a good source of information on many aspects of extractive industry development in Greenland. Some respondents noted, however, that radio is a much better medium to use than the Internet for reaching ordinary Greenlanders, especially in outlying settlements. Transparency International Greenland has also provided civil society capacity building in anti-corruption and transparency. Like other

³⁹ See www.govmin.gl/minerals

Greenlandic NGOs, Transparency International Greenland itself suffers from lack of capacity and difficulty in fundraising, while they are dependent on volunteers with very little free time. The head of the organisation suggested that the government could provide a kick-start to the organisation by providing core funding to the secretariat to allow time for fundraising and engagement with international networks (personal communication).

Some of my respondents in Greenland also noted the need for more and better-informed challenges from the media and civil society to hold government officials to account. Civil society organisations are well-informed and passionate, but activists are small in number. Respondents observed that the press is criticised for not challenging authority enough and for not going into enough depth of analysis. *Sermitsiaq* is the only Greenlandic newspaper, having merged with the other newspaper *Atuagagdliutit/Grønlandsposten* (AG) in 2010. The main radio station, KNR (Kalaallit Nunaata Radioa or Greenlandic Broadcasting Corporation), is funded by the government. There seems to be a lack of Greenlandic bloggers – a list of 14 blogs selected by The Fourth Continent blogger identified just two native Greenlanders, and explained that she was unaware of many others (The Fourth Continent, 2014). Blogging is not used for social commentary or critique.

4.2 Impact assessment

Impact assessment is a standard requirement for industrial projects and is defined in international standards and national legislation. Types of impact assessment vary: it could be an environmental impact assessment (EIA) – the form that is most commonly legislated at the national level; or a social, health, cultural or human rights impact assessment; or the higher-level strategic environmental assessment (SEA), which tends to be applied to government programmes or plans.

The UN Guiding Principles on Business and Human Rights emphasise the importance of adequate due-diligence processes (including impact assessments) (Principle 18). The IFC Performance Standard 1 (IFC, 2012a), requires environmental and social assessments that lead to a robust environmental and social management system. Further key standards include the International Organisation for Standardisation (ISO) standards, notably the ISO 140001 certification for environmental management systems,⁴⁰ and the ISO 26000 standard for organisational social responsibility.⁴¹ International good practice standards all require some form of public consultation (discussed in Section 4.3). It is considered good practice for environmental, social and health impact assessments (ESHIA) and related procedures and documents to be published online by operating companies.⁴²

There are many published sources of guidance on social impact assessment theory and practice (Taylor *et al.*, 2004; Burdge, 2004; IPIECA, 2004; Kwiatkowski and Ooi, 2003),⁴³

40 See www.iso.org/iso/home/standards/management-standards/iso14000.htm

41 See www.iso.org/iso/home/standards/iso26000.htm

42 See for example the online library of Sakhalin Energy Investment Company Limited at www.sakhalinenergy.com/en/library/index.wbp and the BTC pipeline summary documentation on the EBRD website: www.ebrd.com/work-with-us/projects/esia/baku-tbilisi-ceyhan-%28btc%29-pipeline.html.

43 See also www.icmm.com/page/84142/our-work/projects/articles/health-impact-assessment-hia

as well as health impact assessments (Birley, 2011). These may be integrated into an environmental, social and health impact assessment (ESHIA). Human rights impact assessments are applied separately in the case of particularly sensitive projects.⁴⁴ Cultural impact assessments have been defined in the Akwé: Kon Guidelines issued by the Convention on Biological Diversity and provide an additional layer of due diligence in the context of projects carried out on indigenous peoples' lands and in areas of cultural heritage value (CBD, undated).

Strategic environmental impact assessments (SEIAs) or strategic environmental assessments (SEAs) are applied to projects or programmes. The SEA process is framed by the United Nations Economic Commission for Europe (UNECE) Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991) and the UNECE Protocol on Strategic Environmental Assessment (Kyiv, 2003). The literature on SEAs provides guidance on the kind of public involvement that is possible, while acknowledging that ensuring public consultation in SEAs is often a challenge (Dalal-Clayton and Sadler, 2005). In many countries requirements for public consultation are minimal and may be limited to elected public representatives (Therivel, 2004). However, good practice requires the analysis of social issues, including stakeholder mapping, participatory analysis of social context and socio-economic trends, multistakeholder dialogue, and inclusion of the voices of vulnerable groups (World Bank, 2011; Dalal-Clayton and Sadler, 2005; Ahmed and Sanchez-Triana, 2008).

4.2.1 Impact assessment in Greenland

Denmark has signed up to the Espoo EIA Convention⁴⁵ and the Kyiv Protocol⁴⁶, though with reservations which exclude Greenland and the Faroe Islands (ARIA, undated; UNTC, 2015). As noted above, the strategic environmental assessment (SEA) conducted by Alcoa for its proposed aluminium smelter (over and above legal requirements), was used as a tool to make decisions about the siting of the smelter and other aspects of the project design (see Section 3.2.1). It is seen as a positive precedent in incorporating local environmental information into project-related decision making (Hansen, 2010).

SEIAs have been completed for offshore hydrocarbon activities and are available on the government of Greenland website (Government of Greenland, undated c). The aim of these SEIAs is to inform and define the content of companies' EIAs. No public consultation has taken place for the SEIAs, which means the public has not had the opportunity to define the scope of impact assessment at the strategic or project level. The SEIAs also have very little coverage of social issues, aside from subsistence hunting practices (ibid). The methodology involved compiling information from scientific and technical journals and from marine mammal observers already operating in the regions, along with a set of environmental background studies on topics such as sea ice, projected oil drift, and marine flora and fauna. The SEIAs are written in English, with only an executive summary in Greenlandic and Danish, so are of limited informational use to most local people. This is not to undermine their value from the perspective of physical science and environmental risk mitigation.

44 The IFC guide to HRIA can be found here: <http://tinyurl.com/ifc-hriam>

45 See www.unece.org/env/eia/eia.html

46 See www.unece.org/env/eia/sea_protocol.html



Greenland's Arctic ecosystems are fragile and take a long time to recover from industrial impacts.
Photo: Tim Wilson

EIAs and SIAs are both required by the Greenlandic authorities for any extractive industry exploration or production activities. Offshore oil and gas activities have a separate set of guidelines, but do include requirements for EIAs and publication of information. Impact assessment guidelines are available on the government website,⁴⁷ as are the EIAs that have been produced to date for offshore oil exploration.⁴⁸ Assessment documents for offshore exploration can also be found on the website of the Arctic Council's Protection of the Arctic Marine Environment (PAME) initiative.⁴⁹

According to Greenland's SIA guidelines for mining (BMP, 2009: 4), the main objectives of an SIA process for a mineral project in Greenland must be considered alongside the EIA. These include: public consultation; social baseline analysis as a foundation for future planning, mitigation and monitoring; identification of positive and negative social impacts at local and national levels; optimisation of positive impacts and mitigation of negative impacts; and preparation of a plan for an impact-benefit agreement (IBA). According to the 2012 Mineral Resources Act (Government of Greenland, undated b) an assessment of social sustainability needs to be produced alongside other documentation, before a large-scale extractive project can be approved.⁵⁰

As noted above, in 2013, the five oil companies operating in the Baffin Bay area carried out a joint social baseline study, with international consultants Golder Associates and the Greenlandic consultancy Inuplan. This is a key element of the SIA that is required before exploratory drilling. The baseline study describes existing social conditions and key development issues in potentially affected

communities, which can be used as the basis for impact management activities. Stakeholder consultation is a key aspect of the study (including engagement with NGOs, interest groups and community representatives). The joint study will form the basis of the operating companies' respective SIA and EIA processes and will provide a foundation for negotiation of the relevant project IBAs (see Section 4.4).

There has been a lot of dissatisfaction with the impact assessment process led by London Mining for its Isukasia iron ore project (see Section 3.1.2). For example, the leader of the NGO Friends of the Nuuk Fjord explained how they were provided with 8,000 pages of material to read just eleven days before the public hearing (personal communication):

A real public hearing process would have started 4–5 years ago and the EIA and SIA would have been participatory. The people who did the impact assessments were from Copenhagen – they don't know about the fjord system.

The final SIA document for the London Mining project was published in March 2013 (London Mining and Grontmij, 2013). It contains much valuable information, some useful statistics, and provides a good general picture of people's lives and livelihoods. Yet this level of knowledge of the area was not reflected at all in the public consultations, where the local consultants who had gathered the data were not present. Moreover, there was no opportunity for public discussion of the conclusion that the impact on this area will be 'low negative' (ibid).

People need to be able to read documents like this with knowledge of what they are looking for, and asking the right kinds of questions so

47 EIA guidelines for mining : www.govmin.gl/images/stories/minerals/EIA_guidelines_mining.pdf; EIA guidelines for hydrocarbon development: www.bmp.gl/images/stories/petroleum/BMP_EIA_Guidelines_Jan_2011.pdf

48 See www.govmin.gl/index.php/petroleum/environment/environmental-regulation

49 See www.pame.is/index.php/mres-by-countries/greenland

50 See also Colclough and Perera (2013).

that they understand whether the information they need is in there. This is why the efforts of international NGOs with experience, such as Greenpeace, are essential to help people make sense of the information. In addition, the SIA needs to be seen as a basis for ongoing dialogue, not as a source of information to base a one-time decision on. A company will develop a social impact management plan based on the SIA, and this needs to be open to public consultation in the same way as the SIA itself, while there should be agreement on topics that are open for ongoing discussion and negotiation after the completion of the SIA and management plan.

A further question to consider in relation to impact assessment is the question of the 'no development option', either at the level of strategic assessment and policy planning, or at the individual project level (e.g. whether to use one site or another, or whether the project itself represents too great a risk for the environment or local livelihoods). For Greenland this is particularly pertinent, especially in relation to offshore oil development. While it appears that Greenland has made a clear decision to go ahead with oil exploration, should it be considering no-go zones, based on geographical conditions and oil-spill response capacity? For example, the East Greenland block for oil exploration is adjacent to Greenland's vast eastern nature reserve, and very far from any major port facilities. If Greenland were to set aside the whole of the eastern coast as a marine protected area, this would be a major symbolic gesture to the global community, as well as a sensible precaution. The zoning approach ('go zones' and 'no-go zones') is supported by the opposition IA party, WWF Denmark and the Minik Rosing committee (personal communication).



The Isua project proposes a vast open-cast iron ore mine. Four public meetings took place in 2012 as part of the environmental impact assessment (EIA) process, which was heavily criticised for lacking meaningful public engagement. Photo: Emma Wilson

4.3 Meaningful public engagement

Public engagement is the issue that provokes the greatest comment and emotion among Greenlanders and observers of Greenland's mineral and oil developments.

4.3.1 'Meaningful consultation'

According to the UN Guiding Principles on Business and Human Rights (2011), the impact assessment process should: 'involve meaningful consultation with potentially affected groups and other relevant stakeholders, as appropriate to the size of the business enterprise and the nature and context of the operation' (Clause 18b). The IFC Performance Standard 1 (IFC, 2012a) defines stakeholder engagement as an ongoing process that includes stakeholder analysis and planning, disclosure and dissemination of information, consultation and participation, a grievance mechanism, and ongoing reporting to affected communities. If project impacts are expected to be significant, the company is required to carry out an 'informed consultation and participation' process, which involves a more in-depth exchange of views and information, and an organised and iterative consultation that results

in the company incorporating local views into decision-making processes (PS 1).

In 2014, in the context of a review of the World Bank Safeguard Policies (2014), the Bank Information Centre developed a model policy for environmental and social assessment and management (ESAM) (BIC, 2013), including a standard for 'meaningful consultation', which is defined as follows (ibid: 5):⁵¹

Meaningful consultation is a process that

- i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle;
- ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people;
- iii) is undertaken in an atmosphere free of intimidation or coercion;
- iv) is inclusive and responsive to marginalised, discriminated-against, and vulnerable groups, with attention to gender;
- v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, grievance mechanisms and implementation issues;
- vi) is designed to include persons with disabilities in all consultations both through proactive inclusion and accessibility both physically and socially for persons with disabilities to facilitate the fullest participation of affected and interested parties; and
- vii) includes a comprehensive discussion of environment and social issues, not limited to the harm-prevention objective, but also the areas where ESAM can contribute to social,

environmental and economic benefits, and documents the consultation outcome in a way that is validated by the participants.

Some observers argue that 'consultation' is an inadequate term, as this implies an entity (government or company) is approaching a community with an agenda, whereas communities often feel that they are not being consulted on what matters to them. This is one area where anthropological research has particular value, as it is aimed not at eliciting opinions on extractive industry-related questions, but at understanding local communities better. In the earliest stages of project planning, companies and governments could learn much from anthropological studies, youth projects, livelihoods research programmes such as SLiCA, and other initiatives focused on the community but not necessarily related to a specific industrial activity. They could thus build a foundation for 'consultation' that is based on first understanding local peoples' relationship to their local environment; their entrepreneurial capacities; their ways of making decisions, engaging with one another and relating to outsiders; local power hierarchies; community and family structures; and the role of elders.

4.3.2 Free, prior and informed consent

Free, prior and informed consent (FPIC) is an indigenous peoples' right established in international conventions, notably the Convention 169 on Indigenous and Tribal Peoples or ILO 169 (1989); in soft law, for example the UN Declaration on the Rights of Indigenous Peoples (UNDRIP, 2007); and, in a few cases, in national law (for example in Peru and the Philippines). These documents articulate the need for governments to seek the free, prior and informed consent of indigenous peoples to industrial activities taking place on their lands (notably in cases of resettlement) (Buxton and Wilson, 2013; Voss and

51 See also 'Enhanced participation and disclosure' here: www.bicusa.org/issues/safeguards/environmental-and-social-assessment

Greenspan, 2012). Specifically, for example, UNDRIP requires states to:

[C]onsult and co-operate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilisation or exploitation of mineral, water or other resources

(Article 32, paragraph 2).

In the light of issues around legal recognition of some indigenous groups and the fact of non-indigenous groups practicing traditional livelihoods activities and being highly dependent on the land and local resources in some cases, it is increasingly argued that consent processes should be applied to all significantly affected local communities, not only those that are officially recognised as 'indigenous' (Buxton and Wilson, 2013). For example, the 2012 revision of the Forest Stewardship Council (FSC) certification standard expanded the application of FPIC for all projects to significantly affected non-indigenous communities (FSC, 2012).

The responsibility to seek FPIC does not only lie with governments (Lehr and Smith, 2010; Buxton and Wilson, 2013). IFC Performance Standard 7 requires companies to seek the free, prior and informed consent of indigenous peoples in cases of resettlement from their lands (IFC, 2012a, b) and other multilateral development banks have similar requirements. The IFC defines FPIC as a process 'established through good faith negotiation between the client and the Affected Communities of Indigenous Peoples'. Companies are required to document: '(i) the mutually accepted process between the client and Affected Communities of Indigenous Peoples, and (ii) evidence of agreement between the parties as the outcome of the negotiations' (Performance Standard 7). The IFC (2007b) has also produced a guidance note for its private sector clients explaining

the risks of operating in a context where a government has failed to meet its responsibilities under ILO 169, and how to mitigate those risks through considered engagement practices.



On 13 September 2013, an open parliament meeting was held in Nuuk on the possibility of overturning a long-standing ban on uranium mining in the country. Citizens showed up to protest, expressing their continued opposition to uranium mining. Source: Nunavummiut Makitagunarningit (Makita) blog

4.3.3 Access to remedy

Consent and consultation are not single events. Both need to be maintained over the long term through ongoing dialogue. A key aspect of such a dialogue is a mechanism that enables the resolution of conflict or addressing of issues and concerns among the local population before they become conflicts. The Ruggie principles (UNHR, 2011) state that, 'States must take appropriate steps to ensure, through judicial, administrative, legislative or other appropriate means, that when [human rights] abuses occur within their territory and/or jurisdiction those affected have access to effective remedy' (Clause 25). A company's community grievance mechanism should be 'based on engagement and dialogue: consulting the stakeholder groups for whose use they are intended on their design and performance, and focusing on dialogue as the means to address and resolve grievances' (Clause 31h).

There are a number of different types of non-judicial grievance mechanisms, including the following (Scheltema, 2013):

- factory-floor level grievance mechanisms;
- project-level (company-led) grievance mechanisms;
- the national contact points (NCPs) of the OECD Guidelines for Multinational Enterprises (see Box 4);
- mechanisms associated with international financial institutions (e.g. the Compliance Advisory Ombudsman of the World Bank);
- the work of national human rights commissions; and
- multistakeholder initiatives such as the Round Table on Sustainable Palm Oil.

Since 2006, the IFC requires its clients to set up and administer procedures to address project-related grievances from affected communities.⁵² Other international financial institutions have similar requirements. Because of these and other drivers (e.g. certification), leading oil and gas, mining and forestry companies are starting to establish their own formal mechanisms to address and resolve local citizens' grievances (Wilson and Blackmore, 2013). The business case for implementing an effective grievance mechanism, aside from aspects of compliance, includes the potential for reducing and avoiding conflict, by providing a channel for local community concerns to be identified and addressed before they escalate. As part of an effective overall community engagement strategy they can help to build trust with stakeholders, reduce operational risks and enhance management of project impacts and community relations (ibid).

Professor Ruggie's team identified 'effectiveness principles' for non-judicial grievance mechanisms that have been included

in the UN Guiding Principles, including legitimacy, accessibility, predictability, equity, transparency, rights-compatibility, and a source of continuous learning (Rees *et al.*, 2011; UN, 2011). Scheltema (2013) argues that an understanding of effectiveness of non-judicial grievance mechanisms should be expanded to encompass not only the process but also the effectiveness of the **outcomes** of these mechanisms (e.g. strengthening of policy or improvement in complainants' circumstances). Outcome-based effectiveness monitoring would help to build levels of trust stakeholders place in the mechanisms, will also help companies to assess whether or not to employ certain approaches over others, and may convince NGOs that non-judicial mechanisms are not just watered-down versions of judicial mechanisms (ibid).

4.3.4 International experience of public engagement

Case studies of international experience on public engagement and consultation can often be more valuable than guidelines. The three case studies summarised below illustrate different approaches to consultation, ranging from the ground-breaking and extensive Berger Inquiry in Canada, to a citizen advisory council established using company funds following the Exxon Valdez spill, to a consultation in Papua New Guinea that sought balance by including not only the voices of marginalised local people, but also the voices of nature that are sometimes not represented at all in localised consultation processes.

One of the landmark public consultations in extractive industries history was the Mackenzie Valley Pipeline Inquiry, also known as the Berger Inquiry. In 1974, at the request of the Canadian government, Justice Thomas Berger led a commission to investigate the potential social, environmental, and economic impact of

⁵² IFC's updated sustainability framework retains this requirement and is available online. See: IFC (2012a).

a proposed gas pipeline through the Yukon and the Mackenzie River Valley of the Northwest Territories (Fitzpatrick *et al.*, 2008; Nuttall, 2010; CBC, 2010). The inquiry took three years, cost C\$5.3 million, and produced over 40,000 pages of evidence (283 volumes). Berger took his commission to communities across the Yukon and the Northwest Territories, including all communities of the Mackenzie River Valley, and the inquiry is particularly noted for the voice it gave to the aboriginal peoples who would be affected by the proposed project. Berger's report 'Northern frontier, northern homeland'⁵³ was published in 1977 and recommended that no pipeline be built through the northern Yukon at all, and that a pipeline through the Mackenzie Valley should be delayed for 10 years. 'Berger wanted everyone to take a deep breath so those for and against the project could attend to land claims and environmental and social concerns' (O'Malley, 2011). In fact the pipeline was delayed more than 10 years. It wasn't until 2011 that – following a further in-depth consultation – the C\$16.2 billion Mackenzie Valley pipeline project was finally approved to carry natural gas from the Beaufort Sea 1,200 kilometres to the Alberta border to link with southern markets.

The Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) was mandated by the US Oil Pollution Act of 1990 in the wake of the devastating 1989 Exxon Valdez oil spill in Prince William Sound. The council is an independent non-profit organisation whose members include communities, commercial fishing organisations, environmental and tourism organisations and Alaska Native groups. The council signed a contract with the Alyeska Pipeline Service Company (APSC) that guarantees access to its facilities for monitoring purposes and guaranteed annual

funding (currently around US\$2.8 million/year, a figure reviewed every three years), for as long as oil is flowing through the pipeline. The council reviews oil-spill response plans, environmental protection capabilities and potential environmental impacts. It works to raise public awareness as well as holding the APSC to account.⁵⁴

The nature of very-localised impact-benefit negotiations may result in certain issues being overlooked if the appropriate representatives are not around the table to defend them. For example, a dialogue between local community leaders and companies may focus primarily on social benefits and job creation, and neglect ecological concerns if they are seen to be a secondary priority by the representatives that are sitting around the negotiating table. An example of where this particular challenge was identified and addressed is the case of a dialogue established by Australian mediation consultants Pax Populus in relation to the Ok Tedi copper and gold mining project in Papua New Guinea, where the parties round the table included a representative specifically selected to represent 'the voice of the river' (Pax Populus, 2013). This is relevant in the Greenlandic context when considering whether and in what contexts organisations such as Greenpeace (defending the less tangible interests of climate change and the global environment) should be sitting at the negotiating table.

53 The title of the report was meant to emphasise that for some – e.g. resource developers – the region is a frontier, for some – the aboriginal and local populations – a homeland.

54 For more information see www.pwsrcac.org



Nuuk's cultural centre, Katuaq, is used for exhibitions, concerts, films and civil society gatherings. Photo: Emma Wilson

4.3.5 Public engagement in Greenland

Greenland's leaders have tended to see the granting of self-government as the equivalent of granting Greenlanders the rights inherent in the UN Declaration of the Rights of Indigenous Peoples (UNDRIP). In 2009, at the second session of the Expert Mechanism on the Rights of Indigenous Peoples, then-premier Kuupik Kleist stated that Greenland's Self-Government Act 'should be seen as a de facto implementation of the Declaration' (Indigenous Bar Association, 2011: 10). During the parliamentary debate over the government's zero-tolerance of uranium mining in October 2013, former Prime Minister Hammond stated:

Knowing and respecting the rights we have, some people have claimed that we have violated indigenous peoples' rights. It's because of these rights and with these rights as a tool that we can make this decision today [...] It is because of these rights that we own our own resources [...] We are the only people in the world and in the Arctic who have our own government and parliament, and by that the right to become a state. It is because of these rights that we as a government can ask the parliament to take a decision on this issue

(cited in Olsvig, 2013).

However, the opposition leader Sara Olsvig herself argued that the decision to overturn the zero-tolerance policy was made 'without free and prior information, and without any element of citizen involvement', accusing Hammond of using the rights that Greenlanders had fought for during decades of UN negotiations as a tool to 'violate the rights of our own people' (ibid).

One participant at the Isua iron ore project public consultation that I attended asked whether local people would have the opportunity to say 'no' to the development (personal communication). An industry expert – not from London Mining – observed in an email to me after reading a draft of this report that any discussions about whether or not such activities should take place at all ought to happen before licences are awarded. It is the responsibility of the authorities before any decision is made to open up an area for applications and before companies start to invest money in a project (personal communication). This is an important point and relates to debates around when FPIC should be granted and by whom, what aspect of a project it should relate to, and whether it is a 'one-off' decision or an ongoing dialogue – questions that have been poorly studied to date.

The Greenlandic government's EIA guidelines for mining provide guidance on public consultation. The guidelines (BMP, 2011: 8) state that:

The public should be involved throughout the EIA process and informed about the activities when the mine is in production. A public consultation meeting at an early stage of the process for input to the EIA report is recommended as a minimum. A public consultation meeting with relevant information about the EIA report and issues which have been addressed is recommended as well as a minimum, before the final EIA report is submitted for government approval.

The public consultation period covers a minimum of six weeks. Rules and procedures for the involvement of the public must be described in a publicly available white paper. Objections and comments are gathered from public consultations and provided to the government along with suggestions on how to address them in the EIA process or a justification needs to be provided for not doing so. These comments and all data connected to the EIA 'can be made available to the public' according to the EIA guidelines (ibid: 8). Following the public consultation period the EIA report is revised to incorporate the comments, together with a description of how they were addressed and a list of stakeholders who were consulted. The final version provides part of the basis for final government approval. Despite this guidance, public consultation around extractive industry activities remains a key concern for civil society, based on evidence of how the guidance has been implemented by companies such as London Mining (see Sections 3.1.2 and 4.2). The nascent NGO coalition for better consultation in Greenland (see Section 2.6) aims to help government officials, NGOs and communities to better understand their rights and international good practice standards and project-related documentation (personal communication).

In 2012 the Employers' Association of Greenland published a report on stakeholder engagement, highlighting some of the key issues and challenges (Bjørn Aaen, 2012). The report makes clear that public consultation is not just about holding a public meeting: it's about creating a dialogue. What is important is the kind of information shared, the deliberative nature of the dialogue, and the time and place for the dialogue. The report notes that there is a marked difference of positions among stakeholders in large-scale energy and minerals projects, which impedes deliberative debate, while opposition is often based on principle, rather than facts (which are not always fully available). The report concludes that there

is a need for better information sharing, with stakeholders being more open to each other's arguments, to create more open deliberation. There needs to be greater inclusivity in these debates, to ensure involvement of resource-weak stakeholders. The report highlights the responsibility of public authorities to ensure public participation is not limited by power asymmetries. This involves ensuring that the public generally trusts and is interested in the process. The report proposes tighter government guidelines for companies to organise appropriate consultation processes (*ibid*). Hansen (2010) also emphasises the importance of managing power relations in public consultation, and ensuring that less powerful stakeholders have the opportunity to make their voices heard.

A key challenge is the language of the information provided to stakeholders. Alcoa has reportedly provided a lot of information in Greenlandic, although others don't. (Alcoa's website has a page in Greenlandic, though all the links go through to English language pages.)⁵⁵ Greenlanders complain that all project EIA materials are provided in English. A major problem with Greenlandic is that the language doesn't have much of the technical vocabulary so it is difficult to translate highly technical documents. Translation is also expensive; it takes time, and is not always necessary, as most people will not read the majority of the documents. Local experts that I met in Maniitsoq said that they found the Greenlandic Alcoa documentation difficult to get through. Impact assessment documentation is vast and people are normally not given sufficient time to read through it even if they have the capacity and patience to do so. Given the language expertise of educated Greenlanders, most of the people that would understand the content of the documents, would understand them in English or Danish, but that does not mean that an executive summary alone is sufficient in Greenlandic, as it probably will not contain the

most pertinent information for the Greenlandic-only speakers.

4.4 Impact-benefit agreements

Impact-benefit agreements (IBAs) or benefit-sharing agreements between companies and indigenous and local communities are now standard in Australia and Canada (Limerick *et al.*, 2012; Sosa and Keenan, 2001). In other countries, experience has been more varied. In Russia, for instance, oil-producing regions have been leading the way in developing sub-national legal frameworks as in the case of Khanty-Mansiysk (Alferova, 2006). In the case of the Sakhalin-2 project in the Russian Far East, the benefit-sharing process with local indigenous groups was driven by the requirements of project lenders, led by the European Bank for Reconstruction and Development (EBRD), which – like the IFC – has a project finance requirement for companies to implement an indigenous peoples' development plan for projects that significantly affect indigenous peoples' livelihoods (Novikova and Wilson, 2013). In Nigeria, an approach driven by companies themselves, known as the Global Memorandum of Understanding (GMOU) has established models of community–company partnership, whereby multistakeholder committees ensure a greater community voice and shared ownership of decision-making around social investment projects, through facilitated dialogue (Scheltema, 2013). Thus the range of experience to draw upon is broad and diverse, while standardised methods for measuring the outcomes of such initiatives are yet to be developed (*ibid*).

The signing of such agreements alone is not a guarantee of successful outcomes. For instance the use of IBAs in Northern Canada has been criticised for being inequitable and drawing attention away from discussion of industrial impacts and desirable development scenarios (Caine and Krogman, 2010). Gibson and O'Faircheallaigh (2010:12) suggest two factors

⁵⁵ See www.alcoa.com/greenland/kl/home.asp

that are particularly important for successful negotiations: (a) the community's clarity regarding its goals, and (b) its ability to stay united and to plan collectively. It is important that an agreement can be revisited and is not seen as a one-off negotiation (Diges, 2008).

One way that extractive industry companies can contribute to community development is by promoting energy access for communities living close to their projects. In Nigeria's Niger Delta, for example, a consortium of companies including Shell set up the Bonny Utility Company, which uses excess gas to generate power for the local community of Bonny Island. Civil society organisations are now pushing companies to follow this example in the Niger Delta, where people have no access to electricity or rely on expensive diesel for household generators. In this region community gas-to-power utility companies are being piloted.⁵⁶ The model of providing power to local communities is also relevant to mining as well as energy companies, as they often have to establish a major source of electricity to power their projects and this creates an opportunity for that power to be extended also to local communities. This is clearly a relevant topic for discussion in Greenland, in light of the Maniitsoq development, which in its dormant state is sitting on currently unutilised hydropower potential that could be used for community and industrial use, and the potential for the Isua iron ore project – and other mining projects – to use hydropower at an industrial scale and share it with local communities.

4.4.1 Impact-benefit agreements in Greenland

Colclough and Perera (2013) note that the IBA model developed in Greenland goes beyond the traditional model established in

Canada and Australia, as they are designed as formal contracts between the investor, the host municipalities and the national government, which has legal implications relating to compliance and dispute resolution, and application to bilateral investment treaties. Greenlandic strategic social impact assessments (SSIAs) make provision for impact-benefit agreements (IBAs) on the employment of Greenlandic nationals and on the terms and conditions for the use of migratory labour (ibid). A draft model IBA is available on the Government of Greenland website (undated, d).

During the 2010 and 2011 drilling seasons, Cairn Energy entered into an IBA with Greenland's former Bureau of Minerals and Petroleum (BMP)⁵⁷ and the municipalities in each project area. The IBA details Cairn's action plan for reducing social impacts and increasing local benefits, notably through local employment, training and skills development (see Box 5).



Waste management is a key issue that companies could work on with Greenlanders. Many small communities face major challenges dealing with waste and extractive companies have considerable technical expertise to share. Photo: Emma Wilson

⁵⁶ See <http://sungas-nigeria.org>

⁵⁷ The BMP was responsible for promoting and regulating extractive industry development until its responsibilities were divided among the Ministry of Industry, Mineral Resources and Labour, the Mineral Licence and Safety Authority and the Environment Agency for Mineral Resources Activities in 2013.

Box 5. Cairn Energy's impact-benefit agreements

As noted on Cairn Energy's website, the 2011 IBA covered five areas, with targets against which progress has been measured, and key indicators of success:

- **Employment practices:** including targets for increasing Greenlandic involvement in Cairn's project workforce
- **Human resources development:** including the funding of projects to increase Greenlanders' access to education so they can gain the expertise required to participate in the oil and gas industry
- **Business development:** including actions to promote opportunities for Greenlandic companies in Greenland's oil and gas industry; and to promote mentorship and joint ventures between local and international businesses
- **Social wellbeing:** including measures to prevent strain on local services such as healthcare
- **Cultural wellbeing:** including funding of local community development initiatives

Performance against the IBA targets has been monitored and is summarised in a table that Cairn has published online. It includes details such as the fact that Cairn's workforce was about 10 per cent Greenlandic by the 2011 exploration; 12 trainee positions were created in 2011, including four helicopter pilot positions and six offshore training positions for students at the Sisimiut School of Minerals and Petroleum. Cairn set up a US\$250,000 (£158,000) fund for English language training in 2010 and a US\$500,000 (£316,000) fund to improve technical skills in 2011.

In 2011, over 100 Greenlandic organisations were involved in supplying goods and services to Cairn's subsidiary, Capricorn Greenland Exploration AS, while Capricorn spent £38 million with Greenlandic companies. Capricorn's contractors recorded purchases in Greenland valuing £2 million in 2011, while £22,000 of meat and fish supplies was purchased by Capricorn and its contractors from local markets of Aasiaat and Nuuk. A grant fund of £47,000, administered through a board of trustees, was set up to support cultural activities and young people's development through sport.

Source: Cairn Energy (2015e)

Provision of energy for the local population is a key issue in relation to the Alcoa project, which has the potential to make a considerable difference to the Maniitsoq community by providing access to hydropower. In its current inactive state the project is sitting on unutilised hydropower potential that could be used for community and industrial use (including the Isua project). Waste management is another

issue that companies could work on with Greenlanders. Many small communities have major challenges with waste management (although I did spot a battery recycling point in a shop in Maniitsoq), and extractive companies have considerable technical expertise of hazardous and non-hazardous waste management, which they could share with communities.

4.5 Local content and job creation

In many hydrocarbon- and mineral-producing countries, national law and investment contracts include so-called 'local content' provisions: requirements to hire local workers and procure goods and services locally (Open Oil, 2012). There is growing awareness among oil, gas and mining companies that local job creation is an important way to provide local benefits and secure a 'social licence to operate' (IPIECA, 2011).

4.5.1 Building markets and creating opportunities

Meeting local-content targets is not a simple question and compromises sometimes need to be made in countries such as Greenland, with little extractive industry experience, an underdeveloped local workforce, little competition, and low levels of preparedness. In such contexts, there are particular challenges in the implementation of environmental and social performance standards (Wilson and Kuszewski, 2011). Companies have addressed these challenges by training local contractors and subcontractors on the job; increasing oversight and monitoring, especially in hard-to-reach places; using online procurement systems to avoid corruption; and setting up training facilities, sometimes in partnership with government, before they have secured contracts to implement major projects in a local area (ibid).

Companies are now increasingly trying to 'optimise' rather than 'maximise' local content, through development of capacity studies, which might include identifying the optimal areas of a local economy to support, to benefit most from the extractive industry development. For example Statoil worked with the Nigerian government to identify key local skills to develop for the Nigerian oil industry, leading to a joint project to build skills in the fabrication industry (manufacture and assembly of project components) (ibid; Statoil, 2009). Companies have also invested in capacity building of

small-scale enterprises, helping them to secure service contracts on extractive industry projects, for example by manufacturing safety clothing. BP and their consortium partners set up an Enterprise Centre in Azerbaijan to help small and medium enterprises (SMEs) enhance business capacities and improve opportunities to win oil and gas contracts. A US\$15 million Supplier Finance Facility was also launched in collaboration with the IFC and the Micro Finance Bank of Azerbaijan to provide transparent sources of finance for local businesses (Wilson and Kuszewski, 2011).



Greenland lacks the skilled labour for planned large-scale construction projects, so will need to bring in construction labour from China and elsewhere. More important for many Greenlanders is the prospect of jobs in the longer-term operations period, including in management positions. Photo: Tim Wilson

Indigenous and local people have also taken the initiative themselves when faced with major developments on their doorstep. In the face of extensive tar sands developments on their lands, the Fort McKay First Nation in Canada established the Fort McKay Group of

Companies LP, which is 100 per cent owned by the Fort McKay First Nations Band.⁵⁸ These companies now provide services to the tar sands developments, including haulage, land reclamation, fuel distribution and warehousing. While many local people wish the tar sands developments hadn't happened, they at least feel that they have been able to control the benefits to their communities, to some extent.

4.5.2 Labour issues and local content in Greenland

The extraction of Greenland's minerals and oil requires more hands than are currently available among Greenlanders. As noted above, the Isukasia mine project will require almost 3,000 Chinese guest workers to be housed in camps close to the project site during the construction period. Alcoa proposes to bring in around 2,000 Chinese contractors to build the two hydropower dams and the smelter itself. This obviously creates concern that Greenlanders will be squeezed out of the jobs market. Such a situation is unavoidable in a country such as Greenland with so few skilled labourers, although the main driver for companies appears to be the need to keep labour costs down. More important for many is the prospect of jobs for Greenlanders in the longer-term operations period, including in management positions. As one respondent from the university observed, 'There is a big difference if you get Greenlanders in middle-management' (personal communication).

In December 2012, the Greenlandic parliament, under then-premier Kuupik Kleist, approved a law that gave international companies implementing large-scale projects the power over decisions on the use of foreign labour, leading to fears of an influx of Chinese labourers (Nuttall, 2012b). The so-called 'large-scale law' also allowed for foreign construction workers to be paid less than Greenland's minimum wage

of US\$14/hour (Jichang, 2013). The political controversy caused by the introduction of this law caused rifts in the ruling Inuit Ataqatigiit party and are thought to have been a key trigger for the 2013 elections that brought the opposition party Siumut back to power (ibid). On getting into power, former premier Aleqa Hammond promised to review the law, and in January 2014, the government introduced amendments to the law, relating to the definition of a 'large-scale project' and the regulation of wages, which cannot now be set lower than the minimum wage without collective bargaining agreements with the Greenlandic labour union (Eversheds, 2013).

Capacity scoping has not been done systematically in Greenland. However, local training and capacity building is taking place. Cairn trained workers in Aasiaat to support its exploration; Arctic Base Supply has trained and employed local people as marine mammal observers; Nunaoil's partner companies have provided training and capacity building for Nunaoil staff. Cairn Energy employed a Greenlandic diving company and partnered them with a more experienced UK-based company to build capacities (Cairn Energy (2015a). In 2012 the then-CEO of Air Greenland explained that they did not have experience of offshore flying, so Cougar Helicopters had flown for them, taking Air Greenland pilots with them on some of their flights. In 2012, Air Greenland was planning to order a number of offshore helicopters for 2014.

Rather than focus only on technical service jobs, many speak of the need for Greenland to build a 'knowledge economy' in the way that Iceland was able to do (Bertelsen and Hansen 2015; Conditions, 2012). The University in Nuuk is developing research programmes around subjects relevant to the oil and mining developments, including an extractive industries course and social anthropological research

⁵⁸ See www.fortmckay.com

on land and resource use in areas that are to be exploited. Companies acknowledge the need to employ local experts who understand the local environment and way of life to do the impact assessments, especially SIAs. London Mining used a local consultancy to carry out its local surveys. One challenge is whether local researchers, especially from the university, would be willing to become employed by the industries or whether that would be seen as 'selling out' and whether they would be willing to risk public criticism if a process that they contributed to was seen to be unsatisfactory.

4.5.3 Working culture: adapting to new types of industry in Greenland

The question of working culture and workers' mentality is a topic of much debate within the country and among observers. This is not unique to Greenland, especially in cases where indigenous workers are involved in new types of employment. Some feel that Greenland's workers are not ready for employment on major extractive industry projects, not only from the perspective of skills but also working culture. My respondents offered a range of views on the matter, both positive and negative. Some observed that Greenlandic workers do not like steady jobs or a hectic work schedule; they prefer to go hunting and fishing if they want to; they don't like being far from home for too long; and they frequently fail to complete training courses (personal communications).

On the positive side respondents noted that Greenlanders have adapted to new industries in the past, such as the fishing industry, which often requires fishermen to spend long periods of time at sea away from home (personal communications). Many Greenlanders have successfully taken up jobs with the extractive industries and there is some regional variation – for example one industry expert reported that in Aasiaat workers were more reliable than in Nuuk (personal communication). Respondents also observed that foreigners (especially Danes) ought to re-think the way they approach

Greenlanders. One Danish respondent noted: 'It's not as if we know it all and need to teach the locals how to do it' (personal communication). A local man from Maniitsoq observed how Greenlandic hunters know the weather and the environment intimately but are 'so humble – not like the Danes' (personal communication).



A screen in a Tasilaq supermarket showing job announcements. Photo: Tim Wilson.

Overall the comments demonstrated that there is a need for better understanding of cultural difference as a way to build work capacities and manage expectations; greater flexibility on the part of employers; as well as appropriate training and engagement activities, including educational initiatives from school age, which expose young people to different types of work. There is a need to build appropriate expectations about possible jobs for Greenlanders. People feel that the government should be doing more about this, and not avoiding the question. One government respondent argued (personal communication):

Politicians think that they can take fishermen and hunters and turn them into labourers. They know there is a problem with lack of competencies and education and commitment but aren't doing anything. In Denmark it would be a big issue in discussions, but here it is like a hot potato and no-one wants to hold it. It needs to be faced and discussed otherwise international companies will just bring in their own people.

Language once more is a big challenge. I was very impressed when travelling around Greenland at the number of local people who could speak to me in my own language. Yet it is by and large only the educated classes who know Danish and only the most educated who know English. As a representative of Royal Arctic Line observed 'harbour workers don't know English' (personal communication). And this is critical in an industry that employs international work forces and where the main language of health, safety and emergency response is English.

Iceland benefitted from hydropower development by creating employment and a globalised knowledge economy over a period of decades (Bertelsen and Hansen, 2015). This is more difficult in Greenland, with a smaller and less-educated population, but the Icelandic experience suggests that Greenland should invest more in its educational and training institutions, as well as analysing its capacity needs and planning its capacity-building strategy carefully, and being prepared to spend time developing these capacities before launching into full-scale mineral and energy developments.

5

Future Greenland

Greenland is at a critical point in its development – not for the first time. The prospect of increased investment in the country's energy and minerals industries offers hope for the future, especially for those seeking full independence from Denmark. Yet this also poses threats to local livelihoods and the fabric of society, if the industries and the revenues from those industries cannot be managed effectively. Recent events also illustrate the risks of basing future plans on unpredictable commodity markets.

Most people feel that Greenland needs more time if it is to develop in the way that Greenlanders want to develop, although the desire for greater independence may result in a push to move faster. The oil and iron price shocks of 2014 have also demonstrated that great hopes can also be fragile if they rely too much on commodity exports; and that extractive industry development can suddenly be slowed by external forces over which Greenlanders have no control. The intensity of feeling around minerals development has contributed to



Kulusuk in Eastern Greenland is a traditional Greenlandic bygd or small settlement. It has a population of less than 300 but is still one of the largest settlements in the region. The nearby airstrip was built by the US military in 1956 to support an early warning station, which was closed in 1991. Photo: Tim Wilson

instability in Greenland's government, with related issues reportedly contributing to the collapse of two ruling coalitions in two years.

So how can Greenland ensure that its future development is sustainable and equitable for local society? The following sections offer some observations and recommendations.

5.1 Governance and transparency

Revenue management is a key area for countries expecting an increase in extractive industry activity. For Greenland, a first step will be to reassess the country's economic model before starting up major revenue-generating industries, to ensure in the first instance that the revenues will not be wasted on supporting an unsustainable system. Greenland's regulatory framework and capacities also need to be strengthened to ensure effective governance of resource extraction and revenue management. Revenue streams should not only be open to public scrutiny, but open to debate about their investment into a more diverse economic development, including preservation and modernisation of traditional livelihoods.

Joining the Extractive Industries Transparency Initiative (EITI) would make sense for Greenland, as a way to formalise its systems in line with international good practice, although Denmark would have to be the country that joins. Whether or not Greenland/Denmark joins EITI, government and civil society organisations should seek to learn from that initiative. They also need to become acquainted with the provisions of the EU transparency and accounting directives and the US Dodd–Frank Act, and identify on which stock exchanges the companies operating in Greenland are listed. Greenland could also learn from the EITI model of multistakeholder engagement: the government should try to open up more spaces for civil society organisations to engage around the table with industry and government. Greenland should build on the positive experience of Transparency International Greenland's integrity study, and follow the

recommendations of that study, which include improved public consultation procedures and access to information, and better whistleblower arrangements.

The Greenlandic government, public, NGOs and journalists need to build their understanding about investment contracts. Some guidance materials are available, mostly in English (Open Oil, 2012; Cotula, 2010, 2013). It would also be useful to develop more tailored materials specifically for Greenlandic audiences; journalists and NGOs would particularly benefit from targeted training in this area. It will be of great benefit to overall accountability if the government passes legislation to ensure that all contracts are made public, as recommended by EITI (2013). There is a need for adequate legal assistance for government and civil society, to support government in their negotiations on investment contracts and natural resource futures, and to help civil society to understand their rights and associated legal issues, so as to hold developers to account more effectively. As respondents have noted, these kinds of services are expensive and it would be useful for donors, government and industry to think about how to fund or subsidise legal services for those who cannot afford to pay the full cost, for example by establishing a dedicated fund for this purpose.

The government of Greenland website should continue to be a place for sharing standards, guidelines, and impact assessments. The government could also encourage dissemination via non-Internet channels, perhaps more actively involving the media (especially radio and newspaper) and educational establishments, including schools, university departments, research institutes and technical training centres. Civil society organisations could encourage blogging by local Greenlanders as a way to express independent views, while also seeking actively to engage and raise awareness among journalists and broadcasters. Donors, international NGOs, business and government could provide support to local civil society initiatives, research projects and



Maniitsoq, close to where Alcoa is proposing to develop an aluminium smelter. The Alcoa project could make a considerable difference to the Maniitsoq community, including job creation and the provision of access to hydropower for the local community. Photo: Emma Wilson

local information channels, including those that are not Internet-dependent. An interesting example from business is Royal Arctic Line's provision of assistance with transportation for an NGO to extend its outreach in isolated local communities. Greenland has other practical examples from a business sector that appears to be highly aware of its corporate responsibilities to engage with and benefit society.

Greenland will also need to work with other countries to fill the gaps in local governance capacities and to find its way in making tough

decisions relating to its future resource-based development. There have been calls for greater regulation, including by the Arctic Council, which has already approved two binding treaties (on search and rescue and oil-spill response) between Arctic states. Greenland will need to work closely with Denmark, particularly on the complexities of uranium governance, and with major oil-operating companies on industrial management and regulation relating to issues where capacities are particularly low, such as oil-spill preparedness and response.

5.2 Impact assessment

Government, NGOs and local businesses need to become familiar with the UNECE Convention and Protocol (and related guidance) (UNECE, 2012) and better understand the potential for using strategic assessments for energy- and minerals-related policies and programmes. It is also important for all stakeholders to be familiar with the IFC performance standards relating to environmental impact assessments, environmental and social management systems, resettlement and indigenous peoples' issues, as the benchmark standards for extractive industry construction and operations. Further key standards include the International Organisation for Standardisation (ISO) standards, notably the ISO 140001 certification for environmental management systems, and the ISO 26000 standard for organisational social responsibility. The websites of the industry bodies IPIECA (the global oil and gas industry association for environmental and social issues), OGP (the International Association of Oil and Gas Producers) and ICMM (the International Council on Mining and Metals) are good entry points for company-related and project-level guidance.⁵⁹

As Hansen (2010) observed, there is a need to integrate strategic environmental assessment (SEA) at a higher level within Greenlandic regulation, and to broaden its use as a tool for assessment and planning. Greenland's hydrocarbon SEIAs are already available online, but the government should also encourage companies to make their project-related impact assessments, and key conclusions from them, available online in appropriate formats and languages. There should be a public expert debate on the kind of information that needs to be made available in what languages, e.g. to what extent does impact assessment material need to be available in Greenlandic, and as summaries only or full documentation, or something in between. It would be helpful for the government to issue official guidance on this.

It is important that all affected people are able to take part in discussion and debate on the content of impact assessments, whether or not they are able to read the documents themselves in part or in full. The government should also issue guidance (over and above existing guidance) around the nature of consultation relating to impact assessments, based on good practice standards and the specific needs of Greenlandic stakeholders (e.g. language-related, demographic or geographical). Public engagement on the content of impact assessments should extend to the development of environmental, social and health management plans, and on their implementation throughout the life of the project.

The research programmes of the University of Greenland and other research institutes are very valuable in helping to increase understanding and awareness. It is essential for government decision makers and energy and minerals companies to be aware of issues such as social trauma and societal fragility, as well as peoples' inherent adaptability (given the right support) and the efforts being made to build resilience (such as re-establishing links between people and their environment and traditional livelihoods activities, and between youth and elders). These insights can help to inform and strengthen impact assessments and management planning, employment strategies and community development projects (as part of impact-benefit agreements).

As proposed by the opposition Inuit Ataqatigiit (IA) party and WWF Denmark among others, Greenland should consider establishing no-go zones, including in marine areas, be this related to a strategic assessment process or some other form of government planning exercise. For example, the Greenlandic government could think about setting aside the coastal waters of East Greenland as a marine protected area. Similarly in project-level impact assessments, the option of not developing the project in its

59 See www.ipieca.org, www.ogp.org.uk and www.icmm.com

proposed format should also be discussed, along with alternatives.



Fish hanging outside a house in Kulusuk. For Greenlanders, the future might be seen as a combination of traditional activities – such as hunting and fishing – and industrial development, with good education a key requirement for their children to succeed. Photo: Tim Wilson

5.3 Meaningful public engagement

Government officials, NGOs and communities need to understand their rights and international good practice standards relating to stakeholder engagement. There is a need to build the capacities of NGOs to understand and read and translate project materials for local communities so that affected citizens can engage meaningfully. Support for Greenland's nascent NGO coalition on better consultation would help to achieve this. A good starting point for guidance on good practice is the IFC document 'Stakeholder engagement: a good practice handbook for companies doing business in emerging markets' (IFC, 2007a) (see also IFC, 1998). Also useful are the guidance notes to IFC Performance Standards 1 (assessment and management of environmental and social risks and impacts) and 7 (indigenous peoples), and the specific guidance on conducting informed consultation and participation processes with suggested indicators (Annex C to IFC Guidance

Note 1). Extractive industry associations and individual companies have also developed their own toolkits and guidance on stakeholder engagement and disclosure of information (IPIECA, 2004, 2012; ICMM, 2010, 2012).⁶⁰

In line with the recommendations of the Employers' Association of Greenland report on stakeholder consultation (Bjørn Aaen, 2012), the authorities need to ensure that public consultation is inclusive, with a particular focus on involving resource-weak stakeholders and addressing power asymmetries. As the report suggests, there should be tighter government guidelines for companies to organise appropriate and meaningful consultation processes. Language issues need to be clarified and addressed by government and industry, both for publication of materials and for conducting public meetings and eliciting feedback from the public.

Stakeholders may require legal and other expert help from international partners on certain aspects of consultation and rights (for example FPIC), and it is certainly useful to study international experience. Case studies of landmark consultation processes such as Canada's Berger Inquiry are also important for learning and building an understanding of international experiences and good practice about public consultations that have led to tangible outcomes.

There is a need to consider how stakeholder capacity building will be funded and institutionalised to support effective engagement – various funding mechanisms and citizens' organisational models should be explored (one notable example being the Prince William Sound Regional Citizens' Advisory Council in Alaska, set up following the Exxon Valdez oil spill). International networks are also important to provide opportunities for

⁶⁰ See also the IPIECA guidance on community engagement www.ipieca.org/topic/social-responsibility/community-engagement and Anglo American's socio-economic assessment toolbox (SEAT): www.angloamerican.com/sustainability/communities.aspx

sharing experience and building skills. As noted above, Greenlanders are already benefiting from sharing international experience, through international NGO partnerships, establishing local branches of international organisations, and study tours (e.g. of an aluminium smelter in Iceland).

Regarding access to remedy, stakeholders need to understand what forms of access to remedy are available, from the national contact points of the OECD Guidelines to company-level grievance mechanisms, as well judicial mechanisms at the national level. There is a need for more research and more sharing of case study material on what has worked and not worked in particular contexts. Case study material on grievance resolution and conflict management is available online – a good starting point is the Access Facility web portal.⁶¹

5.4 Impact-benefit agreements

There is a need for more analysis of international experience of different forms of impact-benefit agreements (IBAs) and how these might be applicable and beneficial to the Greenlandic context. Companies and government should build on positive company experience to date to optimise opportunities for aligning IBAs with broader development needs at the local and national level, including skills development, business opportunities, apprenticeships and education. The negotiation of IBAs with local stakeholders should not affect or in any way replace discussion of industrial impacts or broader development outcomes.

Companies could also engage in certain areas of social infrastructure development, as appropriate to their core competencies, while also being aware of not taking on the role of the state. Energy access is a key issue and it makes sense for the government to try to negotiate a deal with mining and industrial companies

that are using large amounts of energy for their projects, to also supply energy to communities located within a certain distance of their operations. Companies might also consider engaging in other social infrastructure support activities where they have core competencies, such as waste management.

5.5 Local content and job creation

Greenland could benefit from more in-depth research into the appropriate jobs that could be generated for Greenlanders in the context of energy and minerals development, perhaps following the example of the joint Norwegian–Nigerian study that led to support for Nigeria's fabrication industry (Wilson and Kuszewski, 2011). Such a study could include analysis of Greenlanders' willingness and preparedness to be involved in extractive and energy projects – what skills and capacities are required, what kind of workplace psychology issues need to be understood. The government is already engaged in some of this kind of research and should continue to support it. They should also support public debate on working standards for migrant workers, and the implications for Greenland of a possible shift towards development driven by cheap labour industries.

Research into Greenland's economic development potential should also explore forms of job creation and business development **not** related to the extractive industries, especially in regions that will not have the same energy and minerals opportunities, as a foundation for broad-based and equitable development. Greenland should also consider the investment required to become a 'knowledge economy' as Iceland has done and support that area of development. These kinds of development options will help to mitigate the risk of becoming a victim of fluctuating resource prices in future.

⁶¹ See www.accessfacility.org

To combat the scepticism around Greenlanders' ability to respond to new industrial job prospects, research should gather and learn from positive experience of marine mammal observers and other industry-related jobs, including consideration of factors of success in particular cases and the reasons behind regional differentials. There is a need for education and training for employers (perhaps through the Employers' Association) on some of the challenges and benefits of engaging local Greenlanders with their projects. Companies could be encouraged to work with younger Greenlanders of school age (through educational materials, school presentations and work-experience schemes) as well as setting up apprenticeships for school leavers. There should be more and better language education in schools, including Danish and English, and possibly Chinese. Efforts will need to be made to incentivise and retain teachers in the smaller villages.

5.6 Final thoughts

Overall, the overwhelming message from respondents was that Greenland should not be rushing into energy and minerals development and needs to take the time to build capacities, to understand the implications of the proposed developments, and to ensure that society is ready for the likely changes that will take place. In particular, Greenland's government and external investors and partners need to be aware of the fragilities of Greenlandic society that have been a result of massive social changes in the 20th century, as well as the inherent capacities of Greenlanders to be adaptable and innovative. Greenland needs to see itself as a broad-based and diverse economy, including service- and knowledge-based sectors, not simply a resource periphery for other countries and major global companies to benefit from. And it needs to protect itself from dependency on commodities as the main source of revenue. Education of local Greenlanders in particular skills and sectoral specialisms, including management, will be critical.

The following questions still remain open, and might be important areas for future research and debate:

- How can Greenlanders maintain societal integrity and build resilience in the face of major energy and mineral projects?
- How can Greenland ensure that future development focuses on a diversified economy to protect itself from the unpredictability of commodity markets?
- What skills, capacities and adaptation strategies do Greenlanders have to face the new wave of social and economic change?
- How to create opportunities for a service- and knowledge-based economy, not just a resource extraction economy?
- How to build a genuine dialogue around key issues, and who to include in it?
- How can links with international networks help Greenlanders push for equitable and sustainable development that fits with their own goals and values?

Debates on Greenland's future need to be inclusive, and they need to incorporate the voices of those directly and indirectly affected by government decisions to encourage energy and minerals development, as well as those who may lose out as a result of decisions to invest more in energy and minerals than more traditional livelihoods activities. Debates also need to include consideration of the 'voiceless' environment and climate, but debated in terms closely relevant to the realities of local communities.

It is clear that Greenland needs to develop on its own terms, but at the same time, international partners can provide valuable support and capacity strengthening where appropriate. Greenlanders are already using international links to build resilience through knowledge exchange, awareness raising and sharing experience of solving similar problems elsewhere. Residents of Maniitsoq have taken

part in exchanges with an aluminium smelter in Iceland; international networks have been active in debating the Isua iron ore project; Transparency International Greenland is building experience from other transparency initiatives globally, and seeking to be a full member of the Transparency International family. Even Greenpeace, not a favourite of the average Greenlander, has been praised by civil society and government alike for providing essential support in understanding complex industry-related documentation.

Learning from international experience is essential. Nowadays the notion of putting an investment idea on hold for 10 years – or indeed

over 30 years – sounds unlikely, but Greenland can learn two key lessons from Canada's Berger Inquiry. First of all is the importance of decision makers or their representatives travelling around and talking to people about what they think about key development issues – not only extractive-industry related, but about the whole economic model, people's lives and livelihoods, and whether or not a major industrial development is desirable in a particular location. And second is the importance of stepping back and 'taking a deep breath' before launching into major resource development that could transform society for better or worse.



House in Kulusuk. Greenland needs to develop in its own way, but can benefit from international experience.
Photo: Emma Wilson

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Acronyms

BMP	Bureau of Minerals and Petroleum
CSR	Corporate social responsibility
EIA	Environmental impact assessment
EITI	Extractive Industries Transparency Initiative
ESAM	Environmental and social assessment and management
ESHIA	Environmental, social and health impact assessment
FPIC	Free, prior and informed consent
GME	Greenland Minerals and Energy
GOIA	Greenland Oil Industry Association
IBA	Impact-benefit agreement
ICC	Inuit Circumpolar Council
IFC	International Finance Corporation
IIED	International Institute for Environment and Development
ILO	International Labour Organization
KGH	Kongelige Grønlandske Handelskompagni (Royal Greenland Trading Company)
KNI	Kalaallit Niuerfiat (Greenland Trade)
OGP	International Association of Oil and Gas Producers
PAME	Arctic Council's Protection of the Arctic Marine Environment initiative
SLiCA	Survey of Living Conditions in the Arctic project
SEA	Strategic environmental assessment
SIA	Social impact assessment
UNCLOS	UN Convention on the Law of the Seas
UNDRIP	UN Declaration on the Rights of Indigenous Peoples
UNECE	United Nations Economic Commission for Europe
UNGPs	United Nations Guiding Principles on Business and Human Rights
WWF	Worldwide Fund for Nature



Knowledge
Products

Research report

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Energy

Keywords:

corporate responsibility; extractive industries; good governance; resilience; mining

Greenland seeks to expand its energy and minerals industries to secure the revenues to gain full independence from Denmark. The 2014 oil price crash hit oil exploration hard, bringing disappointment to the local oil industry but relief to global environmentalists. Poor public consultation on mining projects and the lifting of a moratorium on uranium mining have caused public protest, while political turmoil also indicates the strength of feeling around these issues.

This extended trip report is based on interviews, public and informal meetings and analyses of written materials. Applying IIED's global experience, it explores plans for increased resource development and key issues such as corporate responsibility, good governance, civil society activism and addressing social trauma. It concludes with key recommendations and questions for further research and debate.



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