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Title: Integrated Assessment: A Tool to Address Multi Stakeholder Participation

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Abstract

Integrated assessment (IA) of energy projects is becoming the norm for leading companies. From the early focus largely on environment (70 - 80's) to the inclusion of social issues (80s - 90s) and the emergence of health and human rights (90s - 2000s), impact assessment has evolved into ESHIA and more recently IA.

Experience shows that effective IA is based on consultation that is characterized by inclusiveness, participation, early start, continuity, and transparency. Having the necessary consultation skills within the project team is crucial, as environmental and social and health issues cut across technical and communication lines. Various parties perceive impacts from different vantage points and changes to design are often driven by a mix of culture, communication, politics and fact. The ability to address key issues and their interaction with different stakeholders is a crucial attribute of successful IA.

Drawing on their experience in the global energy industry, the authors present a tempered history of impact assessment leading to integrated assessment. The authors also provide practical lessons on public participation with best practice examples from oil and gas projects in Canada and Latin America with particular attention to seeking input from often marginalized groups such as indigenous and local communities.

Introduction

Integrated assessment (IA) of energy projects is slowly becoming the norm for leading companies in the oil and gas sector. From the early focus on environmental issues (70 - 80s) to the inclusion of social issues (80s - 90s) and the emergence of health and human rights (90s - 2000s), impact assessment has evolved into Environmental, Social, and Health Impact Assessment (ESHIA) and more recently IA. The history of transfer of impact assessment shows that the theory leads the implementation by many years. The full use of integrated assessment will still take considerable time. Experience from major energy projects shows that effective IA is based on meaningful stakeholder consultation that is characterized by inclusiveness, participation, early start, continuity, and transparency.

Having the necessary consultation skills within the project team is crucial, as environmental and social and health issues cut across technical and communication lines. The ability to identify and address key issues and their interaction with different stakeholders is a crucial attribute of successful IA. It is also important to ensuring that "critical path" and time-sensitive activities during project permitting and operations are adhered to. This paper describes the evolution and importance of IA and the consultation process underpinning it to deliver project success.

Integrated Assessment

Environmental Impact Assessment (EIA)¹ (or Environmental Assessment in some countries²) originated in the 1970s and had a strong focus on the environment. While early legislation often referred to social issues, these were primarily a secondary concern, the main focus being human impacts on the natural environment.

Even though Social Impact Assessment (SIA) was in development from the early 1970s, regulations to include SIA as part of impact assessment and the actual practice only emerged slowly. By the late 1970s more attention was being given to social issues, but the focus was predominantly on narrow socio-economic issues, with socio-economic questions often combined in just one chapter of the impact assessment report.

The importance of social issues continued to grow during the 1980s and 1990s. For example, the World Bank required that project proponents address social questions in their project evaluation procedures from 1986³. In 1993 the U.S. Council on Environmental Quality began to explore ways to formally incorporate SIA into the revised US EIA regulations.⁴

Overall, the evolution of SIA and its integration with EIA has been slow. In fact, it was not until 1996, after some 20 years of practice that SIA began to be fully integrated into the EIA process, and that EIA (and SIA) started to be integrated into project planning processes.⁵

Health Impact Assessment (HIA) lagged even further behind SIA in its full inclusion as part of Impact Assessment. While the techniques for HIA emerged in the early 1990s, it is only since the latter part of that decade that government agencies have issued formal HIA guidelines (e.g. Canada⁶, New Zealand⁷ and the UK)⁸. While the term EIA is still used most often at government level to include environment, social and health the term ESHIA (Environmental, Social, Health Impact Assessment) was introduced by some companies (mid to late 90s) to specifically show inclusiveness.

From the late 1990s onwards other forms of impact assessment such as community health, biodiversity, human rights and gender emerged within the oil and gas industry and these were subsequently integrated into ESHIA and more recently IA. IA requires that the various aspects of impact assessment are addressed, and that they are considered as they relate to each other and in a form understandable to the communities and individuals affected by a particular project. One useful definition refers to IA as:

"... an interdisciplinary process of combining, interpreting and communicating knowledge from diverse scientific disciplines in such a way that the whole cause – effect chain of a problem can be evaluated from a synoptic perspective with two

¹ For example called EIA in the USA, Netherlands and many other countries

² For example called EA in Canada, Federal and Ontario, Provincial

³ "Social Impact Assessment: A Contribution to the State of the Art Series", Burge and Vanclay, 1996

⁴ Burge and Vanclay, 1996

⁵ Burge and Vanclay, 1996

⁶ "Canadian Handbook on Health Impact Assessment", Roy Kwiatkowski, Chief Environmental Health Assessment Services Health Impacts Bureau

⁷ "A Guide to Health Impact Assessment: A Policy tool for New Zealand (2nd edition)", Public Health Advisory Committee, 2005

⁸ "Introducing Health Impact Assessment: Informing the decision-making process", NHS, 2002

characteristics: (i) it should have added value compared to single disciplinary assessment; and (ii) it should provide useful information to decision makers..."

However, the application of IA is still in its early stages. As with the integration of SIA and HIA into EIA, it will take time until genuine IA is more widely adopted.

Stakeholder Perception

Although oil and gas activities are generally perceived as promising opportunities for economic development, they are also often seen as a threat to the environment and local way of life. While oil and gas development can offer employment and business opportunities, local stakeholders are often concerned about the impact on the local culture, cost of living, traditional economic activities, the environment, or the capacity of government agencies to manage and regulate the industry effectively. This is especially the case in remote and frontier regions, where the arrival of a powerful global industry presents a combination of threats and opportunities to local populations.

The arrival of an oil and gas company in fact often gives rise to a range of extreme expectations and concerns amongst local stakeholders. Global awareness of social and environmental disruptions associated with oil and gas activities in some parts of the world (e.g. Niger Delta, Amazon Basin), and catastrophic accidents resulting in major environmental pollution (e.g. Exxon Valdez, Piper Alpha, Braer) have done little to dispel such concerns. Oil and gas companies that aim to avoid exacerbating existing socio-cultural, economic and environmental problems, or becoming a target for unwarranted criticism, must early on consider the complex background.

When faced with the potential for an oil and gas or mining development, many communities and individuals tend to perceive it not only in a compartmentalized manner (e.g. impacts on environment, land-use, water, jobs, local culture and way of life) but also with recognition that there is interaction between the different compartments and themselves. Table 1 below illustrates (notionally) the degree to which different parties view proposed development projects and their impacts from different vantage points.

Table 1 – Areas of focus of key stakeholders

Actor	Focus
The community	Community benefit, community loss, change to culture, impacts on infrastructure
The environmental NGO	Environmental degradation, loss of biodiversity, reduced water flows, preservation
The local Health Agency	Introduction of diseases, stress of health facilities, growth of HIVAids, clean water
Human rights NGO	Unequal treatment, women's rights, power bases, land rights, gender
Indigenous peoples	Traditional lands, culture, hunting and gathering

⁹ "Definition of Integrated Assessment", Jeroen P van der Sluis, 2002

10 "Managing the Relationship between the Offshore Oil Industry and Frontier Regions", M Shrimpton & K Storey, SPE International HSE Stavanger 2000.

The ability to address such issues and their interaction with all the different stakeholders is a crucial attribute of successful IA and the consultation process that underpins it. Successful changes to design are often driven by a mix of culture, communication, politics and fact. Box 1 shows an example of early integration of thinking from an EIA process undertaken by Shell Peru in the late 1990s for a possible gas development in a highly sensitive area of the Peruvian Amazon.

Box 1: Shell - Camisea, Peru 1998

In a potential gas development project in the upper Amazon in Peru a number of NGOs were particularly concerned about the impact of the project on biodiversity in terms of preservation of natural resources. Local communities saw biodiversity as their living space as well as their provider of food, nourishment and medicine. The Smithsonian Institution undertook independent studies on biodiversity using local and international scientists as well as local advisors from the indigenous communities who could identify plant and animal species in their own context and use. The integration of environmental and community perspectives and thinking in this area assisted Shell in conducting studies in a way that took these concerns into account and that ensured that areas of sensitivity and protection were identified and avoided.

Source:11

Public Participation

Public participation is a key aspect in all impact assessments. The conditions for successful and meaningful stakeholder consultation include early identification of stakeholders and start of engagement, ensuring a continuous flow of information about the project and the studies underway, demonstrating a willingness by the company to listen to stakeholder views, engaging in discussion before decision-making and involving stakeholders in decision-making, applying a range of communication tools, the involvement of qualified, local staff, allowing for continuing dialogue and face-to-face contact with stakeholders before, during and after the IA, involving senior management in the process, and ensuring there is feedback on how information is used and concerns are addressed. In summary, what is required is open engagement with stakeholders regarding their concerns, and ensuring that changes to design and operation reflect the significance of impacts.

IA is perhaps best described by way of a recent example from an oil sands project under consideration by Shell in Northern Alberta. In 2008 Shell International completed an IA on the Grosmont Venture oil sands field test facility. In keeping with Shell Guidelines the decision was taken to carry out an IA on all phases of the project including the pilot facility, even though this was not required by provincial regulations.

Long before the IA was started Shell initiated local consultations. This was important in establishing a basis of trust that subsequently facilitated the IA process. The key features of the comprehensive consultation process adopted are summarized below in Box 2.

 11 Shell Prospecting and Development Peru Information Notes published periodically 1997 - 1999

Box 2 - Key features of Consultation at Shell's Grosmont Venture - Alberta, Canada

- Management Commitment to consultation before any leases obtained
- Staff in place to design strategy and plans before leases obtained
- First contacts made with Chief Big Stone Cree nation on day leases obtained
- Early meetings with Chief and Council and with local Reeve and Council outside reserve areas
- Briefing Notes on what's happening distributed widely about every 3 months
- Local hire of community relations officer Social Performance Adviser
- Management of all consultation by a single department
- Holding "open houses" in communities to describe activities
- Inclusion of elders as special group for understanding traditional lands and culture
- Undertaking 'asset mapping' as an early study of community strengths, needs and issue
- Discussions with local service providers
- Discussions on meaning of integrated assessment
- Regular contact by Project Manger with Chief and Reeve using a report card approach (i.e. 'how well are we doing?')
- Design of IA document with local input
- Local representation from community with direct impacts on IA team
- Local discussions on IA before finalisation

Source:12

In fairness, as with all consultation, it would not be sufficient to say the consultation was smooth at all times. For example project time lines and community time lines did not always jibe. There were differences of opinion on the way forward between some communities, Chief and Council, Band administration and some individuals. The asset mapping approach was initially much delayed due to concerns with which data would be collected and how it would be used.

This consultation process was holistic in nature and was concerned with the overall project lifecycle – not just the undertaking of the IA. The trust established in early consultation provided the opportunity to introduce the IA process and explore new techniques that invited and assured community participation.

Integrated Assessment

To undertake the Grosmont Field Test IA, a team of environmental, social and health professionals was retained and worked with a company steering committee that included project management, alongside social, health and environmental experts. While baseline studies were carried out to meet regulatory requirements, the structure of the IA was determined through discussion with local communities, the majority of whom were indigenous peoples.

Compared to a more traditional EIA layout, the IA¹³ was presented in three sections that mirrored questions put to Shell by the local people (see Box 3).

 $^{^{\}rm 12}$ Shell Grosmont Briefing and Information Notes published periodically 2006 - 2008

¹³ Shell's North Field Test Project – Integrated Assessment; Golder Associates, AMEC Earth and Environmental, Habitat Health Impact Consulting, September 2008

Box 3 - Sections in the Grosmont Field Test IA

- **1. Our Land** includes the water, the air, the soil and the plants and animals. The traditional lifestyle of local communities is based on their relationship with the land. If the land is healthy their traditional lifestyle is healthy.
- **2. Our Communities** includes communities in proximity to and distant from the development. Communities have an interest in the Project because many families hunt and fish in the area. Many people also believe the lakes near their communities are connected by underground water flow.
- **3. Our Lifestyles** includes traditions, culture and values, as well as how people eat, live, and relate to each other. It also includes things people do for work, including wage jobs and work done for income or subsistence such as hunting, trapping or fishing.

Source: 14

Within each section actual questions posed by the communities were addressed based on the baseline data gathered and the analysis carried out. A Technical Report that provided details from the environment and community studies supplemented the IA. The technical report also contained groupings of subject material in a way that coincided with local community expectations.

Conclusions

Over the past 20 years there has been a gradual move towards assessing impacts from major energy projects in a more integrated and holistic manner. Over the same period Environmental, Social and Health impact assessments have evolved individually and reached a state of maturity and application such that they are now an expectation by governments and stakeholders. Notwithstanding the emergence of ESHIA, the move towards integration of impact assessment to achieve full IA is still in progress. As with EIA, SIA and HIA practice lags theory in reaching implementation. Experience from major energy projects around the world demonstrates that IA cannot be accomplished without a wide-ranging consultation process. The integrated approach provides a tool for that consultation. The ability to address social and environmental issues and their interaction with all the different stakeholders in fact is a crucial attribute of successful IA and the consultation process that underpins it.

Plexus Energy Inc – is an international association of experts in environmental and social management providing tailor-made assessments and solutions to understand and manage risk associated with environmental and social impact of resource based projects – www.plexusenergy.net. Murray Jones is located in Toronto, Canada; Jay Wagner London, UK

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¹⁴ IBID