



Netherlands Commission for  
Environmental Assessment



## NCEA services for ESIA and SEA for the oil and gas sector

### Oil and gas exploitation

With the continuing expansion of extractive industries and their effect on the environment throughout the world, the need for sound environmental assessment is more pressing than ever. Over 25 years the NCEA provides advice on scoping for environmental and social impact assessments (ESIA) of several international oil and gas exploration and exploitation initiatives. Furthermore, advice is provided on the quality of the ESIA report and the contents of monitoring systems. The last ten years, the focus is shifting more towards coaching, advice and training on Strategic Environmental Assessment (SEA). This enhances environmental integration into planning and decision making in the oil and gas sector.

### Environmental, social and economic issues in the oil and gas sector

The plans and projects listed on the right, highlighted several issues.

#### Hi-tech expertise on high impact projects

These projects require specific technical knowledge, which is locally often not available. The effects of exploitation of oil and gas are comprehensive: connected ecosystems are affected and the economic interests are large.

#### Investment projects ahead of policy development

Private sector projects are usually ahead of national sector strategies and the capacity of governments to appraise projects, to grant licenses and to enforce license conditions is limited.

#### Equity issues often unaddressed

Commonly, benefits are only reaped by a small group, while many people are exposed to adverse effects of the projects. Therefore compensation of individuals and communities is often an issue.

#### Source of conflict and controversy

Exploitation can generate large revenues to foster growth and reduce poverty. However, when governance is weak

#### NCEA advisory work on ESIA in the oil and gas sector

- Georgia The Baku–Tbilisi–Ceyhan oil pipeline and the South Caucasus gas pipeline
- Peru Hydrocarbon Appraisal and Development
- Chad / Cameroon Chad Oil Export Project
- Ghana Ankroba Petrochemical Plant
- Ghana West African Gas Pipe Line
- Surinam Tout Lui Faut Oil Refinery
- Ecuador Heavy Crude Oil Pipeline
- Mozambique Offshore oil exploitation
- Mozambique Sasol Petroleum Temane gas project
- Mauritania Offshore oil exploitation
- Rwanda Methane harvesting in Lake Kivu
- Ghana Jubilee Field oil exploration

#### NCEA advisory work on SEA in the oil and gas sector

- Mauritania oil and gas developments and coastal zone management
- Bolivia oil and gas development in protected areas
- Ghana oil and gas sector (offshore and onshore)
- Uganda oil and gas development in Lake Albert

#### NCEA training on ESIA and SEA in the oil and gas sector

- Senegal and The Gambia regional workshops on SEA
- SEA workshop Zanzibar
- ESIA workshop Myanmar
- SEA and ESIA workshops in Lebanon, Cuba and Uganda
- ESIA review workshop in Uganda

and regulatory capacity inadequate, it may result in poverty, corruption and conflict.

#### Oil and gas sector decency

The sector is capable and willing to apply high and best

available technologies to minimise risks and impacts if conditions are clear right from the beginning.

### Multi sector involvement

Specific attention to the interests and available options of other sectors in an early stage – coastal management, tourism and fisheries – increases the chance on identifying new opportunities and balancing short term and long-term interests. This is particularly important because oil and gas exploitation usually generates short term benefits with long lasting effects on the environment and the economy.

### Role of ESIA and SEA

ESIA and SEA can address most of the issues mentioned previously. It guarantees:

- a solid assessment of environmental and social issues;
- a well-structured public and government debate on these issues;
- a mechanism to take the results of assessment and debate into account in decision making.

The sector can therefore benefit greatly from applying ESIA and SEA, because the legitimacy of their usually considerable investments can be enhanced.

Where ESIA is limited to the scope of a single project, SEA aims at better strategies for developing legislation, norms and standards, nationwide development programmes and specific sector plans. SEA can help to reduce risks and ensure preparedness for the consequences of oil and gas development by:

- high pace exploitation, e.g. over 10, 20 or 30 years, in combination with different programmes for revenue management;
  - including alternatives in pacing concession rounds and awarding production licenses;
  - addressing the probability and related impacts of:
    - development of LNG production in future
    - port developments necessary to accommodate such activities, including their effects
    - need for oil/gas related waste treatment and disposal;
  - assessing the environmental pros & cons of the technological alternatives for:
    - gathering seismic data
    - drilling and testing wells
    - developing a newly discovered gas or oil field
- Then, the most suitable alternatives can be chosen for each set of environmental conditions (e.g. open water, near shore, near protected areas).

## Oil and gas development in Uganda

Between 2010 and 2013, the NCEA coached an SEA in Uganda. The objective of the SEA was to develop a framework for sustainable use of the oil and gas resources from the Albertine Graben area. The exploration and exploitation should be carried out in a way that maintains the structure, functioning and productivity of the ecosystems of the area as a foundation for long term value creation and sustained livelihoods. The SEA explored:

- how best to pace future exploration and development stages – for example: a stepwise approach starting from the least vulnerable areas and gradually entering the more vulnerable areas with the experience acquired;
- ways to deal with conservation of biodiversity and the most valuable and sensitive areas;
- sustainable coexistence with other sectors for example tourism, agriculture and fisheries;
- options for dealing with pollution and waste;
- developing proposals for improving (institutional) capacity of different stakeholders to enforce law and deal with negative consequences of oil and gas development;
- developing compensation mechanisms;

The SEA was approved by Cabinet in 2015 and its recommendations are currently being implemented.

### What can the NCEA do?

#### Advisory services

As the oil and gas sector usually implies complex and controversial initiatives, it can benefit from independent expertise. Our advisory work is based on national legislation and best-practice guidelines and performance standards.

#### Training

The NCEA also contributes to ESIA and SEA training focussed on the oil and gas sector. Participants learn in 3–5 days to: 1) prepare for, 2) coordinate the execution of, and 3) manage the overall process of ESIA or SEA and its embedding in decision making.

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