Early consideration of environmental aspects – adding value to projects

Andrea Taylor, from Xodus, gives the practitioner’s view on the approaches to and importance of considering environmental aspects at an early stage in project development and the potential added value to projects.

A requirement to consider how a project may affect the environment is explicit in the legal framework governing development in the UK and is a demonstrable requirement when preparing and submitting applications for consent. The timing of this consideration can not only affect consent of the project but can also result in cost savings, enhanced environmental credentials and stakeholder acceptance. It is preferable and recommended that environmental aspects are integrated into the development of projects as early as possible with the aim to develop a sustainable project.

Value-adding appraisal – approaches and importance

A number of appraisal tools and techniques can be employed as part of the EIA process to integrate environment into decision making to define the scope of studies. Examples of tools and techniques include: EIA scoping; modelling e.g. oil spill, atmospheric emissions, coastal processes; Environmental Issues Identification (ENVID); and Value, Decision and Risk Management (VDRM). ENVID and VDRM examples are described briefly below to highlight what is involved and how the techniques can benefit projects.

VDRM approaches may be used at any stage in a project where options need to be selected, and several drivers including environmental aspects need to be considered. This approach provides a robust and systematic decision-making process and an auditable record of the decisions made.

ENVID workshops present the opportunity to involve the whole project team in identifying and characterising potential impacts arising from a proposed project and the mitigation measures required. The workshop looks at all development stages and considers standard operating parameters as well as relevant scenarios where standard operating parameters may be breached. An ENVID matrix is used to work through, document and detail the possible aspects of the proposal which should be considered further in EIA. The ENVID approach also explores the aspects of the proposal which are most sensitive from a stakeholder perspective and which will require careful management throughout the EIA process and beyond.

The value of these and other tools and techniques is generally increased the earlier in the EIA process they are adopted. However, a strategic outlook is required, to consider when their adoption will prove most effective to the project aims and objectives; i.e., adoption of techniques needs to be aligned with the data available and the project schedule, amongst other things.
This approach allows consideration of environmental aspects to influence the final design to prevent, reduce or offset potentially significant environmental effects where possible. The requirement for costly mitigation measures at a later stage of the project as a result of retrospective consideration of mitigation can thus be avoided. Consideration of potential mitigation requirements throughout the EIA process and throughout project development can embed environment decisions into the project design thereby increasing its attractiveness to stakeholders and improving environmental conditions.

**Communicating added value**

Client buy-in and ownership from an early stage of the project is required to increase the effectiveness of the value-adding approaches employed. It is therefore important to outline how the tools and techniques can benefit the client and the project overall to ensure acceptance by all parties involved. This can be achieved by clearly outlining the risks and benefits to the project as early as possible and by developing a close relationship with the client to work through and overcome issues. Inefficient and incomplete consideration of environmental aspects can lead to delays in consenting, increased costs at a later stage in the project and problems justifying why a particular option should go ahead.

As an example, the VDRM technique was employed successfully by Xodus to assist a client with the site selection of a marine renewable development early on in the EIA process. A workshop was held to undertake a site selection ranking exercise to assess the suitability of a range of sites to meet the requirements of project drivers. All key members of the project team were involved in all stages of the process from weighting project drivers, identifying key characteristics of the drivers and scoring sites against drivers. Aspects of both the onshore and offshore environments were considered thus integrating environmental aspects into project decision making at an early stage in concept selection and project development. In this example, environmental aspects were considered along with a range of other feasibility aspects thereby ensuring the big picture was considered from the outset.

In summary, a range of powerful appraisal tools and techniques are available to environmental practitioners to be used throughout the EIA process, which, when used effectively and with client buy-in, can deliver long-term economic, social and environmental benefits to projects.

Andrea Taylor is an Environmental Consultant at Xodus

For access to more EIA articles, case studies and hundreds of non-technical summaries of Environmental Statements visit: [www.iema.net/qmark](http://www.iema.net/qmark)