

Sustainability appraisal: all at SEA?

Written by Tony Jackson

New appraisal requirements

A new EU Directive on strategic environmental assessment (SEA) gives the UK government until July 2004 to implement procedures for taking into account the impact of development plans and programmes on the environment. Member states' land use development plans and regional economic programmes are included in its scope, but the Directive also extends to waste management, minerals, transport and energy plans. The management executives of EU regional programmes have, for some years, already been undertaking SEAs of their own development plans to comply with EU Structural Funds guidance. This requires programmes of assistance to be tested for their contribution towards sustainable development.

More recently, the UK government has encouraged English regions to adopt sustainable development (SD) frameworks, and to use these to undertake an extended form of SEA, termed sustainability appraisal (SA), which deals with the economic and social as well as the environmental aspects of sustainable development. In its guidance, sustainability appraisal is defined as: 'A systematic and iterative

process undertaken during the preparation of a plan or strategy which identifies and reports on the extent to which the implementation of the plan or strategy would enhance the environmental, economic and social objectives by which sustainable development can be defined in order that the performance of the strategy and policies is improved.' (DETR, 2000, para.2.1)

Economic impact analysis already forms a standard part of the appraisal of plans and projects, and environmental impact assessment of specific projects has been a requirement for development plans since the implementation by the UK of the 1985 EU Directive. Social impact assessment, although common practice in reviewing North American development proposals, especially where these affect ethnic minorities, is not currently regarded as standard procedure in the UK when appraising development options, although its value for assessing regeneration initiatives in towns and fragile rural communities would seem self-evident. Barrow (2000) suggests that the role of this technique 'is to advise and



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inform; it should show the likely risks, benefits and development options available; also, like environmental impact assessment, it must flag potentially irreversible and dangerous impacts.' (p.22)

Taking on board the strategic assessment of the social and environmental impacts of their plans and programmes will be an additional challenge for the planning and development staff of local authorities and regeneration agencies, and one to which few will have been exposed during their initial professional training. Research undertaken in the mid-1990s found local authorities unprepared to integrate their assessments of internal economic and environmental plans, and lacking a framework to bring these together to determine overall priorities. Gibbs *et al* (1999) concluded that 'until differences in perspectives and emphasis about sustainable development are resolved, there is little hope for better integration of economic and environmental policies.' (p.92)

Current sustainability appraisal practice

Sustainability appraisal offers a means of achieving better policy integration at local level. However, current UK practice, driven by central government priorities, is running well in advance of the research needed to resolve these differences in perception and emphasis about sustainable development. Although some EU-wide research, such as the Analytical Strategic Environmental Assessment (ANSEA) project, seeks to improve the methodological foundations of these techniques, UK practice at present is essentially pragmatic. Most sustainability appraisals currently offer a rudimentary sustainability health check. These provide little more than a retrospective audit of the implications for sustainable development of strategies and plans that have been already determined mainly on economic grounds.

Figure 1 summarises the main stages in sustainability appraisal. The emphasis in recently completed

sustainability appraisals has been on compliance and consistency. Standard planning checklists have been used to indicate that the broad objectives of the draft plan or strategy comply both with government sustainability guidance and also with the sustainable development framework for the area. Simple scoring matrices have been applied to establish that the individual plan or strategy policies and proposals are consistent with sustainability criteria.

Figure 1: Stages in sustainability appraisal

- Establish sustainable development framework for area
- Identify targets and indicators for sustainable development framework
- Undertake baseline sustainability studies for area
- Scope plan objectives against sustainable development framework and official guidance
- Assess spatial strategic options and compare alternatives
- Appraise plan's policies and proposals
- Independently validate appraisal
- Monitor targets through indicators and feedback into next plan

Some recently published research has highlighted the limitations of this approach when applied to the Regional Planning Guidance (RPG) and Regional Economic Strategies (RES) of the English regions. None of the sustainability appraisals undertaken for the sixteen RPGs and RESs considered by Smith & Sheate (2001) applied sustainability targets to the sustainable development framework or identified indicators for sustainability monitoring. Only one incorporated baseline sustainability information. The resulting absence of basic management data needed to determine whether sustainability goals are being realised means that planners and development practitioners in English regions will find it difficult to use sustainability appraisals for promoting sustainable development within current and subsequent RPGs and RESs. Most of the sustainability appraisals examined were initiated following the completion of a draft strategy, and were undertaken by outside consultants.

Those responsible for the current round of sustainability appraisals should not assume that a quick

screening between drafting and finalising strategies and plans will suffice to meet their new legal obligations. Both the SEA Directive and sustainability appraisal guidance expect a more fundamental assessment of the long-term spatial impacts of plans and programmes, in terms of their intra- and inter-generational socio-economic implications, and their effects on environmental sources and sinks. This requires a major re-thinking of the processes used to formulate plans and programmes, to ensure alternative viable strategic options are properly reviewed at an early stage. In some cases, the statutory policies themselves will need re-examination, although the SEA Directive confines policy assessment to narrowly defined areas, where a consideration of legislation is central to the options for plans and programmes.

The whole process of determining the strategic foundations of an area's economic and land use development plans will now be subject to public scrutiny and become a legitimate part of examination under public inquiry, remedying a limitation in the original environmental assessment legislation. The use of consultants solely to provide an independent audit at a late stage in the drafting of plans and programmes will not comply with SEA Directive requirements, and recourse to this route may expose those responsible for drafting proposals to the possibility of legal redress. Instead, current procedures will need to be adapted to establish an ongoing audit trail that indicates that appropriate steps have been taken at each stage in the drafting process to comply with the Directive, and that best practice has been applied.

In establishing an audit trail as an integral part of the processes of plan or strategy preparation, consultants may still be called upon to offer independent validation, but their use will not allow ownership of the sustainability appraisal to be offloaded. It will be essential for planners and development practitioners, who have responsibility for the preparation of plans and programmes, to have at their disposal a sufficient in-house grasp of SEA/sustainability appraisal tools and techniques to identify and remedy ongoing weaknesses and limitations in their current procedures in respect of sustainability appraisal.

Sustainability appraisal issues to be addressed

The first SEAs undertaken by EU regional programme management executives displayed shortcomings similar to those identified in the sustainability appraisals undertaken by English regions. Subsequently EU guidance has attempted to improve the situation in the current round of EU assistance, and programme management executives should now be well placed to comply with SEA requirements (Clement, 2001). Existing best practice points the way for others. The sustainability appraisals undertaken by those local planning authorities which already have their own clear sustainable development frameworks, targets and indicators, capable of influencing the corporate strategy of the council, demonstrate a higher degree of integration of sustainability objectives at an early stage in plan preparation (see, for example, Fife Council). The current state of the art in general, however, points to a number of issues that must be quickly addressed by planners and development practitioners seeking to ensure that sustainability appraisals enhance sustainability in their areas.

An objectives-led approach: the sustainable development framework used in sustainability appraisal should identify clear objectives, to which targets can be attached, that are capable of being monitored by suitable indicators. Studies to provide a baseline for these targets and indicators are of great value, and local sustainability 'observatories' could prove valuable in offering the kind of data that labour market observatories currently provide in helping to appraise local labour market initiatives and training programmes. An environmental report calling on such data will be required for compliance with the SEA Directive.

Scoping the strategy: to be effective, scoping for sustainability implications needs to be initiated in the early stages of setting out the strategy for the plan or programme and identifying appropriate policies to implement it. Smith & Sheate (2001) point out that 'a retrospective commentary on the performance of a

completed strategy is not a sustainability appraisal, in that it cannot contribute to strategy development and policy making.' (pp.748-9) Unless the organisation responsible for plan or programme preparation already has in place a sustainability strategy to which it is fully committed, attempts to scope strategy will have to overcome the wide range of interpretations about the meaning of sustainable development noted as common in local government during the past decade.

Spatial strategies: consideration and comparison of spatial options is necessary to assess the sustainability impact of various spatially dependent policies and proposals. High-tech clusters may be the current flavour for the promotion of local economic development, but where are the studies establishing their implications for sustainable development? How do greenfield business parks score on the same basis, or edge of town shopping malls? Does the local minerals or transport strategy comply with the adopted sustainability framework? The requirements expected of local and regional strategy, programme and project appraisal have been greatly expanded by government guidance on sustainability appraisal and the SEA Directive. It is no longer sufficient to be able to demonstrate a net added value in terms of jobs created. The new metric underpinning SEA and sustainability appraisal requires that the social and environmental implications must also be considered and, where possible, quantified. This can be of considerable benefit in appraising inner city or remote rural regeneration proposals that offer benefits previously overlooked or undervalued in standard economic appraisal techniques, but only if the basic groundwork to demonstrate how such benefits can be identified through sustainability appraisal is undertaken.

Sustainability appraisal of plans and proposals: how should the impact on sustainability of individual policy initiatives and proposals be assessed, in the context of appraising the strategy, plan or programme as a whole? Current guidance suggests the use of a simple scoring matrix, allowing each separate aspect of the plan or programme to be tested against the sustainable development framework. The sustainability appraisal for Yorkshire and the

Humber Region argued plausibly that this procedure could miss the linkages between, and cumulative impacts of, the whole set of policy initiatives encompassed in the overall strategy, plan or programme. It suggested that the impact of the strategy justifying each individual initiative should itself be appraised against the sustainable development objectives. Some sustainability appraisals have adopted a mixture of both approaches. Neither alternative makes much sense, however, unless assessment of individual policy initiatives and proposals can be supported by a dataset able to compare sustainability outcomes with targets.

Some new tools

Considerable efforts are being made to remedy some of the current shortcomings in sustainability appraisal practice. Development and regeneration agencies are examining ways in which to integrate economic, social and environmental criteria into their appraisal procedures. One example of this approach makes use of two sets of indicators: a 'contextual' set, designed to enable the broad strategic goals for development in the area to be monitored for their impacts on sustainability; and an 'influenceable' set, used for monitoring and evaluating the delivery of specific projects funded by the agency itself. (Roberts *et al*, 2001)

Figure 2 provides a simple illustration of the use of such influenceable indicators, to set targets and track achievements in the delivery of sustainable objectives. These can serve as the operative criteria for delivery of sustainability within the organisation, running alongside the set of contextual indicators that will normally involve collaboration with partners engaged in development assistance. Such a mechanism offers an agreed means of linking efforts by individual agencies into an overall assessment of the sustainability impacts of all such regional assistance. It also enables the overall development or regeneration programme to be drafted in a way that can readily be subjected to sustainability appraisal, linking fundamental objectives that underpin the set of priorities in the

Figure 2: Targeting and tracking sustainable development through influenceable indicators

Setting plan's energy savings strategy

Plan utilises EU and UK indicators of energy consumption to specify key target areas	Planners negotiate set of targets with individual or organisation, for example, 'x' % reduction in use of gas	Reduction in consumption achieved measured and reported at regular intervals
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Setting targets and monitoring achievements

Plan identifies that 'y' energy savings agreements will be negotiated in year 1, 2 ...	Plan delivers first set of targets by negotiating initial agreements	Clients meet individual targets and plan meets completion targets
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strategy, plan or programme to contextual and influenceable indicators for each measure designed to give substance to these priorities.

Much of the difficulty organisations face as they attempt to assess the effectiveness of the delivery and targeting of their efforts at sustainability through the use of indicators is 'the result of attempting to impose from the 'top down' a standard set of indicators that do not match the characteristics and meet the requirements of an individual place or organisation.' (Roberts *et al*, 2001, p.119) Rather than a traditional 'one-size-fits-all' methodology, this approach attempts to deliver 'made-to-measure' sustainability appraisal tools.

Other tools being developed for sustainability appraisal include the use of regional input-output data, used to track the effects of implementing the agreed spatial economic strategy on social and environmental parameters for the area. The Fraser of Allander Institute has used its expertise in this field to collaborate with Scottish government policy makers in testing the impacts on environmental and social objectives of running the Scottish input-output tables under a range of economic scenarios. Pilot studies have also been undertaken to identify the implications for Scottish economic strategies of implementing specific sustainability targets.

Such exercises point to the importance of identifying expected changes in technology and the policy framework when assessing economic strategies against sustainability objectives. Meyer *et al* (2000) developed an input-output model for the State of Kentucky in which the implications for

environmental indicators of implementing existing economic growth strategies over the next twenty-five years were demonstrated. Without basic eco-efficiency changes in technology, and in the absence of strategies to improve public transport, energy conservation, and waste management, the model demonstrated that economic growth targets would violate current environmental discharge limits, regardless of any tightening in such limits over the period. Implementation of these essentially non-contentious sustainable development objectives over the lifetime of the economic strategy could ensure that the economic targets were hit, while at the same time improving the state of the environment in Kentucky and allowing discharge limits to be tightened.

Implications for regeneration

The natural reaction when faced with additional demands during the drafting of measures intended to regenerate an area is that these will make it even harder to deliver desired outcomes. Yet it is clear that regeneration does not solely consist of hitting the economic targets for an area. Increasingly, best practice demonstrates that social and environmental objectives are crucial in attaining the aims of regeneration. The effective application of sustainability appraisal during the preparation of regeneration measures should make these types of outcomes easier to attain, without making the economic ones harder.

The use of the sustainability appraisal tool box can identify development pathways capable of delivering socially inclusive area targets for jobs, start-ups and income levels, without breaching current statutory environmental standards and coming into conflict with higher standards. Sustainability appraisal can also bring together those involved in the preparation of strategies, plans and programmes, by reducing differences in perception about sustainable development. When based on sound techniques, sustainability appraisal can offer convincing proof that all involved in preparation of regeneration measures are working to a common goal: offering improved living standards to all the people within their area, in ways which remain within the carrying capacity of the environment.

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