

ESD in Plan Making

Kendall Banfield & Karla Sperling
Institute for Sustainable Futures, UTS

Paper for NSW RAPI conference
November 1999

Summary

ESD plays an increasing role in environmental management and there are calls for ESD to play a greater role in planning. The current DUAP Part 3 review represents an opportunity to increase the role of ESD in the EP&A Act's plan making processes. The precautionary principle has a major role to play as it requires an ongoing deliberative dialogue with the community. ESD could become a core objective of the EP&A Act. A brief examination of a selection of planning instruments has revealed some common features of ESD friendly instruments: they are based on a deliberative dialogue with the community; they are supported by a web of other ESD-friendly plans and policies; their objectives are complementary; and they give due consideration to dynamic systems. Suggestions are made for increasing the role of ESD in other parts of the NSW planning system.

Background: ISF projects

Throughout 1998 and 1999, the ISF Local Government Team has been involved in a range of projects designed to assist local councils integrate ecologically sustainable development (ESD) principles into their policies and practices. Projects include ESD seminars, staff training on ESD, State of the Environment Reporting, environmental management reviews and an ongoing ESD action research project.

A major issue to repeatedly emerge from the projects is the need to address ESD in planning, both at the level of plan making and in development control. This is particularly an issue for the metropolitan and coastal councils coping with rapid growth. Councils pointed to the need for immediate action as there is a five to ten year time lag between policy change and a noticeable improvement on the ground.

Councils felt let down by the Environmental Planning and Assessment (EPA&A) Act through its lack of consideration of ESD and lack of a clear direction to councils to act on ESD in their planning functions. In contrast, the Local Government Act was seen to give a clearer direction to councils to act on ESD in their management functions, although this task was difficult in practice.

Background: DUAP plan making review

Several participants at a Department of Urban Affairs and Planning (DUAP) plan making forum earlier this year called for greater consideration of ESD in the EP&A Act's Part 3 plan making provisions, and in the Act generally. This call is reflected in DUAP's October 1999 Plan Making discussion paper (DUAP 1999c) as follows:

“One key issue raised at the Discussion Forums held earlier this year and in submissions, is the need for the review process to and new plans to more effectively address the issue of ESD or ecologically sustainable development.

The issue of sustainability fundamentally underpins this review process. It should guide the way we approach the whole range of activities we undertake in the landscape, to ensure those activities are socially, economically and ecologically sustainable. Without a focus on sustainable outcomes, the achievement of any balance in the relation between our communities and the landscape we live and work in, will become increasingly remote.”

Whilst this statement is supported, it remains that the October 1999 discussion paper says little about how to (or whether it is proposed to) integrate ESD into the plan making process. The plan making review appears to be focused on process improvement rather than ESD. This is not to diminish the importance of process improvement, as ESD can be indirectly promoted through improving the effectiveness of the plan making process. The October 1999 discussion paper (DUAP 1999b) addresses these process improvement issues and proposes a three-tiered planning hierarchy.

The first tier would comprise a State Planning Policy Directory, which compiles all policies relevant to planning at the State level and includes revised State policies and agency-endorsed policy documents. The second tier would comprise Integrated Regional Plans, one Plan applying to each of a set of regions covering NSW in its entirety. This would be prepared by a regional board or co-ordinator. The third tier would comprise Local Plans, which are prepared and approved by local councils and communities unless 'called in' by the Minister.

This proposed planning hierarchy is currently being discussed at a number of forums convened by DUAP across NSW. At a recent Sydney forum, the main concerns about the proposal were: the likelihood that the State Planning Policy Directory would contain a number of conflicting objectives that reflect the conflicting directions of the various State agencies; the need for transparency, co-ordination and community input into the operation of the proposed regional boards and the associated Integrated Regional Plans; the need for some kind of regional endorsement of Local Plans to ensure there is co-ordination; and the difficulty in defining regions – a balance between current regional identity, catchments, bioregions, LGAs, ABS statistical divisions and State agency regions.

The main benefits of the proposed hierarchy were acknowledged to be: the State Planning Policy Directory would begin a much needed process of co-ordinating and aligning the environmental management objectives of the State agencies; the fact that Integrated Regional Plans would be mandatory for all regions means that regional

planning *will* happen, whereas under the present arrangement it *might* happen; promotion of regional identity and greater co-ordination and community involvement at that level; clearer roles for plans – at present SEPPs and REPs perform a variety of functions; and minor amendments to plans can be made more easily.

There was little discussion of ESD at this forum.

Theory: Defining ESD

Although the terms ‘sustainability’, ‘sustainable development’ and ‘ESD’ are often used interchangeably, sustainability here is treated as the goal or endpoint of a process of ‘sustainable development’ or ‘ecologically sustainable development’ (ESD). There are many definitions of these terms and all are contestable. This paper argues that plan-making processes should facilitate the creation of planning instruments with sustainability as a goal through adoption of ESD processes.

The well known Brundtland Report definition of ESD emphasises the principle of inter-generational equity: “... *development that meets the needs of the present without compromising the ability of future generations to meet their needs.*” Diesendorf (1999) attempts to integrate intra-generational (social) equity and social, economic and environmental inter-relationships into his definition: “... *sustainable development comprises types of economic and social development which protect or conserve the natural environment and promote social equity and human well-being.*”

Applying these two definitions to plan making implies that plan making processes should only allow/promote development which reduces resource use, promotes social equity and improves human well-being. The challenge is that we meet present needs without compromising the ability of future generations to meet their needs. This need not be at the expense of quality of life in the present – on the contrary, quality of life can be improved.

Theory: Foundation principles of ESD

Application of the above broad definition of ESD to planning instruments is relevant at the most strategic level, but more guidance is needed for application at a more detailed level. Further guidance is provided by the ‘foundation principles’ of ESD - conservation of biodiversity, improved environmental accounting, intergenerational equity and the precautionary principle.

The principle of conservation of biodiversity states that we should recognise that diverse and productive ecosystems are essential for our survival, so we should preserve and look after them. This principle has greatest direct application to plans made under legislation, e.g. Threatened Species Conservation Act. The principle applies directly to some plans made under the EP&A Act, e.g. State Environmental Planning Policy (SEPP) No.26 aims to preserve remnant littoral rainforest ecosystems. It applies indirectly to other planning instruments made under the EP&A Act, e.g. a local water efficiency Development Control Plan (DCP) might list as one

of its aims to protect and improve riverine biodiversity through reduced liquid effluent disposal.

The principle of improved environmental accounting states that we should account for the full costs of development, including the costs of restoration. This includes application of the polluter-pays principle, pricing based on life-cycle costings of goods and services and use of incentive structures to pursue environmental goals. This principle has greatest application in plans and policies made outside the EP&A Act, e.g. EPA's load-based licensing charges for liquid effluent. For plan making under the EP&A Act, the principle has greatest application via s.94 contributions to fund environmental improvement works such as improved pedestrian access in the vicinity of a development.

The principle of intergenerational equity states that the present generation should ensure that the health and productivity of the environment is maintained or enhanced for the benefit of future generations. Of all the guiding principles, this is the one that tends to be most strongly reflected in definitions of ESD. It is also the most broad, so is difficult to apply in plan making, except at the most strategic level. It does, however, imply that plan making should allow/promote only developments which maintain or improve the health and quality of the environment.

Finally, the precautionary principle states that we should not use lack of scientific certainty as a reason to postpone measures to prevent environmental degradation. Decisions should be guided by careful evaluation to avoid irreversible environmental damage and an assessment of the risks involved with various options.

Theory: The precautionary principle and community involvement

Of the four guiding principles of ESD, the precautionary principle has the greatest application to plan making. The precautionary principle not only has direct application to the environmental impact assessment of developments, it can be used to justify improved community involvement in plan making.

Fisher & Harding (1999) believe application of the precautionary principle requires a "*deliberative transdisciplinary problem-solving process*" because: in the absence of sufficient 'facts', some other basis for a decision is required; the terms 'threat', 'measures' and 'scientific uncertainty' are wholly or partly socially determined; and the only way quality and reliability of knowledge can be improved is through a deliberative process.

Fisher & Harding identify the starting point of this process as a 'diagnosis' of the problem, leading to a deliberative dialogue which includes a wide range of interests which extend beyond those who simply have a vested interest in any particular outcome. This is likely to include a process for communities to determine what kind of future they want.

The process must be in the public interest and not just in the interests of the parties deliberating. In this regard, regulatory institutions must take a strong leadership role and ultimately retain the power to determine the issue. Transparency is a necessary

ingredient for ensuring that the decision is in the public interest. Deliberation does not exclude the use of information collection or analytical tools, but gives primacy to the process of dialogue.

Advantages of applying the precautionary principle through a deliberative process are that it opens up scrutiny through dialogue, the decision has a democratic basis and the process generates trust. For successful deliberation all relevant parties must be included, consultation methods must be appropriate (there are many to choose from) and the process must generate trust.

The deliberative process at the broadest level of strategic planning could involve communities developing visions for sustainable neighbourhoods which feed into LGA-wide and regional vision statements and ultimately to a vision of a sustainable NSW. A similar process could be undertaken with staff of the councils and State agencies to develop organisation vision statements that include reference to ESD. The State, regional, local and neighbourhood vision statements could be included in planning instruments to guide the plan's more detailed objectives.

Application: ESD & the EP&A Act

Currently ESD plays a minor role in the operation of the EP&A Act. The EP&A Act's ESD object, i.e. "*...the promotion of ecologically sustainable development*" is one of a list of seemingly unprioritised and unrelated objects. Whilst Schedule 2 of the Regulation requires Environmental Impact Statements (EISs) to "*have regard*" to ESD, ESD is not included in the s.79C or cl.82 heads of consideration for the assessment of development proposals. Nor does the Act include a definition of ESD.

Some suggestions for improving the Act's consideration of ESD include renaming EP&A Act the 'Sustainability Planning Act', which has ESD as its overarching object, rather than one of many objects. A definition of ESD could be included. DUAP could be renamed 'NSW Sustainability Planning' and ESD become the organisation's core function. ESD could be mentioned in the DUAP mission statement, currently "*planning for a better environment, jobs and livable communities*", and duties created to ensure that all decisions of DUAP are made in accordance with ESD principles. ESD-related provisions could be included in the Regulation, Model Provisions and planning guidelines. Existing provisions which act against ESD could be amended to provide consistency.

With regard to the Act's plan making functions, it could require that all planning instruments include an overarching ESD objective which flows through to the more detailed objectives. Plan making could be required to include a deliberative dialogue with the community and plans required to show they have neutral or positive/advancing effect ESD. Discretion to approve planning instruments and development proposals that contravened the overarching ESD objective could be limited. DUAP could provide information to assist plan makers to determine whether developments and planning instruments satisfy the overarching ESD objective.

The following case studies of recent planning instruments were examined to determine features that were common to ESD-friendly planning instruments.

Application: SEPP case study

State Environmental Planning Policy (SEPP) No.59: *Central Western Sydney Economic and Employment Area* provides a case study of a recent SEPP. It rezones sites in western Sydney for employment, residential and opens space uses. The SEPP has seven aims, none of which mentions ESD. Although several of the aims could be seen as indirectly promoting ESD, some are contradictory to ESD.

Aims that indirectly promote ESD refer to: principles of the compact city from DUAP's *Cities for the 21st Century*; conservation of areas having a high biodiversity heritage and scenic or cultural value; and achievement of *Action for Air* Goals by containing vehicle kilometres travelled (VTK) growth and achieving higher than normal public transport usage. One of the SEPP's aims runs counter to ESD as it promotes freight accessibility to the M4 motorway. If the SEPP were to promote ESD it would provide for rail infrastructure to the site as a means of reducing VKT.

The SEPP includes ESD as one of several "*matters for consideration*" when assessing development proposals. Giving ESD the status of a single discretionary consideration amongst many at the development proposal stage is not likely to be sufficient to promote ESD, particularly when some of the aims and development application heads of consideration conflict.

The ability of this SEPP to promote ESD is further compromised by the exclusion of community involvement in its provisions for ongoing management. It provides for the formation of a "*precinct steering committee*", at the discretion of the Director-General, to assist in the preparation of a "*draft precinct plan*" and give advice on or review the precinct plan. The SEPP does not provide for community representation on the committee.

Overall, SEPP 59 represents a poor attempt at integrating ESD into a planning instrument as it includes objectives that both promote and detract from ESD. It also suffers from a lack of a deliberative dialogue with the community in its ongoing implementation.

Application: REP case study

The draft Rhodes Peninsula Regional Environmental Plan (REP) provides a case study of a recent REP. It applies to site between Rhodes Railway Station and the Homebush Bay foreshore in inner-western Sydney. The final of the plan's six aims refers directly to ESD, i.e. "... *to promote the orderly and ecologically sustainable use and development of the land.*" The effectiveness of goal in promoting ESD could be improved by including community input into development of the goal and elevating it to an overarching status.

Seventeen planning principles for Rhodes Peninsula are listed in the plan, most having the potential to directly or indirectly promote ESD. Some of these are: to facilitate development consistent with ESD: encourage active frontages along main

streets; promote public transport as the dominant form of transport; and provide public access to the foreshore. This list represents a good attempt at inserting ESD principles into a planning instrument at this level.

Much attention has been justifiably devoted to a major urban sustainability goal – reducing car use. The REP could be stronger on this point, particularly as the site is located adjacent to a railway station. It could, for example, severely limit or even ban car parking and could make mandatory the provision of ferry services to the site. Whilst there is potential for further progress on ESD via detailed design standards included in the proposed DCP, it is preferable that provisions promoting ESD be as strong as possible at each level of the plan-making process.

One community meeting was held during the exhibition period and a number of issues common to developments of this kind were raised. Some the community's comments reflected outright opposition to any new development and others suggested solutions that would run counter to ESD, e.g. the call for more roads and parking. However, most of the issues raised related to issues that have the potential to improve the ESD status of the site, e.g. appropriate scale of retail development. A longer-term deliberative planning process with the community would be likely to lead to increasingly productive community input and ultimately to a development that is more in keeping with the REP's ESD objectives.

Overall, the draft Rhodes Peninsula REP represents a reasonable attempt to integrate ESD into a planning instrument. It could be further improved by a more thorough deliberative dialogue with the local community and the inclusion of an overarching ESD objective that includes community input.

Application: LEP case study

The preview draft Newcastle Local Environmental Plan (LEP) 1999 provides as a case study of a recent LEP. It applies to the Newcastle LGA. The preview draft LEP is just one component of a long list of ESD-related initiatives that have been undertaken by the City of Newcastle in recent years. Some of these initiatives are: the Newcastle Declaration, endorsed at the 1997 Pathways Conference; the Newcastle Strategic Directions Statement 1998; and the Newcastle Urban Strategy 1998, which reviews land use planning based on new urbanism principles.

The Strategy included input from council staff, business and the community. A set of nine principles of 'Newcastle urbanism' and a list of features of a preferred urban form are included in the Urban Strategy. These provide a solid conceptual basis for the preview draft LEP and much of this is carried forward into the plan.

The preview draft Newcastle LEP begins with the City's vision statement: "*Newcastle will be a model sustainable city of the 21st Century*". The reference to ESD is clear at the highest level. It states the desired outcomes of the Plan as "*A fair go for people; access for people; employment for people; places for people; and a better environment.*" This is a clear reference to the social, economic and environmental dimensions of ESD. Equally important to inclusion of these guiding

statements are the background notes that describe the origins of these statements and how these statements were developed.

The preview draft LEP's aims relate to access, places, buildings, environment and communities. For example, the access aim is to reduce car dependency and the need to travel and to increasing transport choice and improve local access and employment opportunities.

The preview draft LEP sets the framework for the achievement of its aims by: defining broad zones to stimulate a mix of compatible uses; concentrating development activities around nodes; identifying, then protecting urban character and heritage; assessing development according to its environmental impact and contribution to a range of ESD plans and policies; encouraging appropriate development and reducing the need for unnecessary approvals; protecting and respecting the environment; and maximising opportunities for public participation in local planning. Further details are included in DCPs.

Overall, the preview draft Newcastle LEP represents a good attempt at integrating ESD into a planning instrument as it has a clear overarching ESD objective (vision statement) that was developed with community input. This flows through into the lower level objectives. The LEP is supported by a range of other ESD-friendly policies and plans that are based on an ongoing deliberative dialogue with the community.

Application: DCP case study

The Kogarah Town Centre Development Control Plan (DCP) No.5 provides a study of a recent DCP. Along with the Newcastle LEP, it is a good example of a planning instrument that has included much community input. This dialogue included an analysis of existing studies and existing conditions/opportunities, a survey of the community's needs, a design workshop and several interactive community seminars. A community vision for furthering Kogarah's urban village role was also developed.

To achieve the vision, it was agreed that development processes should maintain and enhance Kogarah's village atmosphere, which is seen as human-scale and people-friendly. It was agreed that new buildings and streetscapes display a distinctive character and enhance heritage, and a hierarchy of pedestrian-friendly streets and squares should be created that encourages social interaction and community celebrations. Development should be focused on the station and the village have well defined edges. The village should include a range of uses should within a walkable area and ensure civic buildings should be well placed.

The DCP comprises a town centre structure plan, built form controls, definition of local precincts and a set of urban and environmental design guidelines. The guidelines cover topics such as energy conservation and stormwater management. Dynamic systems are not ignored - the DCP divides the town centre into a spatial system and a circulation system. Pedestrian routes have been identified to guide traffic calming and footpath widening. Perhaps the only item that runs counter to ESD is a proposed car park. Other relevant plans are listed. e.g. Council's s.94 plan

and parking code, as are proposed relevant plans, e.g. access policy for people with a disability.

The DCP requires that development applications include a design vision statement which includes urban and environmental design goals as well as a site analysis which considers solar access, views etc. Pre-development application meetings with the councils and the community are mandatory. The DCP includes a checklist to assist developers in meeting the DCPs requirements.

Overall, the Kogarah Town Centre DCP represents a good attempt at integrating ESD into a planning instrument as it based on a thorough deliberative dialogue which has included the development of an overarching ESD objective. Its effectiveness in promoting ESD is also enhanced by its provision of a development control checklist that ensures that the plan's ESD objectives are not overlooked at development application stage.

Features of ESD-friendly plans

From this brief consideration of recent planning instruments, some common features of ESD-friendly plans have emerged.

The first is that ESD-friendly instruments are based on a deliberative dialogue with community. The Newcastle LEP and Kogarah DCP are good examples - both involved extensive community involvement from visioning at the most strategic level right through to input into detailed design. In the Newcastle example, this dialogue began some years ago and has generated a wealth of material that has created a web of non-EP&A Act plans, policies and strategies.

The second feature is that they include an over-riding ESD objective, rather than one ESD objective amongst others. The over-riding ESD objective ensures that all lower level objectives work in harmony to promote ESD. SEPP 59 is an example of an instrument with conflicting objectives, while the Newcastle LEP's objectives do not conflict as the plan has an over-riding ESD objective flowing from the City's vision statement.

A third feature of ESD-friendly plans is that they link to and are supported by other ESD-friendly plans & policies. All the instruments considered have attempted this. Even SEPP 59 refers to other plans such as *Cities for the 21st Century*. The Kogarah DCP links to the development control planning stage by including a development application checklist. The Newcastle LEP is linked into a web of ESD initiatives that forms a support structure for the creation of planning instruments that promote ESD.

The fourth feature of ESD-friendly instruments is that they duly consider dynamic as well as spatial systems. The planning and management of dynamic systems can have major sustainability implications. The Kogarah DCP is a good example – it divides the town centre into a spatial system and a circulation system, and many of its ESD-friendly objectives relate to transport. The DCP also carefully considers stormwater and is innovative in its requirement for on-site containment of stormwater.

Other reform issues

This paper relates to a part of the NSW planning system, i.e. plans made under Part 3 of the EP&A Act. In order to examine the ESD implications of the entire NSW planning system, a future reform agenda could consider:

- *Linking the vast and growing array of plans and policies made outside the ambit of the EP&A Act to the EP&A Act.* The suggested State Policy Directory could perform this role, making the EP&A Act a 'spine' for other plans. Many of these other plans have the ability to directly or indirectly promote ESD, e.g. catchment management plans, pedestrian access and mobility plans and Local Agenda 21 plans.
- *Developing a process to improve the application of EP&A Act planning instruments to rural and natural resource management issues.* Whilst the EP&A Act has traditionally had an urban focus, it is recognised that EP&A Act planning instruments are playing and should play a greater role here.
- *Developing a process to enable State of the Environment Reports (SoERs) to be used for monitoring the cumulative impacts of development guided by a regional or LGA-wide planning instruments.* SoER indicators with 'critical resources baselines' could trigger LEP clauses that halt development whenever the baseline is crossed, e.g. no further subdivision if the total area of undisturbed bushland in an LGA falls below a prescribed minimum.
- *Reform of development control processes under Part 4 of the Act.* Of particular relevance here are ESD checklists for developers and development control planners, e.g. SEDA's *Energy Smart Homes Policy* and Sutherland Council's *Environmental Sustainability Index*, which award or subtract points for inclusion or omission of ESD design features. DUAP is currently developing a development control checklist for regional NSW (DUAP 1999a)
- *Reform of development procedures by public authorities under Part 5 of the Act.* This could include a study of strategic-level infrastructure plans such as *Action for Transport*, an examination of the ESD implications of Part 5 in its current form and an examination how ESD is addressed in some recent EISs prepared under Part 5.
- *Reform of the EP&A Act's Regulation, definitions and Model Provisions.* It could extend to guidelines in other legislation used in the preparation of planning instruments made under other Acts. e.g. RTA's guidelines for traffic generating developments.
- *Reform of developer contributions processes under Section 94 of the EP&A Act,* e.g. car parking contributions could be redirected toward improving pedestrian, cycling and public transport infrastructure.

References

- City of Kogarah (1999) *Draft Kogarah Town Centre DCP No.5*
- City of Newcastle (1999) *Draft preview Newcastle LEP*
- Diesendorf M (1999) *Models of Sustainability and Sustainable Development*, UTS, Sydney
- DUAP (1999a) *ESD Guidelines for Urban Development in Regional NSW*, Grafton
- DUAP (1999b) *Plan Making in NSW: Opportunities for the future*, discussion paper, Sydney
- DUAP (1999c) *Plan Making Review: Draft Key Directions for Discussion, October 1999*, Sydney
- DUAP (1999d) *Rhodes Peninsula REP (Draft)*
- DUAP (1999e) *SEPP 59: Central Western Sydney Economic and Employment Area*
- Farrier D et al (1999) *The Environmental Law Handbook*, Redfern Legal Centre Publishing
- Fisher E & Harding R (1999) *The precautionary principle: Towards a deliberative, transdisciplinary problem solving process* in Harding & Fisher (eds) (1999) *Perspectives on the Precautionary Principle*, The Federation Press, Sydney
- Griffith R (1998) *Everything you wanted to ask about ESD ... but were afraid of the answer*, Hawkesbury-Nepean Catchment Management Trust, Sydney
- SEDA (1998) *Energy Smart Homes Policy*, Sydney
- Shire of Sutherland (1998) *Environmental Sustainability Index – support information and instructions for use*

About the authors & ISF

Kendall Banfield is a research consultant in the ISF Local Government Team. He has qualifications and experience in environmental management and town planning. He has been involved in a range of projects for councils, planning consultants, the Commissioners of Inquiry for Environment and Planning and the Department of Urban Affairs and Planning.

Karla Sperling is a lawyer and PhD candidate at ISF. Her research examines the mechanisms for incorporating ESD principles in urban planning law. She has tutored and lectured at the University of Wollongong. She has been involved in planning issues from a community perspective and is a former Deputy Chairperson of the Illawarra Catchment Management Committee.

ISF was established by UTS in 1997 at the Australian Technology Park at Redfern. Its mission is to work with government, industry and the community to develop solutions leading to sustainable futures through programs of research, teaching and consultancy. ISF is loosely divided into four teams: water, energy, transport and local government.