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Kennedy, Rosemary J. and Thomson, Mark J. and Jenkins, Graham A. and Foong, Yin K. and Demirbilek, Nur and Ferreira, Luis and Thomas, Glenn and Heffernan, Maree E. and Wilson, Clevo and Buys, Laurie (2006) South Bank Corporation's Draft Ecologically Sustainable Development Policy and Implementation Strategy.

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Review

South Bank Corporation's Draft Ecologically Sustainable Development Policy and Implementation Strategy

Prepared by

**The Centre for Subtropical Design
Queensland University of Technology**

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A partnership between
Queensland University of Technology
and Brisbane City Council

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List of Abbreviations

AGBC	Australian Green Building Council
AGBR	Australian Building Greenhouse Rating Scheme
ESD	Ecologically Sustainable Development
GRI	Global Reporting Initiative
KPI	Key Performance Indicator
NABERS	National Australian Built Environment Rating System
PM	Performance Measure
PO	Policy Objective
QUT	Queensland University of Technology
SAM	Sustainability Assessment Matrix

Acknowledgement of contributors

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Disclaimer

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Overview and Rationale of the submission

Introduction

The Centre for Subtropical Design has reviewed the Draft Ecologically Sustainable Development Policy and Implementation Strategy provided by South Bank Corporation by gathering a team of QUT experts to comment on the full range of sustainability aspects covered by the policy. The Centre has prepared this submission to assist South Bank Corporation to finalise an ESD policy and implementation strategy which will create a truly sustainable, prosperous, and liveable urban parkland precinct.

Overview

Our overview of the draft policy and implementation strategy can be summarised as follows:

- South Bank Corporation's intention to align its long-term vision with sustainability by developing an ESD policy and implementation strategy for aspects of management and development demonstrates its leadership as a progressive and innovative organisation.
- South Bank Corporation's intention to commit to achieving ESD through implementation of the Policy, and to continuous improvement and sharing knowledge, is commendable.
- The scope of the policy includes a full range of sustainability aspects: that is, direct environmental, social, and economic impacts of the organisation.
- The boundaries of the policy are not clear. Key areas of focus are described spatially as the Parklands and Mixed Use precincts, mainly in terms of future development, but some Policy Objectives (PO's) refer to other aspects of the corporation's operations. The policy will be strengthened if it pertains to South Bank's full range of corporate operations.
- Temporal boundaries are not mentioned specifically but these are essential in order for the corporation to benefit from the effort and processes involved in developing and implementing the strategy. Continuous improvement will require auditing on an on-going basis with annual reporting, and feedback to set benchmarks and performance targets for future.
- Generally there seems to be a lack of consistency between the PO's, Key Performance Indicators (KPI's) and Performance Measures (PM's).
- PO's must be written in a form that allows for measurement. In other words, it must be clear what outcomes are required in order to achieve successful completion of the strategy or initiative.

- The KPI's in the Sustainability Assessment Matrix (SAM) are written in question form which is not appropriate for the purposes of assessing whether a PO is being met.
- A set of actual measurable indicators is needed and preferably a set of benchmarks obtained from a best practice investigation of similar developments elsewhere. (QUT can help South Bank Corporation do this).
- Unless achievement against all Key Performance Indicators can be measured there is no basis for measuring the impact of the Policy overall and it simply becomes a 'motherhood' document. Measurement allows organisations to learn from indicators to set performance targets for future projects.
- The intent to reward outstanding achievement in meeting sustainability goals is commendable. The reward proposal appears to accept that achievement of sustainability goals will be variable. The document currently makes no attempt to set minimum acceptable benchmark levels, but this is able to be addressed.

Rationale

What follows is a more detailed analysis of the policy and strategy and positive suggestions for amendments.

Comments are provided on the structure and logic of the Policy and of the Implementation Strategy in the first two sections of the review respectively.

Where relevant, reviewers' comments aligned with specific sections and headings in South Bank's Draft documents are included in the third section of the review.

Recommendations are summarised in the final section, and references are provided.

1 Comment on the structure and logic of the policy

Part One of the policy contains:

- The Corporation's Vision
- Definition of sustainable development and principles used to guide the policy
- Key areas the policy will be implemented in

Organisations of all types have a responsibility to be accountable for their sustainability performance. The Policy which is being developed by South Bank will mean that as an organisation, it can fully align its long-term vision and strategy with a means of monitoring performance, and feedback on progress against that vision. According to the Centre for Public Agency Sustainability Reporting¹, this a valuable practice which is rarely seen. Thus the intention to develop this policy demonstrates South Bank Corporation's leadership in sustainability, and as a progressive, innovative, place leader.

Vision

We recommend that the corporation's commitment to sustainability should be included in the vision statement, rather than later in the document, unequivocally aligning the vision with ecological sustainability. (Combine 1.1 and 1.3).

Principles

The principles go some way to explaining how the corporation's vision and strategy fit into the broader international, national, and state sustainability context. The principles (1.2) used to guide the policy are suitable, considering that the Corporation reports to the Queensland Department of Premier and Cabinet, and its area of jurisdiction is the land which it manages on behalf of the State Government.

Areas of implementation

The boundary of the policy, according to Part 1.4, may be described as new developments and future master planning studies in the Parklands and Mixed Use precincts. However, this item also describes the corporation's commitment to sustainability as pertaining to ongoing operations. Throughout the documents, some policy objectives and strategies refer to areas of the corporation's primary business other than property development, such as major events management.

The policy requires a consistent boundary to be stated, and to ensure that all Policy Objectives (PO's), and aspects for which Key Performance Indicators (KPI's) and Performance Measures (PM's) are provided in the policy and strategy are consistent with the declared boundary, scope and time period.

Setting a boundary is a challenge "since an organisation's economic, environmental, and social impacts occur as a result of and are linked to, activities involving a complex network of entities in its value chain" (GRI

¹ The Centre for Public Agency Reporting 2006 *Briefing Paper on Sustainability Reporting*
www.publicagencyreporting.org

2005²). Complicating factors include the diverse nature of the corporation's operations, and the intimate relationship between the corporation and the larger economic, environmental and social systems within which it operates.

South Bank Corporation's boundary is its own corporate operations, but these are aligned with wider city/region energy policies and programmes. A key issue is the relationship with community-wide sustainability indicators.

The corporation's substantial role as a consumer of goods and services, and as an employer, also means its internal policies and the conditions it seeks to influence affect its supply chain.

According to the corporation's website, South Bank Corporation's primary business units are:

- Community Service Obligation - Parklands Management
- Brisbane Convention & Exhibition Centre (BCEC)
- Property Development
- Retail Management
- Car Park Operations.

As the scope of the policy includes a full range of sustainability aspects, that is, direct social, economic, environmental impacts of the organisation, it may be suitable to declare an operational boundary based on financial control, legal ownership, and business relationships.

Part Two of the policy contains:

- Goals for sustainability

This Part identifies key internal and public policy objectives and goals for the corporation for each of the triple bottom line sustainability aspects, and affirms the corporation's commitment to continuous improvement and sharing knowledge with key stakeholders to promote and achieve positive ESD outcomes.

We recommend adding the following as a dot point to the Part *Protect and enhance the Environment by*:

- Harnessing and harvesting renewable energy sources and resources such as cogeneration from buildings and solar power at the precinct.

We also suggest that **reporting** is essential to the goal of continuous improvement. Though the Implementation Strategy (Part 2.0) supports the role of reporting, we recommend that it should be included specifically as a policy goal. Reporting is a powerful way of telling the news, getting recognition, collecting feedback from all stakeholders and deciding on a course of improvement. It may be appropriate to use the Global Reporting Initiative³ Guidelines for this purpose.

² Global Reporting Initiative 2005 *Boundary Protocol* January. www.globalreporting.org

³ The Global Reporting Initiative (GRI) is an international framework actively cited by more than 700 organisations to report on Corporate Social Responsibility. It developed as a response to the growing

Benefits of ESD measuring and reporting cited by the Centre for Public Agency Sustainability Reporting (2006) are:

- Knowledge of impacts – organisations know of their environmental, social and economic impacts because they measure and report on them.
- Risk and reputation – organisations can actively foster and use their reputations to attract investment.
- Staff attraction and retention – organisations which are seen to be living their values and walking the talk of sustainability and corporate citizenship are more likely to attract and retain high quality staff.
- Communication of commitment – an organisation can tell its sustainability story.
- Stakeholder engagement – through measuring and reporting, organisations can have more meaningful dialogue with stakeholders around the issues of sustainability that are most material, and to demonstrate progress.

The GRI also describes the benefits of ESD measuring and reporting for organisations⁴:

- Management tool – organisations which measure and report on their performance in environmental, social and economic terms are better placed to manage performance against long-term business strategies.
- Network tool – key stakeholder groups can convene to discuss and advance sustainability, assisting in building partnerships and understanding.
- Communications tool – the process can provide a common language and a set of indicators that can be used to discuss performance among stakeholders.
- Supply chain tool – can be a powerful tool for ensuring that brand and reputation are not eroded by the activities of others along the supply chain.
- Financial tool – results of reporting can help increase the financial bottom line by identifying and eliminating areas of waste.
- Increased comparability with other 'place leaders'.

need and practice of reporting against non-financial performance parameters. The use of a common set of disclosures and indicators in such reporting allows for the use of a common language, performance measurement, benchmarking over time and space, and aligns with financial reporting frameworks.

⁴ (adapted from GRI – *Benefits of Reporting Using GRI Guidelines*)

Part Three of the Policy contains:

- Specific objectives associated with policies regarding performance in core environmental, economic and social areas.

The Policy Objectives are organised loosely around the Goals (2.0) though it is acknowledged that in practice, policy objectives will relate across the spectrum. For example, issues of indigenous cultural heritage are under the Environment Part but also relate to the Economic and Social areas.

The main overall comment is that the PO's must be written in a form that allows for measurement. In other words, it must be clear what outcomes are required in order to achieve successful completion of the strategy or initiative.

Comment on the actual Policy Objectives, except for the Landscape/Open Space objective which contains no detail at this stage, follows in Section 3 of this review.

2 Comment on structure and logic of the Implementation Strategy

Part One of the strategy

This Part introduces the means by which the Policy will be implemented. Currently, it is not consistent with the corresponding part in the policy and should be aligned to eliminate ambiguity. Both parts should be aligned with the declared operational boundary.

Part Two of the strategy

This Part describes practical actions for implementation of the ESD Policy. However, it is unclear whether the reference to Parklands in the Action Plan means the total area of the corporation's jurisdiction, or that area described in Policy 1.4 as a sub-precinct known as Parklands Precinct.

Consideration should also be given to how stakeholders will be engaged in the Action Plan.

Parts Three, Four and Five of the Strategy

These Parts describe strategies relating to the policy objectives for Environment, Economic and Social issues respectively.

In these Parts, it would be reasonable to expect to find:

- the implementation strategies to be undertaken for each Policy Objective,
- Key Performance Indicators,
- Measures of Performance, and
- Actions for continuous improvement.

Overall, these parts contain very detailed strategies (except in the Economic area which contains no detail at this stage). However, very little is provided in terms of targets and key indicators for monitoring outcomes.

Also, it may be useful to describe the process by which the implementation strategy for particular PO's were set. For example, it may be necessary to assess various initiatives for their effectiveness, to establish whether they are appropriate strategies for achieving policy objectives.

Comment on actual implementation strategies as they relate to the Policy Objectives is incorporated in Section 3 of this review.

Part Six of the Strategy

This Part describes "Precinct Implementation Plans for On-Going Operations" and is related to Part Two of the strategy, however its meaning and intention is unclear to the reviewers, mainly because of the dual use of the term "parklands" to describe the overall area, as well as a sub-precinct. (The footnote associated with the heading does not help to clarify).

Part Seven of the Strategy

This Part (ESD Performance Measurement) describes the role and intended use of the Sustainability Assessment Matrix (SAM) in Part 8.

Because the SAM is undeveloped at this stage it is difficult to comment on the effectiveness of this process. However, it is clearly meant to be a tool expressly to rate the **expected** performance of proposed new developments, rather than to monitor or report on **actual** performance and overall progress and continuous improvement towards the ESD goals and targets for the corporation as a whole. The latter is the purpose for which the SAM has been interpreted by the reviewers.

Confusion arises because of the terminology selected for the SAM column headings. Rather than KPI's, the questions posed in this column are actually a design checklist. Therefore, the intended purpose of the matrix seems to replicate existing rating tools for use in the design process (such as Green Star developed by the Australian Green Building Council for commercial buildings, office interiors, retail fit-out and education buildings) which take into account all the aspects of sustainability the Policy seeks to address.

It is recommended that an existing rating tool is adopted for the purpose of assessing new developments, and audits of existing operations are conducted using appropriate tools such as Eco Biz, ABGR, and NABERS, and that the Sustainability Assessment Matrix be modified and used to report on ESD achievements for the corporation as a whole.

Part Eight of the Strategy

This Part has been interpreted by each of the reviewers independently as a summary of the proposed Policy aligned with the implementation strategies to be undertaken for each Policy Objective, Key Performance Indicators, Measures of Performance, and actions for continuous improvement. As discussed above the SAM should be modified in order to be a useful way of capturing the ESD policy and strategy, and reporting into one document.

Currently there is a lack of consistency between the PO's, Key Performance Indicators (KPI's) and Performance Measures (PM's). The reason this has occurred is explained previously. In order to populate the matrix, the policy needs to progress from aspects to indicators.

The KPI's in the Sustainability Assessment Matrix (SAM) are written in question form which is not appropriate for the purposes of assessing whether a PO is being met. A KPI is an indicator, which means that it should be written in statement form and performance should be able to be measured in quantitative (operational) or qualitative (management) terms. Meanwhile, the questions posed may provide a design checklist, as they more like narratives for initiatives, than indicators.

The column headed 'Performance Measures' in the SAM actually describes strategies for measuring performance in particular areas, rather than the actual metrics for performance. Ambiguity in terminology used needs to be removed.

Unless achievement against all Key Performance Indicators can be measured there is no basis for measuring the impact of the Policy overall and it simply becomes a motherhood document. Measurement allows organisations to learn from indicators in order to set performance targets for future projects.

3 Detailed analysis of Policy Objectives and Implementation Strategies

This section is intended to provide both critique and advice regarding specific elements of the policy and/or implementation strategy.

Environment

Design Process and Materials Selection

The Policy Objectives (POs) in this part relate mainly to the design of new buildings or other elements and indirectly to retrofitting or refurbishment of buildings or other elements of the South Bank built environment.

The implementation strategy for this policy area is entirely concerned with the *Design and Construction Process* PO, and therefore is discussed under that heading.

Design Standards

It is not clear whether this PO refers to artefacts in the built environment generally (for example street furniture and signage) or buildings only.

Some strategies to support this PO are included in the SAM as KPI's and PM's. These need to be translated to the implementation strategy, and KPI's developed around things like incidence of graffiti, incidence of complaints about street furniture etc. Occupant Satisfaction, Part 3.3.3 of the Policy and Part 5.3 of the Implementation strategy is closely related to this PO.

Material Selection

This PO should refer to 'minimal environmental impact, embodied energy efficiency and product lifespan, product potential for reuse, and material recyclability' as well as durability, and consideration of maintenance. The reviewer suggests adding the following phrase after the last sentence in the policy:

This is in line with reference to adoption of Life Cycle Analysis (LCA) principles.

KPI's which support this policy are required.

Subtropical Climate

There is a strong link between subtropical design principles and sustainability in South East Queensland. Subtropical design principles underpin and reinforce good socially and environmentally sustainable design. The conceptual framework for contemporary subtropical design is the interaction amongst local climate, landscape and lifestyle. If new buildings, structures, and spaces between buildings, and between buildings and streets are designed in response to local conditions, rather than in conflict with them, they are on good terms with their surroundings and their users, and better underpin a healthy environment, a vibrant society and a viable economy.

Based on temperature, humidity and winds, Brisbane is said to have weather within the comfort zone for most of the year. The benign subtropical climate means it is possible to enjoy the outdoors year round, if shade and shelter is

available, and also means that designers and developers of buildings and other places are well-placed to achieve low-energy and low-water outcomes.

The first sentence of the PO should be amended to read:

New buildings, structures and outdoor spaces will be designed and constructed to take account of Brisbane's subtropical climate – that is, to support year round use, and achieve this through low-energy and low-water means.

Strategies and KPI's may need to be developed for various building typologies, and to support outdoor activities.

The second sentence of the PO, regarding long life-span and adaptability, is not specific to climatic considerations and should move to the Design and Construction Process PO.

Design and Construction Process

This PO recognises:

- that energy conservation, water conservation, harvesting and recycling, and waste minimisation are to be positioned in the project delivery process, from initial concept to commissioning and on-going operation, and
- that integrated and collaborative project teams are essential to achieving these outcomes, and
- that it is essential to ensure ongoing ESD performance once in operation.

The implementation strategy mentions a suite of rating tools. These tools can be used to undertake the audit processes mentioned, as long as there is an understanding of their purpose and application.

- AGBC Green Star takes into account triple bottom line aspects and can be used in the design process to rate a broad range of impacts of new and existing buildings.
- NABERS is a performance-based rating system for existing buildings. NABERS rates a building on the basis of its measured operational impacts on the environment and can be used to monitor performance and set targets for improvement. It does not yet, but will eventually cover a full suite of environmental impacts.
- ABGR rates the greenhouse gas emissions of commercial buildings and can be used to monitor performance and set targets for improvement.
- EcoBiz Queensland is primarily concerned with reducing environmental impacts through changes to manufacturing processes and product management and marketing. It may be appropriate to recommend to businesses in the precinct to make eco-efficiency improvements in line with South Bank Corporation's ESD policy.

Having cited these references in the implementation strategy, it is not necessary, and potentially confusing, to list the various energy efficiency techniques.

Finally, the intent to reward outstanding achievement in meeting sustainability goals is commendable. The reward proposal appears to accept that

achievement of sustainability goals will be variable but the document makes no attempt to set minimum acceptable benchmark levels. This should be addressed, in order to strengthen the policy intentions.

Indoor Environment Quality

As well as promoting better indoor air, acoustic and visual quality, this Policy Objective should also encourage the use of natural light.

Water Sensitivity

The draft policy clearly identifies the protection and enhancement of water quality and natural and constructed ecosystems as part of its goal for sustainability at South Bank. This will be achievable through the adoption of best practice sustainable design practice, and the adoption of water sensitive design. The successful adoption of water sensitive design also relies on whole of life cost analysis as part of the overall design process, which is also identified in the draft policy.

Impacts on Waterways

This section notes that “New developments and activities will be designed and managed to positively impact the water quality of internal and adjacent waterways...”. It would be appropriate to mention here that water sensitive design should be adopted to not only improve water quality, but also quantity. A large issue for this type of site is the replacement of grassed and other vegetated areas with impervious surfaces, which increases runoff from the site. Along with pollutants carried by the stormwater, this increased runoff volume can have detrimental impacts on the receiving water ecosystem health. These impacts can be mitigated by the inclusion of rain gardens, infiltration measures and porous pavement in car parking areas.

The key performance measure should be assessment of water quality in internal and adjacent waterways against standards for such waters. An integrated water cycle management plan is not an appropriate performance measure. The performance measure should include monitoring of internal and adjacent waterways with an assessment made in relation to an appropriate water quality standard. This monitoring program should include both dry weather and wet weather sampling.

Water Efficiency

An important aspect of water sensitive urban design (WSUD) is the role it plays in developing a more efficient use of water resources. However, water efficiency is only one aspect of WSUD. One of the great strengths of WSUD is way in which it aims to integrate many of the often competing aspects of water within our urban environment. It seems that the implementation strategy is solely directed towards water efficiency in this regard. This section also needs to discuss the ways in which a WSUD strategy will be implemented in its own right. This of course may include reuse of stormwater on site from ponds, constructed wetlands and rainwater tanks etc, which will feed into the Water Efficiency Management Plan.

While the overall intent of this Part is important and valid it could go much further in the area of water harvesting and recycling. South Bank and its junctions with the Cultural Precinct have a considerable investment in ornamental water some of which is currently inactive due to restrictions on use of potable water. Current signage advising the use of recycled water is “apologetic” rather than proactive. There is an opportunity here for management and development to establish an independent water supply to maintain the important urban aesthetic and micro-climate functions of these installations at all times.

Energy Efficiency

Energy Consumption

Over the past few years in South East Queensland, energy use for control of thermal comfort during summer has increased significantly. This is in large part due to inappropriate design solutions for buildings, where a climate-defensive approach rather than a climate-responsive approach is taken. The PO confirms this.

However, it is also worth noting that energy usage for heating water remains one of the greatest sources of greenhouse gas emission in Queensland, and a PO which seeks to ensure that water is heated by renewable energy sources is recommended.

On-site Energy generation

This PO should clarify whether the policy is directed toward individual developments or total corporation jurisdiction.

The Implementation strategy for the Energy Efficiency policy area is almost identical to the Design Process and Materials Selection strategies. Doubling up on information leads to inconsistency and ambiguity. The approaches need to be rationalised.

Waste and Pollution

Air Quality

Add the following KPI –

Products used have proven qualities with no deleterious effects on the environment e.g. solvents in carpet manufacturing.

Waste Management

Changes to the PO's are recommended as follows:

All new development must have a waste management plan taking into account the construction phase, commissioning and operational phases, for approval.

The management of waste disposal within the Parklands is to promote 'Reduce, Recycle and Re Use' theme in accordance with a waste management strategy to be developed by the Corporation. (QUT can help with this)

The reviewer also recommends adding the following to the implementation Part:

- *Set up a system to audit different types of recycled waste and where they are disposed of. I.e. Green wastes can be used on site for mulching, composting and worm farms. Restaurants serving beverages must have waste segregation such as glass, aluminium cans and plastics for recycling initiatives.*
- *Introduce 'Event based' Risk system criteria for 'High, Medium and Low' activity categories.*
- *Have 'feedback' sessions regularly from visitors/community what ideas they see can improve ESD at the South bank precinct.*
- *Share ideas with other similar groups such as 'Place Leaders Associations'. Hosting meetings and conferences with 'Environmental Themes' and publicising them.*
- *Give out small grants to run competitions to school groups.*

Stormwater Run-off

This section identifies that the use of on site storage and filtration ponds should be encouraged. It would be better to state that a stormwater management plan should be developed to treat any stormwater runoff from the site. Although this may include on site storage and filtration ponds, there are a number of other options that could include gross pollutant traps, constructed wetlands, biofiltration systems, porous pavements as well. Certainly there should be consideration of the full range of pollutants produced from stormwater runoff including sediment, gross pollutants suspended solids and nutrients. Where possible a treatment train approach should be adopted.

The implementation strategy must include Key Performance Indicators and Performance Measures. Without these, there will be no way of assessing whether these objectives have been met. An appropriate Key Performance Indicator will be the water quality and sediment washoff from new construction sites within South Bank. This will indicate whether or not best management practice is in fact being implemented. The Performance Measures may be more complex, as they would need to include an on-going monitoring and assessment process during any construction works taking place. This monitoring and assessment process would need to include assessment against best management practice in soil erosion and sediment control on site, as well as monitoring of actual runoff during storm events to ensure that the best management practice is achieving the objectives.

Transport

The reviewer supports the Policy Objectives but makes the following observations and suggestions regarding the implementation strategy.

- Following the successful implementation of a number of TravelSmart programs by Queensland Transport, South Bank should work with QT to introduce TravelSmart initiatives at two levels:
 - (a) Employer based initiatives

(b) Initiatives targeting residents and education establishments

The aim of Travelsmart is to change travel behaviour of employees in terms of car sharing; use of public transport; cycle options.

- Work with QT in other areas of their policy area for Smarter Travel options to make sure South Bank offers itself as providing pilot/demonstration projects. (eg: increases in bicycle storage areas)
- Encourage employer based car pooling schemes.
- Parking provision and pricing: make sure that commuter market to CBD and to South Bank itself does not benefit from low all day parking fees. With improved pedestrian links to CBD, South Bank will become increasingly attractive for CBD car commuters if availability and price do not discourage it.
- Work with Translink to ensure that up-to-date public transport information is available to South Bank residents.
- Introduce a travel audit for South Bank on an on-going basis (annually updated). This audit would consist of measuring in a quantifiable way the achievement of transport sustainability targets.

It is suggested that the following indicators are adopted and measured:

- Rate of walk; cycle and public transport trips (by percentage) by main trip purpose/market segment (eg: visitors; commuters; residents)
- Public transport interchange performance: average travel times for walk links of modal interchange (bus/rail);
- Public transport accessibility levels:
- Ontime reliability of public transport services at South Bank stations (jointly with Translink) and bus and train services per hour: extent of coverage.

Preservation of Natural Habitat

In the reviewer's opinion there is no natural habitat to preserve and if there were the document should be talking about "**conservation and management**" when dealing with dynamic systems. "Preservation" is for static elements. Discussion under this item appears to suggest that the "natural habitat" in question is the mangrove river edge. These mangroves were planted in conjunction with construction of the Promenade river wall for Expo 88 and are just as much a built environment as any of the terrestrial components of South Bank. The nearest to a natural habitat here is the aquatic habitat of the river itself and South Bank can have no influence over that other than to prevent deleterious discharges into it under other appropriate policy Parts.

Bio-Filters

The use of bio-filters should be encouraged, however, this section should state that this will form part of an integrated water management system that might include other treatment systems such as constructed wetlands, gross pollutant traps, ponds, porous pavement and bio-filtration systems.

Indigenous Cultural Heritage

The Policy Objective prioritizes conserving objects and places that have cultural significance without prioritizing the actual role of Indigenous peoples in the identification and conservation. The policy does not discuss the myriad of ways that indigenous perspectives could more generally contribute to ecologically sustainable development. There appears to be no consultation and involvement of Indigenous peoples beyond the identification and protection of sites of importance.

Overall, the strategy aims to identify and preserve areas of Indigenous significance but fails to adequately describe how groups will be engaged, how Indigenous issues fit within the other elements of the strategy and the meaning of the promotion of Indigenous cultural heritage. The implementation strategy lacks an 'engagement' performance indicator.

The document should describe the process of determining who the relevant communities are and methods of appropriate, ethical engagement. A performance measure should be included that goes beyond "Description of consultation process...". A framework needs to be developed from the outset that clearly involves Indigenous groups and specifies the ethical processes that will be adopted. The process of developing agreements should be more detailed. (QUT can help with this).

The two performance indicators refer to the identification and protection of sites and the impact on significant areas. There should be a third indicator that actually gets at the process of involvement and engagement of Indigenous peoples.

The promotion of Indigenous cultural heritage (the second policy objective) is not supported by a performance indicator and performance measure. Indicators and measures again focus on sites or areas of cultural significance without talking about how these will be incorporated into a framework that involves the promotion of Indigenous culture.

Rather than including Indigenous issues as a 'stand-alone' element under the Environment heading, the issue of Indigenous engagement and involvement could be embedded throughout the whole document, for example taking into account where traditional owners/groups stand in relation to the 'Economic Benefit' element, particularly in the context of arts/cultural aspects of the development

Landscape / Open space

This Part of the Policy and Implementation Strategy has no content to respond to at this time.

Economic

Economic Benefit

The reviewer endorses the POs set out in the draft document. They are investment, asset and finance management, affordable housing, creating/increasing long term value of businesses, job productivity and increasing productivity to minimise operating costs. These objectives are useful, especially when they have been planned within an ecologically sustainable development framework.

However, the current proposal does not provide much information for any of the above mentioned POs. It is recommended strongly that the POs are discussed in relation to KPIs and PMs. In the absence of a detailed discussion on POs the reviewer has some comments/suggestions that can be taken into account when discussing the POs in detail. They are:

Whilst Ecologically Sustainable Development is the most sensible and sustainable way to undertake future development projects at South Bank, the policy does not spell out the economic benefits and costs of such development in any detail. The policy only mentions that economic benefits will be generated from the proposed development. It is important to discuss these benefits and quantify them where appropriate. It is strongly advised to list these benefits under various economic indicators such as:

- jobs created,
- goods and services produced,
- expenditure by the public in the area after the completion of the project,
- impact on transport/ferry services, educational benefits to the public,
- tax revenue generated,
- impact on rent prices,
- tourism benefits and the overall contribution made to the city of Brisbane.

Furthermore, it is important to discuss the multiplier effects occurring in the local area as well as beyond the local area. It is also important to quantify these benefits before and after the completion of a project. This can be done under the various headings specified in the policy. They are environment (includes water and energy efficiency, waste and pollution management, transport, preservation of the natural environment/habitat, indigenous cultural heritage) and social (includes community development, business and urban interaction, occupant satisfaction).

From the overall draft strategy, it can be assumed that the development that will take place in South Bank will be radically different to economic development taking place across the river or even the current activities taking place in the precincts of South Bank. Where possible, it is important to

quantify some of the major differences between the proposed development at South Bank, the existing economic activities in South Bank and the city.

One way to address this issue is to undertake a thorough cost-benefit analysis of the entire proposed project/development. It should be borne in mind that not all economic, environmental, and social benefits (tangible and intangible) will be captured in monetary terms. However, what is not captured in the cost benefit analysis can be spelt out quantitatively and qualitatively, whilst making comparisons with the existing activities of South Bank and the city of Brisbane. This should be undertaken in such a manner so that a comparison can be made before and after the completion of the project.

Social

There appears to be a distinct lack of community engagement and consultation within the Social Part. If the Corporation is serious about making South Bank a community resource and sustainable for future generations, they need to actively engage with the breadth of stakeholders.

The Social issues need to be embedded across the whole, in order for maximum achievement of the overall goals of the project.

It is difficult to make comments regarding the PO, KPI and PM for the Social Part elements due to the lack of logical flow, appropriateness, and consistency.

Community Development

The Key Performance Indicators (KPI) and the Performance Measures (PM) need to be strengthened. The KPIs should not be written as questions as they are indicators of performance.

Parklands Preservation

PM does not have a direct relationship to the Policy Objective (PO) as stated. In addition the PM can not be measured as to its success.

The PO, KPIs and PM's need to be strengthened so they are directly relevant to each other. The PM should be written in a way that is directly measurable.

Community Education

The KPIs need to be written as statements. The first KPI is related to the PO. The following two KPIs are not related to the PO (which is about sustainability). The fourth KPI needs to be clarified as to its direct relationship to the PO.

Most of the PMs are not measurable (only the 3rd one could be measured). The first three PMs are related to the PO (but not measurable), the fourth and fifth PM are not related to the PO. The final PM may or may not be related to the PO.

There is no PM that is measurable to determine whether the PO has been achieved.

Meeting Place

Need KPIs and PM.

Sense of Identity

The first KPI may address the issue of 'sense of identity'. However, the second KPI and the PM do not directly relate to developing a 'sense of identity'. The second KPI relates to levels of activity and engagement with parklands. This would be better located in the Meeting Place or the Design Standard Part.

Community and Stakeholder Consultation

The PO indicates that consultation strategies will be promoted. The KPI and the PM have no direct relationship to consultation with stakeholders (or anyone else). The KPI and PM need to be re-written in line with the PO. A process for community engagement for the purposes of consultation needs to be developed and implemented. There are a number of options in terms of methodology, including focus groups, surveys (on-line or paper based), interviews, etc. It is important to have 'conversations' with the community about the aspects of South Bank and usability. A second PM needs to relate to the use of feedback from community consultations in developing programs, services and developments at South Bank.

Affordable Housing

The KPI and PM need to be included.

Cultural Heritage

The KPI's and PMs need to be included.

Recommendations

As stated at the outset, South Bank Corporation's intention to align its long-term vision with sustainability by developing an ESD policy and implementation strategy for aspects of management and development is highly commendable and demonstrates its leadership as a progressive and innovative organisation. The following recommendations are made in the spirit of enhancing the corporation's goals.

We recommend that the corporation's commitment to sustainability should be included in the vision statement, unequivocally aligning the vision with ecological sustainability.

The Policy requires a consistent boundary to be stated. A policy boundary which wholistically takes into account South Bank Corporation's primary business units is recommended. Once a consistent boundary is established, all policies and strategies should be aligned with this.

Further, ensure that all Policy Objectives (PO's), and aspects for which Key Performance Indicators (KPI's) and Performance Measures (PM's) are provided in the policy and strategy are consistent with the declared boundary, scope and time period. What is needed is a set of actual measurable indicators and preferably a set of benchmarks obtained from a best practice investigation of similar developments elsewhere. (We can help South Bank do this).

We suggest that reporting is essential to achievement of the goals of the Policy. Reporting is a powerful way of telling the good news, getting recognition, collecting feedback from all stakeholders and deciding on a course of improvement.

The Sustainability Assessment Matrix should be modified to capture the ESD policy and strategy, and used to report on ESD achievements for the corporation as a whole.

Appropriate existing rating tools should be adopted for the purpose of assessing new developments, and conducting audits of existing buildings and operations.

The main steps needed to move the draft policy forward are:

- Gather information and data that will help to set benchmarks, relevant KPI's and measures of performance,
- Progress from initiatives to indicators – populate the Sustainability Assessment Matrix.

Once the policy is established and the implementation commenced:

- Learn from indicators for continuous improvement, and
- Set performance targets for future.

References for further information

GRI (2005) Global Reporting Initiative *Sector Supplement for Public Agencies Pilot Version 1.0* with an abridged version of the 2002 *Sustainability Reporting Guidelines*, March 2005. www.globalreporting.org

The Centre for Public Agency Reporting (2006) *Briefing Paper on Sustainability Reporting* www.publicagencyreporting.org

Global Reporting Initiative (2005) *Boundary Protocol* January. www.globalreporting.org

Hargroves, K. & Smith, M.H. (Eds.) (2005) *The Natural Advantage of Nations: Business Opportunities, Innovation and Governance in the 21st Century*, London, Earthscan.

