Collaborative Sustainability Assessment

Dr Caroline Raphael[1]

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Introduction

The expanding and confusing field of sustainability assessment makes it difficult to introduce more terminology. Yet there is clear need identified based on the literature review and to address the findings from the cases (Raphael, 2011), Deliberative sustainability assessment attempts to bridge deliberation and sustainability assessment [2](Pope, 2007). However, as Raphael (2011) argues deliberation does not always lead to ideal outcomes (see also, Gutmann and Thompson 2004, 24; Owens and Cowell 2002, 64; Morrison-Saunders and Therivel 2006, 289).

Assessment can be differentiated based on its role and what it should be aiming for, and as a form of practice, defined by legislation and procedures (Elliot and Thomas 2009). The aim of this paper is to define collaborative sustainability assessment[3], its role for significant land-use planning and development and, to consider a possible procedural framework for its application.

Definition and Role

Collaborative sustainability assessment is proposed as the platform for *joint* and *concurrent* collaborative, deliberative and sustainability assessment process and practice (Sinclair et al. 2008, 416). It is a form of assessment that aims to seriously ensure sustainability and effective deliberation drives the development of a policy, plan, strategy, project or concept. At the strategy, plan or policy level, collaborative sustainability assessment ideally assesses and compares issues, concerns or opportunities against alternative *means* through the application of sustainability criteria. The preferred means for addressing these generate mutually reinforcing gains and opportunities that are further integrated into the strategy, policy or plan.

At the project or concept level and as an *ex ante* form of assessment, collaborative sustainability assessment aims to identify, analyse, predict, estimate, compare, monitor and manage its consequences or effects (intended and unintended) as well as the relationships likely to cause or create the qualities, consequences or effects in the first instance and any change processes invoked by those interventions during and beyond the scope and timing of the assessment[4]. Alternatives *to* the project or concept (options) are identified and assessed against deliberated and agreed upon sustainability criteria. Benefits are clearly demonstrated and negative effects are managed or mitigated for the preferred option. Ideally, projects or concepts would be derived from an overarching policy, strategy or plan that has been subject to collaborative sustainability assessment.

The primary argument is that collaboration is required to facilitate successful deliberation and sustainability assessment and vice versa. In collaborative sustainability assessment, these processes are inextricably intertwined and integrated and necessary from the beginning[5]. That is, involvement of stakeholders (public) *prior* to key decisions being made (Dagg et al. 2003, vii). The emphasis on collaboration offers a sympathetic and effective way of drawing in key parties to facilitate the assessment. Collaborative approaches also bring "together multiple constituencies and create forums for dialogue and knowledge exchange" (Buselich 2007, 4) vital for the assessment (Sheate et al. 2003; Vicente and Partidário 2006). Indeed, in taking a collaborative approach, issues which are routinely forgotten or resisted, can be placed firmly on the agenda by others for discussion (Scrase and Sheate 2002, 282). In this sense, the focus is on positively developing and managing relationships and interactions between key parties to facilitate collaborative sustainability assessment (Forester, 1999, 64; Head 2007, 451-452; Innes and Booher 2003, 43; Innes and Booher 2004, 428-429; Healey 1999, 116). Underpinning this process should be building faith, honesty, goodwill, confidence, capacity and trust (Head 2007, 451-452; Hartz-Karp 2004-05; Buselich 2007) for the process and for those involved. Indeed, in Grace's (2010) and Cameron's (2010) opinion, assessment works well when done through collaborative, proactive approaches which foster goodwill amongst the partners involved. Such a process also aims to integrate collaborative approaches in what could be seen as "an uncollaborative world" of planning (Brand and Gaffikin, 2007, 282)[6] by dealing with conflict productively.

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[1] Contact details: Dr Caroline Raphael, Honorary Research Associate, Murdoch University, caroline.raphael@murdoch.edu.au

[2] Collaborative sustainability assessment is not 'deliberative planning' as discussed by Hopkins (2010b) and Gleeson and Low (2000), as there is a stronger emphasis on assessment practice.

[3] The term "collaborative sustainability assessment" has been applied by Hurley et al. (2006) in the water and asset management sector (Hurley et al. 2008). However, references to collaborative sustainability assessment do not appear within the sustainability assessment literature, nor do Hurley et al. (2006, 2007, 2008a,b, 2010) engage with this broader body of literature. Conceptually, however, it resonates with Armitage and Petts' (2005) "collaborative environmental assessment", Petts (2003, 273) "deliberative environmental assessment" (Petts 2005, 405) and Pope's (2007) "deliberative sustainability assessment", all of which focus on bridging deliberation and assessment practice. Therefore, the term itself is not new, as the ideas and intent behind the concept have been developed previously by these authors. However, what is new is its development in light of the theory on sustainability assessment and deliberation, and its application for significant land-use planning and development undertakings.

[4] Following Vanclay (2004, 30), citing Vanclay and Bronstein (1995, xi) and Vanclay (2003, 6), Almer and Koontz (2004, 475) and Weaver and Rotmans (2006, 288).

[5] An alternative argument is that deliberation should be enhanced and that sustainability assessment could still be called 'deliberative sustainability assessment'. This is acknowledged, however, that collaborative sustainability assessment is still preferred as a concept which embodies the dimensions of deliberation and sustainability assessment and is supported by collaborative and mutually supportive relationships.

[6] It is not, however, collaborative planning per se. Critiques on the unrealistic expectations associated with collaborative planning are common (see for example, Brand and Gaffikin 2007; Nooteboom 2007, 654; McGuirk 2001) since they tend to be based on Habermasian ideals (see for example, Innes and Booher 2003, 35). Rather, I draw upon the notion of collaboration broadly, and its contribution to sustainability assessment and deliberation for significant land-use planning and development undertakings.

Collaborative sustainability assessment reduces the likelihood of deliberation and sustainability assessment becoming sites of conflict by drawing them in together (Richardson 2005, 344). In this process, collaborative sustainability assessment should productively nurture conflict while searching for outcomes that attract genuine consensus (Mansbridge 2003, 189) or at least genuine agreement. Mouffe's (2005, 52: 121) argument is that we need to create shared arenas where actors viewed as legitimate enemies can work towards a form of conflictual consensus. Here consensus may be sought after for higher order values and principles (such as equity and fairness), but allow for differing interpretations and levels of agreement at lower levels of consideration for different reasons (Mouffe 2000, 117 and Dryzek 2000, 170). Silver et al. (2010, 454) refer to this as a "cycle of contestation and consensus" where conflict and consensus afford different opportunities at different stages of policy and decision-making. In this view, conflict and consensus are dynamic and, in part, cyclical (Silver et al. 2010, 464), and collaboration and conflict can be seen as "legitimate and mutually re-enforcing forms of participation" (Aylett 2010, 483).

Collaborative sustainability assessment should also focus on capacity building by encouraging learning[7] and knowledge brokerage[8] amongst those involved (Innes and Booher 2004, 431; Innes and Booher 2003, 48; Sheate and Partidário 2010, 287). Central to this process is enabling legitimate and honest stories about development and sustainability to be revealed and communicated amongst a range of participants for the purposes of sharing knowledge, learning and assessment (Richardson 2005, 362-363; Sheate and Partidário 2010, 287). These stories can then help reconcile divergent views and judgements about the feasibility and desirability of different land-use patterns (Owens and Cowell 2002, 26) when applied for specific undertakings, from a sustainability perspective. Indeed, a critical role for the assessment is to give sustainability meaning and intent at the level of the undertaking. In doing so, it becomes the communicative process or instrument to deal with sustainability issues at the level of a proposed undertaking (Devuyst 2000, 77; Berger 2008, 21; von Raggamby 2008, 79). In this context, sustainability is not an end-state to be achieved or a "fixed state of harmony" (Devuyst 2000, 74; Hurley et al. 2006, 1; Newman and Kenworthy 1999, 5). Rather, it is a value-laden concept and requires elaboration in context by those involved, to support its integration in assessment (see for example, Hardi and Zdan 1997). However, it should aim to pursue the core ideas such as equity, fairness, comprehensiveness, precaution, accountability, transparency, good governance and a recognition of limits of carrying capacity and embrace pluralism (Gibson et al. 2005; Bond et al. 2001, 1012; Sneddon et al. 2006, 264; Hajer and Wagenaar 2003, 21; Frame and Cavanagh 2009, 196).

Proponents of advanced forms of sustainability assessment hold the view that it can lead to significant transformations in policy and decision-making processes (see Newman 2006, 292; Elliot and Perschke 2010). These transformations are seen as necessary in order to contribute to sustainability (Weaver and Jordan, 2008). In this context, collaborative sustainability assessment should challenge the decisions made and how they are made (Kolkman et al. 2007, 702; Bina et al. 2007, 575-576; Weaver and Jordan 2008, 13-14; Weaver and Rotmans 2006, 299). It should also engage with planning processes and systems as well as institutional, administrative, cultural and political contexts, and transform them to support the pursuit of sustainability (Bina 2007, 594; Elliot and Perschke 2010)[9]. Or in other words, it should serve to identify where changes are necessary and to support transformative change management practices and processes (Grace 2010)[10]. In this view, collaborative sustainability assessment can be seen as a means of integrating planning into a transformative sustainability agenda. The rationale is that for change to occur, the decision-making procedure must have legitimacy. Importantly, collaborative sustainability assessment should become the decision-making procedure (Jenkins 2010; and Brown 2010). Another benefit of this approach is that it makes transparent how decisions are made and engenders feelings of inclusion and empowerment in those involved (McAlister 2010, 538). It can also help critique claims, assumptions and judgements about the proposed undertaking, to ensure decisions are made in the right spirit. The intent is to avoid appeals or conditions or policies, strategies, plans or developments which are not anticipated. This is in contrast to collaborative sustainability assessment informing or influencing such processes. Current approaches to sustainability assessment often portray it as an aid to decision-making. If so, the outcomes of sustainability assessment may not hold much legitimacy. Indeed, to adopt collaborative sustainability assessment as an aid to decision-making renders it susceptible to maintaining the status quo[11]. Adopting collaborative sustainability assessment as the decision-making procedure and making it open and accountable also has the potential to overcome situations where "the methodology differs between decision-makers for one decision and over time between decisions" (Söderbaum 2007, 620) or where processes are ill-connected, overlapping and competing (Gibson 2006; Gibson et al. 2005, 161). This approach also reduces the ability of decision

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[7] Sinclair et al. (2008, 425) found that Environmental Assessment may be conducive to learning that could enable a transition to sustainability, but this did not translate to decision-making per se. Thus learning and decision-making must be intertwined in order to effect change (Sinclair et al. 2008, 425).

[8] Knowledge brokerage, according to the Canadian Health Services Research Foundation (2003) cited by Sheate and Partidário (2010, 279), focuses "on identifying and bringing together people interested in an issue, people who can help each other develop evidence-based solutions. It helps build relationships and networks for sharing existing research and ideas and stimulating new work. Knowledge brokering supports evidence-based decision-making by encouraging the connections that ease knowledge transfer."

[9] This contrasts with the "learning-by-doing" approach advocated by many, including Devuyst (2001). As noted by Wilkinson (n.d), cited by Berger (2008, 23), the "learning-by-doing" approach to assessment process can be plagued by problems of having an unclear purpose, too much discretion leading to the possible "temptation to leave out difficult, long-term environmental and social impacts", inappropriate stakeholder representation and participation as well as unclear links between assessments and "final policy decisions" and their degree of influence. Learning-by-doing also leads to iterative or incremental responses which are known to maintain the status quo or modify it in a minor and uninfluential way (see Barns 2010b). In turn, it can potentially lead to more unsustainable development.

[10] This is based on the understanding that sustainability constitutes change and as such is about behaviour change and change management. As Robinson (2004, 379-380) adds, "sustainability is ultimately an issue of human behavior" and "an inherently normative concept, rooted in real world problems and very different sets of values and moral judgements." The argument is that the pursuit of sustainability must empower people, support processes of behaviour change as well as expand and enable cooperative networks that work towards a shared meaning and intent of sustainability in order to effect the necessary change management plans and actions (White 2001, 54-55; Partridge 2005, 6-7; Kotter 1995; and Kegan and Lahey 2001).

[11] Scrase and Sheate (2002, 291), citing Amy (1990), note "that the decision techniques favoured at various times, and the manner in which they are used, reflect and reproduce wider power struggles." Scrase and Sheate (2002, 289) do, however, caution that the "context of past decisions and institutional development" form "part of the process of creating the context for subsequent decisions" and that "decisions have a history and leave a legacy." These decision-making trajectories and traditions may result in "inertia" or set a precedent or context for future decisions which "colours other actor's expectations and choices" for new and future proposals (Scrase and Sheate 2002, 289).

makers holding discretionary powers to make decisions which may not contribute to sustainability or to use other non-participatory methods as part of the overall decision-making process (Glasson et al. 2005; Sheppard 2005, 1516).

Crucially, collaborative sustainability assessment should integrate other forms of procedures for choice such as the use of intuition or tradition and belief as part of the decision-making process (Kørnøv 2001, 172). Central to this aspect is explicating assumptions, preferences, value judgements and political decisions throughout the process to avoid assessment and decisions becoming post-demonstration of preconceived judgements (Elliot and Thomas 2009, 7; Scrase and Sheate 2002, 277; Niestroy 2008, 53; Owens et al. 2004, 1946)[12]. This is important since collaborative sustainability assessment should facilitate practical judgement to evolve tentatively through mutual inquiry and discourse with others (Hajer and Wagenaar 2003, 23). This approach fulfils Sheppard's (2005, 1524) call for "new methods that combine attributes of good public processes and collaborative learning with comprehensive multicriteria decision-support systems."

Collaborative sustainability assessment, as a new method, should therefore provide the space for negotiating different problem perceptions with technical solutions, and integrating values in the assessment process (Vicente and Partidário 2006, 2006; Monnikhof and Edelenbos 2001, 37). It should grant equal opportunity for others to be involved in the process and shape the outcomes and how they are implemented as a means of progressing democratic virtues (Sinclair et al. 2008, 416; Fitzpatrick and Sinclair 2003, 161; Webler et al. 1995; Barber 1984). In order to do this, collaborative sustainability assessment should be applied as a holistic approach, in the sense that the assessment, decision-making and proposal/policy development process are one and the same (Glasson 2010). This approach is important for three reasons. Firstly, it provides the platform for co-design and for brokering interests and preferences prior to the final decisions being made. Secondly, it enables collaborative sustainability assessment to shape the undertaking rather than inform it. Finally, this approach enables collaborative sustainability assessment to become a form of procedural democracy or procedural justice (Rajvanshi 2003, 310; Nooteboom 2007, 662; Hillier 2002, 69; Beck and Crawley 2002).

In the long run and following Gibson et al. (2005) and the approach taken for SEA and sustainability appraisals, collaborative sustainability assessment should become a legislated process following testing and fine-tuning) with suitable guidance and support mechanisms[13]. This is not to advocate a reactionary approach or to encourage a process to secure approval (see Chaytor 1995, 515). Rather the intention is to ensure that the outcomes have legitimacy and there is clarity in ownership of outcomes, obligations and responsibilities through *legislative* mechanisms (see Retief 2010). It should also replace existing assessment processes for significant land-use planning and development undertakings, to ensure it is not influenced or undermined by other processes or results in duplication of assessment and deliberative efforts. Existing assessment processes include, but are not limited to, current development assessment and sub-division approval processes and EIA (where required). Measures for independent review of the collaborative sustainability assessment process should also be available (Levett-Therivel 2007, 59). The aim is to ensure that the predicted outcomes are likely to result. This also gives a measure of confidence about how trade-offs have been dealt with and how honest the process has been. It should also be nested in a broader sustainability management and planning system to ensure each assessment contributes to sustainability and, in turn, each assessment is informed by the outcomes of the management and planning system. This should also include cumulative impact assessment to ensure successive collaborative sustainability assessments do not lead to unanticipated impacts (as noted in EIA-based sustainability assessment). It will also require a broad view of sustainability and one that encompasses environmental, social, cultural and economic considerations, all considered at the same time in an integrated fashion.

Once collaborative sustainability assessment is established and well-developed, it should be supported with its own legislative Bill. This Bill would require collaborative sustainability assessment for all significant land-use planning and development undertakings and replace all other decision-making and assessment processes. This would reduce duplication of effort and frustration for all involved, by having a one-stop shop for decision-making. This approach would force all parties to work together and enable the kind of governance arrangements needed to pursue sustainability for each undertaking. However, as legislative changes take time to occur, collaborative sustainability assessment can still be applied.

Assessment framework

Despite the concerns over procedural rationality, where the focus is on process and not necessarily on outcomes (see for example, Pope 2007; Cameron 2010), collaborative sustainability assessment does require some form of standardised practice or framework (T.B. Fischer 2003). The reason is that collaborative sustainability assessment constitutes a new approach to sustainability assessment and deliberation, incorporating the strengths of existing approaches as well as overcoming their limitations. It is applied for collaborative sustainability assessment for planning policies, strategies, plans through to developments on public land and as such, should be supported by Government. It is also suggested for use within Western Australia's planning context (as a legislated process) but can be modified for application within other areas or applied as a strategic proactive approach.

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[12] Barns (2001) presents the alternative argument that it is the conflict over political visions, cultural values or moral beliefs that is most important. However, the narrow focus on disputes over knowledge, data and science, makes it harder for these issues to be debated. Collaborative sustainability assessment as conceived should overcome this limitation.

[13] Levett-Therivel (2007, 59) argue that there is a difference between legally compliant sustainability appraisal and effective sustainability appraisal. Collaborative sustainability assessment should first and foremost be an effective assessment process.

Collaborative Sustainability Assessment Framework

STAGE		STEP		OUTCOMES
Filtering	▶	**Screening** Issue, problem, opportunity, project or concept is referred to the WAPC for possible assessment based on its significance. If deemed significant (following public deliberation) then the collaborative sustainability assessment process is invoked.	▶	Only issues, problems, opportunities, projects or concepts deemed significant are assessed.
Establishing the Governance Structure	▶	**Formation of an Oversight Committee** This committee of key representatives is established by State Government, to oversee and organise the collaborative sustainability assessment process.	▶	Process is guided by well-respected and responsible parties.
Establishment of Purpose, Option Identification, Scoping and Baseline Development	▶	Identify the key question and goal to be pursued (purpose). Select options/alternatives and critical review of their purpose to ensure they are true options and alternatives[14]. Scope the issues to be addressed based on significance. Establish and clarify the overall objectives, criteria and indicators to be pursued and the baseline condition on which the comparisons will be made (including how trade-offs will be made).	▶	Provides a commonly understood foundation to commence collaborative sustainability assessment.
Assessment and Selection	▶	Assess impacts and relationships associated with each option or alternative. Select and enhance preferred option.	▶	Ensures the best option is chosen, enhanced and put forward for subsequent approval(s).
Development of Management System and Strategies	▶	Determine and detail impact management and mitigation measures. Design implementation, change management processes, follow-up, monitoring and auditing program.	▶	Ensures impacts are suitably mitigated and that collaborative sustainability assessment is supported by a responsive management system.
Proposal	▶	Proposal developed and associated documentation prepared ready for approval.[15]	▶	To document all the assessment and analysis information for the proposed option.
Approval	▶	Submission of proposal for final approval with statutory, binding conditions (to the WAPC).	▶	Binds the proponents, through legislative mechanisms, to the outcomes of collaborative sustainability assessment.

The steps outlined in the collaborative sustainability assessment framework are only conceptually distinct. This is because, in reality, decision-making may involve all or parts of each step occurring at the same time, separately or widely apart at any given point in time (Parkinson 2006, 168). It should therefore be seen as an iterative process addressing issues as they arise and allowing them to come in and out of the process where relevant. The Oversight Committee would be responsible for ensuring that those issues are dealt with transparently and that the outcomes and decisions arising from the process are suitable for approval by the WAPC. The WAPC should be restricted from making changes at this point to avoid their undue influence. This framework does *not* specify the "do-minimum" approach (Scott 2008, 21) as this sets a very low benchmark. Rather, it clarifies the dimensions of collaborative sustainability assessment which should be considered, based on the literature reviews and findings of the cases, as detailed in Raphael (2011). These dimensions are also not exhaustive, nor are they determinative. Instead, they provide a starting point for applying collaborative sustainability assessment with the ultimate goal of refining the framework to make it accessible to a wide user group for differing circumstances (Ness et al. 2007, 506). In this view, it is an emergent framework (Sinclair et al. 2008, 417) and further refinement will help enhance its useability. As such, collaborative sustainability assessment should be accompanied with a responsive evaluation process to ensure it fulfils its broader role. This is not to advocate collaborative sustainability assessment as a long-winded path to utopia or to allow it to constitute "collective fiddling while Rome burns" (Shapiro 2003, 121). Rather, it grants opportunities to earnestly deal with issues which arise during the assessment process and to amend the process accordingly.

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[14] For policies, strategies and plans, alternative *means* to addressing issues, problems and opportunities should be sought after. For projects or concepts, alternatives *to* the project or concept should be sought after.

[15] For policies, strategies and plans, the proposal is the policy, strategy and plan developed as a result of collaborative sustainability assessment and directly informed by the outcomes. For projects or concepts, the proposal is the preferred option refined and enhanced as a result of collaborative sustainability assessment.

Summary

This paper has proposed a new approach to sustainability assessment and deliberation, collaborative sustainability assessment. It was first argued that collaborative sustainability assessment provides a more appropriate means for assessing significant land-use planning and development undertakings, by focussing on building relationships *first* to facilitate and support deliberation and sustainability assessment. The paper then outlined the framework for collaborative sustainability assessment, based on the literature reviews and case study findings, as detailed in Raphael (2011).

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