

Adding another top and bottom line to Sustainability thinking in small to medium sized local authorities – application to a small New Zealand local authority

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Summary

The state government of Victoria requires departments to develop and implement environmental management strategies. However, there appears to be little national level direction in Australia or New Zealand for integrated sustainability planning and reporting initiatives that might happen at local to national levels of government. Given the absence of any clear policy support for this sort of initiative, especially at the level of local or regional government, it seems opportune to consider what might be helpful for those operating at these levels. We worked with a small New Zealand territorial local authority that wanted a simple framework against which to report progress with its sustainable development related strategies and practices. In the first instance we worked with the Council to define sustainable development and developed a planning and reporting framework to afford it some level of accountability. Goals and targets were set for social, economic, cultural and environmental aspects of council performance and these were then subjected to ongoing reporting requirements. Notably, we added a further top and bottom line component, management, because fundamentally this is where sustainability planning and reporting starts and finishes. Goals and targets were set here as well. Our illustrated first report to Council indicated that management was performing extremely poorly in this respect – little wonder that this system appears not to have been implemented by Council. Despite this failure we believe the addition of ‘management’ to top and bottom line planning and reporting require further development should such initiatives become mandatory requirements.

Introduction

The implementation of concepts like sustainability and sustainable development (SD), with their multiple layers of meaning, is fast becoming topical and influential in ‘everyday’ life, with multiple key actors, including central and local government, corporate entities, academics and communities, all grappling with meaning and practice. From its’ seeding in the World Commission on Environment and Development *Our Common Future*, commonly known as the Brundtland Report (WCSD 1987), SD has (apparently) taken root across the world (Gallopín 1997, Hardi and Zdan 1998, Bebbington 2001, Asthleitner et al. 2004). Agenda 21 and more recent initiatives such as the Triple Bottom Line (Elkington 1997) concept, have been interpreted as requiring organisations to consider the environmental and social impacts of development, not just the economic sphere, in policy processes, thereby addressing issues in a more integrated fashion (Bebbington 2001, Giddings et al. 2002, Spangenberg 2004). But, while there are almost innumerable initiatives there remain almost as many questions about outcomes and overall effectiveness of these initiatives, across almost all spheres of endeavour.

While much of the sustainability emphasis has been on private entities (e.g., Robert et al. 2002) public agencies as a whole have come under increased scrutiny in terms of how they can effect or can represent sustainability (Lewis 2000, Ball 2002, MfE 2002, PASTILLE 2002, GRI 2005). Many assert that public agencies should set the compass towards

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sustainability by both policy making and by ensuring that their own operations are in order (Lewis 2000, Ball 2002). Some commentary is directly related to public agencies influence over their jurisdictions sustainability, but some is more properly considered in tandem with New Public Management (Bennett 2001, McAdam et al. 2003). Thus, many organisations have targeted the local government sector, within public agencies, as being a key to driving change to a more sustainable world. Proponents cite their historic environmental management links, their potential collective bargaining power, and their close community links as being of importance (see for example ICLEI Local Governments for Sustainability: <http://www.iclei.org/>, Ball 2002).

Whilst much has been written and/or argued over the meanings or reality of sustainability, it must be acknowledged that for all its perceived 'flaws' the notion of sustainable development is **the** present vehicle for coordinating many of the multiple perspectives about environment, development, and people and then moulding them into forms of action. The phrase, 'multiple perspectives' is a key point as there are many different ways of viewing sustainability (Gallopín 1997, Bebbington 2001, Owens 2003, Astleithner et al. 2004), all dependant on the observer and other contextual circumstances, and, the ultimate goal at hand. The notion of sustainable development, even with its fuzzy meanings, gives decision makers an opportunity to develop a definition of their choosing, which itself provides both advantages and disadvantages. This paper describes the process and issues related to one approach of considering sustainable development in a public agency context. It revolves around the development of a contextualised sustainable development reporting framework for a small district council in New Zealand, with an emphasis on the missing bottom line: management.

Sustainable development and local government – a brief overview

Initially, centralised governmental institutions were arguably the main focus of attention with a notion that their policies should be harnessed to drive the sustainability agenda by using a top-down approach. A review of the literature indicates a wide set of rationales for the incorporation of sustainable development into governmental matters, but detailed case studies of implementation in the literature are still rare. Notably, whilst the central government role and capacity for setting feasible and coherent sustainability policy at the national level was recognised the onus of actual implementation fell onto local communities through such agreements as Agenda 21 or through the mushrooming of community development groups (Lewis 2000, Ball 2002). Conversely, whilst this was happening local government and their activities were not under the same level of scrutiny about their policies or activities, with an assumption that they would simply carry out central government wishes. But the debate and implementation of new public management norms within local government stressed the need for business accountability and community empowerment and this shaped the role of local government in delivering sustainable development.

The sustainability and development debate then shifted the focus of sustainability concerns into the need to empower communities to meet their needs and addressing the question of governance (e.g., Valentin & Spangenberg 2000). Community sustainable development or versions of Local Agenda 21 have blossomed in many parts of the world, with Europe being one of the key players, perhaps due to conditions fostered by the multilayered governance structures. The rise in community led initiatives allowed local NGOs and community groups to develop a series of indicators relating to their own interest, often in partnership with their local government, but much of the measurement of these sets were left to local government. The continuous shift towards more community involvement in decision-making as well as a

call for greater transparency of governmental processes and decision-making, and the sustainability agenda has this as a driver. Historically, local government has been at the forefront of environmental management in their region, with their own operations, and the policies they create, can be of direct influence on their environment (Ball 2002, ICLEI 2003). This was, in part, why local authorities were given the mandate to put into practice the tenets of Agenda 21 (e.g., Brugmann 1996). The weighting of opinion suggests also that local governments are often more 'in-touch' with local governance issues so they represent a strategic point to push the sustainability agenda.

The next phase for reform attention was business, due to the impact of their policies and operations, and a general call for business to both increase the transparency and the sustainability of their operations. In 1997, Elkington coined the term 'triple bottom line' which sought to extend business reporting from being simply financial attributes through to a more encompassing vision which included social and environmental performance measuring. It was argued that business should consider and report against targets under the economic, environmental, and social umbrellas and go beyond the financial annual report. In amongst these calls for embedding sustainability have been more targeted calls for business to specifically address these matters as part of their commercial practices rather than as tack-ons.

The present phase in the sustainability debate might best be described as the partnership phase, in which the relations between all main groupings are the subject of scrutiny and the increasing recognition that all groups need to work together if some type of sustainability is to emerge. This was one of the main themes or outcomes at the WSSD summit in Johannesburg 2002, with this present norm seeming likely to remain in place for some time. In these instances, local government works together with the community at large to provide guidance to their communities or work with local businesses and other stakeholders on aspects of sustainability (including for example Integrated Catchment Management). This view is reflected by the realisation that the more 'successful' sustainable development initiatives include local government partners. Or, as in our case, the local council works with local organisations to develop the approach suitable to the needs of the council.

Even with the above developments it is difficult to ascertain real progress towards sustainable development, despite recent initiatives by the Global Reporting Initiative (2005), with Triple Bottom Line reporting (e.g., Gray and Milne 2001), with Genuine Progress Indicators (e.g., Taylor 2005) and with Sustainable Development Reporting and Accounting (e.g., Ball 2002, Zadek and Raynard 2004). Amongst this range of initiatives, that which is most often quoted remains triple bottom line reporting built around the notion of the 'three pillars of sustainability'. The TBL approach has captured the attention of public agencies, including in New Zealand (MfE 2002), and this has led to some institutions using this framework in the analysis of their local areas. Recently there has been a level of criticism about the potential silo effect that grouping embodying the different aspects into core sets (Economic, Environment, Social) as well as other issues with the triple bottom line approach, with critics asking whether actual reporting really amounts to anything significant (Gray & Milne 2001). However, despite such authors recognising this may become an issue, we felt the integrated ideas around SD and TBL were the best means of approaching a newly interested organisation, which may require a relatively easy structure to understand the complex underpinning concepts. Additionally, recent findings into New Zealand local authority expectations indicate that the phasing in of the Local Government Act 2002 will be most easily met by using a (modified) TBL format (MfE 2002).

In line with current trends the Global Reporting Initiative (2005) has been undertaking work on expanding their indicator series into the public accounting realms, building a process and rationale for Public Agency Sustainability Reporting. Organisations such as the International Council for Local Environmental Initiatives have long recognised that there is a need for a form of reporting structure for local governments, but, at the same time, recognises that different places have different needs, and the various regional members have set about creating ones for their local regions, e.g. Europe or Australia. In terms of Triple Bottom Line Reporting, the City of Melbourne has been especially proactive in tailoring this tool for use in local government policy making (see www.iclei.org.au).

In Europe, the experiences of The Pastille Group provide much in the way of detailing experiences in development, and implementation across a wide range of local government contexts. In Canada, the work of the International Institute of Sustainable Development details the multiplicity of efforts across the globe and many projects have been devoted to both the principles and methodology underpinning the development of indicators (e.g. Hardin & Zdan 1997, Bossel 1997).

Despite these numerous initiatives and despite the ongoing understanding of ‘implementation failure’ (Mitchell 2002), nowhere in this brief overview of the prevailing trends, especially with respect to central and local government initiatives, has the potentially all-pervading role of management been seriously explored. Indicators are almost invariably reflexive of the three pillars of sustainability and reporting mirrors this same pattern. In our view it is time to raise the profile of management effectiveness to provide another pillar of sustainability. What follows is an outline what happened with a local government SD reporting initiative in New Zealand and how management was incorporated as an additional top and bottom line component.

The local government context

Local government has been a particular focus of the drive to develop indicators/performance measures for the assessment of local effects in all spheres of their control. Interest has grown in this field, especially because of other initiatives concurrent in reforming public sectors in many countries but particularly recently in New Zealand (e.g., the Local Government Act 2002), thereby making them more responsive to the best and most practicable means of dealing with issues, along with being more accountable to their stakeholders for their actions. Despite this intent a very challenging road lies ahead as not all councils are created equal. A brief perusal of the literature indicates that the leaders in public agency reporting, along with those councils associated with best practice reputations, reveals that many of the ‘sustainability takers’ comprise mainly of (relatively) large well resourced urban communities, such as large American municipalities³ (e.g. Mitra 2003, Portney 2003) or major urban areas such as Melbourne (Australia) and Leicester or Bristol (UK)(Williams 2002, McMahon 2002).

However, and given the above initiatives and their generally resource rich context, for a council with a small resource base the ability to start small may well be prove to be useful for

³ Most details of these efforts can be found in terms of internet reports, but for an extensive commentary, analysis, and rationale of sustainable development at the municipal level can be found in Portney, K.E (2003) Taking sustainable cities seriously: economic development, the environment, and quality of life in American Cities. MIT PRESS: CAMBRIDGE MASSACHUSSETTS.

two main reasons: less time is needed to instigate the process and provide the base indicators, and organisations can learn from developing one grouping and apply this learning to the next group of indicators.

The case study council and its context

In New Zealand, there are three main tiers of government, central, regional and local, with a range of generally well-articulated responsibilities for each. There are 87 local authorities, comprising of 10 regional councils with policy oversight capacity and water and air management responsibilities, 15 city councils and 58 district councils which deal with local infrastructure, services and land use planning, and 4 unitary authorities which combine the functions of regional and district/city councils. The population sizes of these councils range from c.8000 up to c.500000.

The introduction of the Local Government Act 2002 provides for a more localised response to sustainable development issues in New Zealand. Section 3 (d) of the Local Government Act 2002, “provides for local authorities to play a broad role in promoting the social, economic, environmental, and cultural well-being of their communities, taking a sustainable development approach.”. The Act does give a level of freedom to local government to take the most appropriate means for both reporting and implementing it necessitates under the act, and gives the power of general competence, although this is circumscribed somewhat by various central balances (Wilson and Slater 2003). The council has a responsibility to ensure that its actions reflect this principle in both normal (everyday) practice as well as its planning processes. As part of the response to this, local government is grappling with the issue of how to implement this according to their local issues, resources, and context. One suggested means in our discussion regards implementation has been the call for a form of auditing which incorporates the environmental, economic, social and cultural perspectives specifically mentioned in the Act. All four aspects were taken into account when developing the triple bottom line format so that it could be modified simply to allow the council to meet the newly monitoring and reporting requirements of the Local Government Act, which expects councils to report to the community on how it is meeting the communities desires as articulated by the Long Term Council Community Plan (comprising of economic, cultural, social, and environmental aspects). Local authorities must monitor, and report at least every 3 years on the progress made on the community outcomes.

The question remains as to how the generally small and more rural-based local governments are going to cope with the sustainability agenda emanating largely from central government and international influences, and develop appropriate reporting mechanisms required for transparency and accountability to all their stakeholders. Rural constituencies are usually characterised by: a lower population density, may have a wider range of habitats, a wide variety of land-use practices, have differing pressures in differing environments, and a much smaller resource base with which to address these issues. Whilst some smaller rural-urban areas in Europe and Australia have undertaken some work in this region, for example the work of Rogers and Ryan (2001), they are small in number compared with the research being undertaken in urban areas.

The study site comprises a geographically large district council in New Zealand, with an area of >6000 sq km that ranges from the mountains to the sea, but with a small population of <50000. Parts of the area have seen large population increases. Historically the area has been dependant on agricultural production, but recent figures show that the numbers employed in

this sector have diminished somewhat. Additional major sources of activity are in educational industries and the increasing tourism base. In addition, the district borders one of New Zealand's fastest growing cities, and there are many subdivisions close to settlements that are within easy commuting distance of the city, with 40% of the working population being fully employed outside the district boundaries.

Our approach

We worked closely with the Council during the developmental phase of this project. A project steering group met regularly early in the research to finalise the brief and provide feedback on the strategic approach. It was agreed that Council staff participation would be important so a consultation approach involving the holding of meetings with interested staff was developed. At these meetings proposals from the researchers were discussed with staff, these were then reiterated at subsequent meetings, etc., until a final agreed position was reached. Ultimately a framework was agreed to and illustrated by data collected for us by the Council.

The Proposed Framework

Numerous approaches to local government sustainability reporting have been developed. Few, in our opinion, are integrated. We therefore proposed an integrated system (see Figure 1) along the following lines.

There are multiple steps that need to be undertaken in developing and implementing a Sustainable Development Programme approach and associated reporting process. They are based around a simple 'plan, act, review' cycle, and complement existing annual planning and annual reporting approaches and also the Long Term Council Community Plans (LTCCPs) processes required under the Local Government Act (LGA) (2002) . In summary the steps are:

1. Agree on a Sustainable Development principle for the council which includes notions of goal setting, action and review.
2. Underneath the Sustainable Development principle will sit the Quadruple Top Line (QTL) (i.e., Social, Environmental, Economic and Cultural) and Management 'goal' areas – each of these contain goal statements, objectives, indicators and targets, all of which are subsequently reported against.
3. The Quadruple Top Line 'goal' areas are directly linked to LGA 2002 core areas of Social, Environmental, Economic and Cultural factors. The Management 'goal' area is based on the need to demonstrate organisational processes that support achievement of the QTL goals.
4. Each 'goal' area contains an overarching goal(s), specific objective(s) and indicators and targets that support achievement of the objective. Each indicator is identified as:
 - Internal Council Operations (labelled 'I' in the 'Management' demonstration that follows),
 - External District Wide Council Responsibilities (labelled 'E' in the 'Management' demonstration that follows), and/or
 - broader Advocacy, Planning and Community Well-being Indicators (labelled 'A' in the following tables, e.g., Average School Decile Rating).
5. Objectives are designed around the need to contribute to the 'goal' but also to have relevance to Council responsibilities under the LGA and the Resource Management Act (1991) and where appropriate be linked to related reporting requirements of those pieces of legislation as well as to other initiatives, e.g., the Global Reporting Initiative.

6. Each objective contains a number of indicators, each of which has an associated rationale (i.e., why it is important) and a target. Ultimately it is the target that implies direct Council activity which will then lead to a change in the indicator which will then contribute to achievement (or otherwise) of the objective.
7. Each indicator has been assessed against a range of importance and relevance criteria and then against usability criteria before being confirmed within this reporting framework (see Hughey and Coleman 2006).
8. Quadruple Bottom Line (QBL) and Management reporting measures the contribution of indicator change to achieving the target which then contributes in an upward way to the objective and overall contribution to the QTL and Management 'goals'. It is indicator performance linked to clear targets. Ultimately it is this change that affects the QBL performance of the Council and the District.
9. There needs to be an annual reporting of all of the above which includes an explicit review of overall progress, issues with indicators, etc., and a test for quality assurance, i.e., are the findings auditable?

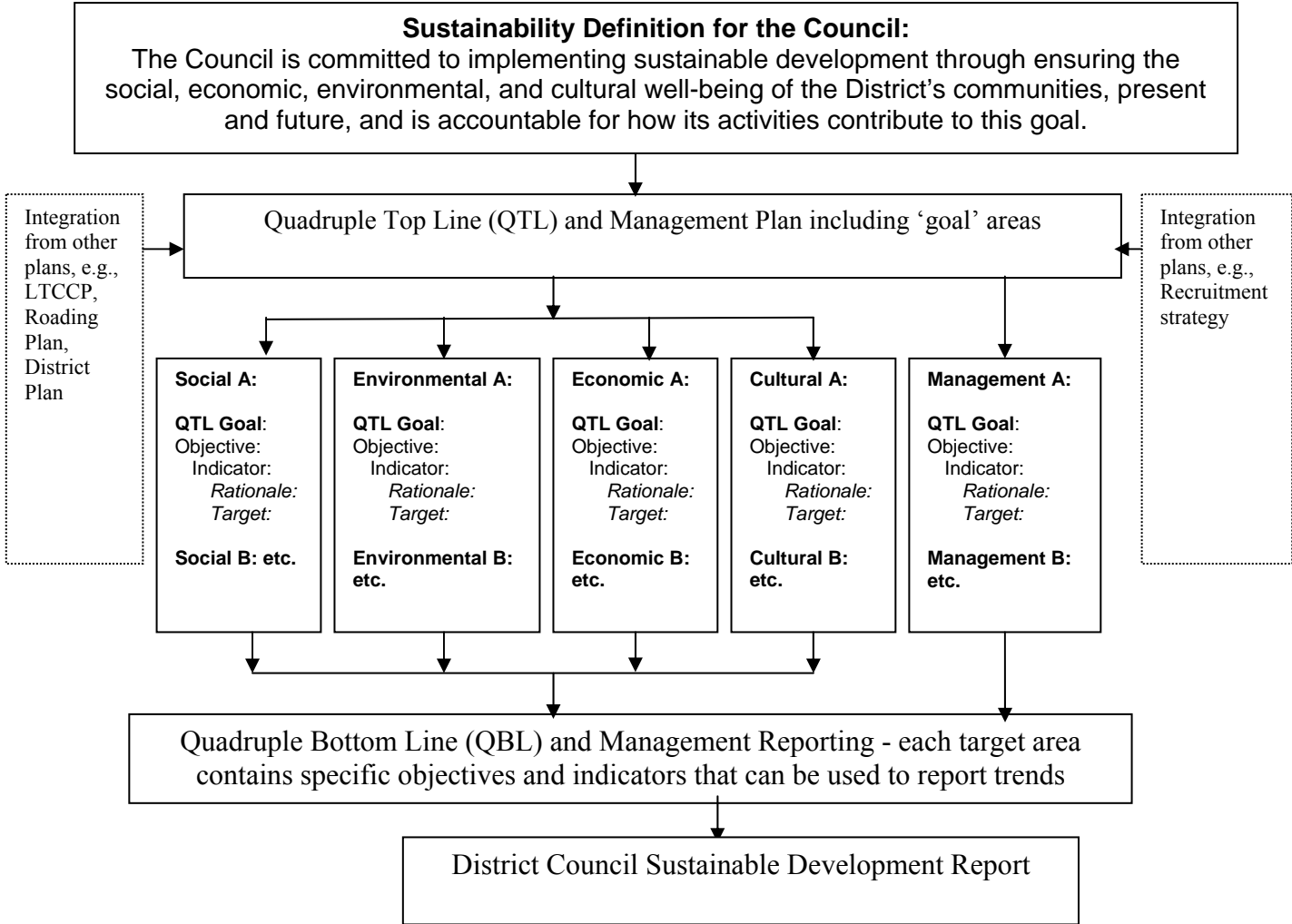
Data are collected for the objectives and indicators and they are then assessed for improvement or otherwise using a simple 'traffic light' system:

	Positive: indicative of best practice and durable outcomes
	Trend not clear or inconclusive, i.e., mixed signals and/or severely lacking data
	Negative: indicative of relatively poor performance

This picture is further illustrated (where appropriate) by the use of symbols (↑,↓,=) to express the direction of change in the indicators. Further development of this 'traffic light' system is required but was beyond the scope of this project. For example:

- there needs to be a weighting applied to outcome over output measures, because ultimately the former are the indicators of sustainable development; and
- there could be some separation of internal vs external performance so that Council can evaluate how its 'own house' is performing compared for others. This may also make it easier for the Council to link (aspects of) its sustainable development reporting through to other relevant reporting, such as the LTCCP and its annual report.

Figure 1. The Council’s Sustainable Development planning and reporting framework



A Goal, Objective and Indicator set was agreed after wide ranging consultations with Council staff. Key points are:

- Each of the indicators has a rationale attached to explain the relationship to the objective.
- Where possible, comparative benchmark data should be obtained from neighbouring like-organisations, e.g., other councils.
- Data should be gathered over the longest historic time series possible for improvement of trend analysis.
- Each 'goal' area and associated indicator and activity measures should have specific and measurable targets set on an annual and longer term basis.
- An integrated set of Internal, External and Advocacy indicators should be chosen and reported on for each of the five reporting areas in the future.
- Each indicator can typically be classified as 'outcome-based' or 'output-based' – a combination of each type is necessary with the focus on outcome indicators for ultimate sustainability reporting.
- Finally, in terms of management and accountability each 'goal' area needs to have specific staff responsibility allocated to it, e.g., Social might well be the responsibility of the HR manager.

This set of indicators was used as the basis for an example application for 2003-04.

Because the addition of 'Management' is novel, and important, we illustrate its application with the following:

Management A:

QTL Goal: The Council strives to incorporate sustainable development throughout its decision making processes.

Objective 1: The Council uses 'sustainability criteria', whenever possible, in the course of its activities to improve its level of 'sustainability'.

Linkage to Legislation: Local Government Act 2002

Linkage to GRI: SO4, PR6, SO1, EN14, EN33

Other:

Indicator(s), Rationale and targets:

1. Agreement to use a sustainability checklist across Council activities. (I)

Rationale: In line with this commitment to sustainable development reporting Council needs to demonstrate that all decisions are made against a sustainability checklist.

Target: Checklist developed and implemented by

2. Number of significant decisions made using the sustainability checklist. (I)

Rationale: It is important to not only have the sustainability checklist but to be using it.

Target:

3. Council's Purchasing, Tendering and Contracting Policies give recognition to organisations that have similar principles (e.g. green labelling, membership of 'sustainability organisations', membership of an industry association which also promotes sustainability amongst its members⁴). (I/E)

Rationale: Council in its purchasing, tendering and contracting decisions will take into account whether or not potential suppliers adhere to similar principles as appropriate supply chain management is a key component of many sustainability initiatives.

Target:

⁴ e.g., NZ Business Council for Sustainable Development

4. Sustainability organisations joined or conferences attended by staff, and the proportion of staff attending these conferences. (I)

Rationale: Participation in sustainability related activities is likely to be associated with improved Council performance in these areas.

Target:

5. New buildings incorporating features of the sustainability principle (number & scope & key buildings) (I)

Rationale: Council needs to demonstrate by its own actions that it is operationalising sustainable design principles (see also: Environmental B(9)).

Target:

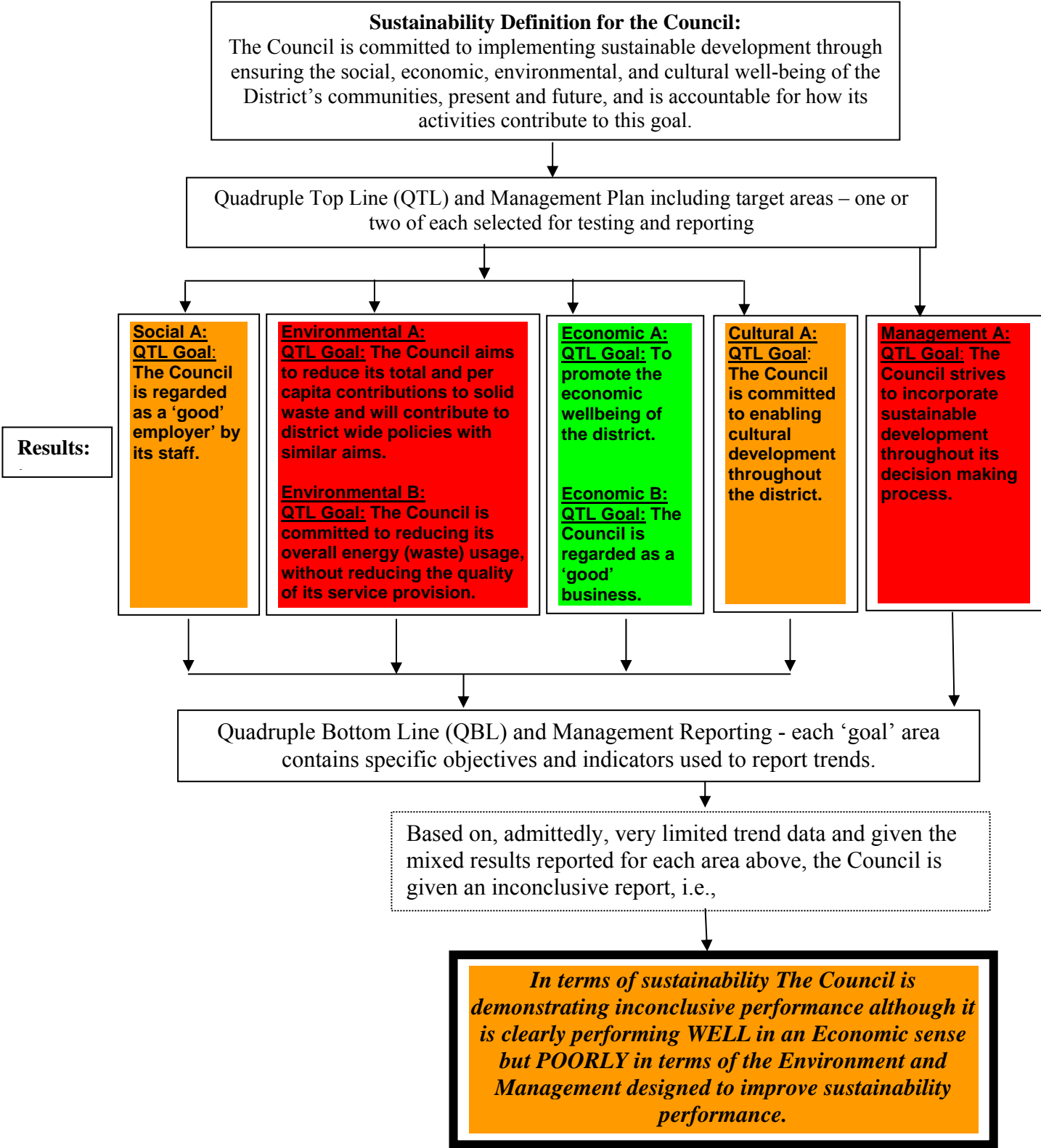
Reporting on the QTL and Management framework then appears within the same framework, but is managed as an Excel spreadsheet:

MANAGEMENT INDICATORS							
Quadruple Top Line Goal: A. Council strives to incorporate sustainable development throughout its decision making process							
Indicators:	Target	2000/2001	2001/2002	2002/2003	2003/2004	Trend	Overall Comments
1. Agreement to use a sustainability checklist across COUNCIL activities		No	No	No	No		Not devised yet
2a. Number of significant decisions made using the sustainability checklist		None	None	None	None		Not devised yet
2b. Proportion of significant decisions made with checklist in hand		None	None	None	None		Not devised yet

Overall trend for Management in The Council = Negative 

Ultimately, by integrating all of the components we were able to give an interim progress report, which is auditable, and based around the summary framework result (Figure 2).

Figure 2. Sustainable Development report for the Council 2003-04



Discussion and conclusions

The research was fraught with challenges, particularly: boundary issues; the indicator set; how best to incorporate the management imperative; and, organisational implications. Given the focus of this paper on management we report on the third and fourth of these challenges.

Ultimately, and despite attempts to gain feedback on our final work, nothing has emanated from the Council, despite a covering letter supporting the work being sent to Council by a key Central Government agency. What then, if anything can be learnt from this exercise in both practical and theoretical contexts?

In a practical sense it was a relatively straightforward exercise to gain initial stakeholder support for the proposed integrated framework. It connected well with the legislation, was simple to understand, and was supported by simple data and interpretational requirements. It remains (in our view) a cost-effective means of planning and reporting on sustainable development. Having all of these attributes in the positive is rare in these sorts of projects. So, given this level of support why has the framework and approach not been adopted by Council?

First, and as reported in almost all sustainability system-type development literature, having a champion in management is fundamental. We understood this requirement. But, like SMEs, small councils and their staff are often under enormous resource and other pressures – a champion would likely have the task added to their already large workload. It was partly for this reason that we included management in the top and bottom line as an added ‘pillar of sustainability’ – that is, an attempt was made to automate leadership. Clearly, this part of the approach failed – there is no champion in the Council, but why was that the case?

The above question leads to our second point. Many, but not all rural councils are considered to be conservative in their approach to sustainability thinking. Despite the pragmatic approach taken here it might have been considered that the framework was too dominated by non-economic development reporting to be ‘safe’ for further development. This is not something we could have countered although we did suggest briefings of even more senior staff and key councillors – these we believe did not occur.

In a theoretical sense the addition of ‘management’ as a ‘pillar of sustainability’ is, we believe, a fundamentally sound and novel approach. However, whereas all of the goals, objectives, targets and indicators in the economic, social, environmental and cultural pillars are outcome focused, those in ‘management’ are output or process focused. It is this addition and this distinction which helps make this framework potentially workable and helpful. The explicit highlighting in reporting of output and process of ‘management’ measures is an essential precursor to improved sustainability performance in the principal pillars of sustainability.

Thus, despite our failure to implement this integrated sustainable development and reporting framework in this council it is our view that more enlightened councils will find the approach enabling and compelling.

REFERENCES

- Astleithner, F.; Hamedinger, A. 2003. The analysis of Sustainability Indicators as Socially constructed policy instruments: benefits and challenges of 'interactive research'. *Local Environment*, 8: 627-640.
- Astleithner, F.; Hamedinger, A.; Homan, N.; Rydin, Y. 2004. Institutions and Indicators – The Discourse about Indicators in the Context of Sustainability. *Journal of Housing and the Built Environment*, 19: 7-24.
- Ball, A. 2002. *Sustainability Accounting in UK Local Government*. Certified Accountants Educational Trust, London.
- Bebbington, J.; Gray, R. 2001. An account of sustainability: failure, success and reconceptualization. *Critical Perspectives on Accounting*, 12: 557-587.
- Bossel, H. 1997. *Indicators for Sustainable Development: Theory, Method, Applications*. A Report to the Balaton Group, International Institute for Sustainable Development. Winnipeg, Manitoba, Canada.
- Brugmann, J., 1996. Planning for sustainability at the local government level. *Environmental Impact Assessment Review* 16 4–6, pp. 363–379.
- Elkington, J. 1997. *Cannibals with forks : the triple bottom line of 21st century business*. Oxford: Capstone.
- Gallopín, G.C. 1997. *Indicators and Their Use: Information for Decision-making*. Part One-Introduction. Pp.13-27 in: Moldan, B. and S. Bilharz (Eds.) Sustainability Indicators. A Report on the Project on Indicators of Sustainable Development. SCOPE 58. Wiley, Chichester.
- Giddings, B.; Hopwood, B.; O'Brien, G. 2002. Environment, Economy and Society: Fitting them together into Sustainable Development. *Sustainable Development*, 10: 187-196.
- Global Reporting Initiative. 2005. *Sector Supplement for Public Agencies Pilot Version 1.0*. Global Reporting Initiative, Amsterdam, The Netherlands. Accessed from: http://www.globalreporting.org/NR/rdonlyres/D7030C20-69C0-4FA3-B08B-9668A7658F9A/0/SS_PublicAgency_ENG.pdf – 10 May 2007.
- Gray, R. 2000. Current Developments and Trends in Social and Environmental Auditing, Reporting and Attestation: A Review and Comment. *International Journal of Auditing*, 4: 247-268.
- Gray, R.H.; Milne, M.J. 2002. Sustainability Reporting: Who's Kidding Whom? *Chartered Accountants Journal of New Zealand*, 81(6): 66-70.
- Hardi, P.; Zalan, T. 1998. *Assessing Sustainable Development – Principles in Practice*. International Institute for Sustainable Development, Winnipeg, Manitoba, Canada.

Hughey, K.F.D.; Coleman, D. 2006. A Sustainability Reporting Framework and example for ????? District Council. Lincoln, Canterbury: Lincoln University.

ICLEI 2002. *Triple Bottom Line Corporate Planning Case Study – City of Melbourne*.
<http://www.melbourne.vic.gov.au/info.cfm?top=166&pg=1197> – accessed 10 May 2007.

Lewis, L. 2000. Environmental audits in Local Government: A useful means to progress in Sustainable Development. *Accounting Forum*, 24: 296-318.

McAdam, R.; Walker, T. 2003. Evaluating the Best Value Framework in UK Local Government Services. *Public Administration and Development*, 24: 183-196.

McMahon, S.K. 2002. The development of quality of life indicators – a case study from the City of Bristol, UK. *Ecological Indicators*, 2: 177-185.

Ministry for the Environment. 2002. *Triple Bottom Line Reporting in the Public Sector – Summary of Core Group findings*. ME number 457. Ministry for the Environment, Wellington.

Mitchell, B. 2002. *Resource and Environmental Management*. 2nd edition, Harlow, Prentice Hall.

Mitra, A. 2003. A Tool for Measuring Progress: The Growing popularity of Sustainable Indicators in the United States. *National Civic Review*, Fall: 30-45.

Owens, S. 2003. Is there a meaningful definition of Sustainability? *Plant Genetic Resources: characterization and utilization*, 1: 5-9.

Portney, K.E. 2003. *Taking sustainable cities seriously: economic development, the environment, and quality of life in American Cities*. MIT Press, Cambridge, Massachusetts.

Robèrt K-H, Schmidt-Bleek B, Aloisi de Landerel J, Basile G, Jansen JL, Kuehr R, Price Thomas P, Suzuki M, Hawken P, Wackernagel M. 2002. Strategic sustainable development – selection, design and synergies of applied tools. *Journal of Cleaner Production*, 10: 197-214.

Rogers, M.; Ryan, R. 2001. The Triple Bottom Line for Sustainable Community Development. *Local Environment*, 6: 279-289.

Spangenberg, J.H. 2004. Reconciling Sustainability and Growth: Criteria, Indicators, Policies. *Sustainable Development*, 12: 74-86.

Statistics New Zealand. 2003.

Taylor, A. 2005. *The Alberta GPI Summary Report*. The Pembina Institute, Alberta, Canada. Accessed from: <http://www.fiscallygreen.ca/gpi/index.php> – 10 May 2007.

The PASTILLE Consortium. 2003. Indicators into Action: Local Sustainability Indicators in their context. Final Report Deliverable 19: PASTILLE European Union FP 5. Accessed from: <http://www.lse.ac.uk/collections/PASTILLE/images/FinalReportWeb.pdf> – 10 May 2007.

Valentin, A.; Spangenberg, J.H. 2000. A guide to Community Sustainability Indicators. *Environmental Impact Assessment Review*, 20: 381-392.

Williams, P.M. 2002. Community Strategies: Mainstreaming Sustainable Development and Strategic Planning? *Sustainable Development*, 10: 197-205.

Wilson V.; Slater, J. 2003. *A Guide to the Local Government Act 2002*. Brookers Ltd. Wellington.

WCSD. 1987. *Our Common Future*. Oxford, Oxford University Press.

Zadek, S; Raynard, P. 2004. *The future of Sustainability Assurance*. Certified Accountants Educational Trust, London.