

# **Exploring Sustainability Considerations in Capital Budgeting Decisions**

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## Structured Abstract

**Purpose:** The paper examines the embedding of sustainability considerations in capital budgeting decision-making practice. The paper examines management consideration of sustainability in light of the tensions between the financial imperative of the organisation and desired strategic sustainability outcomes, exploring the emergence and evolution of capital budgeting decision-making practice.

**Design/methodology/approach:** We adopt a case study approach across five large organisations to examine capital budgeting practice. The research sites comprise a mix of publically listed and government enterprises with data collected from eighty four semi-structured interviews over a three-year period.

**Findings:** Our results highlight the role of two key affects on intra-organisational attempts to measure and 'improve' the impact of sustainability considerations in capital budget decisions. We find that organisational norms associated with the trade-off between financial imperatives and desired sustainability outcomes as well as differences in individual perceptions of sustainability have substantive impact on the extent to which sustainability is privileged.

**Practical implications:** The paper highlights the practical difficulties faced by organisations with the strategic intent to invest in sustainable assets. Our findings point to the influence of organisational context that significantly impacts the way organisations approach, support and enact sustainability.

**Social implications:** By exploring what decision-makers mean by sustainability, we highlight the need to identify patterns of interpretation and subsequent behaviour in order to understand reasons why many sustainability initiatives fail to achieve desired ends.

**Research limitations/implications:** The observations and conclusions reached in the paper are limited to the five case studies examined here, along with our objective analysis of the data collected. Therefore, care should be taken in generalising any of our findings.

**Originality/value:** By examining tensions between financial imperatives and desired sustainability outcomes, we suggest an analytical focus to address significant gaps in our understanding of the organisational challenges of sustainability.

**Keywords:** Management accounting, sustainability, accounting practice, capital budgeting, financial decision making.

**Classification:** Research Paper

# **Exploring Sustainability Considerations in Capital Budgeting Decisions**

## **Introduction**

To date, accounting literature linking corporate social responsibility to organisational sustainability is largely focussed on external stakeholders. In contrast, differences in individual perceptions of sustainability and the influence of organisational context may significantly impact the way managers approach, support and enact sustainability. Given the strategic nature of this construct, capital budgeting practice is a crucial context in which management attempts to embed sustainable practices is played out. To facilitate these decisions, an organisation may deploy a number of accounting tools. Focused on financial considerations, these tools, at times, create tensions between the financial imperative of the organisation and desired sustainability outcomes.

Further, sustainability is power and value laden, subject to organisational and social norms. In this context, sustainability is a multi-faceted intra-firm concept rarely explored in the management accounting literature on decisions affecting organisational sustainability over the long term. In response, the paper examines management consideration of sustainability in accounting for capital budget decisions, exploring the emergence and evolution of sustainable decision-making practice. The focus is on attempts to measure and 'improve' the impact of sustainability considerations on capital budget decision-making processes. In exploring what decision-makers mean by sustainability, we are not attempting to define what sustainability is, but rather to identify patterns of interpretation and subsequent behaviour. Evidence from the five case studies described in this paper suggests a significant gap in our understanding of the challenges of sustainability and the reasons why many sustainability initiatives fail to achieve desired ends.

The remainder of this paper is divided in five sections, starting with a review of the literature providing theoretical support for our study. This is followed by a description of the research site and methods, the results and a discussion of these results. We end with conclusions summarising the contribution and limitations of our research.

## **The Literature on Capital Budgeting and Sustainability**

The focus of much of the accounting research concerned with adoption of Corporate Social Responsibility (CSR) practice is on the influence of stakeholders external to the organisation (see Lynes and Andrachuk, 2008). At the same time, demonstrable links between CSR and ecological and societal concerns focus attention on issues of organisational sustainability (see Gray, 2002). Prior research also suggests a strengthening of the rationality of calculative practices like accounting in considerations of corporate sustainability (for example, Deegan and Soltys, 2007). In particular, accounting can be seen as having potential to provide a renewed focus on the efficiency and effectiveness of capital investment decisions in an institutional setting involving threats to sustainability (see Coleshill and Sheffield, 2000).

However, academic research highlights the 'illusion of control' inherent in management accounting (see Rosanas and Velilla, 2005). This research identifies substantive individual and social influences effecting the practice of accounting (for example, see Harris, 2000 on risk assessment in capital budgeting or Boddy, 2010 on the interaction between leadership

personality and [CSR] measures; and Heidhues and Patel, 2011 on cross-cultural influences). The result is “neglect of CSR as a dynamic and developing process that relies on the involvement of the employee as a major stakeholder in its co-creation and implementation.” (Bolton *et al.*, 2011: 61).

To explore accounting practice and the influence of organisational sustainability concerns, a focus on management controls is required. Given the strategic nature of sustainability (Kogg and Mont, 2012) and the widespread use of capital budgeting as a management control device for strategic decisions, (see Hansen *et al.*, 2003), we specifically focus on the embeddedness of sustainability considerations in capital budgeting decision-making. Whilst strategy can provide “.. a ‘language of truth’ to make sense of the world.” (Morgan and Sturdy, 2000: 112), capital budgeting is the common means to incorporate it into future organisational performance (Bunce *et al.*, 1995).

Capital budgets are socially constructed symbols rather than objective decision-making devices (see Czarniaswska-Joerges and Jacobsson, 1989; Boland, 1993). As an accounting technology, it incorporates the integrative benefits of budgeting with limited evidence of the key criticisms inherent in operational forms of the technology. These criticisms include the neglect of organisational culture (see Flamholtz, 1983) as well as issues of timeliness, accuracy and structural alignment (see Wallander, 1999; for a discussion of the ‘beyond budgeting’ literature, see Hope and Fraser, 2003; Loo and Love, 2012).

Even with ecological, societal and organisational sustainability seemingly more interdependent, decisions to invest in CSR initiatives and to embed sustainable practice require support based on accounting evidence (For a critique of the ‘double enrollment’ aspects of budgeting, see Berland and Chiapello, 2009). In addition, large capital budget proposals tend to encourage risk-aversion in decision-makers (for discussion in a project evaluation context, see Sprinkle *et al.*, 2008). Hence, accounting increasingly performs dual roles to help maintain control over capital budget decisions and measure the economically sustainable performance of the resulting capital acquired (for a discussion of mediating influences on capital budgeting decisions, see Miller, 2007).

Where there is a clear business case, within an economic context, research identifies that traditional accounting tools such as capital budgeting are deployed for analysis and support of an individual investment proposal. However, it could be argued that certain activities under the umbrella of sustainability have greater uncertainty with potential for management to under-estimate future requirements (the pace of change is far more rapid than could be envisaged). In this scenario, it is argued that current tools, or more precisely, current metrics feeding into these tools are inadequate to fully capture the complexity or uncertainty (see Berry and Collier, 2002 on the social construction of risk in an operational budget context;). Hence, there may be calls to adjust hurdle rates or develop ‘new’ metrics to consider (i.e. employee satisfaction and associated staff churn rates). Other means of addressing risk may include formalised checklists, or requiring the appropriate sustainable manager an opportunity to assess investment opportunities. There may also be opportunities where desirable sustainable outcomes may not be referenced from the economic analysis, however are chosen because a strategic imperative of the organisation. For example, the benefits from sustainable reporting are predominately intangible, difficult to quantify; the costs however are tangible.

The deployment of accounting tools maybe distorted when there is a regulatory imperative to change practices. Compliance then becomes the primary driver and the evaluation of economic performance may be sidelined. These circumstances may be justified under a very different interpretation of the business case. What we observe is a complexity of practice, a flexibility necessary to address considerable uncertainty and an attempt to understand an aspect of organisational risk that continues to evolve.

In this paper, we explore two distinct capital budgeting practices. First, the embedding of more sustainable practices into larger capital investment projects. Examples of this phenomenon may include; rehabilitation as a consequence of opening a new mine site; or the decision to achieve a certain green star benchmark on a new building (or fitting out an existing building). Second, undertaking capital investment to achieve a specific sustainability outcome. This second level of differentiation may influence the capital appraisal process; that is investment (i) to support regulatory requirements, (ii) enhance financial performance, or (iii) pursue an organisational strategic imperative. Whilst these may align within a specific context, this may not necessarily be the case on all contexts. For example, this may include; the acquisition of new software to facilitate data capture for NGERs compliance, to the roll out of water/energy meters to enable more precision in monitoring and management.

As a result, the aim of the paper is to build on the limited empirical literature on the embeddedness of sustainability considerations in capital budgeting decisions by examining the boundaries and conflicts of accounting pushed by business managers over time in the quest for sustainable long term productivity. To achieve this aim, we examine the impressions and views on the role of sustainability considerations of individuals that either influence or make capital budgeting decisions over an extended period. Hence, we explore a mix of five private and government case study organisations, interviewing more than eighty managers involved in capital budgeting decision-making. The intended contribution is to clarify a number of aspects of the contested relationship between the financial imperatives of accounting for capital budgeting and organisational sustainability.

## **Site and Methods**

### **Case Study Details**

The case study reported in this paper comprises five (5) commercial and government enterprises with organisational objectives that include the implementation of sustainability initiatives. Given the aim of this paper, the research method was chosen to support exploration of capital budgeting process and associated accounting practice. Process research requires study of how and why phenomenon unfolds over time (Langley, 2009). It examines events, activities, and choices as they emerge and are sequenced over time (see Van de Ven, 1992). This contrasts with studies that focus on co-variation between independent and dependent variables.

The data collection approach adopted in the paper is described by Ahrens and Chapman (2007) as appropriate to exploratory qualitative studies into the uses of management controls. Further, the research sites were identified on the basis of the approach to case study research described in Berry and Otley (1994) and Eisenhardt (1989).

Data collection involved semi-structured interviews with personnel at the case studies. Interviews focused on interviewees tracing through the relationship, identifying the main

events that influenced the success or otherwise of the relationship, how the relationship changed over time, how and why new controls were introduced and how each party responded to these changes during the relationship. A set of questions was designed to collect data on the phenomenon (for the list of questions, see Appendix A), guiding the data collection process. The primary questions were semi-structured to allow participants to tell the story of their experiences. There were also interview prompts to help ensure that insights identifying with regards this phenomenon were addressed when they did not arise during the interview (see Perry, 1998).

The intent was to interview participants from a number of levels within five case study organisations. In total, over ninety-two hours of transcripts conducted in eighty-four interviews across five organisations as specified in Table 1 below.

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TABLE 1 ABOUT HERE

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Similar to Emsley and Kidon (2007), our primary consideration in deciding the number of interviews was whether we had interviewed key participants (including those who had left the target firms at the time of data collection) and the amount of new information that additional interviews were providing (see also Ahrens and Chapman, 2006).

All interviews were digitally recorded and transcribed. Both archival documents and interview data were coded and analysed using NVivo software, to determine the extent to which they help in understanding the management control themes associated with outsourced services and the controls that evolve post contractually. The focus is on constructs germane to the analytical framework used in the case study, as outlined next.

Document coding is an instrument to measure comparative positions and trends in the composition of documents and has been used extensively to assess reporting patterns and disclosures (see Guthrie et al., 2004). It focuses on the semantic content of key documents in order to derive inferences and/or gain understanding or draw conclusions from documents. Table 2 details the sustainability constructs examined.

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TABLE 2 ABOUT HERE

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The results of applying the methods to the identified research sites are outlined next.

## Results

Considered in light of the strategic nature of both capital budgeting and organisational commitment to sustained investment decision-making, the role of leadership is often identified. Amongst all five research sites, we find evidence of the importance of executive preferencing of sustainability, particularly within government enterprises. As explained by a general manager responsible for an operations segment at a government utility:

*One of the other things on this issue of water, the Lord Mayor must have woken up in the middle of the night and had this wonderful vision of a sewer mine plant. And XXX came in one day and said I want you to start – go to Parks & Rec and*

*get the figures of our water consumptions in parks for watering trees and gardens and things. Here is a brief on a sewer mining plant that will give us 'x' quantity of water. Bring me back a profile of how this could be made economic if we put up 'x' amount of money and get 'x' amount of money from the Commonwealth and 'x' amount of money from the Federal Government. I spent two weeks of my time doing nothing else but playing with data to get this thing viable and I said XXX, the best case scenario is on what we know, purely on capital costs, ignoring running costs and maintenance etc, it would start being cash flow positive at about 15 years.*

The government investment criteria at the time deemed this predicted financial outcome as being marginal, at best. The significant budgetary pressure in light of the global trend to 'Government Business Enterprise' focused attention on delivering profit to the Government rather than requiring public funding was typical of recent Australian public sector reforms (for background on this phenomenon, see English *et al.*, 2005). Continuing the discussion on the prospect of rejecting a more environmentally sustainable outcome:

*He said okay, have another look at it. I said one of the things I can play with is the cost of water. This is before the desalination plant .... was announced where the water cost ...is going to double over the next five years. I said to him if the water cost goes up by 50% immediately, it will be cash flow positive in about eight years. He said now we are getting to the right margins. I said but if I put back the operating costs and the maintenance we are back out to about 25 years. Oh well, ignore those, we will get someone to run it. XXX you cannot think of this as a business proposition where someone is going to invest their cash in something that is never going to make money for 25 years.*

Within the listed corporation research sites, strategic leadership came with the need to adapt the accounting tools considered mandatory within the organisation for capital budgeting decisions. As described by an accounting manager:

*My boss, the Finance Director, , is certainly now saying – just the other day we were in a steering committee meeting on a particular project and he was saying are we doing the investment logic map on this? I said yes we are. That is scheduled in a month's time. So it is starting to gain traction inside the organisation. At the end of the day you can look at a project and say why are we doing this? Here's the reason why we are doing it in simplified terms that anybody can understand. It is an excellent framework.*

There was also recognition that organisational consensus was required, as highlighted by a manager responsible for sustainability initiatives at a listed company:

*Where we are going to move to from there – so that was at the asset planning end and now we are sort of going to move down the chain so that we get into the design and construction which is what the organisation is doing. Because our capital program is now huge and we will be building a lot of huge things. What we want is sustainability considerations built into the design and construction. That's the new challenge.*

*It has to be signed off by a certain route of people. So if that were the case generally speaking whenever you propose a purchase you have to justify that purchase. So if you were to say that this was so much more because of the environmental factor then that would be something that they would actually list in there.*

The perceived impact of staff of a more sustainable capital investment programme also highlights the potential influence of staff on decision-makers, as described by one executive at a listed entity:

*It's fair to say that in the new building, if we were to sell it to someone, they wouldn't put the value on the staff lounge and the lounge areas and the pool and the gym that we've put on. So, on a cost benefit basis, we're expecting that the staff benefits are going to far outweigh the costs and in the traditional discounting cash flows and all the rest of it, they would be quite negative I'd reckon as far as ...*

Sometimes this impact needed to be expressed in quantitative terms to have an impact on capital budgeting decisions as a senior manager at a listed company highlights:

*No because you'd only be making up the cash flows then but if you had to, staff turnover, maximising performance from staff and all that sort of stuff you would think would add some benefit but we're pumping a lot into that new site. Even things like the environmental, we've done paybacks on a lot of the environmental stuff. It's like twenty-five year paybacks or something but stopping all the water that goes on the roof of the new warehouse and putting it into underground tanks which has increased in size four fold since we started the project, yeah we've done a bit of modelling there. It's pretty negative as far as pure financial numbers go.*

The business and societal environment within which an organisation operated has impacts on the perceptions of decision-makers in a complex number of ways. As a senior manager at a listed company highlights:

*So anyway we managed to get them through on the basis that collectively they were, but I think they sent up a little bit of a warning sign to say that you know, don't send too many of these NPV negative ones to us you know. But, that has raised a particularly important issue because if the shareholder doesn't pay, or is not prepared to put his money towards these sorts of things then who is. So I don't know if you are aware of what regulated businesses have to do to get their money but it basically means front the regulator and put up a good case. So, for the last water plan, for five years forward we put up quite substantial proposals around sustainability and I think we were helped enormously this time by the fact that - we won't speculate on how this particular clause got there but, in our statement of obligations which is a requirement of our business by the government, the government says this is what I want the business to do, we now have a sustainability clause in there which says we have to do things according to sustainability principles, we have to set up programs to do x, y and z. That had direct link to I guess dealing with the impacts of climate change.*



The executive continues, outlining the effect of these deliberations:

*So we then went out and did some willingness to pay work with the community and community are hugely supportive about us spending money on you know, renewable energy and greenhouse reductions. That has helped our business. I think we have taken in issue personally, governments follow, which quite often happens but nevertheless we now have a regulatory obligation to do something around not only energy and greenhouse but bio-diversity which is great. Just trying to think what else there was in there. I can't exactly recall the points. But nevertheless apart from the business wanting to do it, the government now wants us to do it and we can say to the regulator you know, see here.*

Despite these various influences, public sector norms of financial and legal probity intervened. Highlighted by a general manager responsible for an operations segment at a government utility, the role of contractual controls was vital:

*..., the state government gave us the bridge and we then just – so anything over \$100,000 whether it's capital or operating, it has to go through a tender process. That tender process would look at the environmental, social issues.*

The outcome of these multi-faceted influences on capital budget decision-making is to highlight the organisational and social tension. An example can be found in the between accounting and operations expressed by senior manager at a listed company:

*The only value add that these people are saying is there a regulator telling you to do it? That's it. There's a bit of fluff going on about willingness to pay and they're saying if they've not told you, then these people, if they're willing to pay and you've told them exactly how much it will cost, okay we'll let you do it.*

We discuss the implications of these findings next.

## **Discussion**

This study examined the considerations made by managers in the way they approach, support and enact sustainability in capital budgeting decisions. The overall finding, following analysis of over eighty interviews across five organisations, is that the factors affecting the extent to which sustainability is embedded in such long term decisions is substantively affected by two key influences. These are the organisational trade-off between financial imperatives and desired sustainability outcomes as well as differences in individual perceptions of sustainability. As a result of this study, we are better able to articulate these relationships with context-specific implications for both academics and practitioners.

These relationships can be expressed in terms of the links between notions of financial imperatives, long-term sustainability strategies and personal perceptions of the influence of key stakeholders in the environmental impact or sustainability of a capital budget decision. Table 3 summarises the relationships found in this study.

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TABLE 3 ABOUT HERE

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The key finding of note is the privileging of capital budgeting decisions that favour more environmentally sustainable solutions where the organisation or its leadership have publically committed to sustainability. In these cases, financial criteria may be even subverted in order to make the “environmentally sound” decision. In the five cases studied here, such circumstances are materially more common in government than publically listed enterprises. The tension between financial and sustainability imperatives, along with organisational norms and practice in the public sector also required the use of formal management controls, starting with the adoption of formal tender processes and the use of comprehensive (but often incomplete) contracts.

For the overt privileging of environmentally sustainable capital expenditure to occur, active leadership, aligned strategy and motivated staff are likely to be required. For example, in contrast to the sewer mine plant initiative mentioned in the results section (COM), a listed company made a decision where a more expensive environmentally sustainable capital budgeting decision was accepted. As outlined by ORG2:

*Yes, so that was just a suggestion that came out of the energy management committee and no one really knew how to go about making it happen. Because we're procurement and we can contact suppliers and things like that, we got involved with a couple, one based out of Victoria and one from Scotland. The one from Scotland are already selling them whereas the ones in Victoria are just going through design and manufacture at this stage*

On the other hand, in the same year, the same company rejected a strategic operational decision to switch to 100% recycled paper, the same manager suggested that:

*We did an awful lot of work on this and we recognised that a lot of the recycled paper was actually worse for the environment than non-recycled paper because it was spewing bleaches and things into the river system and belching out smoke and all this kind of stuff.*

In this example, the combination of higher cost (approximately 4 to 12 cents per ream at the time of the decision) and sufficient environmental information was sufficient to reject the proposal. However, the company persevered with exploring options, eventually finding that:

*The one supplier that we do have for stationery which is <Stationery Supplier> who basically did a lot of research for us and we went to the mills themselves and basically said we want this. And they're trying to say how about this stuff, it's half recycled and it's from wherever. We said we know about this stuff and we know it's more damaging to the environment than non-recycled paper. So what we've got now is we've got probably the best price in Australia for 100%*

*recycled paper for this particular paper and it's promoted on <System>, which is our purchasing system, as the first one that appears.*

The result was that the adoption of recycled paper became a choice rather than a sustainability imperative. We suggest that the additional cost per unit, coupled with the usage volume became too much of a financial disincentive that was only partly overcome due to the efforts of a strategic supplier. Arguably, there was insufficient organisational will or leadership to privilege the more environmentally sustainable decision found by the supplier.

In these examples, the absence of internal leadership and alignment with sustainability strategy was insufficient to overcome perceived negative financial outcome. To even be considered required the intervention of a third (external) party – in this instance, a strategic supplier with the knowledge and incentive to source an environmentally superior solution.

As highlighted in the Results section, staff and societal preferences can complement or even reinforce sustainability capital budgeting initiatives. Either way, as Table 3 outlines, the presence of substantive additional cost in the presence of financial imperatives requires additional support internal and external to the organisation in order to make an environmentally sustainable choice. This finding has implications for such choices in light of the predominance of the accounting technology labelled capital budgeting.

## **Conclusion**

This paper has highlighted the trade-off between financial imperatives and desired sustainability outcomes in capital budget decision-making. We identify the role of strategic leadership, organisational norms associated with outcomes as well as differences in individual perceptions of sustainability. In the presence of substantive financial imperatives, these factors have a key affect on intra-organisational attempts to measure and 'improve' the impact of sustainability considerations in capital budget decisions. We find that they have a substantive impact on the extent to which sustainability is privileged.

Given the limited academic literature on environmental sustainability considerations in capital budgeting decisions, the paper point to the influence of organisational context. In addition to leadership and the presence of strategic intent favouring sustainability, forces such public or government ownership as well as staff and societal considerations may be required to significantly impact the way organisations approach, support and enact sustainability. A focus on the tension between financial and sustainability inherent in the use of numerically focussed accounting technology such as capital budgeting illustrates the practical difficulties faced by organisations with the strategic intent to invest in environmentally sustainable assets. By exploring this tension in the form of narratives that articulate what decision-makers mean by sustainability, we highlight the need to identify patterns of interpretation and subsequent behaviour in order to understand reasons why many sustainability initiatives fail to achieve desired ends.

Our paper has several limitations. First, the narrative presented here relates to five organisations, Hence, the observations and conclusions we reached here are limited to these cases. Therefore care should be taken in generalising any of our findings. We highlight the

need to understand the organisational context before applying our findings to other capital budgeting and sustainability research. Second, the narrative as outlined in this paper is based on our observations as researchers and our interpretation of the data. Finally, research on a single control mechanism/technology is necessarily incomplete without consideration of the impacts of other controls (for discussion this limitation, see Johansson and Siverbo, 2011).

Our future research will continue to monitor the way in which government and public entities manage, measure and report on the decisions arising from the tension between financial and sustainability imperatives. This type of longitudinal research should continue to provide us with understanding and interpretation of reasons why many sustainability initiatives succeed or fail to achieve desired strategic outcomes over time.

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## Tables and Figures

Table 1: Case study dimensions– summary of interview coverage

Interviewee Category	Org 1	Org 2	Org 3	Org 4	Org 5	Total
<b>Senior-Level Executives</b>						
- Number of interviews	7	7	10	7	6	37
- Total duration (minutes)	341	426	675	502	462	2,406
<b>Managers</b>						
- Number of interviews	5	10	6	11	7	39
- Total duration (minutes)	231	520	361	632	400	2,144
<b>Other Staff</b>						
- Number of interviews	4	5	-	5	4	18
- Total duration (minutes)	279	214	-	279	227	999
<b>Total Interviews</b>	16	22	16	23	17	84
<b>Total Duration (minutes)</b>	851	1,162	1,036	1,413	1,089	5,549

### Notes:

The following paragraphs provide a brief outline of case study organisations studied:

**Org 1** - A publically listed medical and pharmaceutical organisation operating in the Asia Pacific region, employing approximately 500 staff directly. It's range of products are sold globally.

**Org 2** - A Government Business Enterprise (GBE) providing government community services and employing close to 1,000 staff.

**Org 3** - A publically listed financial services organisation with over 10,000 employees, operating in the Asia Pacific region,

**Org 4** - A Government Business Enterprise (GBE) providing water and sewerage utility services and employing close to 1,000 staff.

**Org 5** - A publically listed construction and mining services organisational operating globally and employing over 15,000 staff.

Table 2: Case study dimensions– Sustainability themes used in the coding analysis

Theme/Category	Description
Capital Expenditure Sustainability	Specifies the requirement to consider sustainability as a criterion in capital expenditure decision. Examples include comply with .. “environmental standards” and “CSR strategies”; “sustainability considerations”.
Decision on social responsibility grounds	Indicates that corporate social responsibility was considered in making a capital budgeting decision.
Decision on environmental grounds	Indicates that the environmental impact of the initiative was considered in making a capital budgeting decision.
Decision on economic motives	Indicates that the prime or only consideration was economic benefit to the organisation in making a capital budgeting decision.
Decision on efficiency motives	Indicates that the prime or only consideration was economic efficiency in making a capital budgeting decision.
Decision on effectiveness motives	Indicates that the prime or only consideration was operational effectiveness in making a capital budgeting decision.
Decision on personal challenge to financial motives	Indicates that personal views or drivers were considered in making a capital budgeting decision.
Decision on reporting consistency	Indicates that consistency with external reporting obligations of the organisation was the prime or only consideration in making a capital budgeting decision.
Decision on CSR reputation	Indicates that the CSR reputation of the organisation was the prime or only consideration in making a capital budgeting decision.
Decision on market share motives	Indicates that market share drivers were considered in making a capital budgeting decision.
Decision on accreditation grounds	Indicates that environmental accreditation was considered in making a capital budgeting decision.
Decision on legislative grounds	Indicates that consistency with legal obligations of the organisation was the prime or only consideration in making a capital budgeting decision.
Decision on risk grounds	Indicates that risk mitigation was the prime or only consideration in making a capital budgeting decision.
Decision on Board or CEO KPI grounds	Indicates that achievement of Board or CEO KPIs was the prime or only consideration in making a capital budgeting decision.
Reporting within organisation	Indicates that consistency with internal reporting was considered in making a capital budgeting decision.
Reporting to the Board	Indicates that consistency with reporting to the Board was considered in making a capital budgeting decision
Media/society attention	Indicates that potential media reaction and/or commentary was considered in making a capital budgeting decision

Table 3: Linkages between decision-making influences, stakeholders and sustainability

Influencing Factor	Link to Stakeholder	Link to Sustainability Theme
Financial imperatives	Can be driven by organisational financial imperatives, backed by leaders and organisational norms where required.	Driven by motives of economics, efficiency, market share, financial KPI or financial media attention.
Long-term sustainability strategies	Can be driven by organisational sustainability strategies, backed by leaders, organisational norms, risk aversion, staff and societal environmental advocates where required.	Driven by motives of social responsibility; environment; effectiveness; CSR reputation; accreditation; legislative; risk taking; or environmental media attention.