

# Education for sustainability in university curricula

*Policies and practice in Victoria*

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Prepared for Sustainability Victoria  
November 2011





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## Foreword

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Education for sustainability (EfS) refers to education that builds the knowledge, skills and dispositions for living sustainably. It is bringing sustainability – for some time a prominent concern within higher education – firmly within the fold of teaching and learning, a key aspect of universities' core business. Is EfS an unstoppable juggernaut in higher education? The short answer is no; it is one of a gamut of policy considerations universities that currently face. This review has made it clear, however, that EfS is a vehicle for infusing a central and progressive presence for sustainability within institutions.

This report establishes a picture of the state of play of EfS in Victoria's universities, but in so doing also considers the interactive dynamics between institutions. All eight universities that were chartered in Victoria have been consulted. In addition, information was gathered from the Australian Catholic University.<sup>1</sup>

Input was sought both from those involved in sustainability policy management and academic practitioners. Documents available publicly and provided on request, including brochures, reports, educational resources and policy materials, were examined, as were scholarly publications and resources available through various national and global bodies dedicated to sustainability and to EfS in particular.

The report is designed both to assist government agencies in understanding the workings within the sector and to suggest to them courses of action to support EfS development, as well as to inform institutions and their members about what is happening throughout the State. From document analysis and semi-structured interviews, a picture of both patterned and more isolated instances of progress and blockages in the expansion of EfS in universities has emerged and is described here.

Interviews were conducted on the basis of anonymity. In order to locate input in discussion of Victorian universities, quotations are identified according to the respondent being at an institution fitting one of four widely accepted categories<sup>2</sup>, being:

- *Go8* – the two members of the Group of Eight research-intensive universities, Melbourne and Monash;
- *Gumtree* – the two institutions notably composed of networks of campuses in Melbourne and provincial cities, Deakin and La Trobe;
- *New* – two universities with strong commitments to their local areas, Ballarat serving the inland west of the State and Victoria University linked to Melbourne's west; and
- *Unitech* – two metropolitan technological institutions with specialised research foci, RMIT and Swinburne.

These pairings are intended somewhat to 'mask' the voices of respondents and institutions, while at the same time providing meaningful context. It is far from the only way Victorian universities could be split up.

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<sup>1</sup> It was arranged that ACU would be the only university whose identity is unambiguously revealed; its Melbourne and Ballarat campuses are part of a string situated along the eastern seaboard. The Victorian presences of interstate universities such as the Warrnambool campus of Flinders and those of various Queensland universities are not within the scope of the investigation.

<sup>2</sup> Marginson and Considine (2000) coined the terms Gumtree and Unitech (we have extended Unitech's applicability to Swinburne). Go8 is a formal grouping, and the News were once in a similar group.

The limitations of the data have allowed the grasping of only a very broad picture of the ways in which EfS is gaining traction in Victorian universities. The reader should be aware that the plasticity of ongoing developments prevents the advancing of definitive conclusions. At the same time, it is possible to identify certain clear emerging trends.

As the birthplace of the multi-sector (sometimes called dual-sector) university, Victoria may have the jump on other jurisdictions in that many of its institutions have had no choice in pursuing EfS within their vocational education and training (VET) sectors; universities in the New and Unitech categories are all multi-sector. Moreover, other Victorian universities have been at the fore of a global wave of curricular reform. The existence of the active Victorian Higher Education EfS Steering Group – bringing together academics who support EfS at all Victorian universities on a regular basis – is also a unique example of State-wide cooperation in an Australian context (of course, Victoria is the most ‘city-state’-like Australian State; staff from all its institutions can more easily get together for meetings than elsewhere).

Due to the necessity of VET providers delivering EfS to VET students, Victoria’s four multi-sector universities currently share more similarities in their practices than do the other four. In the course of preparing the report, it has become clear that, beyond masking respondents, the categories often do provide a useful heuristic for bearing in mind the way universities see themselves positioned amongst their peers. To glean contextualised insights from the report, institutions beyond Victoria may consider how their roles more or less correspondent to one (or more) of the four categories.

The report was commissioned by Sustainability Victoria in order to provide a broad overview of the perceived challenges that face the advancement of EfS in Victoria's universities. We thank Stuart Galbraith, both for his ready assistance and for affording the necessary freedom in pursuing the research.

## Executive summary

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Education for sustainability (EfS) is education which seeks to achieve sustainability, with a particular focus on cultivating knowledge and skills to making a practical, ongoing difference. It comprises environmental, economic and cultural dimensions of sustainability. Australia has a National Action Plan for EfS. For Victoria's universities, it represents a step beyond operational sustainability (eg 'campus greening') initiatives and education *about* sustainability; many advocates view it as something that can be imbued through all educational activities. Many enthusiastic environmentalists have pioneered EfS in Australian universities; the challenge now is to make it mainstream and accessible to newcomers to sustainability as an educational value. This report provides an account of the state of development of EfS in Victoria's universities and is intended to inform government and other agencies and, especially, policy making within universities.

No Victorian university has yet produced a policy that ensures EfS is effectively and widely included in teaching and learning or research activity. All of the universities are, however, contemplating how best to approach EfS in their own ways. As all Victorian universities are in the process of reviewing and in many cases overhauling curriculum practices; the opportunity for the development of policies supporting EfS is evident.

Indications are that, taken as a group, Victorian universities are perhaps more advanced in establishing footholds of EfS compared to those in other Australian jurisdictions (due in part to recent bold curricular change and Victoria's multi-sector institutions). Victoria has in the last few years been the epicentre of curricular change in Australian higher education, much of it dedicated to uncluttering educational and research capacities. In this context, EfS can be imagined as a way of enriching experiences and content that is designed to be impactful without seeming out of place.

Universities approach EfS through a variety of policy formulation channels; supporters must tailor their strategies to often idiosyncratic processes. Each university has different means of reviewing and altering curricula, but many are undertaking curriculum renewal. For EfS to take advantage, it must achieve systematic and enforceable recognition in relevant aspects of curriculum policy in each university. Academic communities differ subtly between institutions; while EfS advocates are united in a common cause, the success of their advocacy will be influenced by the degree to which they can engage in terms of institutional cultures.

EfS policy and practice need to be better coordinated. While there is considerable enthusiasm for EfS, practitioners await engagement with academic leadership in taking the concept further. It is important to appreciate that as EfS matures in an institution, ideas generated both within and beyond its walls must inform its development. Efficiency demands that EfS combine improved policy development with effective awareness efforts as to what the concept can offer. A next step for universities is systematically acknowledging EfS in policy documents in order to define coherent approaches. The ways in which each institution operates, however, mean that appropriate policy and strategies will vary in different settings and no pro forma solution can be advanced.

Each university will produce its own kind of EfS; there is not a one-size-fits-all formula for all university settings. In the coming years all institutions will need to invest in academic development to meet commitments to EfS. To be made a core consideration, EfS must knit with institutional contexts. The dispersal of the EfS concept throughout institutions depends on the exploitations of different circumstances, and in the current climate of curricular evolution

an opportunity exists to attach the concept to tides of innovation. One challenge common to all universities is providing the resources and impetus to larger numbers of academics to incorporate EfS into their activities.

Among the institutions, promising modes of EfS include an increase in general education subjects within and across undergraduate education, existing centres of expertise, and opportunities for combining higher education experiences with VET capacities. Examples of good practice in EfS can be found in all Victorian universities. Strong examples are to be found where faculties and departments have taken holistic approaches to incorporating and addressing sustainability. There are many opportunities for involving industry, public sector agencies and non-government organisations in providing contextualised learning that offers real synergies with the needs and goals of such partners. For the formulation of strategic policy, approaches such as an EfS 'roadshow' within an institution allow the sharing of effective approaches as policy evolves. The campus as laboratory concept is proving a fruitful one for EfS activities.

For agencies that wish to help universities build capacity in EfS, the prudent advice is not to push too hard, to promote the merits rather than the requirement of EfS experiences. There is also a role to be played in assisting cooperation and the sharing of resources. The ongoing task of expanding EfS in Victoria's universities is likely to get more complicated as progress is made.

For government, support for EfS in universities can perhaps most strategically be delivered through the identification of key trends and the assignment of resources and incentives to encourage them. Many of these trends also need to be better understood and addressed by universities themselves.

The report recommends that government agencies can help most by:

1. Endorsing, promoting and developing the National Action Plan for EfS within universities, particularly the goal of including EfS in university courses;
2. Recognising and supporting the different ways universities are developing EfS, including funding incentives;
3. Promoting forums, showcases, and access to resources, benefiting from and informing institutional activities, including the sharing of good practices.



## I Overview

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Education for Sustainability (EfS) prepares communities ‘to tackle the underlying causes of unsustainable trends’ (NAP 2009: 8). This is a pressing yet daunting task; as sustainability scholar Stephen Sterling has written:

*Sustainability does not simply require an 'add-on' to existing structures and curricula, but implies a change of fundamental epistemology in our culture and hence also in our educational thinking and practice. Seen in this light, sustainability is not just another issue to be added to an overcrowded curriculum, but a gateway to a different view of curriculum, of pedagogy, of organisational change, of policy and particularly of ethos (2004, 50).*

EfS focuses on systemic change by looking at ‘social, economic and ecological wellbeing, recognising that they must be part of the same dynamic’ (Sterling 2001, 22). Sustainability itself can be thought these three interdependent strands. EfS is seen as the second, and more ambitious, stage of the ‘greening’ of educational institutions, including universities. Action and studies focused on operations in universities have comprised a first stage (work on which must continue); the challenge in advancing EfS within curricular reform is in many ways greater.

For a start, where physical and material greening can follow a deficit model – where the expending of non-renewable resources is reduced and replaced by carbon neutrality – EfS has an expansive agenda, and one whose progress is harder to boil down to a scalable trope such as carbon expenditure.

EfS is a term of British origin that is commonly used in Australian education and in government policy in Australia; globally, including in Britain, *education for sustainable development* is more often used (at times this has been in Australia, too, although the nomenclature is becoming more stable). The years 2005 to 2014 are the United Nations Decade of Education for Sustainable Development. A widely agreed definition of sustainable development is ‘development that meets the needs of the present world without compromising the ability of future generations to meet their own needs’ (World Commission on Environment and Development, 1987). Sustainable development – while no oxymoron, as some sceptics charge – highlights a key tension. So, whereas sustainability and development complicate one another, the term EfS has some merit in highlighting instead another tension; the contribution education might have to sustainability in ways including but not limited to learning about existing conceptions of sustainable practice. Both education and sustainability have ideological as well as practical facets. It is this tension that frames much discussion percolating within Victoria’s universities.

EfS aims to provide individuals with ‘the knowledge, skills and understanding necessary to make decisions based upon their full environmental, social and economic implications’ (ARIES, 2009). Thus, as Rowe (2007) has depicted, three key domains converge in EfS towards the goal of a sustainable society: natural environment, economic viability and social equity.

External and internal drivers have brought EfS to Australian higher education. At the government level, *Living Sustainably: The Australian Government’s National Action Plan for Education for Sustainability* (2009, better known simply as the National Action Plan, which it contains) has called for integrating EfS in all university courses and subject areas, as well as in campus operations. In this document, the component specifically addressing universities is featured

between longer lists of activities in VET and in schools (both of which are subject to mandatory EfS coverage), and the universities section reflects the need to incentivise rather than direct universities in the endeavour. The Plan seeks specific commitments in order to support and encourage comprehensive change in higher education institutions, to improve coordination through sustainability networks and to work towards the assimilation of sustainability into professional learning qualifications and university degrees. The US-based non-profit organisation Ceres administers the *Global Reporting Initiative*, which offers another, complementary vehicle for universities to engage in the global sustainability movement.

The National Action Plan lists four specific areas in which it supports EfS in universities (Section 2.2):

- 1) the development of whole-of-institution approaches to sustainability '*including research, teaching and learning, and campus management*';
- 2) an incentive scheme through which the Australian Government will provide funding to implement Universities Australia's policy;
- 3) networks for sharing advances in EfS; and
- 4) the promotion of the incorporation of EfS into the accreditation requirements for '*key professions such as engineering, accountancy, economics, law, architecture, planning and teaching. Priority will be given to those professions with the greatest and most immediate impact on sustainability outcomes*'.

These goals are fewer and more nebulous than those for VET, where the requirement of EfS is aligned to more centralised frameworks, stipulations and arrangements with industry.

The higher education sector has also generated its own statements in relation to EfS. Universities Australia's 2006 promulgation of a policy on education for sustainable development encourages its members to '*build capacity in the community by educating the next generation of professionals and leaders to become fully aware of sustainability*', including '*embedding elements of sustainability at appropriate levels in academic programs*'. While symbolically important, such language is also carefully non-committal; to some extent EfS advocacy in Australia comprises the task of maximising perceptions of what appropriate levels are.

Some institutions and umbrella groups have made additional sustainability commitments. Examples include over half of Australia's universities signing up to the Association of University Leaders for a Sustainable Future's *Talloires Declaration* (1990) and the international consortium of institutions *Universitas 21's Declaration on Sustainability* (2009). Individual Australian universities have generated in-house research in planning EfS, and the wider scholarly literature is vibrant; the Australian Government funds the Australian Research Institute for Environment and Sustainability (ARIES), based at Macquarie University. ARIES has produced some materials apparently pitched at kindergarten to Year Twelve (K-12) level and at VET contexts and applicable to teacher training, but such material is not always concerned with the particular complexities of higher education.<sup>3</sup>

At the institutional level, EfS has had an uneven trajectory. Although recognised as the logical

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<sup>3</sup> While existing EfS materials available from ARIES can offer inspiration for how universities might apply the concept in various contexts, this institute comes into its own in providing insight into how sustainability can be promoted in organisational cultures generally. Much of this very accessible material has relevance for universities and for the possibilities of partnerships with industry and community groups. Dexter Dunphy, Andrew Griffiths and Suzanne Benn have produced the 2007 book *Organizational Change for Corporate Sustainability: A Guide for Leaders and Change Agents of the Future*, and Benn has a number of other presentations and papers available on the ARIES website.

progression from effective sustainable campus policies, actual progress in cultivating EfS has been modest. Its transition from the periphery to the centre of the higher education enterprise has faced a number of obstacles: little attention from senior management, lack of resources, and indifference in some departments and disciplines. Although increasing awareness of sustainability has been acknowledged in environmental policies and graduate attributes, implementation plans have been slower in developing. Existing policy statements fail to address EfS in any fully formed sense. One Victorian university has directed its deans to ensure that EfS is embedded in all curricula. Other universities have recognised broad sustainability approaches through the creation of senior positions and full-time policy roles – it is clear in each of these cases that EfS will be a prominent consideration in EfS curriculum and policy.

Examining the gains made in establishing EfS brings out the subtle variety in organisational structures and institutional commitments that abounds in Victorian universities. Some arrangements are openly provisional and some seem closed for renovation. They are the result of idiosyncratic combinations of senior leaders, campus and property managers, teaching and learning units, EfS advocates and student activists. The state of play in EfS in Victorian universities is a snapshot of a higher education system in action.

### **1.1 Advocates and newcomers**

A chief consideration in the mainstreaming of EfS in universities is how current support for EfS is incorporated into a wider presence at the institutional level.

There is a muted tension within institutions as a result of different perceptions and priorities among passionate and often knowledgeable advocates of sustainability in educational contexts and among those with less familiarity with the concept. Newcomers include not only academics prompted to take the notion on in some way, but also policy people with overarching concerns that EfS knit with other more established elements of teaching and learning, institutional strategy and marketing. The cooperation of advocates and newcomers is a priority in its own right for institutions and the system as a whole; there is a role for senior leadership in sponsoring further cooperation.

The successful advance of EfS in Victoria's universities should, therefore, seek traction with those with a burning interest in sustainability and those yet to be convinced of its necessity within disparate higher education courses. The interview methodology upon which this study rests (consulting two members of staff abreast of different areas of university policy and practice at each institution) means that it is with some trepidation that we suggest some institutions have disseminated and communicated policy more effectively.

## 2 Mapping the field

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The workings, progress and prospects of EfS in Victorian universities can be broken down into four broad areas: policy development, governance, curricular inclusion and academic community. In this section, each is addressed in turn, drawing chiefly on working documents and interview data. A brief discussion of EfS at Australian Catholic University's Victorian campuses follows.

### 2.1 Policy development

Every university in Victoria has some form of policy addressing sustainability (including de facto policy, such as terms of reference for exploratory committees overhauling institutional approaches). A list of university documents readily available online or by application to the relevant institution is included as an appendix. Some institutions refer to the addressing of sustainability in curricular policy. The point of entry of EfS (whether the term is used or not) has varied from institution to institution; sometimes it has been through graduate attribute commitments, sometimes extrapolating from government-backed operational sustainability initiatives, sometimes through the expansion of sustainability activities and sometimes through curriculum reforms. The visibility of EfS is often supported by its identification by advocates as a global movement to advance sustainability. Even in those institutions in which its inclusion in the curriculum is not mentioned, EfS as an aspiration is consistent with the way in which sustainability is understood by some staff and the way in which it is presented in material such as promotional brochures.

Most institutions are setting and implementing their sustainability-related policies and strategies at present, and by all indications, intend to include EfS in this, although, again, not necessarily using the term. Sustainability policy is universally seen as potentially an important component of the core suite of areas that should be addressed; EfS is variously seen primarily as something to be dealt with within existing sustainability apparatus (typically focused on operational matters) or, more faithfully to the concept, a combination of sustainability and teaching and learning considerations. Many universities are in the process of major recasting and refining of their curricula and other elements of educational delivery. Markedly different approaches to the handling of EfS are being taken in Victoria's universities. Some are determined to address EfS through policy, others to monitor EfS in practice, and others to consider it as part of ongoing curriculum change. This range of approaches has emerged despite all institutions displaying pockets of EfS practice and all having achieved limited progress in spreading its reach.

In a number of cases, existing policy statements have been little enforced. After being adopted and implemented through operational policies, sustainability as a component of teaching and learning has been rarely given thorough attention. Just recently, Victorian universities have taken action to advance EfS in their undergraduate curricula.

One indication of universities' determination to explore EfS is the prevalence of internal inquiries to ascertain the existence of compatible activities. No institution has attempted a comprehensive audit of EfS activity; in some institutions broader curriculum audits have included EfS in their scopes, but this approach betrays a view that EfS is conceived as a subset of sustainability rather than the intercept of sustainability concerns and teaching and learning practice. More widespread has been the pragmatic decision that resources could be more effectively applied to collecting and building on best practice than in lengthy auditing.

The picture is one of EfS being carried out around (rather than supported by) 'black letter' policy:

*'There is definitively a sort of implicit inclusion of sustainability principles' (Go8);*

*'There are bits and pieces of "sustainability is a good thing and we should integrate it" but apart from that there doesn't seem to be much' (Gumtree).*

In one Unitech, sustainability policy 'mentions EfS in the preamble' – it is difficult to assess how much of a sop the respondent sees this as, given the prominent but deliberately symbolic standing preambles traditionally have in policy documents. At a New, 'implementing' EfS was seen as a long process beginning with careful community consultation.

In some places, EfS is even seen as incompatible with the sweeping but forceful nature of existing university policy per se:

*'EfS does not fit anywhere, seemingly, inside the university's structural framework' (Go8).*

In terms of policy documentation, in all institutions the inclusion of EfS seen as a work in progress:

*'If you mean a formal policy document, no we do not [have any]. We do have some actions in there in regard to EfS' (Gumtree).*

Some institutions avoid using the word 'policy' for sustainability initiatives, which is viewed as a building cultural aspiration:

*'There is actually a strategy not a policy – an excuse for not having implemented it' (Unitech).*

On the other hand, the empowerment of teaching staff to include it has at times led to strong inroads:

*'The implementation of EfS isn't a policy, it's a curriculum commitment; it is not a formal policy' (Unitech).*

Instances of practice are seen as both precariously holding on, and a start:

*'EfS has a toehold, you might say' (New).*

It is clear that being seen to have an organisational commitment to sustainability is a universal value among Victoria's universities, but EfS has yet to firmly establish itself as core business in policy and practice. Indeed, this is acknowledged within even those institutions whose policy planning for broad EfS is at a more advanced stage – it may be that the more institutions consider the support of EfS, the harder they appreciate it to be. In recognition of this, some have moved away from 'black letter' policy claims relating to EfS in order first to develop a more rounded understanding of its possibilities for the institution.

In all the Victorian universities, there are not yet settled approaches for addressing EfS in the curriculum, monitoring it or coupling it with curricular changes. Rather, there is often an expectation that such structures as cross-institutional electives and capstone units can be singled out as likely vehicles for the advancement of EfS. This could be seen either as progress within institutional strategies or evidence that EfS is already being sidelined as a consideration;

it is too early to judge. At the moment, no single university has yet completed an action plan to assure its implementation.

As far as academic leaders are concerned, institutional support for EfS appears to be being considered in the same vein as concepts such as citizenship and awareness of global multicultural or cosmopolitan perspectives, as well as not always being distinguished from education *about* sustainability. A newfound prominence for these areas cuts two ways for EfS, in that while they may collectively exert enough pressure to force room in curricula, they seem destined then to play off against one another for inclusion. Such areas risk being seen as oddments rather than core considerations. Should a broadly compelling ‘hearts and minds’ notion such as EfS become a mandatory hoop, it loses much of its motive force.

The relationship between EfS and institutional progress in operational sustainability and sustainability-focused course content is a fraught one; there is some sentiment that EfS is crowded out by these other *tangible* sustainability activities. If EfS becomes seen as a hostile takeover of the sustainability spotlight, it may lose natural allies. A key policy challenge in some institutions is how preexisting education *about* sustainability (and exploitation of operational sustainability) might be combined with EfS. That EfS is not a derogation of existing achievement in sustainability, and is intended to build upon progress, is a message that has not always been compellingly made in policy and strategy discussion.

Internationally prominent academic advocates of an EfS ethos at times display great insight into the realities and potentialities of incorporating EfS into institutions’ differing curricular approaches. EfS is far more than a ‘brand’ which a university either buys into or does not. In terms of higher education diversity in Victoria and in Australia, university leaders should be wary that some institutions will see advantages in identifying with the label ‘EfS’ in promoting the concept, while others will strategically and deliberately avoid it.

What might be termed normative assumptions – in which EfS is held as a value to be transmitted to all in the university – are evident among respondents coming from both policy planning and practitioner perspectives. Such perspectives seem to assume that policy formulation and support have the power to make such aspirations realistic. There is not, however, an established model of how EfS practice might be relayed through policy and back, bigger and stronger, into institutional curricula. All Australian universities have recent experience matching graduate attributes to their educational activities, and EfS could be supported with similar stipulations.

Elsewhere, more ‘enabling’ strategies prevail, with targeting and engaging the right audiences seen as crucial. One thing to watch for with such approaches is whether they can be confidently and authoritatively transferred to less targeted audiences. Academics from all disciplines should be encouraged to incorporate EfS in their work.

Finally, while there is considerable diversity as to whether EfS is the stuff of policy, strategy or mission (or all three), there is a general sense that only when it is supported with institutional resources commensurate to any trumpeted importance will it have achieved genuine recognition as part of a university’s make-up. Immediate priorities for universities should be completing the commitment-statement-action cycle and defining institutional approaches to, and targets for, EfS more coherently in policy documents, and providing at least roughly commensurate resourcing. There are many resourceful people who have devoted time to seeding EfS within their institutions, but the resources institutions provide them do not tally with institutional rhetoric about EfS. Certainly all universities should account for the National

Action Plan in their policy formulation from this point on. Resources from beyond the institutions would also be welcomed.

## 2.2 Governance

The diversity of approaches to the way EfS policy is set and reviewed in different institutions offers some glimpse of wider governance diversity. A major underpinning of EfS – that by addressing sustainability in the curriculum it is recognised as an institution’s core business – is worth bearing in mind when we consider some of the ways EfS is approached in policy formation processes. Whether all institutions will be comfortable circulating the term ‘embedding’ is not clear, but it is important that all students experience EfS in line with the National Action Plan.

In the case of multi-sector institutions, VET<sup>4</sup> sectors have made considerable headway in implementing EfS in all offerings as part of the Australian Government’s National Action Plan. While such capacity could be turned to the advantage of higher education within these institutions, it is subject to the usual tension and interplay of ideas between sectors common in these institutions. It is clear that no multi-sector institution wants to address EfS simply by extending VET measures into higher education. It is acknowledged, however, that centres set up for the inclusion of EfS in VET courses in these institutions may in time extend existing expertise to higher education.

Recurrent themes regarding institutional governance include endorsement of or displeasure with leadership structures; as a rule, it is seen as important that EfS receive dedicated attention, but also standing within established power bases in order that it develop as mainstream policy. It is crucial that institutional leadership take an active interest and build understanding.

EfS committees and working groups, where active, typically comprise representation from throughout the academic community:

*‘What we have is an EfS committee that is constituted from a range of levels and participants in the university. So: managers of all academic units, practitioners, representing each of the faculties, and we have student representatives as well. And a number of other people who are involved in assisting the development of educational policy and practice in the university’ (New).*

Elsewhere, EfS taskforces are planned:

*‘We have this higher-level policy sub-committee, which is the environmental policy sub-committee. Then, underneath that we have the group that actually get things done. The portfolio of environment is involved that group. And within that group there is a number of working groups... my understanding is there will be one coming into that list called “EfS” but doesn’t appear yet on the website’ (Gumtree).*

Appearing on the website, for a concept such as EfS, would be one of the more affordable and impactful ways of raising consciousness within the institutions and making a statement of intent for external purposes. It may be that this presents an opportunity to create some presence

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<sup>4</sup> Multi-sector universities differ as to what they call this concept; *vocational education and training* (VET), *vocational education and further education* (VE/FE), and *Technical and Further Education* (TAFE) are variously used, reflecting often painstakingly negotiated internal logics. This report uses the generic term VET, which should be taken to include further education.

for EfS in order to develop a university-specific dialogue around EfS prior to 'harder' policy specification.

Broad representation backing EfS is seen as helpful, but some respondents expressed wariness that EfS could be sidetracked by not passing through the '*standard food chain*' of committees and senior officers for approval (Go8) – such as the ostensible privilege of reporting directly to the Vice Chancellor, not via an academic board or university council.

In some institutions, EfS committees are placed within a wider sustainability apparatus, dominated by operational concerns. Advantages of this include some access to sustainability-earmarked funding; disadvantages include the possible conflation of operational sustainability initiatives with progress in EfS:

*'[There is a] curricular working group linking to the sustainability forum [which includes] budget divisions across the university progressing the sustainability agenda throughout the university'* (Go8).

Elsewhere, EfS is seen very definitively as an integral element of teaching and learning reform, reflected in direct responsibility for the area at high levels. Drawbacks of this include that EfS requires assiduous championing in order that it be incorporated in policy:

*'Senior executive across higher education and TAFE... is supposed to be setting and reviewing policy but there is a long pause between meetings and not much action'* (Unitech).

Another pertinent point is that even where EfS has been specifically addressed in policy, it is still at a wait-and-see stage where the effects of policy settings are not clear enough to allow tweaking:

*'The policy is brand new so obviously hasn't been reviewed yet. . [It is] barely eighteen months old'* (Unitech).

Differences in governance at various universities affect EfS policy development and implementation. How governance supports the implementation of generalised policy needs closer attention. There is a reasonable fear that governance can be used not so much to frustrate the prospects of EfS, as bury them in the faint praise of marginal policy inclusion:

*'We've got something that is good if it is actually implemented, touches every part of our curricula. But I'm not sure that those repercussions are actually being seen right throughout the organisation. I don't know if it has been or not because I'm not privy to more senior people in the university'* (Go8).

The governance arrangements of universities vary considerably. One reason why roughly grouping institutions according to when they were chartered is commonplace in studying university systems is that often institutions have policymaking procedures that reflect those in fashion when they first became universities.

It bodes well that considerations of EfS already tend to reflect difference in governance and culture. Even as the interviews were being conducted, important strategic steps were evidently unfolding:

*'I am going to meet the deans tomorrow to agree that we need to do this and that it is important and hopefully move forward from there and also commit some market research around the value and demand for EfS'* (Gumtree).

Inclusive committees are often staffed with self-selected members keenly interested in certain issues; at the upper, deliberative levels of policy formulation, the tenor is generally more dispassionate. On the one hand, there is no institution that does not want to enrich its contribution to sustainability through EfS, on the other, it is only one of many competing priorities in funding allocation and curricular formulation or reform.

In the interviews, the ways in which apparent prominence on an organisational chart can in fact reflect marginality are occasionally noted. One 'false friend' of EfS can be its sole consideration within a university's sustainability or environment committee. Much of the organisational capacity in such areas has been built up working on operational sustainability, and the particular challenges of curricular inclusion require very different negotiations. Some EfS advocates admit a sense of competition with operational sustainability initiatives for limited attention within and beyond institutions. There is some concern about the cancelling out of EfS and operational sustainability energies within segregated sustainability forums, or a tussle between the two areas, rather than constructive complementarity. Sustainability needs to be looked at holistically, in order that educational and operational sustainability measures strengthen one another.

It may be that education or teaching and learning committees, with alliances and resources drawn from sustainability committees, are the best places in which to plead the case of EfS. Sustainability committees reporting directly to the vice chancellor or another senior officer with regard to EfS is problematic if this, on the one hand, is used to indicate a heightened priority and on the other disallows EfS receiving an ongoing voice in teaching and learning committees.

A double-edged sword for the advance of EfS is multi-sector governance; while the requirement of universities with VET offerings to follow the National Action Plan for VET has ensured the gaining of experience in EfS (and in all Victorian instances, the setting up of sustainability-related centres directed initially at VET programs), transferring capacities and assumptions from one sector to another has seen mixed success.

EfS advocacy operates as something of a start-up venture with regard to university policy, and considerable scarce and generally unremunerated time is being devoted in order to get it up and running. While the informal channels through which EfS support is maintained within institutions do not necessarily map well onto the trunk roads of institutional governance, their informal nature also allows them to continue to build momentum, recognised or not. It is imperative that institutional leadership consider lending its authority and, more to the point, resources to EfS.

Things seem to be changing rapidly in the field. High ranking positions for EfS have been created this year in three Victorian universities, and most institutions have devoted support staff for its curricular inclusion, indicating heightened institutional commitments and new capacities to accommodate EfS in these institutions.

### **2.3 Curricular inclusion**

The infusion of EfS into the curricula of universities is not supported by everyone. This is not a matter of active opposition to EfS, but rather a feeling either that there is no practical room for such a consideration in curriculum formation, or that it would, inappropriately, mean the exclusion of other valid considerations, including possibly core disciplinary content. In part, this indicates that education *about* sustainability, rather than more catholically *for* it, is what wider university communities understand by the concept. This distinction needs to be made

clearer; ambitions around the growth of EfS depend very much on communicating that it will not (primarily at least) displace other content or values from education.

Several universities have made much of the importance of the compatibility of dual 'bottom up' and 'top down' support for EfS. Nevertheless, better structures are still needed at the centre of higher education enterprises for the coordination of EfS. The mixed progress achieved with current arrangements demands a thorough exploration of what EfS might offer universities and what they might offer it.

Part of any EfS strategy should be to cement linkages among compatible preexisting practices. Some institutions see EfS as being led by education faculties and by disciplines in which education *about* sustainability is essential.

*'Environment-related subjects are the ones that have sustainability included – that seems the logical thing you would come up with' (Go8).*

Typically these courses are available to students from other disciplines:

*'We list all sustainability subjects and courses on the sustainability website of the university. There is a link to courses. I guess the standard example would be cross faculty, cross-campus multidisciplinary courses that we offer' (Gumtree).*

For some respondents, an ideal scenario seems to be something that combines a clear 'green' element with the application of key disciplinary methodologies. At several institutions, carbon accounting is a favourite:

*The business school 'run(s) student business practicum programs each year and they've done a couple of sustainability-related ones. One has to do with a carbon-accounting exercise for the Royal Botanic Gardens on carbon sequestration' (Go8).*

EfS has reached a critical mass of acceptance among Education academics, but, surprisingly, curricular constraints have dampened sails in some instances. One respondent at a New presented teacher training as a prime opportunity for including EfS but had trouble arguing its case due to the non-inclusion in Victorian Institute of Teaching standards.

A striking feature of institutions in which EfS is most widespread is how much variety there is:

*'Examples really range from short courses to major and minors, to core units in the university programs of several disciplines, degree and double degrees, postgraduate studies, the graduate certificate in sustainability' (Unitech).*

*'At the moment we are gathering what people are doing on the ground. We have examples of EfS in Business, Law, in Sport Management, in Engineering, in Sciences (some aspects of it)... In some arrangements of occasional education courses – we are a dual multi-sector university – and in the VET space it has been driven by the National Skills EfS agenda. Staff have been proactive in technical training industries and work development units like accounting and catering. And also in further education – Certificate I and II. So, a whole range of things but we are not fully aware of a lot of other people who have been doing these things because the university is in the first steps of putting things together' (New).*

While variety is a good thing, other institutions are specifically choosing to build, from best practice models, greater institutional consistency in how EfS is understood. In most cases,

approaches to EfS appear to be aligned to institutional strategies and to be becoming particularly prominent as components of institutional repositioning (especially following leadership changes). It is important not to forget that many successful instances of EfS started as spontaneous developments at key faculties supported by local teaching and learning offices and later circulated both within institutions and beyond as benchmarks of good practice.

At undergraduate level at least there are signs of increasing curricular crystallisation (if the establishment of greater clarity, granulation and definition might be so termed), stemming from graduate attribute claims and a general movement to 'tighten' programs. Some advocates are mindful of the tendency of senior management to attest to support without much backing. As is, many institutions could find references aligned to EfS in their graduate attributes:

*'There are also other things in the graduate attributes; in one of them you can dig out some sustainability things but they are a little bit soft, they are not explicit. There are also graduate attributes that have been a little bit ignored' (Go8).*

EfS gaining ground relies on procedural support for substantive inclusion; it is important that interfaces between the outward and inward images of institutions such as graduate attributes be used for EfS, lest they be used against it.

In institutions in which a sustainability centre exists or in which environmental education is a prominent stream, the view of employees within such programs is typically that it is potentially their role to assist in offering academically sound and enticing EfS opportunities to students from throughout the university, while always bearing in mind that their own disciplinary commitments keep them well occupied as is. Nowhere were 'empire building' ambitions amongst these experts in sustainability content evident and an appreciation of the preferability of self-motivated interest in EfS is universally held for students.

EfS appears to have various, patterned bastions within institutions, especially education faculties, environmental studies, what we might eclectically term 'carbon-conscious disciplines' (that is to say, many areas with much to mitigate, such as logistics, mining, textiles or design – as well as those 'key professions' that exemplify the frontline of EfS impact according to the National Action Plan [Section 2.2.4]), teaching and learning units, and centres dedicated to sustainability. Beyond the Education faculties and VET sector, some respondents showed an appreciation that EfS may indeed experience a natural incubation in those areas, from which it may then spread. Education faculties vary as to how well integrated they are with other parts of each university (and Swinburne does not have one). A sense pervades in some institutions that EfS's place is in an Education faculty, while in others the limited spread of EfS is attributed to the lack of prominence of Education. Furthermore, some Education academics identified a fiat from those in charge of institutional teaching and learning as the best way of advancing EfS – although this may not necessarily be as effective in universities as it is in schools. The success of any measure such as EfS in a university setting depends very much on cultivating engagement among academics, and, through them, students.

The term 'embedding' is used in the National Action Plan and is often heard in promoting EfS with institutions. Embedding anything in a curriculum is very hard to achieve. Teaching and learning policy makers in higher education are wary of embedding; while compulsory schooling and VET frequently make use of the term, it is inherently controversial given ongoing dialogue about academic freedom and accountability. In order to achieve growth in academic interest in EfS, advocates may best be able to lead example; institutions could, however, do more in promoting their examples for internal and external audiences. In any case, it is important that

anyone promoting the embedding of EfS in university curricular provide examples of how this might be done pertinent to different settings and disciplines.

EfS seems most firmly established in those disciplinary areas where it has been tackled out of a sense of strategic anticipation. With the National Action Plan requiring all universities to support EfS, all would do well to make a virtue of the distinctive ways in which it can support their wider strategies. In the carbon-conscious disciplines, improved sustainability is a crucial bottom-line, legal compliance and ethical issue; it is important not in a trendy way, but as forward-looking core skills and knowledge. Similarly, no-one should be too dismissive about the way 'environmental awareness' is being addressed in business programs; in these areas, 'corporate citizenship' very much informs the mainstream, and EfS must conform to such overarching influences if it is to take hold in such sizeable and influential segments of universities.

Equally, advocates in some cases may hinder the welcoming of newcomers to EfS if they are too rigid about the distinction between EfS and widely understood notions of sustainability as it might pertain to the curriculum; soft diplomacy rather than insistences about EfS orthodoxies may best smooth its curricular advance. At the same time, a substantial body of theoretical material is available in order to help academics devise courses and educational experiences through which graduates might meet the National Action Plan's requirement of the skills, knowledge and dispositions which comprise EfS.

Three basic worldviews frame the way institutions are approaching EfS in Victoria. One view emphasises comprehensive coverage, insisting that all students (or all undergraduates) will be exposed to some form of EfS. This vision coincides with recently created positions reporting to senior management with curricular responsibilities. Another option, often suggested by academics with experience in teaching sustainability-related content, stresses effectiveness. In their view, forcing students and staff to engage in EfS is self-defeating and, well, unsustainable. They emphasise opportunities for those interested, fuelled by strategic visibility and awareness efforts. Finally, some EfS advocates suggest ways of combining both approaches through incentives. Their goal is to optimise EfS coverage by investing resources in seeding sustainability into faculty or departmental agendas. This strategy may support EfS proliferation within universities by engaging all faculties and disciplines in developing their own customised approaches.

## **2.4 Academic community**

Putting aside the impact EfS can have on ecology and society and on institutional positioning and policy development, key immediate stakeholders in institutional adoption of EfS are academics and learners. Both academics and students can be divided into advocates and potential newcomers – those who are already keenly motivated, and those who can become so.

The basic problem academics express with regard to EfS is one of insufficient resources. There is often a sense of isolation expressed by EfS champions, who invariably feel the area is under-resourced, particularly with regard to time allocations:

*'I designed a course starting from scratch. Nothing. No material, no outlines, no previous experience to draw upon, absolutely nothing'* (New);

*'Even though there are enough academics interested in these things they just don't have the time to think about it without extra support.'* (Gumtree).

Increasingly, however, the achievements of advocates are being recognised as examples to build on, and there is an implicit appreciation that more systematic resourcing could extend the reach of EfS:

*'I'm aware that in a lot of faculties we've got sustainability champions; they actually have popped up everywhere; from religious studies to the management school and the like. Those individual champions actually put a little bit of energy into this already. We want to make a difference. To make it across-the-board, not just one or two champions. I want to learn from those colleagues but also look at a more systemic review across the board' (Go8).*

There is a clear opportunity for organisations apart from institutions themselves to earmark resources and opportunities tied to the area, if they intend to contribute to the momentum of the EfS movement in universities and have credible input. With the presence of favourable conditions in most campuses for advancing EfS, extra resources can have an immediate impact on achieving robust progress.

Using curricular structures to promote involvement of a wide cross-section of the academic community has shown much promise for building EfS into institutional culture. In some programs at some institutions, a certain critical mass of 'coreness' is built through targeting programs at a wide range of students for whom sustainability is presented as a pertinent matter:

*'They have a sustainability awareness workshop where they have first year, second-year, third-year, fourth-year and even postgraduate students attending' (Unitech).*

A key part of the success of such programs is their drop-in nature – they are prevailing cultural elements rather than requirements.

Different universities appear to be providing opportunities for academic staff to develop their capacities in delivering EfS in different ways. Particularly, some institutions in Melbourne's eastern suburbs have begun to cooperate in such activities. Some universities are wary of such concepts as professional development activities in EfS – university staff often have to manufacture time for such activities from nothing – but it may be possible to incorporate an element into graduate certificate courses in higher education teaching.

Tensions between advocate and newcomer academics, students and academic leaders can be anticipated. Some disciplines with proud end-in-themselves or in any case not obviously ecological preoccupations may need cajoling towards EfS; it is better that attempts are made to meet academics and students some of the way in interpreting their own versions of EfS than to tell them what it is in readymade form. Furthermore, the expansion from often very solid work in operational sustainability and education *about* sustainability needs continued recognition alongside a drive for EfS. The broad inclusion of EfS within curricula is a considerable task in which the input of allies and stakeholders needs to be optimised; senior management might exercise more coordinating leadership here.

Some of the respondents interviewed in this research are early adopters of EfS; for such people there may be opportunities to exploit publishing, teaching and leadership synergies that may emerge if EfS is made a priority in their institutions. For academics more broadly, however, EfS has the potential to become a less happy imposition unmitigated by such other factors if not introduced and resourced appropriately.

Leading practitioners note that awareness of sustainability is so much a part of school curricula nowadays that often by the time students enter university they are thoroughly averse to the prospect. A 'level' of EfS appropriate to higher education must be developed, and many of the necessary resources must be developed afresh, not simply carried over from other sectors of education. If EfS is to work in universities, it has to be done in a university way and made part of disciplinary studies.

## **2.5 Australian Catholic University: a counterpoint**

The inclusion of some subsequently collected insights from an academic at ACU's Victorian presence can supplement the picture so far.

ACU does not have an EfS policy yet. EfS would mesh well with an explicit social justice agenda that is literally written on the Fitzroy campus's front window (*'guided by a fundamental concern for justice and equity'*), but, as is evident elsewhere, the agitation of *'like-minded people'* in influencing policy is essential for EfS's spread. The involvement of a passionate advocate at the time graduate attributes were formulated resulted in responsibility for the environment being included, but that person is no longer involved and progress has stalled. In the time elapsed since the interview, however, ACU has created a new role dedicated to the support of EfS, and all momentum is not lost.

ACU capitalises on its distinctive identity; while it has no environmental science program in Victoria, its institutional culture is informed by the presence of that field in New South Wales. In Victoria, *'absolute gungho greenie'* academics have created *'ad hoc'* EfS pockets. External agencies, including the Australian Learning and Teaching Council and, notably, Sustainability Victoria have been influential in promoting and developing groundbreaking teacher education units, including as part of the Resource Smart Australian Sustainable Schools Initiative. With ACU's unique string of campuses in Eastern Australia, such units can then cross-pollinate with teacher training interstate in supporting the growth of EfS.

From ACU's example, the taking of different approaches at different universities is offered support; each university must play to its strengths and overall mission and be on the lookout for ideas. Also, taking EfS beyond individual initiatives to systemic inclusion is an important consideration in policy formulation; it can be costly if progress is allowed to dissipate with personnel changes.

### 3 Templates for progress

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A strong theme to emerge from this investigation is that, for EfS to flourish, both bottom-up enthusiasm and top-down authority need to be harnessed and coordinated in a way suitable to each university. Momentum is building for EfS both within and beyond institutions, and the question is less whether EfS will be addressed at any particular institution, but rather finding the most effective ways for this to occur within the culture and processes of each university.

#### 3.1 Coordinating policy and practice

##### *Both down and up*

Several institutions have resolved that, in the case of EfS, the harmonisation of existing on-the-ground practitioners and yet-to-be-developed policy be approached as achievable and preferable. In most cases, empowered coordinating structures are needed along with clear action plans for implementation and the resources to enable this.

The groundswell of support for EfS is stronger in some universities than others but, much as disciplinary affiliations are sometimes more pertinent than institutional ones, EfS has its own community of practice networked across institutional borders within Victoria, nationally, and globally. An implication of such enthusiasm is that policies should seek to harness local enthusiasm in blending them into overarching university strategies. Nonetheless, it does not appear that anyone is naïve about the implications of policy and strategy recognition within institutions, and a willingness to compromise in order to advance EfS causes is palpable.

For the multi-sector institutions (ie the Unitechs and News) EfS is additionally seen as an opportunity to soften sectoral differences, with VET able to offer considerable expertise; sectoral differences can, nevertheless be expected to play out.

##### *External and internal forces*

There is pressure building for EfS amongst advocate academics, and a movement supporting it located outside institutional bases, whether from other forms of education, from government, or from global pacesetters. Demand for commitment to EfS from champions within universities is significant; one Go8 respondent emphasises the need for ‘built-in, not bolt-on’ EfS. This is promising for the determination it indicates to make something substantial of EfS. On the other hand, the distinction ‘built-in, not bolt-on’ overlooks the ‘gatekeeping’ function that policy has for institutional change, while at the same time assuming its fortifying benefits. In any case, the only way to build EfS in to curricula consistently throughout a university is for support at the central teaching and learning level.

Internal exploratory processes include audit and best practice approaches. External forces include the TAFE Sustainable Futures elements in the multi-sector institutions, various bodies and plans devoted to EfS – including many university networks and consortia –, institutional respect for internationally celebrated EfS advocates (it might realistically be said that the high esteem in which Portsmouth’s and Gloucester’s achievements are held amongst EfS practitioners are unlikely to be shared by the senior administration at some institutions, ever keen as they are to cultivate points of distinctions from local competitors), graduate attributes and conceptions of ‘generic skills’ at different institutions. Other notable external forces have been the anticipation of necessary skills for future teachers, examples set by business in

countenancing sustainability, and a feeling among universities that they must remain abreast of international trends in general, and sustainability consciousness is certainly one of those.

### 3.2 Efficiency

One consistent theme brought out by the study is that policy and practice should work together. This is observed in various ways – in some institutions there is a feeling of entrenched disconnect between the two, in others there is a sense that policy and practice simply cannot be confused with one another in their current forms: *‘It is not a formal process – it’s the responsibility of the learning and teaching unit in each faculty – but it is a process that it is much more than just a piece of paper stating the policy’* (Unitech).

EfS can thrive on neither policy nor practice alone, but might be captured in a pincer movement between the two. Strong development of EfS examples set by dedicated advocates could, properly promoted and supported by senior management, result in strong EfS awareness, engaging newcomers. The notional problem is to get from EfS being considered by self-motivated individuals to a situation in which interwoven policy and practice, and awareness of the importance of EfS, reinforce one another:

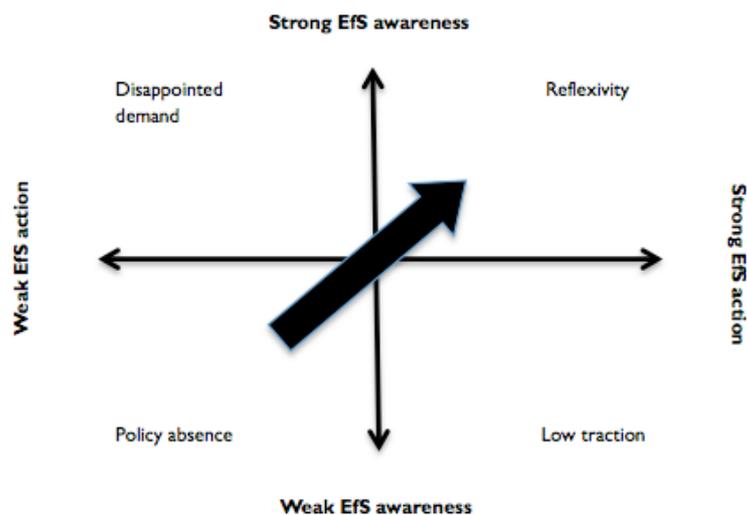


Fig. 1: Awareness and action

This typology seeks to illustrate the symbiosis between EfS promotion and substance. It is important that the different elements of an institutional policy environment are considered holistically with relation to supporting EfS. These elements include policy directions and commitments, coordinating support and developing clear and realistic action plans. Combined, they will help to increase both the visibility and vitality of EfS. In the typology, disappointed demand and low traction result from disproportion in EfS development and awareness; reflexivity between EfS awareness and substance is a mutually reinforcing goal.

## 4 Promising vistas and looming pitfalls

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There are opportunities and potential risks in linking policy and practice, determining student demand, and embedding and mainstreaming EfS

### 4.1 From logical step to logistical challenge

The sentiment EfS advocates hold is persuasive – it is not only in its own right an obvious direction to take the shared sustainability drive within higher education, those elements of sustainability that have already been entrenched in universities risk seeming like window-dressing if the step is not now taken towards deliberate incorporation of skills and values that will affect sustainability. In a sense, EfS in higher education could be calling the university's bluff; are its core business functions contributing towards sustainability, or is operational sustainability enough? Where operational sustainability programs have led by example that may inspire or shame other organisations into action, now the time has come for universities to lead through one of their main products: their graduates.

All Victorian universities have experienced challenges transferring sustainability principles from operations to their educational activities. There is an obvious explanation for why EfS has lagged on-campus sustainability; it is much harder to do, and much less addressable through a modular project plan. It requires the engagement of more individuals. Furthermore, as baseline evidence of a commitment to sustainability, there are many easily transferable practices and innovations on display (for example, phasing out a type of light fitting, or instituting recycling systems). Every university 'does sustainability', but for every university to 'do EfS', it must do its own kind of EfS, in line with the different renditions of broadly similar curricula on offer in different institutions. In many ways curriculum is the major structural substance behind universities' projected brands, and ideally a university's approach to EfS should extend rather than dilute efforts at differentiation.

This report acknowledges that each of Victoria's universities faces a considerable logistical challenge; making a strong and meaningfully directive link between scattered, pioneering EfS practitioners within institutions, and university managements that without exception profess to support EfS. In each institution, these two groups appreciate the steep challenge of delivering EfS to all of their students – together they can systematically work towards meeting the challenge. Whatever policy an institution decides upon, it should work ultimately towards the articulation of essential components of EfS and anticipate its implementation strategically.

Lang et al. (2006) anticipated that some Australian universities, towards the beginning of the United Nations Decade of Education for Sustainable Development (and laypeople can be queried as to whether they have heard such a thing was on), were on the verge of developing the policy superstructures that EfS would require to flourish on an institutional scale. Now, with that decade nearly elapsed, some respondents view the state of progress as treading water until senior management provides stronger support. The current research suggests cogent policy development has turned out harder than anticipated, not least due to other, competing demands, such as the advent of the Australian Qualifications Framework.

### 4.2 Student attitudes

At present, much of the involvement of students in EfS at Victorian universities has been on a self-selecting basis – many of those who have involved themselves are advocates of the concept in their own right. While a degree of student voluntarism is an important aspect of

participation, a first priority is to provide academics with the resources to conceptualise EfS with the contexts of their own disciplines. At present, some but not all institutions have made considerable progress; it is difficult to assess demand state- or nation-wide. Where student demand for 'green' subjects is widespread, it can be met in various ways:

*'Students across the university know that they have the opportunity to study environmental sustainability. So, that unit is promoted across the university as it is offered in second and third year; so there is quite a lot of interest in that unit. When we first piloted it, hundreds of students enrolled just out of interest. They didn't get any credit points for enrolling in it, didn't have to do any assessment. They had to do a presentation at the end but it just a sort of value-adding to their course and they got a certificate'* (Gumtree).

Overseas experiences of EfS suggest that a wide variety of students do benefit from it. A thorough UK report by Bone and Agombar (2011), *First-year attitudes towards, and skills in, sustainable development*, has covered further education (a category which essentially corresponds to VET in Australia) and higher education students. An issue with Australian resonance is that British university curriculum development lends itself to patchy coverage of EfS, due to its traditional reliance on academics' interest in covering that or similar concepts.

Bone and Agombar's research casts around for plausible ways of promoting EfS at tertiary level, but it must be said not all of them withstand close inspection. Bone and Agombar even the Melbourne Model (in which undergraduate education becomes more general, with specialisation at postgraduate level as in leading American universities). It may be, as is the way with cultural cringe, that this foreign endorsement has amplified an unusual level of support for the Melbourne Model amongst EfS advocates in other Victorian universities. This enthusiasm should be tempered by pointing out that Bone and Agombar's recommendation gets rather ahead of itself; it is clear that while the Melbourne Model has the potential to support the introduction of EfS, Melbourne has yet to make good on that potential.<sup>5</sup> Bone and Agombar suggest that 'components of the Melbourne Model' can be adopted for 'holistic delivery and unified understanding of ... skills' (p.6); the integrity of the Melbourne Model and similar approaches indeed lies in its holistic approach to higher education, which – ipso facto – does not vouch for the breaking off of components and their use in other contexts.

It may be that large-scale attitudinal research is of limited value before individual institutions conduct EfS programs that are aligned to their broader missions and strategies; once they do, considerable variation in how students understand and embrace the concept can be expected. To gauge student attitudes further somewhere down the track, it may be possible to glean information by arranging for the appending of items to the Graduate Destination Survey, the Australasian Survey of Student Engagement or various other instruments. Doing so at this stage would probably be a case of garbage in, garbage out; EfS has not yet reached a critical mass in Australian universities for its taking shape to be helpfully reflected in large general-purpose data sets, while smaller, targeted evaluations would distort the picture by disproportionately reflecting enthusiasts' perspectives. As a concept that is not as well understood throughout Victorian universities as Bone and Agombar report education for sustainable development is in the UK, building stronger understanding of EfS in Victorian universities might be a more pressing priority than asking students often leading questions about its importance.

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<sup>5</sup> The University of Melbourne's 'Melbourne Model' involves the overhaul of the typical Australian heritage of having added more and more undergraduate degrees over time in order to concentrate on only six broader undergraduate degrees followed by postgraduate specialisation.

### 4.3 Embedding for action

The term *greenwashing* arose in the 1980s – it evokes a combination of whitewashing (public relations cover ups) and brainwashing, in the context of the rising need to seem environmentally friendly. Greenwashing refers to sustainability-related activities carried out for conspicuousness's sake. In some ways EfS challenges universities as to how serious they are about sustainability. It is challenging to infuse into the teaching and learning of universities, and not the most obviously conspicuous or catchy way to advertise greenness, it does demand a sincere undertaking.

*Embedding* often comes up as an ideal for prospective curricular additions such as EfS; it suggests that other interests need not be displaced, while assuring advocates that the concept will remain front-of-mind. In reality the word 'embedding' in a policy document (and in some EfS-related policies it is now there) can cloud exactly where the buck stops on the matter. Strategy and policy makers should consider tailoring targets and guidelines to clarify expectations. It is important that exceptional examples of EfS are not tendered in lieu of ultimately more forceful curriculum reforms. Embedding requires considerable resourcing:

*'And there is great deal of support throughout the university teaching community to work further, to do more. At this stage, there hasn't been a great deal of opposition to the embedding of sustainability... As staff were are generally very enthusiastic about embedding sustainability into our courses and programs. Obviously, the lack of a dedicated person or the funding of positions to help to achieve this is definitely a barrier. I guess another one of the barriers has been, as far as the [sustainability-related centre] is concerned... we have at times been criticised for not doing so much in the higher education sector and that is truly a funding issue...'* (New).

### 4.4 Mainstreaming

An inherent tension that has emerged is between the expectations that EfS become a mainstream practice and that universities put aside their habitual competitive instincts in achieving this. There is a marked keenness among advocates for cooperative work within the higher education sector. There is a feeling that in this area the sometimes gratuitously competitive nature of institutional positioning might be unhelpful in getting EfS to a viable stage. Indeed, EfS is not firmly and broadly entrenched in any Victorian university, and institutions may have more to gain sharing with one another than in hoarding or developing EfS under wraps. It is important, however, to consider that there may come a time when EfS reaches that critical mass of importance where, as with any other area of institutional work, it takes a normalised place among other areas of institutional strategy. If anything, the long pause in developing central institutional policy to support EfS reflects the good work that advocates have done in developing practice; in most cases, senior management appears to be on the cusp of incorporating the concept into distinctive strategic plans.

Inter-institutional cooperation is valuable where achievable, and any headway for EfS that follows this sentiment is good for EfS proponents as long as university management can see strategic options arising from it. It is up to the various institutions to work on alliances and points of distinction as they see fit at any stage, but government agencies would do well to keep flexible in their supporting roles and not necessarily despair if an institution shifts from being a team-player to a more idiosyncratic approach – that has historically been a sign of vitality for the sector. In university policy contexts, entering a concept into the *institutional* mainstream is a bit like launching a toy boat in a river; once it is let go, its course is likely to be more determined by dominant currents than determining of them. Mainstreaming requires

advocates working with newcomers whose allegiances and passions may lie elsewhere – encouraging healthy relationships requires some insight into different levels of investedness.

EfS in Victorian universities has benefited greatly from the formation and activities of the Higher Education EfS Steering Committee, with support from Sustainability Victoria. Notably, Sustainability Victoria provides a meeting space at a central and neutral location; an important foundational gesture for an endeavour in which universities are gradually becoming more rivalrous. This group has been an important catalyst in driving the presence of EfS within universities. It can be anticipated that the Steering Committee's role can and will evolve as the centrality of EfS in universities is established.

In mainstreaming EfS it can be expected, like any significant and serious area of university enterprise, to take on institutionally differentiated characteristics; to become a brand of EfS under the university's overarching marque. This does not mean that the supra-institutional community of practice maintained by exponents of EfS will evaporate in universities that take EfS seriously into their folds, but it does mean that a chief indicator of how mainstream EfS is becoming will be the very variegation it experiences in different settings. EfS advocates should learn to live with this, and to embrace it if they are to deepen their influence.

#### **4.5 The enabling function of EfS**

EfS entrenchment depends greatly on the support of the academic community. While some academics have not yet been much exposed to EfS, others have enjoyed long involvement. A growing supply of newcomers and the establishment of cross-sector sustainability-related working groups can only suggest greater visibility for EfS in the coming years. In fact with some institutional backing it is not difficult to envisage Education and Environmental Science faculties moving fast towards adjusting their courses to EfS inclusion. Other faculties may also benefit from exploring it.

EfS offers a valuable opportunity for curricular innovation across faculties, provided it is perceived as a flexible tool for integrating knowledge and skills. At this stage, however, a mandatory EfS policy for all faculties may be unrealistic and counterproductive. If the goal is to make sure that EfS will be an important element of university-wide education in the future, incentives may be useful to develop a wide repertoire of tailored mechanisms for delivering EfS in different disciplinary contexts.

Although an approach that combines flexibility with non-coercive means may have important benefits, such foresight is unlikely to mean instantaneous delay progress. If a slow pace is dictated by the negotiation of wider academic ownership, this is not necessarily a negative outcome for an EfS policy. Any policy will require strong coordination and monitoring, and long-term institutional commitment to achieve EfS's fundamental objectives.

#### **4.6. The role of public agencies**

In support of EfS, cross-sector networks emerged gradually, with advocates and practitioners foreseeing the potential of collective action. The National Action Plan launched in 2009 by the Department of the Environment, Water, Heritage and the Arts can be observed as a decisive movement at the federal level to engage all levels of government in this conversation.

In recent times, some cross-sector activity has involved State government support. Victorian agencies can further assist in advancing EfS in universities in Victoria. They can facilitate the sharing of good practices and enhancing cooperation among universities and communities of

practice to maximise its impact while at the same time continuing to allow universities as a group, and universities as individual entities, to explore various EfS agendas in the process.

State agencies may also help to adjust the normative environment for higher education institutions in relation to EfS. By setting and aligning expectations for higher education in relation to EfS policy, Victorian public agencies can foster greater EfS awareness in universities' senior administrations, which has been identified by EfS advocates as a key challenge pending.

## 5 Convenient structures and early successes

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In many cases universities already have structures in place at the ground level to facilitate the development of EfS. Appropriate structures should lend themselves to robust forms of EfS on the ground. A few specific programs and initiatives already active in Victorian universities further illustrate how Victorian universities are eminently capable of making progress.

### 5.1 Convenient structures

It is possible to identify a number of different approaches existing or under construction in different universities from which EfS might be provided to large proportions of students. Three of these are general education-like formats, expert centres and VET cross-training. If EfS is to be disseminated in a way that maximises student exposure without causing undue disruption to delicate curricular balance, these structures would be obvious places to start.

#### *General education-like formats*

In the United States and other countries, undergraduate general education programs seek to provide generic skills and knowledge to whole student cohorts, and are a natural vehicle through which to insure the dissemination of a particular skill or knowledge content. In such a setting, EfS could be seen as another vaccine added to a combined inoculation. Australian universities have rarely pursued common general education conceits in the past, although reminiscent structures are emerging in various forms.

Of Victorian universities, La Trobe, Melbourne, Monash and Victoria University all appear to be developing structures that are more analogous to American general education than has been the case in recent decades. We would have to go back to the 1960s to find a similar level of concern for broad education for all students, when ‘humanities for scientists’ and ‘science for humanists’ enjoyed institutional sympathy in universities new and old. La Trobe’s reinvigoration of the undergraduate interdisciplinary tradition which the university originally embodied, the Melbourne Model’s ‘breadth’ elements and Monash’s ‘depth’ units and Victoria University’s commitment to mandatory learning in the workplace and community each lend themselves to the possibility of providing core experiences of EfS.

#### *Centres of expertise*

Another significant opportunity, and it is by no means mutually exclusive to general education-like structures, is through advocate centres of expertise prominent in different forms in most universities. Both centres carrying the ‘sustainability’ banner and older pioneering environmental studies programs have much to offer. A danger here is that education *about* sustainability and campus sustainability measures at present overshadow progress in EfS at all universities, and charging centres of sustainability expertise with coordinating or delivering EfS may perpetuate such a balance of emphasis. Ballarat, Deakin, Monash, RMIT and Swinburne all have notable capacities in these areas. At present these centres are not necessarily connected to wider curricular coordination, and might be.

#### *VET cross-training*

Another also often overlapping opportunity is through what might be termed VET cross-training; that is, using EfS structures and capacities being mandated for VET to supplement higher education students with EfS. Within multi-sector universities, intramural difficulties in

coordinating higher, vocational and further education capacities may make any suggestion to proceed along such a path seem blithe, but, equally, cross-institution initiatives that cast VET as a senior partner of sorts may have a certain attraction in the generation of sometimes elusive institutional cohesion and solidarity. This tack is a foreseeable option especially for multi-sector institutions, but even universities that do not offer VET might partner with multi-sector peers, stand-alone TAFEs or other training providers to achieve similar offerings – already universities are partnering with one another and with TAFEs in Melbourne’s east.

## **5.2 Early successes**

It is worth highlighting some examples of good practice in covering EfS, both in terms of curricular development and policy reconnaissance.

### *The semester approach*

One way to disseminate EfS is through a faculty- or department-wide ‘semester approach’, in which a program of awareness and educational events is laid out throughout a semester (or over a year), with the aim of facilitating participation from the entire range of students, academics and other staff. This approach combines existing and growing interest with a framing structure that is wholly cognisant of the semesterly rhythm of campus life.

The semester approach works in parallel to other educational activities, which in itself underlines the centrality that EfS is seen to hold for the broad area of study. A proviso for the applicability of a semester program would be the widespread acknowledgement of EfS’s centrality to the field(s) of study. For this reason, it cannot be assumed that the semester approach is likely to be successful institution-wide, but rather should be seen as an important vehicle for EfS within carbon-conscious disciplines.

### *Industry and service*

In many industries, a focus on improved sustainability is an aspiration. While EfS is concerned with education – core business of the university – it is possible that universities might help bridge the gap between programmatic education and a ‘corporate’ holistic consideration of practices, planning and awareness that goes beyond sometimes crudely imagined carbon footprint visualisations of environmental impact. In this way, EfS could be seen as a chance to up the ante in claims of embracing a sustainability ethos for private and public sector organisations. In emerging areas such as carbon accounting, there are clear synergies available for incorporating universities’ EfS approaches into practicum placements or project ‘consultancies’ with a range of businesses or indeed public sector agencies. Furthermore, cutting edge and forward-looking approaches to EfS may be key offerings to incorporate into service learning or other community service activities. A number of Victorian institutions have identified and begun to develop such partnerships.

### *Showcases*

Of potential both in terms of policy development and awareness-raising is the concept of the institution-wide or multi-institution showcase. Multi-campus institutions have already instigated such a concept (eg Victoria University operates an EfS ‘roadshow’), circulating and collecting examples of best practice and feedback throughout their institutions. This concept is an attractive one, in that it builds an ‘anthology’ of good examples and background, while not neglecting the comprehensive reach a sometimes prohibitively expensive sustainability audit process offers. It is clear that the idea of EfS is generally well received where it is understood,

but there are plenty of places within institutions where it is not yet well understood. The travelling best practice showcase appears to work well and may indeed be a candidate for rolling out beyond institutional borders – however, it is perhaps wisest to envisage some kind of multi-institutional summit or forum in order to work out possible areas of cooperation first. The effectiveness of any showcase depends heavily on the involvement and support of senior management, as would partnerships between institutions along such lines.

### *Campus as laboratory*

An American concept that is already being explored in Victorian universities is the campus as laboratory. Here, not only the physical campuses but also the complex organisational operation of universities is subjected to case studies incorporated within a particular discipline or an interdisciplinary approach. There are many examples of how this can be done, incorporating the built and natural environments into studies of history and culture. A caveat is that sometimes campus as laboratory operates less imaginatively along the lines of operational sustainability; students consider how university operations might be made greener, with the obvious implication that such experience can inform other contexts.

## 6 Ways forward

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Recommended approaches for government agencies supporting EfS in universities are:

1. Endorsing, promoting and developing the National Action Plan for EfS within universities, particularly the goal of including EfS in university courses;
2. Recognising and supporting the different ways universities are developing EfS, including funding incentives;
3. Promoting forums, showcases, and access to resources, benefiting from and informing institutional activities, including the sharing of good practices.

EfS in Victorian universities can be supported by outside organisations mindful of how higher education operates. Many of the trends that government and other organisations should recognise in university-based EfS could also be understood and acknowledged better by universities themselves.

### 6.1 National Action Plan

It is an explicit goal of the National Action Plan to embed EfS into all university courses. How universities choose to interpret such a goal, however, is left very much up to them. Whatever universities do, it is crucial that they monitor their progress with an eye to achieving, eventually, a worthwhile EfS component in every course of education.

University communities are starting to debate and tease EfS concepts apart; all universities have made statements about EfS, or implied its inclusion in their plans, but further details are gradually taking shape. Ways of engaging people within any particular setting must be thoughtfully devised. If professions of the undertaking of EfS were required of all Victoria's universities, they could undoubtedly be elicited. In the form of higher education graduate attributes, Australian universities have proved that all things can be claimed. It is possible that graduate attributes are the ideal vehicle, then, for EfS – every institutions could quietly sign on, assemble some evidence of their enforcement, and not bother anyone with them who does not want to be bothered by them. This obviously is not aligned with the practical project of EfS.

It is also implicit in EfS that students are genuinely engaged and do not see involvement as a hoop to jump through or a merit badge to collect. Australian education is not yet subject to the 'résumé guarding' that surrounds higher education in the United States, in which applicants, students and graduates seek to account for their time undertaking worthy activities of varying levels of formality and initiative. That we are not there yet is, of course, a good thing. Nonetheless, it may not hurt the cause of EfS to suggest that a field be reserved for it on academic transcripts, where those who choose may document their involvement and qualification in it.

Bona fide broadening of the supporter base of EfS in universities appears to rest on the ability of institutions to provide the resources (especially time allocations) necessary to allow greater proportions of academic staff to explore the possibility of incorporating EfS into their teaching and research. By empowering and resourcing academics, students are more likely to experience high quality EfS.

## **6.2 Recognition and support**

Within universities, recognition of EfS efforts varies – time and other resources are insufficient for meeting the spirit of the National Action Plan. It may be that some form of sector-wide hallmark be developed for recognising EfS efforts in each institution. It may be possible, particularly, for government agencies to engage senior university leaders in recognising ongoing efforts. Something requiring thorough evaluation processes might expect a mixed reception, and global sustainability movements are already available to sign up to, but a common protocol for recognising the often now informal structures and officers supporting EfS may lend them fortitude.

Securing funding for EfS is, rightly, partly a matter of internal contestation within universities, but government or private sector sponsors matching funds could also be an effective mechanism to build commitment. For their part, it is important that universities are informed by the groundwork done by government and non-government bodies. Sustainability Victoria's unobtrusive sponsoring of EfS development in universities across the State affords each the opportunity to align EfS within broader institutional priorities. Australasian Campuses towards Sustainability provides exposure for successful EfS activities nationally; many of its activities recognising good practice may serve as inspiration for the greater inclusion of EfS in the mainstream marketing of universities.

## **6.3 Forums and information**

Those involved in practising EfS, or in implementing EfS-related policy, would like more resources. The 'resource' needs of education have been troublesome for public education policies in Australia as elsewhere – building curricula is in many ways harder than building buildings. Assistance facilitating in sharing information and organisational arrangements is one way in which outside organisations such as government might universities.

At this point in time, when there is some evidence of innovative cooperation between universities, it would be good for government agencies to encourage this. On a practical level, government agencies could realistically assist in inter-institutional showcases, conferences or resource sharing – while remaining mindful that it is the nature of higher education dynamics that know-how in any really important area is only shared on a quid pro quo basis. Indeed, government agencies seeking to advance EfS in universities would do well to 'put their mouths where their money is' – that is, maintain a listening and watching brief on what institutions are doing and formulate potentially attractive incentivisation before offering advice. The prevalence of the inverse appears to have led to some cynicism in institutions; government agencies offer advice without giving any indication of whether they can back it with resources useful for university education. Such advice has little hope of achieving policy traction at the institutional level.

Similarly, it is important that engagement with EfS be built amongst university leaders and policy makers, academics, students.

## 7 Appendices

### 7.1 Range of practices

The responses of interviewees (including at ACU) and the evaluation of institutional documentation can be used to provide the following snapshot of the state of play in Victoria's universities ('EfS' refers here to EfS as it has been explored in this report, whether the term itself is used or not):

#### **Where EfS policy couched:**

Part of sustainability policy	Most
Part of teaching and learning policy	Some
Too early to tell where	Some

#### **Awareness of policy:**

Widespread	None
Middling	Some
Limited	Most
Even nominated interviewee unaware	Some

#### **Policy redress via:**

Sustainability committee	Most
Education committee	Some
Research committee	None
Appealing to senior management	Some

#### **Study area where EfS most prominent:**

Education	Most
Environmental science	Some
Carbon-conscious discipline	Some

#### **Documents treating EfS:**

Brochures	Most
Input-seeking circulars	Some
Policy, including graduate attributes	Some

#### **Senior officer:**

VC	Some
Dedicated sustainability DVC/PVC	Some
Provost/ Learning head	One
Champion	None
Unidentified	Some

#### **Source of EfS emanation:**

Education	Some
Environment	One
Carbon-conscious discipline	One
Dedicated centre	Some
Teaching and learning apparatus	One
VET component	Some

#### **Extent perceived as:**

Widespread	None
Middling	Some
Modest	Most

('Some' denotes 2 to 4 institutions, 'Most' denotes 5 to 8 institutions)

EfS has reached the point that it is informing policy formulation in Victorian universities, opportunistically at a time when institutions are reconfiguring their policies and curricula. How EfS will proceed is the hands of university communities. Coordinating policy, practice and promotion of EfS is a balancing act, involving action in the field and direction through policy, and expectations and ideas originating both beyond and within institutions. EfS is to be thought of as part of wider strategies, and institutions should consider of how it might be supported as something likely to grow culturally. A key sign of its mainstream acceptance is likely to be in variations redolent of institutional cultures.

For government, concepts reflecting higher education norms and expectations such as universal access that need not equate to mandatory requirements are worth paying particular respect. Forums to support the already existing camaraderie and hunger for shared experience would be a prudent vehicle for government agencies to assist universities in finding their own ways towards EfS. Novel approaches to recognising EfS efforts, including through funding arrangements, might prove appropriate avenues for government involvement.

## **7.2 University documents online**

The following online documents give some idea of the approaches to EfS at Victorian universities. Please note that policies are being developed at all of the universities (including at those for which we were unable to locate publicly accessible documents). Most universities will also provide informational and promotional materials on request.

### **La Trobe University**

- Responsible futures - Sustainability report 2010  
(<http://www.latrobe.edu.au/sustainability/report>).

### **Monash University**

- *A framework for embedding sustainability within education at Monash University*  
(<https://blogs.monash.edu/education-sustainability/>)

### **RMIT University**

- *Sustainability action plan*  
(<http://www.rmit.edu.au/thinkgreen/governance>)

### **Swinburne University of Technology**

- *Sustainability strategy*  
(<http://www.swinburne.edu.au/ncs/SustainableSwin/SustainableSwinburne.html>)

### **University of Melbourne**

- *What is EfS and how is the University responding to it?*  
- *EfS commitments and drivers*  
(<http://sustainablecampus.unimelb.edu.au/curriculum/educationForSustainability.html>)

### **Victoria University**

- *Victoria University principles for education for sustainability (EfS)*  
(<http://tls.vu.edu.au/portal/site/edsus/edsus.aspx> - embed)

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