Success Without Direct Results? Voluntary Environmental Governance Arrangements in the Australian Building Sector

**WORKING PAPER - MANUSCRIPT ACCEPTED FOR PUBLICATION IN
THE AUSTRALIAN JOURNAL OF POLITICAL SCIENCE**

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Abstract

Voluntary environmental governance arrangements (VEGAs) have focal attention in academic and policy debates. The current literature expresses high expectations, but empirical findings show that VEGAs are often unsuccessful in achieving significant levels of improved environmental performance by their participants. At the same time the literature reports an ongoing use of them. Based on a study of fifteen VEGAs in the Australian buildings sector this research paper aims to understand whether VEGAs may have positive effects, but without showing direct measurable results in terms of high(er) levels of environmental performance. Four subtle roles of VEGAs are uncovered: transformation of norms; providing business cases; filling in voids in governmental requirements; and, facilitating the implementation of governmental requirements.

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1 Introduction

Voluntary environmental governance arrangements (VEGAs) aim to address undesirable outcomes in society through collectively agreed rules, but without the force of law. VEGAs are a broad range of governance arrangements characterized by 'a move away from traditional state-led regimes; the involvement of public and private sector stakeholders in rule making and rule implementation; more collaborative policy processes; and, governance instruments that are less rigid, less prescriptive, less committed to uniform outcomes, foster experimentation, and are less hierarchical in nature' (Van der Heijden, 2012, 486-87). The debate on VEGAs has a long history and covers much ground (for recent reviews of the literature, see Potoski, 2011; Van der Heijden, 2012).

Two major issues stand out in the current literature. First, research reports an ongoing use of VEGAs, and on normative grounds speaks positively of their potential in terms effectiveness and efficiency (Hoffmann, 2011; Koehler, 2007). Following this literature, it may be concluded that, at least on the short term, VEGAs are a political reality and are likely to mushroom even further in different countries and sectors (however, see counterclaims in Toller, 2008). Second, empirical studies find that individual VEGAs achieve, at best, moderate success in improving the environmental performance of their participants (for reviews, see Darnall and Sides, 2008; Khanna and Brouhle, 2009; Lyon and Maxwell, 2007; Morgenstern and Pizer, 2007). Yet, these latter studies may be criticised for excluding interaction effects between VEGAs and environmental legislation (e.g. Trubek and Trubek, 2007), for excluding positive spill-over effects of VEGAs from participants to non-participants (e.g. Reid and Toffel, 2009), and for downplaying the value of VEGAs as policy experiments (e.g. Hoffmann, 2011). This is partly a consequence of the tendency in the literature to study individual VEGAs in isolation from the larger institutional settings they are embedded in (Van der Heijden, 2012).

In short, much remains to be done in terms of mapping the role of VEGAs in larger systems of environmental governance. This paper attempts to take up a small part of this huge challenge by examining the development and implementation of a

range of VEGAs in the Australian building sector (here defined as the construction and use of buildings). The paper begins by briefly discussing the backdrop against which these VEGAs have emerged – the requirements of environmental practice in the building sector set by Commonwealth, State and Territory, and local governments. It then introduces the various VEGAs studied and analyses their development and implementation. In line with earlier research, this paper finds that the VEGAs studied have individually achieved, at best, moderate results in terms of buildings built (or retrofitted) with high levels of environmental performance. Yet, in implementation they are found to have added to a changed norm towards environmental performance in the sector. Further, through these VEGAs, business cases are developed, which are of importance to convince laggards in the sector to make a move to higher levels of environmental performance. Finally, the VEGAs studied are considered important to fill in the voids left open by governmental requirements, and to facilitate the sector in meeting governmental requirements. The paper concludes with these main lessons learnt.

2 Environmental governance in the Australian building sector

The typical characteristics of the building sector make the environmental problems it faces severely complex: (i) the environmental harms of the sector spread out and relate to other sectors – such as transport and industry; (ii) buildings often have a long life span, which implies that their environmental impact lasts for decades – or are only considered problematic long after the building is erected; (iii) the sector is highly fragmented, with a wide range of professionals, suppliers, consumers, and financiers involved; (iv) the assumed causes of and solutions to the harms are an interplay of technology and behaviour; and (v) there are high economic interests at stake and strong lobby groups at play, which often makes it hard for policy makers to introduce costly requirements that aim to improve the environmental performance of the sector (here, this paper provides a snapshot of the problems; for good reviews on ‘greening’ the building sector, see Abaire, 2008; Hoffman and Henn, 2009). This is not to say that these problems cannot be addressed by traditional government intervention; indeed, various levels of Australian government have aimed to do so.

2.1 Commonwealth government

With the passing of the *Clean Energy Act* in 2012, the Australian Commonwealth government has sent a clear message regarding their ambitions in addressing climate change. The Act states the need for an overall 20% reduction of greenhouse gas emissions by 2050, compared to the levels in 2000 (Australian Parliament, 2011). One of the most relevant aspects of the Clean Energy Act is the pricing of carbon that is released into the atmosphere – popularly referred to as ‘carbon tax’. Various organizations within the Australian building sector (representing different trades, investors, and property owners) have welcomed this carbon tax, stating that the carbon tax may be a major incentive for the improvement of the environmental performance of the Australian building sector (Allen Consulting Group, 2011; ASBEC, 2008; CIE, 2011; GBCA, 2011). Yet, this carbon tax only works indirectly in the building sector. It does not mandate builders, building owners, or investors to achieve certain results in terms of high levels of environmental performance of buildings, or how to achieve such results. However, such requirements also exist.

From 2003 onwards, various energy efficiency requirements have been introduced in the Building Codes of Australia, aiming to reduce greenhouse gas emissions attributable to the operation of buildings; these requirements have increased in stringency over time (ABCB, 2010). Further, in 2009 a *National Partnership Agreement on Energy Efficiency* was signed by the State and the Commonwealth Government, which again introduced more stringent standards to the energy efficiency of buildings (COAG, 2009). Finally, since 2010, under the *Building Energy Disclosure Act 2010*, disclosure of the energy performance of commercial office spaces larger than 2,000m² is mandatory. It is expected that such information supply helps (future) tenants to compare commercial buildings when deciding to start or extend a lease.

2.2 State/Territory and local governments

State and Territory governments also aim to manage the environmental performance of the building sector within their jurisdictions. These governments can stipulate the environmental performance of (future) buildings on a particular site, the density of

development, or set limits to the spread of urban regions (Thompson, 2007). Further, the Commonwealth government has required all State and Territory governments to prepare overarching strategic plans for their capital cities to ensure a clear set of short-term, mid-term, and long-term objectives. This has resulted in a range of highly ambitious City plans that provide clarity to both (private sector) investors and the public on how public funds will be spent (COAG, 2012). These City plans test the boundaries in terms of reducing greenhouse gas emissions and the part the building sector plays in achieving this objective. They are of interest because they set significantly higher goals than the Commonwealth policies, aim to achieve these goals on shorter terms, and provide space for experimentation and innovation in doing so. For instance, the City of Sydney aims to reduce greenhouse gasses by 70% by 2030, based on 2006 levels (City of Sydney, 2011), and the City of Brisbane by 50% by 2026, based on 2006 levels (City of Brisbane, 2006). Another key characteristic of these plans is that they were developed in close collaboration with business and citizen participation. These deliberative city planning processes fit a larger tendency described in the city planning literature (e.g. Evans, Joas, Sundback, and Thobald, 2005).

2.3 Critical studies

Despite the above discussion, it is often considered that the Commonwealth government's involvement is too limited to truly address the real problems faced in the Australian building sector. From 2000 onwards, a series of studies has been undertaken to gain a better understanding of the key-issues in the sector that need attention in addressing environmental risks (for an overview, see Bond, 2011). Two conclusions recur (AGO, 2006; Johanson, 2011; Maller and Horne, 2011): (i) existing policies, legislative requirements, and regulations do not pay enough attention to potential improvements in the environmental performance of the residential sector, and (ii) they do not pay enough attention to the existing building stock.

Further, the initiatives on the regional and local levels also face severe critique (e.g. COAG, 2012; EDO, 2010; Thomas, 2010). These initiatives are predominantly critiqued because they are often not mandatory. Their success depends on political will and the transposition of the ambitious goals in regulation or other instruments. To date, there is little evidence available to suggest that these

initiatives have achieved any environmental improvement in general, and in the building sector in particular.

3 VEGAs in the Australian building sector: Unpacking the problem and filling in voids

Against the above backdrop, a range of VEGAs studies has emerged in the Australian building sector. These VEGAs aim to improve the environmental performance of new or existing buildings, but all have a different approach in doing so. To understand why these are implemented and how they perform, a series of VEGAs is studied in the Australian building sector.

3.1 Research design

The research presented largely builds on a stratified sample of fifteen VEGAs, which canvases the type and content of these arrangements in the Australian building sector. In order to understand the development process of the VEGAs, their particular form, and the role they play in environmental governance in this sector, a series of in-depth face-to-face interviews was carried out. Interviewees were identified using snowball sampling and selected for their in-depth understanding of one or more VEGAs. This sampling resulted in 53 interviewees from various backgrounds – i.e., policy makers, administrators, investors, developers, architects, engineers, and property owners. It should be noted that the interviewees were often aware of and involved in more than one arrangement. It is expected that this (partly) helps to overcome a sampling bias of arrangement administrators who are overly enthusiastic about their ‘own’ arrangement. Interestingly, many of these administrators were critical of the arrangements in which they were involved. Table 1 provides insight into the background of these interviewees.

**** TABLE 1 ABOUT HERE****

Interviews were based on a semi-structured questionnaire which provided a structure of checks and balances to assess the validity of findings (see appendix A).

Interviews were recorded and transcribed into a report that was sent back to interviewees for validation. The data were processed by means of a systematic

coding scheme based on a large review of the VEGA literature (Van der Heijden, 2012; see appendix B), and qualitative data analysis software was used for an analysis of the data – the program Atlas.ti. By using this approach, the data were systematically explored and insight was gained into the ‘repetitiveness’ and ‘rarity’ of experiences shared by the interviewees. Finally, a document study of existing information on these fifteen VEGAs and existing research on VEGAs was carried out to cross-check the validity of the data and findings (methodology based on Seale, Gobo, Gubrium, and Silverman, 2004).

The following provides a broad overview before focusing on the details: the disparate VEGAs address different aspects of the larger complex environmental problem that the building sector poses. They have unpacked this larger problem into smaller and more manageable problems, and specific problem owners have come together to solve these. Table 2 provides an overview of the VEGAs studied.

*** TABLE 2 ABOUT HERE ***

3.2 Addressing first-mover disadvantages

Traditional direct government involvement may be critiqued for only aiming to bring laggards up to the required standards (Gunningham and Sinclair, 2002). Leadership is needed to experiment with new approaches in addressing environmental problems, which may ultimately become the new norm or benchmark. *First-mover disadvantages* may, however, stand in the way of actors’ opportunity to show leadership. First-mover disadvantages relate to the financial, legislative, and cultural risks organizations face when bringing a new product or service to the market (Lieberman and Montgomery, 1988). That is, the new product or service may be considered too expensive by clients, it may conflict with existing legislation, or it may face resistance when it is considered ‘ahead of its time’, or ‘too fast for the market’ (Robinson and Min, 2002).

Three types of VEGAs in the Australian building sector address such first-mover disadvantages: best-performance grants, intensive regulatory support, and best-of class benchmarking.

Best- performance grants

Addressing first-mover disadvantages through subsidies is a well-known tool in environmental governance (e.g. Stewart, 2006); for instance, the provision of subsidies to households and firms for the instalment of solar panels. Yet, questions have arisen as to how successful traditional subsidies are in improving environmental performance, and sometimes it is even argued that subsidies may be harmful in doing so (Pearce, Porter, Steenblik, Pieters, and Potier, 2003). To address these problems and aim to make recipients of financial support to move beyond mere bottom-line compliance with the financial arrangements' rules (e.g., merely installing solar panels), a range of Australian governments have introduced best-performance grants. Best-performance grants challenge recipients to come up with innovative solutions to achieve high environmental performance of their (future) buildings. Competition among the grant-applicants is expected to raise the bar of these solutions.¹

Typically, these best-performance grants are initiated and administered by local or state governments. They are the result of a collaborative development process in which these governments work together with businesses and non-government organizations. A representative example is South Australia's Buildings Innovation Fund, where the state government collaborates with the Adelaide City Council, the Property Council (a building sector interest group), and the University of South Australia to develop grant criteria and assess applications. The strength of these grants, as explained by a grant administrator, is that the outcomes provide 'solid business cases that innovative solutions to reduce carbon emissions [in the building sector] can be cost-effective' (South Australian Department of the Environment and Natural Resources, 22/3/2012 #51).

Intensive regulatory support

Besides providing funds to limit or take away first-mover financial risks, governments may support first-movers by removing legislative barriers (Frynas, Mellhali, and Pigman, 2006). The building sector is notorious for legislative barriers that hamper improved environmental performance (cf. Bond, 2011); for instance, with current technologies it is possible to reclaim and reuse wastewater; however, sewage and

¹ Former and present grant administrators in Adelaide, 22/3/2012 #51; Brisbane, 31/1/2012 #27; Melbourne, 4/10/2011 #13.

drinking-water regulations often prevent this technology from being implemented (e.g. Power, 2010).

Through intensive regulatory support, the Queensland Government provides regulatory relief to applicants of development proposals that aim to be leaders in terms of environmental performance. The Queensland Government works collaboratively with the development industry, local governments, and referral agencies to identify the most sustainable development proposals in Queensland and helps these organizations to overcome regulatory barriers. Under this VEGA, development proposals that are identified as 'the most sustainable in Queensland' are fast-tracked in order to ensure that 'exemplary sustainable developments [are] delivered sooner throughout Queensland' (Queensland Government, 2011, 4). Or, in the words of a representative of a property and development interest group:

It was an acknowledgement that if they [the government] want to reach a certain state of outcomes, they need to make it easier for the people to go through the system (Urban Development Institute of Australia, 2/2/2012 #31).

Reducing or taking away legal barriers in building permitting may be considered a promising approach to support leaders in the industry (also, Decker, 2003). However, interviewees questioned the effectiveness of this approach in terms of achieving a large number of buildings constructed. That is, the majority of developers and constructors were said to consider building regulations as the lowest common denominator to meet, and not as something to voluntarily move beyond (also, Van der Heijden, 2009).

Best-of-class benchmarking

Again, another way of overcoming first-mover disadvantages is through information supply, and this is what best-of-class benchmarking aims to achieve. VEGAs fitting this type allow for the comparison of buildings against each other based on their environmental performance. These arrangements rate the environmental performance of buildings on a certain scale – e.g., the number of stars indicates a certain performance. Criteria against which buildings are assessed are set by the arrangement's administrator, and assessment is generally carried out by a third party

certifier. In order to meet a particular level of certification, a building must meet a number of criteria. The more criteria are met, the higher the level of certification. Generally the building owner or designer is left to choose a certain mix of criteria to meet and reach a particular level of certification (e.g. Cooper and Symes, 2009). Two voluntary benchmarking arrangements have emerged in Australia: *Green Star* and *EnviroDevelopment*.

Green Star was introduced in 2002 by the Australian Green Building Council (GBCA) – a public company limited - whose board members represent industries and governments. One of the drivers of its development was a report by the Australian Greenhouse Office (AGO, 1999), which identified the office market as an area where, in terms of greenhouse gas emission reductions, much gains were to be expected against limited costs. Different actors in the industry considered this as a possible profitable market, and aimed to develop a label that would distinguish their buildings as performing well above the Building Code of Australia (cf. Heyes and Maxwell, 2004). The VEGA is mostly applied in the commercial office market

EnviroDevelopment is developed and administrated by the Urban Development Institute of Australia (UDIA) – a not-for-profit industry body. When implementing *EnviroDevelopment* in 2009, it was aimed at the residential sector, which then was a niche market left aside by *Green Star*.² Over the years, however, *EnviroDevelopment* has broadened its scope and now addresses commercial buildings as well.

3.3 Addressing split incentives

Another particular problem in the building sector is *split incentives* (cf. Abaire, 2008; Hoffman and Henn, 2009). The costs of environmental underperformance (electricity, heating, water use, etc.) often come to building users, therefore developers and owners often do not see a need to improve the environmental performance of buildings as they do not bear the costs of underperformance. The VEGAs studied address these split incentives by financially supporting building owners in improving the environmental performance of their (future) buildings, and by supporting building users in achieving such improvements in the buildings they lease.

² EnviroDevelopment administrator, Brisbane, 2/2/2012 #30.

Tripartite financing

Property owners often cannot find the necessary financing to upgrade their buildings. Banks are risk averse in supplying mortgages as the cost of the upgrade is not (yet) represented in an increase in the building's market value (cf. Pivo, 2010).

To address this particular issue, the cities of Melbourne and Sydney have introduced VEGAs based on *tripartite financing*. In both cities, the particular arrangements are founded in their overall city planning strategy, as described above. The arrangements address the specific financing problem, but also provide a strong tool for governments to achieve results. As an administrator explained:

[T]he voluntary needs to come with a tangible benefit. If you step back a bit you find that governments need to find out what their value proposition is. Without the [tripartite financing] our value proposition was limited to promotion, networks and knowledge. The finance incentive has created a strong value proposition and something that many Melbourne building owners are interested in (Melbourne City Council, 17/1/2012 #26).

These VEGAs bring together local councils, a national bank, a major fund manager, the Australian Carbon Trust, and property owners in the cities' central business districts. The VEGA is a vehicle to allow the local councils to enter into agreements with building owners and finance providers as a way of funding works to improve the environmental performance of those buildings. Under these VEGAs, the finance provider lends funds to a building owner for environmental upgrades to its buildings, and this loan is repaid through a local council charge on the land – i.e., the local council charges a fee, which is then used to pay off the loan. The agreement states the future environmental performance that is to be achieved, and stipulates a time frame for achieving this result (NSW Government, 2010).

Information networks

Tenants are often unaware as to how to improve their environmental performance. *CitySwitch Green Office*, implemented throughout Australia, addresses this issue.

The VEGA aims to make tenants aware of the energy they use and how they can reduce this. It is administrated by local councils and state governments and serves as a platform for office tenants to learn about energy efficiency, share information, network, and showcase good practices. It further helps tenants to put pressure on their landlords to improve the environmental performance of their buildings.

In participating in the arrangement, office tenants come to agreements with councils on their future environmental performance, and the council then provides support to help them to meet these goals. Certain councils provide financial support; others facilitate meetings and ensure an ongoing supply and distribution of information.³ In return for signing off an agreement with a local council on future targets to be met, participants may use the promotional *CitySwitch Green Office* logo, and early awards have been introduced to recognize leading practice.⁴ The ability to showcase leadership is considered a strong driver for participation:

It is about leadership, it is about being seen to participate. ... The program helps leaders to feel good about what it is they are doing, and to have a place to speak about it (Sydney City Council, 15/2/2012 #41).

Elite networks

In achieving a high overall environmental performance of the building sector, it is important to move beyond the level of individual buildings. In particular, the interaction of infrastructure such as water and electricity supply, sewage and waste collection, and transport of people and goods to and from buildings has a significant impact on the environmental performance of buildings. When making investments in future infrastructure, cities may wish to know whether building owners and developers are willing to move to higher performing buildings, and if so, the necessary requirements for them to do so. Building owners may wish to be informed on the direction a city may take in its infrastructure investments and legislative framework before making investments to improve their buildings' environmental performance. That is, for property owners it is important to have certainty about a city's future policies as these will strong impact on the value of their building portfolio

³ *City Switch* administrators in Sydney 15/2/2012 #41; Adelaide 21/3/2012 #50; and Brisbane 3/2/2012 #35.

⁴ www.cityswitch.net.au

and future investment decisions.

For governments, the most direct way of engaging with businesses is by bringing them together to start a debate. This is what the *Better Buildings Partnership* aims to achieve. The underlying assumption of such collaborative approaches is that participants will be more willing to comply with an agreement made, as opposed to operating under a traditional top-down regulatory approach. This is because they have been involved in the design of the arrangement and as such are, or at least may feel responsible for, its outcomes (cf., Schot and Holder, 2006). This VEGA is an elite network of the City of Sydney, including 13 major commercial landlords representing approximately 60% of the office floor space across Sydney's central business district. The *Partnership* was started in 2011 following examples in London and Toronto.⁵ It recognizes that although commercial property owners have the ability to make major improvements to their individual buildings, they and the City of Sydney can achieve greater results if they collaborate. As an administrator of the *Partnership* explained:

[T]here is only so much they can do with their own portfolio and their own buildings. The next jump [can only be achieved] by actually working together (Sydney City Council, 16/2/2012 #42).

The *Partnership* builds on a Memorandum of Understanding, signed by the various parties, stating that the property owners commit to the City's vision (the earlier discussed Sydney City plan) and the city will support them in doing so. Being involved in the policy making process, public recognition and peer-pressure appear strong drivers for property owners to join and participate. A representative of one of the participating landlords highlighted the reason for their involvement:

The value for us is in being at the table with our competitors and peers. I'm not sure what other value actually comes from the initiative than just being a part of what everybody is a part of at the moment (Sydney based landlord, 17/02/2012 #44).

⁵ www.sydneybetterbuildings.com.au

3.4 Addressing residential buildings

A final particular problem addressed in the series of VEGAs studied is the difficulty of *improving the environmental performance of residential buildings*. Two specific issues stand in the way for doing so. First, existing property rights mean that many existing buildings, in particular residential buildings, do not have to meet new and more stringent environmental regulations (ABCB, 2011). Second, changing the environmental behaviour of households (as users of residential buildings) is hampered by their awareness of the environmental problems faced and their willingness and ability to change their behaviour (Berglund and Matti, 2006). This challenge is strengthened as the information available on both the environmental problems faced and the possibilities for change is highly complex (Hoffman and Henn, 2009). An obvious and oft chosen approach to increase the knowledge of households on environmental problems is information campaigns (Stewart, 2006). However, such campaigns are often found to have a limited effect (Henry and Gordon, 2003).

*Intensive behavioural interventions*⁶

In order to overcome the limitations of one-way information supply, a series of VEGAs aim to make households aware of their behaviour and environmental performance, and to provide them with tools for improvement. Generally, a consultant visits a household and audits the household's environmental performance (e.g., based on their energy and water bills). Following the audit, the consultant advises the household as to how it can improve its environmental performance *and* supplies the household with actual means to do so.⁷ A former administer of one of the VEGAs studied explained:

Basically it was advice over a cup of coffee. Measuring the flow rate out of the showerhead, changing the showerhead if necessary, or putting some compact fluorescent light bulbs in, or looking at the fridge seals. Very basic things. [...] And it may not be the thing that makes the big difference, but it is about engaging people in that. It is an initial

⁶ A term I borrowed from the field of psychology (e.g. Howlin, Magiati, and Charman, 2009).

⁷ Administrators in Melbourne, 03/10/2011 #11; Brisbane, 31/01/2012 #27; and, Adelaide, 22/03/2012 #51.

behaviour change. And if they in their own minds start to see themselves as energy consumers and conservers, that can lead to bigger and more successful changes (South Australian Department of the Environment and Natural Resources, 22/03/2012 #51).

4 Analysing the VEGAs: A story of limited success and mixed expectations

Fully in-line with earlier studies on VEGAs, individually the VEGAs studied have achieved limited success in terms of numbers of buildings built or retrofitted with high levels of environmental performance. To give some examples, in its ten years of existence roughly 500 projects have been certified under the *Green Star* arrangement, representing 18% of Australia's central business district office space (GBCA, 2012); since its initiation in 2009, roughly 40 projects have been certified under the *EnviroDevelopment* arrangement;⁸ roughly 350 tenants, representing about 400 office buildings, have entered into agreements with local councils under *CitySwitch*; less than 10 *Environmental Upgrade Agreements* have been signed in Sydney, and less than 50 buildings currently participate in the *1200 buildings* arrangements in Melbourne.⁹ Although some of the numbers are respectable at first glance, they nevertheless are bleak in contrast with the vast size of the Australian building sector. For instance, in the state of Victoria only about 45,000 residential buildings are built yearly and Australia currently holds about 4,500 office buildings.¹⁰ Interviewees were critical regarding the impact of the VEGAs in terms of numbers of buildings built or retrofitted (n=31, 58%). Nevertheless, they speak positively about the VEGAs' impact on the building sector.

4.1 Changing the norm

There is consensus amongst the interviewees that these VEGAs have achieved more than 'just' a number of buildings with a high level of environmental performance. A group of interviewees hold the opinion that VEGAs in the Australian

⁸ Note: a project may consist of more than one building.

⁹ VEGA administrators in Sydney, 15/2/2012 #39; Brisbane, 2/2/2012 #30; Sydney, 15/2/2012 #41; Sydney, 16/2/2012 #42; Melbourne, 17/1/2012 #26.

¹⁰ Data from www.hia.com.au, www.pulse.buildingcommission.com.au and www.propertyoz.com.au.

building sector have added to a changed norm of developing high performing buildings (n=30, 57%):

The strength of [VEGAs] like this is that it creates a culture and a sense of this [high environmental performance in the building sector] is the normal way to do it (Sydney City Council, 15/02/2012 #34).

You get to a tipping point where it becomes the norm. So we don't have to actually intervene into what will happen naturally. It is about chipping away, and it is about finding our niches - where can we value add or facilitate [through VEGAs] (Brisbane City Council, 31/1/2012 #27).

The cycle is very long, but the [commercial] projects that you see in the last two or three years... I would say it is almost the norm of any project that you see, that it has on its very first page of the brochure that it has these features [as stipulated under a VEGA] (Urban Development Institute of Australia, 2/2/2012 #31).

That being said, this changed norm was only perceived in the top-end of the commercial building sector where large property owners and developers see the advantage of attracting clients that are willing to pay for the extra costs of buildings with high levels of environmental performance. In other areas of the building sector, and especially in the residential sector, interviewee accounts report limited success as the owners of this property type do not see the economic value of high environmental performance of their buildings. As an interviewee explained:

However, I should note that we are talking about the top-end of town here [where VEGAs are taken up]; for instance, government, blue-chip companies, financial institutions, lawyers, and accounting firms. But there is another level where the consumer does not currently see the benefit of [sustainable buildings] and they don't want to pay for it. And even if they do see the benefit, they probably are not willing to pay a premium for it. This is the next major challenge (Lend Lease [major

developer], 17/2/2012 #47).

In relation to the above issue, interviewees stated the importance of VEGAs in providing business cases for the building sector, to 'push the envelope of what can be done' and to 'show the industry that innovation can be cost-effective' (South Australian Department of the Environment and Natural Resources, 22/03/2012 #51). Within the building sector, such business cases appear crucial in achieving a move towards higher levels of environmental performance. An interviewee noted the following:

It is pretty much critical mass. If you are doing a commercial building ... you take a commercial risk to not go Green Star [one of the VEGAs studied] rated at the moment. And this is because it is now a bit of a default. If it is not Green Star it is considered [lesser] from the day it is built. There it is. That market is hit ... but this does not relate to the residential market. It is not proven residents want to pay for it. It is not a clear business-case (Australian Green Development Forum, 1/2/2012 #29).

4.2 The limits of VEGAs

Whilst this group was positive about the role VEGAs have played in changing the norm in the Australian building sector, another group of interviewees was critical regarding what it is VEGAs may achieve. There was a shared perception among these interviewees that VEGAs are insufficient in addressing those areas in the building sector where a business case for higher levels of environmental performance is absent. Here, interviewees argued that government intervention through regulation may be needed (n=30, 57%):

The speed in which we react is out of sync with the problems we face. Although a lot of voluntary programs make sense, they are not fast enough in addressing problems. Regulation is needed. Yes, there is much change to be seen over the last ten years, but change has only occurred in the top-end of the construction market (Australian Green

Development Forum, 1/2/2012 #29).

Mandatory is the way to go. And that probably is a funny answer from somebody who runs a voluntary program. Well, there probably is room for both. But if we make the changes in the timeline we need to make them, then we've got to toughen up here (Sydney City Council, 15/2/2012 #41).

There was a recognition that ... that industry could only go so far ... We operate in an environment where the market drives a lot of things, but in certain areas there needs to be government intervention, or government regulation, or government participation in order to push or progress the agenda to the point where it needs to move to (Australian Sustainable Built Environment Council, 16/11/2011 #21).

That is not to say that interviewees hold that future regulation should replace VEGAs. Interviewees shared the opinion that direct governmental regulation may improve the uptake and success of VEGAs. Subsequently, on their turn, VEGAs may assist in meeting governmental requirements. For instance, the recently implemented 'carbon tax' (see section 2.1) was considered to be a driver for an increased uptake of the discussed VEGAs:

Obviously, being involved in [a VEGA] isn't mandatory but with carbon pricing, it's becoming more important for businesses to prioritize energy efficiency (Brisbane City Council, 2/2/2012 #30).

The thing that is starting now, and that will make a difference is the cost of energy ... People will start looking for ways to reduce costs and [this is where VEGAs come in]. Dollar difference is important to them (Mirvac [major developer] 17/2/2012 #45).

5 Conclusion

This brief research article studied the emergence and implementation of a range of

VEGAs in the Australian building sector. It was found that the individual VEGAs have achieved limited success in terms of buildings constructed or retrofitted with high levels of environmental performance. This underlines the critical literature on the limited effects of VEGAs (e.g. OECD, 2003). Does this imply that VEGAs should be abolished from the environmental governance toolkit? In short, certainly not. Taking into account the care that needs to be taken with the mostly qualitative and anecdotal data collected, it may be concluded that the VEGAs studied fulfil at least four valuable roles in environmental governance in the Australian building sector.

First, the VEGAs studied fulfil a *transformative role* in a perceived change of the norm of sustainable practice and behaviour in the Australian building sector. These VEGAs allow leaders to showcase their leading practice (and be recognized as such), and through collaborative development of VEGAs, various actors in an industry may become aware of the environmental issues faced. Yet, as the case highlights, such a change of norms should not be expected from the implementation of a single VEGA. In the case of the Australian building sector, the various VEGAs addressed different actors (i.e., property owners, tenants, households), different types of buildings (i.e., commercial, residential, new, existing), and different problems (i.e., financing environmental upgrades, regulatory barriers). It is in their variety that these VEGAs have a wide reach throughout the sector.

Second, the VEGAs help to timely *fill in voids* in formal legislative requirements. In the Australian building sector, severe shortfalls in the legislative requirements relate to a lack of attention to existing buildings and a lack of attention to residential buildings. Many of the VEGAs studied particularly aim to address these issues. As opposed to formal legislative requirements, VEGAs may face shorter development time, or are less costly to develop as they remain outside the realm of formal administrative processes and procedures (cf. Lyon and Maxwell, 2007). As one of the interviewees criticized, ‘the Building Codes of Australia [are] very slow when it comes to change and taking up environmental issues’ (Brisbane City Council, 31/01/2012 #27). It should be noted that this ‘advantage’ of VEGAs’ speedy implementation may result in severe accountability issues (Scott and Holder, 2006).

Third, the VEGAs studied play a strong role in generating *business cases*. Where traditional steering tools (i.e., direct regulation, subsidies) leave it to policy makers to set levels of environmental performance, the various VEGAs discussed often leave it to the participants to show improved levels of performance. In

particular, best-performance grants and intensive regulatory support appear to be tools that challenge participants to make significant advances in terms of innovation concerning cost-effective improvements of environmental performance.

Fourth and finally, the VEGAs studied were considered to fulfil a *facilitative role* in meeting governmental requirements. In the case of carbon pricing in particular, it is left to individuals and organizations to reduce their carbon emissions (or pay for emitting). VEGAs here may provide ‘evidence based’ approaches for doing so.

To conclude, VEGAs are often considered as an experimental form of governance (e.g. Hoffmann, 2011). Experiments are about trial and error. As such we may learn valuable lessons from VEGAs: some may prove successful, whilst others do not. This study once more showed that VEGAs do not provide a universal solution to eliminating environmental risks. Yet, as this study indicated, it is too black-and-white to state that without high levels of environmental performance VEGAs have no merit. By undertaking subtle roles, they may help to build the critical mass that will ultimately achieve the necessary change towards high levels of environmental performance in a sector. This implies that governments and non-governmental individuals and organizations need to think carefully when considering VEGAs as an alternative approach to govern environmental risks. As this article has made clear, governments may have much to gain when regulated actors collaborate with them to achieve far reaching goals in terms of environmental sustainability (i.e., the city plans drawn up by the major Australian cities). Thus, showing flexibility through collaboration with regulated actors makes sense for governments. However, it remains a question why regulated actors would collaborate with governments. As this article has made clear, it seems that in the cases studied such participation was mostly found when a VEGA clearly addresses the interest of its non-governmental participants. Thus, one of the major critical questions for further research to address is whether and how VEGAs can be successful if their non-governmental participants lack a clear interest. I will address this question in the research that follows from the study presented here, and I also challenge my colleagues to take up this question.

Appendix A – Interview questions and interviewees backgrounds

1. Why was [case X] developed and implemented?
 - a. Have any program alternatives been considered when the program was developed?
 - b. Have non-state stakeholders expressed what they are willing to change (as considered from the previous/existing governance setting)?
 - c. Have non-state stakeholders expressed what they are willing to accept to change (as considered from the previous/existing governance setting)?
 - d. Was [case X] developed in response to a sudden political problem? (i.e. a problem that received considerable public and media attention)
 - e. Should I understand [case x] (when it was originally developed) as a 'prototype' to be tested before rolling it out more broadly; or, as an experiment open to adaptation and change based on lessons learnt during implementation?
2. Who was involved in the development and implementation of [case X]?
 - a. Were/are any parties underrepresented in the development of the case?
 - b. Were/are any parties overrepresented in the development of the case?
 - c. How was consensus about the case achieved?
 - d. To what extent were/are parties satisfied with the case?
 - e. What role did/does the government play in the development and implementation of the case?
3. Why do [individuals/organizations] participate in the case?
 - a. Does [case x] result in financial gain to participants? (e.g. It gives them a market advantage)
 - b. Does [case x] provide regulatory/legal relief to participants? If so, is this a major reason for participation?
4. What are the outcomes of [case X]?
 - a. How many [individuals/organizations] participate in the case?
 - b. How many buildings were [built/retrofitted] under the case?
 - c. To what extent do non-participants know about the case?
5. To what extent may [case X] be considered a success/failure?
 - a. In terms of participants?
 - b. In terms of buildings [built/retrofitted]?
 - c. In terms of achieving actual carbon reductions?
 - d. In terms of cost-effectiveness?
 - e. In other terms?
6. What are the main characteristics of [case X] related to this success/failure?
 - a. Rules (clearness, adaptability, flexibility)?
 - b. Enforcement and monitoring?
 - c. Sanctioning (peer pressure, financial incentives, legal measures)?
 - d. Rewards (access to information, access to government, public recognition, financial gain)?
 - e. Other? (e.g. role of government?)
7. What are the main lessons learnt from developing and implementing [case X?]

- a. Have these lessons been used to adapt the case?
- b. Are these lessons shared by the other [participants/administrators]?

Appendix B – codes used for data analysis

The list below are the codes used for analyzing the data. The data was coded in three stages. First a rough coding was carried out (**bold** codes). Second an intermediate coding was carried out (underlined codes). And finally, a fine grained coding was carried out (codes *in italics*). Codes are derived from an extensive review of the literature (Van der Heijden, 2012).

Development process

Collaboration/participation
Consensus building
Deliberation/discussion/dialogue
Heterarchy
Devolved decision making
Context based
Ongoing learning and readjustment

Not effective
Too slow for change
Mandatory is needed
Efficient
Cost-effective
Not efficient

Arrangement structure

Flexibility
Transparency
Soft law mechanisms
Target and result orientation
Clear rules
Adaptable rules
Enforcement and monitoring
Self-monitoring
Administered monitoring
Third party monitoring
Government monitoring
Sanctioning
Warning
Financial penalty
Reputational penalty (shaming)
Rewards
Information
Interaction with government
Public recognition
Financial gain

Outcome

Effective
Improving environmental performance
Reducing CO2 emissions

Development motivations

Affirmative
Showcasing good practice
Cheaper than formal regulation
Cost savings
Green consumers
Green financing
Negative
Prevent future regulation
Hindering competitors
Societal pressure
Worker pressure
Industry characteristics
Innovative industry
Strong internal competition
Strong international focus
High organizational capability

Participation motivations

Affirmative
Altruism
Showcasing good practice
Cost savings (general)
Energy cost savings
Green consumers
Green financing
Regulatory relief
Negative
Peer-pressure

Societal-pressure
Reputational harm

Liability and legitimacy
Poor past performance

*** NOTE TO COPY EDITOR: PLEASE TRY TO FIT AS MANY CODES ON ONE PAGE – MAYBE A COLUMN STRUCTURE AS SUGGESTED HERE WORKS BEST***

Tables

Table 1 – Interviewees' background

Interviewee background	Government	Non-government
Policy maker	4	
Administrator	22	12
Architect, engineer, advisor		5
Contractor, developer		3
Property owner		4
Other		3
Total	26	27

Table 2 – the specific problems and problem owners the VEGAs studied address, and their approach

Specific problem	Problem owners	VEGAs (and reach)	Approach (and type)
<i>First-mover disadvantages (government driven)</i>	Developers, builders and owners of new and existing commercial buildings; and new and existing residential buildings	Buildings Innovation Fund (South Australia); Sustainable Development Grant (Brisbane); Smart Green Apartments (Sydney); Lord Mayor Grant (Brisbane); Zero Carbon Challenge (South Australia)	Financial incentives (Best-performance grants)
<i>First-mover disadvantages (specific regulatory barriers)</i>	Developers and future owners of new commercial and residential buildings	Green Door (Queensland)	Regulatory relief (Intensive regulatory support)
<i>First-mover disadvantages (market driven)</i>	Developers, builders and owners of new and existing commercial and residential buildings	EnviroDevelopment (Australia-wide); Green Star (Australia-wide)	Marketing performance (best-of-class benchmarking)
<i>Split incentives (property owners)</i>	Owners of existing commercial buildings	1200 Buildings (Melbourne); Environmental Upgrade Agreements (Sydney)	Financial intercession (Tripartite financing)
<i>Split incentives (tenants)</i>	Tenants of existing commercial buildings	CitySwitch Green Office (Australia-wide)	Information collection and sharing (Information networks)
<i>Split incentives (on precinct level)</i>	Major property owners	Better Building Partnership	Information sharing (Elite networks)

		(Sydney)	
<i>Residential buildings</i>	Households	Climate Smart Home Service (Brisbane); Energy Efficiency Program for Low Income Households (Adelaide); ResourceSmart (Melbourne)	Information sharing (Intensive behavioural interventions)

Acknowledgements

The research presented in this paper is funded through a VENI early career researchers grant by the Netherlands Organisation for Scientific Research (451-11-05). I am grateful to all participants in this research for their voluntary participation. I wish to stress that my assessment here is a critique to the oft normative arguing in the literature about VEGAs and not to the individual arrangements discussed. I wish to thank my colleagues at RegNet, and the anonymous reviewers of this journal for helpful comments to earlier drafts of this article.

References

- Abaire, J. (2008). Green Buildings. *The Urban Lawyer*, 40(3), 623-632.
- ABCB. (2010). *Energy Efficiency Provisions for BCA 2010: Volume Two*. Canberra: Australian Building Codes Board.
- ABCB. (2011). *BCA 2011*. Canberra: Australian Building Codes Board.
- AGO. (1999). *Australian Commercial Building Sector Greenhouse Gas Emissions 1990–2010*. Canberra: Australian Greenhouse Office.
- AGO. (2006). *Scoping Study to Investigate Measures for Improving the Environmental Sustainability of Building Materials*. Melbourne: RMIT.
- Allen Consulting Group. (2011). *The carbon price mechanism and the property sector*. Melbourne.
- ASBEC. (2008). *The second plank*. Sydney: Australian Sustainable Built Environment Council.
- Australian Parliament. (2011). *Clean Energy Act 2011*. Canberra: The Parliament of the Commonwealth of Australia.
- Berglund, C., & Matti, S. (2006). Citizen and consumer. *Environmental Politics*, 15(4), 550-571.
- Bond, S. (2011). Barriers and drivers to green buildings in Australia and New Zealand. *Journal of Property Investment & Finance*, 29(4/5), 494-509.
- CIE. (2011). *Effects of a carbon price on the building and construction industry*. Canberra: Centre for International Economics.
- City of Brisbane. (2006). *Our shared vision*. Brisbane: City of Brisbane.
- City of Sydney. (2011). *Sustainable Sydney 2030*. Sydney: City of Sydney.
- COAG. (2009). *Council of Australian Governments' Meeting, Communiqué*. Darling: Council of Australian Governments.
- COAG. (2012). *Review of capital city strategic planning systems*. Sydney: COAG Reform Council.
- Cooper, I., & Symes, M. (2009). *Sustainable Urban Development*. London: Routledge.
- Darnall, N., & Sides, S. (2008). Assessing the Performance of Voluntary Environmental Programs. *Policy Studies Journal*, 36(1), 95-117.
- Decker, C. (2003). Environmental Statutory Permitting. *Journal of Law and Economics*, 46(1), 103-129.
- EDO. (2010). *The State of Planning in NSW*. Sydney: Environmental Defender's Office NSW.
- Evans, B., Joas, M., Sundback, S., & Thobald, K. (2005). *Governing Sustainable Cities*. London: Earthscan.
- Frynas, J. G., Mellhali, K., & Pigman, G. A. (2006). First mover advantages in international business and firm-specific political resources. *Strategic Management Journal*, 27(4), 321-345.
- GBCA. (2011). *Putting a price on pollution*. Sydney: Green Building Council of Australia.
- GBCA. (2012). *Evolution. A year in green building*. Sydney: Green Building Council of Australia.
- Gunningham, N., & Sinclair, D. (2002). *Leaders and Laggards*. Sheffield: Greenleaf Publishing.
- Henry, G., & Gordon, C. (2003). Driving less for better air. *Journal of Policy Analysis and Management*, 22(1), 45-63.
- Heyes, A. G., & Maxwell, J. W. (2004). Private vs. Public Regulation. *Journal of Environmental Economics and Management*, 48(2), 978-996.

- Hoffman, A. J., & Henn, R. (2009). Overcoming the Social Barriers to Green Building. *Organization & Environment*, 32(4), 390-419.
- Hoffmann, M. (2011). *Climate Governance at the Crossroads*. Oxford: Oxford University Press.
- Howlin, P., Magiati, I., & Charman, T. (2009). Systematic Review of Early Intensive Behavioral Interventions for Children With Autism. *American Journal on Intellectual and Developmental Disabilities*, 114(1), 23-41.
- Johanson, S. (2011, 22 August 2011). Australian homes still the world's biggest. *The Sydney Morning Herald*.
- Khanna, M., & Brouhle, K. (2009). The effectiveness of voluntary environmental initiatives. In M. A. Delmas & O. R. Young (Eds.), *Governance for the Environment* (pp. 144-182). Cambridge: Cambridge University Press.
- Koehler, D. A. (2007). The Effectiveness of Voluntary Environmental Programs. *The Policy Studies Journal*, 35(4), 689-722.
- Lieberman, M., & Montgomery, D. (1988). First mover advantages. *Strategic Management Journal*, 9(1), 41-58.
- Lyon, T. P., & Maxwell, J. W. (2007). Environmental Public Voluntary Programs Reconsidered. *The Policy Studies Journal*, 35(4), 723-750.
- Maller, C., & Horne, R. (2011). Living Lightly. *Urban Policy and Research*, 29(1), 59-72.
- Morgenstern, R., & Pizer, W. (2007). *Reality Check*. DC: RFF Press.
- NSW Government. (2010). *Local Government Amendment (Environmental Upgrade Agreements) Act 2010 No 110*. Sydney: Government of New South Wales.
- OECD. (2003). *Voluntary Approaches for Environmental Policy*. Paris: OECD.
- Pearce, D., Porter, G., Steenblik, R., Pieters, J., & Potier, M. (2003). *Environmentally harmful subsidies*. Paris: OECD.
- Pivo, G. (2010). Owner-Tenant Engagement in Sustainable Property Investing. *The Journal of Sustainable Real Estate*, 2(1), 183-199.
- Potoski, M. (2011). Voluntary programs, compliance and the regulation dilemma. In D. Levi-Faur (Ed.), *Handbook on the Politics of Regulation* (pp. 84-95). Cheltenham: Edward Elgar.
- Power, K. (2010). *Recycled water use in Australia*. Canberra: National Water Commission.
- Queensland Government. (2011). *Green Door information paper*. Brisbane: Queensland Government.
- Reid, E. M., & Toffel, M. W. (2009). Responding to public and private politics. *Strategic Management Journal*, 30(11), 1157-1178.
- Robinson, W., & Min, S. (2002). Is the first to market the first to fail? *Journal of Marketing Research*, 39(1), 120-128.
- Scott, J., & Holder, J. (2006). *Law and New Governance in the EU and US*. Oxford: Hart Publishing.
- Seale, C., Gobo, G., Gubrium, J. F., & Silverman, D. (2004). *Qualitative Research Practice*. London: Sage.
- Stewart, R. (2006). Instrument Choice. In D. Bodansky, J. Brunnée & E. Hey (Eds.), *The Oxford Handbook of Environmental Law* (pp. 147-181). Oxford: Oxford University Press.
- Thomas, I. G. (2010). Environmental policy and local government in Australia. *Local Environment*, 15(2), 121-136.
- Thompson, S. (2007). *Planning Australia*. Cambridge: Cambridge University Press.
- Toller, A. E. (2008). Kooperation als Trend? *Zeitschrift für Vergleichende*

- Politikwissenschaft*, 2(2), 315-246.
- Trubek, D., & Trubek, L. G. (2007). New Governance & Legal Regulation. *Columbia Journal of European Law*, 13(3), 539-564.
- Van der Heijden, J. (2009). *Building regulatory enforcement regimes*. Amsterdam/Delft: IOS Press/Delft University Press
- Van der Heijden, J. (2012). Voluntary Environmental Governance Arrangements. *Environmental Politics*, 21(3), 486-509.