Climate Change and Employment Relations in Australia

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Introduction

Workplaces generally are one of the greatest sources of carbon emissions. Climate change and public policy measures to mitigate its impact are also likely to impact on productivity, employment relations, job quality and workforce development. Significant shifts can be expected in the composition of the labour market through the decline and expansion of certain jobs and industries, and changes in the skills mix of the workforce; indeed this is already occurring (European Commission, 2013). So, it seems reasonable to expect the labour market actors (employers, employees and their representatives) to have an interest in working together in this sphere.

However, the response at the organisational level to climate change and climate change policy remains an emerging area of research, particularly in the Australian context. While the growth potential of certain green jobs, skills and industries has been analysed (Goods, 2010; Rafferty and Yu, 2009; Stillwell and Primrose, 2010),, as have the lobbying efforts of organisations to shape climate policy (Martin and Rice, 2013; Nyberg, Spicer and Wright, 2013) and the political turmoil which has characterised the evolution of climate policy in Australia (Crowley, 2013), there is little hard evidence of how the potential impact of climate change and climate change policy is translating into practice at the workplace level.

In an Australian context, this paper investigates the interactions between climate policy, the workplace, and employment relations. This includes the role being played by employment relations actors, including not only individual organisations and their employees but unions and employer groups, in responding to the challenge of climate change; and the extent to which the policy environment is conducive to such responses. The paper first addresses Australia's climate policy context. Next, method is discussed. This is followed by a general discussion of the potential and actual responses of employment relations actors to climate change, including a review of the policy positions and actions of key Australian

organisations, informed and contextualised by additional literature. The role of collective bargaining is then assessed through an analysis of environmental clauses in enterprise agreements from 2009-2012. Following this, a survey is used to assess the climate activities of organisations at the workplace level, their motivations, and the role of workplace participation. The implications of these findings are then discussed in some final conclusions.

The Policy Context

Efforts to mitigate climate change are constrained by political considerations. Lipsig-Mummé's (2010: 24) observation that, in Canada, 'setting climate policy is a starkly political process' applies equally to many other parts of the world, including Australia. The former national Labor government and now the Liberal/National coalition government have both pledged to achieve a 5 per cent reduction of Australia's 2000 carbon emissions by 2020[1], and nominally adopted a renewable energy target of 20 per cent. However, disagreement between the major parties on how to achieve a reduction in carbon emissions has been a source of uncertainty over the direction of Australian climate policy since 2007. The former Labor government was elected in 2007 with an apparent mandate to act on climate change (Crowley, 2013), and consistent with recommendations from commissioned reports by economist Ross Garnaut (Garnaut, 2011), adopted carbon pricing as a policy strategy. In 2009, intense negotiations were undertaken on carbon pricing, not only with the then Opposition, but with business organisations such as the Business Council of Australia (BCA) and the Australian Industry Group (AiG). Generous industry assistance and a low fixed price of $10 per tonne, substantially less than the $20-$30 recommended by Garnaut, with a floating price to be implemented from 2012, were among the compromises made. This gained the support of these two major industry groups and was nominally agreed upon by the

[1] With up to 25 per cent in the event of an international agreement.

Liberal/National Coalition, whose support was sought in the senate to help pass the legislation. The Australian Greens, who felt that the provisions were too weak, opposed the legislation. However, the then Coalition leader Malcolm Turnbull's support for the scheme directly led to a successful leadership challenge by the more conservative Tony Abbott, and the Coalition's opposition to the Bill. It was then rejected in the Senate (Kelly, 2014).

After elections and winning leadership of a minority government in 2010, Labor then introduced a pricing mechanism with a fixed price from 2012 to 2015. The fixed price was set at $23 per tonne for the first year, rising to $24.50. The price was levied directly only on about 350 of Australia's largest carbon emitting organisations, responsible for roughly 60 per cent of Australia's emissions. Households would be compensated for price increases through the tax system, while some degree of industry support was also provided (O'Gorman and Jotzo, 2014). This policy gained the support of the Greens as well as the independents whose support was needed in the House of Representatives, and this came into in effect in July 2012. A move to an emissions trading scheme (ETS) with a floating price was planned for July 2015, though towards the end of Labor's time in minority government the reappointed Prime Minister Kevin Rudd indicated that he would seek to bring this forward by one year (AAP, 2013).

However, resistance to carbon pricing in the community intensified following effective mobilisation against government intervention from high emission industries and by the Liberal/National Coalition (Nyberg et al, 2013). The policy was characterised as contradicting comments made by then-Prime Minister Julia Gillard during her election campaign that ruled out a 'carbon tax', as the fixed-price mechanism was described (Crowley, 2013). There had been particular emphasis on alleged negative employment effects during the lead up to the 2013 election. Subsequently, the Liberal/National Coalition won the election of September 2013, having pledged to repeal the 'carbon tax' a major part of their

election campaign. It was repealed in July 2014 (Raupach, Baldwin and Smith, 2014). Additionally, a number of other climate-related research and funding initiatives have been targeted for closure under the new government. The 'carbon tax' has since been replaced by the Coalition's 'Direct Action' policy, based on a fixed pool of funds for incentives for business to reduce emissions. (Pannell, 2014).

Method

The methodology is threefold. Firstly, a review of the climate change policy positions of 25 important labour market institutions relating to work and employment, as well as relevant media coverage of these their policy positions, is undertaken. We focus particularly on employer associations and trade unions representing the sectors considered most likely to be affected by government policies to reduce carbon emissions. The analysis also incorporates comments from representatives of these actors and organisations that were interviewed for this project. These positions are further situated within a broader context of the relationship between climate change and work through a review of the literature.

The second dataset consists of 1280 enterprise bargaining agreements (EBAs) containing at least one 'environmental clause' registered by the Australian Fair Work Commission between January 2009 and December 2012. This dataset was obtained from the Workplace Agreements Database (WAD) maintained by the Department of Employment (DoE). As well as assessing the quantitative incidence patterns of agreements containing environmental clauses, the content of these clauses was analysed. A coding frame for the content of environmental clauses was developed from a representative sample of 50 enterprise

agreements, and this was used to code the environmental clauses of all agreements identified by DoE for the period 2009-2012.[2]

The data is generally separated into two periods: 2009-2010 and 2011-2012. The DoE changed how an 'environmental clause' is defined between the two periods, making comparisons across periods difficult, with the definition change producing a more inclusive sample for 2011-12. The cycle of enterprise bargaining periods and the lifespan of agreements must also be accounted for. Given that enterprise agreements can be registered for periods of up to four years, the total period of agreements analysed often covers little more than one bargaining cycle. Consequently, no reliable analysis of changes in patterns between the two sample periods is possible.

The final dataset derives from a survey of 682 Australian organisations employing 20 or more people, including 466 medium and large businesses and 216 government agencies. The business sample, obtained from Dun and Bradstreet, a business information company, was stratified and weighted for business size, sector and state using the *ABS Counts of Australian Businesses, June 2012* as a population reference in order to make it representative. Businesses employing 100 to 199 and 200+ people were over-sampled. Subsequently, some operationally similar sectors (e.g. manufacturing and utilities) were combined for analysis due to small samples.

The sample frame for the government sector was provided by A-ZGovBIZ, another business information company specialising in public sector organisations. Public schools and hospitals were excluded from the government sector sample because of operational difficulties associated with their identification and selection. Based on the A-ZGovBIZ list within each

[2] A total of 49 agreements were excluded from the analysis, because either a clause clearly relating to environmental sustainability could not be found in the agreement, or the agreement could not be sourced through the Fair Work Commission. These exclusions apply when discussing statistics in relation to the application of our coding framework, but do not apply when discussing the raw data on the incidence of clauses provided through the WAD.

government sector, representative quotas were set by geographic location. The final sample was post-weighted according to the list based on location and government sector. No weighting according to size was undertaken as no population reference exists for government agencies.

Where possible, the management representative most responsible for human resources was interviewed. Otherwise a senior or site manager was interviewed (e.g. CEO/ managing director/ director/ general manager/ store manager/ facility manager). In a small minority of instances, a business owner, senior finance officer or operations manager was interviewed. Respondents were questioned regarding:

- The nature and extent of carbon emission reduction practices among organisations;
- The motivations/triggers to reduce emissions, including the influence of employees and unions; and
- The ways, if any, employee participation programs operate with regard to reducing carbon emissions.

Literature and Policy Review

Stakeholder Attitudes and Responses to Policy

Trade unions tend to be more optimistic than employer associations of the business and employment impacts of climate change mitigation generally, and Labor's carbon pricing policies particularly. The Australian Council of Trade Unions (ACTU) and other unions have advocated extensively for climate change action, and policy in this area has a relatively substantial history dating from 1991. The ACTU was particularly forthright in supporting both the Rudd and Gillard Labor governments' policies for reducing carbon emissions, urging even stronger targets (Burgmann, 2013). Unions have been particularly positive regarding the labour market impacts of carbon pricing. In the wake of the global financial crisis in 2008, the ACTU released a joint statement under the banner of the Southern Cross

Climate Coalition (SCCC)[3] arguing that 'combining strong climate policy settings with focused economic stimulus can sustain the great opportunity for green jobs growth in Australia'. A widely distributed 2011 pamphlet, *Climate Change Is Union Business*, argued that 'job creation and action on climate change are closely connected' (ACTU, 2011a). In its climate change policy adopted in 2012, the Australian Council of Trade Unions (ACTU) states its endorsement for analysis that over 770,000 additional jobs could be created by 2030 across the economy, including in carbon intensive sectors such as Manufacturing and Mining, if 'strong action' is taken immediately to reduce carbon emissions. Such an outcome is contingent upon the implementation of 'a price on carbon pollution, a more active industry policy, additional funding for research and development, improved regulatory settings and increased public and private investment' (ACTU, 2012; 2011b).

Not all unions have taken entirely proactive or progressive positions on climate change. The Australian Workers Union (AWU) has been concerned that government policies designed to increase the cost of carbon emissions, without adequate protection or assistance policies, would impact adversely upon business and employment in emissions intensive manufacturing and resources industries (AWU, 2009; Goods, 2011: 60-61; Snell and Fairbrother, 2011: 87-88). However, later assessments of Labor's carbon pricing regime were more optimistic: according to an AWU policy officer the incentives for organisations to reduce energy and wastage created by carbon pricing and rising energy prices led to greater investment by many large manufacturing firms in energy efficient technology, and the assistance package provided an appropriate 'balance between protecting jobs and protecting the environment' (AWU Interview).

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[3] Other members of the SCCC include: the Australian Conservation Foundation, the Australian Council of Social Service, the Australian Green Infrastructure Council, The Climate Institute, the Australian Institute of Superannuation Trustees, and the Property Council of Australia.

The CFMEU is emblematic of tensions within the union movement over climate change. While CFMEU's Forestry Division has actively opposed climate change mitigation, its Mining and Energy Division has been a longstanding and strident supporter of public policies and business strategies to reduce carbon emissions (Goods, 2011). These concerns are symbolic of the 'considerable caution, if not resistance, in some sections of the union moment to embracing a comprehensive "green jobs" agenda' (Spies-Butcher and Stilwell, 2009: 120). More immediate concerns regarding preserving the employment of members may take precedence where there is perceived to be a tradeoff (Rathzell and Uzzell, 2011), and if the optimism of unions about the employment prospects of a transition wanes, so too might support for the transition.

Business groups have placed greater emphasis on the costs imposed by Labor's carbon pricing scheme, particularly during the fixed price period. The BCA (Westacott, 2013) has described Labor's carbon price as 'unconscionably high', while the AiG has criticised the 'unnecessarily high start price' of the carbon pricing scheme and 'insufficient upfront support for less emissions intensive businesses' (AiG, 2011). Business groups argued that Australia's fixed carbon price was unfairly high by world standards, particularly when compared with the prices prevalent in the European Union during its operation (Australian Trade and Industry Alliance (ATIA), 2011; BCA, 2012; Griffin, 2014; Pearson, 2014). According to the Master Builders' Association, the carbon pricing scheme would have a 'substantial, adverse impact' on the Building and Construction sector, especially smaller firms (MBA, 2011). The Minerals Council of Australia asserted the design of carbon pricing policy meant that Australian firms faced a higher penalty for generating emissions than their counterparts in other countries where carbon prices are lower or non-existent. As such, 'the carbon tax imposes costs on the minerals industry that none of Australia's resources competitors will face' and thus 'is

designed to slow the growth of Australia's economy and that means jobs and exports for future generations will be forgone', according to the MCA (MCA, 2012).

All of this is in spite of the apparent support of such groups for the original (2009) ETS. Nominally, many such groups even now support the notion that pricing carbon is a preferred policy option (Edis, 2014; Griffin, 2014). However, the kind of intensive lobbying levelled *against* the fixed price mechanism has failed to materialise *in favour* of an alternative carbon price.

Business groups have also promoted the notion that there would be widespread cost increases to households associated with the carbon tax, including price increases beyond immediate electricity bills (Griffin, 2014) (the latter, being compensated for as part of Labor's package). However, other comments by business groups appear to lament that costs would largely be absorbed by businesses (AiG, 2013a; ACCI Interview). Business groups have further claimed that the carbon price would create unemployment; and that the repeal of the 'carbon tax' was likely to protect jobs (Osborn et al., 2014). However, little evidence has been proffered linking job losses with the carbon price.

Not all employers have presented negative views about the former Gillard government's pricing scheme, however. For instance, Linfox, a major road transport company, was among several businesses which appeared in a video promoting the 'carbon tax' in August 2011. However, since Labor lost power the company has stated that it does not support any particular carbon policy (Ireland, 2013).

Climate Change Activities among Australian Organisations

As part of their efforts to encourage Australia's transition to a low-carbon economy, Commonwealth and State governments have played a proactive role in reforming work and business practices across the public sector. The Australian Government has incorporated

mandatory standards into its procurement practices relating to the environmental performance of ICT goods purchased by government departments and agencies. (Commonwealth of Australia, n.d. (a)). Similarly, the NSW Government's Sustainability Policy represents an attempt to 'lead by example' in reducing carbon emissions and other areas of sustainable practice, such as procurement, waste management and water and energy use. It contains specific targets to reduce carbon emissions in a range of areas. (NSW Government, n.d.).

There appears to be a reasonable amount of innovation at the enterprise level to reduce carbon emissions. For example, the Victorian Trucking Association (VTA) has established a 'sustainability covenant' with the Environmental Protection Authority (EPA) Victoria to encourage its members in the freight and logistics industry to improve their energy efficiency (VTA, n.d.). Linfox's strategy has been driven from the top level of management, because of strong commitment to the environment, as well as identifying these measures as an important part of competitive strategy. The Linfox program of adoption of sustainable management practices set a target of 50 per cent reduction in carbon emissions by 2015, based on a 2007 baseline; by the end of June 2013, 43 per cent had already been achieved. Linfox has adopted more energy efficient work and business practices, including the greater use of 'green energy', more efficient use of electricity, improvements to vehicle design and tyre technology, optimisation of supply chain practices and vehicle use, the adoption of an 'Eco Driving' training program to educate its drivers on more sustainable driving methods, and the creation of a 'green workplace culture' (Linfox, 2012; Linfox Interview). The 'Green Fox' strategy complements a commitment to safe driving practices, which dovetails with the Transport Workers Union's (TWU) Safe Rates strategy for improving pay and safety for truck drivers. Consequently, the TWU has cooperated strongly with Linfox, and the VTA and Road Transport Association in this area. (TWU Interview; TWU 2013; Rawling and Kaine, 2012).

Energy companies have also sought to use emissions reduction to improve competitive advantage. As part of AGL's commitment to improve carbon efficiency, it publishes the carbon impacts of its operations, investments and supply chain, and benchmarks its energy performance against competitors (AGL, n.d.). AGL also indicates the benefits that are being delivered by its development of low-emission and renewable sources of energy generation (AGL, n.d.). The use of more sustainable forms of energy at AGL has made it a more attractive organisation to work for and led to increased commitment among younger employees, according to one manager interviewed (AGL Interview). However, these kinds of strategies have not been widely cited among labour market actors.

Anticipation of policy may have been an important driver of emissions reduction. Data from electricity generation (O'Gorman and Jotzo, 2014) shows that emissions from energy usage peaked in 2008/2009, corresponding with the former Labor government moving towards a pricing mechanism through an ETS. Research from PwC (2009) and a 2009 study for the AiG broadly confirm that the then seemingly inevitable ETS was driving many businesses to address emissions (AiG/KMPG, 2009). A subsequent study by the AiG (2013b) found that 70 per cent of business had *not* reduced their emissions specifically in response to Gillard government's final version of the carbon price two years after its implementation. However, two of the key reasons given for this are instructive. One was that businesses had *already* reduced emissions due to *anticipated* carbon constraints and high energy prices; the other key reason was that businesses expected carbon constraints to relax in the future, as carbon prices fell (due to the move from the fixed price to an ETS) or were eliminated (due to the abolition of the carbon price if the Coalition government were elected) (AiG, 2013b).

Skills and training has been another focus of attempts to make work and business practices more energy efficient. The European Commission (2013) has contended that the skills effects from the transition to a low-carbon economy will be more significant than the impact on

careers and job security. Skills development programs have been a key feature of employer-initiated climate mitigation programs across much of Europe (SustainLabour, 2013). However, the extent to which Australian businesses have invested in this area is unclear. in its 2009 employer survey, the AiG found that 55 per cent of firms lacked adequate internal capabilities to respond to a carbon pricing scheme, and that 60 per cent of firms intended to improve staff capabilities to this end. Training and skills investment is one potential avenue to achieve this objective, although this is not specifically mentioned in the survey. Around 45 per cent of respondents said they would use external assistance to improve carbon management capabilities, which could possibly be used as an alternative (but also a complement) to increased staff training. The survey found that large firms were far more likely than medium and small firms to consider improving their staff capabilities (and also to seek external advice), but that these intentions did not vary significantly by sector (AiG/KPMG, 2009).

Training is an important part of the NSW Government's policy to support workers and businesses transition to a low-emissions economy. Its Industry Partnership Energy Efficiency Training Resources, aim to 'help managers and staff to make business operations, products and services more energy efficient and less carbon intensive'. (NSW Government, n.d.). Beyond its central role in delivering these training programs, TAFE NSW has developed a broad agenda to assisting firms improve their internal carbon management capabilities through its Green Skills initiative (TAFE NSW, n.d.). Industry associations have established similar programs aimed at encouraging their members to develop low-carbon business practices, however some organisations such as the Australian Chamber of Commerce and Industry (ACCI) are more sceptical about the growth of green skills, with one representative claiming that the roll-out of new equipment and technology associated with renewable energy

generally requires the use of existing skills rather than the development of new ones (ACCI Interview).

Employee voice and bargaining in the transition to a low-carbon economy

Employee participation is a generic term describing a diversity of practices (Markey and Townsend 2013; Wilkinson et al. 2010), but generally 'employee participation encompasses the range of mechanisms used to involve the workforce in decisions at all levels of the organization, whether undertaken directly with employees or indirectly through their representatives' (Wilkinson et al. 2010:11-12). We may broadly distinguish between direct and representative (or indirect) forms of participation. Direct participation may be individual or team-based, and focuses on the level of the task or immediate work environment, involving a degree of job autonomy or discretion, usually motivated by the organisational goal of improving efficiency. Examples include suggestion schemes, staff surveys, team meetings, informal or formal meetings with management, quality circles and autonomous work groups. Representative participation involves employees having a say or voice in decision-making through representatives in various structures including works councils, joint consultative committees (JCCs), health and safety committees, and trade unions particularly through the process of collective bargaining (Marchington 2005; Markey 2001; Heller et al. 1998). We may also broadly distinguish a *consultative* approach involving information sharing without decision-making, and a *substantive* approach involving more influence in decision-making.

Direct forms of participation are more likely to be consultative, and representative forms are more likely to be substantive because they commonly involve a degree of joint decision-making at a broader level than the immediate work environment. However, both direct and representative participation may be consultative or substantive in terms of the degree of influence. Particular direct forms such as teams, or representative forms such as JCCs are not

inherently consultative or substantive, but vary depending upon the particular implementation within an organisation (Kim et al. 2010).

Much of the case study research in the area of employee participation in environmental management has emphasised the role of direct but substantive participation, particularly teams with substantive problem-solving and decision-making powers. These often combine specialist environmental employees with other employees either on an ongoing basis or for specific environmental projects (Hanna et al. 2000; Kitazawa and Sarkis 2000; Remmen and Lorentzen 2002; Rothenberg 2003). For example, Linfox has created 16 'sustainability teams' across its organisational structure to monitor progress around the adoption of energy efficiency goals relating to supply chain management, green energy, vehicle usage and technology, among other issues (Linfox, 2012). Other forms of substantive direct participation, such as quality circles, have also been found to enable improved environmental management (Rothenberg 2003). These direct forms have also been complemented by more representative participation, including cooperative relationships with unions being cited among success factors (Remmen and Lorentzen, 2002; Rothenberg, 2003).

Representative mechanisms have also been a notable feature of public policy initiatives aimed at emissions reduction and climate change mitigation in Europe and elsewhere (Ozcure et al. 2011). This has included consultation arrangements and joint labour-management committees, which collaboratively develop workplace-oriented policies for carbon reduction. Expanding the functions of health and safety committees and building on an established record of workplace collaboration have been part of co-determination strategies used in Germany, Belgium, France and the chemical industry in Italy (European Commission, 2010; UNEP, 2008). In Germany a 2001 revision of the Works Constitution Act extended the remit of work councils to environmental issues (European Commission, 2010; Eurofound, 2011).

The training and promotion of 'environmental delegates' and employee participation have also been features of Argentina's approach to climate mitigation (UNEP, 2008). In the United Kingdom, a 'green workplaces' campaign by the Trades Union Congress (TUC) has resulted in organisations training 'green representatives' to conduct audits, identify energy savings, and represent workers on workplace environmental committees (Eurofound, 2011). The TUC (2014) estimates that almost 1,000 green representatives have been trained to date.

Collective bargaining is another representative form of employee participation (Budd et al. 2010) that may play a role in carbon emissions mitigation. Companies and unions in Germany have concluded agreements on environmental matters since the 1980s, encouraged by the 2001 revision of the Works Constitution Act and efforts to combat climate change at the national level (Olsen, 2010). Belgium's 'eco-vouchers' system, where vouchers for environmentally friendly products are used as a form of incentive-based pay, is implemented through collective bargaining agreements (Eurofound, 2011). Collective bargaining has also occurred over environmental matters among UK firms involved in the TUC's 'green workplaces' initiative (European Commission, 2010). Australia's peak union body, the ACTU, has contended that climate change, including specific targets for energy efficiency, should be the subject of collective bargaining at the enterprise level (ACTU, 2012).

Advancing energy efficient practices has been a key priority of the National Tertiary Education Union's (NTEU) enterprise bargaining agenda in recent years, and it has negotiated for the creation of sustainability committees in universities' enterprise agreements (NTEU, 2010). At a leadership level the NTEU drove this approach in enterprise bargaining in 2009-10 because the union identified universities as major carbon emitters (NTEU Interview). However, insertion of environmental commitments into enterprise agreements was often resisted by universities, who often considered that they were already acting in this area or that it was not important, and feeling in some NTEU branches was similar. University

resistance was particularly strong over the inclusion of enforceable clauses in agreements. Some universities, such as Deakin and RMIT, established particularly successful environmental committees, but in some instances these became less effective over time as they became composed of employees with designated roles rather than representatives (NTEU Interview). In the 2013-4 bargaining round in the sector the issue had much less significance.

Even in the relatively supportive environment of Europe the extent of collective bargaining over climate change remains limited (European Commission 2010). In Australia, additional challenges are posed not only by public policy uncertainty in the area of climate change, but also by an ambiguous legal status for environmental clauses in enterprise agreements. However, while provisions enforcing obligations on employers seem to be outside the legal remit of enterprise bargaining, issues clearly linked to efficiency, safety or provisions for consultation on the environment appear to be allowable in the Australian legal context (Lambropoulos 2009).

Environmental Clauses in Enterprise Bargaining Agreements

The incidence of collective bargaining over environmental issues was relatively low. For the 2009-2010 data, only 1.7 per cent of all agreements (n=322) covering 8.7 per cent of all employees covered by an agreement made in this period contained environmental clauses. For 2011-2012, 6.7 per cent of agreements (n=1007) covering 11.3 per cent of employees covered by an agreement made in this period contained an environmental clause.

However, there were significant sectoral variations. For 2009-10, 6 per cent of agreements in the education sector (n=27) contained at least one environmental clause, accounting for 31 per cent of all education sector employees covered by an agreement made in this period and 46 per cent of employees in all industry sectors under agreements for this period containing

an environmental clause. Most of these were in the university sub-sector. Due to the bargaining cycle issue identified above, however, this sector did not feature prominently in the 2011-12 data.

The public administration and safety sector featured prominently in both periods. For 2009-10, 27 per cent of employees covered by an agreement for this period had agreements with an environmental clause, representing 38 per cent of all employees covered by agreements containing an environmental clause for this period. For 2011-12, the 44 per cent of employees from agreements in this sector accounted for 65 per cent of all employees covered by agreements with environmental clauses made in this period. Most agreements were from federal government agencies.

Union involvement was strongly associated with the presence of environmental clauses. Overall, unions were party to agreements covering 98 per cent of employees in the sample. Agreements with environmental clauses also represented a greater proportion of all union agreements and employees covered than the proportions for non-union agreements.

The extent to which the presence of the clauses in enterprise agreements represents genuine employee participation and substantive bargaining on the issue of climate change mitigation and ecological sustainability is mixed. For the most part, little detail could be detected in environmental clauses. The majority of agreements contained clauses referring to the existence of environment-related policies or procedures, but these did little to expand upon what would be required of employees beyond compliance with unspecified policies and procedures. A significant minority of agreements appeared to place the entire onus of responsibility or commitment on employees, and could be as vague as the following clause contained in a construction industry agreement registered in 2010: ‘Employees are expected to carry out their job responsibilities in an environmentally responsible manner, and endeavour to minimize any adverse impact on the environment’.

However, there is also evidence that in some cases agreements may have been used as a means to facilitate other representative forms of participation in emissions reduction. Around 25 per cent of all agreements with environmental clauses provided for consultation over environmental issues, usually through a JCC. The vast majority of these included the union as a party. A small number of agreements (n=23) made provision for a dedicated environmental committee, group or representative. The tertiary education sector accounted for 67 per cent of all such agreements for the 2009-210 period. Some were specified as consultative committees, but other mechanisms, with names such as 'Greening Task Force' or 'Emissions Reductions Working Group', were less clear in terms of their powers. Compared to other sectors, the public administration (especially federal government agencies) and tertiary education sectors had particularly high rates of agreements with consultation provisions on environmental matters. These agreements provided for a substantial and ongoing role for employee participation in improving organisational sustainability.

Agreements from these two sectors also tended to specify desired activities related to waste reduction, energy efficiency, recycling, and even research and development activities, and were more likely to include management commitment to energy efficient capital investment (such as buildings). Agreements in utilities (mainly electricity) and manufacturing also frequently included specific behaviours, in some cases with quite detailed policies. However, very few agreements overall used language which clearly indicated climate change mitigation as a matter for consideration (e.g. mentioning climate change, greenhouse gases or carbon), with public administration and universities again featuring disproportionately among those that did. Universities and public administration and safety together accounted for 41 of the 67 agreements that contained clauses explicitly covering such issues, while not a single agreement in the carbon-intensive electricity sector used language specifically related to climate change mitigation.

Survey of Australian Large and Medium Sized Organizations

Emissions Reduction Activities

The survey used for this study measured carbon emission reduction practices among organisations, along with related issues such as motivations for reducing emissions and the impact on organisations. Although this may appear straightforward, it is complicated by the fact that some organisations undertake *behaviours* which reduce carbon emissions, but they do not *think* of these behaviours as taking steps to 'reduce carbon emissions' *per se*.

Consequently practices were measured in a two step process:

Step 1: Respondents were asked if, in recent years, their organisation had done anything to help reduce, or offset its carbon emissions – and if so, which of a list of things they had undertaken. These included reducing energy consumption, reducing waste material, increasing recycling, along with several other possible actions.

Step 2: A follow up question was asked to determine if organisations had undertaken steps to reduce energy consumption, reduce waste material or increase recycling for reasons *not* connected with reducing carbon emissions *per se*. This was asked of:

- those who reported *not* having taken steps to reduce emissions; and,
- those who *had*, but did not report energy, waste or recycling behaviours as part of their emission reduction practices.

Figure 1 shows that 63 per cent of organisations say that, in recent years, they have taken steps to reduce or offset carbon emissions. However almost all (94 per cent) have undertaken a *behaviour* that reduces emissions, even if the organisation does not think of it in terms of reducing emissions *per se*. For example, 53 per cent have reduced energy consumption explicitly for emissions reduction, but a further 24 per cent have reduced energy consumption for other reasons.

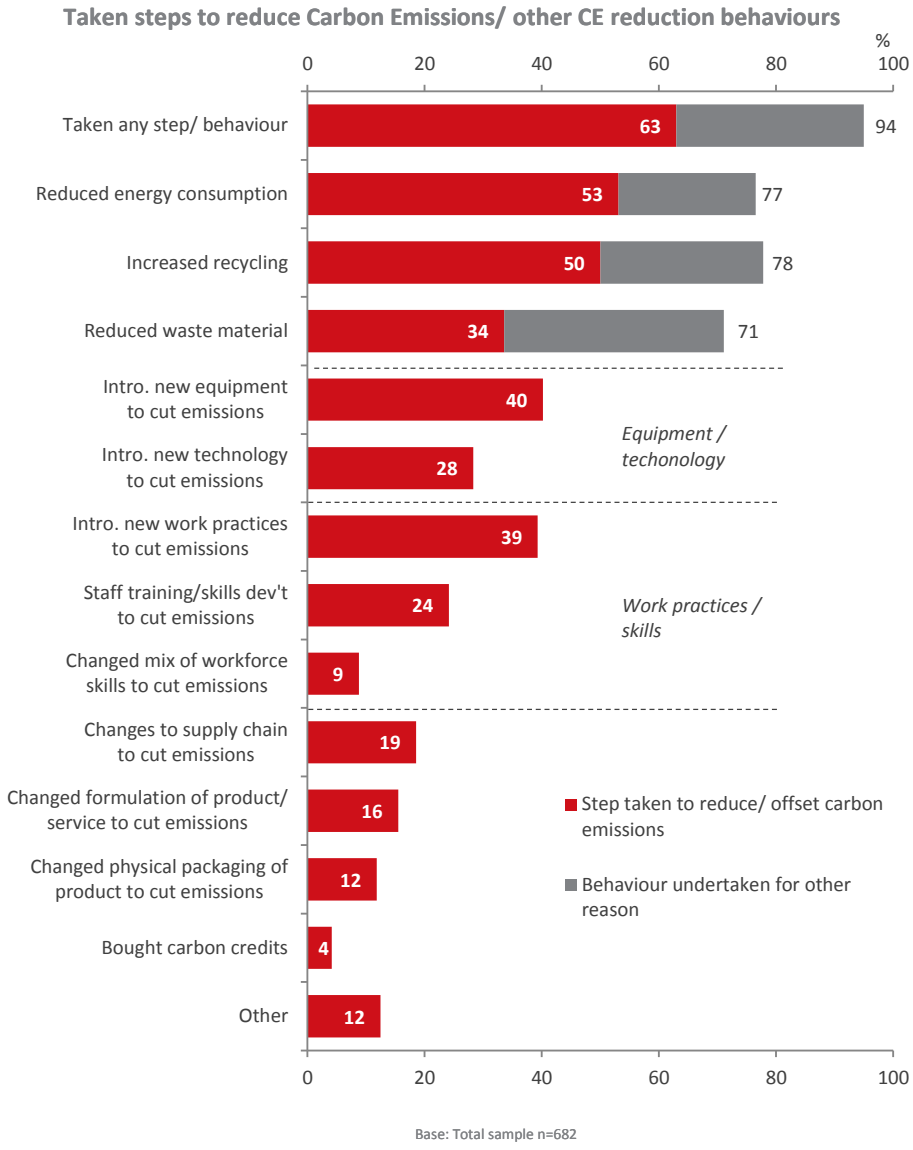
Along with prevalent behaviours connected with energy consumption, recycling and waste reduction, Figure 1. reveals that:

- 40 per cent, claim to have introduced new equipment to cut emissions, and 28 per cent say they have introduced new technology.
- Changed work practices are claimed by 39 per cent, and related to this 24 per cent report undertaking staff training/ skills development to reduce emissions, with 9 per cent changing the mix of skills in their workforce.
- Changes to product/ service formulation to cut emissions is reported by 16 per cent, with 12 per cent saying they have changed the physical packaging of a product.
- About one-in-five say they have made a change to their supply chain, and 4 per cent have bought carbon credits to offset emissions.
- The education/training sector stands out for being by far the most proactive in implementing measures to mitigate carbon emissions, with a 92 per cent rate of having deliberately engaged in emissions reduction. The next highest is much lower, at 77 per cent, in the business services sector, followed by the government sector at 73 per cent, manufacturing/utilities at 71 per cent, and the primary sector at 70 per cent.

Survey respondents were also asked about the impacts of their mitigation *activities* at the workplace level. In general, undertaking climate change mitigation activities appears to have had minimal impact on operations and employment. Roughly 66 per cent of organisations that had reduced emissions stated that there had been very little impact on operations, while 31 per cent indicated a moderate impact: only 3 per cent of emissions reducing businesses cited this as having a major impact. The impact on employment appears to have been similarly mild: 92 per cent of businesses that had expressly reduced carbon emissions had seen no effect on employee numbers, and a further 3 per cent actually stated that they had increased their employee numbers. Only 4 per cent of organisations stated that they had

reduced employee numbers as a result of their emissions reduction activities. These findings may indicate that the challenges of emissions reduction in and of itself, at least at the level of the individual workplace, may be less dire than some have indicated.

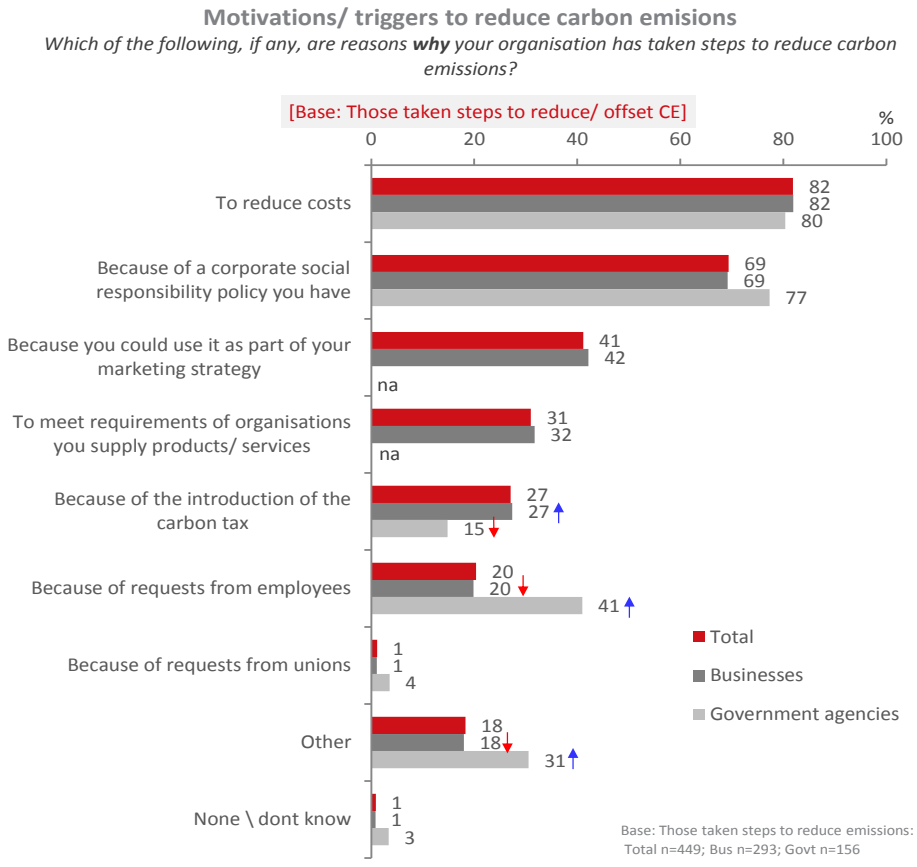
Figure 1. Carbon emissions reduction activities, by activity and whether explicitly linked to carbon emissions reduction



Motivations/ triggers to reduce emissions

Figure 2 summarises motivations for reducing carbon emissions for all organisations. **Reducing costs** is the most common reason for organisations to reduce emissions, cited by 82 per cent of businesses and 80 per cent of government agencies that explicitly reduced emissions. Interestingly, however only 40 per cent of businesses in the Transport, Postal and Warehousing sector that had reduced carbon emissions cited cost reduction as a key motivation.

Figure 2. Motivations/triggers to reduce carbon emissions



However, only 27 per cent of emissions reducing organisations (15 per cent of the total sample) cited Australia's *carbon price* ('tax') as a driver for reducing carbon emissions; though this was as high as 45 per cent of businesses in the crucial high-carbon Primary

sector. It is unclear whether this low rate reflects a reluctance to attribute changes to a policy unpopular among many businesses.

Organisations were also asked about *when* they reduced emissions, and the vast majority (78 per cent) indicated that they had taken steps within the last five years, since 2008, with one-in-five starting some time before that. That year was effectively the first year of the Rudd Labor government, and in 2009 the eventuality of a carbon price mechanism seemed relatively certain. This corresponds with the aforementioned data demonstrating this anticipatory affect.

A large majority of 69 per cent of organisations that reduced emissions (around 43 per cent of the sample) claim that they have because of a corporate social responsibility (CSR) policy. Interestingly, however, only 18 per cent of emissions reducers claim to have a formal written policy to reduce carbon emissions, and only 7 per cent cited ethical or environmental responsibility as a motivation. This may call into question whether 'corporate social responsibility' in this context constitutes sincere engagement with environmental concerns. Interestingly, 20 per cent of respondents reported that requests from employees influenced their organisation to take steps to reduce emissions. This reason was particularly prevalent in the Education and Training sector, where 46 per cent of businesses cited this as a reason. Only 1 per cent of businesses report requests from unions as being a contributing factor.[4] However, this figure was much higher in the Education and Training sector, with 19 per cent of these businesses reporting requests from unions as a driving factor.

[4] 4 per cent among organisations with staff who are members of a union. There is no significant difference between organisations with or without union members reporting requests from employees as an influence.

Employee Participation

Figure 3 indicates a significant degree of employee voice among organisations that have taken steps to reduce emissions. The greatest incidence of employee voice is, however, related to direct forms of participation, i.e., job or task related, rather than representative forms that are more likely to address strategic or even tactical issues across the wider organisation. Hence, **employee team meetings** are the most prevalent way staff can have a say about emission reduction practices, 84 per cent.

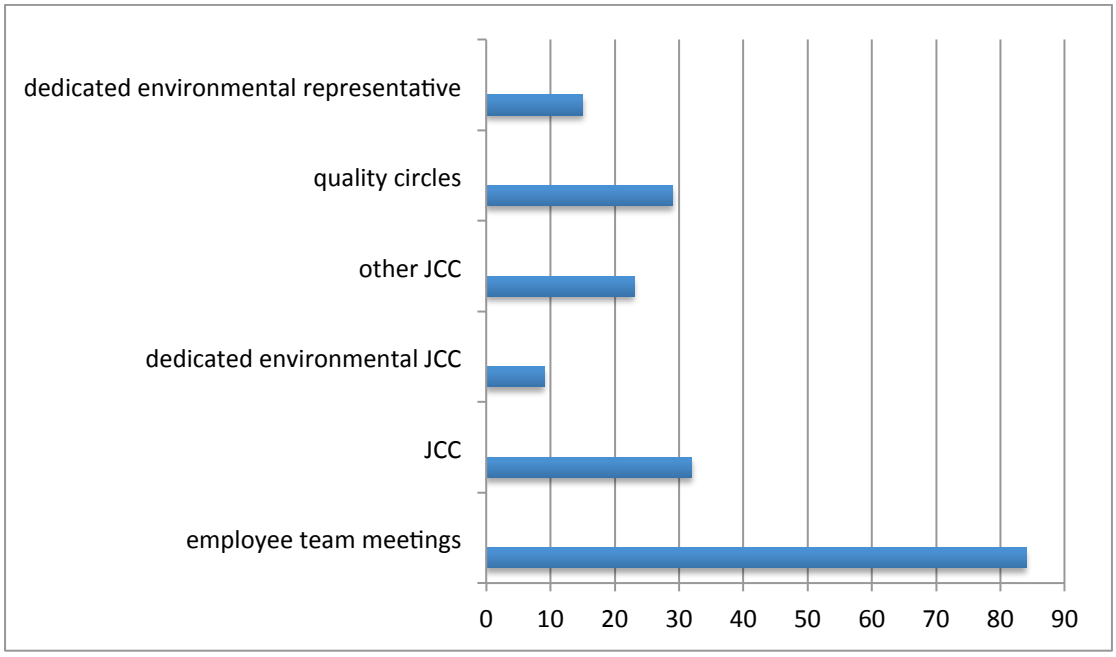
Quality Circles are another potential direct form of employee voice among 29 per cent of all organisations. Businesses in Education and Training (50 per cent), Manufacturing and utilities (48 per cent) and Wholesale Trade (45 per cent) were among businesses most likely to use Quality Circles.

About 30 per cent of organisations report staff can have a say through a **Joint Consultative Committee** (JCC). Engagement through a JCC on carbon emissions was particularly prevalent in Wholesale Trade (79 per cent) and Education and Training (66 per cent). Overall, JCCs were much higher in government agencies (63 per cent) than businesses (32 per cent).

The kinds of dedicated mechanisms discussed in the literature were much less common among organisations using employee participation mechanisms relating to carbon reduction measures. For example, JCCs dedicated to environmental issues were present in only 9 per of emissions reducing organisations, and 15 per cent report their staff have a dedicated **green/ sustainability employee representative**. Education and Training was a particularly high outlier in regard to dedicated JCCs (29 per cent) and environmental representatives (53 per cent).

Figure 3. Methods of employee participation: ways employees can have a say about carbon emission practices

(base those taken steps to reduce carbon emissions, n=449)



Conclusions

Australian unions and employer groups have expressed nominal support for action on climate change, and even for carbon pricing as the form of such action. However, this support has often been heavily moderated by concern for the more traditional goals of such organisations: the pay, conditions and employment opportunities of workers for unions; and the costs, competitiveness and profits of businesses for employer groups. Unions generally seem to present a more positive perspective on the potential and actual effects of carbon pricing than do employers and employer groups. This has, in part, been motivated by an optimistic assessment of the employment effects of carbon pricing. Employers, meanwhile, though often expressing nominal support for climate action and carbon pricing, have in practice lobbied heavily against the former Labor government's carbon price and been pessimistic about the economic impacts of pricing carbon in the absence of an international agreement. These

divisions may also have been moderated by more persistent political affiliations which go beyond the specific issue of climate change.

This study indicates a significant degree of engagement with carbon emissions reduction practices at a range of workplaces. Most of the medium to large workplaces surveyed have engaged in some form of climate mitigation activity, either intentionally or unintentionally. The extent of carbon emissions reduction practices, and to what extent these practices have been successful in measurably reducing carbon emissions, is less clear. Some exceptional organisations and industries have taken extensive steps to reduce emissions, and a number have made investments in equipment and skills in this area; but this does not represent a majority. Given the importance of skills in the transition, the fact that a minority of organisations are investing in skills is of some concern. The low impact of emissions reduction practices on operations can be seen either as a sign that the challenge of emissions reduction may not be as dire as some have predicted, but it may also reflect the fact that organisations still have a long way to go in exploiting opportunities for emissions reduction.

The survey data is, at a glance, somewhat ambiguous on the role being played by policy. Only 27 per cent of emissions reducing organisations were motivated by the *carbon tax.* However, the fact that reducing energy costs was by far the most important motivator should support the notion that a price mechanism can be a key driver of efforts to reduce emissions. Prices on carbon do not need to create awareness about emissions to have an effect: they are designed to create a price signal by increasing the unit costs of carbon emitting activities. Thirty-one per cent of survey respondents did not respond that they had taken steps to reduce emissions, but upon subsequent questioning were shown to have undertaken behaviours which would, in effect, contribute to emissions reduction: carbon pricing is likely to influence these businesses to reduce emissions even though they may not be aware that they are reducing emissions. Another factor is that businesses, anticipating regulatory action, likely

began efforts to reduce emissions before the details of the carbon price mechanism were confirmed: the post-2008 start date supports previous studies showing that businesses began to reduce emissions in anticipation of what then seemed the inevitability of a carbon price. With the carbon price removed, further research will be needed into changes in behaviour in the absence of a carbon price.

Employee participation represents a potentially important mechanism for labour market actors to identify opportunities for carbon emissions reduction at the workplace. Our survey showed that a majority of Australian organisations surveyed report some mechanism for employee participation in carbon emissions reduction. This is predominantly through team meetings and other direct forms of participation at the task or job level. Much of this direct participation would be consultative rather than substantive, however, 20 per cent of organisations were motivated by employee requests to reduce carbon emissions; this suggests substantive participation in some instances and the need to examine this further in case studies.

Only a minority of businesses provide opportunities for representative participation through joint consultative committees and the like at a more strategic or organisation-wide level. Moreover, a much smaller proportion of businesses are engaging in collective bargaining over climate change. However, there are notable exceptions. Government agencies and businesses in the Education and Training sector feature higher rates of employee participation, direct and representative, and including collective bargaining, as well as more substantial collective bargaining clauses than found in other sectors. The company Linfox is also exceptional in creating dedicated ‘sustainability teams’ and also being among those with climate-related clauses in their EBAs. Not coincidentally, these organisations were among the most likely to engage in a range of emissions-reducing behaviours, and the achievements of companies like Linfox in particular in this area are extraordinary. The fact that these practices

are not more widespread points to a potential lost opportunity for public policy initiatives to better facilitate workplace carbon reduction through employee participation.

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