

Chapter 1

Towards an understanding of Green Human Resource Management

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Recently, some scholars argue that protecting the natural world and its resources for the next generation(s) has emerged as an urgent priority, for society, policy-makers and managers (Pinzone, Guerci, Lettieri and Redman, 2016, p. 201). Green Human Resource Management (GHRM), defined as “HRM activities which enhance positive environmental outcomes” (Kramar, 2014, p. 1075 in Shen, Dumont and Deng, 2016, p. 2), is developing as one way to help tackle this ecological priority (Jackson et al., 2011). As such, the purposes of Green HRM workplace-based practices (Renwick et al., 2013) and organizational staff enacting Voluntary Workplace Green Behaviours (VWGBs) (Kim et al., 2017), are to help organisations reduce factory and office emissions and increase recycling, so organizations can help mitigate the effects of global climate change through reduced workplace-driven pollution and waste, and better energy use (Saifulina and Carballo-Penela, 2016, p. 3). In terms of take-up, one Society of Human Resource Management (2011) survey revealed nearly two thirds of organisations sampled engaging in environmental sustainability initiatives, and over 85% of Fortune 500 companies reporting environmental sustainability efforts (Wiernik, Dilchert and Ones, 2016, p. 1). Such initiatives mean Green HRM practices can help to ‘improve organizational green performance’ (Shen, Dumont and Deng, 2016, p. 7).

Although some researchers see Corporate Social Responsibility (CSR) studies as a field where ‘the environmental dimension seems to be the most examined social dimension’ (Wang, Tong, Takeuchi and George, 2016, p. 537), others note Green HRM as an emerging concept which has received inadequate empirical research attention (Shen, Dumont and Deng, 2016, p. 20). Such findings may appear puzzling, as recent research has also demonstrated that employee behaviour makes ‘significant contributions to organizational environmental performance’ (Norton, Zacher, Parker and Ashkanasy, 2017, p. 1), and others argue that workplace pro-environmental behaviour research potentially provides important implications for environmental protection as ‘human activity within organizations is a major cause of ecological degradation’ (Inoue and Alfaro-Barrantes, 2015, p. 138). Of course, one barrier arguably restricting Green HRM research is promotion by fossil fuel industries and their supporters of a ‘neoliberal, free market ideology as a solution for large-scale environmental issues’ (Teeter and Sandberg, 2016, p. 3). This is because it may reduce the desire for government-funded Green HRM research, which has been seen in the context for research scoping and funding under the new Donald Trump administration in the USAⁱ. Nonetheless, benefits for organizations from enacting Green HRM-researched initiatives include helping save firms money through reduced use of raw materials and energy (see Wehrmeyer, 1996, for examples), and a positive impact on external company image (Shen, Dumont and Deng, 2016, p. 7). Such results lead some organizational practitioners concerned about Green issues to ‘accept that “being green” makes good business sense’ (Norton et al., 2017, p. 1).

So, what is the rationale for this research volume? The original idea for it arose from my experiences as a UK A-level student being introduced to the great books in sociology and political science by respected tutors like Dave Rawlinson, Chris Carter and Tony Ward in the 1980s. Then, as now, I have always been persuaded by memorable tomes that others

remember, and my own desire to do ‘a book’, however small, or in whatever form. My academic interest in environmental management, HRM and sustainability was sparked by having the pleasure of reading Dr. Walter Wehrmeyer’s (1996) book, *Greening People: Human Resources and Environmental Management*, and the joy of reading *Managing Human Resources for Environmental Sustainability* by Professor Susan Jackson and colleagues (2012). I would recommend both such books very highly to any interested scholars wondering where to begin reading on the Green HRM-related field.

What appears in this book are a series of research papers on Green HRM written (in my opinion), by some of the most respected and relevant researchers working globally on it today. As Jackson stated earlier (in the *Foreword* to this volume), the chapters following this one are showcased using the micro-meso-macro frame familiar to many management researchers (e.g. George, Howard-Grenville, Joshi and Tihanyi, 2016, pp. 1890, 1892), beginning with micro-level internal organizational initiatives and meso-level external ones (in Section A), before then detailing more macro-level contextual issues (in Section B).

The purpose of this work is that it looks to respond to calls from the *Academy of Management Journal’s (AMJs)* 20th editorial team for research which explores global problems including climate change (George et al., 2016, p. 1880). Here, tackling climate change is seen as a United Nations (UN) Sustainable Development Goal (SDG), because the global average sea level has risen by 7 inches (178mm) over the past 100 years. This problematic circumstance is due to the ‘scale, scope and time horizon over which mitigation efforts must take place, without central authority’, and because of water scarcity, famine and food waste, as ‘the number of forcibly displaced people worldwide at the end of 2014 is about 60 million, the highest level since World War II (UNHCR, 2015)’ (in George et al., 2016, pp. 1883, 1886, 1893).

My own interest in Green HRM stems from four personal experiences, which I now detail. Firstly, as a young boy in the late 1970s, I wondered when passing through the old Esso (now Exxon Mobil) refinery at Fawleyⁱⁱ (UK), why so many fumes were being allowed to drift into people's residential homes nearby. Secondly, while attending University in Newcastle (UK), I saw a fellow student gathering polluted water from the River Tyne in the late 1980s and was puzzled how local rivers could get so polluted, and why this was not being stopped. Thirdly, after the Chernobyl disaster, and visiting Kiev in the Ukraine on a research visit in 1991, I remember coughing on acrid air fumes there, and asking local people what was being done to reduce pollution in the air and waterways. Fourthly, and more positively, when visiting my older brother working in Brazil in the early 2000s, I saw some cars running on sugar cane fuel (not gas/petrol), and wondered if I would ever see more such 'green cars' globally. These four personal experiences shaped my understanding of the downsides and upsides of environmental and ecological management. Indeed, later reading the life story of a European-based work colleague showing green leadership by building their own house in a pro-Green way in the early 2010s made me re-examine the size of my own carbon footprint. Of course, and like others, external events and news also helped form my green knowledge, as I remember reports of the incidents and accidents at nuclear power plants at Three Mile Island (Pennsylvania, USA) and Chernobyl (Ukraine)ⁱⁱⁱ, and chemical leaks at Union Carbide in Bhopal (India) and at BP in the Texas Gulf (USA) making headline news (see Renwick et al., 2013). Such events appear to partly involve some kind of human error as drivers of them, and to have produced much environmental damage arising too.

Most recently, the possible need for humans to physically adapt to climate change events, and the potential and actual development of people's resilience to do so, fascinates me. Here, television documentaries charting the lives of people in desert areas like Jordan in the Middle East (Channel 4, 2017), and in and around the Arctic Circle in Alaska (USA) such as *Life*

Below Zero (on the UK Travel Channel), and their love of such lands, is, for me, essential viewing. This is because such programmes surface real insight into the many ways humans innovate to cope with changing weather events to live in extreme physical environments. In doing so, such documentaries may provide lessons for many people to learn if any of our next generation(s) globally (eventually) ever have to move into, become prone to, or cope with, such harsh climatic conditions. Although perhaps somewhat ethnocentric, other environmental television programmes shown in the UK, USA and Canada may provide accessible, much needed learning for any English-language speakers curious to know more about changes to local and global ecologies. Such are the origins of my own academic and personal interests in the natural environment.

The aim for my own chapters herein is not to develop new theory, but instead, to highlight current yet lesser-known theory and practice in the Green HRM literature and to provide interesting new research avenues in Green HRM. My intention for this book is that it helps moves forward research efforts aimed at highlighting HRM scholarship on the environmental roles of corporations, and individual and organizational actions that may work to increase it (Wang, Tong, Takeuchi and George, 2016, p. 534). In doing so, I send huge thanks and congratulations to all of the authors appearing in this research collection for their excellent chapter contributions. I think all their works move Green HRM research forward in varying, subtle and important ways. I hope that readers of this research volume enjoy it as much as I have in putting it together.

To combat known limitations emerging from the methodology-as-technique genre (Bell, Kothiyal and Willmott, 2016. p. 1), I use a combination of orthodox (review)^{iv} and non-orthodox (current press/media analysis) in my own contributions herein to challenge views that climate change is not happening, or is somewhat alien. While my use of secondary

analysis and mainstream media herein may provide a controversial use of current, contemporaneous evidence, my hope is that reporting such different sources also offers an immediate, basic triangulation of event accuracy (c.f. Hampton, 2015, p.7). I am aware of, and accept that my own pro-Green attitudes, values, and professional involvement in environmental management education may introduce bias and prejudice into this work, and that ‘objectivity’ seems difficult to achieve when such personal pro-Green sympathies are involved. Nonetheless, (c.f. Hampton, 2015, p. 7) I hope my own transparency and critical analysis of interpretations on Green HRM provides a less partisan account overall. In doing so, I also accept that tackling ‘grand challenges’ (GCs)^v like climate change involves the idea of corporate social responsibility (CSR), and of ‘businesses bearing a responsibility to society and a broader set of stakeholders beyond its shareholders’, and is thus relevant, as ‘over 8,000 companies from more than 150 countries are signatories to the United Nations (UN) Global Compact covering issues [including the] environment’ (Wang et al., 2016, p. 534).

To me, any effort towards introducing and understanding Green HRM requires us to briefly note (i) what is happening to our external, ecological environment, and then to more extensively detail (ii) what Green HRM theory and practice could potentially indirectly contribute to help tackle climate change. I begin below by briefly charting what I feel are some key external, environmental changes in our weather and climate. Here, I use the micro-meso-macro analytical frame just detailed (above) internationally, i.e. to examine such changes from my locality, the UK, and then up to more regional, comparative and global perspectives.

The external, ecological environment

In 2016, the UK saw several changing atmospheric events occur such as strange humming sounds in Bristol giving rise to Britain being labelled the perfect ‘tornado alley’, and winds

on the English east coast sweeping an oil rig inland. A very rare heatwave was reported in Glasgow (Scotland) in June which contrasted with hailstones and snow in Rochdale, and heavy flooding in London where 40 millimeters of rain fell in one hour. These events reveal recent UK weather patterns as both changeable and unpredictable (BBC, 2017a). Climate change and global warming seem to impact Britain via the basic physics of the UK generally being warmer overall, and increased rainfall and flooding in particular. Here, figures for Britain reveal the coldest UK winter (2008), the coldest winter in Scotland (2009), and the coldest UK December in 100 years (2010). Whatever the exact drivers of such changes to UK weather, seasoned observers note seeing a definite, future pattern for the UK of prolonged, extreme weather occurring^{vi} (BBC, 2014).

In the USA, ‘fracking’ for energy may produce an increased risk of small earthquakes and water contamination emerging, while one of the most extreme weather events in Hurricane Sandy in 2012 left at least 70 people dead, and a clean-up bill of over \$50 billion. West Texas has seen record rainfall in 2016 and then record droughts and dust storms in 2017, while the increased population in Las Vegas has produced rising energy use there, which in turn is draining the lake of the Hoover dam (BBC Four, 2017; Channel 4, 2017). Further north, the Arctic appears to be warming twice as fast as the rest of the world, with 2007 recording reduced Arctic sea ice and 2012 seeing record lows of Arctic ice, and with such ice being thinner too. Farther afield, the Aral Sea in Kazakhstan/Uzbekistan has shrunk by 90% from the 1960s, a development which has come as a shock to some observers (BBC, 2014), the bleaching of the Great Barrier Reef in Australia still continues (George et al., 2016, p. 1890), glaciers at the summit of Mount Kilimanjaro on Africa’s highest peak are reducing (Channel 4, 2017), and ground-level hurricanes are anticipated in Dubai and the Persian Gulf (BBC Four, 2017).

In the East, China has emerged as a (reforming) powerhouse of carbon emissions, and yet also a victim of world waste, as unwanted parts from Western mobile phones, personal computers and tablets are buried into Chinese-based landfill sites producing solid waste pollution. Here, China currently burns 60,000 tons of coal in 90 minutes, with visibility in cities like Shijiazhuang down to less than 2 meters along a 2,000-mile long cloud stretch of toxic smog. There, some locals state: “you can taste coal in the air”; “we don’t go outside”, and “the whole of China is polluted” (Shudworth, 2017a). Beijing in particular suffers from polluting smog produced by coal power stations (BBC, 2014), which are linked to 1 million premature deaths in China per year due to lung cancer, and many children there developing asthma (Shudworth, 2017a).

Globally, 34 square kilometers of land turn to desert every 90 minutes, and one-fifth of the world's trees have disappeared. Planet Earth's temperature has changed (upwards) by 1 degree Celsius, which has a big impact, as global humidity has increased by 4 degrees due to more water being dumped. Overall, global temperatures are rising, with dry regions getting drier and wet locales getting wetter (BBC Four, 2017). Moreover, the world population also continues to rise. Here, estimates are that 23,000 children are born every 90 minutes, and that the global population will equal around 9 billion people or so by 2050, up 2 billion from the roughly 7 billion humans living now (BBC, 2014). Overall, the world population has doubled in size since 1945 (Channel 4, 2017), which means that, if continued, more people may produce more carbon emissions, and thus increases in climate change. Such developments could impact heavily on low income and developing countries, because most of the increase in world population occurs in the continents of Africa and Asia. Moreover, in countries like Malaysia, urbanization also places a great challenge to government agencies in terms of environmental waste disposal (Ju, Azlinna and Thurasamy, 2015, p. 1). Additionally, the Intergovernmental Panel on Climate Change (IPCC) reports detail a consensual

understanding that our climate system is significantly warming, is likely to carry on doing so, that human activities are a major cause of it, and if continued, means possibly ‘serious impacts’ are likely to both humans and Planet Earth arising (Hampton, 2015, p. 1).

Building on the points above, it is clear that *something* is happening ‘out there’ to Planet Earth from changes to local, regional and global weather and climate patterns, which seem to impact negatively on humans, animals and the natural environment, and are arguably not good global developments. Here, the pro-Green activist Arnold Schwarzenegger estimates that “every day, 19,000 people die due to pollution from fossil fuels” (in Werber, 2015, p. 1), and at least 30,704 human deaths have been associated with heatwaves globally (Milman, 2017, p. 1). These seem staggering and depressing statistics as they appear avoidable. I now consider what Green HRM is, and then what Green HRM research could possibly do to indirectly mitigate climate change impacts.

What is Green HRM?

Green HRM currently exists as a series of environmental HRM processes (from staff originally entering to finally exiting work organizations) (Renwick et al., 2013, 2016), underpinned by Ability-Motivation-Opportunity theory (Appelbaum et al., 2000), as Pinzone et al., (2016), Rayner and Morgan (2017), Renwick et al., (2013), and Russell and Hill (in this volume) all use AMO theory as a theoretical lens to view and explain relevant stakeholder behaviour in Green HRM. The upside of using AMO theory in Green HRM research is that it has a practical relevance in guiding organizations, managers and practitioners forward on what workplace Green HRM interventions they might possibly consider implementing to help combat climate change. For example, Green HRM is focused on using *indirect* links between organizations adopting pro-Green HRM practices to change staff behavior towards taking enhanced care when using energy resources, and employees

undertaking more recycling, and conducting better waste management. Such staff based, pro-Green actions may help the planet over time, as factory smoke emissions are reduced, local water supplies become less polluted from factory outputs, and organizations present lower energy demands and needs forward. As such, keywords for Green HRM impact regarding the environment may perhaps be: indirect, long-term and variable.

However, using AMO theory in Green HRM also has constraints, as AMO theory can seem somewhat instrumental, pro-managerial and arguably Orwellian at first sight too, because it looks to change staff behavior towards increasing concern for the external environment. Yet on closer inspection, Green HRM may appear to have an authoritarian tendency or undercurrent for good reason(s). This is because if society at large wants work organisations to shape staff behaviours to become greener to help deliver reductions in external environmental degradation, doing so could seem to be both a noble cause and social outcome. In essence, some may see Green HRM workplace interventions as a means to justify the end goal of helping society to indirectly reduce climate change overall.

Moreover, the term and concept Green HRM itself may also be ‘contested terrain’ (c.f. Edwards, 1979), as it does not appear as union-focused as other areas of HRM scholarship. To tackle such limitations, Hampton’s (2015) work provides an alternative viewpoint, and route, on how union and non-managerial stakeholders may help tackle global warming. In it, he uses ‘critical realism’ to critique positivist, constructivist and post-modern conceptualisations of climate change, and establish an alternative philosophical framework for humans ‘to take transformative action’, where structure and agency^{vii} ‘magnify the potential of workers and their organisations as ‘strategic climate actors’ (Hampton, 2015, p. 4).

Building on such a wider understanding of Green HRM, while the financial crisis of the late 2000s may have been a key opportunity for work organizations to move away from primarily chasing profits, and instead, to pursue wider goals like ‘the three p’s’ (of people, planet and profit) to meet social needs for a more sustainable biosphere (Hampton, 2015, pp. 4-5), the financial aspects of Green HRM may still dominate. This is because a key driver for some case study examples of Green HRM organizational best practices (especially in USA-based or US-origin organizations) lies in the financial, monetary-based value of ‘going green’, i.e. the desire not to spend resources twice, to save resources, or to recycle resources^{viii} (see Wehrmeyer, 1996 for examples). As such, from the points above, Green HRM has some limitations, which need acknowledging. I now build upon prior literature reviews (see Jackson et al., 2011; Renwick et al., 2013; 2016) to detail some new trends emerging in Green HRM research.

Contemporary research trends in Green HRM

Relevant theory in Green HRM

While some scholars argue that strong theoretical and analytical frameworks for Green HRM ‘have yet to emerge’, a wide range of theoretical lenses currently influence Green HRM themes which draw on institutional theory, systems theory, process theory, stakeholder theory, resource based theory and ability-motivation-opportunity (AMO) theory (Arulrajah and Opatha, 2016, p. 153). Additionally, the theoretical perspective of organisational citizenship behaviours to the environment (OCBEs)^{ix}, where collective OCBEs are aggregations of individual OCBEs, has now ‘gained significant consensus’ (Pinzone et al., 2016, pp. 201-202).

Some recent studies of top management tangible competencies (TMTCs) among UK and New Zealand chief executive officers and managing directors detail the micro-foundations of environmental sustainability based on the resource-based view (RBV) theory, and relationship based business networks (RBNs) entrenched in social network theory (Anonymous, 2017, p. 1). Indeed, other new works draw on social cognitive theory to theorize on the imitation of sustainability behavioural modelling by leaders placing supervisors as role models for employees (Saifulina and Carballo-Penela, 2016, pp. 3-4). Here, servant leadership theory has been highlighted as especially useful for predicting sustainability actions in theorizing that an environmentally-specific servant leadership style can affect targeted Green outcomes (Robertson and Barling, 2017, p. 30), and in investigations of employee attitudinal and behavioural responses to perceived Green HRM to understand employee reactions to perceived CSR (Shen, Dumont and Deng, 2016, p. 4).

In environmental psychology, a major review reveals three major pro-environmental workplace behaviour theoretical frameworks being used: the theory of reasoned action (TRA), the theory of planned behaviour (TPB) and value-belief-norm (VBN) theory (Inoue and Alfaro-Barrantes, 2015, pp. 140-141). Complimentary but less frequently used theories include expectancy-value theory, cognitive action and stress theory, eco-feminist theory, social dilemma frameworks, broaden-and-build/positive emotions theory and transformational leadership theory too (Inoue and Alfaro-Barrantes, 2015, p. 152). Other additional utilized theories in environmental sustainability include natural-resource-based views of the firm (NRBV) (Alt and Spitzbeck, 2016, p. 49), open systems theory and the 'line of sight' concept (Buller and McEvoy, 2016, p. 1).

Organizational Citizenship Behaviours to the Environment (OCBEs), pro-environmental workplace behaviour, Employee Green Behaviours (EGBs), and Green psychological climate

Recent findings on (OCBEs) from a study of the English National Health Service (NHS)^x reveal Green HRM practices as conducive to collective voluntary behaviours towards the environment. There, staff willingness to support firm-level ecological initiatives partially mediate this relationship, as ‘Green competence building, performance management and employee involvement practices’ all positively influence collective OCBEs (Pinzone et al., 2016, pp. 201, 207). As such, sharing a vision with staff is positively associated with organizations adopting proactive environmental practices (Alt and Spitzeck, 2016, pp. 48-49), as both eco- and organization-centric rationales at individual and organizational levels relate to employee OCBEs, and interactive effects like staff perceptions of company rationales are key determinants of such OCBEs (Tosti-Kharas, Lamm and Thomas, 2016, p. 1).

Researchers have found three types of workplace pro-environmental behaviour in the environmental psychology literature, namely: environmental activism, non-activist behaviour in the public sphere^{xi}, and private sphere environmentalism. Here, determinants of pro-environmental behaviour and attitudinal variables^{xii} are ‘significant predictors’ of pro-environmental behaviour, female staff ‘scored higher in environmental activism’ than males, and individual pro-environmental behaviours are influenced by various situational and external factors^{xiii} (Inoue and Alfaro-Barrantes, 2015, pp. 139, 149, 150). Additionally, in the Spanish public sector, ‘harmonious environmental passion of employees’ and ‘organizational environmental support, gender and perceived incomes’ all influence employee workplace environmentally-friendly behaviour (WEFB)^{xiv} too (Saifulina and Carballo-Penela, 2016, pp. 1-2).

For Employee Green Behaviours (EBGs), recent studies find Green HRM both directly and indirectly influencing in-role green behaviour, and only indirectly influencing extra-role

green behaviour through the mediator of psychological climate. Individual green values moderate the impact of psychological green climate on extra-role green behaviour, but not the effect of Green HRM or psychological green climate on in-role green behaviour (Dumont, Shen and Deng, 2016, pp. 1-3). One related study of 11 countries reveals that ‘contrary to popular stereotypes, age showed small positive relationships with pro-environmental behaviours’ (Wiernik, Dilchert and Ones, 2016, p. 1), while another reveals culture as unlikely to be a ‘major moderator of age-employee green behaviour relations’ (Wiernik, Dilchert and Ones, 2016, p. 11).

Current works find green psychological climate^{xv} positively related to corporate environmental strategy, and in turn, moderating the relationship between ‘green behavioural intentions and next-day employee green behaviour’ (EGB)^{xvi} when employees perceive a positive green psychological climate’ (Norton et al., 2017, p. 1). Contextual factors also impact on ‘general green behaviour’, as ‘within-person relationship’ between green behavioural intentions may occur on one day and EGB the next, and roughly ‘one third of variance in daily employee green behaviour resides at the within-person level’ (Norton et al., 2017, pp. 1, 4, 13, 14).

Leadership

Some studies of Green leadership find links between leadership, organizational and individual-level environmental performance (Andersson, Jackson and Russell, 2013), and that participants exposed to environmentally-specific transformational leadership (EFTL) not only rate their leader environmental values and priorities more highly, but also seem engaged in higher levels of pro-environmental behaviours too (Robertson and Barling, 2017, p. 2).

Additionally, perceived Green HRM is positively related to employee task performance and organizational citizenship behaviour (OCB), and negatively related to employee intention to

quit, with organizational identification and perceived organization support (POS) moderating such relationships (Shen, Dumont and Deng, 2016, p. 20). Moreover, related work in Nigeria reveals that:

After controlling for age, education and gender, environmentally specific transformational leadership had a significant positive relationship with environmental concern, which in turn predicted green behaviour at work in a positive direction...[while] environmental concern mediated the relationship between environmentally specific transformational leadership and green behaviour at work (Kura, 2016, p. 1).

Additional studies

Other separate, individual studies on Green HRM also provide new and interesting findings. Here, one study of social exchanges among Mexican employees found organizations and supervisors not linked to eco-initiatives, yet peer relationship quality mediating influences of organizations and supervisors, meaning that ‘social exchange with peers’ seems crucial to developing such eco-initiatives (Raineri, Mejia-Morelos and Francoeur, 2016, pp. 47, 55). A related study on CSR and pro-environmental behaviour showed that perceived CSR has both direct and indirect influences via organisational identification on pro-environmental behaviour (Gkorezis and Petridou, 2017, p. 1). Moreover, case study work among senior managers in Saudi Arabia found that HRM practices can promote and support green workplace behaviour, but ‘are not used effectively’, and that senior managers can ‘only marginally’ facilitate pro-environmental behaviour in such organizations as ‘other management-related issues may be more important than environmental sustainability’ (Abdulghaffar, 2017, p. 25). One survey of HR professionals in Malaysian manufacturing and service companies found only strategic positioner and change champion roles being significantly related to Green HRM practices (Yong and Mohd-Yusoff, 2016, p. 416), while

in-depth interview study of procurement experts in three Brazilian public universities revealed alignment between sustainable procurement levels and environmental training adoption, but a lack of training and support from senior management as barriers to implementing environmental procurement practices (Aragao and Jabbour, 2017, p. 48). Further, findings from one study of Green HRM systems^{xvii} in Malaysia highlight their significant role in promoting the implementation of cleaner organizational sustainability strategies (Gholami, Saman, and Rezaei, 2016, p. 159).

Workers, trade unions and the regulatory context

Critical, Marxist-inspired work by Hampton (2015) has researched worker and trade union roles in building ‘climate solidarity’, and views the ‘ecological^{xviii} context’ and social agents ‘most able and willing to tackle’ climate change as ones occurring ‘in the realm of work’ (Hampton, 2015, pp. 4-7). This is because he argues that the contemporary labour process ‘modifies the climate’, as:

Workers as climate agents organised in trade unions can offer what might be called ‘climate solidarity’: distinctive framings of climate questions, together with specific forms of representation and mobilisation on climate matters^{xix}. Unions offer a potential pole around which a revived climate movement might coalesce^{xx} (Hampton, 2015, pp. 6-8).

Hampton’s work draws upon an extensive review of files produced by UK trade unions on climate change, and his own data on the UK Vestas occupation as a case study (Hampton, 2015, pp. 9-10). His work has been complimented by other recent studies which have empirically researched the environmentally active role of UK trade unions. Here, findings from one survey of 22 UK unions’ environmental activism suggests that:

Although an environmental agenda appears popular with members and encounters little resistance from employers, few unions currently evidence serious or regular engagement, and environmental work is largely confined to large and/or public-sector workplaces where the union is already well established. This limited adoption may be attributable to a combination of the absence of supportive legislation and public funding, the agenda's inability to generate an attractive "product" for members, and already-crowded local agendas. However, most unions surveyed anticipate that their environmental agenda will expand in the future' (Farnhill 2016a, p. 257).

One recent study on the regulatory context surrounding organisational environmental initiatives has been undertaken in Australia. In it, scholars revealed that Australia's brief, carbon pricing scheme has seen policy uncertainty^{xxi} forcing organizations there 'to focus their responses on short-term investments', which preclude 'the development of green capabilities and preventing flexible environmental regulations from achieving their intended policy results' (Teeter and Sandberg, 2016, pp. 1, 14).

Sustainability

Lastly in this chapter, some new studies seek to connect environmental management, HRM and sustainability together. Here, researchers analysing sustainability reports in the Forbes Top 250 global companies find that the higher perceived visibility of environmental issues among consumer opinion in the developed world does not mean that 'the world's largest corporations do not report less on 'labour and decent work' than on 'environmental' indicators. Indeed, nor do they 'support the notion that organisations focus their attention in sustainability activities on 'green matters' while neglecting 'people matters' (Ehnert, Parsa, Roper, Wagner and Muller-Camen, 2016, p. 100). As such, organizational support for sustainability:

Can influence how employees respond to sustainability messages...[and] further, that the intensity of emotions change agents display, and how appropriate [they] are within organizational contexts will influence how employees perceive those individuals and the success of their efforts to influence green outcomes (Blomfield, Troth and Jordan, 2016, pp. 1-2).

Finally, qualitative data collected as part of a Finnish (European) HR Barometer inquiry reveals that contrary to expectations in the prior Green HRM literature, 'ecological responsibility was largely ignored' as a dimension of Sustainable HRM by top managers (Jarlstrom, Saru and Vanhala, 2016, p. 1).

From all the studies detailed above, one thing seems clear. If the *indirect* role that Green HRM theory and practice(s) could play in helping to tackle climate change through re-configuring organisational greening initiatives is accepted, doing so could suggest that Green HRM might *matter* for humans, our planet and the ecology. Indeed, doing so may mean the wider impact of Green HRM theorizing and empirical research is wholly surfaced. The next chapters build upon, extend and enhance such an understanding.

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ⁱ Private correspondence from a US-based researcher (2017).

ⁱⁱ 'The Esso refinery at Fawley, near Southampton, is the largest in the UK and one of the most complex in Europe, with a mile-long marine terminal that handles around 270,000 barrels of crude oil a day and provides 20 per cent of UK refinery capacity' (Source: http://www.exxonmobil.co.uk/UK-English/about_what_refining_fawley.aspx) Accessed 6th March 2017.

ⁱⁱⁱ 'On 26th April 1986, the Chernobyl nuclear reactor leak in the Ukraine exposed on-site workers and fire-fighters trying to fix it to high levels of radiation which burnt human skin, broke down DNA and lead to cancers. The World Health Organization (WHO) estimates that 2,200 such 'liquidator' clean-up staff died, or will die, from the radiation received at Chernobyl. If the current 'fix' sarcophagus Chernobyl shell collapses, it may break into

particles site workers could inhale, and stay in their bodies causing further new cancers’ (BBC, 2017b).

^{iv} I follow the methods used in prior works to review the relevant Green HRM literature herein (see Renwick et al., 2013, p. 2; 2016, p. 115).

^v ‘At a historic summit in September 2015, 193 member states of the UN adopted goals to protect the planet, for example in “affordable and clean energy” (SDG 7)’ (George, Howard-Grenville, Joshi and Tihanyi, 2016, p. 1881).

^{vi} The coldest UK winter was recorded in 1683/4, where sunspots disappeared for 50 years and ice courses reveal the sun had a strange rhythm of low ultra-violet light for decades, but is an exception. Global warming in Britain means an increased chance of record-breaking maximums of cold and heat appearing, which gives rise to the notion of the UK’s ‘weird weather’ (BBC Four, 2017).

^{vii} ‘Structure includes context and refers to the setting within which social, political and economic events occur and acquire meaning, while agency refers to action, specifically political conduct’ (Hay, 2002, p. 91-94) (in Hampton, 2015, pp. 3-4).

^{viii} As ‘management theory and practice departmentalizes and abstracts the natural environment into an economic framework...[which] has created a lack of empathy for nonhumans and the inanimate world’ (Whiteman and Cooper, 2000, p. 1267).

^{ix} ‘OCBEs are defined as individual and discretionary social behaviours not explicitly recognized by the formal reward system, and the contextual factors that enable the manifestation of OCBEs at the unit level’ (Alt and Spitzeck, 2016, p. 48).

^x ‘The NHS in England accounts for 25% of public sector emissions in the UK, and is the largest public sector contributor to climate change in England. It has committed to reducing its carbon footprint by 28% in 2020, and has a dedicated unit, the Sustainable Development Unit (SDU), [to help] organisations change their attitudes and behaviours in regard to the environment’ (Pinzone, Guerci, Lettieri and Redman, 2016, pp. 204-205).

^{xi} ‘Which can be further decomposed into environmental citizenship and policy support’ (Inoue and Alfaro-Barrantes, 2015, p. 140).

^{xii} ‘Such as: personal beliefs, personal norms, satisfaction, motivation, citizenship, and attitudes related to given pro-environmental behaviour’ (Inoue and Alfaro-Barrantes, 2015, p. 149).

^{xiii} ‘Including social norms, incentive, support from supervisors, information and constraints’ (Inoue and Alfaro-Barrantes, 2015, p. 150).

^{xiv} ‘WEFB is an umbrella concept describing all types of voluntary or prescribed activity and can be conceptualized as organizational citizenship behaviour OCB, for instance, switching off lights, recycling garbage and the use of environmentally friendly sprays (Saifulina and Carballo-Penela, 2016, pp. 2-3).

^{xv} ‘Defined as employees’ perceptions and interpretations of their organization’s policies, procedures, and practices regarding environmental sustainability’ (Norton, Zacher, Parker and Ashkanasy, 2017, p. 5).

^{xvi} ‘A workplace-specific form of green behaviour...[where] the workplace represents a context in which factors beyond the control of employees can, to varying degrees, create variation in daily behaviour’ (see Norton, Zacher, Parker and Ashkanasy, 2017, pp. 3-4). ‘EGBs can be required or discretionary, [as] organizations are seeking to understand which personal characteristics lead to good and poor environmental performance at the individual level’ (Wiernik, Dilchert and Ones, 2016, p. 2).

^{xvii} Green HRM systems are of emerging interest in countries like Brazil too (see Jabbour et al., 2017).

^{xviii} ‘Ecologism argues that care for the environment... presupposes radical changes in our relationship with it, and thus in our mode of belief that [environmental problems] can be

solved without fundamental changes in present values or patterns of production and consumption (Dobson, 1990, p. 13)’ (in Hampton, 2015, p. 12).

^{xix} ‘By 2010, a significant breakthrough had been made in the number of UK union representatives who saw themselves as carrying out an environmental role, whatever formal position they held... they proved capable of instigating, directing and supporting significant reductions in workplace carbon emissions... [with such] climate representation initiated by individual unions and supported by the UK Trades Union Congress (TUC)’ (Hampton 2015, p. 151).

^{xx} ‘Trade unions in Britain still constitute the largest voluntary organisation in the country, representing seven million workers, and negotiating on behalf of one-third of all employees’ (Hampton, 2015, p. 7).

^{xxi} Plus ‘seesawing carbon policies in Australia, Canada, China, the EU, India, Japan, New Zealand and the US’ (Teeter and Sandberg, 2016, p. 1).