

EVIDENCE ON GREEN GUIDANCE

A review of the literature

Ingrid Bårdsdatter Bakke, Tristram Hooley, Mariana Lucas Casanova, Tomas Šprlák, Eva Kavková, Helena Košťálová, Ladislav Ostroha & Marta Wrzosek

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Abstract

This paper explores literature which examines the intersection between career, career guidance, sustainability, green issues and environmental concerns. It finds that the literature is clear that climate change is real and already happening and that it is already having impacts on people's careers through the greening of the labour market and education system and through a range of psycho-social effects such as climate anxiety. This has led to the development of an emergent 'green guidance' movement which explores how career guidance can respond to and challenge climate change. It finds three main approaches that are adopted which can be described as technocratic, developmental and emancipatory. A series of recommendations are discussed for the Exploring Green Guidance project.

Table of contents

Abstract.....	3
1) Executive summary	5
Environmental change and the climate crisis.....	5
Implications of climate change for careers.....	5
What is green guidance	5
Recommendations.....	5
2) Introduction	7
About the literature review	7
Definitions and terminology.....	8
3) Environmental change and the climate crisis.....	11
4) The implications of climate change for careers	14
Greening the labour market.....	14
Greening education.....	16
Psychosocial issues when careering in the climate crisis.....	17
5) What is green guidance	19
Conceptualising green guidance	20
Different approaches to green careers and green guidance.....	24
Ethical issues in green guidance.....	28
6) Conclusions and recommendations.....	32
References.....	34

Table of figures

Figure 1-1. Country experts.....	8
Figure 4-1. Figure 2. Packer's light green versus dark green approaches to guidance (Plant, 2020)	21

1) Executive summary

Environmental change and the climate crisis

It is now an established fact that climate change is happening and will affect individuals and societies in fundamental ways. However, there is still some resistance to the extent of measures to mitigate it.

Implications of climate change for careers

Climate change is already having implications for careers and these are likely to increase in the future. A notable change is that the world of work is adapting to mitigate the effects of climate change and so environmentally friendly measures are increasingly included as organisational goals. The labour market is 'greening', and 'green jobs', 'green educations', 'green skills and competencies' are becoming increasingly important to the labour market. There is also considerable effort expended in the education system to 'green' education, particularly by helping people to address the emotional components of climate change and in the preparation of them for green work. There are also a range of psychosocial effects caused by climate change, that can manifest in careers in negative ways because of the stress they cause for individuals.

What is green guidance

Within the field of career guidance concerns about climate change and other environmental degradation have resulted in a range of calls for the development of 'green guidance' (also known by a range of alternative terminologies such as sustainable guidance). We identify three distinct rationalities that underpin the practice and theorisation of green guidance. These can be described as technocratic (focused on aligning people with societies needs e.g. through the development of green skills), developmental (focused on helping people to manage and thrive during the green transition) and emancipatory (focused on helping people to transform their context and bring about a socially just green transition).

Recommendations

Based on these findings we would make a series of recommendations that should be taken into consideration as models for green guidance are developed.

1. Green guidance can draw on strong evidence that environmental change is real and ongoing and that its effects are worsening.
2. There is a need to recognise that concern about environmental change and the willingness to act in response to it is bound up with people's wider identity, including their political and moral beliefs and their beliefs about the environment.
3. Careers practitioners need to be able to support clients in dealing with the emotional and psychological issues raised by environmental change.

4. Green guidance cannot focus only on environmental issues.
5. Green guidance needs to be able to draw on green labour market information.
6. Green guidance is not a single approach and so resources need to recognise that there are a range of different ways to 'do' green guidance.
7. Green guidance raises a series of ethical questions that practitioners are likely to need help in working through.

2) Introduction

Climate change is a real, imminent, and challenging social, political and economic problem. This problem cannot be successfully addressed without action being taken in the labour market and the education system. As career guidance is bound up with the effective functioning of the labour market and the education system, the relationship between these two fields and individuals' engagement with both of them, substantial changes in these policy areas are likely to lead to the need for substantial changes in the field of career guidance. There is a developing agenda which has explored the nature of these changes, often under the label of 'green guidance'. It is to this, that this literature review is primarily addressed.

The concept of green guidance views career guidance as having a critical role in the preparation and support of citizens as they engage with the wider green transition. Such a task is beyond what the traditional theories and practices associated with career guidance have been developed to address. Therefore, the development of green guidance requires the development of new thinking and methods which can recognise the complex landscape of green jobs, decent work, and social justice and thinking about how they relate to value-based career choices are central parts.

In the *Exploring Green Guidance* project, we are looking at career guidance to see how it can be a part of a broader solution to the problem of environmental destruction and climate change. We recognise that green guidance cannot solve these problems alone, and that it is an activity that is deeply embedded within education and employment policy in most countries, but we believe that it can play an important role in addressing these issues.

This literature review will explore the existing literature and research base on green guidance and associated topics and draw out a series of findings that can be used to inform the *Exploring Green Guidance* project's development of new models, approach and resources for green guidance.

About the literature review

This document presents findings from a rapid review of the available literature and research on green guidance-related topics. We will set out the key topics and issues identified in the literature and draw out key findings and insights that can support the *Exploring Green Guidance* project.

The articles for this literature review have been gathered through database searches, reference chaining and snowballing (Goodman, 1961; Johnson & Christensen, 2014), and suggested by the EGG project members based on their own knowledge, discussions with peers and input from experts in the field (see Figure 2-1 for contributors).

Country	Experts
Czechia	Kateřina Hařková, Milada Karasová (CETERAS) and Helena Kořtálová (EKS).
France	Arnaud Wuilleumeir (CIBC 33) and Tomas Sprlak (ZKPRK)
Norway	Ingrid Bårdsdatter Bakke (Inland Norway University) and Tristram Hooley (Inland Norway University)
Poland	Marta Wrzosek (Katalyst Education and SWPS University)
Portugal	Mariana Lucas Casanova (IPP)
Slovakia	Tomas Sprlak (Association for Career Guidance and Career Development ZKPRK).

Figure 2-1. Country experts

The review sought to answer the following research questions.

- How does the environment impact on an individuals' career development?
- How do careers practitioners and other practitioners involved in the delivery of career guidance feel about climate change and the environment?
- What theories and models exist to support green guidance?
- What green guidance practice exists?

The total corpus of articles identified covered a wide range of fields, including career guidance, sustainability, environmental and ecological studies, economic and organisational studies, pedagogy and education research, psychology and medicine, social work and sociology, philosophy of science, and computer science. Abstracts of all articles were read, and an initial set of themes were suggested and mapped to the research questions. Based on this analysis, the articles were read in further detail and used to form the basis of this review. All articles identified are detailed in the references section of this paper.

Definitions and terminology

The discussion of 'green guidance' uses a complex and overlapping set of terminologies. The literature uses terminology like 'green', 'sustainability', 'environmental', 'climate', and a host of other terms and keywords. This terminology is not necessarily used consistently across the different papers, disciplines, and topics addressed in this review. Consequently, it is useful to begin with some reflections on terminology.

The term 'green' is attached to a wide variety of different phenomena. The literature includes a discussion of green governance, the green economy, green industries, green workplaces, green infrastructures, green cities and, of course, green guidance. The terminology of green is rarely attached to a strict definition or benchmark but is rather used to mean that stakeholders in these arenas are pushing towards more environmentally friendly approaches (Rutkowska & Sulich, 2020; Sulich & Rutkowska, 2020).

Sustainability is another key concept which is used in a variety of ways, and it is familiar through the UN Sustainable Development Goals (SDGs), which lies at the heart of the 2030 Agenda for Sustainable Development that was adopted by all UN member states in 2015. In the reviewed literature, sustainability typically addresses the balance between environmental, economic, and social issues as it does in the UN SDGs, but it can also emphasise that a move to decent work must be lasting, i.e. sustainable. It can be about finding a balance in people's lives (work-life balance) that allows them to continue to live in a particular way over the long-term. It can also be applied to businesses, organisations, nations and any other actor. In other words, it can be about many things other than environmental and green issues, and the reviewed literature is inconsistent in the way the terminology of 'sustainability' is used.

A noticeable aspect is the differentiation that can be made between papers which view sustainability as a holistic concept encompassing environmental, social and economic issues, and those which address it as a more specifically, environmental issue (where it becomes a synonym for 'green'). Many of the articles that focus on climate and environmental change emphasise challenges, fears and risks (e.g. Gunasiri et al., 2022; Marczak et al., 2023; Obradovich et al., 2018; Tsevreni et al., 2023) while articles focusing on sustainability as a holistic concept are often more concerned with solutions and ways forward.

Sustainability is sometimes presented as a *goal*. For example, measures for assessing business revenue use the term 'triple bottom line' to integrate social, environmental, and economic goals (people, planet, and profit) (Alhaddi, 2015). Such approaches often draw together financial and non-financial goals, for example, addressing issues such as gender inequality, socioeconomic differences, and indecent jobs to argue that if developments continue to exacerbate inequalities and exploitation, they cannot be successful (Novitz, 2020). Sustainability can also be discussed without directly addressing green or environmental issues, e.g. when discussing sustainable decent work (McMahon & Watson, 2020). In other words, sustainability is a concept that is used widely, but is not necessarily connected to the SDGs or green and environmental issues.

Sustainability can also be seen as a goal in individuals' careers in relation to achieving an appropriate balance between life and work (Hassan et al., 2022; Maree & Di Fabio, 2018). Sustainability as a goal is also connected to literature that describes concrete ways to move forward in the larger context, e.g. education (Lambini et al., 2021; McGrath & Powell, 2016; Shabalala, 2023), human

relations management (HRM) practices (Di Fabio, 2017; Lambini et al., 2021; Valenti et al., 2016), or in society.

In a similar vein, it is also useful to address the terms 'career' and 'career guidance' as these can be conceptualised in a range of ways. Sultana (2017) uses Habermas' formulation of technocratic, developmental and emancipatory discourses to argue that we can see career as a individualistic endeavour focused on the collection of human capital and career guidance as a technology designed to help the social and economic machinery to work smoothly and effectively, or that we can see career as a deeply personal project of self-development designed to move individuals into a better path for the future, or finally, that we can see career as a vehicle for social change and career guidance as a way of helping people come together to question the status quo, mobilise their agency and work for change.

We will ground our discussion of career and career guidance in the understanding of career as *progression through life, learning and work*. This means that we see a career as lifelong and life-wide; it is contextualised by the different arenas people live and develop in, and it is directed by the complex relationship between individual abilities and aspirations and the opportunities and limitations that the context offers them. In the case of career guidance and environmental issues, concerns about sustainability can affect careers because individuals are worried about climate change, because groups advocate for it, or because the world of work is changing towards leaving a greener footprint.

3) Environmental change and the climate crisis

Prior to addressing the development of green guidance, it is important to briefly review the academic evidence that supports the idea that there is a substantial process of human-caused climate change underway.

As discussed in the policy review that preceded this literature review (Hooley and Bakke et al., 2024), there is a broad based, global consensus which recognises that human beings have been responsible for widespread environmental destruction and climate change (Intergovernmental Panel on Climate Change - IPCC, 2023). Abbasi et al. (2023) note that this is not just one problem, but rather a series of interlinked crises which bring together the climate crisis (warming), the nature crisis (loss of biodiversity), and the human health crisis (disruption of social and economic systems, the rise of diseases, poverty and shortages of land, shelter, food and water).

While the IPCC (2023) report remains as the most authoritative summary of the over-arching likelihood and effects of the climate crisis it is underpinned by huge swathes of academic, public and private research from which this account has been constructed (Abass et al., 2022; Al-Ghussain, 2019; Letcher, 2019). Such work explores issues of measurement and modelling of climate change (Eyring et al., 2019; Lian et al., 2021; Valipour et al., 2017), its causes (Anderson et al., 2016; Stern & Kaufmann, 2014) and its impacts on a variety of different systems and phenomenon ranging from fisheries and aquaculture (Barange et al., 2018) to increased risk of flooding (Arnell & Gosling, 2016) and infectious diseases (Wu et al., 2016).

Systematic reviews and other syntheses conclude that while there are still some important debates around the issue of climate change, there is 97% scientific consensus that climate change is both happening and caused by human beings (Cook et al., 2016). Furthermore, there is also extensive work which suggests that climate changes is going to continue to develop and worsen (Jacob et al., 2014) and which assesses the likely impacts on global life and society at a range of different levels of climate change. Will global warming be held at 1.5 degrees above pre-industrial levels as is hoped, or reach 2 degrees as is most likely or warm beyond that level to more catastrophic temperatures (Hoegh Guldberg et al., 2018; Naumann et al., 2021; Schleussner et al., 2016)? Writers highlight issues for the future such as an ongoing loss of biodiversity (Pacifici et al, 2015), changing access to water resources (Haddeland, 2014) and the rising of sea-levels (Kopp et al., 2014).

Research has also traced the way in which the natural and ecological impacts of climate change and environmental destruction are being translated into social and economic impacts (Carleton & Hsiang, 2016; Toi, 2018). While such work

addresses the interaction of multiple complex systems, making prediction difficult, there are a range of areas in which impacts have been traced and predicted including slowing, or even declining, economic growth (Moore & Diaz, 2015) and other (negative) macroeconomic effects (Kahn et al., 2021), an increase in global migration levels (Kaczan & Orgill-Meyer, 2020), increased levels of conflict (Koubi, 2019), worsening human health (Abbasi et al., 2023; Berry et al., 2018; Hajat et al., 2014; Meierrieks, 2021; and Ricciardi et al., 2019), falling availability of food (Springmann et al., 2016) and a host of other negative impacts.

Despite these overwhelmingly concerning findings, there is also extensive research which looks at strategies for adaption and mitigation of climate change (Fawzy et al., 2020). While much of this work is damning about progress so far, it is often relatively optimistic, at least on a technical level, about humanity's potential to slow, halt or even reverse climate change and other forms of environmental destruction (Hulme, 2020). Such work agrees that the task of mitigation and adaption requires a substantial effort and change on behalf of humanity and needs to take place on the terrains of politics, economics, human behaviour, the management of the natural world and the development of new technologies (Nordhaus, 2014; Seddon et al., 2020; Stern, 2015). It needs to be a global effort, which means that it is also a diplomatic issue influenced by the deployment of power within the global political economy. It also needs to be an endeavour that takes place in, and impacts upon, multiple spheres of human life.

There has also been extensive research which has sought to understand public perceptions of environmental issues, including climate change, and levels of concern about the impacts of these issues. In general, there is widespread and growing acceptance amongst the global population of climate science and recognition that there are substantial environmental issues that need to be addressed (Capstick et al., 2015; Whitmarsh & Capstick, 2018). However, there is also evidence that environmental and climate beliefs are increasingly linked to wider political positions, with some right leaning voters in developed countries more likely to be sceptical about climate science and the need for political, social and economic changes. There is also evidence which suggests that despite people's belief in the importance of sustainability, many people do not make the behavioural changes within their own lives that are compatible with this belief (Giannetti et al., 2021).

Dechezleprêtre et al. (2022) argues that global support for climate change mitigation and adaptation policies hinges on three factors: how far people believe that the policy will be *effective*, how far it will lead to an increase in *inequality*, and how far it will impact their household's *self-interest*. This finding suggests that there are three tests for any climate change mitigation policy to pass before it is likely to be pursued within a democracy.

Finally, it is worth noting that there is also substantial literature on the nature of the political change needed to address climate change and how this should be managed (Meadowcroft & Rosenbloom, 2023). The headline policy goal highlighted in such research has often been the achievement of 'Net Zero', that is, a national economy which does not add to the global stock of atmospheric carbon (Fankhauser et al., 2022). Much of the research highlights the failure of governments to take sufficient action, often highlighting both insufficiently ambitious and poorly designed policies and weak implementation (Bloomfield & Steward, 2024; Howes et al., 2017; Rosen, 2015).

The literature which addresses policy solutions sets out a wide range of possible approaches. With strong agreement that to achieve a green transition, there is a need for forms of international cooperation with stronger regulatory powers than the current UN Conference of the Parties (COP) meetings (Bataille, 2020). This may include further international initiatives such as global carbon pricing (Perri et al., 2023). At the national level, countries are likely to have to adopt new forms of industrial strategy (e.g. a Green New Deal) supported by appropriate funding and regulation, which places Net Zero at its heart, actively manage the transition of multiple economic sectors and geographical regions and links climate policies to wider policy goals. Such policies need to address both the mitigation of climate change and the adaptation to new realities (Biagini et al., 2014; Klein, 2020; Rodrik, 2014). Most critically, such national strategies need to manage the phasing out of carbon-based forms of energy production and their replacement with renewable energy. However, this literature also emphasises the relatively different capacities that low-, middle- and high-income countries, and those countries with a high degree of reliance on fossil fuels, have in managing this green transition and achieving Net Zero (Lamb & Minx, 2020).

4) The implications of climate change for careers

Following on from the macro perspective discussed in the last section, this section will now turn to look at the implications of climate change for the careers of individuals. This will be addressed through three lenses, firstly, implications for the labour market where individuals pursue their careers, secondly, implications for the education system, and thirdly, the psycho-social implications of climate change on the career thinking and enactment of individuals.

Although this section will address the implications of climate change under these three headings it is important to recognise that discussions of career, climate change and the interaction between them are defined by complexity. Consequently, we need to understand both the problems of, and solutions to, environmental destruction and career *holistically*. These are 'wicked problems' that are 'socially complex, politically fraught, and imperfectly understood' (Allen et al., 2014, p. 47). The problem of the impact of environmental issues on career addresses individuals in context. It cannot be seen as separate from other issues like family, community and society nor from issues of work-life balance, social injustice, economic inequality, or the functioning of organisations.

Greening the labour market

Much of the literature focuses on how climate change and sustainability affect specific aspects of peoples' work, education or lives. As such, they focus on the contexts for careers and suggest ways to adjust or integrate sustainability issues into the labour market and employing organisations.

Green jobs

The concept of 'green jobs' is at the heart of how environmental issues are addressed in the context of the labour market. The literature is interested in what green jobs are, where to find them, which qualifications are necessary to get them, and what skills and competencies are required to do them (Rutkowska & Sulich, 2020). Green jobs are variously known as green collar, green employment or sustainable employment (Kozar & Sulich, 2023) and can be defined as 'being in line with the goals of sustainable development, promoting smart, sustainable and inclusive growth, ensuring a healthy functioning of Earth's ecosystems and guarantee decent work for all workers and high levels of workers' health' (Moreira et al., 2018, p. 189). Bohnenberger (2022) has developed a framework for distinguishing green jobs from white or brown jobs by looking at output type, occupation, work lifestyles and outcome efficiency as dimensions that can be used to measure the environmental impact of occupations. The

issues of defining green jobs are looked at in more detail in the first paper in this series (Hooley and Bakke et al., 2024).

Green jobs differ from other jobs because they require more skills and human capital (Consoli et al., 2016). Montanari et al. (2023) argue that the human capital required for green jobs can be divided into two categories: (1) *green skills*, which are technical abilities required for specialist roles, and (2) *sustainability competencies*, which denote a broader understanding of and commitment to sustainability which is likely to be important in a much wider range of jobs.

Many writers hold that there is a connection between green jobs and decent work, often by relating them to the UN SDGs and to the International Labor Organisation's (ILO) (n.d.) definition of decent work. This question is approached in different ways. For example, for the ILO, the SDGs bring together environmental and social sustainability through the recognition of decent work in SDG 8 and the need for 'responsive, inclusive, participatory and representative decision-making at all levels' in SDG 17 (Novitz, 2020). Here, the voice of workers who *do* the green transition is especially important (Rodríguez, 2019). Similarly, as Montt et al. (2018) see it, economic activity and work cannot be understood as independent from the context in which it takes place, the natural environment, and therefore, the degradation of nature affects the world of work. Working towards sustainability will disrupt the world of work and lead to a structural transformation. This opens a space for promoting decent work through environmental policies.

This connection between environmental and social sustainability is desirable but not inevitable. VanWynsberghe (2016) gives an example from Canada which demonstrates that it is possible for local policymakers and actors to successfully yoke together environmental and social policy goals by ensuring that new investment in sustainability is linked to the hiring of disadvantaged people. However, in other cases, green jobs have been found to be less organised, have worse records on worker safety and require lower levels of skill (Moreira et al., 2017; 2018). Similarly, Deutz (2014) warns that from a class perspective, it is difficult to see that the competition for investments that is always present in capitalist economic systems will not overshadow the promotion of equity, concluding that the green employment market of the future, will be organised primarily to benefit capital rather than labour.

Within organisational studies, there is interest in how HRM practices can be developed to incorporate sustainability by fostering pro-environmental behaviours and job-related routines (Moreira et al., 2017; Valenti et al., 2016; Xie et al., 2023) and attracting job applicants who wish to work in a sustainable organisation. Such work also identifies that green motivation and green HRM practices are linked to job satisfaction and sustainable performance (Abdelhamied et al., 2023; Fernandez & Ganesan, 2023; Khattak, 2023).

Greening education

There is also a substantial body of literature that examines the role of education in relation to the environment, the green transition, and sustainability. Much of this is linked to the SDG's, often through the lens of 'education for sustainable development' (Annan-Diab & Molinari, 2017; Boeve-de Pauw et al., 2015; Huckle & Wals, 2015). A key concern of the literature is how education can prepare people for the unstable times ahead both by supporting them to deal with the practical and emotional consequences of environmental change and by supporting them to actively intervene into the climate crisis through behaviour change and political action.

Addressing the emotional component of sustainability through education

A range of authors discuss the emotional or affective components of sustainability and explore how to deal with these through education. For example, Määttä and Uusiautti (2020) propose that *sustainable happiness education* could be the key to positive education and adapting to pro-environmental behaviour. If human happiness and life satisfaction are the guiding principles of sustainability education, it can provide a means to educate people about ways of considering their own well-being and that of others whilst also keeping in mind the sustainability aspect of their actions.

Other writers also focus on the role of emotional engagement for sustainability in education, e.g. Skilling et al. (2023) and Pihkala (2020) address eco-anxiety through education. They argue that educators need to start with themselves and acknowledge their own difficult thoughts and feelings on the topic prior to addressing these issues with students. Skilling et al. (2023) present a framework of five spheres of practice which can be used to address eco-anxiety in the classroom.

1. Acknowledging distress and fear
2. Creating a safe space to address eco-anxiety
3. Fostering critical awareness
4. Developing possibilities for action
5. Co-constructing realistic solutions.

In a similar way, Pihkala (2020) argues that validating these emotions and creating activities to deliberate on them is important and notes that it is important to be aware that eco-anxiety can take many forms and be constructive or un-constructive in different ways. Nice et al. (2022) see school counsellors as an especially important resource for young people experiencing eco-anxiety.

Education for (green) work

An alternative conception of the role of education in relation to environmental sustainability, is to view it as critical to preparing people for the kinds of green jobs discussed in the previous section. Rosenberg et al.'s (2018) study of practitioners working in the green economy highlights the importance of a range of both technical and transformational competencies (akin to Montanari et al.'s [2023] distinction between *green skills* and *sustainability competencies*) which they note that workers had built within education and work-based learning.

Studies discuss what approaches are most effective in this kind of education for work. For example, Wall and Hindley (2018) note that flexible learning helps students integrate sustainability in their learning. While Weijzen et al. (2023, p. 1) argue that students need both 'genuine collaborations' with experienced workers as part of their education as well as space to engage in creativity and reflexivity.

Other writers are critical of an economistic focus for education (McGrath & Powell, 2016; Shabalala, 2023). So, McGrath and Powell (2016) argue that vocational education and training (VET) needs to shift its target from purely supporting economic growth to a broader focus on sustainability and the well-being of individuals. Shabalala (2023) urges educators to find ways to integrate economy, politics and environmental education to help learners to comprehend these connections and become informed and engaged citizens, who can contribute to a more sustainable and equitable future.

To sum up, the reviewed literature on the topic of education suggest that green competencies are more than just technical 'green skills' but also include creativity, a wider understanding of social and political systems, the capacity to influence others and the capacity to manage your emotional response to environmental change. It also suggests that education has the capacity to develop these competences and a range of possible tools for doing so.

Psychosocial issues when careering in the climate crisis

The final area that the literature focuses on in relation to the careers of individuals is the psycho-social and emotional effects of careering during the climate crisis. It recognises that this experience will challenge our mental health and coping skills. The new times involve opening a gloomy '*black box*' of psychological processes and phenomena (Di Fabio & Rosen, 2018).

Passmore et al. (2023, p. 138) warn that as peoples' experience of climate change develops, we will see a '*cascade of fundamental existential anxieties*'. As nature and landscapes that people know and have become attached to become degraded and disrupted, existential issues like identity, happiness, life, death, freedom and isolation come to the forefront, creating existential crises and anxieties that people must learn to live with. This has led some to develop a new vocabulary to describe the relationship between mental health and the environment. For example, the condition of *eco-anxiety* has been recognised

and defined as being associated with functional impairment, symptoms of depression, anxiety, PTSD, stress and insomnia, lower self-rated mental health, and reluctance to have children (Boluda-Verdú et al., 2022). Several researchers see *eco-anxiety* as a particular problem for younger people (Léger-Goodes et al., 2022; Tsevreni et al., 2023).

In addition to eco-anxiety and the questions of what it is, if it is a new type of anxiety and how to identify it (e.g. Hickman, 2020; Kurth & Pihkala, 2022; Léger-Goodes et al., 2022), others have suggested related conditions such as *eco-guilt* and *eco-grief* (e.g. Ágoston et al., 2022), *eco-detachment* (Edwards et al., 2023), *eco-paralysis* (Innocenti et al., 2023) *eco-depression* (Pihkala, 2022), *ecological insanity* (Kanner, 1995), and *eco-anger* (Rozuel & Bellehumeur, 2022). In short, individuals may experience eco-emotion clusters in *eco-complexes* (Foster, 2022), affecting their *eco-wellness* (Nice et al., 2022).

The literature explores whether the kinds of emotional and psychological reactions discussed above are related to an urge or ability to act on environmental issues. For example, is eco-anxiety a spur to environmental action or does it have the opposite effect, debilitating and pacifying individuals (Innocenti et al., 2023; Pavani et al., 2023; Pihkala, 2020). Trying to theorise and measure this, some studies (e.g. Pavani et al., 2023; Sampaio et al., 2023; Verplanken et al., 2020) find that anxiousness about the future and the climate may foster pro-environmental behaviour, but that this is dependent on other variables as well, such as an individual's '*green identity*' and their wider personal values.

Research also suggests that balance is essential, with some anxiety potentially having a positive effect on behaviour, but too much being debilitating (Boluda-Verdú et al., 2022). Likewise, it is possible to see eco-grief as a way to foster pro-environmental behaviour because it is a natural response to loss, and grief processes, when handled well, can foster coping and change (Pihkala, 2022).

Future career guidance practitioners will have to be prepared to deal with existential issues related to the environmental transition in both young people and adults. Some writers see school counselling as a critical arena where practitioners must be especially prepared for this (Crandon et al., 2022; Köse, 2023; Nice et al., 2022). This will require much reflexivity and renewal of practice in the future including the development of careers practitioners' mental health competence.

5) What is green guidance

As the discussion so far shows, environmental destruction and climate change are major social issues around which there is a substantial academic and research consensus (Chapter 2). Unsurprisingly, these wide ecological, social, and economic effects have an impact on the environment in which people pursue their careers (Chapter 3). Given this, career guidance practitioners 'would benefit from increased attention to the implications of the stark realities of the crisis' and need to 'begin to address this challenge through engaging in frank professional discourse around uncomfortable truths and their implications for career education, information, advice and guidance' (Mowforth, 2023, p.1).

Other analogous professions have also engaged with the implications of climate change for practice. With for example, the APA Taskforce on Climate Change (2022) recommending that psychologists get involved in supporting people to mitigate the effects of climate change, adapt to them, work to increase public understanding, take social action through the development and advocacy of new policies, programmes and practices and finally engaging in building the profile of psychologists as a key part of the solution to these problems. It is possible to imagine careers professionals taking a similar position.

There has been debate about how careers professionals can best work with climate change since the 1990s, when writers in the career guidance field first voiced concern about climate change. Notably, in the 1990s, Plant (1996) reflected on the changes that he saw coming with the new millennium, e.g. globalisation, acceleration of information technology development and environmental change, and saw that career guidance in the future would have to renew itself to stay relevant and important in the face of these problems. A major concern to Plant was the connection between inevitable climate change and decent work because the ability to change and adapt is often a matter of resources, i.e. those who have resources are better equipped to be flexible. However, an important aspect was that climate change was happening, and the world of work – the whole of society – would change to adapt to it, and hopefully mitigate it. Plant is also seen as the writer who coined the term 'green guidance' (Buhl & Plant, 2023a).

While green guidance has a long history and is increasingly capturing the attention of researchers and writers, as this chapter shows, there is still a very limited practice footprint. Personen (2023) in a study of Finnish school career counsellors found that only around half had ever included environmental issues in their provision. The recognition of a limited level of engagement in green guidance from practitioners has also been identified by our findings in this project (Hooley, Lucas Casanova, M., & Šprlák, 2024). Ginevra et al. (2024) have developed an instrument to measure careers practitioners' engagement in these issues which may prove to be a useful research tool in the future.

Monitoring careers practitioners' engagement in these issues is likely to be an important area of research for the future.

Conceptualising green guidance

When looking at the literature on a greener future, careers and career guidance, we recognise a difference between discussing a greener way of life and discussing careering in a greener employment market in the future. The first marks a profound change in how individuals live, i.e. how they see themselves as part of the world and how one can participate in the green shift by working with values, attitudes and behavioural change. The latter is about how climate change will affect the context that people live in and how change and flexibility can help navigate this new situation successfully, i.e. how the changing context demands new competencies and skills and the duality of green jobs and decent work. These present different approaches to careers and career guidance for careerists, policymakers, and practitioners, and this duality underpins the deliberation on green career and guidance issues in the sections below.

Plant (2020) draws on Packer's ecological restatement of the socio-political ideologies of guidance (Watts, 1996). In this, Packer differentiates between 'light' and 'dark' green approaches to career guidance. Plant writes that a light green approach (environmentalism) 'advocates a management approach to environmental problems, based on the conviction that they can be solved without fundamental changes to current values or patterns of production and consumption' (p.4), and this can be understood as a conservative or liberal approach. A dark green approach (ecologism), on the other hand, 'argues that a sustainable and satisfying existence presupposes radical changes in our relationship with the non-human natural world and in our social and political way of life' and represents a progressive or radical approach.

	Focus on society	Focus on individual
Focus on change DARK GREEN (Ecologism)	RADICAL (social change) In careers practice this might look like: helping individuals to see social and environmental challenges as group – rather than just individual – challenges, e.g. through green critical pedagogy.	PROGRESSIVE (individual change) In careers practice this might look like: encouraging and empowering individuals to make individual career choices that take ecological wellbeing into account.
Focus on status quo LIGHT GREEN (Environmentalism)	CONSERVATIVE (social control) In careers practice this might look like: acting as a ‘gatekeeper’, assisting individuals to develop their skillset/attributes for a greener economy.	LIBERAL (non-directive) In careers practice this might look like: helping individuals who are environmentally-minded to make career choices in line with their personal values and skillset.

Figure 5-1. Figure 2. Packer's light green versus dark green approaches to guidance (Plant, 2020)

The discussion on career, career guidance, and climate change has intensified after the millennium, with writers opting to define and explain what is particular about green career guidance and why developing it would be so important (Guichard, 2003, 2013, 2016, 2022; Metz & Guichard, 2009; Pouyaud, 2016). Many of these writers make an explicit link to social justice and, as such, place themselves within the radical or progressive quadrants of Packer's typology.

Plant (2023) argues that working for a greener future may be dismissed as utopian, but that such work has the potential to transform the world and bring utopias into being. As Plant (2020, p. 6) sums it up: *'Green Guidance is pro-active, questioning, probing, reflexive, and human-centred in the real sense: it moves career decisions to a higher note of personal commitment, societal involvement, and meaningfulness'*.

There are a range of practical green guidance approaches that have been developed and researched. These include addressing social and environmental issues in career counselling interactions (Guichard, 2013; Pouyaud, 2016), group-based interventions (Tacchini et al., 2024) and embedding discussion of environmental issues into the school careers curriculum (Personen, 2023; Saliba, 2023).

Other writers have chosen not to use the language of green guidance but have instead adopted the idea and terminology of sustainability. These writers argue that it is possible for career guidance to help individuals relate to the idea of sustainability and these wider global problems. For example, McMahon and Watson (2020) note that constructivist and postmodern theories and thinking give ample space for engagement with sustainability in terms of social justice. But, McMahon and Watson's discussion also illustrates a difficulty when discussing sustainability and green issues in career guidance, which is that while the social justice and decent work agenda is well known and much discussed,

green and environmental issues are not. It seems as if the connection between social justice and environmental sustainability has been discussed prolifically only in the last decade, despite voices in the field raising the issue almost 30 years ago (Kanner, 1995; Plant, 2014, 2015a).

Buhl & Plant (2023b) have edited a new book which discusses sustainability and environmental issues in career guidance. The writers in this book discuss sustainability both as an existential issue and also explore how to approach these issues in career guidance. Buhl (2023) discusses how social acceleration has led to a loss of resonance, where strengthening the connection to the world through *af-fection* (being "touched"/moved) and *e-motion* (responding to the world/the "touch") is a step towards living sustainably – both having balance within but also being more mindful about the sustainability of the world – having more individual resonance with the world and challenge discourses of career growth and competition and build solidarity through the collective practice of career counselling.

Petersen (2023) calls this an existential orientation that can develop 'væredygtighed',¹ which can be understood as an aptitude for dealing with a society in transition to sustainability. In other words, there is an element of personal competence in terms of attitudes, values, attention, and ability to reflect, which can be developed through career guidance. However, the topic of sustainability in career guidance should not become more of a burden for young people, at the risk of individualisation and blame; the emphasis should be on helping the individual to develop a point of view and make the world '*their own*' (Skovhus & Klindt Poulsen, 2023). In the same vein, Dimsits (2023) argues that there is a danger that young people lose their hope and engagement and holds that career guidance must be a bearer of vocational hope for young people. Vocational hope refers to what we hope for and aspire to achieve through our work. Therefore, green guidance should stimulate the development of professional hope through imagining the world (inspired by Gelatt/Krumboltz), learning about the world (inspired by Law/Krumboltz), and changing the world (inspired by Hooley, Sultana, Thomsen). The main idea is that careers (and careers practitioners) *can* transform the world.

In terms of guidance practice, these writers all call for critical and collective methods in career guidance to avoid the individualisation of these problems and issues. Also, there is more power in working towards change as a group. To Dimsits (2023), green guidance entails supporting the construction of the individual's relationship with existence, the world and nature; supporting the development of vocational hope; promoting reflection on society's demands in terms of sustainability and ecological transition; and involving individuals in

¹ Væredygtighed is a pun playing on the Danish word for sustainability: bæredygtighed

imagining and defining how the world should be and what changes are needed - and what careers, skills and knowledge can do to contribute to this change.

Buhl & Plant's (2023) book collects the most recent texts and ideas about green guidance, but other writers have also explored how to work with sustainability in career guidance. These writers often have concerns that are similar to Buhl, Plant, Dimsits, Petersen, Skovhus, Klindt-Poulsen and their co-writers (Buhl & Plant, 2023). For example, Carosin et al. (2022) argue that guidance should move away from the focus on the individual and help people see themselves in the world. Interventions should include individual and collective experiences of humanness, humanity and the world. They developed a conceptual framework based on these three dimensions to guide methodological innovation, with social justice, decent work and sustainable development as benchmarks. As such, constructivist theories appear when writers discuss thinking and philosophies underpinning guidance that can help people see themselves in the world through the construction of self-concerning personal and societal sustainability for decent work and decent life. The question is: 'How does one best advance reflection on sustainability for decent work and decent lives? How to move forward' (Di Fabio, 2018, p. 173)? McMahon and Watson (2020) argue that professionals must integrate critical consciousness and reflexivity into their practice.

In other words, sustainability is seen as an overarching topic and concern, while environmental sustainability, green jobs, decent work, and economic, social, and gender equality comprise the elements of the bigger picture. They are the dimensions to balance to achieve sustainability.

In the literature, writers and researchers share a range of ideas about what can be challenging for careers in the future, and as implied above, one of the biggest is the need to innovate. For example, Plant (2014, 2015b, 2020, 2021) has in his writing called for a *paradigm shift* in career guidance in the face of climate change. The notion of paradigm shift (Kuhn, 1977) refers to profound changes in ways of seeing the world or thinking about it and in methods and ways to operate in it. According to Allen et al. (2014, p. 47), problems such as these (wicked ones) require a '*mixture of content knowledge and soft skills that enable [individuals] to critically analyse these challenges from a systems perspective, develop creative solutions, communicate effectively, and work collaboratively with others who may not share common views*'.

Much-used concepts may need a makeover. For example, as Pouyaud (2016) explains, the much-used concept of decent work is quite technical and "objective". It does not include a psychological dimension, which is necessary to understand the concept's subjectivity (psychological dimension) for it to be fully useful in career guidance. On that basis, it is worth noting that the present study (this literature review) found that research from psychology also holds that young people appear to be more emotionally activated regarding the development of their life worlds and the making of life choices.

Different approaches to green careers and green guidance

One way of exploring how career guidance engages with environmental issues and sustainability is to group approaches based on the rationality that underpins them. Sultana (2017) adapts Habermas' work to present three rationalities that can underpin career guidance. These rationalities can be understood as a way of describing the intended purpose of different interventions, which is underpinned by socially pervasive schema for organising thoughts and actions. It acts as a lens that predisposes actors to consider certain social practices as 'problems' and some specific measures as 'solutions'. Sultana describes these three rationalities as technocratic, developmental and emancipatory.

Technocratic: Positivistic, information focused

Sultana (2017) argues that in the case of career guidance, the technocratic discourse sees career guidance as oil in the machinery that can lubricate the functioning of the economy by making sure that everyone finds their place in society. The technocratic discourse is connected to human capital thinking, to person-environment fit and trait and factor theories, to being realistic, to economic models and quantitative measures, and, as such, it has a connection to positivistic and quantitatively based empiric research.

Some of the research found in this literature review refers to quantitative research that has sought to develop and test instruments and practices for sustainability-focused career guidance. These approaches focus on the quantification of people's engagement with the environment and the relation of this to their career development and labour market position. For example, Di Fabio and Rosen (2020) developed a measure for mapping individuals' self-perception and inclination to work towards sustainability goals, namely interest, motivation and self-efficacy. They argue that such a measure can be of help in designing interventions in relation to specific targets, contexts and needs and, as such, stimulate action.

Međugorac et al. (2020) and Santilli et al. (2023) address similar issues through their investigations of young people's propensity to have sustainability as a factor in their career planning. Međugorac et al. (2020) found that adolescents' interests and goals related to pursuing a career in the SDG domains. They argue that Social Cognitive Career Theory (SCCT) serves as a framework for understanding where the career interests and goals in the SDG domains came from and as a tool for understanding how barriers and contextual support had both direct and indirect effects through learning experiences, self-efficacy and outcome expectation. Santilli et al. (2023) developed an instrument to assess which sustainability goals were the most meaningful to young people in their career plans, finding four factors from the 17 goals: (1) social/health, (2) environment/nature, (3) human rights/equal economic development, and (4)

policy and democracy. While Ginevra et al. (2024) offer a similar instrument designed to measure careers practitioners engagement with environmental and social activism. Di Fabio and Rosen, Santilli and Međugorac et al. all argue that these measures can be used as starting points for further career guidance and career learning.

Developmental: Constructivist, learning focused

The second discourse that Sultana (2017) proposes is the developmental. It is also referred to as 'hermeneutic' or 'humanist' and is mainly inspired by liberal or client-centred psychology and underpinned by a belief in human potential and the importance of learning, personal growth and fulfilment. Approaches to guidance often say that guidance is a process of self-discovery and learning about oneself in the world through self-exploration, making choices and finding other ways to live through life design and self-construction. Developmental theories and methods are often based on the constructivist theory of science and emphasise interpretivism, post-positivism and narrative approaches.

Constructivist methods have the capacity to work with the psychological dimension that Pouyaud (2016) calls for, and different writers suggest different approaches. Sustainability is often connected to constructivist methodology in career guidance (Cohen-Scali, 2018; Guichard, 2022; Nota et al., 2020; Rochat & Masdonati, 2019). Life design has a prominent position in the literature found in the intersection of career and sustainability (both with and without green perspectives), and the various writers suggest different concepts and strategies for helping clients think about their place in the world.

Argyropoulou et al. (2020) suggest that when career counsellors are motivated to discuss environmental issues in guidance, they can start with themselves by using the life design intervention 'Constructing my future purposeful life' to contribute to their sustainable career development so that they can be better equipped when helping clients. A place to start with clients is to work with people's pro-social/pro-environmental attitudes in individual and group settings (Cohen-Scali, 2018, 2021), work with narratives to create meaning and give direction for the next chapter (change) (Di Fabio & Maree, 2016), card-sorts using the SDGs as content (Bodoira & Rochat, 2021; Rochat & Masdonati, 2019), and '*infusing*' the SDG agenda into school content (Guichard, 2021b).

Allen et al. (2014) found that it can be hard for students in HE to see how the education programs and courses that are offered to them can be combined and connected to build green or sustainability competence that is effective and competitive. They tested a Pathway-program collectively designed by educators at their university, hypothesising that they would be most able to determine in which context and to what use the different competencies and skills would be 'green'. They found that collective effort gave a more cohesive and relevant set of competencies.

Some writers have experience with working with the combination of counselling and education of young people and eco-anxiety specifically. Eriksson et al. (2022) and Skilling et al. (2023) have found that it is helpful to open spaces in their teaching for discussion of environmental issues. Edwards et al. (2023), on the other hand, found that it is not always preferable to raise these issues and discuss environmental worries in the teaching setting as they may make concerns weigh more heavily on the students. Rather, they suggest proactive approaches to teaching which help students connect with nature, thus fostering pro-environmental behaviours without necessarily nurturing their anxiety.

To sum up, many writers in the field see constructivist methods with their focus on exploration, learning and reconstruction, as useful for dealing with sustainability in guidance, where individual, societal and environmental topics can be included. However, writers are wary of the tendency for constructivist methods to put the individual in the centre and either responsabilise people or give environmental and social issues a minor role. Suggesting methodologies for green guidance can thus appear to be more about discussing the concepts and topics to bring up in career guidance conversations than reforming methodologies.

Emancipatory: Social reconstruction

The third underlying rationality that Sultana (2017) suggests is the emancipatory or 'social reconstructionist' one. It is seen as 'more social and communitarian in [its] scope, and committed to questioning the status quo rather than to encourage people to fit in' (p. 65). In this discourse, guidance is critical, questioning, conscientising, decoding, and directing counselees' gaze towards dimensions of injustice (gender, ethnicity, class, etc.) embedded in human societies. Guidance aims at social mobilisation and advocacy for collective action to challenge and transform societies' structures that exacerbate differences between people in terms of opportunities, difficulties and resources.

Emancipatory theories and models apply different theoretical perspectives. However, the most important issue is to use models and theories to critique the status quo and mobilise the power of the collective.

Similar to developmental approaches, emancipatory career guidance will often offer frameworks for ways of thinking and learning about oneself and the world, but a major difference is that the emphasis on learning about this relationship is in order to *transform* the world. This perspective is strongly represented in Buhl and Plant (2023). Guidance is not about reconstructing the self, even though a process of change sometimes necessarily starts with the individual, and counselling will focus on how to do it (Di Fabio, 2018; Maree & DiFabio, 2018). But learning about the world is essential. Guichard (2016) suggests interventions that are:

...designed around the counselees' reflection in which their inclusion in the current world of work would be secondary to the overriding concern of their individual contribution, by their humane and decent work activities, to the development of a good life, with and for others, in just institutions, to ensure the sustainability of a genuine human life on earth.

In other words, Guichard suggests interventions that do not put the individual at the centre. Later, he also suggests, e.g. using Hannah Arendt's concept of labour, work and action as tools for individuals to understand their lives, where *work* is what traditional career guidance has been concerned with. '*Labour*' is a space for thinking about decent work and injustice, and '*action*' opens up a space where individuals can act and change the world (Guichard, 2021a, 2022).

Shabalala (2023) holds that teaching students about economics and politics in environmental education has great potential not only to shape students' pro-environmental attitudes. Learning about the connections between the economy, the environment, and politics also helps them become informed and engaged citizens, and environmental education can be an arena for educating students about the complex relationship between the economy and politics, including sustainability, resource allocation, and social justice. Although VanWynsberghe's (2016) study is not about career guidance per se, they demonstrate how it can look by presenting a concrete example of where national policies are developed for projects for green and decent jobs by local stakeholders' decisions to direct green jobs initiatives to employ disadvantaged groups.

In terms of conceptual frameworks for green guidance within the emancipatory discourse, different suggestions present different ways of seeing the world without focusing on the individual and different concepts to help clients in that line of thinking – for example, by signposting social issues as they relate to issues that come up in the individual counselling (Guichard, 2013; Pouyaud, 2016).

Carosin et al. (2022) suggest that interventions should include individual and collective experiences of humanness, humanity and the world, where certain spaces, identities, knowledge and skills are seen as benchmarks that can be used to design and analyse guidance interventions. In a similar vein, Carosin and Canzittu (2023) suggest a theoretical model of collective orientation with three dimensions: being human and guided by social justice, contributing to humanity through decent work, and questioning one's place in the world in relation to sustainable development. They hold that interventions can foster the interplay between these dimensions, develop knowledge and foster action.

Other interventions argue for career guidance to adopt strongly counter-hegemonic values and encourage clients to question basic societal norms. A strong example of this is the 'slow careers' movement which is addressed by Tacchini et al. (2024). This approach advocates for people to actively slow down

their career, rejecting normative aspirations around money and power and respecting planetary limits.

The three discourses presented by Sultana (2017), the technocratic, the developmental and the emancipatory, each have their sets of frameworks and methods for practically addressing environmental issues in career guidance. Technocratic approaches seek to align individuals' capabilities with societal needs around environmental change. Developmental approaches address the psychological dimension, which is necessary to elicit change, and emancipatory approaches seek to encourage agency and social transformation. Together, they offer practitioners a range of different approaches to addressing environmental issues in guidance which can potentially be combined in different ways. For example Maree (2024) blends all three rationalities when he talks about the role of career counselling as *'aligning people's skills, interests and values with job opportunities'* (p.21), argues that such an approach should be based on *'self-construction theory and career construction theory'* (p.19) and suggests that *'people should actively participate in advancing processes such as decolonisation, transformation, the promotion of social justice, ethical behaviour and tackling the rampant abuse and destruction of the environment'* (p.21).

Ethical issues in green guidance

The idea of green guidance raises a set of ethical issues which it is useful to discuss in more detail. Green guidance is a response to an ethical issue which can be stated as follows: Can career guidance continue to support peoples' careering in the world *without* taking care to help them career in a more environmentally sustainable direction? Can career guidance continue to be a cog in the wheel of neoliberalism's continuing and destructive economic growth (Irving, 2013, Plant, 2014). Can career guidance adopt a stance, that considers that it is relevant, even desirable to influence individual career choices by taking into consideration its effects on our planet? According to Plant's (2004) sustainability perspective, almost every kind of job and all work has an environmental impact. Therefore, *'the role of the guidance practitioner goes beyond that of exploring self and opportunity. It poses questions to globalisation, and it questions economic growth as an end in itself'* (Plant, 2005, p. x).

The belief that career guidance can play an important role in major social issues is at the heart of the green guidance movement. This can be viewed as a continuation of the social justice agenda because leaving the world a greener place ensures justice for the coming generations. The inclusion of environmental issues as the flip-side of social justice in career guidance is now also adopted by the International Association for Educational and Vocational Guidance (IAEVG) in a 2023 Communique, which firmly establishes the environmental impact of

careers and environmentalism as an important area of focus within the career guidance profession.

In light of the multiple crises of the anthropocene and the UN sustainability goals, Guichard (2016) suggests we fundamentally rethink the role of guidance practice by asking a rhetorical question: *'Will we continue to collaborate in supporting the forms of work that undermine the future of the planet and human species? Or can we promote the creation of active life forms that lead to sustainable development by decent humane activities?'* (p. x). Career guidance practitioners should shift their focus from merely facilitating individuals' integration into the existing world towards actively contributing to its transformation. Their role should encompass promoting equitable and sustainable economic and human development. This involves systematically incorporating discussions on concerns for distant others, just institutions, and decent work into their client interactions, even when these themes are not spontaneously raised.

For example, Rochat (2021) argues that, in light of the pressing climatic and social challenges, it is imperative to integrate ecological and human considerations into career guidance processes systematically. Rochat asserts that when sustainability issues are either absent from the client's value system or overshadowed by financial, social, or other concerns, practitioners should employ various interventions to amplify the significance of these factors for the individual. From the ethical standpoint, the author justifies this stance by pointing out the difference between "hedonic" well-being (search for pleasure and avoidance of suffering) and "eudaimonic" well-being (engagement in activities that are meaningful psychologically but also socially), which entails that individual happiness cannot be achieved at the expense of others, i.e., future generations and environment. Career practitioners should help clients to realize careers that allow the achievement of hedonic well-being as much as eudaimonic well-being, while participating in the preservation of ecology and the society.

The methods that are suggested for green guidance (and in emancipatory career guidance) are, as we have seen, often focused on raising issues of environmental concerns and sustainability with clients in guidance. However, raising issues of social significance also means acknowledging and declaring a position related to them (Andersen, 2003; Irving & Malik, 2019), and while it is still a choice to include or not include environmental issues and climate change in career conversations, simply the act of bringing up the topic signifies engagement and a position.

This presents a challenge and a problem for the ideal of the neutral and impartial career guidance counsellor (Masdonati & Rossier, 2021). Impartiality as an ethical principle has protected career counsellors when they have acted in the interest of their clients instead of their employers or other stakeholders. While various frameworks for ethical practice state it differently, the idea is often

advanced that career practitioners should not impose their own agenda on clients (Hooley, 2023) or, alternatively, that they should at least be transparent about what their agenda is.

On the other hand, it would be possible to make the argument that integrating a concern about the environment into career guidance is inevitable and in line with the evidence rather than a highly political position to adopt (Plant, 1996). But as shown in section 1 of this review and in Hooley and Bakke et al. (2024) and Plant (2020), there are different ideas about possible solutions to the climate crisis. These positions connect to political views, and career guidance counsellors can be perceived to be positioning themselves politically even if they feel that they are just following the evidence. At its worst, such positions could potentially estrange clients and other stakeholders who adopt different kinds of eco-politics. In other words, there are potential ethical pits to fall into, and career practitioners need to navigate these carefully.

There is a need to discuss how career counsellors can work for a better future while being transparent about their assumptions, beliefs and values and clear that they are working on behalf of the client. In the same vein as Rochat (2021) suggests bringing up the value of eudaimonic well-being, which comes from acting for the greater good, Bakke (2024) argues that it would be natural for practitioners to bring these issues up with clients if they focus on the relation between career in the world and supporting democracy through a democratic career concept. In this conceptualisation, career guidance seeks to foster citizenship, which is viewed as a social contract in which the individual is able to be independent and autonomous based on the support of others but, in turn, has an obligation to support others to exercise their independence and autonomy. There is no individuality unless it is supported and accepted by others (Sultana, 2011), and there will be no democracy unless it is supported and enacted for future generations (Gamble and Wright, 2018). Helping people to participate in society and understand the give and take of citizenship is to support further democracy as a core societal value, to the benefit of both the clients and the counsellors themselves. Understanding that climate change is one of the major societal threats and that action must be taken, is basic to understanding what the future of education, work and life will be like and which challenges and opportunities lie ahead. It is about supporting the development of society in a beneficial direction for the good of both the client *and* oneself.

Green guidance must therefore learn to grapple with this reality and can find inspiration from critical theory, critical psychology, and career counselling approaches focused on social justice. They have strived to sensitise researchers and practitioners in these areas to the fact that neutrality or apolitical points of view are value-loaded since they are based on the assumption that science must not question the status quo of the world, which ultimately ensures its reproduction (Prilleltensky, 1994; Prilleltensky & Stead, 2012), and in the case of

environmental change: may hinder the profound changes that are needed. Thus, all scientists, psychologists and career counsellors are informed by their individual, social and political views, which are unintendedly internalised by all, and these necessarily penetrate their research and practice (Lucas Casanova et al., 2022). Thus, what is necessary is for the researcher/practitioner to be conscious of these dimensions and to develop reflexivity. This entails accepting that all research and practice are value-loaded, questioning power relations in society, the reproduction of the status quo, and its social and political impact on the most vulnerable of society. According to Prilleltensky (1994) this entails 'struggling with one's values' and accepting the complexities and inner conflicts of their position as researchers or practitioners.

In conclusion, there are several existing points of views related to the ethical stance of career professionals. A number of authors point out the necessity of a *socio-political commitment of counsellors*, which involves analysing the extent to which individual vocational behaviour impacts collective well-being and encouraging clients to consider the consequences of their choices on others and the world, 'even if it means sacrificing the neutrality and impartiality of the guidance process' (Masdonati and Rossier, 2021). Therefore, it entails emphasising the importance of discussing both individual and collective well-being in career decision-making (Pouyaud and Cohen-Scali, 2016). Some argue that the fact that guidance professionals introduce the question of 'the needs of the world' in their dialogue with clients, does not necessarily entail a profound change in practice. Instead, it merely adds another topic for discussion alongside interests, values, competencies, and other decision-making factors (Rochat, 2021). Transitioning towards green guidance thus entails an ethical commitment to consistently consider these aspects in client interactions, without necessitating a fundamental overhaul of their skills and practice.

The green shift will be an integral aspect of professional life (Hooley, 2022), and '*an increasing number of clients are likely to proactively raise concerns about the environment,*' entailing that guidance practitioners address these concerns and proactively introduce the ecological transition '*as a key contextual issue that is shaping career development*'. This perspective posits that considering the ecological transition in career choices extends beyond selecting '*green jobs*'. It recognises that all jobs and professions have an environmental impact and that all kinds of organisations are under pressure to change. Consequently, guidance practitioners are encouraged to view the ecological transition as permeating the entire professional sphere. Their mission includes guiding individuals through a societal transformation that significantly impacts professional lives and working environments.

6) Conclusions and recommendations

The findings from the literature review show that there is much interest in sustainability and how it affects society and individuals. However, it also shows that the careers field has not addressed environmental issues to the extent that it has addressed issues of social justice. Sustainability is an idea and a concept that holds much potential for a better future. However, it is necessary to be mindful of how it is used and in which contexts when we relate it to career guidance and how far it relates specifically to questions of *environmental* sustainability. Perhaps this is a special mission for green guidance, to ‘*carry the flame*’ for environmental issues and to ensure that they are a part of discussions and thinking about sustainability.

The social justice discourse is now well-developed in career guidance, and awareness of the importance of social responsibility and decent work are high. However, the relationship between social justice and environmental issues remains implicit. Through the SDGs, it is assumed that decent work also must be green in some way because there needs to be balance, but the connection between green jobs and decent work is not as straightforward as it seems, as research on HRM shows. Green guidance will need to recognise this complexity and consider how best to deal with balancing green jobs with decent work, as it cannot be assumed that a job is inherently both things.

To sum up, green guidance should champion environmental concerns in career guidance and accept that building green guidance will also be about raising awareness and discussion about climate change and how to relate to it in career guidance. Related to this, it is important to recognise that green guidance is likely to use a wide range of approaches (including counselling, group work and learning-based approaches) and to be informed by different theoretical positions.

Based on these findings we would make a series of recommendations that should be taken into consideration as models for green guidance are developed.

1. **Green guidance can draw on strong evidence that environmental change is real and ongoing and that its effects are worsening.** Given this, it is not a choice as to whether career guidance practitioners engage with it. It will become a part of the world in which people career and in which career guidance is pursued. It is also important to help students and clients engage with this reality, and to recognise that engagement is not the same as behaviour change or meaningful action.
2. **There is a need to recognise that concern about environmental change and the willingness to act in response to it is bound up with people’s wider identity, including their political and moral beliefs and their beliefs about the environment.** Green guidance practice needs to recognise and

acknowledge these sensitivities and negotiate them within any intervention. Green issues need to be made relevant to those who do not have a '*green identity*'.

3. **Careers practitioners need to be able to support clients in dealing with the emotional and psychological issues raised by environmental change.** Career guidance practitioners need to understand the psychological implications of environmental change and attend to these issues as they develop approaches to green guidance.
4. **Green guidance cannot only focus on environmental issues.** Models of green guidance also need to be able to address inequalities and social justice issues as well as address the self-interest of individuals. The concept of sustainability and the SDGs may be useful in framing interventions and approaches although it is important to recognise that there are a range of tensions in bringing together environmental, social and economic issues.
5. **Green guidance needs to be able to draw on green labour market information.** Having a clear understanding of labour market realities, how they are impacted by climate change and how net zero policies are likely to stimulate future labour market developments provides a critical underpinning for green guidance. Career guidance practitioners need to be clear about what green jobs are and how individuals can engage in their careers in a green way, even if they are not in a green job. A key element of this needs to be the development of understanding about and capability in the skills that are needed for the green economy.
6. **Green guidance is not a single approach and so resources need to recognise that there are a range of different ways to 'do' green guidance.** Green guidance cannot be presented as a single model or approach, but rather as an area of concern to which there are a range of possible answers. In particular the technocratic, developmental and emancipatory traditions provide important ways to think about and organise green guidance responses.
7. **Green guidance raises a series of ethical questions that practitioners are likely to need help in working through.** Historic attachments to ideas like neutrality and impartiality raise issues for practitioners if they are going to encourage active engagement with environmental issues and environmental change.

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