Greening the Workforce: A Feminist Perspective

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This paper argues that there is a risk that policy proposals for a 'greener workforce' will replicate current gendered inequalities. Some 'Just Transition' frameworks for addressing workers' concerns about a green economy expressly focus on male-dominated sectors. Others, while recognizing the need to include women, fail to identify or counteract the patriarchal power relations which drive inequality. Part I demonstrates the extent to which some of the most prominent Just Transition frameworks are dominated by a male norm. Part II examines how the dominance of the male norm can be confronted and addressed. Simply referring to gender equality is not sufficient. Instead, Just Transition frameworks should be scrutinized under the lens of a conception of substantive gender equality based on four dimensions: redressing disadvantage; addressing stigma, stereotyping, prejudice and violence; facilitating participation; and achieving structural change. Part III uses the four-dimensional framework of gendered substantive equality to point a way towards a future reconstruction of the labour force that can incorporate values that are both green and feminist. Part IV turns to women's role in bringing about change and argues that to truly engender Just Transition frameworks, participation should avoid essentializing women and instead be based on collective and grass-roots organization.

Keywords: Engendering Just Transitions, Substantive Equality, Greening the Workforce, Four-Dimensional Equality, Feminist Perspective on Climate Change, Unpaid Work, Care, Informal Sector, International Labour Organization.

1 INTRODUCTION

Gender equality and the empowerment of women are gaining increasing attention in international policy documents addressing climate change.[1] Phrases such as gender equality, implementation of gender-responsive climate action,[2] mainstreaming, and empowerment of women abound. Women are referred to as victims of the climate emergency, agents for change, custodians of the environment, unique bearers of knowledge of the natural world, and interesting objects of

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1 ILO Greening with jobs (World Employment Social Outlook 2018), henceforth 'Greening'; CEDAW General recommendation 37 (2018) (GR 37); UN Framework Convention on Climate Change Gender and Climate change (FCCC/CP/2019/L.3, 12 Dec. 2019); Commission on the Status of Women *Achieving gender equality and the empowerment of all women and girls in the context of climate change, environmental and disaster risk reduction policies and programmes* Agreed Conclusions (29 Mar. 2022) (CSW).

2 *See* e.g., UN Women *Implementation of Gender-Responsive Climate Action in the Context of Sustainable Development*, (2015).

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study.[3] Framing of women in these terms, however, risks reinforcing gendered stereotypes and obscuring the underlying patriarchal structures which have sustained inequalities for women in the world of work. In this paper I show that, while there are important gestures made to addressing decent work for women in a green future, there is a lack of appreciation of the power disparities which will continue to drive inequality unless they are directly confronted. The danger is that even the greener future envisaged for the world of work will simply replicate the inequalities in the current labour force. Proposals tend to focus on male-dominated sectors, and although the International Labour Organization (ILO) advocates that women be included in proposals for a greener workforce, too little attention is paid to the need to identify and counteract the patriarchal power relations that have excluded women from these spheres. Particularly serious is the extent to which the informal sector is ignored despite the fact that this is a sector where women predominate, and for whom climate change is an immediate threat.

In this paper, I argue that an explicitly feminist and multi-dimensional understanding of substantive gender equality is needed to ensure that the policies for 'greening the labour force' do not simply replicate current deeply entrenched gendered labour force inequalities. I focus on women because, as I demonstrate below, women face specifically gendered risks from climate change, related to their role in social reproduction, their history of exclusion from property and other wealth-related rights, and their exposure to sexualized violence. I emphasize that women in different social locations, especially racialized and migrant women, women living in poverty, and women with disabilities, require specific attention. But this is not to deny that the green transition might exacerbate other inequalities.

Part I demonstrates the ways in which some of the most prominent 'Just Transition' frameworks are modelled on a male norm. Part II examines how the dominance of the male norm can be confronted and addressed within the framework of Just Transitions. It suggests that simply mentioning the importance of gender equality is not sufficient, and instead scrutinizes prominent Just Transition frameworks, such as those of the ILO and the European Green Deal, under the lens of a conception of substantive gender equality based on four dimensions: redressing disadvantage; addressing stigma, stereotyping, prejudice and violence; facilitating participation; and achieving structural change. This conception of substantive equality is then used to illuminate two major, inter-related blind spots in these Just Transition policies. Firstly, it casts light on the extent to which climate change heightens the role of unpaid work in shaping women's

[3] Introduction in *Feminist Frontiers in Climate Justice* (C. Albertyn et al. eds, Elgar 2023).

opportunities in the workforce. Secondly, it demonstrates the specifically gendered risks of climate change faced by women working in precarious and informal work, using agricultural work and specifically the cut-flower industry as an illustration. Part III uses the four-dimensional framework of gendered substantive equality to point a way towards a future reconstruction of the labour force that can incorporate values that are both green and feminist. Part IV turns to the role of women in bringing about change. It is argued that to truly engender Just Transition towards a green and feminist workforce, participation should avoid essentializing women and instead be based on collective and grass-roots organization which truly reflects the needs and claims of women in many different social locations.

2 JUST TRANSITION: THE MALE NORM

The framework known as 'Just Transition' has been the key mechanism for addressing workers' concerns that the shift to a greener economy would imperil their own jobs and livelihoods. As the ILO explains:

> Efforts to fight climate change, in particular those to reduce greenhouse gas emissions, can create new "green" sectors of the economy. But individuals whose livelihoods are tied to less environmentally-friendly practices will require assistance as countries make the difficult choices to phase out certain industries. Measures to re-skill workers and protect those who lose their jobs and livelihood opportunities will be necessary to ensure a Just Transition toward greener economies and societies.[4]

Velicu and Barca regard the Just Transition framework as 'one of the most innovative and promising proposals to address climate change because it aims to overcome the historical opposition between environmental and labour politics with a view to making the post-carbon transition a socially just process'.[5] However, from its origins in the opposition to environmental regulation by North American fossil-fuel workers, many prominent Just Transition frameworks have been modelled on the paradigm of a male worker, employed in full-time, relatively secure and often unionized work. In their detailed analysis of Canada's coal transition policies, Mertins-Kirkwood and Deshpande show that relatively generous benefits have been provided for a subset of coal workers, who are 'overwhelmingly white, male and born in Canada'.[6] However, little attention has been paid to the many other affected workers in coal communities, where

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[4] ILO, *Social Protection and Climate Change: Greener Economise and Just Societies*, https://www.social-protection.org/gimi/ShowProject.action?id=3046 (accessed 27 Apr. 2023); ILO, *Guidelines for a Just Transition Towards Environmentally Sustainable Economies and Societies for All* 2015.

[5] Irina Velicu & Stefania Barca, *The Just Transition and Its Work of Inequality*, 16 Sustainability: Sci., Prac. & Pol'y 263 (2020), doi: 10.1080/15487733.2020.1814585.

[6] H. Mertins-Kirkwood & Z. Deshpande, *Who is included in a Just Transition* (Adapting Canadian Work and Workplaces to Respond to Climate Change, 2019), 13.

the largest employers are the health care and retail sectors. Workers in these sectors are predominantly women and include a disproportionate share of racialized and immigrant workers.[7] A similar pattern emerges in relation to job prospects in those sectors poised for growth in a greener economy: construction, energy and public transportation. Here too, workers are disproportionately white, male, and born in Canada.[8] The European Green Deal has likewise focussed on 'seeking to open up pathways into a clean energy future for – mostly male – workers in the old fossil fuel-based industries'.[9]

Even where reference is made to gender equality, the conception of equality used is limited to a formal conception of equality, requiring like treatment to a similarly situated male worker. The dominance of the male norm is therefore undiluted. This can be seen in the ILO's main proposals on Just Transition in the workforce, *Greening with Jobs* (henceforth '*Greening'). Greening* acknowledges that most employment gains associated with green technology and keeping global warming below 2°C are likely to be in currently male-dominated industries, such as renewables, manufacturing and construction. Women are seriously under-represented in these areas.[10] Also of key importance in the generation of new jobs is the field of science, technology, engineering and mathematics (STEM), where again women are under-represented.[11] Measures to mitigate climate change are therefore poised to diminish the share of women in total employment unless action is taken to reduce occupational segregation.[12]

What solutions, then, is the ILO proposing? *Greening* places the main emphasis on skills development programmes and social protection. However, while there is clearly some value in these proposals, the male norm remains dominant. This can be seen by a closer look at proposals on skills development. In principle, it seems obvious that job segregation can be addressed by providing training for women to enable them to enter under-represented occupations. However, *Greening* finds that in twenty-seven countries, key policy documents on skills development for the green transition did not mainstream gender equality. This leads it to conclude that 'without a clear recognition of and efforts to narrow the gender gap in terms of sectoral/occupational segregation and access to training, there is a high risk that the

7 *Ibid*., at 2.
8 *Ibid*., at 22.
9 R. Heffernan et al., *A Feminist European Green Deal* (Politics for Europe, 2022).
10 Women in Science, Technology, Engineering, and Mathematics (STEM): Quick Take, Catalyst (2022), https://www.catalyst.org/research/women-in-science-technology-engineering-and-mathematics-stem/ (accessed 22 Jul. 2023); UNESCO, *Women in Science,* Fact Sheet No. 55 (Jun. 2019),https://uis.unesco.org/sites/default/files/documents/fs55-women-in-science-2019-en.pdf (accessed 22 Jul. 2023); Greening, *supra* n. 1 at 147.
11 *Ibid*., at 151.
12 *Ibid*., at 44.

transition to a green economy will only perpetuate the existing situation'.[13] It also acknowledges that most of the programmes it identifies are targeted at semi-skilled and skilled jobs. Indeed, apart from a brief gesture towards measures to promote decent working conditions in waste management sectors, there are hardly any proposals for systematic active labour market policies to support disadvantaged groups in the development of appropriate skills.[14]

A key missing element is the background question of why there is such severe job segregation within the labour market, and what the obstacles are to change. It is not simply a careless omission that skills training for women is not mainstreamed or that decent work for the poorest women is not prioritized. Simply stating the need for more training is unlikely to achieve real change without a more profound understanding of the workings of patriarchy in the labour force. These include gender stereotypes in relation to appropriate jobs, women's prime responsibility for domestic and caring work,[15] women's lack of participation in decision-making, and inequalities in education,[16] which all contribute to the systemic nature of women's labour market inequalities and resulting job segregation.[17]

ILO proposals for social protection as a means to a Just Transition similarly reflect the prioritization of job losses in heavily male-dominated industries. This is particularly true of proposals for social protection measures which rely on unemployment benefits.[18] Unemployment benefits are clearly fashioned for male working patterns, as *Greening* itself acknowledges, excluding women with interrupted work histories due to childbearing, and those in the precarious and informal sector. Only 38.6% of the global workforce is covered by unemployment protection under national legislation, but this is highly unequal, with over 80% coverage in Europe, Oceania and North America and as little as 4.2% in sub-Saharan Africa. Most coverage is based on mandatory contributions and women are less likely to be legally covered in many regions.[19] *Greening* concludes that a gender sensitive approach is needed to compensate for existing disparities and prevent their emergence,[20] but it does not give detail on how.

Other aspects of the social protection systems proposed as part of the ILO's Just Transition are less explicitly reliant on a male norm. However, their apparent

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13 *Ibid.*, at 151.
14 *Ibid.*
15 STEM Education for Girls and Women: Breaking Barriers and Exploring Gender Inequality in Asia (2020). UNESCO Office Bangkok and Regional Bureau for Education in Asia and the Pacific.
16 Michela Carlana, *Implicit Stereotypes: Evidence from Teachers' Gender Bias'*, 134 Q. J. Econ. 1163 (2019), doi: 10.1093/qje/qjz008.
17 *See* S. Fredman, *Women and the Law*, (Oxford University Press 1997) Ch 2, 4 and 5.
18 Greening, *supra* n. 1 Ch. 4.
19 *Ibid.*, at 107.
20 *Ibid.*

gender neutrality often continues to mask a set of assumptions about family structures, which could in practice entrench patriarchy. This can be seen in relation to cash transfers. Cash transfers are clearly necessary to complement unemployment protection to address the large number of workers who have no access to unemployment benefit.[21] But their gendered effect depends on their design, eligibility criteria and levels of payment. Here the correlative of the male norm emerges in the form of a stereotyping of women and their role. ILO proposals generally rely on cash transfers to 'households' or 'families'.[22] Yet it is well-known that the intra-household distribution of income can depend heavily on patriarchal power structures.[23] In recent years, the perception of women as subsumed into the household does appear to have changed, in the light of evidence that women are likely to prioritize their children's welfare in using available resources. This has been a positive development to the extent that it has manifested in cash transfers directly to women. However, an increasingly popular form of delivery of cash transfers is to make them conditional on recipients' fulfilling conditions such as taking their children to health clinics or school.[24] While these are worthwhile objectives in themselves, conditional cash transfers of this type are based on preconceptions of gender which are merely the correlative of the male norm, namely that women are primarily responsible for children. In addition, they are stigmatic and place unnecessary burdens on women.[25]

Unconditional cash transfers are preferable, being effective and easier to measure.[26] Unconditional cash transfers aimed at mitigating effects climate changes can assist in protecting people from possible loss of income due to implementation of environmental policies, thus redressing disadvantage in a non-stigmatic manner. But the level of payment, while increasing women's purchasing power, is inevi-

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21 *Ibid*., at 108.

22 ILO, *Social Protection for a Just Transition and a Sustainable Future for All* 5 (Communication strategy 2021–2025); and *see* generally ILO, *Social Protection and Climate Change: Greener Economies and just Societies,* https://www.social-protection.org/gimi/ShowProject.action?id=3046 (accessed 22 Jul. 2023); ILO, *Social Protection for a Just Transition,* ILO Just Transition Policy Brief (Jan. 2023).

23 S. Chant, *Rethinking the Feminisation of Poverty*, 7 J. Dev. & Capabilities 201–220 (2006).

24 J. L. Aber, & Rawlings, LB. (2011). The World Bank, *North-South knowledge sharing on incentive-based conditional cash transfer programs* (SP Discussion Paper; No 1101, 2011).

25 M. Sepulveda, *Report of the Special Rapporteur on Extreme Poverty and Human Rights,* Human Rights Council (22 May 2014).

26 J. Tolleson, *These experiments could lift millions out of dire poverty*, Nature 606, 640 - 642 (2022) doi: 10.1038/d41586-022-01679-y; S. Troller-Renfree, M. Costanzo & G. Duncan, *The Impact of a Poverty Reduction Intervention on Infant Brain Activity*, 119 Psychol. & Cognitive Sci. e2115649119 (2022).

tably too small to truly transform structures. Real structural change, instead, comes with a full recognition of the State's role in providing quality public services, including health and education, for everyone.[27] Employment in such services can also be green.[28]

A similar analysis can be applied to *Greening's* third main proposal for a Just Transition, namely public employment programmes, which aim to provide temporary employment in labour-intensive infrastructure.[29] *Greening* proposes that such schemes should incorporate temporary employment in climate mitigation and adaptation, such as reforestation, water and soil conservation, flood control and erosion reduction. Here too, however, more attention needs to be paid to the extent to which such programmes can genuinely address underlying patriarchal structures. This can be seen by a closer look at the Indian Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), which features as an example in *Greening*. There have certainly been some positive outcomes of MGNREGA, both in providing climate-friendly work in water conservation and irrigation, and in giving some women access to work.[30] However, Breitkreuz's study suggests that prevailing gender and other hierarchies were not interrupted. For example, work was only available to women or other low status social groups if men had other sources of employment.[31] Athreya et al. found that only 10% of households in India were able to get the full 100 days of work and the majority of users of MGNREGA were in fact men.[32] Moreover, focus groups conducted by Breitkreuz showed clear cases of gender and class-based inequalities in the implementation of the programme. In particular, because women's domestic responsibilities reduced their ability to work the same number of hours as men, and because they did not have the same physical strength as men, they tended to earn lower wages.[33] Agrawal shows that women's participation is low in several states, due to poor governance, as well as cultural norms. Moreover, gender empowerment is not achieved as women are excluded from planning.[34] Again, to achieve real change requires more attention to be paid to the underlying patriarchal

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27 *See* e.g. Magdalena Sepulveda Carmona, *From Rhetoric to Practice: Cash Transfers, Rights and Gender in Latin America* (1 Jun. 2014). Harvard International Review Spring 2014, Available at SSRN:, https://ssrn.com/abstract=2534322.

28 Women's Budget Group.

29 Greening, *supra* n. 1 at 110.

30 *Ibid.*, at 111. *See also* https://www.giz.de/en/worldwide/29773.html.

31 J. Breitkreuz et al., *The Mahatma Gandhi National Rurual Employment Guarantee Scheme: A Apolicy Solution to Rural Poverty in India?,* 35 Dev. Pol'y Rev. 397 (2017), doi: 10.1111/dpr.12220.

32 V. Athreya, A Rajagopal & N. Jayakumar, *Report on Some Aspects of Food Security Policy Interventions* (Chennai: MSSRF 2014).

33 Breitkreuz et al., *supra* n. 31 at 412.

34 *G. Agrawal, Mahatma Gandhi Rural Employment Guarantee Act: Design Failure, Implementation Failure or Both?*, 44 Mgmt & Lab. Stud. 349, 351 (2019).

stereotypes, the division of labour in the home, women's own voices and the structural forces maintaining gender inequality.

3 BEYOND THE MALE NORM: JUST TRANSITIONS THROUGH THE LENS OF SUBSTANTIVE GENDER EQUALITY

How then can the dominance of the male norm be confronted and addressed within the framework of Just Transitions? It has been seen above that simply mentioning the importance of gender equality is not sufficient. A more piercing conception of equality is required. Equality of opportunity, de facto equality and equality of results are familiar candidates.[35] Increasing emphasis is also given to combatting stereotyping.[36] This paper utilizes a four-dimensional conception of the right to substantive equality, which includes the strengths of other conceptions but aims to avoid their weaknesses. On this understanding, the right to substantive gender equality entails simultaneously addressing four dimensions: redressing gendered disadvantage (the redistributive dimension); addressing stigma, stereotyping, prejudice and violence (the recognition dimension); facilitating women's voice and participation (the participative dimension); and accommodating difference and achieving structural change (the transformative dimension).[37] Importantly, there is no lexical priority between the dimensions. All four dimensions need to be optimized simultaneously, and any conflict between them needs to be resolved to optimize each. This framework has now substantially been accepted by the Committee on the Rights of Persons with Disabilities (CRPD)[38] in its interpretation of equality in the CRPD; as well as by the Supreme Court of India,[39] and the UK Equality Act 2010.[40] The following paragraphs elaborate on these dimensions and their interaction with each other.

The first dimension, redressing disadvantage, means that the right to equality should address the detriment attached to gender, rather than assuming that gender should be irrelevant to decision-making. The spotlight is on gendered disadvantage, which includes not just material disadvantage, but also legal impediments, power imbalances, and time poverty. Because the focus is on disadvantage, rather

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35 CEDAW General Recommendation No. 25; ILO A Quantum Leap for Gender Equality (2019).

36 A. Timmer, *Toward an Anti-Stereotyping Approach for the European Court of Human Rights*, 11 Hum. Rts L. Rev. (2011), doi: 10.1093/hrlr/ngr036.

37 S. Fredman, *Substantive Equality Revisited*, 14 Int'l J. Const. L. 712 (2016), doi: 10.1093/icon/mow043; S Fredman, *Discrimination Law* (3d ed., OUP 2022), chapter one.

38 Committee on the Rights of Persons with Disabilities General Comment 6 (2018): *The Right to Equality and Non-Discrimination*.

39 *Nitisha v. Union of India* AIR 2021 SC 1797 (Indian Supreme Court).

40 Equality Act 2010 ss 149, 158. *See also* M. Cohen & S. MacGregor, *Towards a Feminist New Deal for the UK: A Paper for the Women's Budget Commission on a Gender-Equal Economy,* which drew on this four-dimensional framework.

than classification, gender classifications are not always prohibited. Instead, gender-based preferences are permitted where necessary to redress disadvantage. Again, because the focus is on disadvantage, substantive equality is not satisfied by removing a benefit from the advantaged group so that everyone is equally badly treated. Redressing disadvantage entails that the right to equality is only fulfilled by 'levelling up' rather than down.

The second dimension requires the right to equality to redress the stigma, stereotyping, prejudice, and violence that fuel gendered disadvantage. The continued stereotyping of women as primarily responsible for childcare and domestic work means that women do more hours of unpaid work than men, making it difficult for them to enter the labour market on equal terms. It is therefore no coincidence that women predominate among low paid, precarious and informal workers.[41] Moreover, since it is still assumed that caring, cleaning, domestic and other 'women's work' can be done free at home, it is undervalued in the workforce, entrenching job segregation and the gender pay gap.[42] In addition, stereotypes of women as sexual objects and the persistent power imbalance in the workforce and at home fuel gender-based violence. This is intensified for women at the intersection of several oppressed groups: racialized women, women with disabilities, Lesbian, Gay, Bisexual, Transgender, Queer, Intersex + (LGBTQI+) people and those with more than one of these characteristics.

The third, participative dimension highlights the lack of women's voices in political, social and economic decision-making. The right to equality should therefore amplify these voices, especially through collective organization. The interaction with the first and second dimensions, moreover, illuminates the importance of moving beyond the participation solely of elite women, to include the most disadvantaged women, and particularly, women who are the subject of intersectional discrimination.

The fourth, transformative dimension requires the accommodation of difference and structural change. Key to this dimension is the recognition that discrimination and inequality are not simply a result of individual acts of prejudice. Instead, they are inherent in the structures of the workplace and society. Central institutions of labour law, most prominently the contract of employment, perpetuate gender inequality because they pay no attention to the fundamental ways in which unpaid work shapes paid work. This seeps into many aspects of work. For example, time is only visible when expressly covered by contractual terms, obscuring the unpaid work that goes into housework, childcare and other tasks. Behind all of these is the overriding need to redress inequalities in power. Women's

[41] Fredman *supra* n. 37, Ch. 2.
[42] *Ibid*.

disadvantage cannot be characterized solely in terms of income poverty but is centrally related to imbalances of power within and outside the family.[43] It is for this reason that the first dimension, the need to redress disadvantage both materially and of power, must interact closely with the other dimensions: the need to address stereotypes, enhance voice and participation and to bring about structural change.

The remainder of this Part applies the four-dimensional conception of substantive equality to illuminate the most salient ways in which the dominance of the male norm in prominent Just Transition policies obscures the specifically gendered effects of climate change, while Part III uses the conception to propose ways of engendering the Just Transition framework. Immediately apparent is the extent to which the male norm obscures the role of unpaid work in shaping women's ability to enter the workforce on substantively equal terms.[44] This is intensified by climate issues. Women spend significantly more time than men on unpaid work, an imbalance which is particularly pronounced when households do not have access to electricity or piped water. According to the African Development Bank, 544 million people in Africa lack clean cooking facilities, while 548 million people lack electricity.[45] This is the second dimension, stereotyping of women as primarily responsible for domestic work. This in turn feeds into the first dimension, gendered disadvantage. Indoor pollution caused by the use of traditional fuels has a disproportionate effect on the health of women and children, who spend more time at home, increasing both the arduousness of domestic work and the rate of women's absenteeism from work.[46] Moreover, after floods or other disasters women spend increasing time collecting water, cleaning and maintaining their houses after floods and caring for their families. This means that women have less time to engage in economic activities or to gain access to the necessary resources for adaptation.[47] Additionally, women who are already saddled with social and legal inequalities are restricted in their ability to move to safer areas, or to gain access to productive resources, such as secure land tenure, social security and financial services.[48] In these ways, disadvantage and stereotyping are

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43 S. Chant, *The 'Feminisation of Poverty' and the 'Feminisation' of Anti-Poverty Programmes: Room for Revision?*, 43 J. Dev. Stud. 165–197 (2008), doi: 10.1080/00220380701789810.

44 For an interesting discussion on the relationship between the exclusion of reproductive work and of nature from labour law, *see* A. Zbyszewska, *Regulating Work With People and 'Nature' in Mind: Feminist Reflections*, 40 Comp. Lab. L. & Pol'y J. 9.

45 https://www.afdb.org/en/news-and-events/press-releases/irena-and-african-development-bank-partner-scale-renewable-energy-investments-africa-39798.

46 ILO, *Greening With Jobs* (World Employment Social Outlook 2018), henceforth Greening, *supra* n. 1 23.

47 CEDAW GR 37, *supra* n. 1 para. 62.

48 *Ibid.*, para. 63.

maintained by the patriarchal structures of society (the fourth dimension), exacerbated by climate change.

Applying the lens of substantive equality further illuminates the ways in the dominance of the male norm has led to a failure to recognize and address precarious and informal work in the ILO's Just Transition policies.[49] As we have seen, women are over-represented among workers excluded from social protection, decision-making bodies, training, and access to technology, particularly the internet. This is exacerbated for women in the informal economy.[50] Yet workers in these areas face heightened risks from climate change. Agricultural work is a vivid instance of these specifically gendered risks. Women predominate in agricultural work in several parts of the world, with over 60% of working women in South Asia and sub-Saharan Africa concentrated in agriculture, which is often rain fed.[51] This exposes them directly to the economic consequences of changes in climatic systems, including falling into extreme poverty or, in water-scarce areas, displacement. But while all agricultural workers are at risk in this way, women are particularly so. Women constitute more than 40% of the overall agricultural labour force in the developing world. But they own only 10 to 20% of the land.[52] One reason is that women still lack equal rights to property ownership in some countries.[53] This is the first dimension, gendered disadvantage. Furthermore, stigma and stereotyping limit their access to credit, education, health care and social protection; and gender inequalities constrain the extent to which they can participate in decisions governing their lives. These are the second and third dimensions. Nor are these disadvantages simply a result of individual prejudice. As the fourth, transformative dimension indicates, it is important to illuminate the structural forces driving these inequalities. Structural issues, particularly the neoliberal global order, mean that women's livelihood is particularly at risk from land grabs, environmental destruction by abusive extractive industries and the consequences of unregulated industrial and agro-industrial activities.[54]

A particularly telling demonstration comes from the flower industry, where the damaging effects on the climate are matched by the exploitation of precarious workers, particularly women. As Alviar and Olarte's study of the Colombian flower industry shows, large areas of productive land are used to grow flowers for export, displacing subsistence agriculture and damaging the land by threatening

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49 Greening, *supra* n. 1 at 7, 17.
50 *Ibid.*, at 25.
51 *Ibid.*, at 20.
52 *Ibid.*, at 25.
53 Isis Gaddis, Rahul Lahoti & Hema Swaminathan, *Women's Legal Rights and Gender Gaps in Property Ownership in Developing Countries* 48 (2) Population & Dev. Rev. 331–77 (2022), doi: 10.1111/padr.12493.
54 CEDAW GR 37, *supra* n. 1 para. 61.

subterranean water reserves and the soil composition.[55] The work is both precarious and dangerous. A clear division of labour in the flower farms channels women, the majority of workers, into cultivation activities, such as planting, fertilizing, cutting and bunching flowers. These are more physically taxing, lower paid and more dangerous than men's work, which is to apply pesticides, maintain the greenhouses and transport flowers for export. Women workers are hired according to production cycles and paid a fraction of the final price of flowers. Yet the hazards are huge, with many of the pesticides, fertilizers and other chemicals being untested or banned in other countries.[56] Women's health is further damaged due to having to bend constantly to care for and cut the flowers. Particularly important are the structural factors which drive the other three dimensions. The World Bank in 1991 lauded the Colombian cut flower industry as 'one of the major development success stories of the last 20 years', not least because it had become a major employer of low-skill, predominantly female labour.[57]

A similar picture of the double impact of extractive industry on both women workers and the land can be seen in Kenya, where huge flower farms have been established on the shores of Lake Naivasha and elsewhere. As in Colombia, all four dimensions of gendered inequality are stridently in evidence. Between 60 and 70% of the workforce in the cut-flower industry are women, who work very long hours for low wages on precarious contracts with a high degree of exposure to toxins. Several studies conducted by the Kenyan Human Rights Commission between 2001 and 2006 found gross violations of labour rights which went unmitigated.[58] These included forced overtime and long working hours, sexual harassment, low wages, exposure to agrochemicals, lack of unionization, lack of employment security, repetitive strain injuries and lack of maternity protection. Some improvement was noted after new labour laws were brought in 2007, followed by the new Kenyan Constitution in 2010. However, a follow-up study in 2012 found that hazardous work, low pay, job insecurity and discrimination continued to characterize the Kenyan flower sector.[59] New labour laws went unenforced, often through the use of short-term contracts to avoid accruing employment rights. Summary dismissal was rampant, particularly in order to deny employment benefits. Child-care facilities were severely overcrowded, with a high prevalence of malnutrition, communicable diseases, child abuse and neglect.

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55 H. Alviar & M. Olarte, *Climate Change and Gender in Colombia: Exploring Female Led Struggle in the Flower Industry*, in *Feminist Frontiers in Climate Justice* (C. Albertyn et al. eds, Elgar 2023).

56 *Ibid*.

57 José Mendez, *The Development of Colombian Cut Flower Industry,* (The World Bank 1991).

58 Kenya Human Rights Commission, *Wilting in Bloom: The Irony of Women Labour Rights in the Cut-flower Sector in Kenya,* (Henceforth '*Wilting in Bloom*' 2012).

59 *Ibid*.

Particularly concerning was the lack of activity by Kenyan trade unions, despite at least 60% of workers from the cut-flower industry paying membership dues. As many as 97% of workers surveyed reported that the union did not protect them from unfair dismissals or represent them in grievances.[60]

As in Colombia, the exploitation of workers in the flower industry in Kenya corresponds to severe damage to the environment. Lake Naivasha was declared a wetland of international importance in 1995; but the doubling of the flower industry has brought a tenfold rise in population from additional workers and their dependents. Flower production requires huge quantities of water, which are drained from the lake, diverting water usage from local inhabitants, and leading to decreased water levels. At the same time, air transport of cut flowers pumps large quantities of carbon into the atmosphere.

Much optimism was generated by the introduction of third-party certification organizations, aiming to provide ethical audits of labour practices and to promote sustainability. But the Kenyan Human Rights Commission study found widespread dissatisfaction among workers. Particularly concerning was the risk of capture by the more powerful economic actors. According to Kuiper and Gemählich, 'Rather than bringing about a profound transformation of the production process, these certifications obscure and even consolidate the existing socio-economic configuration of the industry'.[61] Here too, ignoring the structural dimension of substantive equality, namely the power of economic actors, has made it impossible both to address the other three dimensions of substantive equality and to heal the environment. Policies of Just Transition need to take all of these into account to recognize and confront the forces keeping women in work which is highly exploitative of both workers and our global commons.

4 ENGENDERING JUST TRANSITIONS: A GREEN AND FEMINIST WORKFORCE

The previous section used the four-dimensional conception to illuminate two major blind spots in prominent Just Transition frameworks, namely unpaid work and precarious work, using the cut flower industry as an illustration of the ways in which all four dimensions interact to perpetuate gendered exploitation of women matching the exploitation of the environment. This section turns to how the right to substantive gender equality can point the way towards a future reconstruction of

[60] *Ibid*.

[61] G. Kuiper & A. Gemählich, *Sustainability and Depoliticisation: Certifications in the Cut-Flower Industry at LakeNaivasha, Kenya*, 52 Afr. Spectrum 31 (2017), doi: 10.1177/000203971705200302.

the labour force that incorporates values that are both green and feminist. Six key principles are suggested.

Firstly, substantive gender equality requires a definitive move away from labour law's narrow definition of 'work'. Employment rights are generally attached to workers employed under a contract of employment or employment relationship, with the best protection afforded to those who are employed in the formal workforce continuously for their working life.[62] Yet, as we have seen, women predominate in precarious and informal work, and it is in this kind of work that jobs and working conditions are most at risk from environmental degradations, especially in developing countries.[63] The exclusion of unpaid work from this paradigm is particularly problematic, given the extent to which domestic drudgery is exacerbated by the climate emergency. To further all four dimensions of substantive equality for a just transition therefore requires a wide definition of work, to include unpaid work, as well as all sources of livelihood, such as access to land, capital and resources, agricultural and fishing and other subsistence work, precarious work and the wide range of activities within the informal economy.

Secondly, Just Transition policies on social protection and employment rights need to be fundamentally reconsidered, so that the interactions between paid and unpaid work (understood in the broad sense set out above) are properly incorporated. Redressing women's disadvantage in the workforce requires structural change in the division of labour in the home as regards childcare, and the availability of green solutions to domestic drudgery. As we have seen, there is much talk of the distribution of clean energy, but not enough about ensuring that this reaches disadvantaged women, in particular, those facing high levels of indoor pollution due to cooking smoke. Nor should the unpaid work required as part of the greening the domestic space be regarded as essentially women's responsibility, invisible within the private sphere. 'Domestic environmental labour' is time-consuming and labour-intensive, often requiring mundane and repetitive chores such as recycling domestic waste, sourcing local agricultural products or installing and using grey-water systems.[64] This suggests not only that clean energy is a top priority, but that it should be distributed fairly and widely. It also suggests potential synergies between the creation of jobs in constructing clean energy networks and relieving some of women's unpaid domestic drudgery and its related health risks. Provided these jobs are created with decent conditions and are equally available for men and women, the interaction between paid and unpaid work can yield a virtuous circle of rewards.

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62 S Fredman & J Fudge, *The Contract of Employment and Gendered Work,* in *The Contract of Employment,* 231–252, (M Freedland et al. eds, Oxford, OUP 2016).

63 Greening, *supra* n. 1 at 7, 17.

64 C. Farbotko, *Domestic Environmental Labour* (Routledge 2018).

Thirdly, as well as reducing and redistributing unpaid work, substantive gender equality requires Just Transition policies to afford proper value to paid caring work. Care is an essential contribution to the social fabric. It is also green. Caring activities are lower in carbon intensity than other productive work, meaning that public investment for generating more and better employment in caring work is consistent with low carbon emissions.[65] Indeed, investing in care is three times less polluting per job created overall than an equivalent investment in the construction industry.[66] A green and feminist Just Transition framework should therefore ensure that care-workers have decent work conditions, decent pay, proper training and job security. This also makes good economic sense. Orneran et al. demonstrate that investment in public social infrastructure has a positive impact on productivity in the rest of the economy by materially reducing the need for unpaid domestic labour and revaluing caring work in paid employment.[67]

Fourthly, however, focussing only on care to create a green and feminist labour force itself risks stereotyping women. The importance of reducing stereotyping in order to redress disadvantage and increase participation points to paying close attention to job segregation, and particularly to women's uneven access to the green jobs of the future, including STEM, digital and green infrastructure, and green construction projects. This brings into play the structural dimension, which recognizes the deep-seated forces maintaining these stereotypes and requires transformative change. Paying lip-service to including women in training programmes for future STEM jobs has not changed the background structures obstructing women from entering such jobs. A much more thoroughgoing transformation of underlying institutional forces is required. As well as changing the division of labour in the home, it is necessary to change stereotypes of 'women's work' which shape the options available to girls and women from the beginning of their school years.

Fifthly, an emphasis on changing the gender composition of skilled jobs for a green transition, such as STEM, should not neglect the importance of substantive gender equality in unskilled and manual work in the green sector. One such group of workers are waste-pickers. The civil society organization Women in Informal Employment: Globalizing and Organizing (WIEGO) demonstrates the central importance of waste-pickers to achieve recycling targets, especially in relation to ambitious schemes to incentivize producers to minimize disposable content of their

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[65] O. Onaran, C. Oyvat & E Fotopoulou, *The Effects of Income, Gender and Wealth Inequality and Economic Policies on Macroeconomic Performance in the UK*, Greenwich Papers in Pol. Econ. 71 (2019).

[66] Women's Budget Group, *Creating a Caring Economy: A Call to Action*, 5 https://wbg.org.uk/wp-content/uploads/2020/10/WBG-Report-v10.pdf.

[67] Onaran, Oyvat & Fotopoulou, *supra* n. 65.

products.[68] This is particularly so since about twenty million people, plus their family members, work in the informal recycling sector.[69]

Greening pays some attention to the green transition in the waste management and recycling sector, acknowledging that most of the workers in this sector are in the informal economy and face serious decent work deficits. These include low earning, long working hours, hazardous working conditions, lack of legal registration and social stigma. Strikingly, however, this description does not include an analysis of the gendered nature of these decent work deficits.[70] In a study in Brazil, it was found that among waste-pickers, men earn much more than women, and no women are found among the highest earners.[71] This is in part because women are not allowed access to recyclables with the highest values.[72] In addition, while all waste-pickers are exposed to high levels of occupational health and safety hazards, these affect women even more given their specific reproductive needs, particularly when menstruating, during pregnancy and when breastfeeding. Redressing disadvantage, the first dimension of substantive equality, is clearly urgent for all informal waste-pickers, but the specifically gendered aspect must also be in focus, such as the barriers against women accessing higher paying recyclables and the consequent endemic gender pay gap even in this most poorly paid service.

This in turn requires sensitivity to the second dimension, the ongoing stereotyping of women as primary homemakers, fuelling and entrenching the power disadvantage illuminated by the first dimension. In their valuable project on gender and waste-pickers, Dias and Ogando found that, while all waste-pickers face numerous challenges, 'women waste-pickers also face the added burden of having to deal with the reproduction of hierarchical gender relations at home, in the workplace, and in their respective communities'.[73] Women are often subjected to sexual exploitation and violence in the private sphere as well as when at work. Nor do they have equal ability to participate in decisions. According to the study, women do not occupy positions of authority within cooperatives or communities, and, because of stereotypical assumptions about women, are often ignored or silenced. This triggers the third dimension, the need to amplify voice and participation. This is aggravated by the asymmetric power relations in the household, where women do double or triple work shifts because of their responsibility for

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68 Extended Producer Responsibility (EPR) and Waste Pickers (WIEGO Technical Brief No 15 Jun. 2022).

69 *Ibid.*

70 Greening, *supra* n. 1 at 145.

71 S. Dias & A. Ogando, *From Theory to Action: Gender and Waste Recycling Book 1*, 11 (WIEGO, 2015).

72 Dias, Sonia & Lucia Fernandez. 2012. *Waste Pickers – A Gendered Perspective*, in *Powerful Synergies: Gender Equality, Economic Development and Environmental Sustainability*, 153–157 (Blerta Cela, Irene Dankelman & Jeffrey Stern eds, United Nations Development Programme 2012).

73 S. Dias & A. Ogando, *From Theory to Action: Gender and Waste Recycling Book 1* (WIEGO, 2015) 1.

raising children and fulfilling domestic chores. All of this contributes to and is exacerbated by deep-seated and persistent gendered inequality, with women having less access to education, credit, and social capital than men, restricted access to property, less mobility, restricted access to property, more physical problems and less bargaining power within the household.[74] This triggers the fourth dimension of substantive equality, the need to address structural inequalities.

Sixthly, to be serious about a green and feminist future in the world of work, including both paid and unpaid work, requires a central role for the State. Leaving it to the marketplace will not provide good quality work, as demonstrated by current conditions in so many countries. Similarly, left to itself, a green transition driven by free enterprise, to the extent that this is possible, will replicate gendered hierarchies in the workforce. A Just Transition necessitates robust investment in public services available to all and not just to the poor or worst off. It also requires green and sustainable infrastructure. In carrying out these projects, workers should be directly employed under employment contracts, fulfilling ILO standards of decent work especially in respect of decent wages. Rather than the sporadic and largely unskilled work provided under current public employment projects, social protection should be complemented with guaranteed work on decent terms for the unemployed together with relevant training to provide high quality public services.[75] This is environmentally friendly, advances substantive gender equality, and increases social capital for all. For example, publicly funded elder care reduces unpaid care-work, provides dignity for older people and is environmentally friendly while promoting substantive gender equality.

5 BRINGING ABOUT CHANGE: ENGENDERING PARTICIPATION

The above has pointed to ways in which substantive equality should engender Just Transition policies. This section briefly touches on the process of change, which is just as important. As suggested by the third dimension, to bring about change, women's participation is essential. However, here too, approaches to Just Transition risk essentializing women. This section argues that to engender Just Transition to achieve a green and feminist workforce requires optimizing all four dimensions of substantive gender equality. This in turn entails more than 'gesture politics' or inviting some women to the table. It requires proper respect for collective and grass-roots organization which truly reflects the needs and claims of women in many different social locations.

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[74] *Ibid.*, at 12.

[75] A. Banerjee & E. Duflo, *Good Economics for Hard Times*, 317–8 (Allen Lane 2019).

There is no shortage of references to women's participation in recent climate justice policy documents. The UN Gender Action Plan puts the 'active involvement of women' at the centre of its policy proposals, and calls for a gender responsive implementation of climate change measures.[76] A similar emphasis is found in the agreed conclusions of the Commission on the Status of Women on gender equality and climate change in March 2022.[77] Both refer to women as agents for change, echoing the UN Climate Change website (UNFCCC) and UN Women Watch. These documents acknowledge that women's unequal participation in decision-making compounds inequalities. However, they err too far towards depicting women as agents of change. Thus, UNFCCC states:

> women can and do play a critical role in response to climate change due to their local knowledge of and leadership in … sustainable resource management and/or leading sustainable practices at the household and community level. Women's participation at the political level has resulted in greater responsiveness to citizen's needs, often increasing cooperation across party and ethnic lines and delivering more sustainable peace.[78]

A similar pattern can be seen in UN Women Watch.[79] This is repeated in more strident terms by the World Economic Forum, under the headline: 'We can solve climate change – if we involve women'. Not only does it place the responsibility for change on women's agency, this essentializes women with stereotypically 'feminine' attributes: 'Women bring more empathy and inclusiveness in their advocacy and problem-solving, which enhances their efficacy as sustainability leaders'.[80]

While women's voice at the table is crucial, it should not be necessary to justify it on the basis of its utility. The four-dimensional framework of substantive equality, while stressing the importance of amplifying women's voice, also insists that this should not be a function of stereotypical perceptions. The challenge is to achieve participation and voice without regarding women as possessing exaggerated agency, or as being simply victims. This entails recognizing the specificity of women's experience of climate change and the particular burdens arising from the gendered structure of the workforce without casting women as passive victims. Hence the central role of participation. At the same time, women should not be attributed with agency which they frequently do not have. This burdens and

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[76] UN Framework Convention on Climate Change Gender and Climate change, FCCC/CP/2019/L.3 (12 Dec. 2019).

[77] Commission on the Status of Women *Achieving gender equality and the empowerment of all women and girls in the context of climate change, environmental and disaster risk reduction policies and programmes* Agreed Conclusions (29 Mar. 2022) (CSW).

[78] https://unfccc.int/gender.

[79] https://www.un.org/womenwatch/feature/climate_change/factsheet.html#change-.

[80] https://www.weforum.org/agenda/2019/09/why-women-cannot-be-spectators-in-the-climate-change-battle/.

essentializes women. This is true both of assumptions that because women do the housework, they should take the lead in recycling and reduction of waste,[81] and of assumptions that women are more interested in behavioural change, whereas men are more taken with technical change.[82]

Moreover, participation should not be seen as a reason not to pay attention to substantive issues. Optimizing all four dimensions, including participation, redressing disadvantage, addressing stereotyping and furthering structural change, makes it crucial to focus too on what women should argue for in the climate change arena. Otherwise, as Alviar and Olarte argue, participation is translated into 'general calls for multisectoral inclusion', representing a 'superficial version of liberal feminism aimed at equal representation through participation'.[83] Measuring gender in terms of the numbers of women at meetings or on committees is purely cosmetic. Instead, we need to critique the continuing prioritization of economic development from the simultaneous perspectives of women and work, and climate change.[84] Velicu and Barca put this even more strongly, arguing for a democratization of the Just Transition framework which reaches beyond pre-existing categories of worker embedded in capitalist structures of inequality, enabling workers to reject the ascriptions which 'pinned them down to a subaltern unequal position'.[85] This would allow 'invisible subjects (the unwaged, peasants or unpaid caregivers) to emerge as active subjects' and sets in motion a process of 'questioning models and methods of socioecological relations, including the wage and other extractive exploitative relations'.[86]

This means that women's participation should not be based on mere numbers of women at the table. Instead, it should centrally involve grass-roots organization. It also means that the substance of their contribution matters. Hassim and Goldblatt's study of the Baleni women's use of litigation to oppose the granting of mining licences in the coastal area in which they live demonstrates that women were not passive victims.[87] But nor could they shallowly be regarded as agents for change. Instead, their longstanding and risky campaign highlighted both their key role in framing the case to take gendered issues into account and the ongoing patriarchal assumptions which limited the extent to which those claims could be

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81 R. Maguire, *Gender, climate change and the United Nations Framework Convention on Climate Change,* in *Research Handbook on Feminist Engagement with International Law,* (S. Rimmer & K. Ogg eds, Edward Elgar 2019).

82 GenderCC Women for Climate Justice, *Shifting the Narratives: Climate Justice and Gender Justice* (Jun. 2021), https://www.gendercc.net/fileadmin/inhalte/dokumente/8_Resources/Publications/GenderCC_ShiftingTheNarratives.pdf.

83 Alviar & Olarte, *supra* n. 54.

84 *Ibid*.

85 Velicu & Barca, *supra* n. 5, 270.

86 *Ibid*.

87 *Baleni v. Minister of Mineral Resources* 2019 (2) SA 453 (GP) (South African High Court).

articulated and realized.[88] Moreover, this was not simply about representation. It was also about the substance of their message. Hassim and Goldblatt conclude that the Xolobeni struggles point to a different way of being, which is sustainable, communal and attentive to women's voices, 'prefigurative of a more fundamental gendered challenge to capitalist enclosure, at the root of climate destruction'.[89]

Machado, Vitale and Rached similarly demonstrate the crucial role of collective organization on the part of Brazil's indigenous women in resisting extractivist policies in their areas.[90] 'Being key guardians of the forest, they were already mobilized and prepared to occupy strategic roles'.[91] Moreover, like the Baleni women, their message was substantive, based not on gestures towards including women's voices, but on a long-standing struggle to bring the indigenous collective worldview into contestation with the neo-liberal agenda. Ultimately then, as Walk et al. argue, it is not enough to involve more women in decision-making. To fully integrate gender perspective requires the involvement of participants who are knowledgeable about gender aspects, including the interests, needs and concerns of women affected, the issues they prioritize, whether they have access to resources and how the work of informally organized women might be better transmitted to bodies that make decisions as to transformation.[92]

6 CONCLUSION

Achieving gender equality and the empowerment of all women and girls in the context of climate change was the priority theme of the influential Commission on the Status of Women in March 2022.[93] Although the report gives too great an emphasis on women's role as agents for change, the agreed conclusions include many constructive recommendations, such as the right to gender-responsive health care services and education, and measures to reduce, redistribute and value unpaid care and domestic work by promoting equal sharing of responsibilities, social protection, and sustainable infrastructure. Particularly important is its reaffirmation of the need to mobilize adequate gender-responsive financial resources to achieve these goals. It similarly reaffirms the need to ensure the equal access of women to

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88 B Goldblatt & S. Hassim, '*Grass in the Cracks': Gender, Social Reproduction and Climate Justice in the Xolobeni Struggle,* in *Feminist Frontiers in Climate Justice* (C. Albertyn et al. eds, Elgar 2023).

89 *Ibid*.

90 M. Machado, D. Vitale & D. Rached, *Indigenous Women Against Bolsonaro's Government in Brazil: Resisting Right-wing Authoritarianism and Demanding Climate Justice* in *Feminist Frontiers in Climate Justice* (C Albertyn et al. eds, Elgar 2023).

91 *Ibid*.

92 P. Walk et al, *Strengthening Gender Justice in a Just Transition: A Research Agenda Based on a Systematic Map of Gender in Coal Transitions*, 14 Energies, 5985 (2021) Doi: 10.3390/en14185985

93 CSW 2022.

decent work and quality jobs in all sectors. However, these recommendations are inevitably at a very high level of generalization, with little extra attention to the meaning of key concepts such as gender-responsive and equality. It has been argued here that a more incisive frame of analysis is provided by a four-dimensional understanding of substantive equality, which requires Just Transition policies simultaneously to redress disadvantage; address stigma, stereotyping and violence; enhance voice and participation and achieve structural change, all understood from a gendered perspective. We need to work together not just to get our voices heard, but also on the substantive ingredients of how a green and feminist future for all women in the world of work should be achieved.